

OIL 3051R
REPLACES OIL 3051Q



Motorcraft®



2010

Lubricants & Chemicals

Be sure to visit fcsdchemicalsandlubricants.com for product information and motorcraft.com for technical resources and purchase locations.

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Phone Directory

Ordering Information

Service Chemicals can be ordered for direct ship delivery via D.O.E.S. II or through your local Ford Authorized Distributor (FAD).

Parts Ordering Assistance:	FMCDealer / Parts & Service / Parts Ordering & Receiving
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To locate your local FAD:	FMCDealer / Parts & Service / Parts Department Tools / FAD Locator
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Service Chemical Direct Ship Distributors Customer Assistance

ConocoPhillips	(800) 858-5576
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Excelda Manufacturing	(800) 550-4062
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Other Contact Information

Material Safety Data Sheets (MSDSes)	(800) 448-2063
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Dealer Business Assistance Center	FMCDealer / Dirs Ask Ford BAC
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Poison Control	(800) 959-3673
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Online Service Chemical Catalog

Visit <http://www.fcsdchemicalsandlubricants.com> for up-to-date product information.

*Note: Information in this catalog is updated continually and the latest information can be found on www.motorcraft.com.
To continue to provide superior quality, Motorcraft reserves the right to change the composition of its products without notice.
Effective October 2006.*

Truckload Program

Receive an 18% discount off of your coolant purchase when you place a combined minimum order of 20 pallets from the items below. You may mix-and-match pallet product types but **only** coolants qualify for the 18% discount.

Part Number	Description	Unit Pack	Pallet Size
ZC-32-C	Motorcraft® Premium Windshield Washer Concentrate Size: 55 Gallon Drum	1 Drum	4 Unit Packs
PM-1-C	Motorcraft® High Performance DOT 3 Brake Fluid Size: 12 fl. oz. Bottle	1 Bottle	1296 Unit Packs
VC-3-B 18% Coolant Discount!	Motorcraft® Specialty Orange Engine Coolant with Bittering Agent Size: 1 Gallon Bottle	1 Bottle	192 Unit Packs
VC-5 18% Coolant Discount!	Motorcraft® Premium Engine Coolant with Bittering Agent Size: 1 Gallon Bottle	1 Bottle	192 Unit Packs
VC-7-B 18% Coolant Discount!	Motorcraft® Premium Gold Engine Coolant with Bittering Agent Size: 1 Gallon Bottle	1 Bottle	192 Unit Packs
XT-5-DM	Motorcraft® MERCON® V Automatic Transmission Fluid Size: 55 Gallon Drum	1 Drum	4 Unit Packs
XT-5-GM	Motorcraft® MERCON® V Automatic Transmission Fluid Size: 1 Gallon Bottle	6 Bottles	32 Unit Packs
XT-5-QM	Motorcraft® MERCON® V Automatic Transmission Fluid Size: 1 Quart Bottle	12 Bottles	84 Unit Packs
VC-5-B 18% Coolant Discount!	Motorcraft® Premium Engine Coolant with Bittering Agent Size: 55 Gallon Drum	1 Drum	4 Unit Packs
VC-7-D 18% Coolant Discount!	Motorcraft® Premium Gold Engine Coolant with Bittering Agent Size: 55 Gallon Drum	1 Drum	4 Unit Packs
PM-4-A	Motorcraft® Brake Parts Cleaner Size: 13 oz. Aerosol	1 Can	1080 Unit Packs
PM-4-B	Motorcraft® Brake Parts Cleaner Size: 13 oz. Aerosol	1 Can	1080 Unit Packs
YN-21	Motorcraft® R-134a Refrigerant Size: 30 lb. Cylinder	40 Cylinders	1 Unit Pack
XL-12	Motorcraft® Transfer Case Fluid Size: 1 Quart Bottle	1 Bottle	672 Unit Packs
XT-8-QAW	Motorcraft® Premium Automatic Transmission Fluid Size: 1 Quart Bottle	12 Bottles	56 Unit Packs

Truckload Program (Cont'd)

Part Number	Description	Unit Pack	Pallet Size
XT-M5-QS	Motorcraft® Full Synthetic Manual Transmission Fluid Size: 1 Quart Bottles	12 Bottles	56 Unit Packs
XT-5-QSM	Motorcraft® Synthetic Blend Mercon Automatic Transmission and Power Steering Fluid Size: 1 Quart Bottle	12 Bottles	56 Unit Packs
XL-14	Motorcraft® Power Steering Fluid Size: 12 fl. oz. Bottle	1 Bottle	1440 Unit Packs
VC-10-A2 18% Coolant Discount!	Motorcraft® Specialty Green Engine Coolant with Bittering Agent Size: 1 Gallon Bottle	1 Bottle	192 Unit Packs
VC-11	Motorcraft® Engine Cooling System Cleaner 2428-31 Size: 1 Gallon Bottle	1 Bottle	192 Unit Packs
PM-27-1G	Motorcraft® Diesel Exhaust Fluid (DEF) Size: 1 Gallon Bottle	1 Bottle	128 Unit Packs
PM-27-J	Motorcraft® Diesel Exhaust Fluid (DEF) Size: 2.5 Gallon Bottle	1 Bottle	72 Unit Packs
PM-27-D	Motorcraft® Diesel Exhaust Fluid (DEF) Size: 55 Gallon Drum	1 Drum	4 Unit Packs
PM-27-T	Motorcraft® Diesel Exhaust Fluid (DEF) Size: 275 Gallon Tote	1 Tote	1 Unit Pack
VC-12 18% Discount!	Motorcraft® Specialty Orange Engine Coolant Revitalizer Size: 1 Quart Bottle	1 Bottle	624 Unit Packs

Ordering Information

FADS

- Order on-line at the MC Distributor website
<http://web.mcdistributor.dealerconnection.com>
→ Select **"Parts Information"**
→ Select **"Truckload Ordering Program"**
- Complete the order form that is found on the back of this page and fax to Ford Truckload Customer Service Representative of Excelda at (800) 984-6874

Dealers

- Complete the order form that is found on the back of this page and fax to Ford Truckload Customer Service Representative of Excelda at (800) 984-6874

Truckload Ordering Assistance

Ford Truckload Customer Service Representative
Customer Service Department
Excelda Manufacturing
Phone: (800) 550-4062
Fax: (800) 984-6874

Truckload Program (Cont'd)

Chemical Bulk Order Form

Your Name	
Your Email Address	
Phone Number	
Ford Authorized Distributor Name	
Ford Authorized Distributor Number (P&A Code)	
Your Purchase Order Number	

Please Note: The Shipping Address will be taken from your Ford Authorized Distributor's record.
NO DROP SHIPS ARE ALLOWED.

Part Number	Description	Unit Pack	Pallet Size	# of Pallets
ZC-32-C	Motorcraft® Premium Windshield Washer Concentrate Size: 55 Gallon Drum	1 Drum	4 Unit Packs	
PM-1-C	Motorcraft® High Performance DOT 3 Brake Fluid Size: 12 fl. oz. Bottle	1 Bottle	1296 Unit Packs	
VC-3-B 18% Coolant Discount!	Motorcraft® Specialty Orange Engine Coolant with Bittering Agent Size: 1 Gallon Bottle	1 Bottle	192 Unit Packs	
VC-5 18% Coolant Discount!	Motorcraft® Premium Engine Coolant with Bittering Agent Size: 1 Gallon Bottle	1 Bottle	192 Unit Packs	
VC-7-B 18% Coolant Discount!	Motorcraft® Premium Gold Engine Coolant with Bittering Agent Size: 1 Gallon Bottle	1 Bottle	192 Unit Packs	
XT-5-DM	Motorcraft® MERCON® V Automatic Transmission Fluid Size: 55 Gallon Drum	1 Drum	4 Unit Packs	
XT-5-GM	Motorcraft® MERCON® V Automatic Transmission Fluid Size: 1 Gallon Bottle	6 Bottles	32 Unit Packs	
XT-5-QM	Motorcraft® MERCON® V Automatic Transmission Fluid Size: 1 Quart Bottle	12 Bottles	84 Unit Packs	
VC-5-B 18% Coolant Discount!	Motorcraft® Premium Engine Coolant with Bittering Agent Size: 55 Gallon Drum	1 Drum	4 Unit Packs	
VC-7-D 18% Coolant Discount!	Motorcraft® Premium Gold Engine Coolant with Bittering Agent Size: 55 Gallon Drum	1 Drum	4 Unit Packs	
PM-4-A	Motorcraft® Brake Parts Cleaner Size: 13 oz. Aerosol	1 Can	1080 Unit Packs	
PM-4-B	Motorcraft® Brake Parts Cleaner Size: 13 oz. Aerosol	1 Can	1080 Unit Packs	



Truckload Program (Cont'd)

Part Number	Description	Unit Pack	Pallet Size	# of Pallets
YN-21	Motorcraft® R-134a Refrigerant Size: 30 lb. Cylinder	40 Cylinders	1 Unit Pack	
XL-12	Motorcraft® Transfer Case Fluid Size: 1 Quart Bottle	1 Bottle	672 Unit Packs	
XT-8-QAW	Motorcraft® Premium Automatic Transmission Fluid Size: 1 Quart Bottle	12 Bottles	56 Unit Packs	
XT-M5-QS	Motorcraft® Full Synthetic Manual Transmission Fluid Size: 1 Quart Bottles	12 Bottles	56 Unit Packs	
XT-5-QSM	Motorcraft® Synthetic Blend Mercon Automatic Transmission and Power Steering Fluid Size: 1 Quart Bottle	12 Bottles	56 Unit Packs	
XL-14	Motorcraft® Power Steering Fluid Size: 12 fl. oz. Bottle	1 Bottle	1440 Unit Packs	
VC-10-A2 18% Coolant Discount!	Motorcraft® Specialty Green Engine Coolant with Bittering Agent Size: 1 Gallon Bottle	1 Bottle	192 Unit Packs	
VC-11	Motorcraft® Engine Cooling System Cleaner 2428-31 Size: 1 Gallon Bottle	1 Bottle	192 Unit Packs	
PM-27-1G	Motorcraft® Diesel Exhaust Fluid (DEF) Size: 1 Gallon Bottle	1 Bottle	128 Unit Packs	
PM-27-J	Motorcraft® Diesel Exhaust Fluid (DEF) Size: 2.5 Gallon Bottle	1 Bottle	72 Unit Packs	
PM-27-D	Motorcraft® Diesel Exhaust Fluid (DEF) Size: 55 Gallon Drum	1 Drum	4 Unit Packs	
PM-27-T	Motorcraft® Diesel Exhaust Fluid (DEF) Size: 275 Gallon Tote	1 Tote	1 Unit Pack	
VC-12 18% Discount!	Motorcraft® Specialty Orange Engine Coolant Revitalizer Size: 1 Quart Bottle	1 Bottle	624 Unit Packs	
Total Pallets (minimum of 20)				

Fax your completed order form to: (800) 984-6874 • Attention: Ford Truckload Customer Service Representative

Medical Information and Material Safety Data Sheets (MSDSes)



For Medical Emergency Information *only*, contact the Poison Control Center at 1-800-959-3673 (Ford). Available 24 hours a day.

For copies of the most current Ford Motor Company Service Chemical and Lubricant Material Safety Data Sheets (MSDSes) *only*, please use one of the following options:

1

INTERNET

Log on to www.fcsdchemicalsandlubricants.com. To access the MSDS search screen, click on the **MSDS / fiche signalétique** link on the red bar located below the product category tabs.

2

E-MAIL

E-mail your request to msds@brownart.com. Include the information requested on the next page.

3

FAX

Copy and complete the form on the next page, then fax the form to **1-800-466-3753** (24 hours a day).

4

PHONE

Call toll-free **1-800-448-2063** and speak to a Ford MSDS Help Desk representative (8 a.m. to 5 p.m. EST, Monday through Friday).



Material Safety Data Sheet (MSDS) – Request Form

— Please Use This Form to Fax in Request for Material Safety Data Sheets —

Your Name: _____

Your Company: _____ Are you a: ☐ Dealer ☐ Distributor ☐ Other

Your Street Address: _____

Your City, State, Zip: _____

Your Phone Number: _____

Your Fax Number: _____

Your E-mail Address: _____

Your preferred method of receiving MSDSes: ☐ E-mail ☐ Fax ☐ Mail

1. Product Name: _____
Part Number(s): _____
FIR (Tox) Number: _____

2. Product Name: _____
Part Number(s): _____
FIR (Tox) Number: _____

3. Product Name: _____
Part Number(s): _____
FIR (Tox) Number: _____

4. Product Name: _____
Part Number(s): _____
FIR (Tox) Number: _____

Please fax completed form to:

Ford MSDS Hotline
1-800-466-3753
24 hours a day

Or mail completed form to:

Ford Motor Company
c/o Brown Art Corporation
Attn: Ford MSDS Hotline
22065 W. Outer Drive
Dearborn, MI 48124
USA

Or call the Ford MSDS Hotline:

Ford MSDS Hotline
1-800-448-2063
8 a.m. to 5 p.m. EST Monday – Friday

Health, Safety & Environmental Web Sites

There are numerous regulations applicable to the manufacturers, distributors, importers, employers, and employees regarding chemical products. Below are some addresses to web sites that may contain helpful regulatory information pertaining to the chemical products purchased and used by you. Ford Motor Company does not maintain these sites. This page is intended for informational purposes only and specific compliance requirements should be discussed with your own legal counsel.

Occupational Safety and Health Administration (OSHA) Home Page

<http://www.osha.gov>

OSHA Hazard Communication Program

<http://www.osha.gov/dsg/hazcom/index.html>

Environmental Protection Agency Home Page

<http://www.epa.gov>

Hazardous Waste FAQ's

<http://www.epa.gov/epawaste/index.htm>

Hazardous Waste Generators

<http://www.epa.gov/epawaste/hazard/generation/index.htm>

Hazardous Waste Transporters

<http://www.epa.gov/epawaste/hazard/transportation/index.htm>

Department of Transportation (DOT) Home Page

<http://www.dot.gov>

Shipping Hazardous Material in Commerce

<http://www.phmsa.dot.gov/hazmat>

California Volatile Organic Compounds (VOCs) - Consumer Products

<http://www.arb.ca.gov/consprod/consprod.htm>

California VOC Consumer Products Regulations

<http://www.arb.ca.gov/consprod/regs/regs.htm>

Consumer Products Enforcement Program

<http://www.arb.ca.gov/enf/consprod.htm>

Hazardous Substances and articles regulations (Product Labeling Requirements)

http://www.access.gpo.gov/nara/cfr/waisidx_00/16cfr1500_00.html

California Proposition 65

<http://www.oehha.ca.gov/prop65/background/p65plain.html>

National Institute of Occupational Safety and Health Pocket Guide to Hazardous Chemicals

<http://www.cdc.gov/niosh/npg/npg.html>

Code of Federal Regulations

<http://www.access.gpo.gov/nara/cfr/cfr-table-search.html#page1>

OZONE Transport Commission

<http://www.otcair.org>

<http://www.otcair.org/governmental.asp>



SAE 0W-30 Super All Season Motor Oil



Part Number	Specification Number	Size	Unit Pack	MSDS/FIR Number
CXO-0W30-LAS12	WSS-M2C171-D	1 Liter	12 (Case Qty.)	167658
CXO-0W30-DAS	WSS-M2C171-D	55 U.S. gal.	1	167658



- Motorcraft® SAE 0W-30 Super All Season Synthetic Motor Oil is a high-quality diesel motor oil recommended by Ford Motor Company, meeting warranty requirements. It is particularly recommended for Power Stroke® applications. It meets API Service Category CI-4/SM. Do not use in gasoline engines equipped with catalysts
- Motorcraft® Super All Season is manufactured with premium-quality synthetic base oils and unique additive technology. Because of its low viscosity it is particularly suited to operation in extremely low ambient temperatures while providing complete engine protection during summer heat. It provides excellent soot control, as well as, protecting against wear, deposit formation, rust and corrosion, foaming, and high-temperature oil oxidation and thickening
- It is formulated for today's low emission, electronically controlled, normally aspirated and turbocharged diesel engines; while providing excellent performance in older generation diesel engines operating on high sulfur fuel

SAE 10W-30 Premium Synthetic Blend Motor Oil



Note: SAE 10W-30 Premium Synthetic Blend Motor Oil is available in bulk quantities at substantial savings. Use of bulk oil products is environmentally proactive. Contact your FCSD Aftermarket Account Manager, an approved Motorcraft® Bulk Oil Distributor, or www.Motorcraft.com for details.

Part Number	Specification Number	Size	Unit Pack	MSDS/FIR Number
XO-10W30-QSP	GF-4	1 Qt.	12 (Case Qty.)	173219
XO-10W30-DSP	GF-4	55 U.S. gal.	1	173219



- Motorcraft® SAE 10W-30 Premium Synthetic Blend Motor Oil is a premium-quality passenger car motor oil recommended by Ford Motor Company where use of this viscosity grade is recommended. It is API Certified for gasoline engine service ILSAC GF-4 and meets API SM/Energy Conserving
- Motorcraft® SAE 10W-30 Premium Synthetic Blend Motor Oil is manufactured with high-viscosity index, premium-quality, synthetic/hydroprocessed base oils and specially designed performance additives, which help minimize engine deposits and wear, protect against high-temperature oxidation, low-temperature gelling, rust and corrosion, and foaming
- Motorcraft® SAE 10W-30 Premium Synthetic Blend Motor Oil is recommended for use in current and older domestic and import passenger cars, SUV's, light-duty trucks, minivans and with normally aspirated, turbocharged and supercharged gasoline engines
- Refer to the Motorcraft® SAE 10W-30 Premium Synthetic Blend Motor Oil specification sheet at www.motorcraft.com and www.fmcdealer.dealerconnection.com for additional information. For MSDS information call 1-800-448-2063

SAE 10W-30 Super Duty Diesel Motor Oil

	Part Number	Specification Number	Size	Unit Pack	MSDS/FIR Number
	XO-10W30-QSD	WSS-M2C171-E	1 Qt.	12 (Case Qty.)	178870
	XO-10W30-DSD	WSS-M2C171-E	55 U.S. gal.	1	178870
 - Motorcraft® SAE 10W-30 Super Duty Motor Oil is a high-quality light- and heavy-duty diesel engine oil recommended by Ford Motor Company. It is particularly recommended for use in Ford vehicles equipped with Power Stroke® engines, as well as, in other diesel engine applications. It meets API Service Category CJ-4, required for use in diesel engines designed to meet 2007 on-highway exhaust emission standards and requiring ultralow sulfur diesel fuel. Do not use in gasoline engines equipped with catalysts - Motorcraft® SAE 10W-30 Super Duty Motor Oil is a high-quality diesel engine oil formulated with premium hydroprocessed base oils and unique additive technology. It satisfies the warranty requirements of Ford Motor Company, as well as most other domestic and import diesel engine manufacturers. It meets the requirements of International and Caterpillar ECF-3 - Motorcraft® SAE 10W-30 Super Duty Motor Oil is designed for new generation, low emission diesel engines providing excellent soot control, protection against wear, deposits, rust and corrosion, foaming, sludge formation, high temperature oxidation and thickening, as well as protecting exhaust aftertreatment systems such as particulate filters. It also provides excellent performance in older-generation diesel engines operating on high-sulfur fuel - Motorcraft® SAE 10W-30 Super Duty Motor Oil can be used in older engines where the manufacturer recommended API Categories CD, CF-4, CG-4, CH-4, CI-4 and CI-4plus - Motorcraft® SAE 10W-30 Super Duty Motor Oil is recommended for use in 7.3L, 6.4L and 6.0L Powerstroke® diesel engines from 0 °F (-18 °C) to 50 °F (10 °C) and 6.7L Powerstroke® diesel engines above 0 °F (-18 °C) - Refer to the Motorcraft® SAE 10W-30 Super Duty Motor Oil specification sheet at www.motorcraft.com and www.fmcdealer.dealerconnection.com for additional information. For MSDS information call 1-800-448-2063					

Note: SAE 10W-30 Super Duty Diesel Motor Oil is available in bulk quantities at substantial savings. Use of bulk oil products is environmentally proactive. Contact your FCSD Aftermarket Account Manager, an approved Motorcraft® Bulk Oil Distributor, or www.Motorcraft.com for details.

SAE 10W-40 Premium Motor Oil

	Part Number	Specification Number	Size	Unit Pack	MSDS/FIR Number
	XO-10W40-QP	API Service SM	1 Qt.	12 (Case Qty.)	173219
	- Motorcraft® SAE 10W-40 Premium Motor Oil is a high-quality passenger car motor oil recommended by Ford Motor Company where use of this viscosity grade is recommended. It meets API Service Category SM - Refer to the Motorcraft® SAE 10W-40 Premium Motor Oil specification sheet at www.motorcraft.com and www.fmcdealer.dealerconnection.com for additional information. For MSDS information call 1-800-448-2063 				



SAE 15W-40 Super Duty Diesel Motor Oil



Note: SAE 15W-40 Super Duty Diesel Motor Oil is available in bulk quantities at substantial savings. Use of bulk oil products is environmentally proactive. Contact your FCSD Aftermarket Account Manager, an approved Motorcraft® Bulk Oil Distributor, or www.Motorcraft.com for details.

Part Number	Specification Number	Size	Unit Pack	MSDS/FIR Number
XO-15W40-QSD	WSS-M2C171-E	1 Qt.	12 (Case Qty.)	178870
XO-15W40-5QSD	WSS-M2C171-E	5 Qt.	4 (Case Qty.)	178870
XO-15W40-DSD	WSS-M2C171-E	55 U.S. gal.	1	178870

- Motorcraft® SAE 15W-40 Super Duty Motor Oil is a high-quality light and heavy-duty diesel engine oil recommended by Ford Motor Company. It is particularly recommended for use in Ford vehicles equipped with Power Stroke engines as in truck, bus, construction and other heavy-duty diesel engine applications. It meets API Service Category CJ-4, required for use in diesel engines designed to meet 2007 on-highway exhaust emission standards and requiring ultralow sulfur diesel fuel. Do not use in gasoline engines equipped with catalysts
- Motorcraft® SAE 15W-40 Super Duty Motor Oil is a high-quality diesel engine oil formulated with premium hydroprocessed base oils and unique additive technology. It satisfies the warranty requirements of Ford Motor Company as well as most other domestic and import diesel engine manufacturers. It meets the requirements of International, Cummins CES 20081, Volvo VDS-4, Mack EO-O Premium Plus, Detroit Diesel 93K218 and Caterpillar ECF-3
- Motorcraft® SAE 15W-40 Super Duty Motor Oil is designed for new generation, low emission diesel engines providing excellent soot control, protection against wear, deposits, rust and corrosion, foaming, sludge formation, high temperature oxidation and thickening, as well as protecting exhaust aftertreatment systems such as particulate filters. It also provides excellent performance in older-generation diesel engines operating on high-sulfur fuel
- Motorcraft® SAE 15W-40 Super Duty Motor Oil can be used in older engines where the manufacturer recommended API Categories CD, CF-4, CG-4, CH-4, CI-4 and CI-4plus
- Motorcraft® SAE 15W-40 Super Duty Motor Oil is suitable for powershift applications requiring Allison C-4 fluid
- Refer to the Motorcraft® SAE 15W-40 Super Duty Motor Oil specification sheet at www.motorcraft.com and www.fmcdealer.dealerconnection.com for additional information. For MSDS information call 1-800-448-2063



SAE 30 Super Duty Diesel Motor Oil

	Part Number	Specification Number	Size	Unit Pack	MSDS/FIR Number
	XO-30-QSD	N/A	1 Qt.	12 (Case Qty.)	184095
	- Motorcraft® SAE 30 Super Duty Motor Oil is a high-quality light- and heavy-duty diesel engine oil recommended by Ford Motor Company. It is recommended for use in Ford vehicles equipped with diesel engines prior to 1995 model year - Motorcraft® SAE 30 Super Duty Motor Oil is formulated for engines requiring a high-quality single weight oil and operated with an engine block heater or in outside temperatures no lower than 10 °F (-12 °C) - Refer to the Motorcraft® SAE 30 Super Duty Motor Oil specification sheet at www.Motorcraft.com and www.FMCDealer.dealerconnection.com for additional information. For MSDS information call 1-800-448-2063				

SAE 5W-20 Full Synthetic Motor Oil

	Part Number	Specification Number	Size	Unit Pack	MSDS/FIR Number
	XO-5W20-QFS	WSS-M2C930-A	1 Qt.	12 (Case Qty.)	173414
	XO-5W20-DFS	WSS-M2C930-A	55 U.S. gal.	1	173414
Note: SAE 5W-20 Premium Synthetic Blend Motor Oil is available in bulk quantities at substantial savings. Use of bulk oil products is environmentally proactive. Contact your FCSD Aftermarket Account Manager, an approved Motorcraft® Bulk Oil Distributor, or www.Motorcraft.com for details. - Motorcraft® SAE 5W-20 Full Synthetic Motor Oil is a premium-quality passenger car motor oil recommended by Ford Motor Company meeting warranty requirements. It is API Certified for gasoline engine service ILSAC GF-4 and meets API SM/Energy Conserving - Motorcraft® SAE 5W-20 Full Synthetic Motor Oil is manufactured with high-viscosity index, premium-quality, synthetic base oils that provide good high temperature and low temperature performance. It helps minimize engine deposits and wear, protect against high-temperature oxidation, low-temperature gelling, rust and corrosion and foaming. The friction-reducing technology in this motor oil provides superior wear protection and energy-conserving characteristics, which result in significant improvement in fuel economy when compared to SAE 5W-30 and 10W-30 motor oils - Refer to the Motorcraft® SAE 5W-20 Full Synthetic Motor Oil specification sheet at www.motorcraft.com and www.fmcdealer.dealerconnection.com for additional information. For MSDS information call 1-800-448-2063					
 					



SAE 5W-20 High Mileage Synthetic Blend Motor Oil



Part Number	Specification Number	Size	Unit Pack	MSDS/FIR Number
XO-5W20-QHM	WSS-M2C930-A	1 Qt.	12 (Case Qty.)	181150

- Motorcraft® SAE 5W-20 High Mileage Synthetic Blend Motor Oil is a premium-quality passenger car motor oil recommended by Ford Motor Company meeting warranty requirements. This oil has been specifically formulated for engines with over 75,000 miles. It is API Certified for gasoline engine service ILSAC GF-4 and meets API SM/Energy Conserving
- Motorcraft® SAE 5W-20 High Mileage Synthetic Blend Motor Oil is manufactured with high-viscosity index, premium-quality, synthetic/hydroprocessed base oils and specially designed performance additives, which help reduce oil consumption and oil leaks, minimize engine deposits, protect against high-temperature oxidation, low-temperature gelling, rust, corrosion and foaming. The friction-reducing technology in this motor oil provides superior wear protection and energy-conserving characteristics, which result in significant improvement in fuel economy when compared to SAE 5W-30 and 10W-30 motor oils
- Motorcraft® SAE 5W-20 High Mileage Synthetic Blend Motor Oil dramatically outperforms and outprotects conventional solvent-refined motor oils
- Refer to the Motorcraft® SAE 5W-20 High Mileage Synthetic Blend Motor Oil specification sheet at www.motorcraft.com and www.fmcdealer.dealerconnection.com for additional information. For MSDS information call 1-800-448-2063



SAE 5W-20 Premium Synthetic Blend Motor Oil



Note: SAE 5W-20 Premium Synthetic Blend Motor Oil is available in bulk quantities at substantial savings. Use of bulk oil products is environmentally proactive. Contact your FCSD Aftermarket Account Manager, an approved Motorcraft® Bulk Oil Distributor, or www.Motorcraft.com for details.

Part Number	Specification Number	Size	Unit Pack	MSDS/FIR Number	TSB
XO-5W20-QSP	WSS-M2C930-A	1 Qt.	12 (Case Qty.)	173219	02-1-9 05-15-8
XO-5W20-5QSP	WSS-M2C930-A	5 Qt.	4 (Case Qty.)	173219	
XO-5W20-DSP	WSS-M2C930-A	55 U.S. gal.	1	173219	

- Motorcraft® SAE 5W-20 Premium Synthetic Blend Motor Oil is a premium-quality passenger car motor oil recommended by Ford Motor Company meeting warranty requirements. It is API Certified for gasoline engine service ILSAC GF-4 and meets API SM/Energy Conserving
- Motorcraft® SAE 5W-20 Premium Synthetic Blend Motor Oil is manufactured with high-viscosity index, premium-quality, synthetic/hydroprocessed base oils and specially designed performance additives, which help minimize engine deposits and wear, protect against high-temperature oxidation, low-temperature gelling, rust and corrosion and foaming. The friction-reducing technology in this motor oil provides superior wear protection and energy-conserving characteristics, which result in significant improvement in fuel economy when compared to SAE 5W-30 and 10W-30 motor oils
- Motorcraft® SAE 5W-20 Premium Synthetic Blend Motor Oil dramatically outperforms and outprotects conventional solvent-refined motor oils
- This oil has been thoroughly evaluated by Ford Motor Company and has performed flawlessly in all dynamometer and vehicle durability tests
- Refer to the Motorcraft® SAE 5W-20 Premium Synthetic Blend Motor Oil specification sheet at www.motorcraft.com and www.fmcdealer.dealerconnection.com for additional information. For MSDS information call 1-800-448-2063



SAE 5W-30 Full Synthetic Motor Oil

	Part Number	Specification Number	Size	Unit Pack	MSDS / FIR Number
	XO-5W30-QFS	WSS-M2C929-A	1 Qt.	12 (Case Qty.)	173414
	XO-5W30-DFS	WSS-M2C929-A	55 U.S. gal.	1	173414
- Motorcraft® SAE 5W-30 Full Synthetic Motor Oil is a premium-quality passenger car motor oil recommended by Ford Motor Company meeting warranty requirements. It is API Certified for gasoline engine service ILSAC GF-4 and meets API SM/Energy Conserving - Motorcraft® SAE 5W-30 Full Synthetic Motor Oil is manufactured with high-viscosity index, premium-quality, synthetic base oils that provide good high temperature and low temperature performance. It helps minimize engine deposits and wear, protect against high-temperature oxidation, low-temperature gelling, rust and corrosion and foaming. The friction-reducing technology in this motor oil provides superior wear protection and energy-conserving characteristics, which result in significant improvement in fuel economy when compared to SAE 10W-30 motor oils - Refer to the Motorcraft® SAE 5W-30 Full Synthetic Motor Oil specification sheet at www.motorcraft.com and www.fmcdealer.dealerconnection.com for additional information. For MSDS information call 1-800-448-2063  					

SAE 5W-30 High Mileage Synthetic Blend Motor Oil

	Part Number	Specification Number	Size	Unit Pack	MSDS / FIR Number
	XO-5W30-QHM	WSS-M2C929-A	1 Qt.	12 (Case Qty.)	181150
	- Motorcraft® SAE 5W-30 High Mileage Synthetic Blend Motor Oil is a premium-quality passenger car motor oil recommended by Ford Motor Company meeting warranty requirements. This oil has been specifically formulated for engines with over 75,000 miles. It is API Certified for gasoline engine service ILSAC GF-4 and meets API SM/Energy Conserving - Motorcraft® SAE 5W-30 High Mileage Synthetic Blend Motor Oil is manufactured with high-viscosity index, premium-quality, synthetic/hydroprocessed base oils and specially designed performance additives, which help reduce oil consumption and oil leaks, minimize engine deposits and wear, protect against high-temperature oxidation, low-temperature gelling, rust, corrosion and foaming. The friction-reducing technology in this motor oil provides superior wear protection and energy-conserving characteristics, which result in significant improvement in fuel economy when compared to SAE 10W-30 motor oils - Motorcraft® SAE 5W-30 High Mileage Synthetic Blend Motor Oil dramatically outperforms and outprotects conventional solvent-refined motor oils - Refer to the Motorcraft® SAE 5W-30 Premium Synthetic Blend Motor Oil specification sheet at www.motorcraft.com and www.fmcdealer.dealerconnection.com for additional information. For MSDS information call 1-800-448-2063  				



SAE 5W-30 Premium Synthetic Blend Motor Oil



Note: SAE 5W-30 Premium Synthetic Blend Motor Oil is available in bulk quantities at substantial savings. Use of bulk oil products is environmentally proactive. Contact your FCSD Aftermarket Account Manager, an approved Motorcraft® Bulk Oil Distributor, or www.Motorcraft.com for details.

Part Number	Specification Number	Size	Unit Pack	MSDS / FIR Number	TSB
XO-5W30-QSP	WSS-M2C929-A	1 Qt.	12 (Case Qty.)	173219	98-17-21
XO-5W30-5QSP	WSS-M2C929-A	5 Qt.	4 (Case Qty.)	173219	
XO-5W30-DSP	WSS-M2C929-A	55 U.S. gal.	1	173219	

- Motorcraft® SAE 5W-30 Premium Synthetic Blend Motor Oil is a premium-quality passenger car motor oil recommended by Ford Motor Company meeting warranty requirements. It is API Certified for gasoline engine service ILSAC GF-4 and meets API SM/Energy Conserving
- Motorcraft® SAE 5W-30 Premium Synthetic Blend Motor Oil is manufactured with high-viscosity index, premium-quality, synthetic/hydroprocessed base oils and specially designed performance additives, which help minimize engine deposits and wear, protect against high-temperature oxidation, low-temperature gelling, rust and corrosion and foaming. The friction-reducing technology in this motor oil provides superior wear protection and energy-conserving characteristics, which result in significant improvement in fuel economy when compared to SAE 10W-30 motor oils
- Motorcraft® SAE 5W-30 Premium Synthetic Blend Motor Oil dramatically outperforms and outprotects conventional solvent-refined motor oils
- This oil has been thoroughly evaluated by Ford Motor Company and has performed flawlessly in all dynamometer and vehicle durability tests
- Refer to the Motorcraft® SAE 5W-30 Premium Synthetic Blend Motor Oil specification sheet at www.motorcraft.com and www.fmcdealer.dealerconnection.com for additional information. For MSDS information call 1-800-448-2063



SAE 5W-40 Full Synthetic Diesel Motor Oil

	Part Number	Specification Number	Size	Unit Pack	MSDS/FIR Number
	XO-5W40-5QSD	WSS-M2C171-E	5 Qt.	4 (Case Qty.)	180934
	XO-5W40-DSD	WSS-M2C171-E	55 U.S. gal.	1	180934
- Motorcraft® SAE 5W-40 Full Synthetic Diesel Motor Oil is a high-performance light and heavy-duty diesel engine oil recommended by Ford Motor Company. It is particularly recommended for use in Ford vehicles equipped with Power Stroke engines as in truck, bus, construction and other heavy-duty diesel engine applications. It meets API Service Category CJ-4, required for use in diesel engines designed to meet 2007 on-highway exhaust emission standards and requiring ultralow sulfur diesel fuel. Do not use in gasoline engines equipped with catalysts - Motorcraft® SAE 5W-40 Full Synthetic Diesel Motor Oil is a high-quality diesel engine oil formulated with synthetic base oils and unique additive technology. It satisfies the warranty requirements of Ford Motor Company, as well as most other domestic and import diesel engine manufacturers - Motorcraft® SAE 5W-40 Full Synthetic Diesel Motor Oil is designed for new generation, low emission diesel engines providing excellent soot control, protection against wear, deposits, rust and corrosion, foaming, sludge formation, high temperature oxidation and thickening, as well as protecting exhaust aftertreatment systems such as particulate filters. It also provides excellent performance in older-generation diesel engines operating on high-sulfur fuel - Motorcraft® SAE 5W-40 Full Synthetic Diesel Motor Oil can be used in older engines where the manufacturer recommended API Categories CD, CF-4, CG-4, CH-4, CI-4 and CI-4plus - Motorcraft® SAE 5W-40 Full Synthetic Diesel Motor Oil is recommended for use in Powerstroke® diesel engines over a wide temperature range, from -20 °F (-29 °C) to over 100 °F (38 °C) - Refer to the SAE 5W-40 Full Synthetic Diesel Motor Oil specification sheet at www.motorcraft.com and www.fmcdealer.dealerconnection.com for additional information. For MSDS information call 1-800-448-2063					

SAE 5W-50 Full Synthetic Motor Oil

	Part Number	Specification Number	Size	Unit Pack	MSDS/FIR Number
	XO-5W50-QGT	WSS-M2C931-B	1 Qt.	12 (Case Qty.)	178040
	- Motorcraft® SAE 5W-50 Full Synthetic Motor Oil is recommended by Ford Motor Company for use in the Ford GT and Shelby GT500. It meets API Service Category SM - It is manufactured with high viscosity index, premium-quality synthetic base oils and performance additives to provide wear and oxidation protection under severe operating conditions. It is resistant to deposit formation, including supercharged and turbocharged applications. It provides quick flow to engine parts during start-up and lubricates effectively over a wide temperature range - This oil is compatible with other synthetic and petroleum based formulations 				

Continuously Variable Chain Type Transmission Fluid

	Part Number	Specification Number	Size	Unit Pack	MSDS/FIR Number
	XT-7-QCFT	WSS-M2C933-A	1 Qt.	12 (Case Qty.)	171931
- Motorcraft® Continuously Variable Chain Type Transmission Fluid is a premium-quality fluid recommended by Ford Motor Company for use in the CFT-30 transmission - It provides optimal frictional characteristics for this type of transmission. It provides good low temperature fluidity, reduces wear and protects against sludge and varnish build-up - This fluid should be used ONLY in the CFT-30 transmission Note: Use of other fluids in the CFT30 transmission may cause internal damage. It is dyed blue for ease of leak detection.					

Dual Clutch Transmission Fluid

	Part Number	Specification Number	Size	Unit Pack	Sell Pack	MSDS/FIR Number
	XT-11-QDC	WSS-M2C200-D2	1 Qt.	1	12 (Case Qty.)	183455
- Motorcraft® Dual Clutch Transmission Fluid is specifically formulated for use in the DPS6 PowerShift twin dry-clutch transmission. It was designed as dual functioning fluid to protect gear, synchronizers and bearings, while also used to operate the transmission's shift mechanisms - Motorcraft® Dual Clutch Transmission Fluid is manufactured with synthetic base oils and performance additives providing improved shifting at all ambient temperatures. Protects against wear and corrosion, while low viscosity improves fuel economy - Use only in DPS6 PowerShift twin dry-clutch transmissions						

FNR5 Automatic Transmission Fluid

	Part Number	Specification Number	Size	Unit Pack	Sell Pack	MSDS/FIR Number
	XT-9-QMM5	Mazda M 5	1 Qt.	1	12 (Case Qty.)	175125
- Motorcraft® FNR5 Automatic Transmission Fluid is recommended by Ford Motor Company for use in the FNR5 5-speed transmission - It is manufactured with high-quality, high viscosity index base oils and specially designed performance additives, providing optimal shift quality over a wide range of conditions, including at low temperatures. Provides protection from wear and corrosion - Use ONLY in FNR5 transmissions - For use in the 2006 - 2009 Fusion and Milan vehicles						

Full Synthetic Manual Transmission Fluid

	Part Number	Specification Number	Size	Unit Pack	MSDS/FIR Number	TSB
	XT-M5-QS	WSD-M2C200-C	1 Qt.	12 (Case Qty.)	175246	00-1-9 01-15-7
- Motorcraft® Full Synthetic Manual Transmission Fluid is a premium-quality SAE 75W-90 gear oil recommended by Ford Motor Company meeting warranty requirements. It is particularly recommended for MTX-75, MT-82 and IB5 transmissions, and is also recommended for older transmissions including rear wheel drive that recommend GL-3 and GL-4 type gear oils - Motorcraft® Full Synthetic Manual Transmission Fluid is manufactured with synthetic base oils and performance additives providing improved gear shifting at all ambient temperatures. Its wear protection extends the life of synchronizers and bearings - Due to its excellent thermal, oxidative and shear stability, this fluid meets Ford's fill-for-life requirements. Reduced friction and optimal lubrication reduces operating temperatures, increases component life and improves efficiency						

MERCON® LV Automatic Transmission Fluid

	Part Number	Specification Number	Size	Unit Pack	MSDS/FIR Number
	XT-10-QLVC	MERCON® LV	1 Qt.	12 (Case Qty.)	179895
	XT-10-DLV	MERCON® LV	55 U.S. gal.	1	179895
Note: MERCON® LV Automatic Transmission Fluid is available in bulk quantities at substantial savings. Use of bulk oil products is environmentally proactive. Contact your FCSD Aftermarket Account Manager, an approved Motorcraft® Bulk Oil Distributor, or www.Motorcraft.com for details. - Motorcraft® MERCON® LV is a premium-quality automatic transmission fluid recommended by Ford Motor Company for use in Ford, Lincoln and Mercury vehicles that require MERCON® LV type fluid. This product also provides excellent performance in electronically controlled automatic transmissions. Check Owner Guide and transmission fluid charts for application - Motorcraft® MERCON® LV is manufactured with high-viscosity index, premium-quality, hydroprocessed base oils and specially designed performance additives, which provide excellent shifting characteristics at high and low ambient temperatures and guards against transmission shudder. This fluid has excellent thermal, oxidation and shear stability and good low temperature fluidity. It provides wear protection and inhibits the formation of gum, sludge, lacquer and foam. It also prevents against rust and corrosion. It is dyed red for ease of leak detection - Do not use in applications where MERCON® V, MERCON® SP (except TorqShift®), Continuously Variable Chain Type Transmission Fluid, Motorcraft® Premium Automatic Transmission Fluid, FNR5 Automatic Transmission Fluid or Type F Automatic Transmission Fluid is recommended, or in transfer cases - Refer to the Motorcraft® MERCON® LV specification sheet at www.motorcraft.com and www.fmcdealer.dealerconnection.com for additional information. For MSDS information call 1-800-448-2063					

MERCON® SP Automatic Transmission Fluid

Transmission
Fluid

	Part Number	Specification Number	Size	Unit Pack	MSDS /FIR Number	TSB
	XT-6-QSP	MERCON® SP	1 Qt.	12 (Case Qty.)	175325	06-7-3 06-14-4
	XT-6-DSP	MERCON® SP	55 U.S. gal.	1	175325	
	• Motorcraft® MERCON® SP is a premium-quality fluid recommended by Ford Motor Company specifically for use in Ford, Lincoln and Mercury vehicles that require MERCON® SP type fluid. This product also provides excellent performance in electronically controlled automatic transmissions. Check Owner's Guide or Workshop Manual for correct applications • Motorcraft® MERCON® SP is manufactured with premium base oils and specially designed performance additives, which provide excellent shifting characteristics at high and low ambient temperatures, excellent thermal and oxidation resistance. It provides wear protection and inhibits the formation of gum, sludge, lacquer and foam. It also provides protection against rust and corrosion. MERCON® SP is friction modified for smooth transmission operation while guarding against transmission shudder • Do not use in transmissions requiring MERCON® V, MERCON® LV, Continuously Variable Chain Type Transmission Fluid, Motorcraft® Premium Automatic Transmission Fluid, FNR5 Automatic Transmission Fluid, or Type F Fluid • Refer to the Motorcraft® MERCON® SP specification sheet at www.motorcraft.com and www.fmcdealer.dealerconnection.com for additional information. For MSDS information call 1-800-448-2063					

MERCON® V Automatic Transmission and Power Steering Fluid

	Part Number	Specification Number	Size	Unit Pack	MSDS/FIR Number	TSB
	XT-5-QMC	MERCON® V	1 Qt.	12 (Case Qty.)	184629	98-3-6
	XT-5-QM	MERCON® V	1 Qt.	12 (Case Qty.)	184629	98-8-7
	XT-5-5QM	MERCON® V	5 Qt.	4 (Case Qty.)	184629	98-15-9
	XT-5-GM	MERCON® V	1 U.S. gal.	6 (Case Qty.)	184629	99-14-12
	XT-5-DMC	MERCON® V	55 U.S. gal.	1	184629	99-16-5
	XT-5-DM	MERCON® V	55 U.S. gal.	1	184629	99-16-6
- Motorcraft® MERCON® V is a premium-quality automatic transmission fluid recommended by Ford Motor Company for use in Ford, Lincoln and Mercury vehicles that require either MERCON® V or MERCON® type fluid. This product also provides excellent performance in electronically controlled automatic transmissions - Motorcraft® MERCON® V is manufactured with high-viscosity index, premium-quality, hydroprocessed base oils and specially designed performance additives, which provide excellent shifting characteristics at high and low ambient temperatures, excellent thermal and oxidation resistance and good low temperature fluidity. It provides wear protection and inhibits the formation of gum, sludge, lacquer and foam. It also provides protection against rust and corrosion. It is dyed red for ease of leak detection - Do not use in applications where MERCON® SP, MERCON® LV, Continuously Variable Chain Type Transmission Fluid, Motorcraft® Premium Automatic Transmission Fluid, FNR5 Automatic Transmission Fluid or Type F Automatic Transmission Fluid is recommended, or in transfer cases - Motorcraft® MERCON® V is suitable for use as a hydraulic oil in a wide variety of industrial applications that call for an ISO 46 or SAE 20W viscosity grade hydraulic oil - Refer to the Motorcraft® MERCON® V specification sheet at www.motorcraft.com and www.fmcdealer.dealerconnection.com for additional information. For MSDS information call 1-800-448-2063						99-17-1
Note: MERCON® V Automatic Transmission Fluid is available in bulk quantities at substantial savings. Use of bulk oil products is environmentally proactive. Contact your FCSD Aftermarket Account Manager, an approved Motorcraft® Bulk Oil Distributor, or www.Motorcraft.com for details.						99-18-4
						99-18-9
						00-15-1
						00-24-2
						02-10-9
						02-19-1
						02-20-3
						04-22-10
						06-8-2
						06-14-4
						06-22-7
						06-23-3
						06-26-1
						07-1-7
						07-5-6
						08-12-10

Premium Automatic Transmission Fluid

	Part Number	Specification Number	Size	Unit Pack	MSDS/FIR Number
	XT-8-QAW	WSS-M2C924-A	1 Qt.	12 (Case Qty.)	171914
- Motorcraft® Premium Automatic Transmission Fluid is a premium-quality fluid recommended by Ford Motor Company for use in the AW F21 6-speed transmission - It has unique frictional characteristics specific to this transmission - It has excellent high temperature thermal and oxidative stability, and protects against transmission shudder - Do not use for applications recommending MERCON® LV, MERCON® V, MERCON® SP, Type F fluid, Continuously Variable Chain Type Transmission Fluid or FNR5 Automatic Transmission Fluid					

SAE 75W-90 API GL-4 Gear Oil

	Part Number	Specification Number	Size	Unit Pack	Sell Pack	MSDS/FIR Number	TSB
	XT-4-QGL	WSS-M2C203-A1 and GL-4	1 Qt.	1	12 (Case Qty.)	175527	01-15-7 04-16-4
- For use in Manual Transmissions in Probe, Escape, Fusion and Milan - Meets Warranty Requirements							

Synthetic Blend MERCON® V Automatic Transmission and Power Steering Fluid

	Part Number	Specification Number	Size	Unit Pack	MSDS/FIR Number
	XT-5-QSM	MERCON® V	1 Qt.	12 (Case Qty.)	181627
- Motorcraft Synthetic Blend MERCON® V Automatic Transmission and Power Steering Fluid is a high-quality automatic transmission fluid recommended by Ford Motor Company. It was developed for use in the newer electronically controlled automatic transmissions built after 1989 and power steering systems built after 1998 requiring MERCON® V or MERCON® fluid - Motorcraft Synthetic Blend MERCON® V Automatic Transmission and Power Steering Fluid is formulated with high-viscosity index, premium-quality, synthetic/hydroprocessed base oils and specially designed performance additives. It is specifically formulated to provide improved shifting characteristics at high and low ambient temperatures, excellent thermal and oxidation resistance, and good low temperature fluidity. It provides wear protection and inhibits the formation of gum, sludge, lacquer, and foam. It also provides protection against rust and corrosion - It is especially effective in applications where high temperatures are a concern. Due to its excellent thermal, oxidative, and shear stability, this fluid is required in manual transmission applications such as Mustang with G1 manual transmissions and F/Eseries with TR 3650 and ZF S5-47 manual transmissions - Formulated for powersteering systems to provide excellent low temperature fluidity as well as improved high temperature thermal stability for use in extreme conditions in all seasons - Do not use in applications where MERCON® LV, MERCON® SP, Continuously Variable Chain Type Transmission Fluid, Motorcraft® Premium Automatic Transmission Fluid, FNR5 Automatic Transmission Fluid or Type F Automatic Transmission Fluid is recommended					

Transfer Case Fluid

	Part Number	Specification Number	Size	Unit Pack	MSDS/FIR Number
	XL-12	ESP-M2C166-H	1 Qt.	12 (Case Qty.)	179944
- Transfer Case Fluid is recommended by Ford Motor Company for use in transfer cases driving front axles on Ford, Lincoln and Mercury AWD/4X4 vehicles. Do not use in AWD vehicles equipped with a transaxle - Motorcraft® Transfer Case Fluid is manufactured with high-viscosity index, premium-quality, hydroprocessed base oils and specially designed performance additives to provide increased protection against deposit, rust, corrosion, and wear and maintains proper viscosity at extreme temperatures - Do not use in automatic transmissions, manual transmissions, power take off units (PTU) or fluid couplers					

Transmission Fluid

Type F Automatic Transmission Fluid and Power Steering Fluid

	Part Number	Specification Number	Size	Unit Pack	MSDS/FIR Number
	XT-1-QF	ESW-M2C33-F	1 Qt.	12 (Case Qty.)	148095
- Motorcraft® ATF Type F is recommended by Ford Motor Company. It is a high-static friction fluid developed for Ford automatic transmissions manufactured during the 1970's and earlier. The special frictional properties of Motorcraft® ATF Type F ensure proper shifting in Ford transmissions that require a fluid meeting ESW-M2C33-F. It is also recommended for power steering systems in a wide variety of Ford Vehicles calling for a Type F fluid, built prior to Model Years 1996-1998. Check Owner Guide for proper application - Motorcraft® ATF Type F resists foaming and protects against rust, corrosion, wear and deposits. Its low viscosity makes it suitable not only for Ford power steering units, but also as a hydrostatic drive fluid for many farm implements and certain industrial equipment applications - Motorcraft® ATF Type F should not be used in newer transmissions requiring MERCON® LV, MERCON® V or MERCON® SP - Refer to the Motorcraft® ATF Type F specification sheet at www.motorcraft.com and www.fmcdealer.dealerconnection.com for additional information. For MSDS information call 1-800-448-2063					

Additive Friction Modifier

	Part Number	Specification Number	Size	Unit Pack	Sell Pack	MSDS/FIR Number	TSB	
	XL-3	EST-M2C118-A	4 fluid oz.	1	12	135454	97-8-11 98-5a-27 98-11-10 04-16-14 02-10-1 05-10-1 05-20-2	05-23-3 06-2-16 06-4-4 06-5-16 06-12-11 07-22-8
- For use on certain limited-slip differentials to reduce chatter and hypoid gear noise levels - Use according to Owner Guide recommendations - Tapered neck applicator for easy use								

High Contrast Hypoid Gear Marking Compound

	Part Number	Specification Number	Size	Unit Pack	Sell Pack	MSDS/FIR Number	TSB
	XG-14	N/A	3 oz.	1	4	175211	05-20-2 05-23-3
- Specially formulated to be non-damaging to axle bearings - Compatible with all Ford/Motorcraft hypoid gear lubricants - Brush-on application							

SAE 75W-140 Synthetic Rear Axle Lubricant

	Part Number	Specification Number	Size	Unit Pack	MSDS/FIR Number	TSB
	XY-75W140-QL	WSL-M2C192-A and GL-5	1 Qt.	12 (Case Qty.)	048396	04-24-20 05-10-1 05-12-6 05-20-2 05-23-3 06-2-16 06-4-4 06-12-11 07-16-10
- Motorcraft® SAE 75W-140 Synthetic Rear Axle Lubricant is an excellent multi-purpose extreme pressure lubricant recommended by Ford Motor Company meeting warranty requirements. It is recommended for conventional and limited-slip differentials of passenger cars, light trucks, vans and buses that operated under mild to severe service conditions - Motorcraft® SAE 75W-140 Synthetic Rear Axle Lubricant is manufactured using high-quality synthetic base oils and performance additives to provide improved high-temperature thermal and oxidative stability. It helps to reduce operating temperatures. It has enhanced wear protection for hypoid gears, excellent shear stability and protects from rust and corrosion. This product meets all fill-for-life requirements of Ford Motor Company						
Note: For a complete drain and refill, some limited-slip axles require addition of Friction Modifier, Part Number XL-3. Refer to Workshop Manual or Owner's Guide.						

SAE 75W-90 Premium Synthetic Transaxle Lubricant

	Part Number	Specification Number	Size	Unit Pack	Sell Pack	MSDS/FIR Number
	XT-75W90-QGT	GL-5	1 Qt.	1	12 (Case Qty.)	171872
- Motorcraft® SAE 75W-90 Premium Synthetic Transaxle Lubricant is a premium-quality lubricant recommended by Ford Motor Company for use in the Ford GT transaxle - It provides excellent gear change and synchromesh performance even at low temperatures - It provides complete lubrications for reduced wear - This fluid is compatible with other synthetic and conventional mineral oil axle lubes						

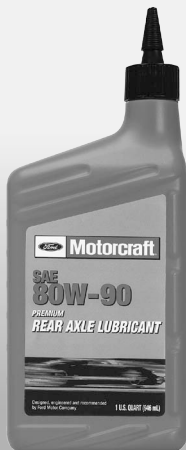
Transaxle Fluid

SAE 75W-90 Synthetic Axle Lubricant

	Part Number	Specification Number	Size	Unit Pack	Sell Pack	MSDS/FIR Number
	XY-75W90-QLS	DANA ES-PM-M2013 and GL-5	1 Qt.	1	12 (Case Qty.)	173036
- Motorcraft® 75W-90 Synthetic Axle Lubricant is a premium-quality gear lubricant recommend by Ford Motor Company meeting warranty requirements and specifically recommended for use in the limited-slip differential of the DANA Model 80 rear axle to eliminate chatter and is approved by Ford Engineering for use in DANA Model 60 and Model 70 rear axles which originally specified SAE 90 - Motorcraft® 75W-90 Synthetic Axle Lubricant is manufactured with high-quality synthetic base oil and unique performance additives. It is specifically formulated for improved high-temperature thermal and oxidative stability. This synthetic formula reduces operating temperatures. It has enhanced wear protection for hypoid gears, excellent shear stability and protection from rust and corrosion. This product meets all fill-for-life requirements of Ford Motor Company						
Note: For a complete drain and refill, some limited-slip axles require addition of Friction Modifier, Part Number XL-3. Refer to Workshop Manual or Owner's Guide.						

SAE 80W-90 Premium Rear Axle Lubricant

Transaxle
Fluid



Part Number	Specification Number	Size	Unit Pack	MSDS/FIR Number	TSB
XY-80W90-QL	WSP-M2C197-A, GL-5, MT-1	1 Qt.	12 (Case Qty.)	173576	03-5-8 05-6-20 05-10-1
XY-80W90-KL	WSP-M2C197-A, GL-5, MT-1	120 lbs. (16 U.S. gal.)	1	173576	

- Motorcraft® SAE 80W-90 Premium Rear Axle Lubricant is an excellent multi-purpose extreme pressure lubricant recommended by Ford Motor Company meeting warranty requirements. It is recommended for conventional and limited-slip differentials of passenger cars, light trucks, vans and buses that operate under mild to severe service conditions
- Motorcraft® SAE 80W-90 Premium Rear Axle Lubricant is manufactured using premium quality hydroprocessed base oils and performance additives to provide thermal and oxidative stability and protection against gear wear, rust and corrosion. This product meets the requirements of MIL-PRF-2105E & Mack GO-J

Note: For a complete drain and refill, some limited-slip axles require addition of Friction Modifier, Part Number XL-3. Refer to Workshop Manual or Owner's Guide.

Specialty Power Transfer Unit Fluid



Part Number	Specification Number	Size	Unit Pack	Sell Pack	MSDS/FIR Number	TSB
XY-75W90-PTU	GL-5	500 mL (1.05 pt)	1	2	174980	06-4-11 06-9-6

- SAE 75W-90 Specialty Power Transfer Unit Fluid is recommended by Ford Motor Company meeting warranty requirements
- It is manufactured with premium quality synthetic base oils and performance additives to provide excellent anti-wear protection and thermal and oxidative stability. Provides good performance at both high and low ambient temperatures
- Recommended for use only in the Power Transfer Unit in Five Hundred, Freestyle and Montego

Constant Velocity Joint Grease (High Temp)

	Part Number	Specification Number	Size	Unit Pack	MSDS/FIR Number	TSB
	XG-5	WSS-M1C258-A1	90 g	1	158358	N/A
	- High-temperature grease required for service of constant velocity joints - Designed to reduce shudder					

Electrical Grease

	Part Number	Specification Number	Size	Unit Pack	Sell Pack	MSDS/FIR Number	TSB
	XG-12	WSB-M1C239-A	3 oz.	1	4	123929/184665	97-24-10 98-24-6 00-6-3 03-1-3 04-14-9 04-24-12 06-9-3 06-21-12
	- Lubricates and protects electrical connectors - Provides a non-corrosive film for electrical switches and contacts - Protects connector metals from oxidation and corrosion						

High Contrast Hypoid Gear Marking Compound

	Part Number	Specification Number	Size	Unit Pack	Sell Pack	MSDS/FIR Number	TSB
	XG-14	N/A	3 oz.	1	4	175211	05-20-2 05-23-3
	- Specially formulated to be non-damaging to axle bearings - Compatible with all Ford/Motorcraft hypoid gear lubricants - Brush-on application						

High Temperature 4X4 Front Axle and Wheel Bearing Grease

	Part Number	Specification Number	Size	Unit Pack	MSDS/FIR Number	TSB
	XG-11	WSS-M1C267-A1	14 oz.	1	023824/184498	98-14-8 01-3-2 01-11-4
	- Required lubricant for 4X4 Ford Light Truck front axle spindle bearings, wheel bearings and U-joints - Lithium complex, high-temperature grease 572 °F (300 °C) dropping point – will not run off at high temperatures - NLGI grade #2					

High Temperature Nickel Anti-Seize Lubricant

	Part Number	Specification Number	Size	Unit Pack	Sell Pack	MSDS/FIR Number	TSB
	XL-2	N/A	8 oz.	1	—	174332	98-5a-5 98-1-4 05-19-12 06-9-10 06-15-2 07-16-1 08-1-9 08-4-7 09-16-5
- Provides high temperature lubrication up to 2552 °F (1400 °C) - Prevents seizing and galling of metal parts - Guards against rust and corrosion caused by chemicals and weathering - For use when replacing oxygen sensors							

Mini-Vent Window Lube

	Part Number	Specification Number	Size	Unit Pack	Sell Pack	MSDS/FIR Number	TSB
	XL-10	ESF-M2C113-A	4 fluid oz.	1	4	153958	N/A
Durable silicone-based lubricant specially formulated for reducing sliding efforts on mini-vent windows							

Multi-Purpose Grease

	Part Number	Specification Number	Size	Unit Pack	Sell Pack	MSDS/FIR Number	TSB
	XL-5	ESB-M1C93-B	11.5 oz. aerosol	1	12	164527	97-15-14 03-23-1 04-2-3 05-16-7
- Outstanding general-purpose grease for use on metal surfaces such as door hinges, seat tracks and deck lid hinges - Continues to lubricate long after application - Not affected by wide temperature operating ranges - Amber color							

Penetrating and Lock Lubricant

	Part Number	Specification Number	Size	Unit Pack	Sell Pack	MSDS/FIR Number	TSB
	XL-1	N/A	12 oz. aerosol	1	12	168705	02-17-12
- Displaces moisture - Helps free rusty/seized parts - Helps protect metal parts against corrosion							

Premium Long-Life Grease

	Part Number	Specification Number	Size	Unit Pack	Sell Pack	MSDS/FIR Number	TSB
	XG-1-C	ESA-M1C75-B	14 oz.	40	—	046977	98-16-2 98-17-21 98-21-7 01-3-2 02-19-1 07-24-1
	XG-1-K	ESA-M1C75-B	120 lb.	1	—	046977	
- Use on chassis, ball joints, U-joints, wheel bearings, brake self adjusting screws and steering gear - Resists washout and component wear under extreme pressure - Fights rust, abrasion and high-temperature breakdown - Contains high-density polyethylene and molybdenum disulfide 275 °F (135 °C) upper temperature limit; 350 °F (177 °C) dropping point - NLGI Grade #2							

PTFE Lubricant

	Part Number	Specification Number	Size	Unit Pack	Sell Pack	MSDS/FIR Number	TSB
	D2AZ-19590-A	ESB-M1C111-A	1 lb.	1	—	001860/173865	97-13-21 98-17-21 00-25-8 04-1-6 04-26-6 05-26-10
	XG-8	ESB-M1C111-B	3 oz. tube	1	—	001860/173865	
- For use with driveshaft slip yokes; especially where grunt-type noise is experienced - Useful in eliminating squeaks between plastic parts - For use on speedometer cables; stops squeaking, sticking and binding							

Silicone Brake Caliper Grease and Dielectric Compound

	Part Number	Specification Number	Size	Unit Pack	Sell Pack	MSDS/FIR Number	TSB	
	XG-3-A	ESE-M1C171-A	3 oz.	1	12	178365	98-5a-19 98-5a-22 98-5a-23 98-5a-29 98-5-4 98-19-2 98-23-6 99-5-7 99-8-10 00-6-9 01-22-4 03-7-2 03-22-6 04-21-6 04-22-13	05-10-21 05-16-2 06-5-14 06-7-4 06-7-6 07-9-8 07-11-2 07-11-8 07-12-4 07-13-5 07-14-4 07-19-3 07-22-1 07-26-8
Brake Application - Lubricates disc brake caliper slide pins - High resistance to water and heat - Compatible with EPDM rubber Ignition System Applications - Provides high voltage seal to secondary ignition wires - Suppresses voltage leaks by coating inner distributor cap surface								

Silicone Spray Lubricant

	Part Number	Specification Number	Size	Unit Pack	Sell Pack	MSDS/FIR Number	TSB	
	XL-6	ESR-M13P4-A	12.25 oz. aerosol	1	12	177167	98-11-8 00-26-3 04-22-10 06-20-4 07-23-4 08-1-2 08-2-6 08-4-10	
- Lubricates window channels and rubber hood strips - Helps prevent battery terminal corrosion - High silicone content - Lubricates and helps prolong the life of rubber parts								

Synthetic Supercharger Fluid

	Part Number	Specification Number	Size	Unit Pack	Sell Pack	MSDS/FIR Number	TSB	
	XL-4	ESE-M99C115-A	4 fluid oz.	1	—	042166	N/A	
- Required for top-off of fluid level in superchargers on: 89-96 3.8L Thunderbird SC 99-03 5.4L Lightning F-150 02-03 5.4L Harley Davidson F-150 03-04 4.6L Mustang Cobra 05-06 5.4L GT 07-08 5.4L Shelby GT 500 - Tapered neck applicator bottle for easy use								

Power Steering Fluid

	Part Number	Specification Number	Size	Unit Pack	Sell Pack	MSDS/FIR Number	TSB
	XL-14	MERCON® V	12 fluid oz.	1	—	184629	98-5a-22 04-22-10
- Recommended for all power steering systems which require MERCON® V fluid - Recommended for all power steering systems previously serviced with MERCON® Note: All power steering systems built after 1998 require the use of MERCON® V fluid.							

Steering Fluid

A/C Cooling Coil Coating

	Part Number	Specification Number	Size	Unit Pack	Sell Pack	MSDS/FIR Number	TSB
	YN-29	N/A	4 fluid oz.	1	2	166422	03-5-6
- Combination acrylic resin and powerful antimicrobial formula eliminates A/C musty odor-causing conditions - For use in all Ford, Lincoln and Mercury vehicles - One application provides protection for 2 - 3 years - Use with Rotunda Flexible Applicator Tool Kit, Part Number 258-00005 - Refer to the applicable Workshop Manual or TSB for application instructions							

A/C System Flushing Solvent

	Part Number	Specification Number	Size	Unit Pack	Sell Pack	MSDS/FIR Number	TSB
	YN-23	N/A	1 U.S. gal.	1	4	173628	02-20-8 07-26-3
- Use to purge the A/C system in the event of contamination - Use with Rotunda A/C Flusher, Part Number 219-00022 - Carefully follow all label and equipment directions							

Cooling System Stop Leak Pellets

	Part Number	Specification Number	Size	Unit Pack	Sell Pack	MSDS/FIR Number	TSB
	VC-6	WSS-M99B37-B6	2 - 10 g pellets per blister card	1	24	174711	N/A
Use only when specified - Use in all Ford, Lincoln, and Mercury vehicles equipped with Motorcraft® Premium Engine Coolant meeting Ford Specification ESE-M97B44-A - When equipped with any other Motorcraft® engine coolant, use only in the Ford F-150 and MY 2010 and earlier Ford Explorer - Add 2 - 4 pellets to new engine coolant equipped after every cooling system flush - Seal and prevent minor leaks in the entire cooling system - Do not produce coolant discoloration - Safe for use with all automotive engine coolant types							

Diesel Cooling System Additive

	Part Number	Specification Number	Size	Unit Pack	Sell Pack	MSDS/FIR Number	TSB
	VC-8	ESN-M99B169-A	16 fluid oz.	1	12	184845	09-8-5
• Use only when specified - In all heavy-duty, diesel engine cooling systems equipped with green-colored Motorcraft® Premium Engine Coolant meeting Ford Specification ESE-M97B44-A - In all heavy-duty diesel engine cooling systems equipped with yellow-colored Motorcraft® Premium Gold Engine Coolant meeting Ford Specification WSS-M97B51-A1 • Designed to replace additives depleted between cooling changeouts • Now dyed yellow to eliminate engine coolant color change when mixing							

Electric A/C Compressor Oil

	Part Number	Specification Number	Size	Unit Pack	Sell Pack	MSDS/FIR Number	TSB
	YN-32	N/A	2 fluid oz.	1	—	180949	N/A
• For use in high-voltage electric compressors used in the following vehicles: - 1999 - 2002 Ford Electric Vehicle (EV) Ranger - 2010 and forward HEV (hybrid) Ford Fusion, Mercury Milan, Ford Escape, and Mercury Mariner - 2011 and forward HEV (hybrid) Lincoln MKZ • Do not use in any other A/C system							

A/C & Engine Cooling Products

Engine Cooling System Iron Cleaner

	Part Number	Specification Number	Size	Unit Pack	Sell Pack	MSDS/FIR Number	TSB
	VC-9	N/A	1 Qt.	1	12	181632	08-23-1 09-8-3 09-8-5 10-7-5
• Use only when specified. Refer to the applicable TSB or WSM for application, usage, and other important information • Unless specified otherwise, do not use this product to flush cooling systems where the cylinder block is aluminum. Use Motorcraft® Premium Cooling System Flush, VC-1 • Contains cleaners that effectively remove rust and polymers that disperse sludges • Is non-aggressive to both ferrous and non-ferrous metals, including mild steel, copper, aluminum, cast iron, brass, bronze, and stainless steels • Provides a passive iron surface after cleaning to avoid flash rusting							

Heavy Truck PAG Refrigerant Compressor Oil

	Part Number	Specification Number	Size	Unit Pack	Sell Pack	MSDS/FIR Number	TSB
	YN-24	WST-M1C231-B2	7 fluid oz.	1	—	168868	N/A
- For use in heavy trucks equipped with Sanden compressors where SP-20 or SP-15 is specified - High viscosity PAG lubricant Use only when specified – do not use as a substitute for YN-12-(A, B, C, or D), YN-22, or YN-32							

PAG Refrigerant Compressor Oil

	Part Number	Specification Number	Size	Unit Pack	Sell Pack	MSDS/FIR Number	TSB
	YN-12-D	WSH-M1C231-B	7 fluid oz.	1	12	173919	97-15-5 98-12-5 02-20-8 04-24-6 07-26-3
- Required in the majority of non-electric vehicle A/C systems equipped with R-134a refrigerant - Use to replace compressor oil lost by leaks or by replacement of an A/C system part Use only when specified. Use when YN-12-A, YN-12-B, YN-12-C, or YN-12-D is specified - For O.E. and Retrofit A/C Systems equipped with R-134a refrigerant							

Premium Cooling System Flush

	Part Number	Specification Number	Size	Unit Pack	Sell Pack	MSDS/FIR Number	TSB
	VC-1	ESR-M14P7-A	22 fluid oz.	1	12	166625	07-23-14 08-22-3 08-22-4 09-5-2 10-4-4
- Fast flush formulation - Compatible with all coolant types - Contains no petroleum distillates - Use to flush engine cooling system whenever coolant is changed or repairs are required - Does not require the use of a neutralizer - Safe for aluminum water pumps							

Premium Engine Coolant with Bittering Agent

	Part Number	Specification Number	Size	Unit Pack	Sell Pack	MSDS/FIR Number	TSB
	VC-5	ESE-M97B44-A	1 U.S. gal.	1	6	164315	98-8-6 01-11-6 01-23-6
	VC-5-B	ESE-M97B44-A	55 U.S. gal.	1	—	164315	
- Green-colored, conventional, ethylene glycol-based, coolant formulation for use in gasoline and diesel engines - Approved for engines with aluminum radiators and/or aluminum heads as well as conventional engines - Provides year-round antifreeze, anti-boil and corrosion protection - A 50/50 mixture of coolant and distilled water provides freeze protection down to -34 °F (-37 °C) and boiling protection up to 265 °F (129 °C) Use only when specified. Do not use this coolant in cooling systems originally equipped with any orange-colored, extended-life coolant such as Motorcraft® Specialty Orange Engine Coolant, meeting Ford Specification WSS-M97B44-D, or with the yellow-colored, longer-life coolant, Motorcraft® Premium Gold Engine Coolant, meeting Ford Specification WSS-M97B51-A1, or with the dark green-colored Motorcraft® Specialty Green Engine Coolant, meeting Ford Specification WSS-M97B55-A - Meets the requirements of ESE-M97B44-A and ASTM D 3306							

Premium Gold Engine Coolant with Bittering Agent

	Part Number	Specification Number	Size	Unit Pack	Sell Pack	MSDS/FIR Number	TSB
	VC-7-B	WSS-M97B51-A1	1 U.S. gal.	1	6	182630	01-23-6 02-23-7 08-22-3 08-22-4 08-23-1 09-5-2 09-8-5 10-4-4 10-7-5
	VC-7-D	WSS-M97B51-A1	55 U.S. gal.	1	—	182630	
- Yellow-colored, longer-life, ethylene glycol-based engine coolant for use in gasoline and diesel engines - Provides year-round antifreeze, anti-boil and corrosion protection - A 50/50 mixture of coolant and distilled water provides freeze protection down to -34 °F (-37 °C) and boiling protection up to 265 °F (129 °C) Use only when specified. Do not use this product in engine cooling systems originally equipped with any green-colored, conventional engine coolant such as Motorcraft® Premium Engine Coolant meeting Ford Specification ESE-M97B44-A (see usage chart for exceptions), or with any orange-colored, extended-life engine coolant such as Motorcraft® Specialty Orange Engine Coolant meeting Ford Specification WSS-M97B44-D, or with the dark green-colored Motorcraft® Specialty Green Engine Coolant meeting Ford Specification WSS-M97B55-A - Meets the requirements of WSS-M97B51-A1 and ASTM D 3306							

R-134a Refrigerant

	Part Number	Specification Number	Size	Unit Pack	Sell Pack	MSDS/FIR Number	TSB
	YN-19	WSH-M17B19-A	30 lb. non-refillable cylinder	1	—	045167	00-5-1 02-20-8 05-14-11 06-14-3 07-26-3
	YN-21	WSH-M17B19-A	30 lb. non-refillable cylinder	40	—	045167	
	• For A/C system recharge or replacement in all Ford, Lincoln and Mercury vehicles equipped with R-134a refrigerant • Every batch of R-134a refrigerant meets the Ford specification for purity • Each cylinder is checked for correct fill weight prior to shipment						

Specialty Green Engine Coolant with Bittering Agent

Part Number	Specification Number	Size	Unit Pack	Sell Pack	MSDS/FIR Number	TSB
VC-10-A2	WSS-M97B55-A	1 U.S. gal.	1	6	184300	N/A
 • Dark green-colored, longer-life, ethylene glycol-based, engine coolant for use in gasoline engines • Provides year-round antifreeze, anti-boil and corrosion protection • A 50/50 mixture of coolant and distilled water provides freeze protection down to -34 °F (-37 °C) and boiling protection up to 265 °F (129 °C) • Use only when specified. Do not use this product in engine cooling systems originally equipped with any green-colored, conventional engine coolant such as Motorcraft® Premium Engine Coolant meeting Ford Specification ESE-M97B44-A, or with the yellow-colored, longer-life coolant, Motorcraft® Premium Gold Engine Coolant meeting Ford Specification WSS-M97B51-A1, or with any orange-colored, extended-life engine coolant such as Motorcraft® Specialty Orange Engine Coolant meeting Ford Specification WSS-M97B44-D • Meets the requirements of WSS-M97B55-A and ASTM D 3306						

Specialty Orange Engine Coolant Revitalizer

	Part Number	Specification Number	Size	Unit Pack	Sell Pack	MSDS/FIR Number	TSB
	VC-12	N/A	1 Qt.	1	6	184251	N/A
 - Designed to replenish the corrosion inhibitors specific to Motorcraft® Specialty Orange Engine Coolant (VC-3-B) which may deplete with time between engine coolant change-out Use only as directed - For use only in MY 2011 and forward diesel engine-equipped F-Series Super Duty installed with Motorcraft® Specialty Orange Engine Coolant - Do not use in any other vehicles or with any other type of engine coolant - Use the Antifreeze Coolant ELC Contamination Kit, Rotunda part number 328-00008, at the recommended intervals (every 15,000 miles/12 months) to determine if the Motorcraft® Specialty Orange Engine Coolant Revitalizer should be added - May be added up to two times over the life of the engine coolant							

Specialty Orange Engine Coolant with Bittering Agent

	Part Number	Specification Number	Size	Unit Pack	Sell Pack	MSDS/FIR Number	TSB
	VC-3-B	WSS-M97B44-D	1 U.S. gal.	1	6	183115	01-23-6
 - Orange-colored, longer-life, ethylene glycol-based, engine coolant for use in gasoline and diesel engines - Provides year-round antifreeze, anti-boil and corrosion protection - A 50/50 mixture of coolant and distilled water provides freeze protection down to -34 °F (-37 °C) and boiling protection up to 265 °F (129 °C) Use only when specified. Do not use this product in engine cooling systems originally equipped with any green-colored, conventional engine coolant such as Motorcraft® Premium Engine Coolant meeting Ford Specification ESE-M97B44-A, or with the yellow-colored, longer-life coolant, Motorcraft® Premium Gold Engine Coolant meeting Ford Specification WSS-M97B51-A1, or with the dark green-colored Motorcraft® Specialty Green Engine Coolant meeting Ford Specification WSS-M97B55-A - Meets the requirements of WSS-M97B44-D, GM 6277M and ASTM D 3306 - Compatible with DEX-COOL® engine coolants							

Anti-Gel & Performance Improver (ULSD Compliant)

Part Number	Specification Number	Size	Unit Pack	Sell Pack	MSDS/FIR Number	TSB
PM-23-A	N/A	20 fluid oz.	12	—	178695	08-1-5 08-26-12
PM-23-ASU	N/A	6 fluid oz.	6	—	178695	
PM-23-GAL	N/A	1 U.S. gal.	4	—	178695	



Note: This ultra-low sulfur formulation can be used in engines required to meet 2007 emissions requirements (e.g., Ford's 6.4 L and 6.7 L diesel engines) and is backward compatible as well (i.e., can be used in Ford's 6.0 L, 6.9 L, and 7.3 L diesel engines).

- Ultra Low Sulfur Diesel (ULSD) Compliant
- Specially formulated for diesel engines to combat the effects of poor-quality diesel fuel
- Helps prevent gelling of diesel fuel in lines, filters, and tanks
- Improves starting ability in cold weather
- Smooths engine operation
- Improves fuel economy
- Adds lubricity to fuel to reduce engine wear

Carburetor Tune-Up Cleaner

	Part Number	Specification Number	Size	Unit Pack	Sell Pack	MSDS/FIR Number	TSB
	PM-2	N/A	18 oz. aerosol	1	12	159419	01-19-7 04-19-2 06-18-3 07-16-1 07-24-8 08-1-9 08-4-7 09-16-5
	PM-3	N/A	16 fluid oz.	1	12	159220	
	• Remove gums and other deposits from air/fuel induction systems of gasoline engines • Free sticking valves and sluggish compression rings • Purge excessive deposits from the combustion chambers • Ideal for spray cleaning of varnished steel or cast iron parts normally hand cleaned on bench operations • Not for use in diesel engines						

Cetane Booster & Performance Improver (ULSD Compliant)

Part Number	Specification Number	Size	Unit Pack	Sell Pack	MSDS/FIR Number	TSB
PM-22-A	N/A	20 fluid oz.	12	—	178699	08-1-5 08-26-12
PM-22-ASU	N/A	6 fluid oz.	6	—	178699	
PM-22-GAL	N/A	1 U.S. gal.	4	—	178699	
Note: This ultra-low sulfur formulation can be used in engines required to meet 2007 emissions requirements (e.g., Ford's 6.4 L and 6.7 L diesel engines) and is backward compatible as well (i.e., can be used in Ford's 6.0 L, 6.9 L, and 7.3 L diesel engines). • Ultra Low Sulfur Diesel (ULSD) Compliant • Specially formulated for diesel engines to combat the effects of poor-quality diesel fuel • Boosts the Cetane Rating (fuel ignitability) of diesel fuel for improved starting performance • Increases power • Smooths engine operation • Improves fuel economy • Adds lubricity to fuel to reduce engine wear						



Choke and Linkage Cleaner

	Part Number	Specification Number	Size	Unit Pack	Sell Pack	MSDS/FIR Number	TSB
	PM-14	WSS-M14P10-B	11 oz. aerosol	1	12	182904	N/A
• Sprays away grease, sludge, gum and varnish from the throttle plates, throttle bodies and other induction system components • Helps clean oil and dirt from choke, carburetor linkage and manifold heat controls • Not for use in diesel engines							

Diesel Exhaust Fluid (DEF)

Part Number	Specification Number	Size	Nozzle	Unit Pack	Sell Pack	Pallet Quantity	MSDS/FIR Number
PM-27-1G	WSS-M99C130-A	1 Gallon	1 per bottle	1	4	32 Cases	183606
PM-27-J	WSS-M99C130-A	2.5 Gallon	1 per bottle	1	2	36 Cases	183606
PM-27-D	WSS-M99C130-A	55 Gallon Drum	N/A	1	1	4 Drums	183606
PM-27-T	WSS-M99C130-A	275 Gallon Tote	N/A	1	1	1 Tote	183606
 • Required for diesel vehicles equipped with a selective catalytic reduction (SCR) emissions after-treatment system • Reduces NO_x emissions in diesel vehicles with an SCR catalyst • AUS32 fluid meeting all the requirements and purity standards of ISO 22241-2 and DIN70070 • Filler nozzle provided with 1 gallon and 2.5 gallon containers. Nozzle specifically designed to fit the DEF filler opening of 2011MY Ford diesel vehicles (as well as many competitive vehicles) and prevent over-filling the DEF tank • Use only dispensing systems that are compatible with DEF. Dispensing systems for 55 gallon drums and 275 gallon totes are available from Rotunda • DO NOT ADD TO FUEL TANK. • ONLY USE IN DIESEL VEHICLES EQUIPPED WITH SCR. • DIESEL VEHICLES EQUIPPED WITH SCR WILL NOT RUN IF THE VEHICLE RUNS OUT OF DIESEL EXHAUST FLUID.							

High Performance DOT 3 Motor Vehicle Brake Fluid

	Part Number	Specification Number	Size	Unit Pack	Sell Pack	MSDS/FIR Number	TSB
	PM-1-Q	WSS-M6C62-A	1 Qt.	1	12	174922	98-5a-50 99-1-6
- For vehicles with disc, drum or ABS - Factory-fill formulation - Minimum dry boiling point of 500 °F (260 °C) - Meets DOT 3, SAE J1703 and FMVSS 116 specification							

Metal Brake Parts Cleaner

	Part Number	Specification Number	Size	Unit Pack	Sell Pack	MSDS/FIR Number	TSB	
	PM-4-A	N/A	13 oz. aerosol	1	12	182902	99-5-4 02-21-1 04-26-7 05-4-7 05-9-10 05-13-10 05-14-8 05-22-3	05-22-19 07-3-1 07-5-15 07-12-4 07-13-9 07-14-4 08-4-7
- Spray away grease and oil from metal brake parts - Fast cleaning – fast drying - PM-4-A is a Special Low Volatile Organic Compound Formula								

Power Flush Injector Fluid

	Part Number	Specification Number	Size	Unit Pack	Sell Pack	MSDS/FIR Number	TSB
	PM-5	N/A	8 fluid oz.	1	12	158039	03-18-3 03-20-6 05-6-13 05-9-1
- For use with injector cleaning equipment - Fast action – cleans dirty injectors in minutes - Reduces deposit-related engine knock - Do not add to fuel tank							

Premium Fuel Injector Cleaner

	Part Number	Specification Number	Size	Unit Pack	Sell Pack	MSDS/FIR Number	TSB
	PM-6	ESE-M14P16-A	12 fluid oz.	1	12	179104	N/A
• Pour in fuel tank to clean dirty injectors while you drive • High-strength formulation – usually cleans injectors with one treatment • Reduces deposit-related engine knock • Removes intake valve deposits							

Pressurized Fuel Injector Cleaner

	Part Number	Specification Number	Size	Unit Pack	Sell Pack	MSDS/FIR Number	TSB
	CM-1001	ESE-M14P17-A	10 oz.	1	—	045361	N/A
• Helps restore fuel system components to factory-specification performance with just one treatment • Cleans entire fuel injection system • Removes deposits from gasoline engine fuel injectors, intake valves, combustion chambers and the fuel induction system • Use only with Fuel Injector Cleaner Application Kits, CM-1000 or CM-1003 (Ford and Lincoln Mercury EFI vehicles and 95% of domestic and import vehicles) or CM-1002 (All Ford, Lincoln, and Mercury vehicles) • For professional use only							

Silicone Brake Caliper Grease and Dielectric Compound

	Part Number	Specification Number	Size	Unit Pack	Sell Pack	MSDS/FIR Number	TSB	
	XG-3-A	ESE-M1C171-A	3 oz.	1	12	178365	98-5a-19 98-5a-22 98-5a-23 98-5a-29 98-5-4 98-19-2 98-23-6 99-5-7 99-8-10 00-6-9 01-22-4 03-7-2 03-22-6 04-21-6 04-22-13	05-10-21 05-16-2 06-5-14 06-7-4 06-7-6 07-9-8 07-11-2 07-11-8 07-12-4 07-13-5 07-14-4 07-19-3 07-22-1 07-26-8
Brake Application • Lubricates disc brake caliper slide pins • High resistance to water and heat • Compatible with EPDM rubber Ignition System Applications • Provides high voltage seal to secondary ignition wires • Suppresses voltage leaks by coating inner distributor cap surface								

Anti-Corrosion Coating

	Part Number	Specification Number	Size	Unit Pack	Sell Pack	MSDS / FIR Number	TSB
	PM-13-A	N/A	16 fluid oz.	1	4	166329	05-20-3
• Excellent long-lasting corrosion protection and mar resistance • For service temperatures exceeding 180 °F (82 °C) • Apply with brush, roller or spray • Surface must be free of oil, dirt and other foreign material (see product sheets for cleaning requirements unique to each product) • Apply at 2.5 mil film thickness Approximately 300 sq. ft/gallon at 2.5 mil film thickness							

Manual Dual Cartridge Applicator Gun

	Part Number	Specification Number	Size	Unit Pack	Sell Pack	MSDS / FIR Number	TSB
	TA-10	N/A	N/A	1	—	N/A	02-17-9 04-8-2
• For use with 10.1 oz. (300 ml) and 7.6 oz. (225 ml) cartridges • Pre-configured to dispense 10.1 oz. (300 ml) 1:1 cartridges • Easy conversion to 2:1 7.6 oz. (225 ml) cartridges (parts included) • Features tempered, built-in nozzle cutter for easy controlled custom bead sizing • For use with Motorcraft® Roof Ditch Sealer (TA-15) and the structural foam found in kits TA-12 and 4W73-5B118-AA							

Metal Bonding Adhesive

	Part Number	Specification Number	Size	Unit Pack	Sell Pack	MSDS / FIR Number	TSB
	TA-1	N/A	1.7 fluid oz.	1	—	156626/161171	01-18-2 01-19-6 04-17-3 04-18-11 04-24-1 04-26-16 04-26-17
• Easy to use formula creates uniform bondline thickness every time despite differences in clamping techniques • No welding needed • Replacement of OEM structural adhesives when specified in service publications • Door skin replacement as specified on www.FMCDealer.com • Tough modified acrylic formula • For bonding cold rolled steel, galvanized steel, aluminum and scuffed e-coat as specified in service publications • Built-in color indicator turns from beige to green when initial set has been achieved • Use applicator gun Rotunda Part Number 501-040							

Metal Surface Prep

	Part Number	Specification Number	Size	Unit Pack	Sell Pack	MSDS / FIR Number	TSB
	ZC-31-A	N/A	16 fluid oz.	1	4	162886	02-11-4 02-21-13 03-6-2 05-10-10 05-10-13 06-21-10 07-16-16 09-8-3
- Cleans and degreases metal surfaces. Removes light RTV residue - Use as surface preparation prior to applying RTV silicones - Gel formula permits use on vertical surfaces and extended soaking for heavy residue - Not for use on plastic Note: As described in TSB 02-11-4, the product is designed to be used with Motorcraft® Silicone Gasket Remover, ZC-30							

Plastic Bonding Adhesive

	Part Number	Specification Number	Size	Unit Pack	Sell Pack	MSDS / FIR Number	TSB
	TA-9	N/A	1.7 fluid oz.	1	—	159252/159253	01-18-2 04-8-5 04-16-9 04-19-9 05-8-3 06-21-12
- A structural adhesive for bonding a variety of plastics to plastics and plastics to primed, painted or e-coated metals - Fast setting at room temperature - Easy to gun, non-sag formula - Also great for general purpose bonding of trim components - High strength structural urethane adhesive - No VOC's, 100% solids - Use applicator gun Rotunda Part Number 501-040							

Collision &
Body Repair

Pneumatic Dual Cartridge Applicator Gun

	Part Number	Specification Number	Size	Unit Pack	Sell Pack	M.SDS / FIR Number	TSB
	TA-11	N/A	N/A	1	—	N/A	02-17-9 04-8-2
- For fast and easy application of long beads from 10.1 oz. (300 ml) and 7.6 oz. (225 ml) cartridges - Pre-configured to dispense 7.6 oz. (225 ml) 2:1 cartridges - Includes conversion kit to enable dispensing of 10.1 oz. (300 ml) 1:1 cartridges - For use with Motorcraft® Roof Ditch Sealer (TA-15) and the structural foam found in kits TA-12 and 4W73-5B118-AA							

Premium Undercoating

	Part Number	Specification Number	Size	Unit Pack	Sell Pack	MSDS/FIR Number	TSB
	PM-25-A	N/A	12 oz. aerosol	1	4	178960	N/A
	PM-25-B	N/A	1.9 pints	1	4	179110	
• Provides sound deadening and underbody chip resistance • Restores factory appearance to underbody repair areas • Provides excellent new car protection • May be applied over the PM-24 rust inhibitor products for outstanding corrosion protection • Available Rotunda equipment for quart application connects directly to the bottle							

Rust Inhibitor

	Part Number	Specification Number	Size	Unit Pack	Sell Pack	MSDS/FIR Number	TSB
	PM-24-A	N/A	12 oz. aerosol	1	4	179154	N/A
	PM-24-B	N/A	1.9 pints	1	4	179098	
• Provides excellent rust inhibition and protection • For use on all body repairs to unibody structure, underbody and frame repair • Will help maintain proper structural integrity for body repairs • Provides excellent protection for new vehicles/add on sales • Available Rotunda equipment allows for different application options, including high pressure fan and 360° fog coverage							

Seam Sealer

	Part Number	Specification Number	Size	Unit Pack	Sell Pack	MSDS/FIR Number	TSB
	TA-2	N/A	10.3 fluid oz.	1	—	181251	01-18-2 01-19-6 02-17-4 04-18-11 04-26-4 04-26-16 07-14-6
 • Fast-curing • Permanently flexible • Excellent bond strength • Paintable in 10 minutes • Will not shrink, crack or peel • Bonds to all primed or painted metals, and most automotive plastics • Heavy bodied, non-sag formula • Immediately bakeable • Typical applications include: Duplicating factory look on: standing cosmetic seams, truck bed seams, tooled door skin seams, floor pans, core supports. Anywhere a non-sag, cosmetic seam sealer is required. • Available in 10.3 oz. (305 ml) aluminum caulk tubes							

Acid Neutralizer

	Part Number	Specification Number	Size	Unit Pack	Sell Pack	MSDS/FIR Number	TSB
	ZC-1-A	N/A	1 U.S. gal.	1	4	152625	04-9-6
- Neutralizes acids which may have been deposited on the paint surface during transportation and storage - Removes waxes and hard water spots - Excellent pre-wash for body shop – removes silicones, waxes and other contaminants before sanding - Saves time when applied to used vehicles – removes oxidation and reduces buff time Note: This product is the first step in the Ford-recommended neutralizing, cleaning, three-step process for automotive finishes as specified per TSB 04-9-6. All three products must be used for complete neutralization.							

Alkaline Neutralizer

	Part Number	Specification Number	Size	Unit Pack	Sell Pack	MSDS/FIR Number	TSB
	ZC-2-A	N/A	1 U.S. gal.	1	4	152570	04-9-6
- Deep cleans painted surfaces to remove alkaline deposits - Dissolves ferrous metal particles while breaking their bond to the paint so that they safely and easily float away Note: This product is the second step in the Ford-recommended neutralizing, cleaning, three-step process for automotive finishes as specified per TSB 04-9-6. All three products must be used for complete neutralization.							

Exterior & Interior
Vehicle Cleaners

Bug and Tar Remover

	Part Number	Specification Number	Size	Unit Pack	Sell Pack	MSDS/FIR Number	TSB
	ZC-42	N/A	16 fluid oz.	1	12	167202	05-16-2
- Multiple deposit remover – cuts tar, asphalt, rust proofing, road oils and gummy materials, as well as removes insects without excessive scrubbing - Safe for use on all Ford, Lincoln and Mercury exterior production vehicle finishes Note: For best results, wash the surface with Motorcraft® Detail Wash, ZC-3-A, after using Bug and Tar Remover.							

Custom Bright Metal Cleaner

	Part Number	Specification Number	Size	Unit Pack	Sell Pack	MSDS/FIR Number	TSB
	ZC-15	ESR-M5B194-B	16 fluid oz.	1	12	002638	97-26-13 98-1-13 08-12-6
- Removes rust from pitted chrome – takes off salt and road chemicals fast - Helps restore shine to chrome, aluminum and brass - Rub on, let dry and then wipe off. Fast dissolving action saves time Note: Do not use on clear coated and painted surfaces.							

Detail Wash

	Part Number	Specification Number	Size	Unit Pack	Sell Pack	MSDS/FIR Number	TSB
	ZC-3-A	ESR-M14P4-A	1 U.S. gal.	1	4	152626	03-10-1 04-9-6 10-15-9
- A great vehicle wash - Returns paint to its original factory pH level - Excellent for everyday use. The pH 7.0 (neutral) formula removes dirt without stripping waxes, polishes or sealants - Concentrated formula – when diluted with water as recommended, each 1 U.S. gallon produces 128 U.S. gallons of wash Note: This product is the third step in the Ford-recommended neutralizing cleaning, three-step process for automotive finishes as specified per TSB 04-9-6. All three products must be used to ensure complete neutralization.							

Dusting Cloth

	Part Number	Specification Number	Size	Unit Pack	Sell Pack	MSDS/FIR Number	TSB
	ZC-24	ESR-M99H93-B	15" x 26.5"	1	24 (Display Package)	N/A	05-13-7
- For use on interior and exterior vehicle surfaces - Special wax treatment polishes surfaces as you clean them - Acts like a magnet to attract dust and dirt – cleans car surfaces as well as office and home furniture - Shipped in a countertop point-of-purchase display							

Engine Shampoo and Degreaser

	Part Number	Specification Number	Size	Unit Pack	Sell Pack	MSDS/FIR Number	TSB
	ZC-20	ESR-M14P3-A	15 oz. aerosol	1	12	172983	N/A
- Cleans grease, oil and road dirt from engine and engine compartment prior to painting or performing engine repair - Use to clean transmission housings, hydraulic equipment, enclosed electric motors, generator housings, gear casings and hand tools							

Premium Windshield Washer Concentrate

	Part Number	Specification Number	Size	Unit Pack	Sell Pack	MSDS/FIR Number	TSB
	ZC-32-A	WSB-M8B16-A2	16 fluid oz.	1	12	163339	N/A
	ZC-32-B	WSB-M8B16-A2	32 fluid oz.	1	12	163339	
	ZC-32-C	WSB-M8B16-A2	55 U.S. gal.	1	—	163339	
- Concentrated formula – the product label displays a handy dilution chart providing the mix ratios of water and windshield washer fluid. Use the dilution chart to obtain the appropriate freeze protection and volatile organic compound (VOC) concentration - Cleans off bugs, dirt and road film fast - Contains a bittering agent (taste adversant) - Use at full strength to remove wax build-up on windshield wiper blades Important Note: This product must be diluted with water prior to use as windshield washer fluid. Federal, state and/or local regulations limit the concentration of volatile organic compounds (VOCs) in windshield washer fluid mixtures. Check the applicable regulations prior to mixing with water and reference the Motorcraft Premium Windshield Washer Concentrate Dilution Chart.							

Exterior & Interior
Vehicle Cleaners

Professional Strength Carpet and Upholstery Cleaner

	Part Number	Specification Number	Size	Unit Pack	Sell Pack	MSDS/FIR Number	TSB
	ZC-54	N/A	18 oz. aerosol	1	12	171146	N/A
- Aerosol system provides excellent delivery of foaming product for deep cleaning - Use on all automotive velour and pile-type fabrics. Do not use on silk, velvet, vinyl or leather surfaces - Removes dirt, grease and grime to restore a like-new appearance							

Spot and Stain Remover

	Part Number	Specification Number	Size	Unit Pack	Sell Pack	MSDS/FIR Number	TSB
	ZC-14	N/A	16 fluid oz.	1	12	124473	N/A
• Safely and effectively removes spots and stains on automotive upholstery • Non-flammable, water-based formula • Contains no chlorinated solvents • Fast-acting and easy to use • Great for use on grease, oil, stains and ground-in dirt							

Ultra-Clear Spray Glass Cleaner

	Part Number	Specification Number	Size	Unit Pack	Sell Pack	MSDS/FIR Number	TSB
	ZC-23	ESR-M14P5-A	15 oz. aerosol	1	12	019761	04-24-5 05-13-7 07-16-11 08-21-5 10-15-7
• Non-streaking, foaming cleaner • Removes smudges, film and smears • Not harmful to painted surfaces • Formulated for automotive use • Great for new car/truck detailing – excellent for removing transit coating from all glass surfaces, including mirror glass • Use only as directed. Do not use on surfaces other than glass and mirrors							

Exterior & Interior
Vehicle Cleaners

Wheel and Tire Cleaner

	Part Number	Specification Number	Size	Unit Pack	Sell Pack	MSDS/FIR Number	TSB
	ZC-37-A	N/A	16 fluid oz.	1	12	176131	N/A
• The only tested and approved product for cleaning wheels on Ford Motor Company vehicles • Effectively removes brake dust • Spray-on, hose-off formula • May require some agitation with sponge for heavier deposits • Combination product safely cleans tires, including white-letters and white-walls							

2000 ml Hand Cleaner Dispenser

	Part Number	Specification Number	Size	Unit Pack	Sell Pack	MSDS/FIR Number	TSB
	ZC-51	N/A	2000 ml	1	—	N/A	N/A
- Motorcraft® 2000 ml Dispenser is a key component of the all new Motorcraft® Hand Care System. The dispenser is used for Motorcraft® Heavy Duty (ZC-48) and Motorcraft® Orange Pumice (ZC-49) - The dispenser mounts in minutes. Large display window makes it easy to see when it is time to refill - Adjustable portion control dispensing saves up to 20% over other systems or portable products - One hand “push” operation is easy to use; dispenser mounting is reinforced with each use - Dispenser complies with ADA guidelines Lifetime Guarantee							

Natural Citrus Hand Cleaner

	Part Number	Specification Number	Size	Unit Pack	Sell Pack	MSDS/FIR Number	TSB
	ZC-22	N/A	1 U.S. gal.	1	4	042357	N/A
- Removes most shop soils, including undercoating and urethane sealants and adhesives, from hands - Has a fresh citrus scent and contains aloe, lanolin and jojoba oil to help soothe skin - Rinses off cleanly - Contains biodegradable surfactant; contains no petroleum solvents - Includes a free pump							

Nitrile Technician Gloves

	Part Number	Specification Number	Size	Unit Pack	Sell Pack	MSDS/FIR Number	TSB
	ZC-55-L	N/A	100 Count (Large)	1	10	N/A	06-21-12
	ZC-55-XL	N/A	100 Count (X-Large)	1	10	N/A	
	• More durable and puncture- and chemical-resistant than latex gloves • Latex- and powder-free • Comfortable fit. Fully textured for a firm grip whether wet or dry • Resistant against: antifreeze, transmission fluid, paint thinners, adhesive removers, gasoline, diesel fuel, engine and gear oil, paint, lacquer, grease and many other similar chemicals • Ideal for technicians when painting, performing auto body and mechanical repairs, and more						

Professional Skin Conditioner

	Part Number	Specification Number	Size	Unit Pack	Sell Pack	MSDS/FIR Number	TSB
	ZC-50	N/A	500 ml	1	6	169249	N/A
	- Improves skin condition and maintains the skin's natural protective barrier. Good skin condition is the best defense against harmful substances and moisture loss - Heals and restores professional working hands - Absorbs quickly without the greasy feeling of other creams - Contains no silicones, oils or added fragrance - Dermatologist tested - Latex and Nitrile glove compatible - Proven under actual workplace conditions - For use with Motorcraft Professional Skin Conditioner Dispenser Part # ZC-52						

Professional Skin Conditioner Dispenser

	Part Number	Specification Number	Size	Unit Pack	Sell Pack	MSDS/FIR Number	TSB
	ZC-52	N/A	500 ml	1	—	N/A	N/A
	- Used for dispensing Motorcraft® Professional Skin Conditioner Part # ZC-50 - Easily mounts in minutes without the use of nails or screws - One hand “push” operation is easy to use; dispenser mounting is reinforced with each use - Display window makes it easy to see when it's time to refill - Dispenser complies with ADA guidelines Lifetime Guarantee						

Adhesion Promoter

	Part Number	Specification Number	Size	Unit Pack	Sell Pack	MSDS/FIR Number	TSB
	PM-19A316-AA	N/A	6 oz. aerosol	1	—	172183	03-15-12 05-9-3
 • Quick-drying, clear plastic primer for use before color coating plastic interior trim parts • Equipped with the EZ TOUCH® FANSPRAY® valve – requires 50% less finger pressure than a standard valve. Allows greater coverage with less overspray and manipulates like a professional spray gun • Use only as recommended • Can be used as a substitute for Dupli Color's CP199 • Use to prime plastic interior trim surfaces before using any M4JZ-19M547-XXXXH color • Use to prime hard plastic interior trim surfaces before using any PM-19M547-XXXXH color. Do NOT use on soft plastic interior trim surfaces before using any PM-19M547-XXXXH color. Reference the applicable TSB and 2004 - 2009 Interior Trim Parts – Plastic Types chart for additional information • Meets current CARB MIR level requirements • Available only while supplies last							

Argent Spray Paint

	Part Number	Specification Number	Size	Unit Pack	Sell Pack	MSDS/FIR Number	TSB
	PM-19K207-AA	ESR-M2P92-A	13 oz. aerosol	1	—	014479	N/A
 • Excellent for reconditioning used vehicles • Use to refinish splash pans and other argent-colored (silver) metal body parts • Valuable tool for touching up cars and trucks							

Exterior Lacquer Touch-Up Paints – 2-in-1 Brush-in-Tube/Pen Tip



Part Number	Specification Number	Size	Unit Pack	MSDS/FIR Number
PMP-19500-1000	ESR-M2P100-C	0.5 fluid oz.	1	040056
PMP-19500-6000	ESR-M2P100-C	0.5 fluid oz.	1	039975
PMP-19500-XXXXX	ESR-M2P100-C	0.5 fluid oz.	1	009836
PMP-19K507-XXXXX	ESR-M2P100-C	1 kit	1	009836

Exterior Lacquer Touch-Up Paints — 2-in-1 Brush-in-Tube/Pen Tip

- Ideal for retouching nicks, chips and scratches during new car prep and customer use
- Built-in, full-width agitator thoroughly mixes paint for exact color match
- User friendly – equipped with two unique applicators, a pen tip for precise retouching of fine chips and scratches and a brush with a tapered tip for pin point or broad stroke use
- For specific vehicle usage, see the applicable MYs in the Paint Charts or Touch-up Paints – Interior and Exterior-Part Booklet

AVAILABLE

1000 - Primer
 6000 - Clear Topcoat
 XXXXX = Color Code

Note: The PMP-19K507-XXXXX kits correspond to the MY 2011 and forward tricoat colors. Each kit contains (1) 0.5 fluid oz. tube of pearlescent topcoat, (1) 0.5 fluid oz. tube of basecoat, and application instructions.

Interior Spray Paint



Part Number	Specification Number	Size	Unit Pack	Sell Pack	MSDS/FIR Number	TSB
PM-19M547-XXXXH (XXXX = Color Code)	N/A	6 oz. aerosol	1	—	172367	05-9-3

- Quick-drying, premium interior plastic trim paint formulation
- UV stable and color fast
- Completely flexible – will not crack, flake or peel when used as directed
- When used as directed, the original grain pattern of the plastic is maintained (remains visible)
- Ideal for repair or paint-to-match purposes
- Each 6 oz. can covers approximately 5-7 square feet of plastic surface
- Use only as recommended
- Use a plastic adhesion promoter such as Motorcraft® Adhesion Promoter before color coating hard plastic surfaces. Do NOT use a plastic adhesion promoter before color coating soft plastic surfaces. Reference the applicable TSB and 2004 - 2009 Interior Trim Parts – Plastic Types chart for more information
- Meets current CARB MIR level requirements
- Do **NOT** repair or repaint air bag covers (doors)
- **Available only while supplies last**

Touch-up
Paint

Clear Silicone Rubber

	Part Number	Specification Number	Size	Unit Pack	Sell Pack	MSDS/FIR Number	TSB
	TA-32	ESB-M4G92-A	3 fluid oz.	1	12	015016	97-7-15 97-26-14 03-12-1 04-9-5 04-14-8 04-15-3 04-21-20 04-23-9 05-7-4 05-10-1 05-13-3 06-14-8 06-14-10 07-1-11 07-12-6
- Form-in-place gasket and multi-purpose adhesive/sealant - Room-temperature acetic acid cure silicone rubber - Many other uses such as sealing leaks, remounting trim and repairing torn weather stripping - Dispenser nozzle can be custom-cut to desired bead size - For replacing gaskets in approved applications							

Gasket Maker

	Part Number	Specification Number	Size	Unit Pack	Sell Pack	MSDS/FIR Number	TSB
	TA-16	WSK-M2G348-A5	0.2 fluid oz.	1	12	014716	91-13-7 05-10-10
- Flexible, anaerobic gasketing material (Red) - Use on rigid machined flanges with less than 0.010" gap - Seals upon assembly, no waiting required - Adheres well to aluminum, iron, steel and magnesium - May also be used on automatic/manual transaxle cases, gear shift housings, dipstick tubes, water pumps and engine flanges							

High Performance Engine RTV Silicone

	Part Number	Specification Number	Size	Unit Pack	Sell Pack	MSDS/FIR Number	TSB
	TA-357	WSE-M4G323-A6	5 fluid oz.	1	6	179193	N/A
- Required for use on all 3.5L/3.7L engine gasketing applications - Cartridge fits standard caulking gun							

Instant Gel Adhesive

	Part Number	Specification Number	Size	Unit Pack	Sell Pack	MSDS/FIR Number	TSB
	TA-19	WSS-M2G401-B5	.06 fluid oz.	1	12	041245	97-12-1 98-8-11 98-20-19 99-6-5 99-13-10 02-25-11 04-2-2 04-12-4 04-24-3 07-4-3 07-16-11
• Rapid curing instant adhesive • Gel formula won't run or drip • Excellent humidity and weather resistance • Use on metals, wood, paper, fabrics, leather, rubber, ceramics and most plastics • May also be used on dashboard panels, vacuum lines, loose trim, emblems and loose vinyl body side moldings							

Metal Surface Prep

	Part Number	Specification Number	Size	Unit Pack	Sell Pack	MSDS/FIR Number	TSB
	ZC-31-A	N/A	16 fluid oz.	1	4	162886	02-11-4 02-21-13 03-6-2 05-10-10 05-10-13 06-21-10 07-16-16 09-8-3
• Cleans and degreases metal surfaces. Removes light RTV residue • Use as surface preparation prior to applying RTV silicones • Gel formula permits use on vertical surfaces and extended soaking for heavy residue • Not for use on plastic Note: As described in TSB 02-11-4, the product is designed to be used with Motorcraft® Silicone Gasket Remover, ZC-30.							

Rear View Mirror Adhesive

	Part Number	Specification Number	Size	Unit Pack	Sell Pack	MSDS/FIR Number	TSB
	TA-17	N/A	0.10/0.02 fluid oz.	1	10	165960/175811	94-17-2
• Permanently remounts mirrors to windshields • Achieves handling strength in seconds; mirror mounting strength in 15 minutes • Superfast, high strength, instant adhesive may also be used to bond close-mated, smooth-surface parts Note: For MSDS for TA-17 (Permatex 81840) see 165960P/175811P.							

Rear View Mirror Button Adhesive

	Part Number	Specification Number	Size	Unit Pack	Sell Pack	MSDS/FIR Number	TSB
	F7AZ-17698-BA (large)	WSS-M2G389-A	21mm x 29mm	10	—	N/A	N/A
 - Found to adhere much longer in high temperature, high humidity environments under constant load - Developed and sold only through Ford for service repair. Not available elsewhere - Applicable to all Ford & Lincoln Mercury vehicles, and many other domestic vehicles - Use with Rotunda applicator 164-R3925							

Rear Window Defroster Repair

	Part Number	Specification Number	Size	Unit Pack	Sell Pack	MSDS/FIR Number	TSB
	PM-11	ESB-M4J58-A	0.125 fluid oz.	1	—	172443	04-24-5 05-13-10 05-22-19
 - Repairs small open-circuit breaks in electrically heated, grid-type rear window defrosters - Tough, lasting repair. Minute quantity needed for each repair - Brush-in-cap applicator. Reestablishes electrical continuity							

RTV Silicone Sealant

	Part Number	Specification Number	Size	Unit Pack	Sell Pack	MSDS/FIR Number	TSB
	TA-31	N/A	5 fluid oz.	1	12	139293	98-18-14 00-24-3 03-21-9 04-19-6 04-26-7 05-9-10 07-3-1 07-5-15
 - A specially designed Alkoxy-Cure RTV Sealant for high temperature applications - Specifically recommended for use with the 7.3L Power Stroke®, 6.0L and 6.4L diesel engine - Non-corrosive, high viscosity material which starts to cure in minutes							

Silicone Gasket and Sealant

	Part Number	Specification Number	Size	Unit Pack	Sell Pack	MSDS/FIR Number	TSB	
	TA-30	WSE-M4G323-A4	5 fluid oz.	1	12	174272	97-2-8 97-24-4 98-6-2 98-7-4 98-12-3 99-5-7 00-18-5 03-5-3 03-6-4	03-7-1 03-16-2 03-19-3 03-21-9 04-9-5 04-17-9 05-10-10 07-24-6
- Recommend for all engine RTV gasketing applications (except 3.5L/3.7L and 7.3L Power Stroke®, 6.0L and 6.4 L diesel engine) - Form-in-place gasket and multi-purpose adhesive/sealant - Room temperature curing silicone rubber - Does not release acetic acid during curing, non-corrosive - Does not harm O₂ sensors - Cartridge fits standard caulking gun								

Silicone Gasket Remover

	Part Number	Specification Number	Size	Unit Pack	Sell Pack	MSDS/FIR Number	TSB	
	ZC-30	N/A	5 fluid oz.	1	12	177152	02-11-4 02-21-13 03-6-2 04-17-9 05-10-10 05-10-13 06-21-10	
- Specifically formulated to soften cured RTV and residue left from multi-layer steel gaskets - Allows removal of gasket residue with a plastic or wood scraper - Safe for aluminum and cast iron gasket surfaces - Assures a safe cleaning process without risk of damaging the sealing surface - Eliminates the need for metal tools or abrasives for removing gasket residue - Only Ford-approved product for removing multi-layer steel gaskets and RTV								
Note: As described in TSB 02-11-4, this product is designed to be used with Motorcraft® Metal Surface Prep, ZC-31-A.								

Thread Sealant with PTFE

	Part Number	Specification Number	Size	Unit Pack	Sell Pack	MSDS/FIR Number	TSB
	TA-24	WSK-M2G350-A2	0.2 fluid oz.	1	10	003737	N/A
- Instantly seals threaded fittings - Resistant to engine and transmission fluids - Lubricates bolts and studs - May also be used on fuel inlet fittings, hydraulic lines, water outlet plugs, rear axle fill plugs and transmission oil cooler lines							

Threadlock 262

	Part Number	Specification Number	Size	Unit Pack	Sell Pack	MSDS/FIR Number	TSB
	TA-26	WSK-M2G351-A6	0.2 fluid oz.	1	10	015395	97-14-21 97-21-17 98-17-15 03-21-43 05-17-6 06-14-10
- High strength (red) - Cures only when confined between surfaces - Prevents loosening of nuts, bolts, screws and fittings - Maintains clamp load - May also be used on seat and door bolts, cup plugs, dip stick tubes, engine studs, ring gear bolts, bearing sleeves and bearing shafts							

Threadlock and Sealer

	Part Number	Specification Number	Size	Unit Pack	Sell Pack	MSDS/FIR Number	TSB
	TA-25	N/A	0.2 fluid oz.	1	10	003751	97-2-3 98-5a-27 98-21-20 00-5-1 03-15-15 04-23-7 05-16-4 05-20-2
- Medium-strength threadlocker (blue) - Working bond is formed in 5 minutes—no more waiting. Final bond forms in 24 hours - Cures only when confined between surfaces - Cures without cracking or shrinking - Hand tool removable - Prevents loosening of nuts, bolts, screws and fittings							

Ultra Silicone Sealant

	Part Number	Specification Number	Size	Unit Pack	Sell Pack	MSDS/FIR Number	TSB	
	TA-29	N/A	2.4 fluid oz.	1	12	174399	98-5-8 98-7-4 00-24-2 02-21-1 04-16-4 05-10-1 05-12-6	05-20-2 05-23-3 06-10-5 06-14-6 06-17-06 07-7-1 07-14-1 07-15-3
• RTV Silicone (gray) designed for rigid flanges • Resistant to oil, transmission fluid, gear oils and coolant • No odor, O₂ Sensor safe • For use on transmission pans and covers, axle cover plates and transfer case covers								

Verification Tests Required for the API Certification Mark (Starburst) and API SM

Ball Rust Test

In this bench test a polished metal ball is subjected to an aqueous acid solution similar to acids normally found in engine oils. A digitized-optical image analyzer measures the amount of rust. It replaced the Sequence IID test.

Sequence IIIG and IIIGA

The Sequence IIIG dynamometer test is designed to simulate high-speed trailer tow conditions. In fact, the engine is run hot enough the exhaust manifolds glow red. Its main purpose is to evaluate an engine oil's performance in combating high-temperature oxidation, which causes oil thickening and varnish deposits. It also evaluates high temperature cam and tappet wear, and piston ring deposits. This test uses a GM 3.8L V6 and runs a total of 100 hours. The IIIGA test measures the low temperature performance of the oil after completion of the IIIG test.

Sequence IVA

The Sequence VIA is a dynamometer test used to evaluate low temperature cam and tappet wear. It uses a Nissan 2.4L I4 engine and runs a total of 100 hours. The cam wear is measured over seven positions on the cam lobe.

Sequence VG

The Sequence VG dynamometer test simulates city stop-and-go driving, and moderate-speed freeway driving. It evaluates engine oil's capability to prevent low- and moderate-temperature sludge and varnish formation. This test uses a Ford 4.6L V8. The engine also employs a specially designed rocker cover jacketed for water-cooling to help produce sludging conditions.

Sequence VIB

The Sequence VIB dynamometer test measures the effect of engine oil on fuel economy by comparing candidate oils versus an industry standard reference oil. The test is run both on fresh oil and after aging, simulating approximately 4,000 miles of driving. The test uses a Ford 4.6L V8.

Sequence VIII

Previously referred to as the "L-38" test, the Sequence VIII dynamometer test evaluates an engine oil's ability to combat copper-lead bearing corrosion. It also measures resistance to "thinning out" because of sheardown of it's viscosity modifier. The test uses a single cylinder engine displacing 42.5 cubic inches, run with the following conditions held constant: speed, temperature and air/fuel ratio. The test is run a total of 40 hours.

TEOST MHT-4

The Thermo-Oxidation Engine Oil Simulation Test or TEOST is a bench test, which measures the amount of deposits formed on a heated rod. It simulates deposits formed in turbocharger bearings, piston ring lands and other high-temperature areas of the engine.

Motorcraft Oil Quick Reference Oil Applications and Crankcase Capacities Chart

Recommend Motorcraft SAE 5W-20	Oil Refill (Qts) (1)	Oil Filter	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
1.6L -4V Fiesta	4.2	FL 910 S											
2.0L -2V Escort (02) / Focus	4.0	FL 400 S											
2.0L -4V I4 Focus	4.5	FL 910 S											
2.0L -4V I4 Transit Connect	4.5	FL 910 S											
2.0L -4V Escort (00) / ZX2 (03) Cougar	4.5	FL 2005 (2)											
2.0L -4V Focus / Escape	4.5	FL 400 S (2)											
2.3L -4V I4 Escape Hybrid / Mariner Hybrid	4.5	FL 2017 B											
2.3L -4V I4 Focus	4.5	FL 910 S											
2.3L -4V I4 Fusion / Milan	4.5	FL 2017 B											
2.3L -4V I4 Escape / Mariner	4.5	FL 910											
2.3L -4V I4 Ranger	4.0	FL 400 S											
2.5L -4V Escape / Mariner including Hybrid	5.3	FL 910 S (5)											
2.5L -4V Fusion / Milan including Hybrid	5.3	FL 910 S											
2.5L -4V MKZ Hybrid	5.3	FL 910 S											
2.5L -4V Cougar	5.8	FL 820 S											
2.5L OHC Ranger	4.5	FL 400 S											
3.0L -2V Taurus / Sable (05) / Ranger	4.5	FL 400 S											
3.0L -4V Taurus / Sable	(96-03)5.5/6.5	FL 820 S											
3.0L -4V RFF Escape	(04)5.5/6.0	FL 820 S											
3.0L -4V RFF Five Hundred / Montego	6.0	FL 820 S											
3.0L -4V RFF Mariner / Freestyle (07)	6.0	FL 820 S											
3.0L -4V RFF Fusion / Milan / Zephyr (06 only)	6.0	FL 820 S											
3.0L -4V RFF Fusion / Milan / Escape / Mariner	6.0	FL 500 S											
3.0L -4V DAMB Lincoln LS	6.9	FL 400 S											
3.5L -4V Edge / MKX / MKZ	5.5	FL 400 S											
3.5L -4V Edge / MKX / MKZ	5.5	FL 500 S											
3.5L -4V Taurus / Sable / Taurus X / Flex (09 only)	5.5	FL 400 S											
3.5L -4V Taurus / Fusion / Milan / Flex	5.5	FL 500 S											
3.5L -4V Explorer	6.0	FL 500 S											
3.5L EB Taurus SHO / Flex / MKS / MKT	5.5	FL 500 S											
3.7L -4V MKS	5.5	FL 400 S											
3.7L -4V MKS / MKT	5.5	FL 500 S											
3.7 L -4V Mustang / F-150	6.0	FL 500 S											
3.8L Mustang / Windstar (03)	5.0	FL 400 S											
3.9L -2V Freestar	5.0	FL 400 S											
3.9L -4V Lincoln LS / Thunderbird	(02)6.0/6.9	FL 2021											

Continued on Next Page

Motorcraft Oil Quick Reference Oil Applications and Crankcase Capacities Chart (Cont'd)

Quick
Reference Charts

Recommend Motorcraft SAE 5W-20	Oil Refill (Qts) (1)	Oil Filter	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
4.2L Freestar / Monterey	5.0	FL 400 S											
4.2L SPI Econoline / F-150	6.0	FL 400 S											
4.6L -2V(05) -3V Explorer / Mountaineer	(05)6.0/6.5	FL 820 S											
4.6L -2V F-150 / Expedition (04)	6.0	FL 820 S											
4.6L -3V Mustang / F-150 (09-10)	6.0	FL 820 S											
4.6L -4V Marauder (04) / Aviator	6.0	FL 820 S											
4.6L -4V Mustang Cobra/Mach 1 / Continental (02)	6.0	FL 820 S											
4.6L -2V Crown Victoria/Grand Marquis	(02)5.0/6.0	FL 820 S											
4.6L -2V Econoline	6.0	FL 820 S											
4.6L -2V Town Car / Mustang (04)	(02)5.0/6.0	FL 820 S											
5.0L -4V Mustang	8.0	FL 500 S											
5.0L -4V F150	7.7	FL 500 S											
5.0L Explorer/Mountaineer	5.0	FL 820 S											
5.4L -2V Econoline / Excursion (05)	6.0	FL 820 S											
5.4L -2V/3V F-Super Duty	7.0	FL 820 S											
5.4L -2V Expedition / F-150 (Including SC)	6.0	FL 820 S											
5.4L -2V F-Super Duty	6.0	FL 820 S											
5.4L -4V Navigator / Blackwood (02 only)	(02)6.0/7.0	FL 820 S											
5.4L -3V Navigator / Expedition / Mark LT (08)	7.0	FL 820 S											
5.4L -3V F-150 / Raptor	7.0	FL 820 S											
6.2L F-150 / Raptor	7.0	FL 820 S											
6.2L F-Super Duty	7.0	FL 820 S											
6.8L -2V Econoline	6.0	FL 820 S											
6.8L -2V F-Super Duty (04) / Excursion	6.0	FL 820 S											
6.8L -3V F-Super Duty	7.0	FL 820 S											

Recommend Motorcraft SAE 5W-30	Oil Refill (Qts) (1)	Oil Filter	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
2.0L HP 4V Zetec SVT Focus (2)	4.5	FL 2005											
2.0L EB, Explorer	5.7	FL 910 S											
3.3L Villager	4.2	FL 2007											
3.5L -EB F150	6.0	FL 500 S											
3.5L EB Taurus SHO / Flex / MKS / MKT	5.5	FL 500 S											
3.9L Lincoln LS	6.0	FL 2021											
4.0L SOHC Explorer / Mountaineer	5.0	FL 820 S											
4.0L SOHC V6 Mustang	5.0	FL 820 S											
4.0L SOHC Explorer Sport(03) / Explorer Sport Trac	5.0	FL 820 S											
4.0 L Ranger	5.0	FL 820 S											

Continued on Next Page

Motorcraft Oil Quick Reference Oil Applications and Crankcase Capacities Chart (Cont'd)

Recommend Motorcraft SAE 5W-50	Oil Refill (Qts) (1)	Oil Filter	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
5.4L 4V DOHC Supercharged V8 - GT	9.5	FL 2033											
5.4L 4V DOHC Supercharged V8 - Shelby GT500	6.5	FL 820 S											

Recommend Motorcraft SAE 10W-30 C-J-4 (Above 0°F/-18°C)	Oil Refill (Qts) (1)	Oil Filter	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
6.7L DIT Diesel Vehicles (4)	13.0	FL 2051											

Recommend Motorcraft SAE 15W-40 C-J-4 (Above 20°F/-7°C)	Oil Refill (Qts) (1)	Oil Filter	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
4.5L DIT Diesel Vehicles LCF (3)	15.0	FL 1995											
6.0L DIT Diesel Vehicles (3)	15.0	FL 2016											
7.3L DIT Diesel Vehicles (3)	15.0	FL 1995											
6.4L DIT Diesel Vehicles (3)	15.0	FL 2016											

Note (1): All capacities are with oil filter.

Note (2): FL400S and FL2005 are interchangeable.

Note (3): Check Owner's Guide for appropriate viscosity depending on ambient temperature.

0°F (-18°C) – 50°F (10°C) use SAE 10W-30 C-J-4
Below 50°F (10°C) use SAE 0W-30 C-J-4 or C-I-4
Above -20°F (-29°C) use SAE 5W-40 C-J-4

Note (4): Check Owner's Guide for appropriate viscosity depending on ambient temperature, duty cycle and biofuel content.

Above 20°F (-7°C) use SAE 15W-40 C-J-4
Above -20°F (-29°C) use SAE 5W-40 C-J-4
Above -40°F (-40°C) use SAE 0W-30 or 0W-40 C-J-4 or C-I-4

Note (5): Early 2009 vehicles used FL 2017B filter. Check if filter on the vehicle is spin on (FL 910 S) or cartridge (FL 2017B).

SC = Supercharged
EB = Eco-Boost

Motorcraft Axle Lubricants – Quick Reference Lubricant Applications and Capacities Chart

Application	Axle Location	Fluid Refill (Pints) [1]	Axle Description	Friction Modifier [3]	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Crown Victoria / Grand Marquis / Town Car (All)	Rear	3.8 (02) / 4.5 (03)	8.8	XL-3 for LS	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Crown Victoria Police (All)	Rear	◆ 3.8 ◆ 4.5	8.8	XL-3 for LS	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Five Hundred / Montego	Rear	1.5(06) 2.4 [7]	Getrag (06)/M160	N/A					◆	◆					
Taurus / Sable (09)	Rear	2.4 [8]	M160	N/A								◆	◆	◆	◆
Fusion / Milan / MKZ	Rear	2.4 [8]	M160	N/A							◆	◆	◆	◆	◆
MKT	Rear	2.4 [8]	M160	N/A										◆	◆
Lincoln LS (C)	Rear	2.9	8.0	N/A	◆	◆	◆	◆	◆	◆					
Lincoln LS (Sport) (C)	Rear	2.9	8.0	N/A	◆	◆	◆	◆	◆	◆					
Lincoln Limo (LS)	Rear	4.8(02) / 4.5	8.8	XL-3	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Marauder (LS)	Rear	3.8	8.8	XL-3			◆								
Mustang (All)	Rear	◆ 3.3 ◆ 3.0	7.5	XL-3 for LS	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Mustang (All) / Shelby GT500	Rear	◆ 3.8 ◆ 4.0	8.8	XL-3 for LS	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Mustang Cobra (IRS w / LS)	Rear	2.6	8.8	XL-3	◆		◆								
Thunderbird (C)	Rear	2.9 2.5(03-06)	8.8	N/A	◆	◆	◆	◆	◆	◆					
Aviator (All)	Rear	3.5	8.8	XL-3 for LS			◆	◆	◆	◆					
Aviator (C)	Front	2.8 [9]	M30(M186)	N/A			◆		◆						
Edge / MKX	Rear	2.4 [8]	M160	N/A						◆	◆	◆	◆	◆	◆
Taurus X	Rear	2.4 [8]	M160	N/A							◆	◆	◆	◆	◆
Flex	Rear	2.4 [8]	M160	N/A									◆	◆	◆
Explorer	Rear	2.4 [8]	M160	N/A										◆	◆
Escape / Mariner (C)	Rear	2.6 [8]	M28(M174)	N/A	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
4.0L Explorer (Conventional, Beam)	Rear	5.5	8.8	N/A	◆										
Explorer / Mountaineer (LS, Beam)	Rear	5.5(00), 5.3 (01)	8.8	XL-3	◆										
Explorer / Mountaineer (C) (IRS)	Rear	3.5	8.8	N/A	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Explorer / Mountaineer (LS, IRS)	Rear	3.3	8.8	XL-3	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Explorer Sport (03) / Sport Trac (LS)	Rear	5.3	8.8	XL-3	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Explorer Sport (03) / Sport Trac (C)	Rear	5.5	8.8	N/A	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Explorer Sport(03) / Sport Trac (C)	Front	3.3 [9]	M35(M194)	N/A	◆	◆	◆	◆	◆	◆					
Explorer Sport Trac (C)	Front	2.8 [9]	M30(M186)	N/A							◆	◆	◆	◆	◆
Explorer / Mountaineer (C)	Front	2.8 [9]	M30(M186)	N/A			◆	◆	◆	◆	◆	◆	◆	◆	◆
Explorer / Mountaineer (C)	Front	3.3 [9]	M35(M194)	N/A	◆										
Freestyle	Rear	1.5 [7]	159.9	N/A					◆	◆					
Ranger (C and LS, except Level II)	Rear	5.0	7.5/8.8	XL-3 for LS	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Ranger (4WD Off Road, High Torque, Level II)(LS)	Rear	5.3	8.8	XL-3		◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Ranger (4WD)	Front	3.3 [9]	M35 (M194)	N/A	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Expedition / Navigator (C)	Rear	5.5(02) 3.5	8.8/9.75	N/A	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Expedition / Navigator (LS)	Rear	5.3(02) 3.3	8.8/9.75	XL-3	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
F-150 / Blackwood (03) Lincoln Mark LT (06) (C, E)	Rear	5.5	8.8/9.75	N/A	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
F-150 Raptor (E)	Rear	6.0	9.75	N/A										◆	◆

(cont.)

Motorcraft Axle Lubricants – Quick Reference Lubricant Applications and Capacities Chart (Cont'd)

Application	Axle Location	Fluid Refill (Pints) [1]	Axle Description	Friction Modifier [3]	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
F-150 / Blackwood (03) Lincoln Mark LT (06) (LS)	Rear	5.3	7.0	8.8/9.75/10.25	XL-3	●	●	●	●	●	●	●	●	●	●
F-150 / 250LD / Expedition / Navigator (C)	Front	3.5	[9]	8.8	N/A	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
F-250 / 350 (C, E)	Rear	7.5 (01)	6.9	10.50	N/A	●	●	●	●	●	●	●	●	●	●
F-250 / 350 (LS)	Rear	7.5 (01)	6.5	10.50	XL-3[4]	●	●	●	●	●	●	●	●	●	●
F-250HD / 350 (02) / Excursion 00-05 (C)	Front	3.8	[9]	M50(M229)	N/A	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
F-250 / 350 / 450 / 550 (C)	Front	5.9	[9]	M60(M248)	N/A	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
F-350 / 450 (All)	Rear	8.0 (04)	8.4	M80(M286)	[2] [4] XL-3 for LS	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
F-450 / 550 (All)	Rear	14.0		S110/S130	N/A	●	●	●	●	●	●	●	●	●	●
F-550 / E-550 (03) (All)	Rear	24.5	26.7 [6]	S135	N/A [5]	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
E-150 (C)	Rear	5.5		8.8/9.75	N/A	●	●	●	●	●	●	●	●	●	●
E-150 (LS)	Rear	5.4	5.3(03-06)	8.8/9.75	XL-3	●	●	●	●	●	●	●	●	●	●
E-150 / E-250 / 350 (C)	Rear	6.3		M60(M248)	N/A	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
E-150 / E-250 / 350 (LS)	Rear	5.8		M60(M248)	XL-3 [4]	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
E-250 / 350 (All) (DSO)	Rear	5.8		M60(M248)	[4] XL-3 for LS	●	●	●	●	●	●	●	●	●	●
E-350 Chassis / RV / Cutaway (C) (DSO)	Rear	7.4		M70HD(M273HD)	N/A	●	●	●	●	●	●	●	●	●	●
E-350 Chassis / RV / Cutaway (C)	Rear	6.6 (09)	9.0	M70FF(M267FF)	N/A	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
E-350 Chassis / RV / Cutaway (LS)	Rear	6.3		M70FF(M267FF)	XL-3 [4]	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
E-350 Chassis / RV / Cutaway (LS)	Rear	6.6 (09)	9.0	M70FF(M267FF)	N/A	●	●	●	●	●	●	●	●	●	●
E-450 Chassis / RV / Cutaway (C)	Rear	8.3		M70HD(M273HD)	N/A	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
E-450 Chassis / RV / Cutaway (LS)	Rear	7.8		M70HD(M273HD)	XL-3 [4]	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
E-450 Chassis / RV / Cutaway (LS)	Rear	8.3		M70HD(M273HD)	N/A	●	●	●	●	●	●	●	●	●	●
F-53 Motorhome, F-59 Chassis (C)	Rear	8.0 (04)	8.4	M80(M286)	N/A	●	●	●	●	●	●	●	●	●	●
F-53 Motorhome, F-59 Chassis (All)	Rear	14.0		S110/S130	N/A [5]	●	●	●	●	●	●	●	●	●	●
F-53 Motorhome, F-59 Chassis (All)	Rear	24.5		S135/S150	N/A [5]	●	●	●	●	●	●	●	●	●	●
F-53 Motorhome, F-59 Chassis (All)	Rear	32.0		17060S	N/A [5]	●	●	●	●	●	●	●	●	●	●

◆ XY-80W90-QL, WSP-M2C197-A, SAE 80W-90 Premium Rear Axle Lubricant
 ● XY-75W140-QL, WSL-M2C192-A, SAE 75W-140 Synthetic Rear Axle Lubricant
 ◆ XY-75W90-QLS, SAE-75W-90 Synthetic Rear Axle Lubricant

- XL-3, EST-M2C118-A, Additive Friction Modifier

C = Conventional Axle
 LS = Limited Slip Axle
 FF = Full Floating
 SF = Semi-Floating
 HD = Heavy Duty
 E = Electronic Locking Differential
 (XX) = The last model year used
 [X] = Notes
 M&S prefix axle descriptions = Dana Axles
 Numeric descriptions = Ford/Visteon Axles

When filling a Limited Slip axle
 requiring Friction Modifier, always add
 Friction Modifier first, before filling with
 the lubricant.

Notes:
 [1] Oil refill volume does not include friction modifier. Do not overfill above volumes shown (friction modifier should be added first).
 [2] Friction modifier required in vehicles built before 10/10/04.
 [3] 4 fl oz of friction modifier added unless otherwise specified.
 [4] Add 8 fl oz of friction modifier.
 [5] S100/130/135/150/17060 limited slip axles do not require friction modifier.
 [6] 26.7 pints in E-550 only. All other vehicle receive 24.5.
 [7-9] For 4X4 and AWD, PTU and Transfer Case fill, check owner guide or shop manual for fill capacity.
 [7] XY-75W90-PTU, GL-5, SAE 75W90 Specialty Power Transfer Unit Fluid
 [8] XY-75W140-QL, WSL-M2C192-A, SAE 75W-140 Synthetic Rear Axle Lubricant
 [9] XL-12, ESP-M2C166-H, Transfer case fluid

Version 3.7 / Published 6/2010

Automatic Transmission Fluid Chart

TRANSMISSIONS

TYPE MODEL YEAR	C6 AL4D	E-4OD	4R100	5R110 TORQ SHIFT	AOD	AODE	4R70W	4R70E	4R75WE	4R44E	4R56E	5R56E	5R55N	5R44E	5R56WS	6HP26	6R60/ 6R75	6R140 TORQ SHIFT 6
1991	V	V			V													
1992	V	V			V													
1993	V	V			V													
1994	V	V			V													
1995	V	V			V													
1996	V	V			V													
1997		V																
1998		V																
1999		V																
2000		V																
2001		V																
2002		V																
2003		V																
2004		V																
2005		V																
2006		V																
2007		V																
2008		V																
2009		V																
2010		V																
2011		V																
MODEL YEAR	C6 AL4D	E-4OD	4R100	5R110 TORQ SHIFT	AOD	AODE	4R70W	4R70E	4R75WE	4R44E	4R56E	5R56E	5R55N	5R44E	5R56WS	6HP26	6R60/ 6R75	6R140 TORQ SHIFT 6

TRANSAXLES

TYPE MODEL YEAR	ATX	F-4E (4EAT)	4F20E	CD-4E	4F27E	* AX4S (AXODE)	4F50N (AX4N)	CVT	6 SPEED AUTO AWF-21	AW ECVT	FNR5	6F50/ 55N	6F35N	DP56	TYPE
1991	V	V				V									
1992	V	V				V									
1993	V	V				V									
1994	V	V				V									
1995	V	V				V									
1996	V	V				V									
1997	V	V				V									
1998		V				V									
1999		V				V									
2000		V				V									
2001		V				V									
2002		V				V									
2003		V				V									
2004		V				V									
2005		V				V									
2006		V				V									
2007		V				V									
2008		V				V									
2009		V				V									
2010		V				V									
2011		V				V									
MODEL YEAR	ATX	F-4E (4EAT)	4F20E	CD-4E	4F27E	* AX4S (AXODE)	4F50N (AX4N)	CVT	6 SPEED AUTO AWF-21	AW ECVT	FNR5	6F50/ 55N	6F35N	DP56	TYPE

Specific service fluids (listed to the right) are called for depending on the type of transmission and the year the transmission was built. It is important to use the correct fluid, each fluid exhibits different properties and should be used only in the transmission for which they were designed. The vehicle owner or rebuilder should use the type of fluid printed in the owners guide or on the automatic transmission fluid level indicator. Refer to your scheduled maintenance guide to determine the correct service interval. Failure to use the recommended fluid may affect transmission performance and durability.

CAUTION:

DO NOT USE SUPPLEMENTAL TRANSMISSION FLUID ADDITIVES, TREATMENTS OR CLEANING AGENTS. The use of these materials may affect transmission operation and result in damage to internal transmission components.

CAUTION:

MERCON® SP, MERCON® LV, Motorcraft® Premium Automatic Transmission Fluid and Motorcraft® FNR5 ATF's are unique fluids and MUST be used in applications recommending that particular fluid. Use of any other fluid may cause reduced functionality or transmission damage.

CAUTION:

The functional characteristics of fluids for the CVT transmissions are very different than those of other ATF's. Use of a fluid other than Motorcraft® Continuously Variable Chain Type Transmission Fluid or one labeled as meeting MERCON® C may cause severe transmission damage.

FAILURE TO USE RECOMMENDED FLUID WILL AFFECT TRANSMISSION PERFORMANCE. REFER TO OWNERS MANUAL AND/OR FLUID LEVEL INDICATOR FOR PROPER FLUID TYPE.

V MERCON® V

- Part number XT-5-QM (Quarts) and XT-5-DM (55 Gallon Drum) Ford Specification is MERCON® V.
NOTE: AUTOMATIC TRANSMISSIONS REQUIRING MERCON® V SHOULD ONLY BE SERVICED WITH MERCON® V.

SP MERCON® SP

- Part number XT-6-QSP (Quarts) and XT-6-DSP (55 Gallon Drum) Ford Specification is MERCON® SP.

CVT CONTINUOUSLY VARIABLE CHAIN TYPE

- Part number XT-7-QCFT (Quarts).

P PREMIUM AUTOMATIC TRANSMISSION FLUID

- Part number XT-8-QAW.

M5 FNR5 Automatic Transmission Fluid

- Part number XT-9-QMM5.

LV MERCON® LV

- Part number XT-10-QLV (Quarts)

D Dual Clutch Transmission Fluid

- Part number XT-11-QDC (Quarts)

Transmission Fluid Chart

MANUAL TRANSMISSION FLUID CHART

TRANSAXLES

TYPE	NOTE 1 YEAR	MTX- 1234	MT	SEE NOTE 2 GSM	MTX25	IB5	GSM
1991							
1992							
1993							
1994							
1995							
1996							
1997							
1998							
1999							
2000							
2001							
2002							
2003							
2004							
2005							
2006							
2007							
2008							
2009							
2010							
2011							
MODEL TYPE	NOTE 1 YEAR	MTX- 1234	MT	SEE NOTE 2 GSM	MTX25	IB5	GSM

TRANSMISSIONS

TYPE	NOTE 1 YEAR	MTX- 1234	MT	SEE NOTE 2 GSM	MTX25	IB5	GSM
1991							
1992							
1993							
1994							
1995							
1996							
1997							
1998							
1999							
2000							
2001							
2002							
2003							
2004							
2005							
2006							
2007							
2008							
2009							
2010							
2011							
MODEL TYPE	NOTE 1 YEAR	MTX- 1234	MT	SEE NOTE 2 GSM	MTX25	IB5	GSM

USA AND CANADA OIL AND TRANSMISSION FLUID PART NUMBER INTERCHANGE

COMMERCIAL NAME	SERVICE PART NUMBER U.S.	SERVICE PART NUMBER CANADA
MERCON® V (QUARTS)	XT-5-QM XT-5-QMC	CXT-5-LM12
SYNTHETIC BLEND MERCOR® V (QUARTS)	XT-5-QSM	XT-5-QSM
MERCON® V (DRUMS)	XT-5-DM XT-5-DMC	CXT-5-DM CXT-5-DBM
MERCON® LV (QUARTS)	XT-10-QLVC	XT-10-QLV / CXT-10-LV12
MERCON® LV (DRUMS)	XT-10-DLV	CXT-11-DLV
TYPE F	XT-1-QF	CXT-1-LF12
SAE 75W-90 API GL-4 GEAR OIL (QUARTS)	XT-4-QGL	XT-4-QGL
FULL SYNTHETIC MANUAL TRANSMISSION FLUID (QUARTS)	XT-M5-QS	XT-M5-QS
MERCON® SP (QUARTS)	XT-6-QSP	CXT-6-LSP12
MERCON® SP (DRUMS)	XT-6-DSP	CXT-6-DSP
PREMIUM AUTOMATIC TRANSMISSION FLUID	XT-8-QAW	CXT-8-LAW12
*** CVT FLUID CHAIN TYPE	XT-7-QCFT	CXT-7-LCF12
FNR5 AUTOMATIC TRANSMISSION FLUID	XT-9-QMM5	XT-9-QMM5
SAE 75W-90 PREMIUM SYNTHETIC TRANSAXLE LUBRICANT	XT-75W90-QGT	XT-75W90-QGT
DUAL CLUTCH TRANSMISSION FLUID	XT-11-QDC	XT-11-QDC

*** Continuously variable chain type transmission fluid

- NOTE 1: 1989 - 1997 Probe, 2001 - 2004 Escape, 2006 - 2009 Fusion/Milan.
- NOTE 2: Escort/Tracer
- NOTE 3: 1988 - 1998 Service gasoline vehicles with MERCON® V.
1996 - 1998 Service diesel vehicles with SYNTHETIC BLEND MERCON® V.
1999 - 2001 Service all vehicles with SYNTHETIC BLEND MERCON® V.
- NOTE 4: 2008 - 2009 Service diesel vehicles with Full Synthetic Manual Transmission Fluid.
- NOTE 5: XT-M5-QS or XT-4-QGL replaced SAE 80W manual transmission fluid
F2ZZ-19C547-A for pre-1989 manual transmissions.

- V** MERCON® V - Part number XT-5-QM (Quarts) and XT-5-DM (55 Gallon Drum).
- Ms** MERCON® V SYNTHETIC BLEND ATF
- Part number XT-5-QSM (Quarts).

- Fs** FULL SYNTHETIC MANUAL TRANSMISSION FLUID
- Part number XT-M5-QS (Quarts). Ford specification WSD-M2C200-C.
- GT** SAE75W-90 PREMIUM SYNTHETIC TRANSAXLE LUBRICANT
- Part number XT-75W90-QGT (Quarts).
- GL-4** SAE75W-90 API GL-4 GEAR OIL
- Part number XT-4-QGL. Ford specification WSS-M2C203-A1.

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Ethylene Glycol-Based Engine Coolant Protection Chart

Capacity Cooling System (Quarts)	PROTECTION CHART Quarts of Engine Coolant Required for Protection to Temperatures (°F) Shown										
	2	3	4	5	6	7	8	9	10	11	12
6	0	-34				A 50/50 mixture (coolant/distilled water) is recommended as it provides freeze protection down to -34 °F (-37 °C) and boiling protection up to 265 °F (129 °C). DO NOT ALLOW the concentration of coolant to fall below 40% or exceed 60% as engine parts could become damaged or not work properly. Shaded blocks show 50% concentration to the next higher full quart.					
7	6	-18	-54								
8	10	-8	-34								
9	14	0	-21	-50							
10	16	4	-12	-34	-62						
11	18	8	-6	-23	-47						
12	19	10	0	-15	-34	-57					
13	21	13	3	-9	-25	-45					
14	22	15	6	-5	-18	-34	-54				
15	23	16	8	0	-12	-26	-43				
16	23	17	10	2	-8	-19	-34	-52			
17	24	18	12	5	-4	-14	-27	-42			
18	24	19	14	7	0	-10	-21	-34	-50		
19	25	20	15	9	2	-7	-16	-28	-42		
20	25	21	16	10	4	-3	-12	-22	-34	-48	
21		22	17	12	6	0	-9	-17	-28	-41	
22		22	18	13	8	2	-6	-14	-23	-34	-47

ETHYLENE GLYCOL HYDROMETER SCALE - For cooling systems larger than shown, use double the quantity required for a system one-half as large. For systems smaller than shown, use half the quantity required for a system twice as large.

R-134a REFRIGERANT CHARGE CAPACITIES IN OUNCES

CAR	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
CONTINENTAL	38													
CONTOUR	26													
COUGAR	26													
CROWN VICTORIA	38					38			27					
ESCORT	28	28*		28		24								
FIESTA														19
FIVE HUNDRED								29						
FOCUS				26							18			
FUSION									21				22	
FUSION HEV (HYBRID)													22	
GRAND MARQUIS	38					38			27					
GT														
LS			28					18						
MARK VIII	32													
MILAN									21				22	
MILAN HEV (HYBRID)													22	
MKS												26		
MKZ										21			22	
MKZ HEV (HYBRID)														22
MONTEGO								29						
MUSTANG	34							31		26			21	
MYSTIQUE	26													
SABLE	34										26			
TAURUS	34										26			
THUNDERBIRD					28									
TOWN CAR	38					32			23					
TRACER (U.S.)	28													
ZEPHYR									21					

* = 99-00 2.0L ZETEC requires a charge of 24 ounces

TRUCK	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
AVIATOR						46								
BLACKWOOD					37									
ECONOLINE DIESEL	44			42	40					32	36			
ECONOLINE DIESEL w/ AUX	64			68	60					54				
ECONOLINE GAS	44			42	40					30				
ECONOLINE GAS w/ AUX	64			68	60					54				
EDGE										19.4	21			
ESCAPE											25			
ESCAPE HEV (HYBRID)				32				41			38		32	
EXCURSION			42					45						

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R-134a REFRIGERANT CHARGE CAPACITIES IN OUNCES (Cont'd)

TRUCK (Cont'd)	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
EXCURSION w/ AUX			68*											
EXPEDITION	37					40				22				
EXPEDITION w/ AUX	62					58				36				
EXPEDITION EL w/ AUX										36				
EXPLORER	30				32**				31		31/27***	27		
EXPLORER SPORT				30										
EXPLORER SPORT TRAC				30						31	31/27***	27		
EXPLORER w/ AUX					56**				47		47/44***	44		41
EXPLORER w/ AUX (4 CYLINDER)														47
FLEX												36		
FREESTAR						36								
FREESTAR w/ AUX						53								
FREESTYLE								29						
FREESTYLE w/ AUX								38						
F-SERIES < 8500 GWM	33*						37			36		24		
F-SERIES > 8500 GWM GAS	38	42						45			27			29
F-SERIES > 8500 GWM DIESEL	38	42						45			27			26
F-SERIES F650-F750			42				40							42
LCF									44					
MARK LT									34	36				
MKT													36	
MX										19.4	21			
MARINER								32			25			
MARINER HEV (HYBRID)									41		38		32	
MONTEREY							36							
MONTEREY w/ AUX							53							
MOUNTAINEER	30				32				31		31/27***	27		
MOUNTAINEER w/ AUX					56**				47		47/44***	44		
NAVIGATOR	37					40								
NAVIGATOR w/ AUX	62					58				36				
NAVIGATOR L w/ AUX										36				
RANGER	30						33							
TAURUS X											26			
TAURUS X w/ AUX											36			
TRANSIT CONNECT													29.6	
VILLAGER	32													
VILLAGER w/ AUX	52													
WINDSTAR	44													
WINDSTAR w/ AUX	56													

* Gulf Coast Consulate (GCC) – F-Series <8500 requires 49 ounces and Excursion requires 56 ounces

** Export vehicles w/o aux require 32 ounces and w/ aux require 46 ounces

*** Explorer/Explorer Sport Trac/Mountaineer units built after 12/3/07 use the lower of the two values, those built before 12/3/07 use the higher value. Confirm with label on vehicle.

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REFRIGERANT COMPRESSOR OIL CAPACITIES IN FLUID OZ. / CC

Motorcraft® PAG Refrigerant Compressor Oil YN-12-D	Motorcraft® Electric A/C Compressor Oil YN-32
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CAR	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
CONTINENTAL	7/207													
CONTOUR	7/207													
COUGAR	7/207													
CROWN VICTORIA	7.5/222					7/207								
ESCORT	6.6/195					7/207								
FIESTA														3.4/101
FIVE HUNDRED								7/207						
FOCUS				7/207							4/118			
FUSION									6/178					
FUSION HEV (HYBRID)												4.4/130		
GRAND MARQUIS	7.5/222					7/207								
GT														
LS				7/207										
MARK VIII	7/207													
MILAN									6/178					
MILAN HEV (HYBRID)												4.4/130		
MKS												7/207		
MKZ										6/178				
MKZ HEV (HYBRID)													4.4/130	
MONTEGO								7/207						
MUSTANG V6	8.6/254							7/207					4/118	3.5/104
MUSTANG V8	8.6/254							7/207					4/118	
MYSTIQUE	7/207													
SABLE	6.6/195										7/207			
TAURUS	6.6/195										7/207			
THUNDERBIRD				7/207										
TOWN CAR	7.5/222					8/237			7/207					
TRACER (U.S.)	7/207													
ZEPHYR									6/178					
TRUCK	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
AVIATOR						14/414								
BLACKWOOD					9/266									
ECONOLINE DIESEL	9/266										7/207			
ECONOLINE DIESEL w/ AUX	13/384										11/325			
ECONOLINE GAS	9/266									8/237				
ECONOLINE GAS w/ AUX	13/384									16/473				
EDGE										4/118				
ESCAPE				7/207							5/148			
ESCAPE HEV (HYBRID)								11/325					4.4/130	

(Continued on next page)
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REFRIGERANT COMPRESSOR OIL CAPACITIES IN FLUID OZ. / CC (Cont'd)

Motorcraft® PAG Refrigerant Compressor Oil YN-12-D	Motorcraft® Electric A/C Compressor Oil YN-32
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TRUCK	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
EXCURSION			9/266											
EXCURSION w/ AUX			14/414											
EXPEDITION	9/266									7/207				
EXPEDITION w/ AUX	14/414		11/325		14/414					7/207				
EXPLORER	9/266													
EXPLORER SPORT				9/266										
EXPLORER SPORT TRAC				9/266						9/266				
EXPLORER w/ AUX				13/384*					16/473					8.8/260
EXPLORER w/ AUX (4 CYLINDER)														6.8/201
FLEX												11/325	9.5/281	
FREESTAR							10/296							
FREESTAR w/ AUX							12/355							
FREESTYLE								7/207						
FREESTYLE w/ AUX								9/266						
F-SERIES < 8500 GVW (LESS 6.2L)	9/266						8/237**	8/237				6/178		3.4/101
F-SERIES < 8500 GVW (WITH 6.2L)														6/178
F-SERIES > 8500 GVW GAS	11/325	9/266												4.1/121
F-SERIES > 8500 GVW DIESEL	11/325	9/266												3.4/101
F-SERIES F650-F750			9/266											10.1/299
LCF									9/266	7/207				
MARK LT									8/237					
MKX										4/118				
MKT													9.5/281	
MARINER								7/207			5/148			
MARINER HEV (HYBRID)									11/325					4.4/130
MONTEREY							10/296							
MONTEREY w/ AUX							12/355							
MOUNTAINEER	9/266													
MOUNTAINEER w/ AUX				13/384					16/473					
NAVIGATOR	9/266													
NAVIGATOR w/ AUX	14/414		11/325			14/414				7/207				
RANGER	9/266													
TAURUS X														
TAURUS X w/ AUX														
TRANSIT CONNECT														
VILLAGER	7/207													
VILLAGER w/ AUX	10/296	11/325												
WINDSTAR	10/296													
WINDSTAR w/ AUX	14/414													

* Export vehicles require 4/14 - Gulf Coast Consulate (GCC) require 17/503

** 2004 F-150 Heritage requires 9/266

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Service Coolant Usage Chart

Vehicle	Model Year(s)							
	Pre-1999	1999 - 2001	2002	2003	2004 - 2008	2009	2010	2011
Ford								
Crown Victoria	G	GY	GY	GY (prior to 7/15/02) Y (from 7/15/02)	Y	Y	Y	Y
Econoline (E-Series)	G	GY	GY (prior to 1/7/02) Y (from 1/7/02)	Y	Y	Y	Y	Y
Edge	N/A	N/A	N/A	N/A	Y	Y (prior to 1/19/09) DG (from 1/19/09)	DG	DG
Electric Vehicle Ranger	N/A	GY	GY	N/A	N/A	N/A	N/A	N/A
Escape	N/A	GY	GY (prior to 7/15/02) Y (from 7/15/02)	Y	Y	Y	Y	Y (prior to 11/16/10) O (from 11/16/10)
Escort	G	GY	GY (prior to 7/15/02) Y (from 7/15/02)	Y	N/A	N/A	N/A	N/A
Excursion	N/A	GY	Y	Y	Y	N/A	N/A	N/A
Expedition	G	GY	GY	GY (prior to 7/15/02) Y (from 7/15/02)	Y	Y	Y (prior to 2/22/10) O (from 2/22/10)	O
Explorer, Explorer Sport, and Explorer Sport Trac	G	GY	GY (prior to 7/15/02) Y (from 7/15/02)	Y	Y	Y	Y	Y
F150 - F550 (Cuautilian Plant)	G	GY	GY (prior to 2/4/02) Y (from 2/4/02)	Y	Y	Y	N/A	N/A
F250 - F550 (Kentucky Truck Plant)	G	GY	Y	Y	Y	Y	Y	O
F150 - F550 (All other plants)	G	GY	GY (prior to 7/15/02) Y (from 7/15/02)	Y	Y	Y	Y	O
Fiesta	N/A	N/A	N/A	N/A	N/A	N/A	N/A	O
Flex	N/A	N/A	N/A	N/A	N/A	Y (prior to 1/19/09) DG (from 1/19/09)	DG	DG
Freestar	N/A	N/A	N/A	N/A	Y	N/A	N/A	N/A
Focus	N/A	GY	GY (prior to 7/15/02) Y (from 7/15/02)	Y	Y	Y	Y	Y
Fusion	N/A	N/A	N/A	N/A	Y	Y	Y (prior to 7/6/09) DG (from 7/6/09)	DG
Mustang (including Cobra)	G	GY	GY (prior to 7/15/02) Y (from 7/15/02)	Y	Y	Y	Y	O
Ranger	G	GY	GY (prior to 7/15/02) Y (from 7/15/02)	Y	Y	Y	Y	Y
Super Duty F53 Stripped Chassis (Trumac)	G	GY	Y	Y	Y	Y	Y	Y
Taurus	G	GY	GY (prior to 7/15/02) Y (from 7/15/02)	Y	Y	Y (prior to 5/18/09) DG (from 5/18/09)	DG	DG
Thunderbird	N/A	N/A	GY (prior to 7/15/02) Y (from 7/15/02)	Y	Y	N/A	N/A	N/A
Transit Connect	N/A	N/A	N/A	N/A	N/A	N/A	O	O
Windstar	G	GY	GY	GY (prior to 7/15/02) Y (from 7/15/02)	N/A	N/A	N/A	N/A
All other vehicles not otherwise noted	G	GY	N/A	N/A	Y	Y	N/A	N/A
Lincoln								
Aviator	N/A	N/A	N/A	Y	Y	N/A	N/A	N/A
Blackwood	N/A	GY	GY (prior to 7/15/02) Y (from 7/15/02)	N/A	N/A	N/A	N/A	N/A
Continental	G	GY	GY (prior to 7/15/02) Y (from 7/15/02)	N/A	N/A	N/A	N/A	N/A

Revised 6/18/10

For the most up-to-date information, please refer to the chart at http://www.fcscdchemicalsandlubricants.com/main/quickref/scuc_English.pdf

Service Coolant Usage Chart

Vehicle	Model Year(s)							
	Pre-1999	1999 - 2001	2002	2003	2004 - 2008	2009	2010	2011
LS	N/A	GY	GY (prior to 7/15/02) Y (from 7/15/02)	Y	Y	N/A	N/A	N/A
MKS	N/A	N/A	N/A	N/A	N/A	Y (prior to 5/18/09) DG (from 5/18/09)	Y (prior to 5/18/09) DG (from 5/18/09)	DG
MKT	N/A	N/A	N/A	N/A	N/A	N/A	DG	DG
MKX	N/A	N/A	N/A	N/A	Y	Y (prior to 1/19/09) DG (from 1/19/09)	DG	DG
MKZ	N/A	N/A	N/A	N/A	Y	Y	Y (prior to 7/6/09) DG (from 7/6/09)	DG
Navigator	G	GY	GY	GY (prior to 7/15/02) Y (from 7/15/02)	Y	Y	Y (prior to 2/22/10) O (from 2/22/10)	O
Town Car	G	GY	GY	GY (prior to 7/15/02) Y (from 7/15/02)	Y	Y	Y	Y
All other vehicles not otherwise noted	G	N/A	N/A	N/A	Y	N/A	N/A	N/A
Mercury								
Cougar	G	O	O	N/A	N/A	N/A	N/A	N/A
Grand Marquis	G	GY	GY	GY (prior to 7/15/02) Y (from 7/15/02)	Y	Y	Y	Y
Sable	G	GY	GY (prior to 7/15/02) Y (from 7/15/02)	Y	Y	Y (prior to 5/18/09) DG (from 5/18/09)	N/A	N/A
Marauder	N/A	N/A	N/A	GY (prior to 7/15/02) Y (from 7/15/02)	Y	N/A	N/A	N/A
Mariner	N/A	N/A	N/A	N/A	Y	Y	Y	Y (prior to 11/16/10) O (from 11/16/10)
Milan	N/A	N/A	N/A	N/A	Y	Y	Y (prior to 7/6/09) DG (from 7/6/09)	DG
Monterey	N/A	N/A	N/A	N/A	Y	N/A	N/A	N/A
Mountaineer	G	GY	GY (prior to 7/15/02) Y (from 7/15/02)	Y	Y	Y	Y	N/A
All other vehicles not otherwise noted	G	GY	GY	N/A	Y	N/A	N/A	N/A

Usage Notes:

G = Green-colored engine coolant meeting Ford specification ESE-M97B44-A (Motorcraft® Premium Engine Coolant, VC-5 and VC-5-B (in USA) / Premium Quality Antifreeze/Coolant, CXC-10 (in Canada))

GY = Factory-filled with green-colored engine coolant. Service as normal with green-colored engine coolant, or service with yellow-colored engine coolant with the following important conditions:

- If the green-colored engine coolant is thoroughly flushed out of the cooling system and then the system is filled with yellow-colored engine coolant, the service maintenance (change-out) intervals of the yellow-colored engine coolant can be followed.
- If the green-colored engine coolant is not completely flushed out of the cooling system (e.g., yellow-colored engine coolant is used to top off the system), then the service maintenance (change-out) intervals of the green-colored engine coolant must be followed.
- All pre-1999 vehicles, as well as all model years of Mercury Villager, must be serviced with the green-colored engine coolant.

O = Orange-colored engine coolant meeting Ford specification WSS-M97B44-D (Motorcraft® Specialty Orange Engine Coolant, VC-3-B (in USA) and CVC-3-B (in Canada))

Y = Yellow-colored engine coolant meeting Ford specification WSS-M97B51-A1 (Motorcraft® Premium Gold Engine Coolant, VC-7-B and VC-7-D (in USA) and CVC-7-B (in Canada))

DG = Dark green-colored engine coolant meeting Ford specification WSS-M97B55-A (Motorcraft® Specialty Green Engine Coolant, VC-10-A2 (in USA) and CVC-10-A (in Canada))

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For the most up-to-date information, please refer to the chart at http://www.fcsdchemicalsandlubricants.com/main/quickref/scuc_English.pdf

Motorcraft® Engine Cooling System Products Usage Information

Motorcraft® Engine Coolant Name	Motorcraft® Premium Engine Coolant (USA) Motorcraft® Premium Quality Antifreeze Coolant (Canada)	Motorcraft® Premium Gold Engine Coolant	Motorcraft® Specialty Green Engine Coolant	Motorcraft® Specialty Orange Engine Coolant
Service Part Numbers	VC-5 and VC-5-B (USA) CXC-10 (Canada)	VC-7-B and VC-7-D (USA) CVC-7-B (Canada)	VC-10-A2 (USA) CVC-10-A (Canada)	VC-3-B (USA) CVC-3-B (Canada)
Ford Specification	ESE-M97B44-A	WSS-M97B51-A1	WSS-M97B55-A	WSS-M97B44-D
Use with the following products:				
Acustrip® 3-Way HD Antifreeze Coolant Test Kit, Rotunda part numbers 328-00001 and 328-00006	Yes, but <i>only</i> for use with diesel engine-equipped vehicles	Yes, but <i>only</i> for use with diesel engine-equipped vehicles	No	Yes, but use <i>only</i> as recommended to check coolant for nitrite contamination in the MY 2011 and forward F-Series Super Duty
Antifreeze Coolant ELC Contamination Kit, Rotunda part number 328-00008	No	No	No	Yes, but use <i>only</i> in the MY 2011 and forward diesel engine-equipped F-Series Super Duty as recommended
VC-1 – Motorcraft® Premium Cooling System Flush	Yes	Yes	Yes	Yes
VC-6 – Motorcraft® Cooling System Stop Leak Pellets	Yes	Yes, but use <i>only</i> in the F-150 and (MY 2010 and prior) Explorer	N/A	Yes, but use <i>only</i> in the F-150
VC-8 – Motorcraft® Diesel Cooling System Additive	Yes, but <i>only</i> for use with diesel engine-equipped vehicles	Yes, but <i>only</i> for use with diesel engine-equipped vehicles	No	No
VC-9 – Motorcraft® Engine Cooling System Iron Cleaner (for industrial use only)	Yes, but use <i>only</i> when directed per the vehicle's Workshop Manual or a Technical Service Bulletin (TSB)	Yes, but use <i>only</i> when directed per the vehicle's Workshop Manual or a Technical Service Bulletin (TSB)	Yes, but use <i>only</i> when directed per the vehicle's Workshop Manual or a Technical Service Bulletin (TSB)	Yes, but use <i>only</i> when directed per the vehicle's Workshop Manual or a Technical Service Bulletin (TSB)
VC-12 – Motorcraft® Specialty Orange Engine Coolant Revitalizer	No	No	No	Yes, but use <i>only</i> in the MY 2011 and forward diesel engine-equipped F-Series Super Duty as recommended

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For the most up-to-date information, please refer to the chart at http://www.fcsdchemicalsandlubricants.com/main/quickref/scuc_English.pdf

2004 – 2009 Interior Trim Parts — Plastic Types

Plastic Trim Part	Vehicle	Plastic Type	Use Adhesion Promoter?
Consoles	All 2004-2009 Ford, Lincoln, and Mercury vehicles	Soft	No
Pillars	All 2004-2009 Ford, Lincoln, and Mercury vehicles	Hard	Yes
Lower Door Panels	All 2004-2009 Ford, Lincoln, and Mercury vehicles	Hard	Yes
Upper Door Panels	All 2004-2009 Ford, Lincoln, and Mercury vehicles	Hard	Yes
	All 2004-2009 Lincoln vehicles	Soft	No
Instrument Panels*	2004-2005 Excursion 2004-2009 Escape, Expedition, F-150, F-250-750, Focus, Mariner, and Mustang	Hard	Yes
	All other 2004-2009 vehicles**	Soft	No

***Note:** Never repair or repaint airbag deployment covers (doors).

**** Note the following exceptions:**

1. Do not use the adhesion promoter or paint on the Lincoln Mark LT, Edge, or MKX for paint-to-match or repair procedures.
2. Do not use the adhesion promoter or paint on the Freestyle and Taurus X for repair procedures.

2011 PASSENGER CAR EXTERIOR PAINT CHART

Vehicle Certification Label Code	Vehicle Division Color Promotional Name	Customer Service Division Color Name	Part Number	Current or New	Ford Division						Lincoln Mercury Division				
					Fiesta	Focus	Mustang/ Shelby GT500	Crown Victoria	Fusion	Taurus	Grand Marquis	Milan	Town Car	MKS	MkZ
CI	Grabber Blue	Grabber Blue	PMP-19500-7210A	C			X								
DX	Dark Blue Pearl Met.	Dk. Pearl Blue	PMP-19500-7083A	C									X		
FQ	Bordeaux Reserve Red Met.	Bordeaux Reserve	PMP-19500-7240A	N					X	X		X		X	X
G3	Light French Silk Met.	Pueblo Gold	PMP-19500-7113A	C									X		
HG	Smokestone Met.	Smokestone	PMP-19500-7148A	C				X			X				
HH	Dark Cherry Met.	Dark Cherry	PMP-19500-7149A	C									X		
HP	Performance White	High Performance White	PMP-19500-7139A	C			X								
JL	Dark Toreador Red Met.	Dk. Toreador Red	PMP-19500-6771A	C				X			X				
JP	Silver Birch Met.	Silver Birch ▲	PMP-19500-7052A	C				X			X		X		
JV	Sangria Red Met.	Sangria Red	PMP-19500-7197A	C		X									
KR	Norsea Blue Met.	Norsea Blue	PMP-19500-7111A	C				X			X				
L6	Kona Blue Met.	Kona Blue	PMP-19500-7188A	C			X			X				X	
L7	Bright Magenta Met.	Bright Magenta	PMP-19500-7245A	N	X										
LS	Lt. Ice Blue Met./Lt. Ice Blue	Light Ice Blue ▲	PMP-19500-7054A	C				X	(b)		X	(b)	X		
NQ	Yellow Blaze Met. Tri-Coat	Yellow Blaze Tricoat (Kit)*	PMP-19K507-7238A	N	X		X								
PQ	Race Red	Race Red	PMP-19500-7236A	N			X								
SQ	Lime Squeeze Met.	Green Orchid	PMP-19500-7239A	N	X										
SZ	Blue Flame Met.	Blue Flame	PMP-19500-7220A	C	X	X			X			X			
T9	Monterey Grey Met.	Monterey Met.	PMP-19500-7173A	C	X										
U6	Red Candy Met. Tinted ▲	Red Candy Tint ▲	PMP-19500-7219A	C	X		X		X	X		X		X	X
UA	Black/Ebony	Black	PMP-19500-1724A	C		X	X	X			X		X		
UG	White Platinum Met. Tri-Coat	White Platinum Tricoat (Kit)*	PMP-19K507-7204A	C					X	X		X		X	X
UH	Tuxedo Black Met.	Tuxedo Black Met.	PMP-19500-7211A	C	X				X	X		X		X	X
UJ	Sterling Grey Met./Sterling Grey	Sterling Gray Met.	PMP-19500-7205A	C		X	X		X	X		X		X	X
UN	Steel Blue Met.	Steel Blue Met.	PMP-19500-7227A	C					X			X			X
UP	Gold Leaf Met.	Gold Leaf Met.	PMP-19500-7225A	C						X				X	
UR	Natural Neutral Met.	Natural Neutral Met.	PMP-19500-7223A	C		X									
UX	Ingot Silver Met.	Ingot Silver Met.	PMP-19500-7226A	C	X	X	X		X	X		X			X
WS	White Suede	White Suede	PMP-19500-7193A	C		X			X	X		X			
WT	Vibrant White	Performance White ▲	PMP-19500-1028A	C				X			X		X		
YZ	Oxford White	White ▲	PMP-19500-5920A	C	X										
Z6	Silver Diamond Premium Coat Met.	Silver Diamond PC	PMP-19500-7242A	N										X	
SPECIAL PAINTS															
	Primer (g)		PMP-19500-1000	C	X	X	X	X	X	X	X	X	X	X	X
	Clear Topcoat (c)		PMP-19500-6000	C	X	X	X	X	X	X	X	X	X	X	X
	Charcoal		PMP-19500-6388G	C	X	X	X		X	X		X	X	X	X
	Medium Dark Platinum		PMP-19500-7060G	C										X	

(b) = Special vehicle option.

(c) = Use only to repair scratches in the clearcoat alone (i.e., scratches that are not down to the color coat).

(g) = Use before color coat if scratch is down to metal surface.

▲ = Clearcoat.

* = Kit includes one tube of basecoat, one tube of pearlescent topcoat, and application instructions.

How to Activate the Roller Ball



Step One
Unscrew
black cap
from tube.



Step Two
Remove
and discard
orange
insert.



Step Three
Screw black
cap on tube
and shake pen
vigorously for
proper color
match.



Step Four
Activate Roller Ball
by pressing down on
tip while moving pen.
Practice technique
before doing repair.

ORDER THROUGH YOUR D.O.E.S. II SYSTEM

2011 TRUCK, VAN, SPORT UTILITY & CROSSOVER UTILITY VEHICLE EXTERIOR PAINT CHART

Vehicle Certification Label Code	Vehicle Division Color Promotional Name	Customer Service Division Color Name	Part Number	Current or New	Ford Division										LM Division			
					Edge	Econoline	Explorer	Expedition	Flex	Ranger	Escape	F-Series & Raptor	F-Series Super Duty	Transit Connect	Navigator	Mariner	MKT	MX
BY	School Bus Yellow	Chrome Yellow	PMP-19500-1526A	C		(f)								(f)				
CX	Dark Shadow Grey Met.	Dk. Shadow Gray	PMP-19500-7039A	C						X								
D3	Torch Red	Colorado Red ▲	PMP-19500-7042A	C						X				X				
DX	Dark Blue Pearl Met.	Dk. Pearl Blue	PMP-19500-7083A	C		X		X				X	X		X			
E4	Vermillion Red	Vermillion Red ▲	PMP-19500-6470A	C		X		X				X	X					
F1	Vermillion Red	Vermillion Red ▲	PMP-19500-6470A	C				X					X					
FQ	Bordeaux Reserve Red Met.	Bordeaux Reserve	PMP-19500-7240A	N	X		X		X								X	X
G2	Redfire Met.	Redfire	PMP-19500-7089A	C						X								
G3	Pueblo Gold Met.	Pueblo Gold	PMP-19500-7113A	C		X												
G9	Vista Blue Met.	Vista Blue	PMP-19500-7147A	C						X								
GG	Forest Green Met.	Forest Green	PMP-19500-7175A	C									X					
HQ	Mediterranean Blue Met.	Cerulean Blue	PMP-19500-7241A	N	X				X									X
HS	Earth Met.	Earth	PMP-19500-7190A	C	X				X								X	X
JQ	Golden Bronze Met.	Golden Bronze	PMP-19500-7234A	N			X	X				X	X					
JV	Sangria Red Met.	Sangria Red	PMP-19500-7197A	C							X					X		
L6	Kona Blue Met.	Kona Blue	PMP-19500-7188A	C	X		X		X								X	X
LQ	Pale Adobe Met.	Pale Adobe Met.	PMP-19500-7235A	N				(a)				X	X					
PQ	Race Red	Race Red	PMP-19500-7236A	N								X						
SQ	Lime Squeeze Met.	Green Orchid	PMP-19500-7239A	N							X					X		
SZ	Blue Flame Met.	Blue Flame	PMP-19500-7220A	C							X	X						
TY	Silver Met.	Moondust Silver	PMP-19500-6041A	C										X				
U6	Red Candy Met. Tinted ▲	Red Candy Tint ▲	PMP-19500-7219A	C	X		X		X			X					X	X
UA	Black	Black	PMP-19500-1724A	C		X				X								
UE	Panther Black Met.	Panther Black	PMP-19500-E001A	C										X				
UG	White Platinum Met. Tri-Coat	White Platinum Tricoat (Kit)*	PMP-19K507-7204A	C	X		X	X	X			X	X		X		X	X
UH	Tuxedo Black Met.	Tuxedo Black Met.	PMP-19500-7211A	C	X		X	X	X		X	X	X		X	X	X	X
UJ	Sterling Grey Met.	Sterling Gray Met.	PMP-19500-7205A	C			X	X			X	X	X		X	X		
UK	Royal Red Met.	Royal Red Met.	PMP-19500-7207A	C		X		X					X		X			
UN	Steel Blue Met.	Steel Blue Met.	PMP-19500-7227A	C		(b)					X					X		
UP	Gold Leaf Met.	Gold Leaf Met.	PMP-19500-7225A	C			X				X					X	X	X
UV	Dark Blue	Blazer Blue	PMP-19500-E002A	C										X				
UX	Ingot Silver Met.	Ingot Silver Met.	PMP-19500-7226A	C	X	X	X	X	X		X	X	X		X	X	X	X
UY	Molten Orange Met. Tri-Coat	Molten Orange Tricoat (Kit)*	PMP-19K507-7228A	C								X						
V7	Golden Bronze Met.	Golden Bronze	PMP-19500-7234A	N				X					X					
WS	White Suede	White Suede	PMP-19500-7193A	C	X		X		X		X					X		
YN	Silver Met.	Lt. Charcoal Met. ▲	PMP-19500-6041A	C						X								
YZ	Oxford White	White ▲	PMP-19500-5920A	C		X		X		X	(f)	X	X					
Z1	Oxford White	White ▲	PMP-19500-5920A	C				X					X					
Z2	Frozen White	Frozen White	PMP-19500-E003A	C														
		SPECIAL PAINTS																
		Primer (g)	PMP-19500-1000	C	X	X	X	X	X	X	X	X	X		X	X	X	X
		Clear Topcoat (c)	PMP-19500-6000	C	X	X	X	X	X	X	X	X	X		X	X	X	X
		Charcoal	PMP-19500-6388G	C	X	X	X	X		X	X	X	X		X	X	X	X
		Medium Dark Platinum	PMP-19500-7060G	C							X						X	

(a) = Accent color.
(b) = Special vehicle option.
(c) = Use only to repair scratches in the clearcoat alone (i.e., scratches that are not down to the color coat).
(f) = Fleet only.
(g) = Use before color coat if scratch is down to metal surface.
▲ = Clearcoat.
* = Kit includes one tube of basecoat, one tube of pearlescent topcoat, and application instructions.

NOTE: There is no 2011 Interior Paint Availability Chart. The Motorcraft® Interior Spray Paints were discontinued effective MY 2010.

ORDER THROUGH YOUR D.O.E.S. II SYSTEM

2010 PASSENGER CAR EXTERIOR PAINT CHART

Vehicle Certification Label Code	Vehicle Division Color Promotional Name	Customer Service Division Color Name	Part Number	Current or New	Ford Division					Lincoln Mercury Division				
					Focus	Mustang/Shelby GT500	Crown Victoria	Fusion	Taurus	Grand Marquis	Milan	Town Car	MKS	MKZ
CI	Grabber Blue	Grabber Blue	PMP-19500-7210A	N		X								
D3	Torch Red	Colorado Red ▲	PMP-19500-7042A	C		X								
DX	Dark Blue Pearl Met.	Dk. Pearl Blue	PMP-19500-7083A	C								X		
G3	Light French Silk Met.	Pueblo Gold	PMP-19500-7113A	C								X		
GQ	Sunset Gold Met.	Amber Gold Met.	PMP-19500-7206A	C		X								
HG	Smokestone ▲/Smokestone ▲ Met./Smoke Stone Met./Smokestone Met.	Smokestone	PMP-19500-7148A	C			X	X		X	X			X
HH	Dark Cherry Met.	Dark Cherry	PMP-19500-7149A	C								X		
HP	Performance White	High Performance White	PMP-19500-7139A	C		X								
HT	Cinnamon Met.	Cinnamon	PMP-19500-7186A	C					X				X	
JL	Dark Toreador Red ▲ Met.	Dk. Toreador Red	PMP-19500-6771A	C			X			X				
JP	Silver Birch ▲ Met./Silver Birch Met.	Silver Birch ▲	PMP-19500-7052A	C			X			X		X		
JV	Sangria Red Met.	Sangria Red	PMP-19500-7197A	C	X			X			X			X
KR	Norsea Blue ▲ Met.	Norsea Blue	PMP-19500-7111A	C			X			X				
L6	Kona Blue Met.	Kona Blue	PMP-19500-7188A	N		X								
LS	Lt. Ice Blue ▲ Met./Lt. Ice Blue Met./Lt. Ice Blue	Light Ice Blue ▲	PMP-19500-7054A	C			X	(b)		X	(b)	X		
SZ	Blue Flame Met.	Blue Flame	PMP-19500-7220A	C	X									
U1	Sport Blue Met.	Sport Blue	PMP-19500-7209A	C				X			X			
U6	Red Candy Met. Tinted ▲/Candy Red Met. Tinted ▲	Red Candy Tint ▲	PMP-19500-7219A	C		X		X	X		X		X	X
UA	Black ▲/Black/Ebony	Black	PMP-19500-1724A	C	X	X	X			X		X		
UG	White Platinum Met. Tri-Coat	White Platinum Tricoat	PMP-19500-7204A	C				X	X		X		X	X
UH	Tuxedo Black Met.	Tuxedo Black Met.	PMP-19500-7211A	C				X	X		X		X	X
UI	Brilliant Silver Met.	Brilliant Silver Met.	PMP-19500-7208A	C		X		X			X			X
UJ	Sterling Grey Met.	Sterling Gray Met.	PMP-19500-7205A	C	X	X		X			X			X
UL	Atlantis Green Met.	Atlantis Green Met.	PMP-19500-7212A	N				X	X		X		X	X
UN	Steel Blue Met.	Steel Blue Met.	PMP-19500-7227A	N					X				X	
UP	Gold Leaf Met.	Gold Leaf Met.	PMP-19500-7225A	N					X				X	
UR	Natural Neutral Met.	Natural Neutral Met.	PMP-19500-7223A	N	X									
UX	Ingot Silver Met.	Ingot Silver Met.	PMP-19500-7226A	N	X				X				X	
WS	White Suede	White Suede	PMP-19500-7193A	C	X			X	X		X		X	
WT	Vibrant White ▲ Met./Vibrant White ▲	Performance White ▲	PMP-19500-1028A	C			X			X		X		
					SPECIAL PAINTS									
			Primer (g)	PMP-19500-1000	C	X	X	X	X	X	X	X	X	X
			Clear Topcoat (c)	PMP-19500-6000	C	X	X	X	X	X	X	X	X	X
			Charcoal	PMP-19500-6388G	C	X	X		X		X	X	X	X
			Medium Dark Platinum	PMP-19500-7060G	C								X	

(b) = Special vehicle option.

(c) = Use only to repair scratches in the clearcoat alone (i.e., scratches that are not down to the color coat).

(g) = Use before color coat if scratch is down to metal surface.

▲ = Clearcoat.

How to Activate the Roller Ball



Step One
Unscrew black cap from tube.



Step Two
Remove and discard orange insert.



Step Three
Screw black cap on tube and shake pen vigorously for proper color match.



Step Four
Activate Roller Ball by pressing down on tip while moving pen. Practice technique before doing repair.

ORDER THROUGH YOUR D.O.E.S. II SYSTEM

2010 TRUCK, VAN, SPORT UTILITY & CROSSOVER UTILITY VEHICLE EXTERIOR PAINT CHART

Vehicle Certification Label Code	Vehicle Division Color Promotional Name	Customer Service Division Color Name	Part Number	Current or New	Ford Division										LM Division				
					Edge	Econoline	Explorer	Explorer Sport Trac	Expedition	Flex	Ranger	Escape	F-Series	F-Series Super Duty	Mountaineer	Navigator	Mariner	MKT	MX
BY	Yellow	Chrome Yellow	PMP-19500-1526A	C		X						(f)							
CX	Dark Shadow Grey Met.	Dk. Shadow Gray	PMP-19500-7039A	C							X								
D3	Colorado Red/Torch Red/Red ▲	Colorado Red ▲	PMP-19500-7042A	C			X	X			X								
DI	Dark Ink Blue Met.	Dark Ink Blue	PMP-19500-7187A	C	X				X										
DX	Dark Blue Pearl/Dark Blue Pearl Met./ Dark Blue Pearl ▲ Met./Dark Pearl Blue Met./ Dark Blue Met.	Dk. Pearl Blue	PMP-19500-7083A	C		X			X				X	X		X			
E4	Vermillion Red	Vermillion Red ▲	PMP-19500-6470A	C		X			X				X	X					
F1	Vermillion Red	Vermillion Red ▲	PMP-19500-6470A	C					X					X					
G2	Redfire Met.	Redfire	PMP-19500-7089A	C							X								
G3	Pueblo Gold/Pueblo Gold Met.	Pueblo Gold	PMP-19500-7113A	C		X	(a)		(a)				X	X					
G9	Vista Blue Met.	Vista Blue	PMP-19500-7147A	C							X								
GG	Forest Green Met.	Forest Green	PMP-19500-7175A	C										X					
HT	Cinnamon Met.	Cinnamon	PMP-19500-7186A	C	X				X									X	X
JV	Sangria Red Met./Sangria Red ▲ Met./ Sangria ▲ Met.	Sangria Red	PMP-19500-7197A	C			X	X			X				X		X		
NZ	Kiwi Green Met./Kiwi Green ▲ Met.	Kiwi Green	PMP-19500-7174A	C								X					X		
SZ	Blue Flame Met./Blue Flame ▲ Met./Blue Flame	Blue Flame	PMP-19500-7220A	C			X	X					X		X				
T5	Dark Copper Met./Dark Copper ▲ Met.	Dark Copper	PMP-19500-7133A	C			X	X											
T9	Black Pearl Slate Met./Black Pearl Slate ▲ Met.	Monterey Met.	PMP-19500-7173A	C			X	X				X			X		X		
U1	Sport Blue Met.	Sport Blue	PMP-19500-7209A	C	X							X							
U6	Red Candy Met. Tinted ▲/Razor Red w/tinted ▲/ Red Candy Met.	Red Candy Tint ▲	PMP-19500-7219A	C	X					X			X					X	X
UA	Black ▲/Black/Ebony	Black	PMP-19500-1724A	C		X	X	X			X	X		X	X		X		
UD	Black ▲/Black	Black	PMP-19500-1724A	C										X					
UG	White Platinum/White Platinum Tri-Coat Met.	White Platinum Tricoat	PMP-19500-7204A	C	X		X		X	X			X	X	X	X		X	X
UH	Tuxedo Black Met./Tuxedo Black	Tuxedo Black Met.	PMP-19500-7211A	C	X				X	X			X	X		X		X	X
UI	Sport Blue Met./Brilliant Silver Met./ Brilliant Silver ▲ Met.	Brilliant Silver Met.	PMP-19500-7208A	C			X	X							X				
UJ	Sterling Gray Met./Sterling Grey ▲ Met.	Sterling Gray Met.	PMP-19500-7205A	C	X				X	X		X	X	X		X	X	X	X
UK	Royal Red ▲ Met./Royal Red Met.	Royal Red Met.	PMP-19500-7207A	C		X			X				X	X		X			
UN	Steel Blue Met./Steel Blue ▲	Steel Blue Met.	PMP-19500-7227A	N						X		X					X	X	X
UP	Gold Leaf Met./Gold Leaf ▲ Met.	Gold Leaf Met.	PMP-19500-7225A	N								X					X	X	X
UQ	Wine Red ▲ Met.	Wine Red Met.	PMP-19500-7224A	N													(b)		
UX	Ingot Silver Met./Ingot Silver ▲ Met./Ingot Silver	Ingot Silver Met.	PMP-19500-7226A	N	X	X			X	X		X	X	X		X	X	X	X
UY	Molten Orange	Molten Orange Tricoat	PMP-19500-7228A	N									X						
UZ	Lava/Lava Met.	Lava Red	PMP-19500-7229A	N									X						
WS	White Suede/White Suede ▲	White Suede	PMP-19500-7193A	C	X		X	X		X		X			X		X		
YN	Silver Met.	Lt. Charcoal Met. ▲	PMP-19500-6041A	C							X								
YZ	Oxford White	White ▲	PMP-19500-5920A	C		X	(f)		X		X	(f)	X	X					
Z1	Oxford White	White ▲	PMP-19500-5920A	C										X					
					SPECIAL PAINTS														
		Primer (g)	PMP-19500-1000	C	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
		Clear Topcoat (c)	PMP-19500-6000	C	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
		Charcoal	PMP-19500-6388G	C	X	X	X	X	X		X	X	X	X	X	X	X	X	X
		Medium Dark Platinum	PMP-19500-7060G	C								X						X	

(a) = Accent color.
(b) = Special vehicle option.
(c) = Use only to repair scratches in the clearcoat alone (i.e., scratches that are not down to the color coat).
(f) = Fleet only.
(g) = Use before color coat if scratch is down to metal surface.
▲ = Clearcoat.

NOTE: There is no 2010 Interior Paint Availability Chart.

2009 PASSENGER CAR EXTERIOR PAINT CHART

Vehicle Certification Label Code	Vehicle Division Color Promotional Name	Customer Service Division Color Name	Part Number	Current or New	Ford Division						Lincoln Mercury Division					
					Focus	Mustang/ Shelby GT500	Crown Victoria	Fusion	Taurus		Grand Marquis	Milan	Sable	Town Car	MKS	MKZ
D2	Moss Green ▲ Met.	Moss Green	PMP-19500-7192A	C				X				X				X
D3	Torch Red ▲	Colorado Red ▲	PMP-19500-7042A	C		X										
DI	Dark Ink Blue ▲ Met.	Dark Ink Blue	PMP-19500-7187A	C				X	X			X	X		X	X
DX	Dark Blue Pearl ▲ Met.	Dk. Pearl Blue	PMP-19500-7083A	C										X		
G2	Redfire ▲ Met./Vivid Red ▲ Met.	Redfire	PMP-19500-7089A	C				X				X				X
G3	Light French Silk ▲ Met.	Pueblo Gold	PMP-19500-7113A	C										X		
G5	Alloy ▲ Met.	Alloy	PMP-19500-7116A	C		X										
G9	Vista Blue ▲ Met.	Vista Blue	PMP-19500-7147A	C	X	X										
GQ	Amber Gold ▲ Met.	Amber Gold ▲	PMP-19500-7206A	N	X											
HG	Smoke Stone ▲ Met./Smokestone ▲	Smokestone	PMP-19500-7148A	C			X	X	X	X	X	X	X		X	X
HH	Dark Cherry ▲ Met.	Dark Cherry	PMP-19500-7149A	C										X		
HP	Performance White ▲	High Performance White	PMP-19500-7139A	C		X										
HT	Cinnamon ▲ Met.	Cinnamon	PMP-19500-7186A	C					X				X		X	
JL	Dark Toreador Red ▲ Met.	Dk. Toreador Red	PMP-19500-6771A	C			X			X						
JP	Silver Birch ▲ Met.	Silver Birch ▲	PMP-19500-7052A	C			X			X				X		
JV	Sangria Red ▲ Met./Dark Candy Apple Red	Sangria Red	PMP-19500-7197A	C	X	X			X				X		X	
KR	Norsea Blue ▲ Met.	Norsea Blue	PMP-19500-7111A	C			X			X						
LS	Lt. Ice Blue ▲ Met.	Light Ice Blue ▲	PMP-19500-7054A	C	X		X		X	X			X	X		
P6	Moss Green ▲ Met.	Moss Green	PMP-19500-7192A	C				X			X					X
PV	White Chocolate ▲ Met. Tri-Coat/ White Chocolate Tri-Coat	White Chocolate ▲	PMP-19500-7167A	C					X				X		X	
PX	Highland Green ▲	Dark Highland Green	PMP-19500-6920A	C		X										
U1	Sport Blue ▲ Met.	Sport Blue	PMP-19500-7209A	N				X				X				
U3	Grabber Orange ▲ Met.	Valencia	PMP-19500-7178A	C		X										
UA	Black ▲/Ebony ▲	Black	PMP-19500-1724A	C	X	X	X			X				X		
UG	White Platinum ▲ Tri-Coat/ White Platinum Tri-Coat	White Platinum Tri-Coat	PMP-19500-7204A	N				X			X					X
UH	Tuxedo Black ▲ Met.	Tuxedo Black Met.	PMP-19500-7211A	N				X	X		X	X			X	X
UI	Brilliant Silver ▲ Met.	Brilliant Silver Met.	PMP-19500-7208A	N	X	X		X	X		X	X			X	X
UJ	Sterling Grey ▲ Met.	Sterling Gray Met.	PMP-19500-7205A	N	X											
WS	White Suede ▲	White Suede	PMP-19500-7193A	C	X			X	X		X	X			X	X
WT	Vibrant White ▲ Met./Vibrant White ▲	Performance White ▲	PMP-19500-1028A	C			X			X				X		
ZY	Vapor Silver ▲ Met.	Vapor Silver	PMP-19500-7195A	C		X		X			X					X
SPECIAL PAINTS																
		Primer (g)	PMP-19500-1000	C	X	X	X	X	X	X	X	X	X	X	X	X
		Clear Topcoat (c)	PMP-19500-6000	C	X	X	X	X	X	X	X	X	X	X	X	X
		Charcoal	PMP-19500-6388G	C	X	X	X	X	X	X	X	X	X		X	X
		Medium Dark Platinum	PMP-19500-7060G	C											X	

(c) = Use only to repair scratches in the clearcoat alone (i.e., scratches that are not down to the color coat).

(g) = Use before color coat if scratch is down to metal surface.

▲ = Clearcoat.

How to Activate the Roller Ball



Step One
Unscrew black cap from tube.



Step Two
Remove and discard orange insert.



Step Three
Screw black cap on tube and shake pen vigorously for proper color match.



Step Four
Activate Roller Ball by pressing down on tip while moving pen. Practice technique before doing repair.

ORDER THROUGH YOUR D.O.E.S. II SYSTEM

2009 TRUCK, VAN, SPORT UTILITY & CROSSOVER UTILITY VEHICLE EXTERIOR PAINT CHART

Vehicle Certification Label Code	Vehicle Division Color Promotional Name	Customer Service Division Color Name	Part Number	Current or New	Ford Division										LM Division				
					Edge	Econoline	Explorer	Explorer Sport Trac	Expedition	Flex	Ranger	Escape	F-Series (F-150)	F-Series Super Duty	Taurus X	Mountaineer	Navigator	Mariner	MX
BY	Yellow ▲	Chrome Yellow	PMP-19500-1526A	C		X													
CX	Dark Shadow Grey ▲ Met.	Dk. Shadow Gray	PMP-19500-7039A	C							X			X					
D3	Torch Red ▲/Colorado Red	Colorado Red ▲	PMP-19500-7042A	C			X	X			X	X							
DI	Dark Ink Blue ▲ Met.	Dark Ink Blue	PMP-19500-7187A	C	X					X					X				X
DX	Dark Blue Pearl/Dark Blue Pearl ▲ Met.	Dk. Pearl Blue	PMP-19500-7083A	C		X			X				X	X			X		
E4	Vermilion Red ▲/Bright Red ▲	Vermilion Red ▲	PMP-19500-6470A	C		X							X	X					
F1	Red ▲	Vermilion Red ▲	PMP-19500-6470A	C							X			X					
FL	Toreador Red ▲	Toreador Red ▲	PMP-19500-6758A	C										X					
G2	Redfire ▲ Met./Vivid Red ▲ Met.	Redfire	PMP-19500-7089A	C	X					X	X	X						X	X
G3	Pueblo Gold/Pueblo Gold ▲ Met.	Pueblo Gold	PMP-19500-7113A	C		X	(a)		(a)				X	X	(a)				
G9	Vista Blue ▲ Met.	Vista Blue	PMP-19500-7147A	C							X			(b)					
GG	Forest Green/Forest Green ▲ Met.	Forest Green	PMP-19500-7175A	C		X								X					
GQ	Amber Gold ▲ Met.	Amber Gold Met.	PMP-19500-7206A	N								X							
HG	Smokestone ▲ Met.	Smokestone	PMP-19500-7148A	C							X				X				
HM	Black Cherry Ice	Black Cherry Ice	PMP-19500-7201A	N													(b)		
HS	Stone Green ▲ Met.	Earth	PMP-19500-7190A	C					X				X				X		
HT	Cinnamon ▲ Met.	Cinnamon	PMP-19500-7186A	C	X					X					X				X
JV	Sangria ▲ Met./Sangria Red ▲	Sangria Red	PMP-19500-7197A	C			X	X	X			X			X	X	X	X	
L2	True Blue	True Blue	PMP-19500-7023A	C										X					
LS	Lt. Ice Blue ▲ Met.	Lt. Ice Blue ▲	PMP-19500-7054A	C						X					X			X	
NH	Light Sage ▲ Met.	Light Sage	PMP-19500-7146A	C								X					X		
NZ	Kiwi Green ▲ Met.	Kiwi Green	PMP-19500-7174A	C								X						X	
P5	Aspen Green ▲	Aspen Green ▲	PMP-19500-7056A	C										X					
PV	White Chocolate Tri-Coat/White Sand Tri-Coat Met.	White Chocolate Tricoat	PMP-19500-7167A	C			X						X		X	X			
SE	Silver Eclipse	Silver Eclipse	PMP-19500-7128A	C											(a)				
SZ	Blue Flame	Blue Flame	PMP-19500-7220A	N								X							
T5	Dark Copper ▲ Met.	Dark Copper	PMP-19500-7133A	C			X	X											
T7	Dark Stone ▲ Met.	Charcoal Beige	PMP-19500-7136A	C										X					
T9	Black Pearl Slate ▲ Met./Black Pearl Slate ▲	Monterey Met.	PMP-19500-7173A	C			X	X	X			X				X	X	X	
U1	Sport Blue ▲ Met.	Sport Blue	PMP-19500-7209A	N	X		X	X				X				X			
U3	Grabber Orange ▲	Valencia	PMP-19500-7178A	C							X								
U6	Razor Red Dual-Coat Met.	Red Candy Tint ▲	PMP-19500-7219A	N									X						
UA	Black ▲	Black	PMP-19500-1724A	C	X	X	X	X	X	X	X	X	X	X		X	X	X	X
UD	Black ▲	Black	PMP-19500-1724A	C										X					
UG	White Platinum Tri-Coat Met./White Platinum ▲ Met.	White Platinum Tri-Coat	PMP-19500-7204A	N	X				X	X							X		X
UH	Tuxedo Black ▲ Met.	Tuxedo Black Met.	PMP-19500-7211A	N											X				
UI	Brilliant Silver ▲/Brilliant Silver ▲ Met.	Brilliant Silver Met.	PMP-19500-7208A	N	X	X	X	X		X		X	X	X	X	X		X	X
UJ	Sterling Grey ▲ Met.	Sterling Gray Met.	PMP-19500-7205A	N	X	X				X		X	X	X				X	X
UK	Royal Red ▲ Met.	Royal Red Met.	PMP-19500-7207A	N		X			X				X	X					
WS	White Suede ▲	White Suede	PMP-19500-7193A	C	X		X	X		X		X			X	X		X	X
YN	Silver ▲ Met.	Lt. Charcoal Met. ▲	PMP-19500-6041A	C							X			X					
YZ	Oxford White ▲	White ▲	PMP-19500-5920A	C		X	X		X		X	(f)	X	X					
Z1	Oxford White ▲	White ▲	PMP-19500-5920A	C										X					
ZY	Vapor Silver ▲ Met.	Vapor Silver	PMP-19500-7195A	C					X								X		
SPECIAL PAINTS																			
	Primer (g)		PMP-19500-1000	C	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
	Clear Topcoat (c)		PMP-19500-6000	C	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
	Charcoal		PMP-19500-6388G	C	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
	Medium Dark Platinum		PMP-19500-7060G	C					X			X							

- (a) = Accent color.
 (b) = Special vehicle option.
 (c) = Use only to repair scratches in the clearcoat alone (i.e., scratches that are not down to the color coat).
 (f) = Fleet only.
 (g) = Use before color coat if scratch is down to metal surface.
 ▲ = Clearcoat.

ORDER THROUGH YOUR D.O.E.S. II SYSTEM

2009 INTERIOR PAINT AVAILABILITY CHART

Trim Code	Trim Color	Passenger Cars										Trucks, Vans, Sport Utility & Crossover Vehicles													Interior Paint Color Name	Interior Paint Part Number	
		Crown Vic./Gnd. Mar.	Focus	Fusion/Milan	Mustang	Shelby GT500	Taurus	Sable	Lincoln MKS	Lincoln MKZ	Town Car	Econoline	Edge	Escape/Hybrid	Expedition	Explorer/Sport Trac	Flex	F-Series	F-Series Super Duty	Ranger	Taurus X	Mariner/Hybrid	Mountaineer	Lincoln MKX			Navigator
2	Light Graphite				X																					Black	PM-19M547-4149H
					X																					Charcoal Black	PM-19M547-0001H
					X																					Med. Dove	PM-19M547-0002H
4	Chamois				X																					Black	PM-19M547-4149H
					X																					Charcoal Black	PM-19M547-0001H
9	Black Charcoal												X									X				Black	PM-19M547-4149H
													X									X				Charcoal Black	PM-19M547-0001H
																						X				Cashmere	PM-19M547-0004H
																						X				Med. Lt. Stone	PM-19M547-2011H
A	Black																	X								Black	PM-19M547-4149H
																		X								Charcoal Black	PM-19M547-0001H
B	Black Ebony Medium Flint																	X	X					X		Black	PM-19M547-4149H
																		X	X				X			Charcoal Black	PM-19M547-0001H
																							X			Lt. Stone	PM-19M547-0008H
																			X							Dark Foundry	PM-19M547-0016H
																		X								Sienna	PM-19M547-0018H
																		X								Obsidian	PM-19M547-0019H
																							X			Med. Satin Nickel	PM-19M547-2015H
C	Camel Parchment			X	X		X						X	X	X			X		X		X		X		Black	PM-19M547-4149H
					X									X					X					X		Charcoal Black	PM-19M547-0001H
				X	X		X						X	X	X			X		X		X		X		Camel	PM-19M547-0003H
													X													Cashmere	PM-19M547-0004H
															X								X			Lt. Camel	PM-19M547-0005H
				X											X				X				X			Med. Camel	PM-19M547-0006H
														X				X								Greystone	PM-19M547-0007H
				X			X								X						X					Sand	PM-19M547-0009H
							X							X							X					Dusk Gray	PM-19M547-0013H
														X												Med. Dark Camel	PM-19M547-0014H
																			X							King Ranch Red	PM-19M547-0015H
																			X							Dark Foundry	PM-19M547-0016H
				X																						X	Dark Stone	PM-19M547-2012H
D	Dove Light Camel				X													X					X			Med. Satin Nickel	PM-19M547-2015H
					X														X							Black	PM-19M547-4149H
					X														X							Charcoal Black	PM-19M547-0001H
					X																					Med. Dove	PM-19M547-0002H
																							X			Lt. Camel	PM-19M547-0005H
																				X			X			Greystone	PM-19M547-0007H
																							X			Sand	PM-19M547-0009H
																			X							Med. Satin Nickel	PM-19M547-2015H
																			X							Dark Foundry	PM-19M547-0016H
																			X							Med. Lt. Stone	PM-19M547-2011H
																	X							Med. Stone	PM-19M547-2022H		
E	Medium Flint Stone										X						X									Black	PM-19M547-4149H
											X															Charcoal Black	PM-19M547-0001H
																		X								Dusk Gray	PM-19M547-0013H
																		X								Sienna	PM-19M547-0018H
												X						X								Obsidian	PM-19M547-0019H
												X														Med. Flint	PM-19M547-2001H
F	Medium Dark Flint										X															Lt. Flint	PM-19M547-2003H
																										Med. Stone	PM-19M547-2022H
																			X							Black	PM-19M547-4149H
																			X							Med. Flint	PM-19M547-2001H
G	Medium Light Stone																			X						Lt. Flint	PM-19M547-2003H
																				X						Med. Dk. Flint	PM-19M547-2004H
											X															Black	PM-19M547-4149H
											X															Greystone	PM-19M547-0007H
H	Medium Parchment Camel																									Med. Lt. Stone	PM-19M547-2011H
																										Med. Satin Nickel	PM-19M547-2015H
					X							X														Black	PM-19M547-4149H
					X							X														Charcoal Black	PM-19M547-0001H
					X							X														Camel	PM-19M547-0003H
J	Light Camel																									Greystone	PM-19M547-0007H
																										Sand	PM-19M547-0009H
																										Med. Camel	PM-19M547-0006H
																										Sand	PM-19M547-0009H
																										Dusk Gray	PM-19M547-0013H
																										Sterling Gray	PM-19M547-0017H

ORDER THROUGH YOUR D.O.E.S. II SYSTEM

**Motorcraft**

2009 INTERIOR PAINT AVAILABILITY CHART

Trim Code	Trim Color	Passenger Cars									Trucks, Vans, Sport Utility & Crossover Vehicles													Interior Paint Color Name	Interior Paint Part Number		
		Crwn. Vic./Gnd. Mar.	Focus	Fusion/Milan	Mustang	Shelby GT500	Taurus	Sable	Lincoln MKS	Lincoln MKZ	Town Car	Econoline	Edge	Escape/Hybrid	Expedition	Explorer/Sport Trac	Flex	F-Series	F-Series Super Duty	Ranger	Taurus X	Mariner/Hybrid	Mountaineer			Lincoln MKX	Navigator
K	Light Camel									X																Black	PM-19M547-4149H
										X																Lt. Camel	PM-19M547-0005H
										X																Med. Camel	PM-19M547-0006H
										X																Med. Satin Nickel	PM-19M547-2015H
L	Stone Medium Light Stone	X		X			X	X					X		X						X			X	X	Black	PM-19M547-4149H
		X		X										X		X								X	Charcoal Black	PM-19M547-0001H	
		X													X								X		Greystone	PM-19M547-0007H	
				X			X	X						X							X		X			Lt. Stone	PM-19M547-0008H
							X														X					Dusk Gray	PM-19M547-0013H
								X																		Med. Dk. Flint	PM-19M547-2004H
		X		X			X	X					X		X						X			X	X	Med. Lt. Stone	PM-19M547-2011H
M	Dark Charcoal								X														X	X	Med. Satin Nickel	PM-19M547-2015H	
									X																	Black	PM-19M547-4149H
																										Med. Satin Nickel	PM-19M547-2015H
N	Charcoal Black Black	X								X															Black	PM-19M547-4149H	
		X								X															Charcoal Black	PM-19M547-0001H	
R	Red Accent Crimson Red				X	X				X															Black	PM-19M547-4149H	
					X	X																			Charcoal Black	PM-19M547-0001H	
S	Stone Medium Stone Medium Light Stone	X							X				X			X		X			X				Black	PM-19M547-4149H	
														X				X							Charcoal Black	PM-19M547-0001H	
										X											X				Cashmere	PM-19M547-0004H	
																									Med. Camel	PM-19M547-0006H	
		X												X				X			X				Greystone	PM-19M547-0007H	
		X															X								Lt. Stone	PM-19M547-0008H	
										X															Sand	PM-19M547-0009H	
																		X							Dark Foundry	PM-19M547-0016H	
																		X							Sterling Gray	PM-19M547-0017H	
		X															X								Obsidian	PM-19M547-0019H	
										X				X					X			X				Med. Lt. Stone	PM-19M547-2011H
T	Light Stone									X															Med. Satin Nickel	PM-19M547-2015H	
										X															Black	PM-19M547-4149H	
										X															Charcoal Black	PM-19M547-0001H	
										X															Lt. Stone	PM-19M547-0008H	
V	Cashmere								X																Med. Satin Nickel	PM-19M547-2015H	
									X																Black	PM-19M547-4149H	
									X																Charcoal Black	PM-19M547-0001H	
W	Charcoal Black Dark Charcoal	X	X	X	X	X	X	X	X	X			X		X	X	X			X		X	X	X	Black	PM-19M547-4149H	
		X	X	X	X	X	X	X	X	X			X		X	X	X			X		X	X	X	Charcoal Black	PM-19M547-0001H	
		(b)						X																	Cashmere	PM-19M547-0004H	
																							X		Lt. Camel	PM-19M547-0005H	
		X	X			X	X						X							X					Lt. Stone	PM-19M547-0008H	
																							X		Sand	PM-19M547-0009H	
															X										King Ranch Red	PM-19M547-0015H	
																									Sterling Gray	PM-19M547-0017H	
		X															X								Obsidian	PM-19M547-0019H	
										X						X					X		X			Med. Lt. Stone	PM-19M547-2011H
W	Medium Pebble																								Med. Satin Nickel	PM-19M547-2015H	
																									Med. Stone	PM-19M547-2022H	
												X													Black	PM-19M547-4149H	
												X													Charcoal Black	PM-19M547-0001H	
W	Tan Light Parchment																								Lt. Parchment	PM-19M547-1076H	
																									Med. Pebble	PM-19M547-2016H	
																		X							Black	PM-19M547-4149H	
																		X							Med. Camel	PM-19M547-0006H	
W	Tan Light Parchment																								Dusk Gray	PM-19M547-0013H	
																									X	King Ranch Red	PM-19M547-0015H
																									X	Obsidian	PM-19M547-0019H

(b) = VOGA only (Special Edition).

Important Usage Information

- When using any **Ford Automotive Interior Spray Lacquer** color, **M4JZ-19M547-XXXXH**, Motorcraft Adhesion Promoter, PM-19A316-AA, or equivalent **MUST** be used according to the product's directions to prime all plastic interior trim parts prior to color application.
- When using **Motorcraft Interior Spray Paint** color, **PM-19M547-XXXXH**, refer to the Interior Spray Paint TSB for additional usage information and see chart on Page 76.

CHEK-CHART

Lubrication

Recommendations Guide

2010 EDITION



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2010 LUBRICATION RECOMMENDATIONS GUIDE

KEY TO LUBRICANT SYMBOLS

AE	Esso Type LT 71141 Automatic Transmission Fluid Audi: P/N G 052 162 (-A1, -A2) BMW: P/N 83 22 9 407 807 Chevrolet: P/N 89021903 (Canada) Jaguar: P/N JLM 20238 Land Rover: Esso LT71141 Porsche: P/N 999 917 547 00 (A2) or P/N 000 043 205 09 (20 liter container) Suzuki: Esso LT71141 Volkswagen: P/N G 052 162 (-A1, -A2)
AF2	DEXRON®-II Automatic Transmission Fluid
AF3	DEXRON®-III Automatic Transmission Fluid AGCO, Deutz-Allis, White: Power Fluid 411 BMW: Power steering use AF3; Models with combined power steering, hydraulic brake booster, self-leveling suspension system use SLF Mercedes-Benz: Use only manufacturer approved fluid
AF6	DEXRON®-VI Automatic Transmission Fluid
AP3	ATF+3® Automatic Transmission Fluid Chrysler, Dodge, Dodge Trucks, Eagle, Jeep, Plymouth: Mopar ATF+3® (Type 7176E) P/N 4798233 Mitsubishi: Mitsubishi Diamond SP, P/N MS991156
AP4	ATF+4® Automatic Transmission Fluid Chrysler, Dodge, Dodge Trucks, Eagle, Jeep, Mitsubishi, Plymouth: Mopar ATF+4® (Type 9602), P/N 05013457AA (quart) and 05013458AA (gallon)
API★	Motor Oil certified by the American Petroleum Institute (Starburst Symbol) AM General: Use engine oil meeting GM Standard GM6094 Buick: 2004-2010 use engine oil meeting GM Standard GM6094. Cadillac: 2003-2010 CTS & CTS-V, 2004-2010 SRX, 2004-09 XLR, 2005-2010 STS, 2006-2010 STS-V, 2006-09 XLR-V, 2008-09 DTS, 2008-09 Escalade and 2010 CTS Sport Wagon use only engine oil meeting GM standard GM4718M. Other models use engine oil meeting GM standard GM6094M Chevrolet: 2010 Camaro with 6.2L V8 engine, 1999-2010 Corvette, 2005-2010 Cobalt 2.0L Supercharged, 2005-06 SSR, 2006-09 Trailblazer SS and 2008-2010 HHR Turbocharged use engine oil meeting GM Standard GM4718M. Other 2004-2010 models use engine oil meeting GM Standard GM6094M. Chrysler: As noted use SAE 5W-20, SAE 5W-30 or 10W-30 engine oil meeting MS-6395. FFV engine oils must meet MS-9214. Dodge: As noted use SAE 5W-20, SAE 5W-30 or 10W-30 engine oil meeting MS-6395. FFV engine oils must meet MS-9214. Use of a full synthetic SAE 10W-30 meeting MS-9615 is preferred in the 1999-2004 Viper. Ford, Ford Light Trucks, Lincoln, Mazda Trucks, Mercury: As noted use SAE 5W-20, Spec WSS-M2C930-A (ILSAC GF-4), or SAE 5W-30, Spec WSS-M2C929-A (ILSAC GF-4). Starting October 1, 2010, use SAE 5W-20, Spec. WSS-M2945-A (ILSAC GF-5), or SAE 5W-30, Spec. WSS-M2C946-A (ILSAC GF-5) GMC: 2004-09 use engine oil meeting GM Standard GM6094M Jeep: As noted use SAE 5W-20, SAE 5W-30 or 10W-30 engine oil meeting MS-6395. FFV engine oils must meet MS-9214. Pontiac: 2005-06 GTO & 2007-2010 Solstice Turbocharged use oil meeting GM Standard GM4718M. Other 2004-2010 models use oil meeting GM Standard GM6094M. Saab: 2008-09 9-7X use only engine oil meeting GM Standard GM4718M. Saturn: 2004-07 Ion Redline & 2008-2010 Saturn Sky 2.0L Turbocharged use engine oil meeting GM Standard GM4718M. Other 2004-2010 models use engine oil meeting GM Standard GM6094M.
BC	Bar and Chain Oil <i>Use manufacturer's packaged oils or equivalent</i>
BTF	Hydraulic Transmission Fluid John Deere: BIO-HY-GARD
CF	Motor Oil, API Service CF (Obsolete)
CF-2	Motor Oil, API Service CF-2 (Obsolete)
CF-4	Motor Oil, API Service CF-4 (Obsolete)
CG-4	Motor Oil, API Service CG-4 (Obsolete)
CH-4	Motor Oil, API Service CH-4
CI-4	Motor Oil, API Service CI-4
CI-4+	Motor Oil, API Service CI-4 PLUS
CJ-4	Motor Oil, API Service CJ-4
CL	Chassis Lubricant
CTF	Cab Tilt Fluid All makes: Use manufacturer's packaged oil or a MIL-H-5606 equivalent
CV	Constant Velocity Joint Grease Ford, Lincoln, Mercury: Use P/N XG-5, Spec. WSS-M1C258-A
ECF-1-a	Motor Oil, ECF-1-a Caterpillar: The ECF-1-a specification defines additional requirements for diesel engine lubricants that meet API CH-4.
ECF-2	Motor Oil, ECF-2 Caterpillar: The ECF-2 specification defines additional requirements for diesel engine lubricants that meet API CI-4 or CI-4 PLUS



2010 LUBRICATION RECOMMENDATIONS GUIDE

KEY TO LUBRICANT SYMBOLS

ECF-3	Motor Oil, ECF-3 Caterpillar: The ECF-3 specification defines additional requirements for diesel engine lubricants that meet API CJ-4
EO-L	Motor Oil, EO-L Mack: Spec. EO-L
EO-L Plus	Motor Oil, EO-L Plus Mack: Spec. EO-L Plus
EO-M	Motor Oil, EO-M Mack: Spec. EO-M (must pass Mack T-8E and T-9 tests).
EO-M Plus	Motor Oil, EO-M Plus Mack: Spec. EO-M Plus (must pass Mack T-8E and T-9 tests and resistance to oxidation).
EO-N Plus	Motor Oil, EO-N Premium Plus Mack: Spec. EO-N Premium Plus (must pass Mack T-8E and T-10 tests).
EO-O Plus	Motor Oil, EO-O Premium Plus Mack: Spec EO-O premium plus (must meet Mack requirement in Mack T12 and Cummins ISB tests)
EP	Extreme Pressure Gear Oil
FA	Automatic Transmission Fluid, Type-F
GA	Automatic Transmission Fluid, Type-G
GC	Wheel Bearing Grease, NLGI Classification GC AGCO: P/N 79014730 Bering: No. 1 (Ba Al BASE) Chrysler, Dodge, Jeep: P/N 05083149AA meeting MS-6560 Freightliner: No. 2 GM: P/N 1051344, Spec. no. 998525V International (Navistar): Optional synthetic grease P/N 2644067R1 Isuzu: No. 2 or 3
GG	Graphite Grease
GL-1	Gear Oil, API Service GL-1
GL-2	Gear Oil, API Service GL-2 Meritor/Rockwell: Spec O-72 or O-73
GL-3	Gear Oil, API Service GL-3 AM General, Cadillac, Chevrolet, Chevrolet Trucks, GMC Trucks, Isuzu, Pontiac, Saturn: Manual Transmission use SAE 75W-90, P/N 89021806 or equivalent. Dodge Trucks, Jeep: As noted SAE 75W-90, P/N 04897622AA meeting MS-9684.
GL-4	Gear Oil, API Service GL-4 Audi, Volkswagen: Use the following as noted: Synthetic SAE 75W-90, P/N G005 000 (G50); Synthetic SAE 75W-90, P/N G005 100 (G51); Synthetic SAE 75W-90, P/N G052 145 (-A1, -A2, -S2), Synthetic SAE 75W-90, P/N G 052 911(-A1) or G 052 171 (-A2) or G 052 726 A2 Chevrolet: Manual Transmission 1999-2001 Metro, 1999-2002 Sprint, 1999-2002 Prizm and 2004-06 Aveo use SAE 75W-85, GM P/N 12346190 or equivalent. Chevrolet Trucks: Manual Trans. and transfer case 1999-2004 use SAE 75W-85, GM P/N 12346190 or equivalent. NOTE: for the 1999-2004 Tracker, if the determination has been made that the 5-speed M59 TRANS synchronizers have been replaced, use GM P/N 12345349; Manual Trans NV1500 use GM P/N 12377916; Manual Trans. NV4500 use SAE 75W-85, GM P/N 12346190 or equivalent. Dodge: NV 4500, Tremec T56 and 1999-2002 Viper manual transmission use Synthetic 75W-85, P/N 04874459 meeting MS-9070. Ford, Lincoln, Mazda, Mercury: SAE 75W-90, P/N XT-4-QGL, Ford Spec. WSS-M2C203-A1, Mazda Spec. (MES) 115A GMC Trucks: Manual Transmission NV4500 use GM P/N 12346190. Nissan: Manual Transmission, SAE 75W-85, Nissan MTF HQ Multi 75W, P/N 999MP-MTF00P. Pontiac: Manual transmission 1999-2001 Firefly and 2003-07 Vibe use GM P/N 12346190 or equivalent.
GL-5	Gear Oil, API Service GL-5 AGCO: Gear Lube 715, SAE 80W-90 AM General: Front and Rear Differential 2003-2010 H2 and 2006-2010 H3 use a synthetic GL-5, SAE 75W-90 meeting GM Specification 9986115. Buick: Front & Rear Differential Rainier 2004-07, Rear Differential 2008-2010 Enclave, and Getrag 760 Transfer Case 2008-2010 Enclave use a synthetic GL-5, SAE 75W-90 meeting GM Specification 9986115. Cadillac: Rear Differential 2003-2010 CTS and Front and Rear Differential 2004-2009 SRX and 2005-2010 STS Rear Differential, use a synthetic GL-5, SAE 75W-90 meeting GM Specification 9986115. Escalade models see GM Trucks. Chevrolet: 1999-2002 Camaro use P/N 12378261 or Synthetic 75W-90 meeting Spec. 9986115. Others may use P/N 1052271, Spec. 9985290 Chevrolet Trucks: Getrag 760 Transfer Case 2008-2010 Equinox and 2009-2010 Traverse use GM P/N 89021677 Chrysler, Dodge, Jeep: Use the following as noted: Synthetic SAE 75W-90, P/N 05010320AA (1qt) meeting MS-9763; SAE 80W-90, P/N 04874468 meeting MS-9020; SAE 90, P/N 04874466 meeting MS-8987; or Synthetic SAE 75W-140, P/N 04874469 meeting MS-8985; w/limited slip & models w/Quadra Drive, Vari-Lok or Trac-Lok (front & rear axles), add additive P/N 04318060AB as noted; 1996-2010 Wrangler, TJ w/ Trailer Tow package & Liberty 8.25 axle w/ Trailer Tow package use synthetic 75W-140 oil Mopar P/N 82200945. Deere: John Deere Extreme Guard Eaton: Spec. MIL-PRF-2105E Fabco, Marmon-Herrington: Front-wheel driving axles in Mack Trucks, Mack Spec. GO-J



2010 LUBRICATION RECOMMENDATIONS GUIDE

KEY TO LUBRICANT SYMBOLS

GL-5

Gear Oil, API Service GL-5 (continued)

Ford, Lincoln, Mazda Trucks, Mercury: Front axles use SAE 80W-90, P/N XY-80W90-QL, Spec. WSP-M2C197-A as noted.

2005-2007 Five Hundred, Montego and Freestyle Power Transfer Unit uses SAE 75W-90 P/N XY-75W90-PTU.

2007-2010 Edge/MKX/MKZ Power Transfer Unit uses SAE 75W-140 P/N XY-75W140-QL, spec WSL-M2C192-A.

Rear axles use SAE 80W-90, P/N XY-80W90-QL, Spec. WSP-M2C197-A; or Synthetic SAE 75W-140, P/N XY-75W140-QL, Spec. WSL-M2C192-A; or Synthetic SAE 75W-90, P/N XY-75W90-QLS, Spec. DANA ES-PM-M2013

GM Light Duty Trucks: 2001-05 P/N 1052271, Spec. 9985290 as noted. 1999-00 Front axles: S-Trucks, Vans & full-size trucks, 80W-90, P/N 1052271, Spec. 9985290. Rear axles: 2000 full-size models, G-Vans with 8.6" axle, 1999 Silverado, and Sierra with 4.3L, 4.8L, 5.3L, or 6.0L engine, use a synthetic GL-5, SAE 75W-90 meeting GM Specification 9986115. 1996-2000 HD 3500 with Dana 11" axle, 75W-140 Synthetic, P/N 12346140, Spec. 9985991; Tracker & Sunrunner differential, 80W-90 P/N 12345977; Others, 80W-90, P/N 1052271, Spec. 9985290.

GMC: Getrag 760 Transfer Case 2007-2010 Acadia use GM P/N 89021677

Isuzu: Front and rear differential 2003-08 Ascender, 2006 I280 and I350, 2007-08 I290 and I370 use a synthetic GL-5, SAE 75W-90 meeting GM Specification 9986115.

International (tractors): Specification B-22

Jaguar: Synthetic SAE 75W-140, meeting Specification WSL-M2C192-A

Mack: Transfer case, 1999-2001, GO-J, GO-J PLUS Transmission, 1999-2000, GO-J, GO-J PLUS, TO-A PLUS; 2001, TO-A PLUS

Meritor/Rockwell: Spec. O-76A (85W-140), O-76D (80W-90), O-76E (75W-90), O-76J (75W), O-76L (75W-140), O-76M (full synthetic 75W-140), O-76N (full synthetic 75W-90)

Pontiac: Differential 1999-2002 Firebird, Differential 2006-2010 Solstice, and Carrier assembly 2007-2009 Torrent use a synthetic GL-5, SAE 75W-90 meeting GM Specification 9986115. Others may use P/N 1052271, Spec. 9985290.

Porsche: 1999-05 911: P/N 999 917 545 00 is preferred in differential and manual transmission; 1999-05 Boxster: G86/00 & G86/01 manual transmission use P/N N 052 911 C0; Boxster S: G86/20 manual transmission use P/N 999 917 546 00; 1997-05 Boxster and Boxster S: final drive of Tiptronic transmission use P/N 999 917 546 00

Saab: Front and rear differential 2005-2009 97-X, use a synthetic GL-5, SAE 75W-90 meeting GM Specification 9986115.

Saturn: MJ8 transfer case 2006-07 VUE, Getrag 760 Transfer Case and carrier assembly 2007-2010 Outlook, 2008-2010 VUE, and Differential 2007-2010 SKY use a synthetic GL-5, SAE 75W-90 meeting GM Specification 9986115.

Subaru: P/N K0324AA093

Suzuki: Transfer case 2007-2009 XL-7 use GM P/N 89021677.

GL-5★

GL-5 Gear Oil for Limited-Slip Differentials

Cadillac: Rear Differential CTS and XLR, use a synthetic GL-5, SAE 75W-90 meeting GM Specification 9986115 plus 4 oz. Additive P/N 1052358, Spec. 9035-P. Rear differential STS and SRX, use a synthetic GL-5, SAE 75W-90 meeting GM Specification 9986115 plus 3.4 oz. (rear cover removed) or 2.4 oz. (drain plug removed) Additive P/N 1052358, Spec. 9035-P.

Chevrolet: 1999-04 Camaro & Corvette, use a synthetic GL-5, SAE 75W-90 meeting GM Specification 9986115 plus 4 oz. Additive P/N 1052358, Spec. 9035-P.

Chrysler, Dodge, Jeep: Use the following as noted: SAE 75W-90, P/N 05010320AA meeting MS-9763; SAE 80W-90, P/N 04874468 meeting MS-9020; SAE 90, P/N 04874466 meeting MS-8987; or Synthetic SAE 75W-140, P/N 04874469 meeting MS-8985. All axles require additive, P/N 04318060AB meeting MS-10111 as noted.

Ford, Lincoln, Mazda Trucks, Mercury: For rear axles use SAE 80W-90, P/N XY-80W90-QL, Spec. WSP-M2C197-A plus specified quantity of additive; or Synthetic SAE 75W-140, P/N XY-75W140-QL, Spec. WSL-M2C192-A plus specified quantity of additive; or Synthetic SAE 75W-90, P/N XY-75W90-QLS, Spec. DANA ES-PM-M2013 plus specified quantity of additive. Ford/Visteon axles with 7.5, 8.8 and 9.75 ring gears require 4 fl oz of friction modifier, P/N XL-3, EST-M2C118-A. Ford/Visteon axles with 10.25 and 10.50 ring gears and Dana M60, M70 and M80 axles require 8 fl oz of friction modifier, P/N XL-3, EST-M2C118-A.

GM Trucks: P/N 1052271 (Canada, 740321), Spec. 9985290

Isuzu: Use GL-5 Limited-Slip Differential Gear Lubricant plus 4 oz. Additive, Isuzu P/N 8-01052-358-0 or GM P/N 1052358

Mitsubishi: Genuine Gear Oil, P/N 8149630EX (90 GL-5)

Pontiac: 1999-04 Firebird, use a synthetic GL-5, SAE 75W-90 meeting GM Specification 9986115 plus 4 oz. Additive P/N 1052358, Spec. 9035-P. 2006-2010 Solstice use a synthetic GL-5, SAE 75W-90 meeting GM Specification 9986115 plus noted amount of Additive P/N 1052358, Spec. 9035-P.

Volvo: With Eaton limited-slip axles GL-5 plus additive 1161329-6; with Dana limited-slip axles GL-5 plus 0.5 Liters Additive P/N 1161129-0

GLS

Gear Lubricant, Special

Acura: Manual Transmission, use Acura Manual Transmission Fluid, P/N 08798-9031A. Rear Differential 2001-06 MDX use VTM-4 differential fluid Acura P/N 08200-9003A

Audi: Haldex clutch TT Quattro: P/N G 052 175 (-A1). Manual transmission 02Q use P/N G052 171 (-A2)

BMW: Standard Differential, Castrol SAF-XO or BMW P/N 83 22 9 407 768; with multiplate limited-slip, Castrol SAF-XJ or BMW P/N 83 22 1 470 080.

Models equipped with Dynamic Performance Control (DPC) use Castrol SAF-XO or BMW P/N 83 22 9 407 768 in the Angle drive with differential gear (center fill plug) and use SAF-Carbon in the superposing gear units (two outer filler plugs).

Manual transmission with yellow label: Esso/Exxon MTF-LT-1, BMW P/N 83 22 9 408 942. From model year 2004 some manual transmissions are filled with Castrol MTF-LT-2 which has the same properties as MTF-LT-1. The MTF-LT-1 fluid may be mixed and or substituted for the MTF-LT-2 manual transmission fluid. Manual Transmission on all 2006-2010 vehicles equipped with a N52 engine require the use of MTF-LT-3 long-term fluid, BMW P/N 83 22 9 408 942. N52

equipped vehicles are 5-series (E60) from 3/2005 production, Z4 Roadster (E85) from 9/2005 production, Z4 Coupe (E86) from 1/2006 production, 3-series (E90/91) from 3/2005 production, 3-Series (E92/93) from 7/2006 production, X3-series (E83) from 9/2006 production, 1-Series Coupe (E82) from 3/2008 production, and 1-Series Convertible (E88) from 3/2008 production. X-drive transfer case 2000-06 X5 (E53) use TF0870, BMW P/N 83 22 0 397 244; Transfer case 2004-2010 X3-series (E83), 2006-2010 3-series (E90, E91, E92), 2006-2010 X5-series (E70), 2008-2010 X6-series (E71) 2004-2010 5-series sedan (E60) and 2006-2010 5 series Wagon (E61) use TF0870, BMW P/N 83 22 0 397 244.

Manual Transmission with and without SMG as fitted on 2006-2010 M5 (E60) and 2006-2010 M6 (E63/E64) use MTF-LT-2, BMW P/N 83 22 0 309 031. Manual Transmission 2006-08 Z4 M Coupe (E86) and 2006-08 Z4 M Roadster (E85) use MTF-LT-2, BMW P/N 83 22 0 309 031.

Cadillac: Manual transmission & transfer case applications use GM P/N 88861800.

Chevrolet: 5-speed manual transaxle 1999 Cavalier, and 1999-01 Venture use GM P/N 12345349. All other manual transmission & transfer case applications use GM P/N 88861800. Rear Differential 2009-2010 Chevrolet Corvette use GM P/N 88862624.

Chevrolet Trucks: Manual Trans NV3500 use GM P/N 12345349; 5-speed manual transmission sectional case use GM P/N 12345349 or 1052931; 4-speed manual transmission aluminum case use GM P/N 1052931. 4-speed manual transmission w/ iron case use GM P/N 12345577. Transfer case 2004-2010 Colorado use GM P/N 12345349. With Dana 11 inch ring gear differential use GM P/N 12346140, Spec. 9985991.

Chrysler: 1999-2001 Neon, 1999-2000 Cirrus, 2001-02 PT Cruiser, 1999-2000 Sebring Coupe, 2001 Sebring Sedan with NVT350 (A578) manual transaxle use P/N 04874465 meeting MS-9417. 6-speed Manual transmission 2004-06 Crossfire use Mopar P/N 04761872AB or approved products as listed on MB 236.2.

Dodge: 1999-2000 Avenger, 1999-2001 Neon, 1995-2000 Stratus and 2001 Stratus with NVT350 (A578) manual transaxle use P/N 04874465 meeting MS-9417.

Dodge Trucks: NV1500, -3500, -3550, -5600, T4, T5, T176 manual trans. use Mopar P/N 04874464 meeting MS-9224.

Ford: 2005-2007 Five Hundred and Freestyle, Fluid coupler uses Volvo P/N XL-13



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KEY TO LUBRICANT SYMBOLS

GLS

Gear Lubricant, Special (continued)

GMC Trucks: NV1500 manual transmission use GM P/N 12377916, NV3500 manual Trans. use GM P/N 12345349. 5-speed manual transmission sectional case use GM P/N 12345349 or 1052931; 4-speed manual transmission aluminum case use GM P/N 1052931. 4-speed manual transmission w/ iron case use GM P/N 12345577. Transfer case 2004-2010 Canyon use GM P/N 12345349. Manual Transfer case 2007 Silverado use GM P/N 88861800; w/Dana 11" ring gear differential use GM P/N 12346140, Spec. 9985991. Other differentials use GM P/N 12378557.

Honda: Manual Transmission, use Honda Manual Transmission Fluid, P/N 08798-9031. Rear differential 2003-2010 Honda Pilot and 2006-2010 Ridgeline use Honda VTM-4 differential fluid, P/N 08200-9003.

Isuzu: NV1500 manual transmission in 1999-2000 Hombre use GM P/N 12377916; NV3500 manual transmission in 1999-2000 Hombre use GM P/N 12345349. Manual transmission in 1999 Oasis uses Honda Manual Transmission Fluid, P/N 08798-9016; Transfer Case 2006 I280 and I350, 2007-08 I290 and I370 use GM P/N 12345349.

Jaguar: Differential 1999-2003 XJ8, 1999-2004 XJR, 1998-2006 XK8 and 2000-06 XKR use Shell Spirax TS 90. Differential 2009 XF from VIN R41866 and 2010 XF with 4.2L and the 5.0L natural aspirated engine use Castrol SAF-XO. Differential 2010 XF with the 5.0 SC uses Castrol BOT 720.

Jeep: NSG370, NV1500, NV3550, T4, T5 and T176 manual transmissions, P/N 04874464 meeting MS-9224.

Land Rover: Range Rover Manual Trans R380 1999-2002: Use Texaco MTF 94; Transfer case: 1999-2004 Discovery, use Texaco Multi-gear 75W-90R or Castrol Synthetic 75W-90R. Transfer Case 2002-05 Freelander: Use Texaco S5 Full Synthetic SAE 75W-90. Transfer Case 2003-05 Range Rover: Use Castrol BOT 26 FMB 1. Transfer Case 2005-09 LR3, 2006-10 Range Rover, Range Rover Sport, and 2010 LR4 use Shell TF 0753. Differential 2002-05 Freelander use Texaco S5 Full Synthetic SAE 75W-90. Differential 2005 LR3 and 2004-05 Range Rover use Castrol SAF-XO. 2006-09 LR3 and 2006-2010 Range Rover, Range Rover Sport and 2010 LR4 uses Castrol SAF-XO in the Standard Differential and Castrol BOT 720 in the Electronic Differential. 2007-2010 LR2 Power Transfer Unit use BOT118 Plus, P/N LR003137, rear differential use Castrol EPX 80W-90 P/N LR003156, Active On-Demand Coupling Coupling use Statoil SL01-301 P/N LR003136.

Mercedes-Benz: 6-Speed Manual transmission use P/N 001 989 2603 or approved products listed on MB Sheet 235.10. All others manual transmissions use as noted P/N 000 989 2603 or approved products on MB Sheet 236.2. Rear Differentials 2006-07 ML350, ML500 & 2007 GL320, GL450, ML320, ML63 AMG use hypoid gear oil MB P/N 001 989 59 03 or approved products listed on MB Sheet 235.15. Rear Differential 2005-07 SL65 AMG & 2007 CL63 AMG, CLK63 AMG, R63 AMG, S63 AMG, S65 AMG, SLK55 AMG use MB P/N 001 989 52 03 or approved products listed on MB Sheet 235.61. Front & Rear Differential 2002 G500 Use MB P/N 001 989 27 03 or approved products listed on Mercedes Benz factory approved service products sheet. Front & Rear Differential 2003 G500 & G55 Use MB P/N 001 989 28 03 or approved products listed on MB Sheet 235.0. All Front and Rear differentials as fitted on all other model years and models use MB P/N 001 989 33 03 or MB P/N 001 989 17 03 or approved products listed on MB Sheet 235.7

Mercury: 2005-2007 Montego, Fluid coupler uses Volvo P/N XL-13

Mini: Manual Transmission, up to 7/2004 production R65 5 Speed & Getrag 285 6 Speed use Texaco MTF94 Lifetime Fluid, part number 83 22 0 140 516, from 7/2004 production Getrag 252 5 Speed and 285 6 Speed use MTF LT-3 Lifetime Fluid, part number 83 22 7 533 818.

Mitsubishi: 2008-2010 Lancer Turbo Twin Clutch-sportronic shift transmission use DIA QUEEN SSTF-1. 1995-99 Eclipse 2.0 Natural aspirated manual transmission use Texaco MTX Fluid FM; Differential and Transfer case use Mitsubishi Diamond Queen LSD Gear Oil.

Nissan: Front and rear differential 2009-2010 GT-R only use Castrol SAF-XJ 75W-140

Oldsmobile: 5-speed manual transaxles 1999 Alero use GM P/N 12345349.

Plymouth: Manual transaxles 1999-2001 Neon and 1999-2000 Breeze use P/N 04874465 meeting MS-9417.

Pontiac: Manual transmission 2007-09 G5 use GM P/N 88861800; all other 5-speed manual trans. use GM P/N 12345349

Porsche: Cayenne final drive without limited slip use Burmah SAF-AG4, Porsche P/N 000 043 205 30, Cayenne final drive with limited slip use Burmah SAF Carbon Mod, Porsche P/N 000 043 300 37.

Saturn: Manual Transmission 2007 VUE and ION use GM P/N 88861800.

Subaru: P/N 003304300. Differential 2004-05 Impreza WRX STi use Subaru P/N K0904AA080, 2006 Impreza WRX STi use Subaru P/N K0305Y0900

Toyota: V160 Gear Oil, P/N 08885-01306. Transfer Case 2010 Toyota 4-Runner and FJ Cruiser use Toyota Genuine Gear oil LF or equivalent.

Volkswagen: 2004 Touareg, with VIN 7L_4D000014 to 7L_4D060119 (USA) and 7L4D000039 to 7L_4D059806 (Canada) use Volkswagen P/N G 052 196 A2 in final drive with differential lock.

Volvo: Manual Trans. 1999-2005 C70, S70, V70 use P/N 11 61 423; Manual Trans. 2001-05 S40, S60 use P/N 11 61 745; Manual Transmission 2006-07 C70, S40, S60, S60R, V50, and V70 use P/N 11 61 745; Differential 2006 S60, S80, V70, XC70, and XC90 use Volvo P/N 1161620-8. Manual Transmission 2008-2009 S60 use MTF 97309. 1999-2000 Transfer case use P/N 1161513-5.

GO-H/S

Gear Oil, GO-H/S

Mack: Spec. GO-H/S

GO-J

Gear Oil, GO-J

Mack: Spec. GO-J

GO-J PLUS

Gear Oil, GO-J Plus

Mack: Spec. GO-J PLUS

HB

Hydraulic Brake Fluid, DOT 3

Acura: DOT 3, Acura P/N 08798-9008A.

Buick: Brake System: DOT 3, GM P/N 12377967, Spec. 9986121; Clutch system, DOT 3, GM P/N 12345347, Spec. 9985642

Chrysler, Dodge, Eagle, Jeep, Plymouth: DOT 3, P/N 04318080AB meeting MS-4574

Ford, Lincoln, Mazda Trucks, Mercury: High Performance DOT 3, P/N PM-1-C, Spec. WSS-M6C92-A

GM: Brake System: DOT 3, GM P/N 12377967, Spec. 9986121; Clutch system: use, DOT 3, GM P/N 12345347, Spec. 9985642

Honda: DOT 3, Honda P/N 08798-9008

HBH

Hydraulic Brake Fluid, DOT 4

Audi: DOT 4

BMW: DOT 4 only Note: Models with hydraulic brake booster and self leveling suspension use SLF

Chrysler, Dodge, Eagle, Jeep, Plymouth: DOT 4, P/N 04549625 meeting MS-9971

Ford: Use Super DOT 4, P/N YS4Z-19542-AA, Spec. ESD-M6C57-A where recommended.

GM: Super DOT-4 GM P/N 88958860

Jaguar: Up to 2002 Castrol-Girling Universal from 2002 onwards ITT Super DOT4

Land Rover: Shell Donax YB DOT-4 ESL Fluid. (if fluid is not available use a low viscosity DOT-4 meeting ISO 4925 class 6 and Land Rover LRES22BF03.

Mercedes-Benz: Use MB P/N 000 989 08 07 -01 (1 liter), MB P/N 000 989 08 07 -11 (5 liter) or MB approved products

Mini: DOT 4 fluid, Mini P/N 81 22 0 146 735

Nissan: 2009-2010 GTR use Genuine NISSAN Brake Fluid R35 Special DOT4

Porsche: DOT 4 Type 200

Saab: Use fluid meeting DOT 4 requirements



2010 LUBRICATION RECOMMENDATIONS GUIDE

KEY TO LUBRICANT SYMBOLS

HBH	Hydraulic Brake Fluid, DOT 4 (continued) Volkswagen: DOT 4 Volvo: Hydraulic Brake Fluid, DOT4+, P/N 9437433
HF	Type C-4 Fluid Case: TCH Fluid
HG	High Temperature Grease: Clay, complex, or polyurea thickened Caterpillar: No. 2 Polyurea Grease Deere: HG, use complex or polyurea EP no. 2 Spec. JDM J13E4. Use MIL-G-10924F below -22°F (-30°C) Moly HG, use complex with Moly and EP, Spec. JDM J25 Ford, Lincoln, Mazda Trucks, Mercury: P/N XG-11, Spec. ESA-M1C198-A GM: NLGI no. 3, P/N 12345777
HOA	Antiwear Hydraulic Oil Kubota: VG 32, may use inhibited formulation
HP	Hypoid Gear Oil (Obsolete) Ford Trucks: All axles previously requiring XY-90-GL, Spec No. ESW-M2C105-A are now serviced with XY-75W90-QLS. Requires 8 fl oz of friction modifier, P/N XL-3, EST-M2C118-A for limited slip applications.
HTF	Tractor Hydraulic Fluid AGCO, Deutz-Allis, White: Power Fluid 821-XL Case, Case IH: Hy-Tran Plus®, Spec. MS-1207; Hy-Tran Ultra, Spec. MS-1209, as noted. Deere: Hy-Gard®, Spec. JDM J20C or J20D Ford, New Holland: 134 Hydraulic Fluid. As noted use Spec. F200-A in cold weather Hesston Fiat (tractors): OlioFiat Tutela Multi-F Kubota: Super UDT Fluid Landini, Massey Ferguson: PERMATRAN®-III Fluid. As noted use Spec. M1135, M1143 or M1144
HY	Hydraulic Oil Ford, New Holland: Hydraulic Oil 41, P/N 1QM2C41
LB	Chassis Grease, NLGI Classification LB AM General: GM P/N U.S. 12377985, in Canada 88901242 or lubricant meeting requirements of NLGI no. 2, Category LB or GC-LB. Chrysler, Dodge, Jeep: P/N 04897841AA meeting MS-4178 GM: P/N 12377985 GM: Parking brake cables and Corvette Rear Toe-Link Outer Ends with Z06 or Z51 option use GM P/N U.S. 12377985, in Canada 88901242 or lubricant meeting requirements of NLGI no. 2, Category LB or GC-LB. Mack: Semi-fluid grease, Mobil® SHC® 007 or equivalent
LM	Lithium Multipurpose Grease EP LM: Lithium Grease w/EP AGCO: Lithium II, P/N 79014728. Bering: NLGI no. 2. Case IH: Spec 251H-EP Deere: Capable of operating above 302°F (150°C). Ford (tractors), New Holland: P/N 9613310, Spec. ESN-M1C137-B. Freightliner, Kenworth, Peterbilt, Sterling: EP grease with lithium 12-hydroxy stearate base. GM: P/N 12377985 International (trucks): Fleetrite® EP2 Moly Grease. Mack: Spec. MG-C Massey Ferguson: Spec M-1105. Mercedes-Benz: Use only manufacturer approved products. White GMC: EP+Moly grease preferred. Moly LM: Lithium Grease with Moly Moly Poly LM: Lithium Grease with Polyethylene and Moly Ford, Lincoln, Mazda Trucks, Mercury: P/N XG-1-C, Spec. ESA-M1C75-B Toyota Trucks: Front drive shaft thrust bearings, synthetic oil and NLGI no. 1 chassis grease; Propeller shafts, Moly LM.
LS	Steering Gear Lubricant GM: P/N 1052182; Canada 992710 except Corvette manual steering gear housing, P/N 1052084. Saab: P/N 30 08 703.
MA	MERCON® Automatic Transmission Fluid (Obsolete) Ford, Ford Light Duty Trucks, Lincoln, Mazda Trucks, Mercury: All automatic transmission / transaxle applications requiring MERCON are now serviced using MERCON®-V Automatic Transmission Fluid. Transfer cases are now serviced with XL-12.
MA5	MERCON®-V Automatic Transmission Fluid Ford, Lincoln, Mazda Trucks, Mercury: 1999-2004 trucks w/ S5-47 ZF, use Synthetic Blend MERCON®-V, XT-5-QSM. Use as noted for other manual transmissions and automatic transmission requiring MERCON® V P/N XT-5-QM.
MIL	Military Specification
MLV	MERCON® LV Automatic Transmission Fluid Ford: P/N XT-10-QLVC, do not use MERCON® V or MERCON® SP in applications calling for this fluid.



2010 LUBRICATION RECOMMENDATIONS GUIDE

KEY TO LUBRICANT SYMBOLS

MO Motor Oil, Any API Service Classification

MSP MERCON® SP Automatic Transmission Fluid

Ford Light Duty Trucks: MERCON® SP Automatic Transmission Fluid, P/N XT-6-QSP (Quarts). Do not use MERCON® V in applications calling for this fluid

MT-1 Gear Oil, API Service MT-1

OL Outboard Gear Oil

Use manufacturer's packaged oils or equivalent

PO Penetrating Oil

PS Power Steering Fluid

Acura: Power Steering use Acura P/N 08206-9002A

Audi: Power steering or hydraulic system, P/N G002000

Buick: 1999-03 models use P/N 1052884, Spec. 9985010. 2004-2010 models use P/N 89021184.

Cadillac: 1999-03 models use P/N 1052884, Spec. 9985010. 2004-2010 models use P/N 89021184.

Chevrolet: 1999-03 all, P/N 1052884, Spec. 9985010; 2004 -2010 models use P/N 89021184

Chevrolet Trucks: 1999-03 Models use P/N 1052884, Spec. 9985010. 2004-2010 Models use P/N 89021184.

Chrysler, Dodge, Jeep: 2004-05 Crossfire, 2009-2010 Hybrid Aspen and 2009-2010 Hybrid Durango use Pentosin CHF 11S P/N 05127381AA; 2003-06 Sprinter use Mercedes-Benz P/N 000 989 88 03 or approved products listed on MB Sheet 236.3. 2008 Commander use Mopar Hydraulic System Power Steering Fluid P/N 05142893AA meeting MS-10838. Other models, use P/N 04883077 meeting MS-5931 Note: Original factory fill MS-9933 which was used in some 1999-2001 models is superseded by AP4, Mopar ATF+4® (MS-9602). AP4, Mopar ATF+4® (MS-9602) should NOT be mixed or used as a topping off fluid on systems requiring MS-5931.

GMC: 1999-03 models use P/N 1052884, Spec. 9985010. 2004-2010 models use P/N 89021184.

Ford, Lincoln, Mercury: For power steering systems in model years prior to 1996-98 requiring Type F ATF use P/N XT-1-QF, Spec. ESW-M2C33-F. For power steering systems in model years 1996-98 and after requiring MERCON® V, use P/N XT-5-QMC meeting MERCON® V.

Honda: Use Honda Power Steering Fluid, P/N 08206-9002

Hyundai: 2000-2010 Accent, 2007-2009 Entourage, 2001-2006 Santa Fe, 2010 Santa Fe, 2000-05 Sonata, 2000-08 Tiburon, 2005-2009 Tucson, and 2007-2010 Veracruz use PSF-3. 2006-2010 Azera, 2007-2009 Santa Fe, and 2006-2010 Sonata use PSF-4. 2009-2010 Genesis w/ EPHS uses Pentosin CHF-202, w/ NPS use PSF-4.

Isuzu: Hombre: See GM; Oasis: See Honda

Kia: 2005-09 Amanti, 2005-2010 Optima and 2007-2010 Rondo use PSF-IV. All others 2005-2010 use PSF-III

Land Rover: 2001-2010 Range Rover, 2005-2010 Range Rover Sport, 2007-2009 LR3 and 2010 LR4 use Texaco Cold Climate PAS fluid 14315, 2008-2010 LR2 use Pentosin CHF202.

Mercedes-Benz: C-Class (baumuster 203), CL-Class (baumuster 215 and 216), CLK-Class (baumuster 209), CLS-Class (baumuster 219), E-Class (baumuster 211), S-Class (baumuster 220 & 221), SL-Class (baumuster 230), and SLK-Class (baumuster 171) use Pentosin CHF 11S, Mercedes-Benz P/N A 001 989 24 03 or approved products listed on MB Sheet 345.0, All other models use Mercedes-Benz P/N 000 989 88 03 or approved products listed on MB Sheet 236.3

Mini: use Pentosin CHF11S, MINI P/N 82 11 0 148 132

Mitsubishi: Mitsubishi PS Fluid or Diamond SP, SPIII

Nissan: Use Nissan PSF-II

Oldsmobile: 1999-03 models use P/N 1052884, Spec. 9985010. 2004 models use P/N 89021184.

Porsche: P/N 000.043.203.33, Pentosin CHF 11S

Saab: 1999-06 9-3 and 9-5 use Pentosin CHF 11S; 2007 9-3 and 9-5 use Pentosin CHF11S or CHF 202; 2008-09 9-3 and 9-5 use Pentosin CHF 202; 2004-09 9-7X use GM P/N 89021184

Saturn: Use Saturn P/N 21007583 or GM P/N 89021184.

Subaru: P/N K0209A0080

Suzuki: 2007-09 XL7 use GM P/N 89021184 or NAPA-PSF-9600

Toyota: Toyota PSF Type EH, P/N 008886-01

Volkswagen: P/N G002000 or G002012 as noted

Volvo: Pentosin CHF 11S, Volvo P/N 1161529 or Ford specification WSS M2C-204-A

SD Motor Oil, API Service SD (Obsolete)

SE Motor Oil, API Service SE (Obsolete)

SEO Special Engine Oil

Acura: 2007-2010 Acura RDX only use oil that meets Acura standard HTO-06.

Audi: Use only engine oil meeting Volkswagen Oil Standard 502 00 in the 1999-2004 A4 1.8L turbo & 2003-04 Cabriolet 1.8L turbo. Engine oil meeting Volkswagen Oil Standard 502 00 must always be used in the engines fitted in model year 2005-2010. Use always engine oil meeting Volkswagen Oil Standard 505 01 with viscosity 5W-40 in the 2003-04 RS6

BMW: All except M-series vehicles or Z8 equipped with the S54, S62 or S85 engines and except X5 and 335D equipped with the M57T2 D30 engine use High Performance Synthetic Oil, SAE 5W-30, BMW P/N 07 51 0 017 866 or equivalent meeting BMW Long-life rating LL-01. M-series vehicles and Z8 equipped with the S54, S62 or S85 engines use BMW P/N 07 51 0 009 420 or equivalent meeting Long-Life rating LL-01. X5 and 335D equipped with the M57T2 D30 engine use only low-ash synthetic Castrol SLX Professional OE SAE 5W-30 or equivalent meeting BMW Long-life rating LL-04.

Chrysler: 2004-08 Crossfire: Use only synthetic engine oils meeting MB 229.3 or MB 229.5.

Dodge Trucks: 2003-06 Sprinter: Use engine oils meeting MB 228.3, MB 228.5, MB 229.3, MB 229.5

2007-09 Sprinter w/Gasoline engine: use engine oil meeting MB 229.3, MB229.31, MB229.5 or 229.51

2007-09 Sprinter w/Diesel Engine: engine oil meeting MB 228.51 MB 229.31 or MB 229.51

Ford: 2005-07 Ford GT and 2007-11 Mustang Shelby GT500 use SAE 5W-50 Full Synthetic Motor Oil P/N XO-5W50-QGT, Spec. WSS-M2C931-B.

Jaguar: Use engine oil meeting specification WSS M2C925-A.

Jeep: 2007-2009 Grand Cherokee w/3.0L Diesel Engine, use SAE 5W-30 Synthetic Engine Oil, meeting MS-11106 or Mercedes Benz MB 229.31 or 229.51

Land Rover: 2010 Range Rover, Range Rover Sport & LR4 5.0L use engine oil meeting specification WSS M2C925-A.

Mercedes-Benz: 2007-2010: Gasoline engines use only synthetic engine oil meeting MB Sheet 229.5 or MB Sheet 229.51. Diesel engines use only synthetic engine oil meeting MB Sheet 229.51. 2005-06: Use only synthetic engine oil meeting MB Sheet 229.5 or MB Sheet 229.51; 1998-2004: Use only synthetic engine oil meeting MB Sheet 229.3, MB Sheet 229.5 or MB Sheet 229.51. Prior to 1997: Gasoline and Diesel engines use engine oil meeting MB Sheet 229.3 or MB Sheet 229.5.

Mini: Use MINI High Performance Synthetic Oil, SAE 5W-30



2010 LUBRICATION RECOMMENDATIONS GUIDE

KEY TO LUBRICANT SYMBOLS

SEO

Special Engine Oil (continued)

Porsche: In Cayenne models with V6 engine use engine oil meeting Volkswagen Oil Standard 503 00 for extended oil change service change intervals.

Volkswagen: 1998-2005 1.8L Turbo gasoline engine use only engine oil meeting Volkswagen Oil Standard VW 502 00

2004-2005 1.9 TDI-PD and 5.0L TDI-PD use only engine oil meeting Volkswagen Oil Standard VW 505 01

2004-05 All gasoline engines except 1.8L Turbo use engine oil meeting VW oil standard VW502 00, VW500 00 or VW 501 01

2006-07 Gasoline engines use engine oil meeting VW oil standard 502 00

2006-07 5.0 TDI-PD engines use only engine oil meeting VW oil standard 504 00/507 00

SH

Motor Oil, API Service SH (Obsolete)

SJ

Motor Oil, API Service SJ

SL

Motor Oil, API Service SL

SLF

Special Lubricant Fluid

Acura: Automatic transmission: Acura ATF-Z1, P/N 08200-9001A. Rear differential 2009-2010 TL AWD, 2005-2010 RL, 2007-2010 MDX and 2007-2010 RDX use Acura ATF-Z1, P/N 08200-9001A

AGCO, Massey Ferguson, White: LHM Mineral Brake Fluid (green), P/N 3405 389 M1 (HSMO)

Allison: Castrol TranSynd Fluid, or TES 295 equivalent, applies to series: 1000; 2000; 2000MH; 2400; AT500; B3/4/500; HD4000; HT 700; MD 3000; MT 600

Audi: Final drive w/ Multitronic CVT use P/N G 052 190 (-A2); Automatic transmission 09A use P/N G 052 990 (A2); Automatic transmission 02E, use P/N G 052 182 (A2);

Automatic transmission 09L use P/N G 060 162 A2; 2004-05 automatic transmission 09E use P/N G 055 005 (-A2); 2006-09 automatic transmission 09E in combination with 8-cylinder engine use P/N G 055 005 A2; 2006-09 automatic transmission 09E in combination with 12-cylinder engine use P/N G 055 162 A6; 2007-2009 automatic transmission 0AT transmission use P/N G 055 162 (-A2); 2009 0B6 automatic transmission use P/N G 060 162 (-A2)

BMW: Automatic transmission: 1999-2005 3-series w/ A5S 360R & A5S 390R (5L40-E/GM5): the transmission oil pan will be labeled with either Texaco ETL-7045 or Dexron III please fill or top off with the proper fluid; 1999-2000 5-series w/ A5S 360R (GM 5L40-E) use Texaco 7045-E or BMW P/N 83 22 0 026 922; 2000-05 5-Series and X5 series w/ A5S 390R (GM5) use Texaco ETL-8072 B or BMW P/N 83 22 0 024 359; 2004-06 X3 Series w/ GM5: the transmission oil pan will be labeled with either Texaco ETL-7045 or Dexron III please fill or top off with the proper fluid. 2002-2010 1-series, 3-series, 5-series, X5-series, 6-series, X6-series or 7-series with 6-speed Automatic transmission GA6HP19Z, GA6HP19ZTU, GA6HP26Z, GA6HP26ZTU, GA6HP32Z, or S6S53BZ use Shell ATF M-1375.4 or P/N 83 22 0 142 516.

2008-2010 1-series, 2007-2010 3-series, and 2007-2010 X3-series with Automatic transmission GA6L45R use BMW P/N 83 22 0 403 249.

Buick: Transfer case & rear differential, 2002-06 Rendezvous and 2005-06 Terraza use Versatrack fluid P/N 12378514; Transfer case 2004-07 Rainier, use P/N 12378508

Cadillac: 1999-2006 Escalade with NVG236, NVG 246-NP8 Transfer case, use P/N 12378508. 2010 SRX with F46 transfer case use GM P/N 92184900. 2010 SRX with AM-TE-PTU use GM P/N 19256084. 2010 SRX with AF40-6 transmission uses AW1 Transmission fluid, GM P/N 19256039 (US) or 19256040 (Canada).

Caterpillar: Caterpillar MTO (SAE 10W-30), P/N 105-3335

Chevrolet: Transfer case & rear differential, 2002-05 Venture AWD and 2005-06 Uplander use Versatrack fluid P/N 12378514; 2005-07 Cobalt manual transmission MU3 use GM P/N 21018899

Chevrolet Trucks: Automatic Transfer Case Fluid, beginning with models produced starting late June, 1999, use only P/N 12378508, Spec. 9986186, which is blue. Other models should also use this part number, although mixing of this blue fluid with the red Autotrac fluid, P/N 12378396, Spec. 9986152, for top off is permitted. NVG 900 Transfer case 2005-2009 Equinox use Versatrack fluid P/N 12378514; 2001-06 ZF 6-Speed manual transmission: Synthetic Transmission Fluid, P/N 12378515.

Chrysler: Automatic transmission 2004-06 Crossfire use Shell 3403 ATF; 2001-05 Sebring Coupe with Mitsubishi automatic transmission use Mitsubishi Diamond SP-III Automatic Transmission Fluid. Transfer case MS140 2005-08 300 uses Mopar Transfer Case Lubricant LX, P/N 05170055AA. Transfer case 2009-2010 300 uses Mopar BW 44-40 Transfer Case Lubricant, P/N 68049954AA.

Dodge: 2001-05 Stratus Coupe with Mitsubishi automatic transmission use Mitsubishi Diamond SP-III Automatic Transmission Fluid. Transfer case MS140 2005-08 Magnum and 2006-08 Charger use Mopar Transfer Case Lubricant LX, P/N 05170055AA. Transfer case 2009-2010 Charger use MOPAR BW 44-40 Transfer Case Lubricant, P/N 68049954AA

Dodge Light Trucks: 2003-09 Sprinter Automatic transmission use Mopar P/N 05127382AA or equivalent as listed on MB 236.10 and MB 236.12. Pickups with 6-speed automatic transmission AS68RC use Mopar AS68RC automatic transmission fluid. 2008-2010 NVG 246 Automatic Transfer Case use Mopar NVG 246 Automatic transmission fluid, P/N 05179014AA or equivalent.

2008-2010 NVG 246 Automatic Transfer Case use Mopar NVG 246 Automatic transmission fluid, P/N 05179014AA or equivalent.

Fendt: Synthetic Mineral Oil, Pentosin CHF 11S

Ford, Mercury: Manual Transaxles in: Probe, Contour, Mystique, Focus and Fiesta use XT-M5-QS, Spec. WSD-M2C200-C; Escape, Mariner, Fusion and Milan use XT-4-QGL, Spec. WSS-M2C203-A1. 2005-08 Ford GT use XT-75W90-QGT. 2006-2009 Fusion/Milan with FNR5 automatic transmission use FNR5 Automatic transmission Fluid, P/N XT-9-QMM5, spec Mazda MES MN 117C (ATF M-V). Supercharged engine use XL-4, spec ESE-M99C115-A in the supercharger; Transfer cases use XL-12. Manual transmission 2008-09 F250-550 and 2011 Mustang use P/N XT-M5-QS, Spec. WSD-M2C200-C.

GMC: Automatic Transfer Case Fluid, beginning with models produced starting late June, 1999, use P/N 12378508, Spec. 9986186, which is blue. 2001-06 ZF 6-Speed manual transmission: Synthetic Transmission Fluid, P/N 12378515.

Honda: Automatic transmission: Honda ATF-Z1, P/N 08200-9001

Hyundai: 1996-2002 Genuine Hyundai SP-II Automatic Transmission Fluid; 2003-2010 except 2009-10 Genesis, except 2010 Santa Fe and except 2010 Tuscon use Genuine Hyundai SP-III Automatic Transmission Fluid. 2009-2010 Hyundai Genesis w/4.2L use Shell M-1375.4 ATF. 2010 Santa Fe & 2010 Tuscon use Genuine Hyundai SP-IV automatic transmission fluid

Infiniti: Active Suspension: Nissan Fluid A. 5 Speed RWD Automatic Transmission use NISSAN Matic S transmission fluid, P/N 999MP-MTS00P. Use NISSAN Matic J transmission fluid, P/N 999MP-MTJ00P in the 5 speed RWD Automatic transmission if Nissan Matic S fluid is not available. 7 Speed RWD Automatic Transmission only uses NISSAN Matic S transmission fluid, P/N 999MP-MTS00P.

Isuzu: Transfer case 2003-07 Ascender use P/N 12378508, Spec. 9986186 Automatic Transfer Case Hombre, beginning with models produced starting late June, 1999 only uses P/N 12378508, Spec. 9986186, which is blue. Other models should also use this part number, although mixing of this blue fluid with the red Autotrac fluid, P/N 12378396, Spec. 9986152, for top off is permitted; Automatic transmission Oasis: use Honda automatic transmission fluid: Honda ATF-Z1, P/N 08200-9001; Automatic Transmission 2004 Axiom, Rodeo w/3.5L use Isuzu Genuine ATF Automatic Transmission Fluid.

Jaguar: Power steering: Hydraulic System Mineral Oil (HSMO). 1999-2003.5 XJ series Automatic Transmission with 4.0L supercharged engine, use Shell ATF 3403 M115; 2003.5 and onwards XJ series Automatic Transmission with 3.0L, 3.5L, 4.2L and 4.2L supercharged engine, use Shell M1375.4; 1998-2003 XK series Automatic Transmission with 4.0L supercharged engine, use Shell ATF 3403 M115; 2003 and onwards XK series Automatic Transmission with 4.2L and 4.2L supercharged engine, use Shell M1375.4; Automatic Transmission 2004-2006 XKR use Shell ATF 3403 M115; Automatic transmission 2002.5-06 S-Type, use Shell ATF M-1375.4; Automatic Transmission 2001.5-06 X-Type use automatic transmission fluid ATF IDEMITSU K17 (Jatco 3100 PL085) Manual Transmission 2002-05 X-Type use oil meeting specification WSS-M2C200-C. Automatic transmission 2009-2010 XF, use Shell ATF M-1375.4



2010 LUBRICATION RECOMMENDATIONS GUIDE

KEY TO LUBRICANT SYMBOLS

SLF

Special Lubricant Fluid (continued)

Jeep: Transfer Case NV146 Use Castrol BOT89 M1 fluid; 1999-2004 Transfer case NV147 and NV247 use P/N 05016796AA meeting MS-10216 or Mobilfluid® 424;

2005-2010 Transfer case NV245 and NV247 use P/N 05016796AB; 2004 Grand Cherokee W/ NAG1 Automatic transmission use Shell 3403 Automatic transmission fluid.

Kia: Automatic Transmission 2005-09 Kia Sorento and 2009-2010 Borrego with V6 3.8L use Appolloil ATF RED-1K or equivalent meeting the RED-1K specification. 2009-2010 Borrego w/ V8 4.2L use Shell ATF M1375.4 All other automatic transmissions use Diamond ATF SP-III, SK ATF SP-III or equivalent meeting the SP-III specification.

Transfer case 2009-2010 Borrego w/ full time 4WD use ATF Mobilfluid LT.

Land Rover: Jatco Automatic Transmission 2002-05 Freelander, use Texaco N402; 2003-05 Range Rover with GM Auto trans uses Texaco ETL-7045E; ZF6HP26 Automatic Transmission 2005-07 LR3 and 2006-07 Range Rover, Range Rover Sport use Shell ATF M-1375.4

Landini: Legend Series use Spec. MF R 12640, SAE J71R1 (red). As noted use LHM Mineral Brake Fluid (green), P/N 3405 389 M1 (HSMO)

Lexus: LX470 Active Height Control Suspension, Toyota Suspension Fluid, AHC

Mazda: 2003-2010 Mazda6, 2004-2010 Mazda3, 2006-2010 Mazda5 and 2010 CX-7 with 5-Speed Automatic transmission use ATF M-V (spec Mazda MES MN 117C)

Mercedes-Benz: 5-speed Automatic Transmission and Transfer Case use Mercedes-Benz P/N 001 989 21 03 10 (Shell ATF 3403-M 115). 7-speed Automatic transmission use Fuchs ATF 3353. In Level control use MB P/N 000 989 91 03 10

Mitsubishi: Mitsubishi Diamond SP-III Automatic Transmission Fluid. 2007-2010 Outlander w/ 6 speed AT Dia Queen ATF-J2

Nissan: 5 Speed FWD Automatic transmission on uses NISSAN Matic K transmission fluid, P/N 99MP-MTK00P; 5 Speed RWD Automatic Transmission uses NISSAN Matic S transmission fluid, P/N 999MP-MTS00P. Use NISSAN Matic J transmission fluid, P/N 999MP-MTJ00P if the Nissan Matic S fluid is not available. Transmission in 2009-2010 GT-R uses Genuine Nissan Transmission Oil R35 Special.

Oldsmobile: Transfer case & rear differential, 2002-04 Silhouette use Versatrak fluid P/N 12378514; 1999-2004 Bravada Automatic Transfer Case, beginning with models produced starting late June, 1999, use only P/N 12378508, Spec. 9986186, which is blue. Other models should also use this part number, although mixing of this blue fluid with the red Autotrac fluid, P/N 12378396, Spec. 9986152, for top off is permitted.

Pontiac: Transfer case & rear differential 2001-05 Aztek, 2003-06 Montana, 2005-06 Montana SV6 and Transfer Case 2006-07 Torrent use Versatrak fluid P/N 12378514; Manual Transmission 2007 G6 use GM P/N 21018899

Porsche: Use Shell ATF 3403-M115, Porsche P/N 000 043 204 41

Saab: Manual transmission 1999-early 2002 P/N 400 108 247; Beginning with VIN 22023982 (9-3 Trollhattan), 27007452 (9-3 Finland) & VIN 23027675 (9-5), all 2002-06 manual transmissions are factory filled with SAAB MTF 0063 synthetic, P/N 12799117. MTF 0063 synthetic is NOT to be mixed with other manual gearbox fluid including Saab Synthetic Manual Transmission fluid that has been used since 1996. In addition, manual transmissions for 1994 and later models that have been rebuilt in Sweden will have MTF 0063 synthetic added. These transmissions will be identified by a label marked "MTF 0063" attached to these transmissions. 2005-09 9-3 with 6-speed Automatic Transmission use Saab P/N 93 165 147. Transfer Case 2005-09 9-7X use GM P/N 12378508

Saturn: Trans: L-Series, Saturn P/N 21018899; S-Series, 1999 AF3 or Saturn P/N 21005966; 2000-02, AF3. Manual transmission 2004-07 ION use Saturn P/N 21018899; 2004-07 VUE 5-spd automatic transmission use only Honda ATF-Z1, Saturn P/N 22717466. 2002-07 VUE and 2005-08 Relay, Rear Drive Module & Power Transfer, use Versatrak fluid, P/N 12378514. NVG 900 Transfer case 2006-07 VUE use Versatrak fluid, P/N 12378514.

Subaru: Subaru ATF, P/N K0140Y0700 (IDEMITSU ATF HP)

Toyota: MR2 with sequential MTX system, Sequential MT Fluid, P/N 08886-02206

Volkswagen: 09A 5-speed Automatic Transmission use P/N G 052 990 (A2), 02E Automatic transmission use G 052 182;

09D 6-speed Automatic Transmission use P/N G 052 025; 09L Automatic Transmission use G055 005 A.; 09M Automatic Transmission use P/N G 052 025

Volvo: With Automatic On Demand Clutch (Haldex unit), use Volvo P/N 11 61 641

SLG

Special Lubricant-Grease

GM: P/N 12345879, spec 998530

SLS

Special Lubricant-Spray

Audi, Volkswagen: Silicone Spray

Case IH, International (tractors): P/N 407 492 R1

Ford, Lincoln, Mazda Trucks, Mercury: Multipurpose Grease Spray, P/N XG-4, Spec. ESB-M1C93-B

Kenworth, Peterbilt: Multipurpose Spray Lubricant

SM

Motor Oil, API Service SM

Chrysler: 2005-2010 300 SRT8 use a full synthetic SAE 0W-40 engine oil meeting MS-10725.

Dodge: 2008-2010 Caliber SRT-4, 2006-2008 SRT8 Magnum SRT8, 2006-2010 Charger SRT-8 use full synthetic SAE 0W-40 engine oil meeting MS-10725.

Nissan: 2009-2010 GTR, only use full synthetic Mobil 1 0W-40

SP

Speedometer Cable Lubricant

Chrysler, Dodge, Jeep: P/N 04318078

Ford, Lincoln, Mazda Trucks, Mercury: As noted us P/N XG-8, Spec.ESB-M1C111-B

Freightliner, Kenworth, Peterbilt, Sterling: Lubriplate aero extreme low temperature grease or equivalent

TC

Two-Cycle Oil for Air-Cooled Engines

Includes oils with ash-producing additives. Use manufacturer's packaged oils or equivalent

TC-W

Two-Cycle Oil, NMMA (BIA) TC-W

Use manufacturer's packaged oils or equivalent

TC-WII

Two-Cycle Oil, NMMA (BIA) TC-WII

Use manufacturer's packaged oils or equivalent

TC-W3

Two-Cycle Oil, NMMA (BIA) TC-W3

Use manufacturer's packaged oils or equivalent



2010 LUBRICATION RECOMMENDATIONS GUIDE

KEY TO LUBRICANT SYMBOLS

TIV	JWS 3309 Automatic Transmission Fluid Audi: P/N G 055 025 Chevrolet: AC Delco T-IV, GM P/N 88900925 Chevrolet Light Trucks: AC Delco T-IV, GM P/N 88900925 Ford: Premium automatic transmission fluid, P/N XT-8-QAW, Spec WSS-M2C924-A Lincoln: Premium automatic transmission fluid, P/N XT-8-QAW, Spec WSS-M2C924-A Lexus: ATF Type T-IV, Toyota P/N 08886-81015 Mazda: With 6-spd Automatic use JWS 3309 Automatic Transmission Fluid Mercury: Premium automatic transmission fluid, P/N XT-8-QAW, Spec WSS-M2C924-A Mini: 6-Spd Automatic Transmission GA6F21WA use MINI ATF JWS 3309, P/N 83 22 0 402 413. Pontiac: AC Delco T-IV, GM P/N 88900925 Porsche: Esso JWS 3309, Porsche P/N 000 043 205 28 Saab: Saab 3309 mineral based oil. Saturn: Saturn T-IV Fluid, Saturn P/N 22689186 Scion: ATF Type T-IV, Toyota P/N 08886-81015 Suzuki: Suzuki ATF 3317 or Mobil ATF 3309 Toyota: ATF Type T-IV, Toyota P/N 08886-81015 Volvo: P/N 1161540-8 Volkswagen: P/N G 055 025
TO-4	Transmission Oil, TO-4 Caterpillar: Transmission Drive Train Oil (TDTO)
TO-A	Manual Transmission Fluid Mack: SAE 50 synthetic oil pas
TTA	Type T Automatic Transmission Fluid Toyota: ATF Type T, P/N 08886-00405
TU	Super Tractor Oil Universal (STOU) Deere: Spec. no. JDM J27A Massey Ferguson: Spec. M1139
VDS	Motor Oil, VDS Volvo: Volvo Drain Specifications
VDS-2	Motor Oil, VDS-2 Volvo: Volvo Drain Specifications 2
VDS-3	Motor Oil, VDS-3 Volvo: Volvo Drain Specifications 3 (must complete extended field trial and meet API CI-4 plus)
VDS-4	Motor Oil, VDS-4 Volvo: Volvo Drain Specifications 4 (must complete extended field trial and meet API CJ-4 plus)
VTA	Variable Transmission Fluid Additive Saturn: DEX-CVT® Fluid, Saturn P/N 22697447
VTF	Variable Transmission Fluid Audi: CVT Transmission Fluid, P/N G 052 180 (-A2) Chrysler: Use Mopar CVT+4 Dodge: Use Mopar CVT+4 Ford: P/N XT-7-QCFT, Spec. WSS-M2C933-A (CFT30 Transmission only) Honda: CVT use Honda CVTF, P/N 08200-9006; Rear differential 1997-08 CR-V and 2003-08 Honda Element use Honda Dual Pump Fluid, P/N 08206-9002; Rear differential 2009-2010 CR-V and 2009-2010 Honda Element use Honda Dual Pump Fluid II, P/N 08200-9007 Jeep: Use Mopar CVT+4 Mercury: P/N XT-7-QCFT, Spec. WSS-M2C933-A (CFT30 Transmission only) Mini: With ECVT use Esso CVT EZL 799 Fluid, MINI P/N 83 22 0 136 376 Mitsubishi: Use CVT fluid CVTF-J1 Nissan: CVT use genuine Nissan CVT fluid NS-2 Saturn: DEX-CVT® Fluid, Saturn P/N 22688912
WG	Waterproof Grease
WS	JWS 3324 Automatic Transmission Fluid Hyundai: WS transmission fluid, spec NWS-9638 Lexus, Scion, Toyota: Toyota Genuine ATF WS (JWS3324 or NWS9638) Pontiac: GM P/N 88863400 (USA) and GM P/N 88863401 (Canada)

CARS & LIGHT TRUCKS

ACURA • AM GENERAL • AUDI

ACURA

SLX—SEE ISUZU TROOPER

1999-2000 ALL MODELS EX. NSX

CRANKCASEAPI★
Above 20°F (-7°C)10W-30
All temperatures5W-30²

CAPACITY, Refill ¹ :	Liters	Qt
2.2CL, 2.3CL	4.3	4.5
3.0CL	4.4	4.6
3.2TL 1999-2000	4.4	4.6
3.5RL	4.6	4.9

Integra:
1.8L ex. VTEC3.8 4.0
1.8L VTEC4.0 4.2

1 Capacity shown includes filter. After refill, check oil level.

2 Preferred.

TRANSAXLE, AutomaticSLF

CAPACITY, Initial Refill ¹ :	Liters	Qt
2.2CL	2.4	2.5
2.3CL	2.5	2.6
3.0CL	2.9	3.1
3.2TL	2.7	2.9
3.5RL	3.0	3.2

Integra2.7 2.9

1 With engine at operating temperature, shift transmission through all gears. Turn engine off and check fluid level within one minute.

TRANSAXLE, ManualGLS

CAPACITY, Refill:	Liters	Pt
2.2CL, 2.3CL	1.9	4.2
Integra 1999-2000	2.3	4.8

FINAL DRIVE

3.5RLGL-4, GL-5
Above 0°F (-18°C)90
Below 0°F (-18°C)80W-90

CAPACITY, Refill:	Liters	Pt
3.5RL	1.0	2.2

OTHER COMPONENTS

Brake Fluid ReservoirHB
Clutch Fluid ReservoirHB
Power Steering Fluid ReservoirPS

2001-10 ALL MODELS EX. ZDX

CRANKCASE

RDXSEO
All othersAPI★

3.2CL, 3.2TL, TL5W-20
3.5RL, RL5W-20
MDX5W-20

NSX:

Above -4°F (-20°C)10W-30²
Below 0°F (-18°C)5W-30

RDX5W-30¹
RSX ex. Type S5W-20
TSX: 2004-085W-30

2009-105W-20
All Others5W-30

CAPACITY, Refill ² :	Liters	Qt
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3.2CL:4.4 4.6

3.2TL, TL:4.4 4.6
2001-034.3 4.5

3.5RL, RL:4.6 4.9
2001-044.3 4.5

Integra:
1.8L ex. VTEC3.8 4.0
1.8L VTEC4.0 4.2

MDX:
2001-024.7 5.0
2003-104.3 4.5

NSX5.0 5.3
RDX: 2007-104.7 5.0

RSX:
All, ex. Type S4.2 4.4
Type S4.7 5.0

TSX:
2004-084.2 4.4
2009-104.0 4.2

1 Use oil that meets Acura standard HTO-06.
2 Preferred.

3 Capacity shown includes filter. After refill, check oil level.

TRANSAXLE, AutomaticSLF¹

CAPACITY, Initial Refill ² :	Liters	Qt
---	--------	----

3.2CL2.9 3.1

3.2TL, TL:2.9 3.1
2001-033.0 3.2

2004-063.1 3.3
2007-092.8 3.0

2010: w/SH-AWD3.3 3.5
w/o SH-AWD

3.5RL, RL:3.0 3.2
2001-042.7 2.9

2005-102.7 2.9
Integra2.7 2.9

MDX:
2001-023.0 3.2
2003-062.7 2.9

CAPACITY, Initial Refill²:

2007-09	2.8	3.0
2010	3.1	3.3
NSX	2.9	3.1

RDX:

2007-09	3.3	3.5
2010: w/SH-AWD	2.9	3.1
w/o SH-AWD	2.8	3.0

RSX:

2002-05	2.7	2.9
2006	2.9	3.1

TSX:

2004-05	2.9	3.1
2006-09	2.8	3.0
2010: 2.4L	2.5	2.6
3.5L	3.3	3.5

1 Use Honda Automatic Transmission Fluid (ATF)-Z1. Using a non-Honda ATF can affect shift quality.

2 With engine at operating temperature, shift transmission through all gears. Turn engine off and check fluid level within one minute.

TRANSAXLE, ManualGLS

CAPACITY, Refill:	Liters	Pt
3.2TL	2.2	4.6
Integra	2.2	4.6
NSX	2.7	5.7
RSX	1.5	3.2
TSX	2.0	4.2

TRANSFER CASEGL-4, GL-5

3.5RL, MDX, RDX, RL90, 80W-90

CAPACITY, Refill:

3.5RL, MDX, RDX, RL	0.4	0.8
FINAL DRIVE	GL-4, GL-5	

FINAL DRIVEGL-4, GL-5

3.5RL:
Above 0°F (-18°C)90
Below 0°F (-18°C)80W-90

CAPACITY, Refill:	Liters	Pt
3.5RL	1.0	2.1

REAR DIFFERENTIAL

2007-10 RDX, 2005-10 RLSLF

All othersGLS

CAPACITY, Refill:	Liters	Pt
3.5RL, RL:		

Clutch chamber2.6 5.5
Hypoid chamber0.7 1.5

MDX:

2001-062.6 5.5
2007-102.5 5.3

RDX2.5 5.3

OTHER COMPONENTS

Brake Fluid ReservoirHB
Clutch Fluid ReservoirHB
Power Steering Fluid ReservoirPS

AM GENERAL

2003-09 HUMMER H2, H3, H3T

CRANKCASEAPI★

2003-04 H2: Above 0°F (-18°)10W-30³
All temperatures5W-30^{1,3}

2005-09 H2 All temperatures5W-30³

2006-09 H3, H3T All temperatures5W-30^{1,3}

CAPACITY, Refill ² :	Liters	Qt
All	5.7	6.0

1 Preferred.

2 Capacity shown includes filter. After refill, check oil level.

3 Where temperature falls below -20°F (-29°C) it is recommended that you use either an SAE 5W-30 synthetic oil or an SAE 0W-30 oil meeting GM standard GM6094M.

TRANSMISSION, Automatic

All	AF6
CAPACITY, Refill¹:	Liters Qt

1 With the engine at operating temperature, shift transmission through all gears. Let engine slow idle in PARK for 3 minutes or more. Check fluid level and add fluid as needed. Do not overfill.

TRANSMISSION, Manual

through all gears. Let engine slow idle in PARK for 3 minutes or more. Check fluid level and add fluid as needed. Do not overfill.

TRANSMISSION Manual

2003-08 H3, H3T:
2WD2.2 4.6
4WD2.3 4.8

20092.4 5.1

TRANSFER CASE

2WD	.....	2.2	4.6
4WD	.....	2.3	4.8
2009	.....	2.4	5.1

DIFFERENTIALGL-5

TRANSFER CASE		
H2, H3, H3T		AF6
CAPACITY, Refill:	Liters	Pt

Rear:

H22.6 5.5
2003-08 H31.6-1.8¹ 3.4-3.8¹

2009 H3, H3T2.0 4.2

1 Fill no higher than 0.4" below plug hole.

OTHER COMPONENTS

Brake FluidHB
Clutch FluidHB
Power Steering FluidPS

AUDI

1999-2009

CRANKCASE

1999-2004 A4 1.8L TurboSEO

2003-04 RS6 4.2LSEO

2005-09SEO

Others 1999-2004API★

1999-2004 1.8L Turbo

All temperatures0W-40, 5W-30, 5W-40²

2003-2004 RS6 4.2L: All temperatures5W-40

1999-2004 Others:

Energy Conserving Oil:

All temps5W-30, 5W-40, 10W-30, 10W-40

Ex. Energy Conserving Oil:

All temperatures5W-50, 10W-50, 10W-60

Below 59°F (15°C)5W-30, 5W-40,

10W-30, 10W-40

Above 5°F (-15°C)15W-40, 15W-50,

20W-40, 20W-50

2005-09:

All temperatures5W-40, 5W-30, 0W-40

CAPACITY, Refill¹:

A3, A3 Quattro:			
2.0L	.....	4.6	4.9
3.2L		5.5	5.8

2.0L4.6 4.9

3.2L5.5 5.8

A4, S4, RS4:

1.8L Turbo:

1999-20013.5 3.7

2002-033.9 4.1

2004-054.1 4.3

2.0L 2005-094.5 4.8

2.7L6.5 6.9

2.8L:

19996.0 6.3

2000-035.7 6.0

3.0L:

2005-076.4 6.8

All others5.4 5.7

3.2L:

2005-068.1 8.6

2007-086.5 6.7

4.2L RS4:

20078.0 8.5

20089.5 10.0

A5 Quattro6.5 6.9

A6, Allroad, RS6, S6:

2.7L:

2000-036.5 6.9

20046.9 7.3

20056.5 6.9

2.8L:

19996.0 6.3

2000-015.7 6.0

3.0L6.0 6.3

3.2L:

20058.1 8.6

2006-096.5 6.9

4.2L:

A6: 2005-20078.8 9.3

20089.1 9.6

20098.5 9.0

Allroad 20058.0 8.5

All others7.6 8.0

5.2L10.0 10.5

A8, S8:

3.7L7.5 7.9

4.2L:

19997.5 8.0

2000-017.2 7.6

2002-067.5 7.9

20078.4 8.8

2008-09: A89.1 9.6

S87.5 7.9

5.2L10.0 10.5

6.0L 2005-0912.5 13.2

Q7:

3.6L6.9 7.3

4.2L9.2 9.7

S4:

2004-079.0 9.5

2008-098.8 9.3

S58.8 9.3

TT:

1.8L Turbo, 2.0L4.5 4.8

3.2L5.5 5.8

1 Capacity shown includes filter; add 0.5 liters (0.5 qt) less than specified amount, run engine to operating temperature. Recheck level and correct as necessary.

2 Use only engine oil meeting Audi/Volkswagen Oil Standard 502.00 in the 1999-2004 A4 1.8L Turbo.

CARS & LIGHT TRUCKS

AUDI Continued • BMW

TRANSMISSION, Automatic			CAPACITY, Initial Refill ^{1, 2:}			CAPACITY, Refill:		
Multitronic 01J CVT		VTF	2008:	Liters	Qt	A8, S8:	Liters	Pt
A3, TT: 2003-08 09G		TIV	A3, Quattro: 02E Trans	7.2	7.6	w/01L trans.	1.3	2.7
2003-09 02E		SLF	A4, Quattro:			w/01V trans.	0.8	1.7
Q7:			01J Trans	5.0	5.3	w/09E trans.	1.2	2.5
0AT Trans		SLF	09L Trans	8.0 ³	8.3 ³	2007-09 A8	1.1	2.3
09D Trans		TIV	A5 Quattro: 0B6 Trans	9.0	9.5	2007-09 S8	1.2	2.5
Others		AE	A6, Quattro:			Q7, Front	1.0	2.1
0B6, 09L, 09E		SLF	09L Trans	4.0 ³	4.2 ³	TT	1.0	2.1
			01J Trans	5.0	5.3	¹ Contact local dealership for fluid specifications.		
CAPACITY, Initial Refill ^{1, 2:}			CAPACITY, Refill:			CENTER DIF, Auto. Trans		
1999:	Liters	Qt	A8 Quattro:			TT w/Haldex clutch		GLS
A4, Quattro: 01V Trans	2.6	2.7	09E Trans (Total fill)	10.4	11.0	All Others		GL-4
A6, Quattro: 01V Trans	2.6	2.7	09L Trans	8.0 ³	8.3 ³	All temperatures		Synthetic 75W-90
A8, Quattro:			Q7: 0AT, 09D Trans	9.0	9.5	CAPACITY, Refill:		
01V Trans	2.6	2.7	S5: 0B6 Trans	8.0	8.3	A4, S4:	Liters	Pt
01L Trans	4.0	4.2	S6, S8: 09E Trans	10.0	10.5	1999-2007	0.8	1.7
2000:			TT: 02E Trans	5.5	5.8	2009 A5 Quattro, S5	0.9	1.9
A4, Quattro: 01V Trans	4.0 ³	4.2 ³	2009:			A6, Allroad, S6:		
A6, Quattro: 01V Trans	4.0 ³	4.2 ³	01J Trans:			w/01L trans.	0.8	1.7
A8 Quattro: 01L Trans	4.0 ³	4.2 ³	A4	4.8	5.1	w/01V trans.	0.8	1.7
S4: 01V Trans	4.0 ³	4.2 ³	A6	5.0	5.3	w/09L trans.	0.9	1.9
2001:			02E Trans:			A8, S8:		
A4, Quattro: 01V Trans	4.0 ³	4.2 ³	A3	5.2	5.5	w/01L trans.	0.9	1.9
A6, Quattro: 01V Trans	4.0 ³	4.2 ³	TT, Quattro	5.5	5.8	w/01V trans.	0.8	1.7
A8 Quattro: 01L Trans	4.0 ³	4.2 ³	09D Trans Q7	9.0	9.5	w/09E trans.	1.1	2.3
Allroad: 01V Trans	3.5	3.7	09E Trans:			w/09L trans.	0.9	1.9
S4: 01V Trans	4.0 ³	4.2 ³	A8 Quattro	10.4	11.0	2008-09 Q7	1.3	2.7
S8: 01L Trans	3.5	3.7	S6	10.0	10.6	2008-09 RS4	0.9	1.9
2002:			09L Trans: ³			2007-08 S6 w/OIR	1.5	3.2
A4, Quattro: 01V Trans	3.0	3.2	A4 Quattro, A6 Quattro	8.0	8.5	2007-09 S6 w/OAV	0.9	1.9
A6, Quattro:			A8 Quattro	9.8	10.3	2008-09 TT w/OAV	0.9	1.9
01L Trans	4.0 ³	4.2 ³	S4	10.4	11.0	TT w/Haldex clutch	0.2	0.4
01J Trans	4.5	4.8	0AT Trans Q7	8.6	9.1	2007-09 w/OAR	0.9	1.9
A8 Quattro: 01L Trans	4.0 ³	4.2 ³	0AW Trans A4	5.0	5.3			
Allroad: 01V Trans	4.0 ³	4.2 ³	0B6 Trans A4 Quattro,			REAR DIFFERENTIAL		
S4: 01V Trans	3.0	3.2	A5 Quattro, S5	10.4	11.0	2008-09 TT		¹
S6 Quattro: 01L Trans	4.0 ³	4.2 ³				ex. 2002-07 A4, S4		GL-4
S8: 01L Trans	3.5	3.7				All temperatures		Synthetic 75W-90
2003:						2002-07 A4, S4		GL-5
A4, Quattro:						All temperatures		Synthetic 75W-90
01V Trans	3.0	3.2				CAPACITY, Refill:		
01J Trans	4.5	4.8				A4:	Liters	Pt
A6, Quattro:						1999-2001	1.8	3.8
01L Trans	4.0 ³	4.2 ³				2002-04 01R diff	1.5	3.2
01J Trans	4.5	4.8				A6, Allroad, S6:		
A8 Quattro: 01L Trans	4.0 ³	4.2 ³				A/T	1.9	4.0
Allroad: 01V Trans	4.0 ³	4.2 ³				M/T	1.5	3.2
RS6: 01L Trans	4.0 ³	4.2 ³				A8, S8	1.5	3.2
S6 Quattro: 01L Trans	4.0 ³	4.2 ³				Cabriolet	1.0	2.1
S8: 01L Trans	3.5	3.7				S4:		
TT: 09G Trans (Total fill)	7.0	7.4				1999-2001	1.8	3.8
2004:						2002-04:		
A4, Quattro:						01R diff	1.5	3.2
01V Trans	3.0	3.2				01V diff	1.8	3.8
01J Trans	4.5	4.8				w/MT 01A-01R diff	1.9	4.0
A6, Quattro:						w/MT 01H	1.5	3.2
01L Trans	4.0 ³	4.2 ³				TT:		
01J Trans	4.5	4.8				2001-02	1.0	2.1
A8 Quattro:						2003-04:		
01L Trans	4.0 ³	4.2 ³				01R diff	1.5	3.2
09E Trans (Total fill)	10.4	11.9				01V diff	1.8	3.8
Allroad: 01V Trans	4.0 ³	4.2 ³				2005-07:		
RS6: 01L Trans	4.3	4.2 ³				A4, S4 w/AT 01R	1.5	3.2
S4: 09L Trans	8.0 ³	8.3 ³				w/MT 01R	1.9	4.0
TT: 09G Trans (Total fill)	7.0	7.4				w/MT 012/01W	2.3	4.9
2005:						A6 w/AT	1.5	3.2
A4, Quattro:						w/MT	1.9	4.0
01V Trans	3.0	3.2				A8 w/02R	1.5	3.2
01J Trans	5.0	5.3				Allroad w/AT	1.9	4.0
09L Trans	8.0 ³	8.3 ³				w/MT	1.5	3.2
A6 Quattro: 09L Trans	4.0 ³	4.2 ³				TT w/02D diff	1.0	2.1
A8 Quattro: 09E Trans (Total fill)	10.4	11.9				2007-09 w/OAR	0.9	1.9
09D Trans	2.6	2.8				2008 RS4	0.9	1.9
S4: 09L Trans	8.0 ³	8.3 ³				2008-09 A5 Quattro, S5	0.9	1.9
TT: 09G Trans (Total fill)	7.0	7.4				2007-09 S6 w/01R	1.5	3.2
2006:						2007-09 S6 w/OAR	0.9	1.9
A3, Quattro: 02E Trans	7.2	7.6				2008-09 Q7	1.3	2.7
A4, Quattro:						2008-09 TT w/OAV	0.9	1.9
01V Trans	3.0	3.2				¹ Contact local dealership for fluid specifications.		
01J Trans	5.0	5.3				OTHER COMPONENTS		
09L Trans	8.0 ³	8.3 ³				Power Steering		PS
A6, Quattro:						Brake & Clutch Master Cylinder		HB
09L Trans	4.0 ³	4.2 ³				Driveshaft, Quattro		LM
01J Trans	5.0	5.3				BMW		
A8 Quattro: 09E Trans (Total fill)	10.4	11.9				1999-2000		
S4: 09L Trans	8.0 ³	8.3 ³				CRANKCASE		
TT: 09G Trans (Total fill)	7.0	7.4				Standard Performance 2, 4 valve engines:		
2007:						1999-2000		.SJ, SL, SM ¹
A3, Quattro: 02E Trans	7.2	7.6				High Performance S54,		
A4, Quattro:						S62, S85 engines		SEO ²
01J Trans	5.0	5.3				Standard Performance 2, 4 Valve engines:		¹
09L Trans	8.0 ³	8.3 ³				High Performance Mineral Oil:		
A6, Quattro:						Above 5°F (-15°C)		.15W-40
09L Trans	4.0 ³	4.2 ³				-5° to 68°F (-20° to 20°C)		.10W-40
01J Trans	5.0	5.3				5° to 50°F (-20° to 0°C)		.10W-30
A8 Quattro:						Below 50°F (10°C)		.5W-30
09E Trans (Total fill)	10.4	11.0				Below 32°F (0°C)		.5W-20
09L Trans	8.0 ³	8.3 ³						
Q7: 0AT, 09D Trans	9.0	9.5						
S4: 09L Trans	8.0 ³	8.3 ³						
S6, S8: 09E Trans	10.0	10.5						
TT: 09G Trans (Total fill)	7.0	7.4						

CARS & LIGHT TRUCKS

BMW Continued

High Performance Synthetic Oil: All Temperatures5W-40 High Performance S54, S62, S85 engines ² Special Engine Oil (SEO) All Temperatures: ex. Castrol RS (Motorsport)5W-30 Castrol RS (Motorsport)10W-60			High Performance Synthetic Oil: All Temperatures5W-40 High Performance S54 (ex. Z4 M Coupe, Roadster), S62, S85 engines: ² All Temperatures: ex. Castrol RS (Motorsport)5W-30 Castrol RS (Motorsport)10W-60 Z4 M Coupe and Roadster ³ All Temperatures: Castrol RS (Motorsport)10W-60			CAPACITY, Initial Refill^{1,2}: 328i & Xi: ZF6HP19Z 4.0 4.2 GAGL45R 4.0 4.2 330Ci: ZF5 HP19 4.0 4.2 330i: 2001-05 ZF5 HP19 4.0 4.2 2006-09 ZF6 HP19 4.0 4.2 330xi: 2001-05 ZF5 HP19 4.0 4.2 2006 ZF6 HP19 4.0 4.2 335i & Xi: ZF6HP19Z 4.0 4.2 GAGL45R 4.0 4.2 525i: 2001-03 ZF5 HP19 4.0 4.2 2004 ZF6 HP19 4.0 4.2 2005-06 ZF6 HP26 4.0 4.2 2007 ZF6 HP19 4.0 4.2 525xi: 2006 ZF6 HP26 4.0 4.2 2007 ZF6 HP19 4.0 4.2 528i, 528xi: ZF6HP19Z 4.0 4.2 GA64L45R 4.0 4.2 530i: 2001-03 ZF5 HP19 4.0 4.2 2004-06 ZF6 HP26 4.0 4.2 2007 ZF6 HP19 4.0 4.2 530xi: ZF6 HP19 4.0 4.2 535i & Xi: ZF6HP19Z 4.0 4.2 GAGL45R 4.0 4.2 540i: ZF5 HP24 4.0 4.2 545i: ZF6 HP26 4.0 4.2 550i: ZF6 HP26 4.0 4.2 645Ci: ZF6 HP26 4.0 4.2 650Ci: ZF6 HP26 4.0 4.2 650i: ZF6 HP26 4.0 4.2 740i & iL: ZF5 HP24 4.0 4.2 745i & iL: ZF6 HP26 4.0 4.2 750i: ZF6 HP26 4.0 4.2 ZF6 HP32 5.0 5.3 750iL: ZF5 HP24 4.0 4.2 ZF5 HP30 5.5 5.8 750iL: ZF6 HP26 4.0 4.2 ZF6 HP32 5.0 5.3 760i & Li: ZF6 HP26 4.0 4.2 ZF6 HP32 5.0 5.3 X3: 5L40E 4.0 4.2 6L45E 6.2 6.5 X5: 2001-03: w/3.0L: 5L40E 4.0 4.2 w/4.4 & 4.6L: ZF5 HP24 4.0 4.2 2004-06: w/3.0L: 5L40E 4.0 4.2 w/4.4 & 4.8L: ZF6 HP26 4.0 4.2 Z3: 5L40E 4.0 4.2 Z4: ZF5 HP19Z 4.0 4.2 2010 ^{1,2,3} : 128i GA6-L45R 9.5 10.0 135i GA6HP19Z 9.0-10.0 9.5-10.6 328 A6HP19Z NS NS 328xi A6HP19Z NS NS 335d A6HP26Z 9.0-10.0 9.5-10.6 335i A6HP19Z NS NS 335xi A6HP19Z NS NS 528i GA6HP19Z 9.0-10.0 9.5-10.6 528xi GA6HP19Z 9.0-10.0 9.5-10.6 535i GA6HP19Z 9.0-10.0 9.5-10.6 535xi GA6HP19Z 9.0-10.0 9.5-10.6 550i: GA6HP26Z NS NS GA8HP70Z NS NS 650i A6HP26Z 9.0-10.0 9.5-10.6 750i A6HP26Z NS NS 750Li A6HP26Z NS NS 760Li GA8HP90Z NS NS X3 6L45 NS NS X5: GA6HP19Z NS NS GA6HP26Z NS NS X6: GA6HP19Z NS NS GA6HP26Z NS NS Z4 A6HP19Z NS NS			TRANSMISSION, Manual 1999-2000 GLS CAPACITY, Refill: 318, 320, 325 1.1 2.4 323, 328 1.2 2.6 525i, 540i 1.2 2.5 840Ci, 850Ci, 850CSI 2.3 4.8 M3 1.2 2.6 M Roadster and Coupe 1.2 2.6 M5 1.7 3.6 Z3: w/1.9L, 2.5L 1.0 2.1 w/2.8L 1.2 2.6 TRANSFER CASE NV125 AF3 All others GLS CAPACITY, Refill: ATC500, NV125 0.5 1.1 DIFFERENTIAL GLS CAPACITY, Refill: 318i 1.1 2.4 323, 328 1.4 3.0 325, 525i, 530i 1.7 3.6 528i 1.2 2.5 540i 1.2 2.5 740, 750 1.2 2.5 840, 850 1.9 4.0 M Roadster & Coupe 1.4 3.0 M3: 1999-00 1.4 3.0 M5 1.1 2.4 X5: Front 0.6 1.2 Rear 1.2 2.5 Z3 1.0 2.0 2001-10 CRANKCASE Standard Performance 2, 4 Valve engines: All SJ, SL, SM ¹ High Performance S54, S62, S85 engines: SEO ^{2,3} Standard Performance 2, 4 Valve engines: ¹ High Performance Mineral Oil: Above 5°F (-15°C) 15W-40 -5° to 68°F (-20° to 20°C) 10W-40 5° to 50°F (-20° to 0°C) 10W-30 Below 50°F (10°C) 5W-30 Below 32°F (0°C) 5W-20			TRANSMISSION, Automatic GA6HP19Z SLF GA6L45R SLF GM 5L40E SLF GM 5L50E SLF GM 6L80E AF6 GM 6L45E AF6 ZF 5HP-19 AE ZF 5HP-24 AE ZF 5HP-30 AE ZF 6HP-19 SLF ZF 6HP-26 SLF ZF 6HP-32 SLF CAPACITY, Initial Refill^{1,2}: 2001-09: 128 4.0 4.2 135 4.0 4.2 325Ci: ZF5 HP19Z 4.0 4.2 325i: 2001-05 ZF5 HP19 4.0 4.2 2006-09 ZF6 HP19Z 4.0 4.2 325xi: 2001-05 5L40E 4.0 4.2 2006-09 ZF6 HP19Z 4.0 4.2			CAPACITY, Initial Refill^{1,2}: 2001-09: 128 1.3 2.7 135 1.5 3.2 325i, 325i Sportwagon, 325ci, 325xi: w/5-Spd S5D 250G 1.2 2.5 w/6-Spd GS6S37BZ, GS6X37BZ 1.6 3.4 328i: w/6-Spd GS6S37BZ 1.6 3.4 330i, 330i Sportwagon 330ci 330xi, 335i, 335xi: w/5-Spd S5D 310Z, S5D 320Z 1.2 2.5 w/6-Spd GS6S37BZ, GS6X37BZ 1.6 3.4 525i, 525i Sportwagon, 525xi, 528i: w/5-Spd S5D 310Z, S5D 320Z 1.2 2.5 w/6-Spd: GS6S17BZ 1.3 2.7 GS6S37BZ 1.6 3.4 GS6X37BZ 1.5 3.2 530i, 530xi, 535i, 535xi: w/5-Spd S5D 310Z, S5D 320Z 1.2 2.5 w/6-Spd: GS6S37BZ 1.6 3.4 GS6X37BZ 1.5 3.2		
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CARS & LIGHT TRUCKS

BMW Continued • BUICK • CADILLAC

CAPACITY, Refill:	Liters	Pt
540i: w/6-Spd S6S 420G	1.7	3.6
545i: w/6-Spd GS6S53BZ	1.6	3.4
550i: w/6-Spd GS6S53BZ	1.5	3.2
645ci: w/6-Spd GS6S53BZ	1.6	3.4
650i: w/6-Spd GS6S53BZ	1.5	3.2
M3, M5: w/6-Spd S6S 420G	1.7	3.6
M5, M6: w/7-Spd GS7S47BG	2.5 ¹	5.3 ¹
X3: w/6-Spd GS6X37BZ	1.5	3.2
X5: w/5-Spd S5D 280Z	1.0	2.1
w/6-Spd GS6S37BZ	1.5	3.2
Z3: w/5-Spd S5D 250G		
w/2.5L	1.0	2.1
w/3.0L	1.2	2.5
M Roadster, Coupe	1.2	2.5
Z4: ex. 6-Spd GS6S37BZ	1.0	2.1
w/6-Spd GS6S37BZ	1.5	3.2
Z8: W 6-Spd GS6S420G	1.9	4.0
2010:		
128i GS6-17BG	1.3	2.7
135i GS6-53DZ	1.5	3.2
328i S6-17BG	NS	NS
328xi S6X37BZ	NS	NS
335i S6-53BZ	NS	NS
335xi S6X53DZ	NS	NS
528i GS6-17BG	1.3	2.7
528xi GS6X37BZ	NS	NS
535i GS6-53DZ	1.5	3.2
535xi GS6X53DZ	NS	NS
550i S6-53BZ	NS	NS
650i S6-53BZ	NS	NS
M5: GS7S47BG	NS	NS
S6-53BZ	NS	NS
M6 GS7S47BG	NS	NS
X3 GS6X37BZ	NS	NS
Z4: S6-17BG	NS	NS
S6-53BZ	NS	NS
1 Contact BMW for fluid type.		
TRANSFER CASE		
NV 125		AF3
All others		GLS
CAPACITY, Refill:	Liters	Pt
2001-09:		
325, 328, 330 & 335xi, xIT w/AWD:		
NV 121	0.16	0.3
328, 330, 525, 528, 530 & 535 xi		
& xIT w/X-Drive: ATC 300	0.5	1.1
X3 w/X-Drive: ATC 400	0.7	1.5
X5:		
w/X-Drive: ATC 500	0.8	1.7
ex. X-Drive:		
Up to 02/2005 NV 125	0.5	1.1
From 02/2005 LWX 500	0.5	1.1
2010:		
328xi	0.5	1.1
335d	0.5	1.1
335xi	0.5	1.1
528xi	0.5	1.1
535xi	0.5	1.1
X3	0.7	1.5
X5: Gas	0.8	1.7
Diesel	0.8	1.7
X5 4.8L	0.8	1.7
X6: 3.0L	0.8	1.7
4.4L	0.8	1.7
DIFFERENTIAL		
CAPACITY, Refill:	Liters	Pt
2001-09:		
1 Series:		
188L, LW	1.0	2.1
215L, LW	1.2	2.6
3 Series ex. M3		
2001-05:		
325i, Ci, 330i, Ci	1.0	2.1
325xi, 330xi:		
Front Differential	0.6	1.3
Rear Differential	1.0	2.1
2006-09:		
328i, Ci, 330i, Ci	1.0	2.1
328xi, 330xi:		
Front Differential	0.6	1.3
Rear Differential	1.0	2.1
335i, 335i Coupe	1.2	2.3
5 Series, ex. M5:		
2001-03:		
525i, 530i	1.0	2.1
540i	1.4	2.9
2004-09:		
525i, 528i, 530i, 535	1.2	2.3
545i, 550i	1.4	2.9
525xi, 525xi, 530xi, 535xi:		
Front Differential	0.6	1.3
Rear Differential	1.2	2.3
6 Series, ex. M6	1.4	2.9
7 Series:		
2001: 740, 750 i & iL	1.4	2.9
2002-09:		
745i, 750i & Li	1.4	2.9
760i, Li	1.5	3.2
M3	1.2	2.5
M5, M6	1.1	2.3
X3: Front Differential	0.7	1.5
Rear Differential: 2.5L	0.9	1.9
3.0L	1.0	2.1

CAPACITY, Refill:	Liters	Pt
X5: Front Differential	0.6	1.3
Rear Differential:	1.2	2.5
3.0L, 4.4L, 4.6L	1.2	2.5
4.8L	1.6	3.4
Z3:		
ex. M Coupe, Roadster: 2.5L	0.9	1.9
3.0L	1.2	2.5
M Coupe, Roadster	1.2	2.5
Z4:		
ex. M Coupe, Roadster:		
2003-05	1.0	2.1
2006-07: 2.5L	0.8	1.7
3.0L	1.0	2.1
M Coupe, Roadster	1.2	2.5
Z8	1.4	2.9
2010:		
Front:		
335d	0.6	1.2
335xi	0.6	1.2
528xi	0.6	1.2
535xi	0.6	1.2
X3	0.7	1.5
X5	0.7	1.5
X6	0.7	1.5
Rear:		
128i, 135i, Z4:		
188L, 188LW	1.0	1.2
215L, 215LW	1.2	2.5
328i, 328xi, 335d, 335i, 335xi, 650i:		
168L	0.8	1.7
188L, 188LW	1.0	2.1
215L, 215LW	1.2	2.5
528i, 528xi, 535i, 535xi, 550i (4.8L):		
188L, 188LW	1.0	2.1
188K	1.2	2.5
215L, 215LW	1.2	2.5
215K	1.4	2.9
750i, 750Li:		
205AL	0.8	1.7
225AL	0.9	1.9
M5:		
188L, 188LW	1.0	2.1
188K	1.2	2.5
215L, 215LW	1.2	2.5
215N	1.1	1.3
M6:		
188L, 188LW	1.0	2.1
215L, 215LW	1.2	2.5
215N	1.1	1.3
X3:		
188K	1.2	2.5
X5:		
188L, 188LW	1.0	2.1
188K	1.2	2.5
215L, 215LW	1.2	2.5
X6:		
QMVH Middle	1.0	2.1
QMVH Left	0.5	1.1
QMVH Right	0.6	1.3

OTHER COMPONENTS

Power Steering	AF3
w/Hydroboost	SLF
w/Self-Leveling Suspension	SLF
Brake & Clutch Master Cylinder	HB
SMG Operating Unit	SLF
Throttle Linkage; Door, Hood	
& Trunk Latch	LM
Front Wheel Bearings	GC

BUICK

TERRAZA—SEE CHEVROLET & GMC TRUCKS;

ENCLAVE - SEE SATURN

1999-2010 ALL EX. RAINIER, RENDEZVOUS

CRANKCASE	API*
3.8L V6 Codes 1, K:	
1999-2003 Above 0°F (-18°C)	10W-30 ²
Below 60°F (16°C)	5W-30
2004-10 All temperatures	5W-30 ^{2,3}
All others:	
Above 0°F (-18°C)	10W-30
All temperatures	5W-30 ^{2,3}
2005-10 Below -20°F (-29°C)	Synthetic 5W-30 or 0W-30 ³
CAPACITY, Initial Refill:	Liters Qt
1999-2009 3.1L	4.3 4.5
3.6L	5.2 5.5
3.8L: 1999-2008	4.3 4.5
2009	4.7 5.0
3.9L	3.9 4.1
4.6L	7.1 7.5
5.3L	5.7 6.0
5.7L	4.7 5.0
2010:	
2.4L	4.7 5.0
3.0L	5.7 6.0

CAPACITY, Initial Refill:	Liters	Qt
3.6L	5.2	5.5
3.9L	3.8	4.0
4.6L	7.0	7.4

1 Capacity shown is with filter. Recheck oil level after filling.
2 Preferred.

3 Where temperature falls below -20°F (-29°C) it is recommended that you use either an SAE 5W-30 synthetic oil or an SAE 0W-30 oil meeting GM standard GM6094M.

TRANSMISSION/TRANSAXLE

All		AF6
CAPACITY, Initial Refill:	Liters	Qt
1999-2006, All	7.0	7.4
2007-09:		
Lucerne w/4.6L	6.6	7.0
Others	7.0	7.4

2010:		
2.4L	8.0	8.5
3.0L, 3.6L	9.0	9.5
3.9L, 4.6L	7.0	7.4

1 With the engine at operating temperature, shift transmission through all gears. Let engine slow idle in PARK for 3 minutes or more. Check fluid level and add fluid as needed. Do not overfill.

OTHER COMPONENTS

Power Steering	PS
Brake & Clutch Master Cylinder	HB
Clutch Fluid Reservoir	HB

CADILLAC

ESCALADE—SEE CHEVROLET & GMC TRUCKS

1999-2010

CRANKCASE	API*
2008-10: All temperatures	5W-30 ⁵
2004-07: All temperatures	5W-30 ¹
1999-2003:	
Above 0°F (-18°C)	10W-30 ²
Below 60°F (16°C)	5W-30
All temperatures, others	5W-30 ³

CAPACITY, Refill:	Liters	Qt
2.8L	5.7	6.0
3.0L	5.8	6.1
3.2L	4.8	5.1
3.6L, CTS, SRX, STS	5.7	6.0
4.4L: STS	8.5 ⁵	9.0 ⁵
XLR	7.6 ⁵	8.0 ⁵
4.6L: ex. DTS	7.6	8.0
DTS	7.1	7.5
5.7L	6.2 ⁵	6.5 ⁵
6.0L	5.7 ⁵	6.0 ⁵
6.2L	5.7 ⁵	6.0 ⁵

1 Where temperature falls below -20°F (-29°C) it is recommended that you use either an SAE 5W-30 synthetic oil or an SAE 0W-30 oil meeting GM standard GM6094M.

2 Preferred 3.0L, 3.2L, 4.6L (1999).

3 Preferred 3.2L, 3.6L, 4.6L, 5.7L, 6.0L (2000-03).

4 Capacity shown is with filter. Add oil as necessary.

5 Synthetic oil required GM Standard GM4718M.

TRANSMISSION/TRANSAXLE,

Automatic

All		AF6
CAPACITY, Initial Refill:	Liters	Qt
4T80E	7.0 ²	7.4 ²
5L40-E, 5L50-E	4.7	5.0
6L50-E: 2007	6.9	7.2
2008-10	6.3	6.7
6L80-E	6.2	6.5
RWD ex. Catera	4.7	5.0
Catera (Total fill)	6.6	7.0

1 With the engine at operating temperature, shift transmission through all gears. Let engine slow idle in PARK for at least 3 minutes. Check fluid level and add fluid as needed.

2 Remove drain plug in case after pan removal. Replace scavenging screens.

TRANSMISSION/TRANSAXLE, Manual

AY6:		
2005-07	7.5W-90	GL-3
2009-10	7.5W-90	GL-5
M35, Tremec (2003-06)		GLS
Tremec (2007, 2009-10)		GLS
CAPACITY, Initial Refill:	Liters	Qt
AY6	1.8	1.9
M35	1.3	2.6
Tremec 6-Speed	3.5	3.7

DIFFERENTIAL

Front	7.5W-90	GL-5
Rear:		
Catera: w/ Limited Slip	8.0W-90	GL-5*
w/o Limited Slip	8.0W-90	GL-5
CTS, SRX, STS:		
w/ Limited Slip	7.5W-90	GL-5*
w/o Limited Slip	7.5W-90	GL-5
XLR:		
2004-08	7.5W-90	GL-5*
2009		GLS

CARS & LIGHT TRUCKS

CADILLAC Continued • CHEVROLET • CHEVROLET & GMC TRUCKS

CAPACITY, Refill:	Liters	Pt
Front:		
CTS 2008-10	0.7	1.4
SRX 2004-10	0.7	1.4
STS:		
2005-06	0.7	1.4
2007-10	1.0	2.1
Rear:		
Catera 1999-2001	1.7	3.6
CTS:		
2003-07	1.3	2.7
2008-09: w/ LSD	1.2	2.5
w/o LSD	1.3	2.7
2010: w/ LSD & cooler	1.5	3.2
w/ LSD & w/o cooler	1.2	2.5
w/o LSD	1.3	2.7
SRX:		
2004-06	1.3	2.7
2007-09:		
w/ LSD & drain plug removed	1.0	2.1
w/ LSD & cover removed	1.2	2.5
w/o LSD & drain plug removed	1.1	2.3
w/o LSD & cover removed	1.3	2.7
2010:		
w/ LSD	0.7	1.4
w/o LSD	0.6	1.3
STS:		
2005-06	1.3	2.7
2007:		
w/ drain plug removed	1.0	2.1
w/ cover removed	1.2	2.5
2008-10:		
w/ LSD	1.2	2.5
w/o LSD	1.3	2.7
XL:		
2004-07	1.6	3.4
2008	1.9	4.0
2009	2.0	4.2
TRANSFER CASE		
All		GLS
CAPACITY, Refill:	Liters	Pt
2003-06 SRX, STS BW4476	0.5	1.0
2007: First Design	0.5	1.0
Second Design	0.8	1.7
2008-10 CTS	1.0	2.0
2008-09 SRX, STS	0.8	1.7
2010:		
SRX	0.6	1.3
STS	0.8	1.7
OTHER COMPONENTS		
Power Steering, Catera		AF3
Power Steering, ex. Catera		PS
Brake & Clutch Master Cylinder		HB
Front Suspension & Steering Linkage,		
Parking Brake Cable Guides		LB
Front Wheel Bearings, RWD		
ex. Catera		GC

CHEVROLET

**LUMINA APV, VENTURE,
UPLANDER—SEE CHEVROLET &
GMC TRUCKS; GEO, NOVA,
SPECTRUM, SPRINT—SEE
GEO/CHEVROLET/ASUNA**

1999-2010 ALL FWD MODELS

CRANKCASE		API★
3.4L Code X, 1999-2002 3.8L:		
Above 0°F (-18°C)	10W-30 ¹	
Below 60°F (16°C)	5W-30	
Below -20°F (-29°C)	10W-30	
Others:		
Aveo All temperatures	5W-30 ^{3,4}	
Cobalt 2.2L, 2.4L L4 All temperatures	5W-30 ^{3,4}	
2.0L L4	5W-30 ^{3,5}	
HHR All temperatures ex. 2.0L	5W-30 ^{3,4}	
HHR 2.0L	5W-30 ^{3,5}	
Impala, Malibu, Monte Carlo		
2003: All temperatures	5W-30 ^{1,3}	
Above 0°F (-18°C)	10W-30 ³	
2004 All temperatures	5W-30 ^{1,3,4}	
2005-07 All temperatures	5W-30 ^{3,4}	
2008 Impala		
All temperatures	5W-30 ^{3,4}	
Below -20°F (-29°C)	10W-30 ^{3,4}	
2008-10 Impala, Malibu:		
All temperatures	5W-30 ^{3,4}	
CAPACITY, Refill²:	Liters	Qt
1.6L:		
2004-07	3.8	4.0
2008	3.75	4.0
2009-10	4.5	4.7
2.0L: VIN P	5.7	6.0
2009-10 Turbo	4.7	5.0
2.2L: 2008 VIN D	4.7	5.0
2009-10 Cobalt, HHR	4.7	5.0

CAPACITY, Refill²:	Liters	Qt
2004-08 VIN F	4.7	5.0
VIN 4, 57	4.3	4.5
2.4L: 2006-08 VIN B	4.7	5.0
ex. VIN B	4.7	5.0
3.1L VIN J	4.3	4.5
3.4L VIN X	4.3	4.5
3.5L	3.8	4.0
3.6L 2009-10	5.2	5.5
3.8L	4.3	4.5
3.9L	3.8	4.0
5.3L	5.7	6.0
1 Preferred		
2 Capacities include filter change		
3 Where temperature falls below -20°F (-29°C) it is recommended that you use either an SAE 5W-30 synthetic oil or an SAE 0W-30 oil.		
4 Only engine oil meeting GM standard GM6094M and showing the API certified for gasoline engines starburst symbol.		
5 Synthetic oil required, GM Standard GM4718M		
TRANSAXLE, Automatic		
1999-2010: ex. AISIN (81-40LE)		AF6
AISIN (81-40LE)		TIV
CAPACITY, Initial Fill¹:	Liters	Qt
All ex. 2008-10 Cobalt, HHR 4T45E ²	6.5	6.9
125 (3T40)	3.8	4.0
440-T4, (4T60)	5.7	6.0
1999-2005 4T40E	6.5	6.9
4T60E, 4T65E	7.0	7.4
4T65E All ex. 2006 Malibu	7.0	7.4
4T65E 2006 Malibu only	6.5	6.9
6T40, 6T70 2008-10 Malibu	6.0	6.3
AISIN (81-40LE) Total fill	5.8	6.2
2006 Cobalt 4T40E	6.6	7.0
2008-10 Cobalt, HHR 4T45E	6.6	7.0
1 With the engine at operating temperature, shift transmission through all gears. Let engine slow idle in PARK for 3 minutes or more. Check fluid level and add fluid as needed. Do not overfill.		
2 Has no fluid level indicator. Not owner serviceable.		
TRANSAXLE, Manual		
1999		GLS
2004-10 Aveo: w/D16		75W-90 GL-3
w/YM4		Synthetic 75W-85 GL-4
2000-05 ex. 2004-05 Aveo		
& 2005 MU3		GLS
2005-10 MU3		SLF
2007 All ex. MU3		GLS
2008-10 Cobalt, HHR		GLS¹
CAPACITY, Refill:	Liters	Pt
D16 Aveo	1.8	3.8
GETRAG: 5 speed	1.7	3.6
2007	1.6	3.3
M86 2008-10 Cobalt, HHR	1.6	3.3
MU3	1.9	4.0
Y4M Aveo	2.1	4.4
1999 All others	1.9	4.0
1 GM recommends P/N 88861800 (Canada 88861801).		
OTHER COMPONENTS		
Power Steering		PS
Brake Master Cylinder		HB
Clutch Fluid Reservoir		HB
Front Suspension & Steering Linkage,		
Parking Brake Cable Guides		LB
Front Wheel Bearings, Caprice		GC
1999-2010 RWD MODELS		
CRANKCASE		API★
Corvette engines:		
Below -20°F (-29°C)	10W-30 ¹	
All temperatures	5W-30 ^{1,2}	
3.8L Code K:		
Above 0°F (-18°C)	10W-30 ²	
Below 60°F (16°C)	5W-30	
5.7L Camaro:		
Above 0°F (-18°C)	10W-30	
All temperatures	5W-30 ²	
CAPACITY, Refill²:	Liters	Qt
3.6L	5.7	6.0
3.8L	4.3	4.5
5.7L: Code G, S, Corvette	6.1	6.4
Code G, Camaro	5.2	5.5
6.0L: Corvette ex. Z51	5.2	5.5
Corvette Z51	5.7	6.0
6.2L: w/o oil cooler (2008)	5.7	6.0
w/o oil cooler (2008)	5.2	5.5
7.0L Corvette (2006-08)	7.6	8.0
2010 Camaro 6.2L	7.6	8.0
2009-10 Corvette:		
6.2L	5.7	6.0
6.2L Supercharged	9.9	10.0
7.0L	9.9	10.5
1 Engine oil must also meet GM spec 4718M. API★ oil not meeting GM Spec 4718M may be used for top oil only.		
2 Preferred.		
3 Capacity shown is with filter. Recheck oil level after filling.		
TRANSMISSION, Automatic		
All		AF6
CAPACITY, Initial Refill¹:	Liters	Qt
4L60, 4L60-E	4.7	5.0
6L80-E	6.2	6.5

1 With the engine at operating temperature, shift transmission through all gears. Let engine slow idle in PARK for 3 minutes or more. Check fluid level and add fluid as needed. Do not overfill.		
TRANSMISSION, Manual		
All		GLS
CAPACITY, Refill:	Liters	Pt
Corvette:		
1999-2003	3.9	8.2
2004-05	3.8	8.0
2006	3.9	8.2
2007-10: Base	3.5	7.3
w/Z51	4.0	8.4
Z06	4.3	9.0
2009 6.2L VIN R	NS	NS
Camaro:		
5-speed	3.2	6.8
6-speed	3.8	8.0
DIFFERENTIAL		
1999-2008:		
Standard		GL-5
Limited-Slip		GL-5★
2009-10		GL-5
CAPACITY, Refill:	Liters	Pt
Camaro	1.7	3.6
1999-2007 Corvette:		
ex. 2006-07, Z06	1.6	3.4
2006-07, Z06	2.5	5.3
2008 Corvette: ex. Z06	1.86	3.9
Z06	2.5	5.3
2009-10: Base	2.0	4.4
Z06, ZR1	2.75	5.8
1 Use Dextron LS Gear 011 meeting GM specification P/N 9986290. Lubricant GM P/N 88862624 in Canada 88862625.		
LIMITED-SLIP IDENTIFICATION:		
Tag under rear cover-attaching bolt.		
OTHER COMPONENTS		
Power Steering		PS
Brake Master Cylinder		HB
Clutch Fluid Reservoir		HB
Front Suspension & Steering Linkage,		
Parking Brake Cable Guides,		
Shift Linkage, Clutch Cross Shaft		LB
Front Wheel Bearings, Caprice		GC
CHEVROLET & GMC TRUCKS		
2008-10 GMC ACADIA & CHEVROLET TRAVERSE—SEE SATURN		
1999-2008 BUICK RENDEZVOUS, TERRAZA; CHEVROLET EQUINOX, LUMINA APV, UPLANDER, VENTURE; OLDSMOBILE SILHOUETTE; PONTIAC AZTEK, MONTANA, MONTANA SV6, TRANS SPORT		
2009-10 CHEVROLET EQUINOX		
2010 GMC TERRAIN		
2006-09 TORRENT		
CRANKCASE		API★
All Engines		
Above 0°F (-18°C) (1999-2008)	10W-30 ⁴	
All temperatures	5W-30 ^{1,2}	
CAPACITY, Refill²:	Liters	Qt
2.4L	4.7	5.0
3.0L	5.7	6.0
3.4L: 1999-03 All	4.3	4.5
2004 Montana, Silhouette	3.8	4.0
2005 Montana	4.3	4.5
2004-05 Aztek, Rendezvous, Venture	4.3	4.5
2005-09 Equinox	3.8	4.0
2006-09 Torrent	4.3	4.5
3.5L	3.8	4.0
3.6L	5.2	5.5
3.9L	3.8	4.0
1 Where temperature falls below -20°F (-29°C) it is recommended that you use either an SAE 5W-30 synthetic oil or an SAE 0W-30 oil meeting GM standard GM6094M.		
2 Preferred.		
3 Capacity shown is with filter. After refill, check oil level.		
4 Not recommended for Uplander & Torrent.		
TRANSAXLE, Automatic		
All: ex. AF33-5		AF6
AF33-5		TIV
CAPACITY, Initial Refill¹:	Liters	Qt
3T40 (3-speed)	3.8	4.0
1999-2008 ex. AWD	7.0	7.4
2001-06 AWD	7.4	7.8
AF33-5	4.0	4.3
2008-09 Equinox, Torrent:		
AF33	3.9	4.1
6T70	9.0 ²	9.5 ²

CARS & LIGHT TRUCKS

CHEVROLET & GMC TRUCKS Continued

CAPACITY, Initial Refill¹:	Liters	Qt
2010 Equinox:		
6T40, 6T45	6.0	6.3
6T70, 6T75	6.0	6.3
1 With the engine at operating temperature, shift transmission through all gears. Let engine slow idle in PARK for 3 minutes or more. Check fluid level and add fluid as needed. Do not overfill.		
2 Total or dry fill.		
TRANSFER CASE	.SLF	
CAPACITY, Refill:	Liters	Pt
AWD		
ex. Equinox, Terrain, Torrent	0.3	0.6
Equinox, Terrain, Torrent:		
w/3.6L Getrag 760	0.8	1.7
w/3.6L	0.5	1.0
2010 Getrag 760	1.0	2.1
DIFFERENTIAL		
1999-2006		.SLF
2007-10	.75W-90	GL-5
CAPACITY, Refill:	Liters	Pt
AWD		
ex. Equinox, Terraza, Terrain, Torrent, Uplander	0.3	0.3
Equinox, Terrain, Torrent:		
2005-06	0.8	1.7
2007-10	0.5	1.0
Terraza, Uplander	1.9	4.0
OTHER COMPONENTS		
Brake Fluid Reservoir		.HB
Clutch Fluid Reservoir		.HB
Power Steering Reservoir		.PS
1999-2005 ASTRO, SAFARI		
1999-2004 BRAVADA, S-SERIES, S10, SONOMA		
1999-2000 ISUZU HOMBRE		
1999-2001 JIMMY		
CRANKCASE	.API★	
Above 0°F (-18°C)		.10W-30
All temperatures		.5W-30^{1,2}
CAPACITY, Refill:	Liters	Qt
All Models	4.3	4.5
Includes filter. After refill, check oil level.		
1 Preferred.		
2 Where temperature falls below -20°F (-29°C) it is recommended that you use either an SAE 5W-30 synthetic oil or an SAE 0W-30 oil.		
TRANSMISSION, Automatic		
All ex. Hombre		.AF6
Hombre		.AF3
CAPACITY, Initial Refill¹:	Liters	Qt
4L60/65-E	4.7	5.0
1 With the engine at operating temperature, shift transmission through all gears. Check fluid level in PARK and add fluid as needed.		
TRANSMISSION, Manual		
NV1500, 4-cyl.		.GLS
NV3500, V6		.GLS
CAPACITY, Initial Fill:	Liters	Pt
NV1500	2.7	5.7
NV3500	2.0	4.2
TRANSFER CASE		
BW4401, 4470, 4472		.GLS
NV136, 236, 246		.SLF
NV231, 233		.GLS
CAPACITY, Refill:	Liters	Pt
BW4401, 4470	1.2	2.5
BW4472: Astro, Safari	1.4	3.0
Others	1.2	2.5
NV136, 236, 246	1.9	4.0
NV231, 233	1.0	2.1
DIFFERENTIAL		
Front		.GL-5
All temperatures		.80W-90
Rear:		
Conventional:		
1999-2000 All		.GL-5
All temperatures		.80W-90
2001-05		.GL-5
Astro, Safari		
All temperatures		Synthetic 75W-90
Jimmy, Sonoma, S10		
All temperatures		.80W-90
Limited Slip & Locking:		
1999-2000 All		.GL-5¹
All temperatures		.80W-90
2001-05		.GL-5
Astro, Safari		
All temperatures		Synthetic 75W-90
Jimmy, Sonoma, S10		
All temperatures		.80W-90
CAPACITY, Refill:	Liters	Pt
Front	1.2	2.6
Rear:		
Astro, Safari & 7.625" axle	1.7	3.6
8.6" axle	1.9	4.0
1 Do not add limited slip additive.		

OTHER COMPONENTS		
Brake Fluid Reservoir		.HB
Clutch Fluid Reservoir		.HB
Power Steering Reservoir		.PS
1999-2000 C, G, K, P GASOLINE & DIESEL MODELS;		
1999-2000 CADILLAC ESCALADE CRANKCASE		
All Gasoline Models	.API★	
All temperatures		.5W-30^{1,5}
Above 0°F (-18°C)		.10W-30
All Diesels	.CG-4^{1,2} CH-4^{1,2} SH/CF-4	
Above 0°F (-18°C)		.15W-40²
Above 32°F (0°C)		.30
Below 32°F (0°C)		.10W-30
CAPACITY, Refill³:	Liters	Qt
All Gasoline Models:		
4.3L	4.3	4.5
4.8L, 5.3L, 6.0L	5.7	6.0
5.0L, 5.7L	4.8 ⁴	5.0 ⁴
7.4L: short filter	6.3	6.6
long filter	6.6	7.0
All Diesel Models:		
6.5L 1999-2000	7.6	8.0
1 Preferred.		
2 CG-4 or CH-4 required.		
3 Includes filter. After refill level must be checked.		
4 Add 1 qt. (0.9L) additional for: CNG; large crankcase option; 3500HD installation.		
5 Where temperature falls below -20°F (-29°C) it is recommended that you use either an SAE 5W-30 synthetic oil or an SAE 0W-30 oil.		
TRANSMISSION, Automatic		
All		.AF6
CAPACITY, Initial Refill¹:	Liters	Qt
4L60E	4.7	5.0
4L80E	7.3	7.7
1 With the engine at operating temperature, shift transmission through all gears. Check fluid level in PARK and add fluid as needed.		
TRANSMISSION, Manual		
NV3500		.GLS
NV4500		.75W-85 GL-4
CAPACITY, Refill:	Liters	Pt
NV3500	2.0 ¹	4.4 ¹
NV4500	3.8	8.0
1 Approximate, fill to level of fill plug.		
TRANSFER CASE¹		
NV236, 246, Automatic		.SLF
NV149-NP one-speed automatic		.GLS
NV263-NP1 selectable		.GLS
Others, Manual		.GLS
CAPACITY, Refill:	Liters	Pt
BW4401	1.5	3.2
BW4470	1.5	3.2
NV236, 246, 261	1.9	4.0
NV243	2.1	4.4
1 To identify, see tag on case.		
DIFFERENTIAL		
Front		.GL-5^{1,2}
All temperatures		.80W-90
Rear:		
C/K ex. 3500 HD with Dana 11" Axle		
Conventional:		
1999:		
GMT 400 C, K 10-30		.GL-5¹
All temperatures		.80W-90
GMT 800 Codes C, K 15-25		.GLS¹
All temperatures		Synthetic 75W-90
2000		.GLS¹
All temperatures		Synthetic 75W-90
Limited Slip:		
1999-2000:		
GMT 400 C, K 10-30		.GL-5¹
All temperatures		.80W-90
GMT 800 C, K 15-25		.GLS
All temperatures		Synthetic 75W-90
Locking:		
1999-2000		
GMT 400 C, K 10-30		.GL-5¹
All temperatures		.80W-90
GMT 800 C, K 15-25		.GLS
All temperatures		Synthetic 75W-90
3500 HD Dana		
80 Axle		.GLS
All temperatures		Synthetic 75W-140
G & P Series:		
Conventional		.GL-5
All temperatures		.80W-90
Limited Slip & Locking		.GL-5³
All temperatures		.80W-90
CAPACITY, Refill:	Liters	Pt
Front:		
Escalade, K1, K2	1.7	3.6
K3	2.1	4.4

CAPACITY, Refill:		
Rear:		
Escalade, C, K Series, 3500 HD:		
8.5", 8.6"	2.0	4.2
9.5"	2.6	5.5
10.5"	3.0	6.3
11"	4.0	8.5
G Series:		
8.5"	2.0	4.2
8.6"	2.3	4.9
9.5"	2.8	5.9
10.5"	3.0	6.3
P Series:		
10.5"	3.4	7.2
11"	4.0	8.5
1 1999 models Do not use synthetic lubricant in axles using RTV sealant. Synthetic lubricant will chemically attack RTV sealant. American Axle has only approved the use of Synthetic Lubricant 75W-90 GM part no. 12378261, as follows:		
a. All 8.6" rear axles are compatible.		
b. All 9.5" rear axles built before mid-February 1998 (RTV sealant used to seal cover pan) are not compatible.		
c. All 9.5" rear axles built after mid-February 1998 (equipped w/cover pan & gasket) are compatible.		
d. All 10.5" rear axles built prior to March 3, 1999 are compatible if axle shaft hub RTV sealer is replaced w/GM gasket part no. 327739.		
2 In cold climates when excessive shift effort to shift to 4WD is encountered, use GM Part No. 12345836.		
3 Do not add limited slip additive.		
OTHER COMPONENTS		
Brake Fluid Reservoir		.HB
Clutch Fluid Reservoir		.HB
Power Steering Reservoir		.PS
2001-09 ENVOY		
2002-09 TRAIL BLAZER		
2003-08 ISUZU ASCENDER		
2004-07 RAINIER		
CRANKCASE	.API★	
Above 0°F (-18°C), 2001-04		.10W-30
All temperatures		.5W-30^{1,2,4}
CAPACITY, Refill³:	Liters	Qt.
4.2L	6.6	7.0
5.3L, 6.0L	5.7	6.0
1 Preferred.		
2 Where temperature falls below -20°F (-29°C) it is recommended that you use either an SAE 5W-30 synthetic oil or an SAE 0W-30 oil.		
3 Includes filter. After refill, check oil level.		
4 2006-09 Trail Blazer w/6.0L requires GM4718M Synthetic or equivalent.		
TRANSMISSION, Automatic		
All		.AF6
CAPACITY, Initial Refill¹:	Liters	Qt.
4-speed	4.7	5.0
1 With the engine at operating temperature, shift transmission through all gears. Check fluid level in Park with parking brake applied and add fluid as needed.		
TRANSFER CASE		
CAPACITY, Refill:	Liters	Pt.
NV120, 126, 226	1.8	3.8
1 Auto-Trac II Fluid.		
DIFFERENTIAL		
All temperatures		.Synthetic 75W-90
2006-09 Trailblazer SS w/6.0L		.75W-90 GL-5★¹
CAPACITY, Refill:	Liters	Pt.
Front: 2001-09	0.8	1.7
Rear:		
2001-03	1.9	4.0
2004-09:		
4.2L	1.7	3.6
5.3L	2.0	4.3
6.0L	2.6 ¹	5.5 ¹
1 Add GM Part No. 1052358 or equivalent 2006 4.0oz, 2007-09 5.5oz.		
OTHER COMPONENTS		
Power Steering		.PS
Brake Master Cylinder		.HB
Front Axle Propshaft Spline, or One-Piece Propshaft Spline (2WD w/auto. Trans.)		.SLG
Suspension & Steering Linkage, Rear		
Driveline Center Splines, Parking Brake Cable Guides, Shift Linkage.		.LB
Universal CV Joint, 4WD		.LB
Front Wheel Bearings		.GC
2004-10 CHEVROLET COLORADO & GMC CANYON		
2006 ISUZU I-280, I-350		
2007-08 ISUZU I-290, I-370		
CRANKCASE	.API★	
All temperatures		.5W-30^{1,2}
Above 0°F (-18°C)(2004)		.10W-30
CAPACITY, Refill³:	Liters	Qt
2.8L, 2.9L	4.7	5.0
3.5L, 3.7L, 5.3L	5.7	6.0
1 Preferred.		
2 Where temperature falls below -20°F (-29°C) it is recommended that you use either an SAE 5W-30 synthetic oil or an SAE 0W-30 oil meeting GM standard GM6094M.		

CARS & LIGHT TRUCKS

CHEVROLET & GMC TRUCKS Continued • CHRYSLER, DODGE, PLYMOUTH

3 Capacity shown is with filter change. After refill, check oil level.

TRANSMISSION, Automatic

All	AF6
CAPACITY, Initial Refill¹:	Liters Qt
4-speed	4.7 5.0

¹ With the engine at operating temperature, shift transmission through all gears. Check fluid level in PARK and add fluid as needed.

TRANSMISSION, Manual

75W-90	GL-3
CAPACITY, Refill:	Liters Pt
4WD	2.2 4.6
4WD	2.3 4.9

TRANSFER CASE

CAPACITY, Refill:		Liters	Pt
T150		1.3	2.7

DIFFERENTIAL

Front & Rear Axle:	GL-5
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All temperatures	Synthetic 75W-90
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CAPACITY, Refill:	Liters Pt
Front Axle	1.5 3.2
Rear Axle: 2004-08	1.6-1.8 3.4-3.8
2009-10:	
V8	2.0 4.2
ex. V8	1.7 3.6

OTHER COMPONENTS

Brake Fluid Reservoir	HB
Clutch Fluid Reservoir	HB
Power Steering Reservoir	PS

2001-10 C, G, K, GASOLINE, DIESEL & 3500 HD MODELS (AVALANCHE, SIERRA, SILVERADO, SUBURBAN, TAHOE, YUKON)

2001-10 CADILLAC ESCALADE

2003-06 SSR

2003-10 H SERIES VANS

CRANKCASE

All Gasoline Models:	5W-30 ^{1,2}
Below 0°F (-18°C)	10W-30

All Diesel Models:

2001-02	CI-4, CH-4, CG-4
2003-06	CI-4, CH-4
2007-10	CJ-4
6.5L:	
Above 0°F (-18°C)	15W-40 ¹
Above 32°F (0°C)	10W-30
Below 32°F (0°C)	10W-30
6.6L:	
Above 0°F (-18°C)	15W-40 ¹
Above 32°F (0°C)	10W-30
Below 32°F (0°C)	10W-30

CAPACITY, Refill³:

All Gasoline Models	Liters Qt
4.3L	4.3 4.5
4.8L, 5.3L, 6.0L	5.7 6.0
5.0L, 5.7L	4.8 5.1
6.2L	5.7 6.0
8.1L: 3500 HD	6.3 6.7
Others	6.1 6.4
All Diesel Models	
6.5L	7.6 8.0
6.6L	9.5 10.0

¹ Preferred.
² Where temperature falls below -20°F (-29°C) it is recommended that you use either an SAE 5W-30 synthetic oil or an SAE 0W-30 oil.
³ Includes filter. After refill, check oil level.

TRANSMISSION, Automatic

All	AF6
CAPACITY, Initial Refill¹:	Liters Qt
4L60/65-E/70-E	4.7 5.0
4L80/85-E	7.3 7.7
6L50, 6L80-E	5.7 6.0
6L90-E	6.0 6.3
2M70	10.8 ² 11.4 ²
Allison 1000, 2000	7.0 7.4

¹ With the engine at operating temperature, shift transmission through all gears. Check fluid level in PARK and add fluid as needed.
² Total or dry fill.

TRANSMISSION, Manual

NV3500	GLS
NV4500	75W-85 GL-4
ZF 6-speed transmission	SLF
Tremec 6-speed	GLS
CAPACITY, Refill:	Liters Pt
NV3500:	
2001-03	2.0 4.2
2004-06	2.3 4.9
2007: 2WD	2.3 4.9
4WD	2.0 4.2
NV4500	3.7 7.8
Tremec 6-speed	3.5 7.4
ZF 6	6.0 12.7

TRANSFER CASE

H Series Vans:	
2003-07	GLS
2008-10	AF6

K Series:

2001-03:	
Manual Transfer Cases	GLS
Automatic Transfer Cases	SLF

2004-06:

Borg Warner	GLS
NP8 only	SLF
NV149 Series	GLS
NV236, NV296 Automatic	SLF
NV261-NP2	GLS
NV263-NP1 selectable	GLS

2007:

All ex. New Silverado:	
Manual Transfer Cases	GLS
Automatic Transfer Cases	SLF

New Silverado: MP 1222/1225/1226-NQG, MP 625/1626-NQF, MP 3023/3024-NQH	AF6
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2008-10 All

CAPACITY, Refill:	Liters Pt
Borg Warner	1.4 3.0
H Series Vans 2003-10	2.5 5.3
K Series: NV236, 246, NP8	1.9 4.0
NV-149-NP 2001-02	2.3 4.9
NV-149-NP3 2002-07	2.1 4.4
NV-261-NP2	1.9 4.0
NV-263-NP1	1.9 4.0
MP 1222/1225/1226-NQG, MP 1625/1626-NQF, MP 3023/3024-NQH	1.5 3.2

DIFFERENTIAL

Front Axle:	
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2001-02:

8.25" S4WD Axle	GL-5
All temperatures	80W-90
8.25" F4WD Axle, 9.25"	GL-5
2003-05 K-Series	GL-5
All temperatures	80W-90

2006-10 Escalade,

K-Series AWD	75W-90 GL-5
1500 All temperatures	Synthetic 80W-90
1500HD, 2500, 2500HD, 3500:	
All temperatures	Synthetic 75W-90

2007-10 New Silverado, Sierra

75W-90	GL-5
H Series	GL-5
All temperatures	Synthetic 75W-90

Rear Axle:

C, K Series, Escalade:	
ex. 3500 HD Dana 80 Axle	
2001 All	GL-5
All temperatures	Synthetic 75W-90

2002-10

ex. steerable	GL-5
All temperatures	Synthetic 75W-90

2002-06

steerable	GLS ¹
All temperatures	Synthetic 75W-90

3500 HD Dana

80 Axle	GLS
All temperatures	Synthetic 75W-90

G, H Series:

8.6"	GL-5
All temperatures	Synthetic 75W-90
9.5", 10.5":	
Conventional	GL-5
All temperatures	80W-90

Limited Slip & Locking

All temperatures	80W-90
2005-10	75W-90 GL-5
SSR	GL-5★

SSR

All temperatures	GL-5★
All temperatures	Synthetic 75W-90

CAPACITY, Refill:

Front Axle:	
Escalade, K Series	
8.25":	
2001-03	1.7 3.6
2004-10	1.4 3.0
9.25": 2001-10	1.7 3.6
H Series	1.2 2.5

Rear Axle:

C, K Series, Escalade:	
8.6":	
2001-02	2.3 4.9
2003-10	2.0 4.2
9.5"	2.6 5.5
9.75"	2.8 5.9
10.5"	2.6 5.5
11.5":	
2001-05	3.6 7.6

CAPACITY, Refill:

2006-10	3.0 6.3
3500 HD Dana 80	4.0 8.5
G, H Series:	
2001-05:	
8.6"	2.0 4.2
9.5"	2.6 5.5
9.75"	3.0 6.3
10.5":	
2001-02	2.6 5.5
2003-04	3.2 6.8
2005	3.1 6.6
2006-08:	
8 5/8" ring gear	2.0 4.4
9 3/4" ring gear	2.8 5.9
10 1/2" ring gear	2.6 5.5
2009-10:	
8 5/8" ring gear	2.0 4.4
9 1/2" ring gear	2.6 5.5
9 3/4" ring gear	3.0 6.2
10 1/2" ring gear	3.1 6.6
SSR:	
2003	1.9 4.0
2004	2.3 4.9
2005-06: w/AT	2.0 4.2
w/MT	2.6 5.5

¹ Do not add friction modifier.

OTHER COMPONENTS

Brake Fluid Reservoir	HB
Clutch Fluid Reservoir	HB
Power Steering Reservoir	PS ¹

¹ For hybrid Silverado 1500 use GM. Part No. 88901975 (Canada Part No. 88901976).

CHRYSLER, DODGE, PLYMOUTH

2007-09 CHRYSLER ASPEN—SEE DODGE TRUCKS

1999-2000

INCLUDES AVENGER, CARAVAN, PROWLER, SEBRING COUPE, TOWN & COUNTRY, VIPER, VOYAGER

CRANKCASE

Below 32°F (0°C)	5W-30
Below 100°F (38°C)	5W-30 ²
Above 0°F (-18°C)	10W-30

CAPACITY, Refill³:

2.4L, 2.7L, 3.2L, 3.5L	4.7 5.0
All others	4.3 4.5

¹ Flexible fuel engine oil must meet DaimlerChrysler Standard MS-9214.

² Not recommended for 3.2L/3.5L engine above 32°F (0°C). For these applications: above 0°F (-18°C) 10W-30 preferred.

³ Capacity shown includes filter. After refill, check oil level.

TRANSMISSION/TRANSAXLE, Automatic

Caravan, Town & Country, Voyager	AP3
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Others

CAPACITY, Initial Refill²:

All w/longitudinal engine	4.2 4.4
All w/transverse engine	3.8 4.0

¹ Chrysler Corp. recommends that all vehicles with Chrysler automatic transmissions/transaxles ex. 1999 earlier Caravan, Town & Country, and Voyager models, be serviced with ATF+4® Automatic Transmission Fluid.

² With the engine at operating temperature, shift transmission through all gears. Check fluid level in PARK and add fluid as needed.

TRANSAXLE, Manual

NV T350 (A578)	GLS
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CAPACITY, Refill:

All	2.1 4.4
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FINAL DRIVE

All temperatures	75W-90
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CAPACITY, Refill:

1999	0.9 1.9
2000	0.7 ² 1.5 ²

¹ Synthetic gear lubricants should be avoided.

² 42LE transaxles built after 7-26-99 fill to 3/8" (9mm) below fill hole.

AWD MINI VAN

Power Transfer Unit & Drive Module	GL-5
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All temperatures	80W-90
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Overrunning Clutch

AP3

CAPACITY, Refill:

Power Transfer Unit	1.1 2.3
Drive Module	1.9 4.0
Overrunning Clutch	0.4 0.8

OTHER COMPONENTS

Brake Fluid Reservoir	HB
Clutch Fluid Reservoir	HB

CARS & LIGHT TRUCKS

CHRYSLER, DODGE, PLYMOUTH

2001-07 INCLUDES ALL CHRYSLER, DODGE, AND PLYMOUTH PASSENGER CARS & VANS EX. VIPER, PROWLER, SEBRING COUPE & STRATUS COUPE

CRANKCASE

2001-04 ex. Crossfire

3.2L, 3.5L

ex. 3.2L, 3.5L

2004 Crossfire

2005:

2.0L

2.4L

2.7L

3.2L

3.3L

3.5L

3.7L

3.8L

5.7L

6.1L

2006:

2.4L

2.7L

3.3L

3.5L: Pacifica

ex. Pacifica

3.8L: Pacifica

ex. Pacifica

4.0L

5.7L

6.1L

2007:

1.8L

2.0L

2.4L: Avenger, Sebring

ex. Avenger, Sebring

2.7L: Avenger, Sebring

ex. Avenger, Sebring

3.3L

3.5L

3.8L: Pacifica

ex. Pacifica

4.0L

5.7L

6.1L

2001-06:

2.0L

2.4L, 2.7L, 3.3L, 3.5L, 3.8L

2005-06 300 w/2.7L, 3.5L

3.5L Code 4

3.2L: 2001

2004-06

5.7L, 6.1L

2007:

1.8L

2.0L

2.4L: Caliber

Caravan, Town & Country

PT Cruiser

2.7L: Avenger, Sebring

300, Charger, Magnum

3.3L

3.2L

3.5L: Avenger, Sebring

300, Charger, Magnum

3.8L

4.0L

5.7L, 6.1L

1 Flexible fuel engine oil must meet Chrysler Standard MS-9214.

2 Check oil cap for proper usage.

3 With 5.7L Multiple Displacement System must use 5W-20 oil.

4 Must be synthetic oil, meeting specification MB 229.3 or MB 229.5.

5 Preferred.

6 Capacity shown includes filter. After refill, check oil level.

7 Must be synthetic oil, meeting specification MS-10725.

TRANSMISSION/TRANSAXLE, Automatic¹

All

CAPACITY, Initial Refill²:

NAG1

All w/transverse engine:

w/4 Speed

w/5 Speed

All w/longitudinal engine

1 All w/longitudinal eng., does not include final drive.

2 With the engine at operating temperature, shift transmission through all gears. Check fluid level in PARK and add fluid as needed.

TRANSMISSION/TRANSAXLE, Manual

All ex. Crossfire:

BG6

Getrag 288

NV T350:

2001

2002: ex. PT Cruiser

PT Cruiser

2003-07

NV T355

NV T850

Crossfire

All Temperatures

CAPACITY, Refill:

BG6

Crossfire

Getrag 288

w/o Turbo

NV T350, T355, T850

1 Use fluid approved to MB236.2. Such as Mopar Part No. 04761872AB.

FINAL DRIVE

All w/longitudinal engine

All temperatures

CAPACITY, Refill:

All

1 Synthetic gear lubricants should be avoided.

2 42LE transaxles fill to 3/8" (9mm) below fill hole.

OVERRUNNING CLUTCH, POWER TRANSFER UNIT, TRANSFER CASE

Power Transfer Unit:

Caliber:

All temperatures

Mini Van:

All temperatures

Pacifica

2004 All temperatures

2005-07 All temperatures

Overrunning Clutch

Transfer Case:

Chrysler 300

Dodge Charger, Magnum

CAPACITY, Refill:

Chrysler 300, Dodge Charger, Magnum:

Transfer Case MS140

Caliber:

Power Transfer Unit

Mini Van:

Power Transfer Unit

Overrunning Clutch

Pacifica:

Power Transfer Unit:

2004-06

2007

Overrunning Clutch

REAR CARRIER/DRIVE ASSEMBLY & FRONT & REAR DIFFERENTIAL

300, Charger, Magnum:

Front Differential

All temperatures

Rear Differential

All temperatures

Caliber:

All temperatures

Crossfire:

2004

All temperatures

2005-07

All temperatures

Mini Van:

All temperatures

Pacifica

2004 All temperatures

2005-07 All temperatures

CAPACITY, Refill:

300, Charger, Magnum:

Front

Rear: 198mm

210mm

215mm

Caliber:

Rear Drive Assembly

Crossfire

Mini Van:

Driveline Module

Pacifica:

Rear Carrier Unit

OTHER COMPONENTS

Brake Fluid Reservoir

Clutch Fluid Reservoir

Power Steering

1999-2000 AVENGER, SEBRING COUPE, STEALTH

CRANKCASE

Turbo Models:

Above 32°F (0°C)

Above -10°F (-23°C)

Below 60°F (16°C)

2.0L:

Above -10°F (-23°C)

Below 100°F (38°C)

Others:

Above 0°F (-18°C)

Below 100°F (38°C)

CAPACITY, Refill²:

2.0L, 2.4L, 2.5L

3.0L:

Non-Turbo

Turbo

1 Preferred.

2 Capacity shown is with filter. After refill, check oil level.

TRANSMISSION/TRANSAXLE, Automatic

Avenger, Sebring

Others

CAPACITY, Initial Refill²:

Avenger, Sebring

Stealth

1 Chrysler Corp. recommends Avenger and Sebring Coupe automatic transaxles be serviced with ATF+4® Automatic Transmission Fluid.

2 With the engine at operating temperature, shift transmission through all gears. Check fluid level in NEUTRAL and add fluid as needed.

TRANSMISSION/TRANSAXLE, Manual

Avenger, Sebring

Others

All Temperatures

CAPACITY, Refill:

Avenger, Sebring

Stealth:

FWD

AWD

TRANSFER CASE

All Temperatures

CAPACITY, Refill:

Stealth:

5-speed

6-speed

1 Fill no higher than 7/16 - 1/2" below fill hole.

REAR CARRIER & DIFFERENTIAL

Limited-Slip

Standard

Above -10°F (-23°C)

-30° to -10°F (-34° to -23°C)

Below -30°F (-34°C)

CAPACITY, Refill:

Stealth

OTHER COMPONENTS

Brake Fluid Reservoir

Clutch Fluid Reservoir

2001-05 SEBRING COUPE, STRATUS COUPE

CRANKCASE

2001-02

2003-04:

Above 0°F (-18°C)

Below 100°F (38°C)

2005:

Above 0°F (-18°C)

Below 100°F (38°C)

CAPACITY, Refill²:

2.4L

3.0L

1 Preferred.

2 Capacity shown is with filter. After refill, check oil level.

TRANSAXLE, Automatic

CAPACITY, Initial Refill¹:

2001-04

2005: 4-cyl

6-cyl

1 With the engine at operating temperature, shift transmission through all gears. Check fluid level in NEUTRAL and add fluid as needed.

2 Approximate.

3 Total Capacity.

TRANSAXLE, Manual

All temperatures

CAPACITY, Refill:

2.4L

3.0L

OTHER COMPONENTS

Power Steering:

2001

2002-05

Brake & Clutch Master Cylinder

Suspension & Steering Linkage

1 Mitsubishi Diamond ATF PS Fluid.

2008-10 PT CRUISER

CRANKCASE

All temperatures

CAPACITY, Refill²:

2.4L

1 Meeting specification standard MS-6395.

2 Capacity shown includes filter. After refill, check oil level.

CARS & LIGHT TRUCKS

CHRYSLER, DODGE, PLYMOUTH Continued • DODGE TRUCKS

TRANSAXLE, Automatic

All		AP4
CAPACITY, Initial Refill¹:	Liters	Qt
All	3.8	4.0

Manual

All		AP4
Capacity, Refill	Liters	Pt
Getrag 288	1.8	3.8
NV T350	2.4-2.7	5.1-5.7

¹ With engine at operating temperature, shift transmission through all gears. Check fluid level in PARK and add fluid as needed.

OTHER COMPONENTS

Brake/ Clutch Fluid Reservoir	HB
Power Steering Reservoir	AP4

2008-10 AVENGER, SEBRING SEDAN, SEBRING CONVERTIBLE

CRANKCASE	API★¹
2.4L, 2.7L	.5W-20 ³ , 5W-30 ³
3.5L:	

Above 0°F (-18°C)	10W-30 ⁴
Below 32°F (0°C)	.5W-30

CAPACITY, Refill²:	Liters	Qt
2.4L	4.3	4.5
2.7L	5.2	5.5
3.5L	5.2	5.5

¹ Meeting specification standard MS-6395.

² Capacity shown includes filter. After refill, check oil level.

³ Check oil fill cap for proper engine oil viscosity usage.

⁴ Preferred.

TRANSAXLE, Automatic

All		AP4
CAPACITY, Initial Refill¹:	Liters	Qt
41TE/41AE	3.8	4.0
62TE	5.2	5.5

Manual

All		AP4
CAPACITY, Refill:	Liters	Pt
BG6	2.0	4.2
NV T355	2.4-2.7	5.1-5.7

¹ With engine at operating temperature, shift transmission through all gears. Check fluid level in PARK and add fluid as needed.

OTHER COMPONENTS

Brake/ Clutch Fluid Reservoir	HB
Power Steering Fluid Reservoir	AP4

2008 PACIFICA

CRANKCASE	API★¹
3.8L All temperatures	.5W-20
4.0L All temperatures	10W-30

CAPACITY, Refill²:	Liters	Qt
3.8L	4.7	5.0
4.0L	5.2	5.5

¹ Meeting specification standard MS-6395.

² Capacity shown includes filter. After refill, check oil level.

TRANSAXLE, Automatic

All		AP4
CAPACITY, Initial Refill¹:	Liters	Qt
4-speed	3.8	4.0
6-speed	5.2	5.5

¹ With engine at operating temperature, shift transmission through all gears. Check fluid level in PARK and add fluid as needed.

REAR CARRIER, POWER TRANSFER UNIT & OVERRUNNING CLUTCH AWD

Rear Carrier & Power Transfer Unit	.75W-90	GL-5
CAPACITY, Refill:	Liters	Pt
Rear Carrier Unit	0.7	1.5
Power Transfer Unit	0.8	1.7
OVERRUNNING CLUTCH	0.6	1.3

OTHER COMPONENTS

Brake Fluid Reservoir	HB
Power Steering Fluid Reservoir	AP4

2008-10 300, CHARGER

2008 MAGNUM

CRANKCASE	API★
All ex. 6.1L	.5W-20 ¹
2.7L, All temperatures	.5W-20 ¹
3.5L, All temperatures	10W-30 ¹
5.7L, All temperatures	.5W-20 ¹
6.1L, All temperatures	.5W-40 ²

CAPACITY, Refill³:	Liters	Qt
2.7L, 3.5L	5.7	6.0
5.7L, 6.1L	6.6	7.0

¹ Meeting specification standard MS-6395.

² Must be synthetic oil, meeting specification MS-10725.

³ Capacity shown includes filter. After refill, check oil level.

TRANSMISSION, Automatic

All		AP4
CAPACITY, Initial Refill¹:	Liters	Qt
42RLE 4-speed	3.8	4.0
NAG1 5-speed	5.0	5.2

¹ With engine at operating temperature, shift transmission through all gears. Check fluid level in PARK and add fluid as needed.

TRANSFER CASE

All		SLF
CAPACITY, Refill:	Liters	Pt
All	0.6	1.3

FRONT DIFFERENTIAL

All	Synthetic 75W-90	GL-5
CAPACITY, Refill:	Liters	Pt
All	0.6	1.3

REAR DIFFERENTIAL

All	Synthetic 75W-140	GL-5
CAPACITY, Refill:	Liters	Pt
198MM	1.4	2.9
210MM, 215MM	1.6	3.4

OTHER COMPONENTS

Brake Fluid Reservoir	HB
Power Steering Reservoir	AP4

2008-10 CALIBER

CRANKCASE	API★¹
2008 all temperatures	.5W-20 ³ , 5W-30 ³
2009-10:	

1.8L, 2.0L, all temperatures	.5W-20 ³ , 5W-30 ³
2.4L: Non-turbo all temperatures	.5W-20 ³ , 5W-30 ³
Turbo all temperatures	.5W-40

CAPACITY, Refill²:	Liters	Qt
2008	4.3	4.5
2009-10:		
1.8, 2.0l	4.3	4.5

1.8, 2.0L	4.3	4.5
2.4L: Non-Turbo	4.3	4.5
Turbo	4.7	5.0

¹ Meeting specification standard MS-6395.

² Capacity shown includes filter. After refill, check oil level.

³ Check oil fill cap for proper engine oil viscosity usage.

TRANSAXLE, Automatic

All		VTF
CAPACITY, Initial Refill¹:	Liters	Qt
All	7.0	7.4

Manual

All		AP4
CAPACITY, Refill	Liters	Pt
BG6	2.0	4.2
Getrag DMT6	1.8	3.8
NVT355	2.7	5.7

¹ With engine at operating temperature, shift transmission through all gears. Check fluid level in PARK and add fluid as needed.

REAR CARRIER, POWER TRANSFER UNIT

OTHER COMPONENTS

Brake/Clutch Fluid Reservoir	HB
Power Steering Fluid Reservoir	AP4

OTHER COMPONENTS

Brake/Clutch Fluid Reservoir	HB
Power Steering Fluid Reservoir	AP4

2008-10 TOWN & COUNTRY, GRAND CARAVAN

CRANKCASE	API★¹
3.3L, 3.8L	.5W-20 ³ , 5W-30 ³
4.0L	10W-30

CAPACITY, Refill²:	Liters	Qt
3.3L, 3.8L	4.7	5.0
4.0L	5.2	5.5

¹ Flexible fuel engine oil must meet MS-9214.

² Capacity shown includes filter. After refill, check oil level.

³ Check oil fill cup for proper engine oil viscosity usage.

TRANSAXLE, Automatic

All		AP4
CAPACITY, Initial Refill¹:	Liters	Qt
4XTE	3.8	4.0
62TE	5.2	5.5

¹ With engine at operating temperature, shift transmission through all gears. Check fluid level in PARK and add fluid as needed.

OTHER COMPONENTS

Brake Fluid Reservoir	HB
Power Steering Reservoir	AP4

2008-10 DODGE CHALLENGER

CRANKCASE	API★
All ex. 6.1L	.5W-20 ¹
3.5L	10W-30 ¹
5.7L	.5W-20 ¹
6.1L	Synthetic 5W-40 ²

CAPACITY, Refill³:	Liters	Qt
3.5L	5.7	6.0
5.7L, 6.1L	6.6	7.0

¹ Meeting Chrysler material standard MS-6395.

² Meeting API SM or SM/CF and Chrysler material standard MS-10725.

³ Capacity shown is with filter. After refill, check oil level.

TRANSMISSION/TRANSAXLE Automatic

All		AP4
CAPACITY, Initial Refill:	Liters	Qt
NAG1	5.0	5.3
42 RLE	3.8	4.0

Manual

All		AP4
CAPACITY, Refill:	Liters	Pt
All	1	1

¹ To check the fluid level, remove the fill plug on the left side of the transmission. The fluid level should be at the bottom of the fill hole. Add fluid as needed.

DIFFERENTIAL

Rear:

3.5L	Synthetic 75W-140	GL-5
5.7L, 6.1L	Synthetic 75W-90	GL-5★ ¹
CAPACITY, Refill:	Liters	Pt

¹ Use Mopar® synthetic 75W-90 or equivalent with Mopar® friction modifier hypoid gear additive.

OTHER COMPONENTS

Brake/Clutch Fluid Reservoir	HB
Power Steering Reservoir	AP4

2009-10 DODGE JOURNEY

CRANKCASE	API★
2.4L	.5W-20 ¹
2.7L	.5W-20 ¹
3.5L	10W-30 ¹

CAPACITY, Refill²:	Liters	Qt
2.4L	4.3	4.5
2.7L, 3.5L	5.2	5.5

¹ Meeting Chrysler material standard MS-6395.

² Capacity shown is with filter. After refill, check oil level.

TRANSMISSION/TRANSAXLE, Automatic

All		AP4
CAPACITY, Initial Refill:	Liters	Qt
41TE/41AE	3.8	4.0
62TE	5.2	5.5

TRANSMISSION/TRANSAXLE, Manual

All		AP4
CAPACITY, Refill:	Liters	Pt
BG6	2.0	4.2
NV T355	2.4-2.7	5.1-5.7

OTHER COMPONENTS

Brake/Clutch Fluid Reservoir	HB
Power Steering Reservoir	AP4

DODGE TRUCKS

NITRO—SEE JEEP

1999 ALL GASOLINE MEDIUM & HEAVY DUTY EMISSION MODELS

CRANKCASE

Gasoline Models	API★
Above 0°F (-18°C)	10W-30 Preferred
Below 32°F (0°C)	.5W-30

CAPACITY, Refill:	Liters	Qt
Gasoline Models ¹ :		
5.2L, 5.9L	4.7	5.0
8.0L	6.6	7.0

¹ Capacity shown is with filter. After refill, check oil level.

TRANSMISSION, Automatic

CAPACITY, Initial Refill²:	Liters	Qt
All	1.4 ³	1.5 ³

¹ Chrysler Corp. recommends that all vehicles with Chrysler automatic transmissions be serviced with ATF+4® Automatic Transmission Fluid.

² With the engine at operating temperature, shift transmission through all gears. Check fluid level in NEUTRAL and add fluid as needed.

³ Add 1.5 qts. of fluid. Start engine & operate at idle. With service & parking brake applied, shift transmission through all gears. With transmission in Neutral, check fluid level. Fluid level should be at Min. mark on dipstick. Allow transmission fluid to reach operating temperature. See Note 1.

TRANSMISSION, Manual

NV4500		GL-4
All temperatures		Synthetic 75W-85
NV5600		GLS

CAPACITY, Refill:	Liters	Pt
NV4500	3.8	8.0
NV5600	4.5	9.5

TRANSFER CASE

CAPACITY, Refill:	Liters	Pt
NV241 (1999)	2.7	5.7
NP241 HD, NV241 HD	3.1	6.6
NV241 HD w/PTO	4.9	10.4

PTO ADAPTER

CAPACITY, Refill:	Liters	Pt
NV021	2.1	4.4

DIFFERENTIAL¹

Gasoline Models:

Dana Rear:		
Standard		GL-5
Limited-Slip		GL-5★
All temperatures		.90

All Others ex. Dana Rear: 1999:

Van:		
Standard		GL-5
Limited-Slip		GL-5★
All temperatures		.80W-90

Pickup, Truck:

Standard		GL-5
Limited-Slip		GL-5★
All temperatures		.75W-90

CARS & LIGHT TRUCKS

DODGE TRUCKS Continued

Others:		
Standard	GL-5	
Limited-Slip	GL-5★	
All temperatures	.80W-90	
CAPACITY, Refill²:		
Gasoline Models:		
Front:		
Dana 60 (248):		
1999	3.6	7.6
Rear:		
Dana 60 (248):		
2WD	3.0	6.3
4WD	3.4	7.2
Dana 70 (267):		
2WD	3.3	7.0
4WD	3.6	7.6
Dana 80 (286):		
2WD	3.2	6.8
4WD	4.8	10.1
1 Rear axles with limited slip & locking differentials include 6.5% friction modifier additive. Part No. 4318060.		
2 Note: Lubricant level in axles must not come up to the fill plug opening. The level must be below the opening as follows:		
Front: Dana	.1/4" (6mm)	
Rear:		
9.25"	.5/8" (16 mm)	
Dana	.3/4" (19 mm)	
OTHER COMPONENTS		
Brake & Clutch Master Cylinder	HB	
Suspension & Steering Linkage	LB	
Wheel Bearings,		
Transmission Linkage	(EP) GC	
Power Steering Reservoir	PS	
1999 ALL RWD & 4WD LIGHT DUTY GASOLINE EMISSION MODELS		
CRANKCASE		
Above 0°F (-18°C)	10W-30 ¹	
Below 32°F (0°C)	.5W-30	
CAPACITY, Refill²:		
	Liters	Qt
2.5L	4.2	4.4
3.9L	3.8	4.0
5.2L, 5.9L	4.7	5.0
1 Preferred.		
2 Capacity shown is with filter. After refill, check oil level.		
TRANSMISSION, Automatic		
CAPACITY, Initial Refill²:		
	Liters	Qt
All	1.4 ³	1.5 ³
1 Chrysler Corp. recommends that all vehicles with Chrysler automatic transmissions be serviced with ATF+4® Automatic Transmission Fluid.		
2 With the engine at operating temperature, shift transmission through all gears. Check fluid level in NEUTRAL and add fluid as needed.		
3 Add 1.5 qts. of fluid. Start engine & operate at idle. With service & parking brake applied, shift transmission through all gears. With transmission in Neutral, check fluid level. Fluid level should be at Min. mark on dipstick. Allow transmission fluid to reach operating temperature. See Note 2.		
TRANSMISSION, Manual		
NV1500 HD, NV3500	GLS	
AX-15: 1999	GL-3	
All temperatures	.75W-90	
NV4500	GL-4	
All temperatures	Synthetic 75W-85	
CAPACITY, Refill:		
	Liters	Pt
AX-15	3.1	6.6
NV1500 HD	2.2	4.7
NV3500	2.0	4.2
NV4500	3.8	8.0
TRANSFER CASE		
All	AF2, AF3, AP3, MA	
CAPACITY, Refill:		
	Liters	Pt
NP231, NV231 HD	1.2	2.5
NV241	2.7	5.7
NV242	1.2	2.5
DIFFERENTIAL¹		
1999:		
Front:		
7.25" C205F	GL-5	
All temperatures	.75W-90	
Rear 8.25" & 9.25":		
Vans:		
Standard	GL-5	
Limited Slip	GL-5★	
All temperatures	.80W-90	
Pickup, Truck:		
Standard	GL-5	
Limited-Slip	GL-5★	
All temperatures	.75W-90	
Dana rear:		
Standard	GL-5	
Limited-Slip	GL-5★	
All temperatures	.90	

CAPACITY, Refill²:		
Front: 4-wheel drive 7.25"	Liters	Pt
Model 194 FIA	1.4	3.0
C205F	1.7	3.6
Dana 44 (216)	2.3	4.9
Dana 60 (248)	3.6	7.6
Rear: 7.25"	1.4	3.0
8.25"	2.1	4.4
9.25"	2.3	4.8
Dana 60 (248) 2WD	3.0	6.3
4WD	3.4	7.2
1 Rear axles with limited slip & locking differential include 6.5% friction modifier additive. Part No. 4318060.		
2 Note: Lubricant level in axles must not come up to the fill plug opening. The level must be below the opening as follows:		
Front: 7.25"	.3/4" (19 mm)	
Dana	.1/4" (6 mm)	
Rear: 7.25" & 8.25"	.1/4" (6 mm)	
9.25"	.5/8" (16 mm)	
Dana	.3/4" (19 mm)	
OTHER COMPONENTS		
Brake & Clutch Master Cylinder	HB	
Suspension & Steering Linkage	LB	
Wheel Bearings,		
Transmission Linkage	(EP) GC	
Power Steering Reservoir	PS	
2003-09 SPRINTER VAN CRANKCASE		
2003-06	SEO	
All temperatures	.0W-30, 5W-30	
All temperatures	.0W-40, 5W-40, 5W-50	
Above -4°F (-20°C)	.10W-30	
Above -4°F (-20°C)	.10W-40, 10W-50, 10W-60	
Above 5°F (-15°C)	.15W-40, 15W-50	
Above 23°F (-5°C)	.20W-40, 20W-50	
2007-09	SEO	
All temperatures	.5W-30, 5W-40	
All temperatures	.0W-30, 0W-40	
CAPACITY, Refill¹:		
	Liters	Qt
2.7L	9.0	9.5
3.0L	12.5	13.2
3.5L	9.5	10.0
1 Capacity shown includes filter. After refill, check oil level.		
TRANSMISSION/TRANSAXLE Automatic		
2003-09	SLF ¹	
CAPACITY, Initial Refill²:		
	Liters	Qt
NAG1	5.0	5.3
1 Must meet specification MB 236.10, 236.12 such as Mopar® Part No. 05127382AA, or equivalent.		
2 To check the fluid level, remove the locking pin and cap from the dipstick tube. With the service brake actuated. Start engine and let it run at idle in the PARK position. Shift transmission through all gears with the engine idling. Warm up the transmission, wait at least 2 minutes and check oil level using dipstick 8863B with the engine running. Dipstick 8863B will be approximately 3 inches above the fill tube when installed. In any forward gear or reverse check the transmission fluid temperature using a scan to obtain correct oil temperature. At approximately 85°F the oil level should be at the 20 mm mark, at 120°F the oil level should be at the 40 mm mark, and at 180°F the oil level should be at the 60 mm mark on the dipstick. Add or drain fluid as needed and recheck. Install new dipstick tube cap and locking pin.		
DIFFERENTIAL		
Rear	GLS ¹	
CAPACITY, Refill²:		
	Liters	Pt
Rear	1.8	4.0
1 Use oil which meets specification MB 235.0, such as Shell spiral MB90, or equivalent.		
2 Fluid capacity can be .03L (1 oz.)		
OTHER COMPONENTS		
Brake Fluid Reservoir	HBH	
Power Steering Reservoir:		
2003-05	PS	
2006-09	AP4	
1999-2007 ALL DIESEL MODELS EX. SPRINTER		
2000-07 ALL GASOLINE MEDIUM & HEAVY DUTY EMISSION MODELS		
CRANKCASE		
All Gasoline Models:		
5.2L, 5.9L, 8.0L,		
Above 0°F (-18°C)	.10W-30 Preferred	
Below 32°F (0°C)	.5W-30	
5.7L:		
2003-04:		
Above 0°F (-18°C)	.10W-30	
Below 100°F (38°C)	.5W-30	
2005-06: All temperatures	.5W-20	
8.3L (SRT): All temperatures	Synthetic 0W-40 ¹	
All Diesel Models ex. Sprinter		
Engine Code C: 1999-2002	CG-4, CH-4	
Below 19°F (-7°C)	.5W-30	
0° to 30°F (-18° to -1°C)	.10W-30	
-10° to 0°F (-23° to -18°C)	.10W-30 ²	
Above 10°F (-12°C)	.15W-40	

Engine Code 6: 1999-2002		
CG-4, CH-4, CI-4		
Above 10°F (-12°C)	.15W-40	
0° to 30°F (-18° to -1°C)	.10W-30	
-10° to 0°F (-23° to -18°C)	.10W-30 ²	
Engine VIN A		
CI-4		
All temperatures	.15W-40	
2003-06	CI-4, CJ-4	
All Temperatures	Synthetic 5W-40	
Above 0°F (-18°C)	.15W-40	
2007 5.9L	CJ-4/S	
2007 6.7L	CJ-4	
Above 0°F (-18°C)	.15W-40	
All temperatures	Synthetic 5W-40	
CAPACITY, Initial Refill:		
	Liters	Qt
All Gasoline Models ³ :		
4.7L	5.6	6.0
5.2L, 5.9L	4.7	5.0
5.7L, 8.0L	6.6	7.0
8.3L (SRT)	8.2	8.7
All Diesel Models ex. Sprinter ⁴ :		
1999-2003	9.5	10.0
2004-07 (Inc filter)	11.4	12.0
1 Must meet Chrysler specification MS-10725 requirements.		
2 With block heater.		
3 Capacity shown includes filter. After refill, check oil level.		
4 Capacity shown is without filter. When replacing filter, fill it with oil before installing. Run engine and check dipstick, additional oil may be needed. Must let oil settle for 5 minutes before checking.		
TRANSMISSION, Automatic		
All ex. AS68RC	AP4	
AS68RC	SLF ¹	
CAPACITY, Initial Refill²:		
	Liters	Qt
A45RFE, 545RFE, 68RFE:		
2WD ³	5.2	5.5
4WD	6.2	6.5
AS68RC	6.8	7.2
Others	3.8	4.0
1 Mopar® AS68RC Automatic Transmission Fluid.		
2 With the engine at operating temperature, shift transmission through all gears. Check fluid level in NEUTRAL and add fluid as needed.		
3 DTCs may be set, reset with the DRBIII®, if necessary.		
TRANSMISSION, Manual		
Getrag 238, G56	AP4	
NV4500, T-56	GL-4	
All temperatures	Synthetic 75W-85	
NV5600	GLS	
CAPACITY, Refill:		
	Liters	Pt
G56 Diesel	5.6	11.8
G56 5.7L	4.7	10.0
Getrag 238, T56	2.2	4.6
NV4500	3.8	8.0
NV5600	4.5	9.5
TRANSFER CASE		
1999-2000	AP3, AF3	
2001-07 ex. NV246	AP4	
CAPACITY, Refill:		
	Liters	Pt
NV241	2.2	4.6
NV241 HD	3.1	6.5
NV241 HD w/PTO	4.9	10.4
NV241/244 GENII, NV243	1.6	3.4
NV246, NV271, NV273	1.9	4.0
PTO ADAPTER		
1999-2000	AP3, AF3	
2001-02	AP4	
CAPACITY, Refill:		
	Liters	Pt
NV021	2.1	4.6
DIFFERENTIAL		
Front:		
1999-2002	GL-5	
All temperatures	.80W-90	
2003-06	GLS	
All temperatures	Synthetic 75W-90	
2007		
C205F	GL-5	
All temperatures	.75W-85	
9.25" AA, AA EL	GLS	
All temperatures	Synthetic 75W-90	
Rear:		
Dana:		
Standard	GL-5	
All temperatures	.90	
Limited-Slip	GL-5★ ¹	
All temperatures	.90	
9.25 AA", 10.5" AA, 11.5"	GL-5	
All temperatures	Synthetic 75W-90	
CAPACITY, Refill²:		
	Liters	Pt
Front:		
Dana 60 (248)		
1999	3.6	7.6
2000-02	4.0	8.5
9.25" AA:		
2003-05	2.3	4.8
2006-07	2.2	4.6
AA EL 2006-07	2.0	4.2
C205FD	1.6	3.3

CARS & LIGHT TRUCKS

DODGE TRUCKS Continued

Rear:		
Dana 60 (248):		
1999-2003:		
2WD	3.0	6.3
4WD	3.4	7.3
2004-06	2.8	5.9
Dana 70 (267):		
2WD	3.3	7.0
4WD	3.6	7.8
Dana 80 (286):		
2WD	3.2	6.8
4WD	4.8	10.1
9.25"	2.1	4.4
10.5" AA, AA-EL		
2003-04	2.3	4.8
2005-07	2.5	5.3
11.5" AA		
2003-05	3.6	7.7
2006-07:		
Trac-Rite	4.0	8.4
Open	4.2	8.8

1 Rear axles with limited slip & locking differentials include 6.5% friction modifier additive. Part No. 4318060.

2 Note: Lubricant level in axles must not come up to the fill plug opening. The level must be below the opening as follows:

Front	.1/4" (6mm)
Rear	.3/4" (19 mm)

OTHER COMPONENTS

Brake & Clutch Master Cylinder	.HB
Suspension & Steering Linkage	.LB
Wheel Bearings, Transmission Linkage	.(EP) GC
Power Steering Reservoir:	
2002-07 1500, 2500, 3500	.AP4
Others	.PS

2000-07 ALL RWD & 4WD

GASOLINE LIGHT DUTY EMISSION MODELS INCL. CHRYSLER ASPEN CRANKCASE

2000-02: Above 0°F (-18°C)	.10W-30 ¹
Below 32°F (0°C)	.5W-30
2003-04:	
Dakota, Durango, and Ram Van	
Above 0°F (-18°C)	.10W-30
Below 100°F (38°C)	.5W-30
Ram Pickup	.5W-30 ²
2005-06:	
3.7L, 4.7L, 8.1L	.5W-30 or 10W-30 ^{1,2,3}
5.7L	.5W-20 ^{1,4}
2007: All Engines	.5W-30 ⁶ or 5W-20 ¹

CAPACITY, Refill⁵:	Liters	Qt
2.5L	4.3	4.5
3.9L	3.8	4.0
4.7L	5.6	6.0
5.7L	6.6	7.0
3.7L, 5.2L, 5.9L	4.7	5.0

1 Preferred.

2 Check oil cap for proper usage.

3 5W-30 is preferred for Flexible Fuel Vehicles.

4 With 5.7L Multiple Displacement System must use 5W-20 oil.

5 Capacity shown includes filter. After refill, check oil level.

6 5W-30 is only an option for the Light Duty Ram Trucks.

TRANSMISSION, Automatic

2 Check oil cap for proper usage.

3 5W-30 is preferred for Flexible Fuel Vehicles.

4 With 5.7L Multiple Displacement System must use 5W-20 oil.

5 Capacity shown includes filter. After refill, check oil level.

6 5W-30 is only an option for the Light Duty Ram Trucks.

TRANSMISSION, Automatic

All ex. AS68RC		AP4
AS68RC		SLF¹
CAPACITY, Initial Refill²:	Liters	Qt
A45RFE, 545RFE, 68RFE: 2WD ³	5.2	5.5
4WD	6.2	6.5
AS68RC	6.8	7.2
Others	3.8	4.0

1 Mopar® AS68RC Automatic Transmission Fluid.

2 With the engine at operating temperature, shift transmission through all gears. Check fluid level in NEUTRAL and add fluid as needed.

3 DTCs may be set, reset with the DRBIII®, if necessary

TRANSMISSION, Manual

Getrag 238, G56		.AP4
NV1500, NV3500		.GLS ¹
NV4500, T-56		.GL-4
All temperatures		Synthetic 75W-85
NV5600		.GLS
CAPACITY, Refill:	Liters	Pt
G56	4.7	10.0
Getrag 238, T-56	2.2	4.6
NV1500	2.2	4.6
NV3500: 2000-01 Dakota, Durango	2.0	4.2
2WD	2.3	4.8
4WD	2.0	4.2
NV4500	3.8	8.0
NV5600	4.5	9.5

1 2000 NV1500, include 0.2pt (0.1L) friction modifier.

1 2000 NV 1500, include 0.2pt (0.1L) friction modifier.

TRANSFER CASE

2000	AP3, AP3	
2001-07: ex. NV246	AP4	
NV246	SLF	
CAPACITY, Refill:	Liters	Pt
MP140, MP143	0.9	1.9
NV133, NV231 HD, NV233	1.2	2.5
NV144	0.8	1.7
NV241	2.2	4.6

CAPACITY, Refill:	Liters	Pt
NV241/244 GENII, NV243	1.6	3.4
NV242, NV244	1.3	2.7
NV271, NV273, NV246	1.9	4.0

DIFFERENTIAL

Front:		
C205F	.GL-5	
All temperatures	.75W-90	
9.25" AA, AA EL	.GLS	
All temperatures	.Synthetic 75W-90	
Dana 44 (216)	.GL-5	
All temperatures	.80W-90	

Rear:		
7.25" axles		
Standard	.GL-5	
Limited-Slip	.GL-5★ ¹	
All temperatures	.75W-90	
8.25", 9.25" axles:		
2000-02:		
Standard	.GL-5	
Limited-Slip	.GL-5★ ¹	
All temperatures	.75W-90	
2003-04 Dakota, Durango		
Standard	.GL-5	
Limited-Slip	.GL-5★ ¹	
All temperatures	.75W-90	
Trailer Tow	.GLS	
2005-07 Dakota, Durango; Aspen	.GL-5	
All temperatures	.Synthetic 75W-140	
2003-06 Ram Pickup/Truck	.GLS	
All temperatures	.Synthetic 75W-140	

9.25", 10.5", 11.5" Ram Pickup/Truck Axles:		
All	.GL-5★ ³	
All temperatures	.Synthetic 75W-90	
Dana axles:		
Standard	.GL-5	
Limited-Slip	.GL-5★ ¹	
All temperatures	.90	

CAPACITY, Refill²:	Liters	Pt
Front:		
9.25" AA	2.3	4.9
9.25" AA EL	2.0	4.2
C205F	1.6	3.6
Dana 44 (216)	2.3	4.9
Dana 60 (248)	4.0	8.5
186 FIA (Model 30)	1.2	2.6
Rear: 7.25"		
8.25": 2000-04	2.1	4.4
2005-07	2.0	4.2
9.25": 2000-04	2.3	4.9
2005-07	2.1	4.4

1 Rear axles with limited slip & locking differentials include 6.5% friction modifier additive. Part No. 4318060.

2 Note: Lubricant level in axles must not come up to the fill plug opening. The level must be below the opening as follows:

Front: C205F	.1/8" (3 mm)
Dana	.1/4" (6 mm)
Rear: 7.25" & 8.25"	.1/4" (6 mm)
9.25"	.5/8" (16 mm)
Dana	.3/4" (19 mm)

3 Trac-Lok® differentials require Limited Slip Additive in the lubricant. Trac-Rite™ / Trac-Rite EL™ differentials DO NOT require Limited Slip Additive.

OTHER COMPONENTS		
Brake & Clutch Master Cylinder	.HB	
Suspension & Steering Linkage	.LB	
Wheel Bearings,		
Transmission Linkage	.(EP) GC	
Power Steering Reservoir:		
2002-07: 1500, 2500, 3500	.AP4	
Aspen, Dakota, Durango	.AP4	
Others	.PS	

2008-10 1500, 2500, 3500 PICKUPS

CRANKCASE	API★
All Gasoline	.3.4
All Diesel	.3.4
3.7L, 5.7L, All temperatures	.5W-20 ^{1,2}
4.7L w/o flexible fuel engine:	
All temperatures	.5W-20 ^{1,2,8}
5.9L HO Diesel:	
Above 0°F (-18°C)	.15W-40 ⁷
All temperatures	.Synthetic 5W-40 ⁶
6.7L HO Diesel:	
Above 0°F (-18°C)	.15W-40 ⁷
All temperatures	.Synthetic 5W-40 ⁶

CAPACITY, Refill⁵:	Liters	Qt
3.7L	4.7	5.0
4.7L	5.7	6.0
5.7L	6.6	7.0
5.9L, 6.7L	11.4	12.0

1 Meeting specification standard MS-6395.

2 For 2500/3500 pickups with a gross combined weight greater than 14,000 lbs use 5W-30.

- 5.9L: Use only low ash diesel engine oil meeting API CJ-4/SM or higher that meets Cummins CES 20081 standards.
- 6.7L: Use API CJ-4 oil that meets specification standard MS-10902. Oil meeting Cummins CES 20081 standards may also be used. Low ash diesel engine oil is required.
- Capacity shown includes filter. After refill, check oil level.
- Preferred only when minimum temperatures consistently fall below 5°F (-15°C).
- Preferred.
- 4.7L with flexible fuel engine use Mopar® Flexible Fuel 5W-30 or equivalent which meets Chrysler standard MS-6395.

TRANSMISSION, Automatic

All ex. AS68RC		AP4
AS68RC		SLF ¹
CAPACITY, Initial Refill²:	Liters	Qt
42RLE, 48RE	3.8	4.0
45RFE, 545RFE, 68RFE:		
2WD	5.2	5.5
4WD	6.2	6.5
AS68RC	6.8	7.2

1 Use Mopar® AS68RC Automatic Transmission Fluid.

2 With the engine at operating temperature, shift transmission through all gears. Check fluid level in NEUTRAL and add fluid as needed.

TRANSMISSION, Manual

All		AP4
CAPACITY, Refill:	Liters	Pt
Getrag 238	2.2	4.6
G56:		
w/Diesel engine	5.9	12.4
w/5.7L	5.1	10.7

TRANSFER CASE

All ex. NV246		AP4
NV246		SLF ¹
CAPACITY, Refill:	Liters	Pt
NV241, NV243, NV244	1.6	3.4
NV246	1.9	4.0
NV271, NV273	1.89	4.0

1 Mopar® NV246 Transfer case fluid.

1 Mopar® NV246 Transfer case fluid.

DIFFERENTIAL

Standard	.GL-5
Limited Slip	.GL-5★
Front:	
American Axles	.Synthetic 75W-90
Corporate Axles:	
C205F Standard	.75W-90
C200F Standard	.Synthetic 75W-140
C200FE Limited Slip	.Synthetic 75W-140 ¹

Dana Axles	
Magna Axles	
.Synthetic 80W-90	
.Synthetic 75W-90	
Rear:	
American Axles	
Corporate Axles:	
Standard	
.Synthetic 75W-140	
Limited Slip	
.Synthetic 75W-140 ¹	

Dana Axles:	
226 RBI Standard	.80W-90 ²
226 RBI Limited Slip	.80W-90 ^{2,3}
226 RIA	.75W-90
302 RBI Synthetic	.75W-90

CAPACITY, Refill:	Liters	Pt
Front:		
American Axles:		
9.25" Standard	2.2	4.6
9.25" Limited Slip	2.0	4.2

Corporate Axles:		
C205F Standard	1.6	3.4
C200F Standard	1.7	3.6
C200FE Limited Slip	1.7	3.6

Dana Axles:		
186 FBI Standard	1.0	2.1
186 FIA Standard	1.2	2.6
216 FBI Limited Slip	1.3	2.7

Magna Axles:		
275 FBI Standard	5.1	10.8
Rear:		
American Axles:		
10.5"	2.5	5.3
11.5" Standard	4.2	8.9
11.5" Limited Slip	4.0	8.4

Corporate Axles:		
8.25" Standard	2.1	4.4
8.25" Limited Slip	2.1	4.4
9.25" Standard	2.2	4.6
9.25" Limited Slip	2.1	4.4
C213R Standard	2.1	4.4
C213RE Limited Slip	2.2	4.7

Dana Axles:		
226 RBI	2.3	4.8
226 RIA	1.4	2.9
302 RBI	6.6	14.0

1 Requires the addition of 4 oz. (118 ml) of Mopar® limited slip additive.

2 Trailer towing use synthetic 75W-140.

3 Requires the addition of 3.4 oz. of Mopar® limited slip additive.

OTHER COMPONENTS

Brake/Clutch Fluid Reservoir	.HB
Power Steering Reservoir	.AP4

CARS & LIGHT TRUCKS

DODGE TRUCKS Continued • DAEWOO • FORD, LINCOLN, MERCURY

2008-09 CHRYSLER ASPEN 2008-10 DODGE DAKOTA, DURANGO CRANKCASE

All	API★
2008-10 All temperatures	.5W-20, 5W-30 ^{1,2}
CAPACITY, Refill¹:	Liters Qt
3.7L	3.8 4.0
4.7L	5.7 6.0
5.7L	6.6 7.0

- 1 Meeting specification standard MS-6395.
2 Check oil cap for proper engine oil viscosity.
3 Capacity shown is with filter. After refill, check oil level.

TRANSMISSION/TRANSAXLE

Automatic

All ex. EVT	AP4
EVT	AF6
CAPACITY, Initial Refill:	Liters Qt
42RLE	3.8 ¹ 4.0 ¹
45RFE, 545RFE:	
2WD	5.2 6.2
4WD	6.2 6.5
2009 EVT	11.0 ² 11.6 ²

- 1 To check the fluid level, remove the dipstick tube cap. With the service brake actuated, start engine and let it run at idle in the PARK position. Shift transmission through all gears with the engine idling. Warm up the transmission, wait at least 2 minutes and check oil level using dipstick 9336 with the engine running. Dipstick 9336 will protrude from the fill tube when installed. In any forward gear or reverse, check the transmission fluid temperature using a scan to obtain correct oil temperature. The dipstick 9336 has indicator marks every 10 mm. At approximately 90°F the oil level should be at the 23 mm mark, at 130°F the oil level should be at the 36 mm mark, and at 180°F the oil level should be at the 45 mm mark on the dipstick. Add or drain fluid as needed and recheck. Install the dipstick tube cap.

- 2 Dry fill capacity. Amount may vary depending on configuration.

Manual

All	AP4
CAPACITY, Refill:	Liters Pt
G238	2.2 4.6

TRANSFER CASE

All	AP4
CAPACITY, Refill:	Liters Pt
MP3010	1.4 2.5
NV140	0.9 1.8
NV233	1.2 2.5
NV244	1.4 2.9
NV244 GENII	1.6 3.4

DIFFERENTIAL

Front	GL-5
All temperatures	.75W-90
Rear	GL-5★

All temperatures	Synthetic 75W-140 ¹
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CAPACITY, Refill:	Liters Pt
Front:	
C205F2	1.6 3.4

Rear:	
2008:	
8.25" ³	2.0 4.2
9.25" ⁴	2.1 4.4
2009:	
8.25"	2.0 4.2
8.25" Hybrid	1.9 4.0
9.25"	2.1 4.4
2010:	
8.25"	2.0 4.2
9.25"	2.1 4.4

- 1 Limited slip axles require 4 oz. (118 ml) of Mopar® limited slip additive.
2 Fill 20 mm ± 6 mm from bottom of fill hole.
3 Fill 22 mm ± 6 mm from bottom of fill hole.
4 Fill 31 mm ± 6 mm from bottom of fill hole.

OTHER COMPONENTS

Brake Fluid Reservoir	HB
Power Steering Reservoir	AP4

DAEWOO

1999-2002 LEGANZA, NUBIRA

CRANKCASE	API★
Above -5°F (-22°C)	.10W-50
Above -21°F (-30°C)	.5W-30
CAPACITY, Refill¹:	Liters Qt
All	4.0 4.2

- 1 Includes filter. After refill, check oil level.

TRANSAXLE

Leganza	AF3
Nubira: to 11/01 (THM)	AF3
from 11/01 (ZF)	AE
CAPACITY, Total Refill:	Liters Qt
Leganza:	
1999	6.5-7.0 6.9-7.4
2000-02	7.0-7.6 7.4-8.0
Nubira: to 11/01	11.5 ¹ 12.0 ¹
from 11/01	— —

- 1 Nubira does not have a dipstick. Refer to manufacturer's procedure.

TRANSAXLE, Manual	GL-4
All temperatures	.75W, 80W
CAPACITY, Refill:	Liters Pt
All	1.8 3.8

OTHER COMPONENTS

Brake/Clutch Fluid Reservoir	HB
Power Steering Fluid Reservoir	AF3

1999-2002 LANOS

CRANKCASE	API★
1999-2000:	
Above 0°F (-20°C)	.10W-50
All temperatures	.5W-30
2001-02:	
Above -5°F (-22°C)	.10W-30
Above -21°F (-30°C)	.5W-30

CAPACITY, Refill¹:	Liters Qt
All	3.8 4.0

- 1 Includes filter. After refill, check oil level.

TRANSAXLE, Automatic

CAPACITY, Initial Refill¹:	Liters Qt
Lanos (total fill)	11.5 12.2
1 With engine at operating temperature, shift transmission through all gears. Let engine slow idle in PARK for 3 minutes or more. Check fluid level and add fluid as needed.	

TRANSAXLE, Manual	GL-4
All temperatures	.75W, 80W
CAPACITY, Refill:	Liters Pt
Lanos	1.8 3.8

OTHER COMPONENTS

Brake Fluid Reservoir	HB
Clutch Fluid Reservoir	HB
Power Steering Reservoir	AF2, AF3

FORD, LINCOLN, MERCURY

PASSENGER CARS INCLUDING FWD VANS

1999-2010 FORD CROWN

VICTORIA, LINCOLN TOWN CAR,

MERCURY GRAND MARQUIS

2003-04 MERCURY MARAUDER

CRANKCASE	API★
All temperatures	.5W-20
CAPACITY, Refill:	Liters Qt
4.6L:	
1999-2002	4.7 ¹ 5.0 ¹
2003-07	5.7 ¹ 6.0 ¹
2008-10	5.9 ¹ 6.2 ¹

- 1 Capacity shown includes filter. After refill, check oil level.

TRANSMISSION/TRANSAXLE, Automatic

1999-2008	MA5
2009-10	MLV

CAPACITY, Total Fill^{1, 2}:	Liters Qt
Crown Victoria, Grand Marquis:	
1999-2002 ³	13.2 13.9
2004	12.1 12.8
2005-10 ³	13.2 13.9

Marauder:	
2003-04	12.1 12.8
Town Car:	
1999-2006	12.1 12.8
2007-10	13.2 13.9

- 1 With engine at operating temperature, shift transmission through all gears. Check fluid level in PARK and add fluid as needed.
2 Total or dry fill shown, use less fluid when refilling.
3 Police or handling package refill 12.1L (12.8 qts).

DIFFERENTIAL

1999-2001:	
Standard	.80W-90 GL-5
Limited-Slip	.80W-90 GL-5★ ¹

2002-10:	
Standard	.80W-90 GL-5 ³
Limited-Slip	Synthetic 75W-140 GL-5★ ¹

Police/Limousine	Synthetic 75W-140 GL-5★ ¹
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CAPACITY, Refill:	Liters Qt
1999-2002	1.8 ² 3.8 ²
2003-10	2.4 ² 5.0 ²
1999-2010 Town Car Limousine	2.2 4.6

- 1 Add 4 oz. of friction modifier Part No. EST-M2C118-A or equivalent for complete refill of a limited-slip axle.
2 Fill to 1/4"-9/16" (6-13mm) below fill hole.
3 If equipped with trailer tow option or 4:10 ratio use synthetic 75W-140.

OTHER COMPONENTS

Brake Fluid Reservoir	HB
Power Steering Reservoir:	
1999-2007	MA
2008-10	MA5

1999-2004 FORD MUSTANG

CRANKCASE	API★
All temperatures	.5W-20

CAPACITY, Refill¹:	Liters Qt
3.8L, 3.9L	4.7 5.0
4.6L SOHC:	
1999-01	4.7 5.0
2002-04	5.7 6.0
4.6L DOHC Cobra	5.7 6.0

- 1 Capacity includes filter. After refill, check oil level.

TRANSMISSION, Automatic

1999-2004	MA5
CAPACITY, Initial Refill¹:	Liters Qt
All	4.7 5.0

- 1 With engine at operating temperature, shift transmission through all gears. Check fluid level in PARK and add fluid.

TRANSMISSION, Manual

1999-2000	MA
2001-04: V6	MA

V8: w/T45 (2001)	MA
w/TR3650 (2001-02)	Synthetic MA
w/TR3650 (2003-04)	MA

2004: V8 ex. Cobra	MA
Cobra	1

CAPACITY, Refill:	Liters Pt
3.8L V6	2.6 5.6
4.6L V8: 1999-2000	3.1 6.6
2001-03	3.8 8.0
2004	3.7 7.8

- 1 2004 Cobra 6-Speed fluid type listed on transmission label.

DIFFERENTIAL

1999-2001 ex. 2001 Mustang Cobra:	
Standard	GL-5
Traction-Lok	GL-5★ ¹
All temperatures	.80W-90

2001 Mustang Cobra:	
Traction-Lok	GL-5★ ¹
All temperatures	Synthetic 75W-140

2002-04:	
Standard	GL-5
Traction-Lok	GL-5★ ¹
All temperatures	Synthetic 75W-140

CAPACITY, Refill²:	Liters Pt
All w/7.5" ring gear	1.5 3.2
1999-2003 8.8" ring gear	1.8 3.8
2004	2.0 4.2

- 1 Traction-Lok axles add 4 oz. of friction modifier.

- 2 Fill to 1/4" (6 mm) below bottom of fill hole.

OTHER COMPONENTS

Brake Fluid Reservoir	HB
Power Steering Reservoir	MA

2005-10 FORD MUSTANG

CRANKCASE	API★
4.0L, All temperatures	.5W-30
4.6L, All temperatures	.5W-20
5.4L, All temperatures	Synthetic 5W-50 ²

CAPACITY, Refill¹:	Liters Qt
4.0L	4.7 5.0
4.6L	5.7 6.0
5.4L	6.0 6.5

- 1 Capacity includes filter. After refill, check oil level.

- 2 Must meet Ford specification WSS-M2C931-B.

TRANSMISSION, Automatic

All	MA5
CAPACITY, Total Refill¹:	Liters Qt
5R55S	11.2 11.8

- 1 Transmission has no dipstick, refer to procedures in Automatic Transmission Service Guide.

TRANSMISSION, Manual

2005-10	MA
CAPACITY, Refill:	Liters Pt
V6 w/5-speed T5	2.6 5.5
V8: w/5-speed TR3650	3.0 6.3
w/6-speed TR6060	3.4 7.2

DIFFERENTIAL	
All w/8.8" ring gear:	
Standard	GL-5
Traction-Lok	GL-5★ ¹
All temperatures	Synthetic 75W-140

CAPACITY, Refill²:	Liters Pt
7.5" ring gear	1.5 3.2
8.8" ring gear: 2005	2.0 4.2
2006-07	1.9 4.0
2008-10	1.7 3.6

- 1 Traction-Lok axles add 4 oz. of friction modifier.

- 2 Fill to 1/4" (6 mm) below bottom of fill hole.

OTHER COMPONENTS

Brake Fluid Reservoir	HB
Clutch Fluid Reservoir	HB
Power Steering Reservoir:	
2005-08	MA
2009-10	MA5

2002-05 FORD THUNDERBIRD	
2000-06 LINCOLN LS	

CRANKCASE	API★
2000-01 LS w/3.9L, All temperatures	.5W-30
2000-01 All Others, All temperatures	.5W-20
2002-06 All temperatures	.5W-20

CARS & LIGHT TRUCKS

FORD, LINCOLN, MERCURY Continued • FORD TRUCKS

CAPACITY, Refill¹:		
3.0L V6: 2000	Liters	Qt
2001-05	5.7	6.0
3.9L V8: 2000-03	6.5	6.9
2004-05	5.7	6.0
2006	6.2	6.6
Thunderbird: 2002	6.5	6.9
2003-05	5.7	6.0
	6.2	6.6
¹ Capacities include filter change. After refill, check oil level.		
TRANSMISSION, Automatic .....MA5		
CAPACITY, Total Fill:		
All	Liters	Qt
	11.2 ¹	11.8 ¹
¹ Total fill, fill to bottom of fill hole. Transmission does not have a dipstick; refer to procedures in the Automatic Transmission Fluid Service Guide.		
TRANSMISSION, Manual .....MA		
CAPACITY, Refill:		
All	Liters	Pt
	1.1	2.3
DIFFERENTIAL .....GL-5		
2000-01 Lincoln LS, All temperatures		.80W-90
All Others, All temperatures		Synthetic 75W-140
CAPACITY, Refill:		
2000-05	Liters	Pt
2006	1.4 ¹	3.0 ¹
	1.3	2.7
¹ Fill to 1/8"-3/16" (3-15mm) below fill hole.		
OTHER COMPONENTS		
Brake Fluid Reservoir		.HB
Clutch Fluid Reservoir		.HB
Hydraulic Engine Cooling Fan		.MA
Power Steering Reservoir		.MA
2005-07 FORD FIVE HUNDRED, FREESTYLE, MERCURY MONTEGO		
CRANKCASE .....API★		
All temperatures		.5W-20
CAPACITY, Refill¹:		
3.0L V6	Liters	Qt
	5.7	6.0
¹ Capacities include filter change. After refill, check oil level.		
TRANSMISSION, Automatic		
6-speed		.TIV
CVT		.VTF
CAPACITY, Total Fill:		
CVT:	Liters	Qt
2005	9.5	10.0
2006-07	9.6	10.1
6-speed:		
2005-07	7.0	7.4
TRANSFER CASE .....GL-5		
All temperatures		.75W-90
CAPACITY, Refill:		
All	Liters	Pt
	0.9	1.9
DIFFERENTIAL		
Front		.GLS
Rear		.GL-5
All temperatures		.80W-90
CAPACITY, Refill:		
All	Liters	Pt
	0.7	1.5
OTHER COMPONENTS		
Brake Fluid Reservoir		.HB
Power Steering Reservoir		.MA
2004-07 FORD FREESTAR, MERCURY MONTEREY		
1999-2007 FORD TAURUS, MERCURY SABLE		
1999-2003 FORD WINDSTAR		
1999-2002 LINCOLN CONTINENTAL		
CRANKCASE .....API★		
1999-2007 All		.5W-20
CAPACITY, Refill¹:		
2.5L	Liters	Qt
3.0L:	4.7	5.0
ex. DOHC & SHO	4.3	4.5
DOHC:		
1999-2004	5.2	5.5
2005	5.7	6.0
2006	4.3	4.5
3.0L SHO, 3.2L SHO	4.7	5.0
3.4L SHO	6.2	6.5
3.8L 1999-2003	4.7	5.0
3.9L, 4.2L	4.7	5.0
4.6L	5.7	6.0
¹ Capacity shown includes filter.		
TRANSAXLE, Automatic		
1999-2007		.MA5
CAPACITY, Total Fill¹:		
3-speed	Liters	Qt
AXOD	7.9 ²	8.3 ²
AX4S	12.2 ³	12.9 ³
AX4N (4F50N): 2001-07	11.6 ³	12.3 ³
1999-2002 Continental	12.8 ³	13.5 ³
Freestar & Monterey:	13.0 ³	13.7 ³
2004-05	13.0 ³	13.7 ³
2006-07	11.6 ³	12.3 ³
¹ When servicing transmission, use less fluid to refill.		

- 2 Initial refill: with engine at operating temperature, shift transmission through all gears. Check fluid level in Park and add fluid as needed.
- 3 Total (dry) fill. Approximate, make final check with dipstick. For transaxle, drain or refill, measure amount drained & add approximately same amount. Do not overfill. See Note 2.

OTHER COMPONENTS

Brake Fluid Reservoir		.HB
Power Steering Reservoir		
(All Models 1999-2007)		.MA

2007-10 FORD EDGE, LINCOLN MKX

2009-10 FORD FLEX, LINCOLN MKS

2008-10 FORD TAURUS, TAURUS X

2010 LINCOLN MKT

2008-09 MERCURY SABLE

CRANKCASE

All temperatures		.5W-20
CAPACITY, Refill:		
3.5L: w/o Turbo	Liters	Qt
	5.2	5.5
w/turbo	5.7	6.0
3.7L	5.2	5.5

TRANSAXLE, Automatic

2007-09		.MA5
2010		.MLV
CAPACITY, Refill:		
2007-09	Liters	Pt
2010 6F50/6F55	9.5	10.0
	8.9	9.4

Differential

All		.80W-90
CAPACITY, Refill:		
All	Liters	Pt
	1.2	2.4

POWER TRANSFER UNIT

All		Synthetic 75W-140
CAPACITY, Refill:		
All	Liters	Pt
	0.5	1.1

OTHER COMPONENTS

Brake Fluid Reservoir		.HB
Power Steering Reservoir		.MA5

1999-2000 FORD CONTOUR, MERCURY MYSTIQUE

1999-2002 MERCURY COUGAR

CRANKCASE

All temperatures		.5W-20
CAPACITY, Refill¹:		
2.0L	Liters	Qt
	4.3	4.5
2.5L	5.5	5.8

¹ Capacity shown includes filter. After refill, check oil level.

TRANSAXLE, Automatic

CAPACITY, Initial Refill¹:		
All	Liters	Qt
	3.7	4.0

¹ With engine at operating temperature, shift transmission through all gears. Check fluid level in PARK and add fluid as needed.

TRANSAXLE, Manual

CAPACITY, Refill:		
All	Liters	Pt
	2.6	5.4

OTHER COMPONENTS

Brake Fluid Reservoir		.HB
Power Steering Reservoir:		
1999-2002		.MA

1999-2002 FORD ESCORT

2000-2010 FORD FOCUS

1999-2003 FORD ZX2

1999 MERCURY TRACER

CRANKCASE

Escort, Focus, Tracer, ZX2:		
1999-2001		.5W-20
2002-04: SVT Focus (2.0L HP)		.5W-30
2002-10 Others		.5W-20
CAPACITY, Refill¹:		
1.8L, 1.9L	Liters	Qt
	3.8	4.0
2.0L Ford SOHC	3.8	4.0
2.0L Ford DOHC:		
2005-10	4.3	4.5
2.3L 2005-07	4.3	4.5

¹ Capacity shown is with filter. After refill, check oil level.

TRANSAXLE, Automatic

Escort, Tracer, ZX2		.MA
Focus:		
2000-07		.MA5
2008-10		.MLV

CAPACITY, Total Fill:		
Escort, Tracer, ZX2	Liters	Qt
Focus: 2000-05	3.9 ¹	4.1 ¹
2006-07	6.6 ²	6.9 ²
2008-10	6.7 ²	7.0 ²
	6.6 ²	6.9 ²

¹ Initial refill. With engine at operating temperature, shift transmission through all gears. Check fluid level in park and add fluid as needed.

² Total or dry fill capacity shown. Approximate, make final check with dipstick. For transaxle drain & refill, measure amount of fluid drained and add approximately same amount. Do not overfill. See Note 1.

TRANSAXLE, Manual

Escort, Tracer		.MA
Focus: 2000-07		.SLF
2008-10		.GLS

CAPACITY, Refill:

Escort, Tracer, ZX2	Liters	Pt
	3.3	7.0
Focus: SOHC	2.3 ¹	4.9 ¹

Focus:

2004-05	2.0	4.2
2006-10	1.9	4.0
DOHC: 5-speed	1.9	4.0
6-speed	1.7	3.6

¹ Level must be no higher than 3/16 in. (5mm) below fill hole.

OTHER COMPONENTS

Brake Fluid Reservoir		.HB
Clutch Fluid Reservoir		.HB

2000-01 Focus w/Manual Tranaxle:

Brake Fluid Reservoir		.HBH
Clutch Fluid Reservoir		.HBH
Power Steering Reservoir:		
1999-2007		.MA
2008-10		.MA5

1999-2002 MERCURY VILLAGER

CRANKCASE

All temperatures		.5W-30
CAPACITY, Refill¹:		
3.0L, 3.3L	Liters	Qt
	3.8	4.0

¹ Capacity shown is with filter. After refill, check oil level.

TRANSAXLE, Automatic

Villager		.MA
CAPACITY, Refill:		
All	Liters	Qt
	8.3	8.7

OTHER COMPONENTS

Brake Fluid Reservoir		.HBH
Power Steering Reservoir:		
1999-2002		.MA

2006-10 FORD FUSION, MERCURY MILAN

2007-10 LINCOLN MKZ

2006 LINCOLN ZEPHYR

CRANKCASE

All temperatures		.5W-20
CAPACITY, Refill¹:		
2.3L	Liters	Qt
	4.3	4.5
2.5L	5.0	5.3
3.0L	5.7	6.0
3.5L	5.2	5.5

¹ Capacity shown includes filter. After refill, check oil level.

TRANSAXLE, Automatic

6-speed AW21		.TIV
6F35		.MLV
CVT		.MLV
FNR5		.SLF

CAPACITY, Total Fill:

6-Speed AW21	Liters	Qt
	7.0	7.4
6F35	8.5	9.0
CVT	4.1	4.3
FNR5	6.7	7.1

¹ With engine at operating temperature, shift transmission through all gears. Check fluid level in PARK and add fluid as needed.

TRANSAXLE, Manual

All temperatures		.75W-90
CAPACITY, Refill:		
All	Liters	Pt
	2.8	5.9

POWER TRANSFER UNIT

All temperatures		.Synthetic 75W-140
CAPACITY, Refill:		
2007-10	Liters	Pt
	0.53	1.1

DIFFERENTIAL

All temperatures		.80W-90
CAPACITY, Refill:		
2007-10	Liters	Pt
	1.2	2.5

OTHER COMPONENTS

Brake Fluid Reservoir		.HB
Power Steering Reservoir:		
2006-10 ex. 2007 MKZ		.MA
2007-10 MKZ		.MA5
2008-10 Fusion, Milan		.MA5

Clutch Fluid Reservoir		.HB
------------------------	--	-----

FORD TRUCKS

1999-2010 FORD RANGER

1999-2009 MAZDA B2300, B2500, B3000, B4000

CRANKCASE

4.0L		.5W-30 API★
All others		
CAPACITY, Refill:		
B Series: 2.3L	Liters	Qt
	3.8	4.0
2.5L	4.3	4.5
3.0L	4.3	4.5

CARS & LIGHT TRUCKS

FORD TRUCKS Continued

CAPACITY, Refill¹:		
4.0L	Liters	Qt
Ranger:		
2.3L	3.8	4.0
2.5L	4.3	4.5
3.0L:		
1999-2006	4.3	4.5
2007-08	4.7	5.0
4.0L	4.7	5.0
1 Capacity shown includes filter. After refill, check oil level.		
TRANSMISSION, Automatic MA5		
CAPACITY, Initial Refill¹:		
1999-2001	Liters	Qt
2002-10:		
2.3L	9.4 ²	9.9 ²
3.0L, 4.0L: 2WD	9.5 ²	10.0 ²
4WD	9.8 ²	10.3 ²
1 With engine at operating temperature, shift transmission through all gears. Check fluid level in PARK and add fluid as needed.		
2 Total dry fill shown.		
TRANSMISSION, Manual MA		
CAPACITY, Refill:		
2002-10:	Liters	Pt
All	2.6	5.5
TRANSFER CASE		
1999-2007		
2008-10		
CAPACITY, Refill:		
2002-10:	Liters	Pt
All	1.2	2.5
DIFFERENTIAL		
Front	.80W-90	GL-5
Rear: All w/o FX4	.80W-90	GL-5¹
All w/FX4	Synthetic 75W-140	GL-5¹
CAPACITY, Refill:		
Front:	Liters	Pt
B-Series:		
1999-2002	1.7	3.6
2003-06	1.5	3.2
Ranger:		
1999: 2.5L, 3.0L	1.4	3.0
4.0L	1.7	3.6
2000-08	1.7	3.6
Rear ^{2, 3} :		
Ranger, B-Series:		
1999-2003	2.4-2.5	5.0-5.3
2004-10: w/o FX4	2.4-2.5	5.0-5.3
w/FX4	2.5-2.6	5.2-5.5
1 Add 4 oz. of friction modifier meeting Ford Spec. EST-M2C118-A for complete refill of traction-loc axles.		
2 Fill no more than 1/4"-9/16" below fill plug hole.		
3 Traction-loc axles use 2.2-2.4L (4.75-5.0 pts) of fluid.		
OTHER COMPONENTS		
Brake Fluid Reservoir		HB
Clutch Fluid Reservoir		HB
Power Steering Reservoir: 1999-2007		MA
2008-10		MA5
1999-2005 ECONOLINE VANS		
CRANKCASE:		
Gasoline		API★
All temperatures		.5W-20
Diesel:		
1999-2005	CI-4/ SL, CH-4, CG-4/SH	
Above 10°F (-12°C)	.15W-40 ^{1, 3}	
-10°F to 90°F (-23°C to 32°C)	.10W-30 ²	
Below 30°F (-1°C)	.5W-30	
Below 0°F (-18°C)	.0W-30	
CAPACITY, Refill¹:		
All Gasoline	Liters	Qt
Diesel:		
1999-2005	14.2	15.0
1 Preferred above 30°F (-1°C).		
2 Preferred from -10°F to 30°F (-23°C to -1°C).		
3 15W-40 recommended for above 50°F (10°C), and must be used when towing a trailer or heavy duty driving.		
4 Capacity shown includes filter. After refill, check oil level.		
TRANSMISSION, Automatic		
1999-2005 4R70/75 E-W		MA5
2004-05 Torqshift		MSP
CAPACITY, Initial Refill¹:		
1999-2005 4R70/75 E-W	Liters	Qt
1999-2004 4R100	4.7	5.0
Torqshift 5-speed 2004-05	6.1	6.5
	7.0	7.4
1 With engine at operating temperature, shift transmission through all gears.		
DIFFERENTIAL		
Dana axles:		
1999-2002:		
ex. 80 & E-350 w/4.10 Ratio:		
Conventional	.GL-5	
Traction-Lok	.GL-5★ ²	
All temperatures	.80W-90	
80 & E-350 w/4.10 Ratio:		
Conventional	.GL-5	
Traction-Lok	.GL-5★ ²	
All temperatures	Synthetic 75W-140	

2003-05:		
ex. M60-IU		
Conventional	.GL-5 ¹	
Traction-Lok	.GL-5★ ^{1, 3}	
All temperatures	.80W-90	
M60-IU:		
Conventional	.GL-5 ¹	
Traction-Lok	.GL-5★ ^{1, 3}	
All temperatures	.90	
2005:		
E350 w/M70 (M248)	.GL-5 ⁴	
All temperatures	Synthetic 75W-140	
E350 w/M70 HD limited slip	.GL-5★ ³	
Others w/limited slip	.GL-5★ ⁴	
All temperatures	.90	
Others w/conventional	.GL-5	
All temperatures	Synthetic 80W-90	
Ford axles:		
1999-2002:		
Conventional	.GL-5	
Traction-Lok	.GL-5★ ²	
All temperatures	Synthetic 75W-140	
Visteon axles:		
All ex. 2005:		
Conventional	.GL-5	
Traction-Lok	.GL-5★ ⁴	
All temperatures	Synthetic 75W-90	
2005		
Conventional	.GL-5	
Traction-Lok	.GL-5★ ⁴	
All temperatures	Synthetic 75W-140	
CAPACITY, Refill:		
Ford 8.8", 9.75"	Liters	Pt
Visteon 8.8", 9.75"	2.6-2.7	5.5-5.8
	2.6-2.7	5.8-5.8
Dana:		
M60-IU	3.0	6.3
M70-2U	3.1	6.6
M70-1HD	3.5	7.5
80 1999-2001	3.9	8.25
M70FF	3.2	6.8
M60	3.0	6.3
M70HD:		
E-350 DSO	3.5	7.4
E-450	3.9	8.3
1 Axles subject to frequent trailer towing particularly in hot or hilly area, use synthetic 75W-140 GL-5.		
2 Traction-Lok axles, add friction modifier. For complete axle fill, Ford 8.8" add 4 oz. Ford 10.25" axle & dana axles add 8 oz.		
3 Add 8 oz. of friction modifier. For complete axle fill.		
4 Add 4 oz. of friction modifier. For complete axle fill.		
OTHER COMPONENTS		
Brake Fluid Reservoir		HB
Power Steering Reservoir:		
1999-05		MA
2006-10 ECONOLINE VANS		
CRANKCASE:		
Gasoline		API★
All temperatures		.5W-20
Diesel:		
2006-07	CI-4+1, CI-4/ SL, CH-4	
2008-10	CJ-4, CJ-4/ SM	
Above 10°F (-12°C)	.15W-40 ^{2, 3}	
-10°F to 90°F (-23°C to 32°C)	.10W-30 ⁴	
Below 30°F (-1°C)	.5W-30, 5W-40	
Below 0°F (-18°C)	.0W-30	
CAPACITY, Refill⁵:		
All Gasoline	Liters	Qt
Diesel		
1 Preferred.	5.7	6.0
2 Preferred above 30°F (-1°C).	14.2	15.0
3 Recommended for trailer towing.		
4 Preferred from -10°F to 30°F (-23°C to -1°C).		
5 Capacity shown includes filter. After refill, check oil level.		
TRANSMISSION, Automatic		
4R70/75 E-W:		
2006-08		MA5
2009-10		MLV
Torqshift:		
2006-08		MSP
2009-10		MLV
CAPACITY, Initial Refill¹:		
4R70/75 E-W:	Liters	Qt
2006-07	4.7	5.0
2008-10	13.1 ²	13.9 ²
Torqshift 5-speed:		
2006-07	7.0	7.4
2008-10	17.7 ²	18.8 ²
1 With engine at operating temperature, shift transmission through all gears. Check fluid level in PARK and add fluid as needed.		
2 Total dry fill capacity.		

DIFFERENTIAL		
2006:		
Dana Axles ex. E-350 w/Dana M70 (M248)		
Conventional	.80W-90	GL-5
Limited Slip	.90	GL-5★²
E-350 w/Dana M70 (M248)		
Conventional	Synthetic 75W-140	GL-5
Limited Slip	Synthetic 75W-140	GL-5★²
Visteon 8.8", 9.75"		
Conventional	Synthetic 75W-140	GL-5
Traction-Lok	Synthetic 75W-140	GL-5★¹
2007-10:		
Dana Axles: ex. E-350 w/Dana M60 (M248)		
4.10 axle ratio:		
Conventional	.80W-90	GL-5
Limited Slip	.90	GL-5★³
E-350 w/Dana M60 (M248) 4.10 axle ratio:		
Conventional	Synthetic 75W-140	GL-5
Limited Slip	Synthetic 75W-140	GL-5★³
CAPACITY, Refill⁴:		
Dana M60:	Liters	Pt
2006	3.0	6.3
2007-10	2.8	5.9
Dana M70	3.0	6.3
Dana M70FF:		
2006:		
Limited Slip	3.2	6.8
Conventional	3.1	6.6
2007-10	3.1	6.6
Dana M70HD	3.9	8.3
Visteon 8.8", 9.75"	2.6	5.5
1 Add 4 oz. of friction modifier meeting Ford specification EST-M2C118-A or equivalent.		
2 Dana limited-slip axles (E-250, E-350) add 8 oz. of friction modifier meeting Ford specification EST-M2C118-A or equivalent.		
3 Only for Dana (M60) limited-slip axles add 8 oz. of friction modifier meeting Ford specification EST-M2C118-A or equivalent.		
4 Fill 1/4" to 9/16" (6 mm to 14 mm) below bottom of fill hole.		
OTHER COMPONENTS		
Brake Fluid Reservoir		HB
Power Steering Reservoir:		
2006-07		MA
2008-10		MA5
1999-2010 FORD F-150, 1999 FORD F250LD, 2006-08 LINCOLN MARK LT, 2002 LINCOLN BLACKWOOD		
CRANKCASE		
All		.5W-20 API★
CAPACITY, Refill¹:		
VIN Code 5 2004-10	Liters	Qt
All others	6.6	7.0
	5.7	6.0
1 Capacity shown includes filter. After refill, check oil level.		
TRANSMISSION/TRANSAXLE, Automatic		
1999-2004 E4OD, 4R100		MA
1999-2010 4R70/75 E-W		MA5
2009-10 6R80		MLV
CAPACITY, Total Fill^{1, 2}:		
1999-2001:	Liters	Qt
4R70W	13.1	13.9
E4OD, 4R100 (4x2)	15.0	15.9
E4OD, 4R100 (4x4)	15.5	16.4
2002-04 Heritage:		
4R100 (4x2)	16.1	17.0
4R100 (4x4)	16.7	17.7
4R70/75 E-W	13.2	13.9
2004-10 4R70/75 E-W	13.2	13.9
2009 6R80	13.2	13.9
2010 6R80:		
4.6L	11.4	12.1
5.4L	12.4	13.1
Manual		
1999-2007		MA
2008		MA5
CAPACITY, Refill:		
5-speed	Liters	Pt
	3.5	7.4
1 With engine at operating temperature, shift transmission through all gears. Check fluid level in PARK and add fluid as needed.		
2 Total (dry) capacity. Approximate, make final check with dipstick.		
TRANSFER CASE		
1999-2007		MA
2008-10		SLF
CAPACITY, Refill:		
1999-2008	Liters	Pt
2009-10	1.9	4.0
	1.5	3.2
DIFFERENTIAL		
Front:		
1999-2003		GL-5
All temperatures		.75W-90
2004-10		GL-5
All temperature		.80W-90

CARS & LIGHT TRUCKS

FORD TRUCKS Continued

Rear:

Conventional	.....	GL-5
Traction-Lok	.....	GL-5★
1999-2010	.....	

All temperaturesSynthetic 75W-140

CAPACITY, Refill:Liters Pt

Front:		
1999	1.8-2.0	3.5-3.7
2000-07	2.0	3.7
2008-10	1.8	3.5

Rear:

8.8", 9.75"		
1999-2000	2.6-2.7 ¹	5.5-5.8 ¹
2001-10	2.6 ¹	5.5 ¹
10.25"		
1999-2000	3.3-3.8 ²	7.5-8.0 ²
2001-03	3.3 ²	6.9 ²
2004	3.3 ¹	6.9 ¹
2005-08	3.3 ²	6.9 ²

1 Add 4 oz of friction modifier, Ford specification EST-M2C118-A for complete refill of traction-lok axles.

2 Add 8 oz of friction modifier, Ford specification EST-M2C118-A for complete refill of traction-lok axles.

OTHER COMPONENTS

Brake Fluid ReservoirHBH

Clutch Fluid ReservoirHBH

Power Steering Reservoir:

1999-2007	.....	MA
2008-10	.....	MA5

1999-2010 FORD EXPEDITION, LINCOLN NAVIGATOR

CRANKCASE

All5W-20 API★

CAPACITY, Refill:Liters Qt

VIN Code 5: 2004-106.6 7.0

All others5.7 6.0

1 Capacity shown includes filter. After refill, check oil level.

TRANSMISSION

Automatic

4R70E, 4R70W 1999-2006MA5

4R100, E4ODMA

6HP26MSP

6R75MSP

6R80MLV

CAPACITY, Initial Refill:Liters Qt

4R70W, 4R70E4.7 5.0

4R100, E4OD6.1 6.5

6HP26:4.7² 5.0²

20079.0^{2,3} 9.5^{2,3}

2008 6R7510.5³ 11.0³

2009 6R8010.5³ 11.0³

2010 6R8012.4³ 13.1³

1 With engine at operating temperature, shift transmission through all gears. Check fluid level in PARK and add fluid as needed.

2 Transmission has no dipstick, refer to procedures in Automatic Transmission Fluid Service Guide.

3 Total or dry fill.

TRANSFER CASE

1999-2007MA

2008-10SLF

CAPACITY, Refill:Liters Pt

All1.9 4.0

DIFFERENTIAL

FrontGL-5

All temperatures80W-90

Rear:

ConventionalGL-5

Traction-LokGL-5★

All temperaturesSynthetic 75W-140

CAPACITY, Refill:Liters Pt

Front 1999-20101.7 3.6

Rear:

1999-98 Ford 8.8", 9.75"³2.6⁴ 5.5⁴

Ford 10.25"³3.5 7.4

1999-20022.7 5.8

2003-04:

8.8" Conventional1.7 3.6

8.8", 9.75" Traction-Lok1.8 3.8

9.75" Conventional1.9 4.0

2005-06:

9.75"2.0 4.2

2007-10:

9.75" Conventional2.1 4.5

9.75" Traction-Lok2.0 4.2

1 2003, All temperatures use Synthetic 75W-90.

2 Add 4oz. of friction modifier for complete axle refill.

3 8.8", 10.25" have removable cover.

4 Fill 1/4 to 9/16" below fill hole.

OTHER COMPONENTS

Brake Fluid ReservoirHB

Power Steering Reservoir:

1999-2007	.....	MA
2008-10	.....	MA5

2001-05 FORD EXPLORER SPORT 2001-05 & 2007 FORD SPORT TRAC

1999-2001 FORD EXPLORER, MERCURY MOUNTAINEER

CRANKCASE

All temperatures:5W-30

4.0L5W-20

All others5W-20

CAPACITY, Refill:Liters Qt

4.0L4.7 5.0

4.6L5.7 6.0

5.0L4.7 5.0

1 Capacity shown includes filter. After refill, check oil level.

TRANSMISSION, Automatic

1999-2005 AllMA5

2007 6R60MSP

CAPACITY, Initial Refill:Liters Qt

4R70W w/5.0L4.7 5.0

1999-2001 All others3.7 4.0

2002 Explorer Sport, Sport Trac:

2WD9.5² 10.0²

4WD9.8² 10.3²

2007 Explorer Sport Trac:

6R6010.6² 11.2²

5R55S11.7² 12.4²

2002-07 4.0L:

2WD9.5² 10.0²

4WD9.8² 10.3²

1 With engine at operating temperature, shift transmission through all gears. Check fluid level in PARK and add fluid as needed.

2 Total fill shown.

TRANSMISSION, Manual

.....MA

CAPACITY, Refill:Liters Pt

All2.6 5.5

TRANSFER CASE

.....MA

CAPACITY, Refill:Liters Pt

1999-2007 Explorer, Mountaineer1.4 3.0

w/4WD1.4 3.0

1999-2001 Explorer, Mountaineer1.3 2.6

w/AWD1.3 2.6

2001-03 Explorer Sport, Sport-Trac1.2 2.5

2004-05 All1.2 2.5

2007 Explorer Sport Trac1.4 3.0

DIFFERENTIAL

Front:

1999-2007 othersGL-5

All temperaturesSynthetic 75W-90

Rear:

Conventional:

1999-2001 Explorer, MountaineerGL-5

w/5.0LSynthetic 75W-140

All temperaturesGL-5

1999-2007 All others80W-90

All temperatures80W-90

Traction-Lok

1999-2001 Explorer, MountaineerGL-5★¹

w/5.0LSynthetic 75W-140

All temperaturesGL-5★¹

1999-2007 All others80W-90

All temperatures80W-90

2004-05 & 2007

Sport TracGL-5★²

All temperaturesSynthetic 75W-140

CAPACITY, Refill:Liters Pt

Front: Explorer, Mountaineer: 1999-20021.7 3.6

2003-051.5 3.2

Explorer Sport Trac: 2001-041.7 3.6

20051.5 3.2

20071.3 2.7

Rear:

Explorer, Mountaineer:

1999-20012.7³ 5.7³

Explorer Sport, Sport Trac2.6³ 5.5³

Sport Trac 2005:

Conventional2.3³ 4.9³

Traction-Lok2.4³ 5.1³

Sport Trac 2007:1.7³ 3.6³

1 Add 4 oz. of friction modifier for complete axle refill.

2 Add 4 oz. of friction modifier Ford Spec ES-4L3W-M2C196-BA.

3 Fill to no more than 1/4" - 9/16" below fill plug hole.

OTHER COMPONENTS

Brake Fluid ReservoirHB

Clutch Fluid ReservoirHB

Power Steering ReservoirMA

1999-2006 EXCURSION, F250 HD, F350, F450, F550

CRANKCASE

GasolineAPI★

DieselCH-4, CI-4, CI-4★

Gasoline:

All temperatures5W-20

Diesel:

Above 30°F (-1°C)15W-40

-10° to 30°F (-23° to -1°C)10W-30

Below -10°F (-1°C)0W-30

CAPACITY, Refill:Liters Qt

Gasoline 1999-20045.7 6.0

2005-06:6.6 7.0

Code 5, 5.4L6.6 7.0

Code V, Y, 6.8L14.1 14.9

1 Capacity shown includes filter. After refill, check oil level.

TRANSMISSION, Automatic

4R100MA

5R110WMSP

CAPACITY, Initial Refill:Liters Qt

4R1006.1 6.5

5R110W7.1 7.5

1 With engine at operating temperature, shift transmission through all gears. Check fluid level in PARK and add fluid as needed.

TRANSMISSION, Manual

5-speed ZF 1999-2001Synthetic MA

All othersMA

CAPACITY, Refill:Liters Pt

5-speed ZF S5-473.2 6.8

6-speed ZF S6-650: w/o oil cooler5.5 11.6

w/oil cooler6.0 12.7

TRANSFER CASE

.....MA

CAPACITY, Refill:Liters Pt

NV2711.9 4.0

DIFFERENTIAL

Front:

1999-2001GL-5

All temperatures75W-90

2002-06GL-5

All temperatures90

Rear:

Conventional:

1999-2006 Dana 80GL-5

All temperaturesSynthetic 75W-90

1999-2001 Dana 135GL-5¹

All temperatures80W-90

Ford axlesGL-5

All temperaturesSynthetic 75W-140

2002-06 Dana S110, 130, 135GL-5

All temperaturesSynthetic 75W-140

Traction-Lok:

1999-2006 Dana 80GL-5★²

All temperaturesSynthetic 75W-90

1999-2001 Dana 135GL-5★^{1,2}

All temperatures80W-90

2002-04 Dana 135GL-5★²

All temperaturesSynthetic 75W-140

Ford axlesGL-5★²

All temperaturesSynthetic 75W-140

CAPACITY, Refill:Liters Pt

Front: Excursion, F250-550 Super Duty:

1999-20002.8 5.9

2000-04: Dana 501.8 3.8

Dana 602.7 5.8

2005 Excursion2.8 5.9

2005-06 All Others3.0 6.3

Rear:

1999-2006 F250-550 SD:

Ford 10.5"3.3 6.9

Dana 80: Conventional4.0³ 8.5³

Trac-Lok3.8³ 8.0³

D

CARS & LIGHT TRUCKS

FORD TRUCKS Continued • GEO, CHEVROLET-PONTIAC

2008-10	CJ-4
Above 20°F (-7°C)	15W-40 ⁴
0°F to 50°F (-18°C to 10°C)	10W-30
Above -20°F (-29°C)	5W-40 ⁴
Below 50°F (10°C)	0W-40/ 0W-30

CAPACITY, Refill ¹ :	Liters	Qt
Gasoline	6.6	7.0
Diesel	14.2	15.0

- 1 Preferred above 30°F (-1°C)
- 2 Preferred from -10°F to 30°F (-23°C to -1°C)
- 3 Capacity shown includes filter. After refill, check oil level.
- 4 15W-40 and 5W-40 oils are recommended for above 50°F (10°C), and must be used when towing a trailer or heavy duty driving.

TRANSMISSION/TRANSAXLE, Automatic

2007-08	MSP
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2009-10	MLV
---------	-----

CAPACITY, Initial Refill ¹ :	Liters	Qt
All ex. 2010 SR110	7.1	7.5
2010 SR110	16.6 ¹	17.5 ¹

1 Total or dry fill.

2007	MA
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2008-10	SLF
---------	-----

CAPACITY, Refill:	Liters	Pt
6-speed	5.5	11.6

TRANSFER CASE

2007	MA
------	----

2008-10	SLF
---------	-----

CAPACITY, Refill:	Liters	Pt
All	1.9	4.0

DIFFERENTIAL

Front	80W-90 GL-5
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Rear: Dana 80	Synthetic 75W-90 GL-5
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Dana S110/ S130	Synthetic 75W-140 GL-5
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10.5" axle	Synthetic 75W-140 GL-5 [★]
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CAPACITY, Refill:	Liters	Pt
Front	2.8	5.8

Rear: 10.5" axle	3.3 ¹	6.9 ¹
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Dana S110, S130	6.6	14.0
-----------------	-----	------

Dana 80	4.0	8.5
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1 Add 8 oz. friction modifier Ford spec Est-M2C118-A for complete axle fill.

OTHER COMPONENTS

Brake Fluid Reservoir	HB
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Clutch Fluid Reservoir	HB
------------------------	----

Power Steering Fluid: 2007	MA
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2008-10	MA5
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2001-10 FORD ESCAPE,

ESCAPE HYBRID

2001-10 MAZDA TRIBUTE

2005-10 MERCURY MARINER,

MARINER HYBRID

CRANKCASE

All temperatures	5W-20
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CAPACITY, Refill ¹ :	Liters	Qt
2.0L, 2.3L	4.3	4.5

2.5L	4.7	5.0
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3.0L: 2001-04	5.2	5.5
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2005-10	5.7	6.0
---------	-----	-----

1 Capacity shown includes filter. After refill, check oil level.

TRANSALE, Automatic

2001-06	MA
---------	----

2007-08	MA5
---------	-----

2009-10: Escape, Mariner	MLV
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Tribute	MA5
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CAPACITY, Initial Refill ¹ :	Liters	Qt
CD4E: 2001-04	3.7	3.9

2005-10	9.5 ²	10.0 ²
---------	------------------	-------------------

ECVT Hybrid	5.0 ²	5.3 ²
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2009-10 6-Speed	8.5 ²	9.0 ²
-----------------	------------------	------------------

1 With engine at operating temperature, shift transmission through all gears. Check fluid level in PARK and add fluid as needed.

2 Approximate. Total dry fill.

TRANSALE, Manual

All temperatures	75W-90
------------------	--------

CAPACITY, Refill:	Liters	Pt
2001-04: FWD	2.7	5.7

4WD	2.2	4.6
-----	-----	-----

2005-07: FWD	2.3	4.9
--------------	-----	-----

4WD	2.4	5.1
-----	-----	-----

2008	2.4	5.1
------	-----	-----

2009-10: Escape, Mariner	2.3	4.9
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Tribute	2.4	5.1
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POWER TAKEOFF (Center Differential)

2001-07:	
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4WD w/AT	GL-5
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All temperatures	Synthetic 75W-140
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4WD w/MT	GL-5
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All temperatures	80W-90
------------------	--------

2008-10:	
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Escape, Mariner	Synthetic 75-140 GL-5
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Tribute: 4WD w/AT	Synthetic 75W-140 GL-5
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4WD w/MT	80W-90 GL-5
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CAPACITY, Refill:	Liters	Pt
All	0.4	0.8

DIFFERENTIAL, Rear

All temperatures	80W-90
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CAPACITY, Refill:

Liters	Pt
All ex. Hybrid, 2008-10 Tribute:	

2001-07	1.4	3.0
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2008-10	1.15	2.43
---------	------	------

Hybrid Models	1.4	3.0
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2008-10 Tribute	1.15	2.43
-----------------	------	------

OTHER COMPONENTS

Brake Fluid Reservoir	HB
-----------------------	----

Clutch Fluid Reservoir	HB
------------------------	----

Power Steering Reservoir	MA
--------------------------	----

2002-07 FORD EXPLORER

4-DOOR (EX. SPORT-TRAC)

2008-10 FORD EXPLORER,

SPORT-TRAC

2003-05 LINCOLN AVIATOR

2002-10 MERCURY

MOUNTAINEER

CRANKCASE

4.0L All temperatures	5W-30
-----------------------	-------

4.6L All temperatures	5W-20
-----------------------	-------

CAPACITY, Refill ¹ :	Liters	Qt
4.0L	4.7	5.0

4.6L	5.7	6.0
------	-----	-----

1 Capacity shown includes filter. After refill, check oil level.

TRANSMISSION, Automatic

5R55W, 5R55S	MA5
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6R60	MSP
------	-----

6R80	MLV
------	-----

CAPACITY, Total fill ¹ :	Liters	Qt
5R55W: 2002-05	12.0 ²	12.7 ²

5R55S: 2006	12.3	13.0
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2007-08	11.7	12.4
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2010	12.0	12.7
------	------	------

6R60	10.5 ²	11.0 ²
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6R80: 2009	10.0	11.2
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2010	11.4	12.1
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1 With engine at operating temperature, shift transmission through all gears. Check fluid level in PARK and add fluid as needed.

2 Total fill shown. Transmission does not have a dipstick.

TRANSMISSION, Manual

MA5	
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TRANSFER CASE

2002-07	MA
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2008-10	SLF
---------	-----

CAPACITY, Refill:	Liters	Pt
AWD	1.3	2.7

4WD	1.4	3.0
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DIFFERENTIAL

Front:	GL-5
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All temperatures	80W-90
------------------	--------

Rear:	
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ex. Limited-Slip	GL-5
------------------	------

Limited-Slip	GL-5 [★]
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All temperatures	Synthetic 75W-140
------------------	-------------------

CAPACITY, Refill:	Liters	Pt
Front:		

Aviator	1.3	2.7
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Explorer: 2002-05	1.7	3.6
-------------------	-----	-----

2006-10	1.3	2.7
---------	-----	-----

Mountaineer: 2002	1.7	3.6
-------------------	-----	-----

2003-10	1.3	2.7
---------	-----	-----

Rear: Conventional	1.7 ²	3.6 ²
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Traction-Lok	1.7 ²	3.6 ²
--------------	------------------	------------------

1 Add 4 oz. of friction modifier for complete axle fill.

2 Fill to 1/4" below fill plug hole.

OTHER COMPONENTS

Brake Fluid Reservoir	HB
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Clutch Fluid Reservoir	HB
------------------------	----

Power Steering Reservoir:	
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2002-07	MA
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2008-10	MA5
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2010 TRANSIT CONNECT

Crankcase

2.0L	5W-20
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CAPACITY, Refill ¹ :	Liters	Qt
2.0L	4.3	4.5

1 Capacity includes filter change. After refill check oil level.

TRANSMISSION/TRANSALE, Automatic

All	MLV
-----	-----

CAPACITY, Total Refill ¹ :	Liters	Qt
4F27E	6.7	7.0

1 With engine at operating temperature, shift transmission through all gears. Check fluid level in PARK and add fluid as needed.

OTHER COMPONENTS

Brake Fluid Reservoir	HBH
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Power Steering Reservoir	MA5
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GEO, CHEVROLET-PONTIAC

1999-2001 CHEVROLET METRO

CRANKCASE

Above 0°F (-18°C)	10W-30
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All temperatures	5W-30 ^{1,2}
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CAPACITY, Refill ³ :	Liters	Qt
All	3.3	3.5

1 Preferred.

2 1999-2001, at temperatures below -20°F (-29°C), 5W-30 synthetic, or 0W-30 should be considered.

3 Capacity shown includes filter. After refill, check oil level.

TRANSALE, Automatic

MA5	
-----	--

CAPACITY, Initial Refill ¹ :	Liters	Qt
All	1.5	1.6

1 With the engine at operating temperature, shift transmission through all gears. Let engine slow idle in PARK for 3 minutes or more. Check fluid level and add fluid as needed.

TRANSALE, Manual	75W-85 GL-4
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CAPACITY, Refill:	Liters	Pt
All	2.4	5.0

1999-2002 PRIZM

CRANKCASE

1.6L Code 6:	
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Above 0°F (-18°C)	10W-30
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Below 60°F (16°C)	5W-30 ^{1,2}
-------------------	----------------------

1.8L Code 8:	
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Above 0°F (-18°C)	10W-30
-------------------	--------

All temperatures	5W-30 ^{1,2}
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CAPACITY, Refill ³ :	Liters	Qt
1.6L	3.1	3.2

1.8L	3.7	3.9
------	-----	-----

1 Preferred.

2 1999-2002 all, at temperatures below -20°F (-29°C), 5W-30 synthetic, or 0W-30 should be considered.

3 Capacity shown with filter. After refill, check oil level.

TRANSALE, Automatic

MA5	
-----	--

CAPACITY, Initial Refill ¹ :	Liters	Qt
3-speed ²	2.5	2.6

CARS & LIGHT TRUCKS

HONDA • HYUNDAI

HONDA

PASSPORT—SEE ISUZU

1999-2000 ACCORD, CIVIC, CR-V, DEL SOL, ODYSSEY, PRELUDE, ISUZU OASIS

CRANKCASE	API★	
Accord	.5W-20 ¹	
Civic: ex. Si	.5W-20 ¹	
Si	.5W-30 ¹	
CR-V	.5W-30 ¹	
Del Sol: DOHC VTEC	.10W-30 ¹	
Others	.5W-30 ¹	
Odyssey	.5W-30 ¹	
Prelude	.5W-30 ¹	
CAPACITY, Refill ² :	Liters	Qt
Accord:		
4-cyl.	4.3	4.5
V6	4.4	4.6
Civic:		
D16Y7 eng.	3.6	3.8
D16Y5, D16Y8 eng.	3.3	3.5
B16A2 eng.	4.0	4.2
CR-V	3.8	4.0
Del Sol:		
ex. B16A2 eng	3.3	3.5
B16A2 eng.	4.0	4.2
Oasis, Odyssey:	4.4	4.6
Prelude:		
2.2L: ex. VTEC	3.8	4.0
VTEC	4.8	5.1
2.3L	4.3	4.5

1 Preferred.
2 Capacity shown includes filter. After refill, check oil level.

TRANSAXLE, Automatic

CVT	VTF	
All others	SLF	
CAPACITY, Refill ¹ :	Liters	Qt
Accord:		
4-cyl.	2.4	2.5
V6	2.9	3.1
Civic, Del Sol:		
ex. CVT	2.7	2.9
CVT	3.9	4.1
CR-V:		
2WD	2.7	2.9
4WD	2.9	3.1
Oasis, Odyssey	2.9	3.1
Prelude	2.4	2.5
¹ With the engine at operating temperature, shift transmission through all gears. Turn engine off and check fluid level within minute.		

1 With the engine at operating temperature, shift transmission through all gears. Turn engine off and check fluid level within 1 minute.

TRANSAXLE, Manual

CAPACITY, Refill:	Liters	Pt
Accord	1.9	4.0
Civic, Del Sol:		
ex. VTEC	1.8	3.8
VTEC	2.2	4.6
CR-V	1.7	3.6
Prelude:		
ex. VTEC	1.9	4.0
VTEC	2.1	4.4

DIFFERENTIAL, Rear

CR-V	VTF	
CAPACITY, Refill:	Liters	Pt
All	1.0	2.2

OTHER COMPONENTS

Power Steering	.PS
Brake Master Cylinder	.HB

2001-10 ACCORD, ODYSSEY

2001 CR-V, PRELUDE

2000-06, 2010 INSIGHT

2000-09 S2000

CRANKCASE

Accord & 2002-10 Odyssey:

All temperatures .5W-20¹

CR-V, Prelude:

Above 15°F (-10°C) .10W-30

Below 95°F (35°) .5W-30⁴

Insight:

All temperatures .0W-20^{2,4}

2001 Odyssey:

Above 20°F (-7°C) .10W-30

All temperatures .5W-30⁴

S2000:

Above -5°F (-20°C) .10W-30⁴

All temperatures .5W-40

 CAPACITY, Refill²: | Liters | Qt |

Accord:

2.3L 4.3 4.5

2.4L 4.2 4.4

3.0L:

2001-02 4.4 4.6

2003-07 4.3 4.5

3.5L 2008-10 4.3 4.5

CR-V 3.8 4.0

CAPACITY, Refill ² :	Liters	Qt
Insight: 2000-06	2.5	2.6
2010	3.2	3.4
Odyssey	4.3	4.5
Prelude, S2000	4.8	5.1

1 5W-30 may be used only if 5W-20 is not available.

2 5W-20 or 5W-30 may be used only if 0W-20 is not available.

3 Capacity shown includes filter. After refill, check oil level.

4 Preferred.

TRANSAXLE

CVT

All others

 CAPACITY, Refill¹: | Liters | Qt |

Accord:

2001-02:

4-cyl. 2.5 2.6

V6 2.9 3.1

2003-06:

4-cyl. 2.8 3.0

V6 2.9 3.1

2007:

4-cyl. 2.9 3.1

V6 3.0 3.2

2008:

4-cyl. 2.8 3.0

V6 3.3 3.5

2009-10:

4-cyl. 2.5 2.6

V6 3.3 3.5

CR-V:

2WD 2.7 2.9

4WD 2.9 3.1

Insight: 2000-06

2010 3.3 3.5

Odyssey: 2001

2002-04 3.3 3.5

2005-10 3.1 3.3

Prelude

1 With the engine at operating temperature, shift transmission through all gears. Turn engine off and check fluid level within 1 minute.

2002-04 3.3 3.5

2005-10 3.1 3.3

Prelude 2.5 2.6

1 With the engine at operating temperature, shift transmission through all gears. Turn engine off and check fluid level within 1 minute.

TRANSMISSION/TRANSAXLE, Manual

CAPACITY, Refill:

Accord:

2001-02 1.9 4.0

2003-10:

4-cyl. 1.9 4.0

6-cyl. 2.2 4.7

CR-V

Insight 1.5 3.2

Prelude 2.1 4.4

S2000: 2000-03

2004-09 1.5 3.2

2004-09 1.6 3.4

DIFFERENTIAL, Rear

CR-V

S2000

All temperatures

CAPACITY, Refill:

CR-V

S2000

Other Components

Power Steering

Brake Master Cylinder

Clutch Fluid

2001-10 CIVIC

2003-10 CIVIC HYBRID,

ELEMENT, PILOT

2002-10 CR-V

2007-10 FIT

2006-10 RIDGELINE

CRANKCASE

All ex. Civic Si, Hybrid all temperatures

Civic Si:

2002-05 All temperatures

2006-08 All temperatures

Civic Hybrid:

All temperatures

CAPACITY, Refill²:

Civic:

2001-02:

D17A1 eng.

D17A2, D17A6 eng.

2003-05:

D17A2, D17A6 eng.

D17A1 eng.

2006-10:

1.3L Hybrid

1.8L

2.0L

CR-V, Element

Fit

Pilot:

2003-04

2005-10

Ridgeline

1 5W-30 may be used only if 5W-20 is not available.

2 Capacity shown includes filter. After refill, check oil level.

TRANSAXLE, Automatic

CVT

All others

 CAPACITY, Refill¹: | Liters | Qt |

Civic:

2001-2005:

ex. CVT

CVT

2006-10

Hybrid

CR-V:

2002-06:

2WD

4WD

2007-10:

2WD

4WD

Element:

2003-04:

2WD

4WD

2005-06:

2WD

4WD

2007-10:

2WD

4WD

Fit

Pilot:

2003-04

2005

2006-08:

2WD

4WD

2009:

2WD

4WD

2010

Ridgeline

1 With the engine at operating temperature, shift transmission through all gears. Turn engine off and check fluid level within 60-90 seconds.

2003-04

2005

2006-08:

2WD

4WD

2009:

2WD

4WD

2010

Ridgeline

1 With the engine at operating temperature, shift transmission through all gears. Turn engine off and check fluid level within 60-90 seconds.

2003-04

2005

2006-08:

2WD

4WD

2009:

2WD

4WD

2010

Ridgeline

1 With the engine at operating temperature, shift transmission through all gears. Turn engine off and check fluid level within 60-90 seconds.

2003-04

2005

2006-08:

2WD

4WD

2009:

2WD

4WD

2010

Ridgeline

1 With the engine at operating temperature, shift transmission through all gears. Turn engine off and check fluid level within 60-90 seconds.

2003-04

2005

2006-08:

2WD

4WD

2009:

2WD

4WD

2010

Ridgeline

HYUNDAI

1999-2010 ALL MODELS

CRANKCASE

1999-2004, 2005 Elantra, XG 350:

Above 32°F (0°C) .20W-40, 20W-50

Above -10°F (-23°C) .10W-30, 10W-40, 10W-50

Below 100°F (38°C) .5W-30, 5W-40

2005-10 Accent, Azera, Genesis Sedan, Santa Fe, Sonata,

Tiburon, Tucson, Veracruz; 2006-10 Elantra:

Above 0°F (-18°C) .10W-30

All temperatures .5W-20, 5W-30¹

2009-2010 Genesis Coupe:

2.0L all temperatures .5W-20, 5W30, 5W40

3.8L above 0°F (-18°C) .10W-30</

CARS & LIGHT TRUCKS

HYUNDAI Continued • INFINITI

CAPACITY, Refill¹:	Liters	Qt
Elantra:		
1999-2003	4.0	4.2
2004	3.8	4.0
2005-10	4.0	4.2
Entourage	5.2	5.5
Genesis:		
2.0L	5.3	5.6
3.3L	5.2	5.5
3.8L	5.2	5.5
4.6L	6.5	6.9
Santa Fe:		
2.4L	4.3	4.5
2.7L	4.5	4.7
3.3L	5.9	6.2
3.5L: 2003	4.4	4.6
2004-09	4.3	4.5
Sonata:		
2.0L	4.0	4.2
2.4L:		
1999-03	4.0	4.2
2004-05	4.3	4.5
2006-08	4.0	4.2
2009-10	4.3	4.5
2.5L, 2.7L	4.5	4.7
3.0L	4.0	4.2
3.3L: 2006-07	5.9	6.2
2008-10	5.2	5.5
Tiburon:		
1.8L, 2.0L, 2.4L	4.0	4.2
2.7L	4.5	4.7
Tucson:		
2005-09: 2.0L	4.0	4.2
2.7L	4.5	4.7
2010: 2.0L	4.1	4.3
2.4L	4.5	4.7
Veracruz	5.2	5.5
XG300, XG350	4.3	4.5
1 Capacity shown is with filter. After refill, check oil level.		
TRANSAXLE, Automatic		
2007-09 Veracruz		TIV
2009-10 Genesis		WS
All Others		SLF
CAPACITY, Initial Refill¹:	Liters	Qt
All Models:		
1999-2000	4.0	4.2
Accent:		
2001-10 (total fill):	6.1	6.5
Azera	10.9	11.5
Elantra:		
2001-06	7.8	8.2
2007-09	6.2	6.5
2010	6.6	6.9
Entourage	10.9	11.5
Genesis Coupe (total fill):		
2.0L	10.0	10.5
3.8L	9.5	10.0
Genesis Sedan (total fill):		
3.8L	8.2	8.6
4.6L	9.5	10.0
Santa Fe:		
2001-02:		
All (total fill)	8.5	8.9
2003-04:		
2.4L	7.8	8.2
2003:		
2.7L	8.5	8.9
3.5L	10.4	11.0
2004:		
2.7L	7.8	8.2
3.5L	8.5	8.9
2005-08	8.5	8.9
2007-08:		
2.7L	7.8	8.2
3.3L	10.9	11.5
2009:		
2.7L	8.5	9.0
3.3L	10.9	11.5
Sonata (total fill)	7.8	8.2
2006-08:		
4-Speed	7.8	8.2
5-Speed	10.9	11.5
2009-10:		
2.4L	7.8	8.2
3.3L	10.9	11.5
Tiburon:		
2001 (total fill)	6.6	6.9
2003-08	7.8	8.2
Tucson (total fill)	7.8	8.2
Veracruz	10.9	11.5
XG300, XG350 (total fill)	8.5	8.9
1 With the engine at operating temperature, shift transmission through all gears. Check fluid level in NEUTRAL and add fluid as needed.		
TRANSAXLE, Manual GL-4		
All temperatures	.75W-85, 75W-90	
CAPACITY, Refill:	Liters	Pt
Accent:		
1999-2005	2.2	4.6
2006	1.9	4.0
2007-10	2.0	4.2
Elantra:		
2001-06	2.1	4.4
2007-10	2.0	4.2

CAPACITY, Refill:	Liters	Pt
Genesis:		
2.0L	2.0	4.4
3.8L	2.2	4.6
Santa Fe:		
2001-02	2.3	4.9
2003:		
2.4L, 2.7L	2.1	4.5
3.5L	2.5	5.2
2004	2.1	4.5
2005	2.3	4.9
2006-08	2.1	4.5
2009	1.9	11.5
Sonata:		
1999-2005	2.1	4.5
2006	1.9	4.0
2007	2.1	4.5
2008-10	1.8	3.7
Tiburon:		
1999-2004	2.2	4.6
2005-08:		
w/5-speed	2.1	4.5
w/6-speed	2.2	4.6
Tucson	2.1	4.6
TRANSFER CASE GL-5		
Veracruz	.75W-90	GL-5
Santa Fe, Tucson	.80W-90	GL-5
CAPACITY, Refill:	Liters	Pt
Santa Fe, Tucson, Veracruz	0.8	1.7
DIFFERENTIAL GL-5		
Veracruz	.75W-90	GL-5
Genesis, Santa Fe, Tucson	.80W-90	GL-5
CAPACITY, Refill:	Liters	Pt
Rear:		
Genesis	0.7	1.5
Santa Fe	1.1	2.3
Tucson	0.7	1.5
Veracruz	0.9	2.0
OTHER COMPONENTS		
Power Steering:		
1999-2010		PS
Brake Master Cylinder		HB
Clutch Master Cylinder		HB
Wheel Bearings		LM

INFINITI

1999-03 QX4 — SEE NISSAN

1999-2010 ALL MODELS EX. QX4		
CRANKCASE SL, API*		
1999-2006:		
All temperatures	.5W-30 ¹	
Above 0° F (-18°C)	.10W-30, .10W-40	
2007-10 All temperatures	.5W-30	
CAPACITY, Refill:²	Liters	Qt
EX35	4.9	5.2
FX35	4.7	5.0
FX45:		
2003-05	6.4	6.8
2006-08	5.8	6.1
FX50	6.7	7.1
G20	3.4	3.6
G35 Coupe: 2003-07	4.7	5.0
G35 Sedan:		
2003-06	4.7	5.0
2007-08	4.9	5.2
G37	4.9	5.2
I30	4.0	4.2
I35	4.0	4.2
M35:		
2006-08	4.7	5.0
2009-10	4.9	5.2
M45:		
2003-04	5.6	5.9
2006-10	5.5	5.8
Q45:		
1999-2002	5.3	5.6
2003-05	5.6	5.9
2006	5.3	5.6
QX56:		
2004-08	6.2	6.6
2009-10	6.5	6.9
1 Preferred.		
2 Capacity shown is with filter. After refill, check oil level.		
TRANSMISSION, TRANSAXLE, Automatic		
EX35		SLF
FX35, FX45, FX50		SLF
G20, I30, I35		AF3¹
G35, G37		SLF
M35, M45		SLF
Q45:		
1999-2001		AF3¹
2002-06		SLF
QX56		SLF
CAPACITY, Total fill:²	Liters	Qt
EX35	10.3	10.9
FX35:		
2008	10.3	10.9

CAPACITY, Total fill:²	Liters	Qt
2009-10	9.2	9.7
FX45	10.3	10.9
FX50	11.3	11.9
G20	7.0	7.4
G35	10.3	10.9
G37:		
Coupe:		
2008-09	10.3	10.9
2010	9.2	9.7
Sedan	9.2	9.7
I30	9.4	9.9
I35	8.5	9.0
M35, M45:		
5-Speed	10.3	10.9
7-Speed	9.2	9.7
Q45:		
1999-2001	10.5	11.1
2002	10.1	10.7
2003-06	10.3	10.9
QX56	10.6	11.2
1 Use Genuine Nissan Matic D ATF or equivalent.		
2 Total Fill shown. When refilling measure amount drained and refill with equal amount of new fluid. Start engine and allow transmission to reach operating temperature. Move gearshift through all gear ranges ending in park. Check fluid level and add fluid as needed.		
TRANSAXLE, Manual		
I30	.80W-90	GL-4
G20:		
1999	.80W-90	GL-4
2000-01	.75W-90	GL-4
2002	.75W-90, 75W-85	GL-4
G35	.75W-90, 75W-85	GL-4
G37	.75W-90, 75W-85	GL-4
CAPACITY, Refill:	Liters	Pt
G20:		
1999: RS5F32A	3.6-3.8	7.6-8.0
RS5F32V	3.7-3.9	7.8-8.2
2000-02	3.0	6.3
G35	2.9	6.1
G37	2.9	6.1
I30:		
RS5F50V	4.3-4.5	9.1-9.5
RS5F50A	4.5-4.8	9.5-10.1
TRANSFER CASE		
EX35		SLF²
FX35, FX45:		
2003-06		AF3¹
2007-08		SLF²
FX35, FX50 2009-10		SLF²
G35		AF3¹
G37		SLF²
M35, M45:		
2003-07		AF3¹
2008-10		SLF²
QX56		AF3¹
CAPACITY, Refill:	Liters	Pt
EX35	1.25	2.64
FX35:		
2003-08	1.25	2.64
2009-10	1.0	2.1
FX45, G35, M35, M45	1.25	2.64
FX50	1.0	2.1
G37	1.0	2.1
QX56	3.0	6.3
1 Use Genuine Nissan Matic D ATF or equivalent.		
2 Use Genuine Nissan Matic J ATF.		
DIFFERENTIAL, Front		
All	.80W-90 ¹	GL-5
CAPACITY, Refill:	Liters	Pt
EX35	0.65	1.37
FX35, FX45, FX50	0.65	1.37
G35, G37	0.65	1.37
M35, M45	0.65	1.37
QX56	1.6	3.4
1 For hot climates SAE 90 is suitable for temperatures above 32°F (0°C).		
DIFFERENTIAL, Rear		
FX35:		
2008	.80W-90 ¹	GL-5
2009-10:		
w/tow pkg.	Synthetic 75W-90	GL-5
w/o tow pkg.	.80W-90 ¹	GL-5
FX45	.80W-90 ¹	GL-5
FX50:		
w/tow pkg.	Synthetic 75W-90	GL-5
w/o tow pkg.	.80W-90 ¹	GL-5
G35, G37	.80W-90 ¹	GL-5
M35, M45	.80W-90 ¹	GL-5
Q45:		
1999-2002		GL-5
Below 104°F (40°C)	.75W-90, 80W-90 ²	
Above 50°F (10°C)	.140	
30° to 100°F (-1° to 38°C)	.90	
10° to 85°F (-12° to 29°C)	.85W	
Below 85°F (29°C)	.80W	
Below 50°F (10°C)	.75W	
2003-06	.80W-90 ¹	GL-5

CARS & LIGHT TRUCKS

INFINITI Continued • ISUZU • JAGUAR • JEEP

QX56:	
2004-05	.80W-90 ¹ GL-5
2006-10	Synthetic 75W-90 GL-5

CAPACITY, Refill:	Liters	Pt
FX35, FX45	1.4	3.0
FX50	1.75	3.7
G35, G37	1.4	3.0
M35, M45	1.4	3.0

Q45:	
1999-2002	1.3 2.7
2003-06	1.4 3.0
QX56	1.75 3.7

1 For hot climates SAE 90 is suitable for temperatures above 32°F (0°C).

2 80W-90 is preferred.

OTHER COMPONENTS

Power Steering:	
1999-2006	AF3
2007-10	AF6
Brake Master Cylinder	HB

ISUZU

HOMBRE—SEE CHEVROLET S10
OASIS—SEE HONDA ODYSSEY
2003-08 ASCENDER—SEE
CHEVROLET TRAILBLAZER
2006-08 I280, I290, I350, I370—SEE
CHEVROLET & GMC TRUCKS

1999-2004 AMIGO, AXIOM (2002-04), RODEO, RODEO SPORT, TROOPER, VEHICROSS, ACURA SLX, HONDA PASSPORT

CRANKCASE	API★
Above 40°F (4°C)	.30
1999-2004:	
Above 10°F (-12°C)	.15W-40, 20W-40, 20W-50
Above 0°F (-18°C)	.10W-30
All temperatures	.5W-30

CAPACITY, Refill ¹ :	Liters	Qt
2.2L	4.2	4.4
3.2L, 3.5L	4.0	4.2

1 Capacity shown is without filter. When replacing filter, additional oil may be needed.

TRANSMISSION, Automatic

1999-2003	AF3
2004 Rodeo w/3.5L	SLF
2004 Others	AF3

CAPACITY, Total Refill:	Liters	Qt
All	8.7 ¹	9.2 ¹

1 Transmission does not have a dipstick.

TRANSMISSION, Manual

Borg Warner T-5	AF3
Others	SJ, SL, SM
All temperatures	.5W-30
Above 90°F (32°C)	.15W-40, 20W-40, 20W-50

CAPACITY, Refill:	Liters	Pt
Borg Warner T-5	2.1	4.4
Trooper, SLX	2.7	5.7
Others	3.0	6.3

TRANSFER CASE¹

All w/T.O.D. system	AF2, AF3
2WD Trooper & SLX	AF2, AF3
Others	SJ, SL, SM
All temperatures	.5W-30
Above 90°F (32°C)	.15W-40, 20W-40, 20W-50

Capacity, Refill:	Liters	Pt
Axiom	1.3	2.7
Rodeo, Rodeo Sport	1.3	2.7
Trooper & SLX, 2WD	0.2	0.4
Trooper, SLX, VehiCROSS		
w/TOD	1.9	4.0
Others	1.5	3.2

1 Extension gearbox on rear of transmission.

DIFFERENTIAL

Front	GL-5
Above 50°F (10°C)	.80W-90, 80W-140
Below 90°F (30°C)	.75W-90
w/Saginaw rear axle	GL-5¹
All temperatures	.80W-90
All w/Limited-Slip Diff.	GL-5★
Others, rear	GL-5
Above 50°F (10°C)	.140
0° to 90°F (-18° to 32°C)	.80W-90, 90
Below 50°F (10°C)	.80W-90

CAPACITY, Refill:	Liters	Pt
Rodeo, Rodeo Sport: Front	1.3	2.7
Rear	1.8	3.8
All w/Saginaw axle	1.9 ¹	4.0 ¹
Trooper, SLX: Front	1.4	3.0
Rear	3.0	6.3
VehiCROSS: Front	1.4	3.0
Rear	2.2	4.6

CAPACITY, Refill:	Liters	Pt
Others: Front	1.3	2.7
Rear	1.8	3.8

1 Saginaw axle has removable rear cover without fill plug.

OTHER COMPONENTS

Power Steering	AF2, AF3
Brake & Clutch Master Cylinder	HB
Brake, Clutch, Accelerator Linkage	MO
Suspension & Steering Linkage	LM
Universal Joints & Slip Yokes, 4WD	LM
Wheel Bearings	GC

JAGUAR

1999-2010 S-TYPE, X-TYPE, XF, XJ & XK SERIES

CRANKCASE

All ex. 5.0L	API★
5.0L	SEO³

1999:

13° to 127°F (-10° to 50°C)	.15W-40
-5° to 127°F (-20° to 50°C)	.10W-30
-24° to 127°F (-30° to 50°C)	.5W-30

2000-09:

-22° to 122°F (-30° to 50°C)	.0W-30, 5W-30 ¹ , 0W-40, 5W-40
------------------------------	---

2010:

4.2L	.5W-30
5.0L	.5W-20

CAPACITY, Refill²:

All Models ex. X-Type:

1999:

XK8:	
w/o Oil Cooler	6.5 6.9
w/Oil Cooler	7.3 7.7

2000-02:

S-Type:	
3.0L	6.0 6.3
4.0L	6.5 6.9
XJ8, XK8	6.5 6.9
XKR	7.5 7.9
2001-02 XJR	7.5 7.9

2003:

S-Type:	
3.0L	6.5 6.9
4.2L	6.0 6.3
XJ8, XJR 4.0L	7.0 7.4
XJR, XKR	7.5 7.9
XK Series 4.2L	7.0 7.4
X-Type 2.5L & 3.0L	5.8 6.1

2004-09:

S-Type:	
3.0L	6.5 6.9
4.2L:	
2004-05	6.0 6.3
2006-08	6.5 6.9

XF	6.0 6.3
XJ8	6.8 7.2
XJR	7.6 8.0
XK Series 4.2L	7.0 7.4

2010

XF:	
4.2L	6.0 6.4
5.0L	7.3 7.6
XFR 5.0L	7.3 7.6
XJ 5.0L	7.3 7.6
XK 5.0L	7.3 7.6
XKR 5.0L	7.3 6.3

X-Type:

2.5L & 3.0L 2004-05	5.8 6.1
3.0L 2006-09	5.9 6.2

1 Preferred.

2 Capacity shown is with filter. After refill, check oil level.

3 Meeting Jaguar Specifications WSS-M2C925-A.

TRANSMISSION, Automatic

1999-2002.5 S-Type	MA5
2002.5-08 S-Type	SLF
2001-09 X-Type	SLF
2009-10 XF	SLF

1999-2002:

XK Series	
4.0L Normally Aspirated	AE
4.0L Supercharged	SLF
2003-10 XK Series	SLF
2002-03 XK8	AE

1999-2003.5:

XJ:	
4.0L Normally Aspirated	AE
4.0L Supercharged	SLF
2003.5-10 XJ	SLF

CAPACITY, Total Fill:

Liters	Qt
1999:	
S-Type	9.0 9.5
XJ8	10.0 10.6
XK8: Normally Aspirated	10.0 10.6
Supercharged	9.5 10.0

CAPACITY, Total Fill:	Liters	Qt
2000:		
S-Type	9.0	9.5

2001: S-Type	9.0	9.5
X-Type	8.8	9.3
2002-08: S-Type	10.0	10.6
2001-03 XK8 Normally Aspirated	10.0	10.6
2002-09: X-Type	8.8	9.3

XF:

2009: w/Supercharger	10.5	11.1
w/o Supercharger	10.0	10.6
2010: 4.2L w/o Supercharger	9.5	10.0
4.2L w/Supercharger	9.9	10.5
5.0L	10.1	10.7
2010 XFR	10.1	10.7
2004-09 XJ Series 4.2L	10.0	10.5

XK Series 4.2L:

2003-09: w/o Supercharger	9.5	10.0
w/Supercharger	10.0	10.6
2010 XJ, XK, XKR	10.1	10.7

1 "Filled for life" design. No routine inspection is required, nor is a dipstick provided. Fill to bottom of filler plug hole w/transmission at operating temperature.

TRANSMISSION, Manual

2002-05 X-Type	SLF
2007-08 S-Type	WSS-M2C932-A

CAPACITY, Maximum fill:	Liters	Pt
2002-07 X-Type	1.8	3.8
2007-08 S-Type	1.6	3.4

DIFFERENTIAL

1999: XJ & XK8 **GLS**

2000-03:

X-Type	GL-5
All temperatures	Synthetic 75W-140
XJ, XK8	GLS
S-Type	GL-5
All temperatures	Synthetic 75W-140

2002-07: S-Type **GL-5**

All temperatures Synthetic 75W-140

2000-05 XK8 **GLS**

2000-05 XKR **GLS**

2007 XK series **GL-5**

All temperatures Synthetic 75W-140

2002-06 X-Type **GL-5**

All temperatures Synthetic 75W-140

2004-07 XJ8, XJR **GL-5**

All temperatures Synthetic 75W-140

2008-10 All **GL-5**

Synthetic 75W-140 **GL-5**

CAPACITY, Refill:

Liters	Pt
S-Type: 2000	1.5 3.2
2001-02	1.5 3.2
2003-08	1.3 2.7
X-Type 2002-08	1.2 2.5
XF: 2009	1.3 2.7
2010: w/Supercharger	1.3 2.7
w/o Supercharger	0.9 1.9

XFR:

2010: w/Supercharger	1.3	2.7
w/o Supercharger	0.9	1.9

XJ:

2010: w/Supercharger	1.3	2.7
w/o Supercharger	0.9	1.9
XJ8, XJR: 1999-2003.5	1.9	4.0
2003.5-08	1.3	2.7
XJ8 2000	1.9	4.0
XK Series: 2003-06	1.9	4.0
2007-08	1.3	2.7

XK, XKR:

2010: w/Supercharger	1.3	2.7
w/o Supercharger	0.9	1.9
XK8 1999	1.8	3.8
XK8, XKR: 2000	1.8	3.8
2001-02	1.8	3.8

TRANSFER CASE **GL-5**

All temperatures .75W-140

CAPACITY:	Liters	Pt
X-Type 2.5L, 3.0L	0.5	1.05

OTHER COMPONENTS

Power Steering	AF3
Brake Master Cylinder	HBH

JEEP

1999-2001 CHEROKEE

2006-07 COMMANDER

1999-2007 GRAND CHEROKEE,

WRANGLER

1999-2006 TJ

CRANKCASE **API★**

2.4L	.5W-30 ¹
2.5L	.10W-30 ¹
3.0L Diesel: 2007 All Temperatures	.5W-30
3.7L: 2005-06 All Temperatures	.5W-30
2007 All Temperatures	.5W-20
4.0L 2001-04: Above 0°F (-18°C)	.10W-30
Below 32°F (0°C)	.5W-30

CARS & LIGHT TRUCKS

JEEP Continued

4.7L ex. H.O.		
2001-04 Above 0°F (-18°C)	10W-30	
Below 100°F (38°C)	5W-30	
2005-06 All Temperatures	5W-30	
2007 All Temperatures	5W-20	
4.7L H.O. 2002-04: Above 0°F (-18°C)	10W-30	
Below 32°F (0°C)	5W-30	
5.2L, 5.9L: Above 0°F (-18°C)	10W-30	
Below 60°F (16°C)	5W-30	
5.7L 2005-07: All Temperatures	5W-20	
6.1L 2006-07: All Temperatures	5W-40 ^{2,4}	
Wrangler	5W-30, 5W-20 ³	
CAPACITY, Refill²:	Liters	Qt
2.4L: 1999-2005	3.8	4.0
2006	4.7	5.0
2.5L	3.8	4.0
3.7L	4.7	5.0
3.8L	5.7	6.0
4.0L	5.7	6.0
4.7L	5.7	6.0
5.7L, 6.1L	6.6	7.0
5.2L, 5.9L	4.7	5.0
1 Preferred.		
2 Capacity shown includes filter. After refill, check oil level.		
3 Check Oil cap for correct oil viscosity.		
4 Manufacturer recommends the use of full synthetic engine oil.		
TRANSMISSION, Automatic		
1999-2001 AW-4	MA	
1999-2003 All others	AP4 ¹	
2004 Grand Cherokee w/NAG1	SLF ²	
2004 All Others	AP4	
2005-06	AP4	
CAPACITY, Initial Refill³:	Liters	Qt
1999-2001 Cherokee w/AW-4	1.9	2.0
1999-2001 45RFE4	4.7	5.0
2002-07 545RFE4: 2WD	5.2	5.5
4WD	6.2	6.6
2003 Grand Cherokee W5J400	5.0	5.3
2004-07 NAG1	5.0	5.3
All others	3.8	4.0
1 Chrysler Corp. recommends that 32RH automatic transmission be serviced with ATF+4® automatic transmission fluid.		
2 Chrysler recommends Shell Part No. 3403 automatic transmission fluid.		
3 With engine at operating temperature, shift transmission through all gears. Check fluid level in PARK or NEUTRAL and add fluid as needed.		
TRANSMISSION, Manual		
1999-2003:		
All ex. NV3550	GL-3	
All temperatures	75W-90	
NV3550	GLS	
2004-07	GLS	
CAPACITY, Refill:	Liters	Pt
1999-2000: 2WD	3.5	7.4
4WD	3.3	7.0
2001-02 All	3.3	7.0
1999 AX15	3.2	6.8
2000-01 NV3550: Cherokee	3.1	6.6
2000-02 TJ, Wrangler	2.3	4.9
2003-05 TJ NV3500, Wrangler	2.0	4.2
2004-05 NV1500	2.3	4.9
2005-07 NSG370	1.5	3.1
TRANSFER CASE		
1999-2000 ex. NV247	AF3, AP3, MA	
1999-2003 NV247	SLF	
2001-03 ex. NV247	AP4	
2004-07:		
NV146, NV147, NV245, NV247	SLF	
NV140, NV231, NV241, NV242	AP4	
CAPACITY, Refill:	Liters	Pt
Model 140, 146	0.6	1.3
Model 145, 245	1.8	3.8
Model 231	1.0	2.1
Model 241	2.0	4.2
Model 242	1.4	3.0
Model 147, 247, 249	1.6	3.4
DIFFERENTIAL		
All	GL-5	
All w/Class III or IV hitch, Wrangler w/Trailer		
Tow Pkg., Grand Cherokee w/Vari-Lok or		
Quadra Drive, 2005-06 Jeep Rubicon w/226		
Axle Rear and Grand Cherokee	Synthetic 75W-140 ¹	
All Others	80W-90	
2007: Commander, Grand Cherokee	75W-140	
Wrangler: w/o towing package	80W-90	
w/towing package	75W-140	
CAPACITY, Refill²:	Liters	Pt
Front:		
Commander	1.7 ³	3.6 ³
Cherokee:		
1999-2001 Cherokee w/181	1.5	3.2
Grand Cherokee:		
1999-2003	1.2	2.5
2004	1.1	2.3
2005-07	1.7	3.6
TJ, Wrangler:		
1999-2006:		
w/181	1.2	2.5
w/216	1.9	4.0

CAPACITY, Refill²:	Liters	Pt
2007: w/186	1.0	2.2
w/216	1.3	2.7
2.4L	4.7	5.0
Rear:		
Cherokee 4 w/8.25" axle	2.0	4.2
1999-2001:		
8.25" axle2	2.3	4.9
Others	1.2	2.5
Commander, Grand Cherokee:		
2004 186	1.1	2.3
2005-07:	1.7	3.6
198 RBL	1.7	3.6
213R	2.0	4.2
213RE	2.2	4.6
216 RBA, 226 RBA	2.3	4.9
TJ, Wrangler:		
1999-2006:		
216 RBL	1.9	4.0
194, 198 RBL	1.7	3.6
Others	1.2	2.5
2007:		
198 RBL	1.8	3.8
226 RBL	2.3	4.9
1 Mopar Synthetic Gear Oil. All with limited-slip axles & Grand Cherokee models w/Quadra Drive (front & rear axles), add 6.5% additive.		
2 1999-2007 Models, fluid level must be 1/2" below fill plug opening.		
3 Commander with C200FE axle Add 4 oz of MOPAR Trac-Lok additive part No.4318060.		
OTHER COMPONENTS		
Brake Fluid Reservoir	HB	
Power Steering Reservoir	PS	
2008-10 COMMANDER, GRAND CHEROKEE CRANKCASE		
All ex. 6.1L	API★	
6.1L	SM API	
3.0L Diesel, All temperatures	5W-30 ¹	
3.7L, 4.7L, 5.7L, All temperatures	5W-20 ^{2,5} 5W-30 ^{2,5}	
6.1L, All temperatures	5W-40 ^{3,6}	
CAPACITY, Refill²:	Liters	Qt
3.0L	9.5	10.0
3.7L	4.7	5.0
4.7L	5.7	6.0
5.7L, 6.1L	6.6	7.0
1 Meeting specification standard MS-11106 or Mercedes Benz MB 229.51.		
2 Meeting specification standard MS-6395.		
3 API SM or SM/CF meeting specification standard MS-10725.		
4 Capacity shown includes filter. After refill, check oil level.		
5 Check oil cap for correct oil.		
6 Manufacturer recommends the use of full synthetic engine oil.		
TRANSMISSION, Automatic		
All	AP4	
CAPACITY, Initial Refill¹:	Liters	Qt
545RFE:		
2WD	5.2	5.5
4WD	6.2	6.6
NAG1	5.0	5.3
1 With engine at operating temperature, shift transmission through all gears. Check fluid level in PARK or NEUTRAL and add fluid as needed.		
TRANSFER CASE		
NV140	AP4	
NV146	SLF	
NV245	SLF	
CAPACITY, Refill:	Liters	Pt
NV140, NV146	0.65	1.4
NV245	1.8	3.8
DIFFERENTIAL		
All	Synthetic 75W-140	GL-5
CAPACITY, Refill:	Liters	Pt
Front:		
C200F	1.7	3.6
C200FE	1.7 ¹	3.6 ¹
Rear:		
C213R	2.07	4.37
C213RE	2.24 ¹	4.73 ¹
1 Add 4 oz. (118 ml) of friction modifier.		
OTHER COMPONENTS		
Brake Fluid Reservoir	HB	
Power Steering Reservoir	PS ¹	
1 Mopar® Hydraulic System Power Steering Fluid P/N 05142893 AA or equivalent meeting standard MS-10838.		
2002-10 LIBERTY 2007-10 DODGE NITRO CRANKCASE		
All Gasoline	API★	
2005-06 Diesel	SL/CF API★ ¹	
Gasoline:		
2002-06		
Above 0°F (-18°C)	10W-30	
Below 100°F (38°C)	5W-30 ²	
2007-10		
3.7L	5W-20 ³	
4.0L	10W-30 ³	

Diesel		
All temperatures	Synthetic 0W-40 ⁴	
CAPACITY, Refill⁵:	Liters	Qt
2.4L	4.7	5.0
2.8L Diesel: 2003-05	6.0	6.3
2006-07	4.7	5.0
2008-10	6.6	7.0
3.7L	4.7	5.0
4.0L	5.2	5.5
1 Meeting specification standard MS-10725.		
2 Preferred.		
3 Meeting specification standard MS-6395.		
4 If 0W-40 is not available, 5W-40 can be used.		
5 Capacity shown includes filter. After refill, check oil level.		
TRANSMISSION, Automatic		
All	AP4	
CAPACITY, Initial Refill¹:	Liters	Qt
42RLE	3.8	4.0
45RFE, 545RFE	4.7	5.0
NAG1	5.0	5.3
1 With engine at operating temperature, shift transmission through all gears. Check fluid level in PARK or NEUTRAL and add fluid as needed.		
TRANSMISSION, Manual		
All	GLS	
CAPACITY, Refill:	Liters	Pt
NSG370	1.5	3.17
NV1500	2.3	4.8
NV3550:		
2002	2.3	4.8
2003-04:		
2WD	2.2	4.8
4WD	2.0	4.2
TRANSFER CASE		
All	AP4	
CAPACITY, Refill¹:	Liters	Pt
MP1522	1.8	3.8
MP3022	1.9	4.0
MP130, MP140, MP143	0.85	1.8
NV231	1.4	3.0
NV241	2.0	4.2
NV242	1.6	3.3
1 Approximate dry fill, or fill to bottom of fill plug hole.		
DIFFERENTIAL		
Front:		
2002-03	Synthetic 75W-140	GL-5
2004-10	80W-90	GL-5
Rear:		
Liberty:		
2002-07:		
198RB1	75W-140	GL-5
8 1/4"	Synthetic 75W-90 ²	GL-5 ¹
2008-10 8 1/4"	Synthetic 75W-140	GL-5
Nitro:		
2007-10 8 1/4"	Synthetic 75W-140	GL-5
CAPACITY, Refill:	Liters	Pt
Front:		
186 FIA (Model 30)	1.24	2.6
Rear:		
198 RBL (Model 35)	1.78	3.76
8 1/4"	2.08	4.4
1 Models equipped with Trac-Lok axles, add 4.0 oz. of limited slip additive to the lubricant.		
2 Axle intended for heavy duty applications or trailer tow use synthetic 75W-140.		
OTHER COMPONENTS		
Brake/Clutch Fluid Reservoir	HB	
Power Steering Reservoir	AP4	
2007-10 COMPASS, PATRIOT CRANKCASE		
All temperatures	5W-20, 5W-30 ^{1,2}	
CAPACITY, Refill³:	Liters	Qt
2007	4.3	4.5
2008	4.7	5.0
2009-10	4.3	4.5
1 Meeting specification standard MS-6395.		
2 Check oil cap for proper engine oil viscosity usage.		
3 Capacity shown includes filter. After refill, check oil level.		
TRANSAXLE, Automatic		
All	VTF	
CAPACITY, Initial Refill¹:	Liters	Qt
2007-09	3.8	4.0
2010	7.0	7.4
Manual		
All	AP4	
CAPACITY, Refill	Liters	Pt
NVT355	2.4-2.7	5.1-5.7
BG6	2.0	4.2
Getrag DMT6	1.8	3.8
1 With engine at operating temperature, shift transmission through all gears. Check fluid level in PARK and add fluid as needed.		
REAR CARRIER, POWER TRANSFER UNIT		
All	80W-90	GL-5
CAPACITY, Refill¹:	Liters	Pt
All	0.5	1.1
1 Fill to bottom of fill plug.		
OTHER COMPONENTS		
Brake/Clutch Fluid Reservoir	HB	
Power Steering Fluid Reservoir	AP4	

CARS & LIGHT TRUCKS

JEEP Continued • KIA

2008-10 WRANGLER

CRANKCASE

All **API★**

2008-10 All temperatures 5W-30, 5W-20^{1,2}

CAPACITY, Refill¹: **Liters** **Qt**

3.8L, 4.0L 5.7 6.0

1 Meeting specification standard MS-6395.

2 Check oil cap for correct oil viscosity.

3 Capacity shown is with filter. After refill, check oil level.

TRANSMISSION/TRANSAXLE, Automatic

All **AP4**

CAPACITY, Initial Refill¹: **Liters** **Qt**

2008-10:

42RLE 3.8 4.0

45RFE, 545RFE: 2WD 5.2 5.5

4WD 6.2 6.5

1 With engine at operating temperature, shift transmission through all gears. Check fluid level in PARK and add fluid as needed.

Manual

2008-10 NSG370 **GLS¹**

CAPACITY, Refill: **Liters** **Pt**

2008-10 NSG370 1.5 3.1

1 Mopar manual transmission fluid part number 04874464.

TRANSFER CASE

2008-10 NV241 **AP4**

CAPACITY, Refill: **Liters** **Pt**

2008-10 NV241 2.0 4.2

DIFFERENTIAL

Front:

2008-10:

186 FBI 80W-90 **GL-5¹**

216 FBI 80W-90 **GL-5¹**

Rear:

2008-10:

198 RBI 80W-90¹ **GL-5¹**

226 RBI 80W-90¹ **GL-5¹**

CAPACITY, Refill: **Liters** **Pt**

Front:

2008-10:

186 FBI (Model 30) 1.0 2.1

216 FBI (Model 44) 1.3 2.7

Rear:

2008-10:

198 RBI (Model 35) 1.8 3.8

226 RBI (Model 44) 2.3 4.8

1 When equipped with Trac-lok, add 3.4 ounces of limited slip additive.

OTHER COMPONENTS

Brake/Clutch Fluid Reservoir **HB**

Power Steering Reservoir **AP4**

KIA

1999-2001 SEPHIA

2000-09 SPECTRA

CRANKCASE

1999-2001 Sephia, 2000-04 Spectra 1.8L: **API★**

Above 85°F (29°C) 40

Above 15°F (-9°C) 20W-40, 20W-50

Above -15°F (-25°C) 10W-40, 10W-50

32° to 105°F (0° to 39°C) 30W

15° to 65°F (-9° to 20°C) 20W-20

-15° to 85°F (-25° to 29°C) 10W-30

Below 32°F (0°C) 5W-30

Below -5°F (-20°C) 5W-20

2004-08 Spectra 2.0L:

Above 14°F (-10°C) 15W-40

-13°F to 104°F (-25°C to 40°C) 10W-30

Above -13°F (-25°C) 10W-40

Below 68°F (20°C) 5W-40

Below 50°F (10°C) 5W-30

Below 14°F (-10°C) 5W-20

2009 Spectra

Above 0°F (-18°C) 10W-30

All temperatures 5W-20, 5W-30

CAPACITY, Refill: **Liters** **Qt**

1999-2009 Sephia, Spectra 4.0¹ 4.2¹

1 Capacity includes filter.

TRANSAXLE, Automatic:

1999-2000 Sephia **AF3, MA**

2001 Sephia **SLF**

Spectra **SLF**

CAPACITY, Total Fill¹: **Liters** **Qt**

1999-2004 Sephia, Spectra 1.8L 5.4 5.7

2004-05 Spectra w/2.0L 7.8 8.2

2006-08 Spectra 6.2 6.5

2009 Spectra 6.6 7.0

1 Total or dry fill capacity shown, use less fluid when refilling.

TRANSAXLE, Manual

1999-2001 Sephia **GL-4, GL-5**

2000-09 Spectra **GL-4**

Sephia 80W-90

Spectra:

2001-08 75W-90

2009 75W-85

CAPACITY, Refill:

Sephia, Spectra w/1.8L 2.7 5.7

2004-09 Spectra w/2.0L 2.0 4.2

OTHER COMPONENTS

Brake Fluid Reservoir **HB**

Clutch Fluid Reservoir **HB**

Power Steering Reservoir:

1999-2001 **AF3**

2002-09 **PS**

2003-09 SORENTO

1999-2002, 2005-10 SPORTAGE

CRANKCASE

2003-06 Sorento: **API★**

Above 14°F (-10°C) 20W-40, 20W-50

Above 5°F (-15°C) 15W-50, 15W-40

Above -13°F (-25°C) 10W-40, 10W-50

-15° to 104°F (-25° to 40°F) 10W-30

Below 68°F (20°C) 5W-40¹

Below 50°F (10°C) 5W-30¹

Below 14°F (-10°C) 5W-20^{1,2}

2007-09 Sorento:

All temperatures 5W-20³, 5W-30

Above 0°F (-18°C) 10W-30

Above 9°F (-13°C) 15W-40

Above 19°F (-7°C) 20W-50

1999-2002 Sportage:

All temperatures 5W-30

Above 0°F (-18°C) 10W-30, 10W-40

2005-10 Sportage:

All temperatures 5W-20

Above 0°F (-18°C) 10W-30

Above 9°F (-13°C) 15W-40

Above 19°F (-7°C) 20W-50

1 Restricted by driving condition and environment.

2 Not recommended for sustained high speed vehicle operation.

3 Preferred.

CAPACITY, Refill¹: **Liters** **Qt**

Sorento:

2003-06 4.4 4.7

2007-08 5.7 6.0

2009 5.2 5.5

Sportage:

1999-2002 4.2 4.4

2005-10:

2.0L 4.0 4.2

2.7L 4.5 4.8

1 Capacity includes filter.

TRANSAXLE, Automatic

Sorento: 2003-08: 4-speed **AF2**

5-Speed **SLF**

2009 **SLF**

Sportage: 1995-2002 **AF3**

2005-10 **SLF**

CAPACITY, Total Fill¹: **Liters** **Qt**

Sportage: 1999-2000 6.3 6.7

2001-02 6.8 7.2

2005-10 7.8 8.2

Sorento: 2003-04 10.2 10.8

2005-06 10.0 10.6

2007 10.9 11.5

2008-09 10.0 10.6

1 Total or dry fill capacity shown, use less fluid when refilling.

TRANSAXLE, Manual

1999-2006 **GL-4, GL-5**

2007-10 75W-90

CAPACITY, Refill: **Liters** **Pt**

Sorento:

2WD 3.2 6.8

4WD 2.7 5.7

Sportage:

1999-2002:

2WD 1.9 4.0

4WD 1.2 2.5

2005-10 2.2 4.7

TRANSFER CASE

Sorento **AF3**

1999-2002 Sportage **GL-4, GL-5**

All temperatures 75W-90

2006-10 Sportage **GL-5**

All temperatures 80W-90

CAPACITY, Refill: **Liters** **Pt**

Sportage:

1999-2002 1.7 3.6

2005-10 0.8 1.7

Sorento 1.4 3.0

DIFFERENTIAL, 4WD

2008-09 Sorento:

w/o Limited slip 90

w/Limited slip 85W-90

All others 80W-90, 90

CAPACITY, Refill: **Liters** **Pt**

Sorento 2008-09:

Front 1.3 2.7

Rear 1.6 3.4

Sportage: 1999-2002:

Front 1.2 2.5

Rear 1.5 3.2

2005-10 Rear 0.8 1.7

OTHER COMPONENTS

Brake Fluid Reservoir **HB**

Clutch Fluid Reservoir **HB**

Power Steering Reservoir: 1999-2001 **AF3**

2002-10 **PS**

2004-09 AMANTI

2001-10 OPTIMA

2007-10 RONDO

2002-10 SEDONA

CRANKCASE

2004-06 Amanti, 2002-05 Sedona, 2001-06 Optima (Old Body Style):

Above 14°F (-10°C) 20W-40, 20W-50

Above 5°F (-15°C) 15W-50, 15W-40

Above -13°F (-25°C) 10W-40, 10W-50

-15° to 104°F (-25° to 40°F) 10W-30

Below 68°F (20°C) 5W-40¹

Below 50°F (10°C) 5W-30¹

Below 14°F (-10°C) 5W-20^{1,2}

2007-09 Amanti, 2007-10 Rondo:

All temperatures 5W-20³, 5W-30

Above 0°F (-18°C) 10W-30

2006-10 Optima (New Body Style) 2.4L:

All temperatures 5W-20³, 5W-30

Above 20°F (-7°C) 20W-40, 20W-50

Above 10°F (-13°C) 15W-40, 15W-50

Above 0°F (-18°C) 10W-30

2006-10 Optima (New Body Style) 2.7L:

All temperatures 5W-20³, 5W-30

Above 20°F (-7°C) 20W-50

Above 10°F (-13°C) 15W-40

Above 0°F (-18°C) 10W-30

2006-10 Sedona:

All temperatures 5W-20³, 5W-30

Above 0°F (-18°C) 10W-30

CAPACITY, Refill: **Liters** **Qt**

Amanti: 2004-06 4.3⁴ 4.5⁴

2007-09 5.2 5.5

Optima: 2001-06:

2.4L 4.3⁴ 4.5⁴

2.5L 4.2⁵ 4.4⁵

2.7L 4.8⁴ 5.1⁴

2007-09:

CARS & LIGHT TRUCKS

KIA Continued • LAND ROVER

2006-10 Rio, Rio5:

All temperatures	5W-20 ¹
Above 20°F (-7°C)	20W-50
Above 10°F (-13°C)	15W-40
Above 0°F (-18°C)	10W-30
CAPACITY, Refill:	Liters Qt
2001-05	3.2 ² 3.4 ²
2006-10	3.3 ² 3.5 ²

1 Preferred.

2 Capacity includes filter.

TRANSAXLE, Automatic **SLF**

CAPACITY, Total Fill¹:	Liters Qt
2001-05	5.9 6.2
2006-10	6.1 6.5

1 Total or dry fill capacity shown; use less fluid when refilling.

TRANSAXLE, Manual **GL-4**

2001-04	75W-90
2005-09	75W-85

CAPACITY, Refill:	Liters Pt
2001-05	2.8 5.9
2006-10	1.9 4.0

OTHER COMPONENTS

Brake Fluid Reservoir	HB
Clutch Fluid Reservoir	HB
Power Steering Reservoir	PS

2009 BORREGO

CRANKCASE **API★**

Above 0°F (-18°C) 10W-30

All Temperatures 5W-20¹, 5W-30

CAPACITY, Refill²:	Liters Qt
3.8L	5.2 5.5
4.6L	6.7 7.0

1 Preferred.

2 Capacity includes filter.

TRANSMISSION, Automatic **SLF**

CAPACITY, Total Fill:	Liters Qt
3.8L	10.8 11.3
4.6L	14.0 14.7

TRANSFER CASE

Part Time 4WD **AF3**

Full Time 4WD **SLF**

CAPACITY, Refill:	Liters Pt
All	1.6 3.4

DIFFERENTIAL **GL-5**

All Temperatures 90

CAPACITY, Refill:	Liters Pt
Front	1.4 3.0

Rear:

3.8L	1.4-1.9 ¹	3-4 ¹
4.6L	1.9	4.0

1 The volume may differ according to the vehicle.

OTHER COMPONENTS

Brake Fluid Reservoir	HB
Power Steering Reservoir	PS

2010 FORTE

CRANKCASE **API★**

All Temperatures 5W-20

CAPACITY, Refill¹:	Liters Qt
2.0L	4.1 4.3
2.4L	4.5 4.8

1 Capacity includes filter.

TRANSAXLE, Automatic **SLF**

CAPACITY, Total Fill¹:	Liters Qt
4-Speed	6.6 6.9
5-Speed	7.6 8.0

1 Total or dry fill capacity shown; use less fluid when refilling.

TRANSAXLE, Manual **GL-4**

All Temperatures	75W-85
------------------	--------

CAPACITY, Refill:	Liters Pt
Forte	1.9 4.0

OTHER COMPONENTS

Brake Fluid Reservoir	HB
Clutch Fluid Reservoir	HB
Power Steering Reservoir	PS

2010 SOUL

CRANKCASE **API★**

All temperatures 5W-20

CAPACITY, Refill¹:	Liters Qt
1.6L	3.3 3.5
2.0L	4.0 4.2

1 Capacity includes filter.

TRANSAXLE, Automatic **SLF**

CAPACITY, Total Fill¹:	Liters Qt
A4CF1	6.8 7.2
A4CF2	6.6 6.9

1 Total or dry fill capacity shown; use less fluid when refilling.

TRANSAXLE, Manual **GL-4**

All temperatures	75W-85
------------------	--------

CAPACITY, Refill:	Liters Pt
M5CF1	1.9 2.0
M5CF2	2.0 2.1

OTHER COMPONENTS

Brake Fluid Reservoir	HB
Clutch Fluid Reservoir	HB
Power Steering Reservoir	PS

LAND ROVER

1999-2000 DISCOVERY & RANGE

ROVER, 2001-03 DISCOVERY

2002-05 FREELANDER

2005-09 LR3, 2010 LR4

2001-10 RANGE ROVER

2006-10 RANGE ROVER SPORT

CRANKCASE **API★**

1999-2000 Discovery, Range Rover:

1999-2000:	
Above 14°F (-10°C)	10W-40, 10W-60, 10W-50, 5W-50
Below 122°F (50°C)	5W-40, 5W-50
Below 95°F (35°C)	5W-30
-4° to 95°F (-20° to 35°C)	10W-30

2001-03 Discovery:	
All temperatures	5W-40, 5W-50
Above 32°F (0°C)	10W-60
Above -4°F (-20°C)	10W-40, 10W-50
Below 95°F (35°C)	5W-30
-4° to 95°F (-20° to 35°C)	10W-30

2001-10 Range Rover, 2006-10 Range Rover Sport:

2001-02:	
All temperatures	5W-50
Above 32°F (0°C)	15W-40, 15W-50, 20W-40, 20W-50
Above 14°F (-10°C)	10W-40, 10W-50, 10W-60
14° to 95°F (-10° to 35°C)	10W-30
Below 113°F (45°C)	5W-40
Below 14°F (-10°C)	5W-20

2003:	
All temperatures	5W-40, 5W-50
Above -4°F (-20°C)	10W-40, 10W-50
-4° to 95°F (-20° to 35°C)	10W-30
Below 95°F (35°C)	5W-30
Above 32°F (0°C)	10W-60

2004-06:	
All temperatures	5W-40, 5W-50, 0W-40
-30°C to 35°C (-22°F to 95°F)	0W-30
Below 35°C (95°F)	5W-30
Above -20°C (-4°F)	10W-40

2007-10: All temperatures 5W-30

2002-07 Freelander:

All temperatures	0W-40, 0W-50, 0W-60, 5W-40, 5W-50, W-60
Below 35°C (95°F)	0W-30, 5W-30
-20°C to 35°C (-4°F to 95°F)	10W-30
Above -4°F (-20°C)	10W-40, 10W-50, 10W-60

2005-09 LR3 all temperatures 5W-30

2010 LR4 all temperatures 5W-30

CAPACITY, Refill^{1, 2}	Liters Qt
--	------------------

1999-2003: Discovery:	
w/Oil Cooler	6.2 6.6
ex. Oil Cooler	5.8 6.1
2002-05: Freelander w/Oil Cooler	5.2 5.5

LR3:

2005-06	7.5 7.9
2007-09: 4.0L	5.7 6.0
4.4L	7.7 8.1
2010 LR4	8.0 8.5

Range Rover, Range

Rover Sport:

1999-2000 4.0L	5.8 6.1
1999-2002 4.6L	5.8 6.1
2003-05 4.4L	8.5 9.0

2006-09:	
4.2L	7.7 8.1
4.4L	7.7 8.1
2010 5.0L	8.0 8.5

1 Capacity shown is with filter. After refill, check oil level. Capacities shown are approximate and provided as a guide only. All oil levels must be checked using the dipstick or level plugs as applicable.

2 Manufacturer recommends the use of synthetic oils only.

TRANSMISSION, Automatic

2002-05 Freelander **SLF**

2006-09 LR3 **SLF**

2010 LR4 **SLF**

2003-05 Range Rover:

ZF Auto Gearbox **AE**

GM Auto Gearbox **SLF**

2006-10 Range Rover, Range Rover Sport **SLF**

Others **AF3**

CAPACITY, Refill^{1, 2}	Liters Qt
--	------------------

1999-2003 Discovery	9.3 9.8
2002-05 Freelander	8.5 9.0
2005-09 LR3	9.5 10.0

Range Rover, Range Rover Sport:

1999-05	9.9 10.5
2006-10	9.5 10.0
2010 LR4	9.9 10.5

1 Capacities shown are approximate and provided as a guide only. All oil levels must be checked using the dipstick or level plugs as applicable.

2 Dry or total fill shown, use less fluid when refilling. With engine at operating temperature, shift through all gears. Check fluid level in PARK and add fluid as needed.

TRANSFER CASE

Freelander, LR3 **GLS**

1999-2003 Discovery **GLS**

1999-2002 Range Rover **AF3**

2003-10 Range Rover, Range Rover Sport **GLS**

2010 LR4 **GLS**

CAPACITY, Refill:	Liters Pt
--------------------------	------------------

2002-05 Freelander	1.1 2.3
2005-09 LR3	1.5 3.2
2010 LR4	1.5 2.6

Range Rover, Range Rover Sport:

1999-2002	2.0 4.1
2003-05 NV225	1.0 2.0
2006-10	1.5 3.2
Discovery: 1998	2.3 4.8
1999-2005	2.0 4.1

DIFFERENTIAL, FRONT & REAR

2005-09 LR3 **GLS**

All temperatures 75W-90

2010 LR4 **GLS**

All temperatures 75W-90

2007-10 Range Rover, Range Rover Sport **GLS**

1999-2006 ex. LR3 **GL-5**

All temperatures Synthetic 75W-90

CAPACITY, Refill:	Liters Pt
--------------------------	------------------

2005-09 LR3: Front	0.6 1.3
Rear, Open diff	1.1 2.3
Electronic torque	1.5 3.2
2010 LR4: Front	0.6 1.0
Rear, Open diff	1.1 2.3
Electronic torque	1.5 3.2

2002-05 Freelander¹, Rear 0.8 1.7

1999-03 Discovery, Front & Rear 1.6 3.4

Range Rover:

1999-2002 Front & Rear	1.7 3.6
2003-06: Front	0.8 1.7
Rear	1.0 2.1
2007-10: Front	0.8 1.7
Rear: Open Diff	1.1 2.3
Electronic Torque	1.6 3.4

2006 Range Rover Sport:

Front	0.6 1.1
Rear	1.5 3.2
2007-10 Front	0.6 1.1
Rear: Open Diff	1.1 2.3
Electronic Torque	1.5 3.2

1 Front Differential is incorporated in the Intermediate Reduction Drive.

OTHER COMPONENTS

Power Steering:

Discovery **PS**

2002-05 Freelander **AF3**

2005-09 LR3 **PS**

2010 LR4 **PS**

1999-2002 Range Rover **AF3**

2003-10 Range Rover **PS**

2006-10 Range Rover Sport **PS**

Brake Master Cylinder all **HBH¹**

Front Axle Hubs **GL-4, GL-5**

Above -4°F (-20°C), 90

Below 50°F (-10°C) 80W

Steering & Suspension Fittings **LM**

1 Use fluid meeting DOT 4 requirements.

2008-10 LR2

CRANKCASE **API★**

All temperatures 5W-30¹

CAPACITY, Refill²:	Liters Qt
--------------------------------------	------------------

3.2L	7.5 7.9
------	---------

1 Meeting ACEA A5 or B5 specification.

2 Capacity shown is with filter. After refill, check oil level. Capacities shown are approximate and provide as a guide only. All oil levels must be checked using the dipstick or level plugs as applicable.

TRANSMISSION, Automatic

All **TIV**

CAPACITY, Total Fill^{1,2}:	Liters Qt
--	------------------

AWF21 6-speed	7.0 7.4
---------------	---------

1 Capacity shown is dry/total fill.

2 Capacity shown is with filter. After refill, check oil level. Capacities shown are approximate and provide as a guide only. All oil levels must be checked using the dipstick or level plugs as applicable.

TRANSFER CASE

All **GLS**

CAPACITY, Refill:	Liters Pt
--------------------------	------------------

All	0.75 1.3
-----	----------

DIFFERENTIAL

Rear **GLS**

CAPACITY, Refill:	Liters Pt
--------------------------	------------------

Rear	0.7 1.5
------	---------

CARS & LIGHT TRUCKS

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LEXUS

LX450—SEE TOYOTA LAND CRUISER

1999-2009 GS300, GS400, GS430, IS300, IS350C, LS400, LS430, SC300, SC400

1999-2003 ES300

2002-10 IS-F, IS250, IS350

ES350, GS350, GS450H, GS460, HS250H, LS460, SC430

2004-06 ES330

2008-09 LS600H

CRANKCASE **API★**

2008-10 LS460, LS600H, HS250H **5W-20, 0W-20¹**

1999-2010 All others **5W-30¹**

CAPACITY, Refill²:	Liters	Qt
ES300, ES330	4.7	5.0
ES350	6.1	6.4
GS300:		
1999-2005	5.4	5.7
2006:		
2WD	6.3	6.7
4WD	6.4	6.8
GS350:		
2WD	6.3	6.7
4WD	6.4	6.8
GS400, GS430	5.2	5.5
GS450H	6.3	6.7
GS460L:		
2WD	6.3	6.6
4WD	6.4	6.7
HS250H	4.3	4.5
IS-F	9.3	9.6
IS250:		
2WD	6.3	6.6
AWD	6.4	6.8
IS300	5.4	5.7
IS350	6.3	6.6
LS400 1999-2000	5.6	5.9
LS430	4.5	4.8
LS460: 2007-08	8.6	9.1
2009-10:		
2WD	8.6	9.1
AWD	9.0	9.5
LS600H 2008-10	9.0	9.5
SC300	5.2	5.5
SC400	4.7	5.0
SC430	5.2	5.5

¹ Preferred.

² Capacity shown is with filter. After refill, check oil level.

TRANSMISSION/TRANSAXLE, Automatic:

1999 ES300 **AF3**

2007 ES350, GS350, GS430, GS450H,

IS250, IS350 **WS**

2004-06 LS430 **WS**

2008-10 All **WS**

All Others **TIV**

CAPACITY, Initial Refill^{1, 4}:	Liters	Qt
ES300	3.5 ²	3.7 ²
ES330	3.5	3.7
ES350	2.8	3.0
GS300, GS400:		
1999-2000	1.9	2.0
2001-04	2.0	2.1
2005 GS300	1.8	1.9
2006 GS300:		
A760H	1.6 ³	1.7 ³
A960e	1.1 ³	1.2 ³
GS350:		
2WD	1.8	1.9
4WD	2.8	3.0
GS430: 2001-05	1.8	1.9
2006	1.3 ³	1.4 ³
2007	1.7	1.8
GS450H:	5.4	5.7
GS460	3.2	3.4
HS250H	4.2	4.4
IS-F	3.4	3.6
IS250: 2006:		
2WD	1.5	1.6
AWD	2.7	2.8
2007-10:		
2WD	1.8	1.9
AWD	2.8	3.0
IS300	2.4	2.5
IS350 2006-10	1.7	1.8
LS400	1.9	2.0
LS430:		
1999-2003	1.8	1.9
2004-06	1.7 ³	1.8 ³
LS460	3.2	3.4
LS600H	5.9	6.2
SC300: 1999-2000	1.9	2.0
SC400 1999-2000	1.9	2.0
SC430:		
2002-05	1.8	1.9
2006-08	1.3 ³	1.4 ³

¹ Transmissions with dipstick: With the engine at operating temperature, shift transmission through all gears. Check fluid level in PARK and add fluid as needed.

² Final Drive is serviced separately in ES300.

³ Top up as needed.

⁴ Transmissions without dipstick, require special procedures, to check fluid levels refer to the transmission fluid service guide appendix for procedures.

TRANSMISSION/TRANSAXLE, Manual

IS250, IS300	GL-4, GL-5
All temperatures	75W-90
SC300	GL-4, GL-5
All temperatures	75W-90, 80W-90
CAPACITY, Refill:	Liters Pt
IS250	1.8 1.9
IS300, SC300	2.6 5.4
FINAL DRIVE	AF3
CAPACITY, Refill:	Liters Pt
1999 ES300	0.9 2.0

DIFFERENTIAL

GS300, GS430, LS430, SC430 w/LSD	GL-5★
All temperatures	Synthetic 75W-90
IS250 AWD	GL-5
All temperatures	80W-90
IS250 2WD, IS350	GL-5★
All temperatures	Synthetic 75W-85
GS450H, LS460, LS600H	GL-5
All temperatures	75W-85
All Others	GL-5
All temperatures	80W-90
CAPACITY, Refill:	Liters Pt
GS350:	
Front	0.7 1.48
Rear	1.4 3.0
GS450H	1.4 3.0
GS460:	
Front	0.7 1.5
Rear	1.4 3.0
IS250:	
Front	0.7 1.48
Rear:	
2WD	1.2 2.5
AWD	1.1 2.3
IS300	1.1 2.3
IS350	1.4 3.0
LS460, LS600H:	
Front	0.7 1.5
Rear	1.3 2.7
All other RWD ex. 2006 GS300	1.4 3.0
2006 GS300:	
Front	0.7 1.48
Rear:	
2WD	1.2 2.5
4WD	1.1 2.3

OTHER COMPONENTS

Brake Fluid Reservoir **HB**

Clutch Fluid Reservoir **HB**

Power Steering Reservoir **AF3**

1999-2009 GX470, LX470, RX300, RX330, RX400H

2007-10 LX750, RX350, RX450H

CRANKCASE **API★**

LX570, RX450H	5W-20, 0W-20 ¹
2010 RX350	5W-20, 0W-20 ¹
2008 RX400H	5W-20, 0W-20 ¹
Above 0°F (-18°C)	10W-30
All others	5W-30 ¹

CAPACITY, Refill²:	Liters	Qt
GX470	6.2	6.6
LX470	6.8	7.2
LX570: 2008-09	7.0	7.4

2010:		
w/Blue dipstick	7.0	7.4
w/Green dipstick	7.5	7.9
RH400H	4.7	5.0
RX300, RX330	4.7	5.0
RX350	6.1	6.4
RX450H	6.1	6.4

¹ Preferred.

² Capacity shown is with filter. After refill, check oil level.

TRANSMISSION/TRANSAXLE, Automatic

2008-10 all **WS**

GX470, LS430:

2001-03 **TIV**

2004-09 **WS**

LX470, LX570:

1999-2002 **AF3**

2003 **TIV**

2004-09 **WS**

RX300, RX330 **TIV**

RX350 **WS**

RX400H, RX450H **WS**

CAPACITY, Initial Refill^{1, 3}:	Liters	Qt
GX470:		
2003-05	1.7 ²	1.8 ²
2006-08	1.3 ²	1.4 ²

CAPACITY, Initial Refill^{1, 3}:	Liters	Qt
LX470:		
1999-2002	1.9	2.0
2003-05	3.0	3.2
2006-07	1.7 ²	1.8 ²
LX570	2.1	2.2
RX300: 1999-2002:		
2WD	3.5	3.7
4WD	3.9	4.1
2003	3.5	3.7
RX330: 2004:		
w/U151E Trans.	3.5	3.7
w/U151F Trans.	3.6	3.8
2005-06	3.5	3.7
RX350: 2007-09	3.5	3.7
2010	2.8	3.0
RX400H: Front:		
w/o Towing	3.9	4.1
w/Towing	4.2	4.4
Rear (AWD only)	2.0	2.1
2007-08	1.8	1.9
RX450H	4.6	4.9

¹ Transmissions with dipstick: With the engine at operating temperature, shift transmission through all gears. Check fluid level in PARK and add fluid as needed.

² Top up as needed.

³ Transmissions without dipstick, require special procedures, to check fluid levels refer to the transmission fluid service guide appendix for procedures.

TRANSFER CASE

GX470	GL-5
All temperatures	75W-90
LX470	GL-4, GL-5
RX300, RX330, RX350	GL-5
Above 0°F (-18°C),	90
Below 0°F (-18°C)	80W, 80W-90
CAPACITY, Refill:	Liters Pt
GX470	1.4 3.0
LX470	1.3 2.7
LX570 2008-10	1.5 3.1
RX300, RX330, RX350	0.9 1.9

DIFFERENTIAL

GX470	GL-5
Above 0°F (-18°C),	90
Below 0°F (-18°C)	80W, 80W-90
LX470, LX570: 1999-2007:	
Standard	GL-5
Above 0°F (-18°C),	90
Below 0°F (-18°C)	80W, 80W-90
2008-10 All temperatures	75W-85
Limited-slip	GL-5★
RX300, RX330, RX350	GL-5

CAPACITY, Refill:	Liters	Pt
GX470:		
Front	1.4	3.0
Rear	3.1	6.6

LX470: Front:		
1999	1.7	3.6
2000-07	1.6	3.4
2008-09	2.0	4.1
Rear: 1999-2004:		
w/o: locking diff	3.2	6.8
w/locking diff	3.3	7.0
2005-07	3.3	7.0
2008-09	4.3	9.0
LX570 2008-10:		
Front	1.9	4.0
Rear	4.2	8.9
RX300, RX330, RX350	0.9	1.9
RX450H rear traction motor	1.8	3.8

OTHER COMPONENTS

Power Steering **AF3**

Brake & Clutch Master Cylinder **HB**

Active Height Control Suspension Fluid **SLF**

MAZDA

B2300, B2500, B3000, B4000M, TRIBUTE — SEE FORD TRUCKS

1999-2002 MAZDA 626

CRANKCASE **API★**

Above -13°F (-25°C) 10W-30

Below 32°F (0°C) 5W-30

CAPACITY, Refill¹:

1999-2002: 2.0L **Liters Qt**

2.5L 4.2 4.4

¹ Capacity shown includes filter. After refill, check oil level.

TRANSAXLE, Automatic

2.0L **MA**

2.5L **AF3**

CAPACITY, Total Fill¹:

2.0L: 1999-2000 **Liters Qt**

2001 8.3 8.8

2002 8.7 9.2

2.5L 8.9 9.4

2.5L 8.0 8.5

¹ Total or dry fill capacity shown. Approximate. make final check with dipstick. For drain & fill, measure amount drained & refill with same amount. Initial refill with engine at normal operating temperature.

CARS & LIGHT TRUCKS

MAZDA Continued • MERCEDES-BENZ

TRANSAXLE, Manual			
626	GL-4, GL-5		
All temperatures	75W-90		
Above 50°F (10°C)	80W-90		
CAPACITY, Refill:	Liters	Pt	
1999-2002	2.7	5.7	
OTHER COMPONENTS			
Brake Fluid Reservoir	HB		
Clutch Fluid Reservoir	HB		
Power Steering Reservoir	AF2, MA		
2000-06 MPV			
CRANKCASE			
All temperatures:			
2000-01	5W-30		
2002-06	5W-20		
CAPACITY, Refill:	Liters	Qt	
2000-03	5.2	5.5	
2004-06	5.7	6.0	
1 Capacity shown includes filter.			
TRANSAXLE, Automatic			
CAPACITY, Initial Refill:			
2000-01 (Total Fill)	8.0	8.4	
2002-06 (Total Fill)	9.7	10.2	
1 With engine at operating temperature, shift transmission through all gears. Check fluid level in PARK and add fluid as needed.			
TRANSFER CASE			
All temperatures			
Above 50°F (10°C)	80W-90		
CAPACITY, Refill:	Liters	Pt	
All	1.5	3.2	
DIFFERENTIAL			
Above 0°F (-18°C)			
Below 0°F (-18°C)	90		
CAPACITY, Refill:	Liters	Pt	
Front	1.7	3.6	
Rear	1.5	3.2	
OTHER COMPONENTS			
Brake Fluid Reservoir	HB		
Clutch Fluid Reservoir	HB		
Power Steering Reservoir	AF3, MA		
1999-2010 MIATA			
CRANKCASE			
1999-2004:			
Above -15°F (-25°C)	10W-30		
Below 32°F (0°C)	5W-30		
2005-10 All temperatures	5W-20		
CAPACITY, Refill:	Liters	Qt	
1999-2005	4.0	4.2	
2006-07	4.3	4.5	
2008: w/6-speed manual	4.5	4.8	
Others	4.4	4.7	
2009-10: w/engine oil cooler	4.5	4.8	
w/o engine oil cooler	4.4	4.7	
1 Capacity shown includes filter.			
TRANSMISSION, Automatic			
1999-2005			
2006-10	TIV		
CAPACITY, Total Refill:	Liters	Qt	
1999	6.4	6.8	
2000-05	6.7	7.1	
2006-10	7.4	7.8	
1 Total refill shown. With engine at operating temperature, shift transmission through all gears. Check fluid level in PARK and add fluid as needed.			
TRANSMISSION, Manual			
1999-2004			
All temperatures			
Above 50°F (10°C)	80W-90		
2005-10:			
5-speed	GL-4, GL-5		
All temperatures	75W-90		
Above 50°F (10°C)	80W-90		
6-speed	GL-4		
All temperatures	75W-90		
CAPACITY, Refill:	Liters	Pt	
5-speed	2.0	4.2	
6-speed: 2004-05	1.8	3.8	
2006-10	2.1	4.4	
DIFFERENTIAL			
1999-2003:			
All temperatures	90		
Above 0°F (-18°C)	90		
Below 0°F (-18°C)	80W		
2004-06	90		
2007-10	90, 80W-90, 75W-90		
CAPACITY, Refill:	Liters	Pt	
1999	1.0	2.1	
2000	0.9	1.9	
2001-04	1.0	2.1	
2005: w/traction control	0.8	1.7	
w/o traction control	1.0	2.1	
2006-10	0.6	1.3	
OTHER COMPONENTS			
Brake Fluid Reservoir	HB		
Clutch Fluid Reservoir	HB		
Power Steering Reservoir	AF3, MA		

1999-2002 MILLENNIA

CRANKCASE			
Above -15°F (-25°C)			
Below 32°F (0°C)	10W-30		
CAPACITY, Refill:	Liters	Qt	
2.3L:			
1999	4.2	4.4	
2000-02	4.3	4.5	
2.5L:			
1999	4.3	4.5	
2000-02	4.2	4.4	
1 Capacity shown is with filter.			
TRANSAXLE, Automatic			
CAPACITY, Total Fill:			
1999:	Liters	Qt	
2.3L	7.9	8.3	
2.5L	7.4	7.8	
2000-02:			
2.3L	7.4	7.8	
2.5L	7.9	8.3	
1 Total or dry fill shown. Use less fluid when refilling transaxle.			
OTHER COMPONENTS			
Brake Fluid Reservoir	HB		
Power Steering Reservoir	AF2, MA		
2007-10 CX-7, CX-9			
2004-10 MAZDA3			
2006-10 MAZDA5			
2003-10 MAZDA6			
1999-2003 MAZDA PROTEGE, PROTEGE5			
CRANKCASE			
All temperatures			
2000-2001	5W-30		
2002-03	5W-20		
2004-08 All:	5W-20		
2.0L			
Non Turbo	4.3	4.5	
Turbo	5.7	6.0	
2.3L:			
2003-05:	5.2	5.5	
2006-08	5.7	6.0	
3.7L	5.2	5.5	
2009-10: CX-7:			
w/Turbo	5.7	6.0	
w/2.5L	5.0	5.3	
CX-9	5.2	5.5	
Mazda3, 5 2.0L, 2.3L	4.3	4.5	
2.3L Turbo Mazda3 2007-10	5.7	6.0	
Mazda6:			
2.5L	5.0	5.3	
3.7L	5.2	5.5	
1 Preferred.			
2 Capacity shown is with filter. After refill, check oil level.			
TRANSAXLE, Automatic			
2007-09 CX-7, CX-9			
2010 CX-7: w/5-speed	SLF		
w/6-speed	TIV		
2010 CX-9	TIV		
Mazda3, 5, 6, ex. Mazda6 w/6-speed	SLF		
Mazda6 w/6-speed	TIV		
Protege	AF3		
CAPACITY, Total Fill:	Liters	Qt	
All ex. CX-7, CX-9, Mazda3, Mazda5, Mazda6:			
1999-2007	7.2	7.6	
CX-7, CX-9	7.0	7.4	
Mazda3:			
2004-09 FN4A-EL	7.2	7.6	
2006-10 FS5A-EL	8.1	8.6	
Mazda5:			
2006-07	7.2	7.6	
2008-10	8.1	8.5	
Mazda6:			
2003-04 w/2.3L	7.2	7.6	
2003-04 w/3.0L	9.2	9.7	
2005:			
4-speed	7.2	7.6	
6-speed	7.0	7.4	
2006-08:			
5-speed	8.1	8.5	
6-speed	7.0	7.4	
2009-10:			
5-speed	5.0	5.3	
6-speed	7.0	7.4	

1 Total or dry fill capacity shown. Approximate, make final check with dipstick. For transaxle drain & refill, measure amount. Do not overfill.			
TRANSAXLE, Manual			
All temperatures			
Above 50°F (10°C)	75W-90		
CAPACITY, Refill:	Liters	Pt	
G66 M-R	2.9	6.1	
Mazda3, Mazda5, Mazda6:			
G35M-R	2.9	6.1	
A65M-R	2.3	4.9	
A26MX-R	2.6	5.5	
2007-10 A26M-R	2.5	5.3	
Protege:			
1999	2.7	5.7	
2000	2.6	5.5	
2001-03	2.7	5.7	
POWER TAKE-OFF UNIT			
All temperatures			
CAPACITY, Refill:	Liters	Pt	
CX-7	1.2	2.5	
TRANSFER CASE			
All temperatures			
CAPACITY, Refill:	Liters	Pt	
CX-9	0.5	1.0	
DIFFERENTIAL			
All temperatures			
CAPACITY, Refill:	Liters	Pt	
CX-7, CX-9	1.0	2.1	
OTHER COMPONENTS			
Brake Fluid Reservoir	HB		
Power Steering Reservoir	AF2, MA		
2004-10 MAZDA RX8			
CRANKCASE			
All temperatures			
CAPACITY, Refill:	Liters	Qt	
2004-08	3.5	3.7	
2009-10	4.4	4.6	
1 Capacity shown is with filter. After refill, check oil level.			
TRANSMISSION, Automatic			
RC4A-EL			
SJ6A-EL			
CAPACITY, Total Fill:			
RC4A-EL	8.7	9.2	
SJ6A-EL	8.0	8.5	
1 Total or dry fill capacity shown. Approximate, make final check with dipstick. For transaxle drain & refill, measure amount of fluid drained and add approximately same amount. Do not overfill.			
TRANSMISSION, Manual			
All temperatures			
CAPACITY, Refill:	Liters	Pt	
2004-08	1.75	3.6	
2009-10	2.0	4.1	
DIFFERENTIAL			
2004-05			
2006-10	90W		
CAPACITY, Refill:	Liters	Pt	
All	1.4	3.0	
OTHER COMPONENTS			
Brake Fluid Reservoir	HB		
Clutch Fluid Reservoir	HB		
MERCEDES-BENZ			
1999 ALL MODELS WITHOUT FLEXIBLE SERVICE SYSTEM (FSS)			
CRANKCASE			
All			
Gasoline & Diesel:			
All Temps	0W-30, 5W-30, 0W-40, 5W-40, 5W-50		
Above -4°F (-20°C)	10W-30, 10W-40, 10W-50, 10W-60		
Above 5°F (-15°C)	15W-40, 15W-50		
Above 23°F (-5°C)	20W-40, 20W-50		
CAPACITY, Refill:	Liters	Qt	
Gasoline Models:			
4-cyl:			
2.3L:			
ex. supercharged	6.2	6.5	
1999 Supercharged	5.8	6.1	
6-cyl:			
2.6L	6.0	6.3	
2.8L	8.0	8.5	
3.0L SOHC:			
ex. 4MATIC	6.0	6.3	
4MATIC	6.5	6.9	
3.0L DOHC	7.5	7.9	
3.2L:			
1999 S320	7.0	7.4	
ex. S320	8.0	8.5	
8-cyl:			
C43 AMG	7.5	7.9	
E55 AMG	7.5	7.9	
All other models	8.0	8.5	
12-cyl:			
1999: CL600	10.0	10.6	
S600	10.0	10.6	
SL600	10.0	10.6	

CARS & LIGHT TRUCKS

MERCEDES-BENZ Continued

CAPACITY, Refill ¹ :			Liters	Qt
Diesel Models 6-cyl.1999:				
3.0L	7.0	7.4		
E300	7.1	7.5		
1 All capacities shown include filter. On models with oil cooler, additional oil may be needed when cooler is drained. Wait 5 minutes after refilling or turning off engine to check oil level. V12 with oil filter on top: use wrench Part No. 103589020900.				
TRANSMISSION, Automatic				
1999 5-speed		SLF		
W5A580 model 722.6				
CAPACITY, Initial Refill ¹ :			Liters	Qt
Gasoline Models:				
C Class:				
C43 1999	9.4 ²	9.9 ²		
C220	5.5	5.8		
C230	7.5 ²	7.9 ²		
C280 1999	9.4 ²	9.9 ²		
CL500, CL600 1999	9.1	9.6		
CLK320	7.3 ²	7.7 ²		
CLK430	9.4 2	9.9 ²		
E Class:				
E320 1999	7.5 ²	7.9 ²		
E430	9.4 ²	9.9 ²		
ML Class:				
ML320	7.5 ²	7.9 ²		
ML430	9.4 ²	9.9 ²		
S Class:				
S320 1999	7.1 ²	7.5 ²		
S420 1999	8.6 ²	9.1 ²		
S500	9.4 ²	9.9 ²		
S600 1999	8.6 ²	9.1 ²		
SL Class:				
SL500 1999	8.2 ²	9.9 ²		
SLK Class:				
SLK230	7.1 ²	7.5 ²		
Diesel Models				
1999 E300	7.1	7.5		
1 With engine at operating temperature, shift transmission through all gears. Check fluid level in PARK and add fluid as needed.				
2 Total fill, add less fluid when refilling.				
TRANSMISSION, Manual			GLS	
CAPACITY, Refill:			Liters	Pt
SLK 230	1.5	3.2		
TRANSFER CASE			AF3	
CAPACITY, Refill:			Liters	Pt
E320	1.0	2.2		
ML320, ML430	1.5	3.2		
DIFFERENTIAL				
Front		GLS		
Rear		GLS		
CAPACITY, Refill:			Liters	Pt
Gasoline Models:				
C36 AMG, C43 AMG	1.3	2.8		
C220, C230, C280	1.1	2.4		
CL320	1.3	2.8		
CL500, CL600	1.4	3.0		
CLK320, CLK430	1.3	2.8		
E320:				
Front: All	0.5	1.0		
Rear:				
Coupe, Cabriolet	1.3	2.8		
Sedan	1.3	2.8		
Wagon	1.3	2.8		
E420, E430	1.3	2.8		
ML320, ML430: Front	1.1	2.4		
Rear	1.5	3.2		
S320, S420	1.3	2.8		
S430, S500, S600	1.4	3.0		
SL320	1.3	2.8		
SL500, SL600:	1.4	3.0		
SLK230	1.3	2.8		
SLK230	1.3	2.8		
Diesel Models 1999 E300	1.1	2.4		
LIMITED-SLIP IDENTIFICATION:				
Metal plate on rear of differential, near fill plug.				
OTHER COMPONENTS				
Power Steering		PS		
Brake Master Cylinder		HBH		
Clutch Master Cylinder		HB ¹		
Engine Control Linkage & 300TD Level Control		SLF		
Body & Sunroof Rails		LM		
1 Fluid meeting DOT 4 plus requirements.				
1999-2007 ALL MODELS WITH FLEXIBLE SERVICE SYSTEM (FSS) CRANKCASE				
All		SEO		
All temperatures				
	0W-30, 5W-30, 0W-40, 5W-40, 5W-50			
Above 5°F (-15°C)	15W-40, 15W-50			
Above 23°F (-5°C)	20W-40, 20W-50			
Above -4°F (-20°C)	10W-30, 10W-40, 10W-50, 10W-60			
CAPACITY, Refill ¹ :			Liters	Qt
4-cyl.:				
1.8L	5.5	5.8		
2.3L ex. Supercharged	6.2	6.6		
2.3L Supercharged:				
1999-2001	5.6	5.9		
2002-04	5.5	5.8		
2.5L C230	8.0	8.5		

CAPACITY, Refill ¹ :			Liters	Qt
6-cyl.:				
2.4L, 2.8L	8.0	8.5		
3.0L Diesel	7.0	7.4		
3.0L C280, SLK280	8.0	8.5		
3.2L: 1999-04	8.0	8.5		
2005-06 E320 CDI	7.3	7.7		
2007 E320 Bluetec	8.5	9.0		
3.5L	8.0	8.5		
3.7L	8.0	8.5		
8-cyl.:				
1999-00 C43 AMG	7.5	7.9		
2005-06 C55 AMG	8.5	9.0		
1999-03 CLK430	8.0	8.5		
1999-06 CL500	8.0	8.5		
2007 CL550	8.5	9.0		
2001-06 CL55 AMG	7.5	7.9		
2001-02 CLK55 AMG	7.5	7.9		
2003-06 CLK55 AMG	8.5	9.0		
2007 CLK63 AMG	8.8	9.3		
2003-06 CLK500	7.5	7.9		
2007 CLK550	8.5	9.0		
2006 CLS55 AMG	8.5	9.0		
2007 CLS63 AMG	8.8	9.3		
2006 CLS500	7.5	7.9		
2007 CLS550	8.5	9.0		
1999-02 E55 AMG	7.5	7.9		
2004-06 E55 AMG	8.5	9.0		
2007 E63 AMG	8.8	9.3		
2003-04 E500	8.0	8.5		
2005-06 E500	7.5	7.9		
2007 E550	8.5	9.0		
2003-04 G55	7.5	8		
2005-07 G55	8.5	9.0		
2002-07 G500	8.0	8.5		
2007 GL450	8.5	9.0		
2000-03 ML55 AMG	7.5	7.9		
2007 ML63 AMG	9.7	10.2		
2002-05 ML500	8.0	8.5		
2006-07 ML500	8.5	9.0		
2007 R63 AMG	9.6	10.1		
2006-07 R500	8.5	9.0		
2001-06 S55 AMG	7.5	7.9		
2000-06 S430	8.0	8.5		
1999-06 S500	8.0	8.5		
2007 S550	8.5	9.0		
2003-07 SL55	8.5	9.0		
1999-02 SL500	8.0	8.5		
2003-06 SL500	7.5	7.9		
2007 SL500	8.5	9.0		
2006-07 SLK55 AMG	8.0	8.5		
12-cyl.:				
2006 CL65 AMG	10.5	11.1		
2002 CL600:	9.5	10.0		
2003-07 CL600	9.0	9.5		
2002-07: S600	9.0	9.5		
2006 S65 AMG	10.5	11.1		
2007 S65 AMG	9.0	9.5		
2005-07 SL65 AMG	8.0	8.5		
1999-01 ex. SL600	10.0	10.6		
1999-01 SL600	9.0	9.5		
2002 SL600	10.0	10.6		
2004-07 SL600	8.0	8.5		
1 Capacity shown includes filter. On models with oil cooler, additional oil may be needed when cooler is drained. Allow 5 minutes after refilling or turning engine off before checking oil level. V12 with oil filter on top: use wrench Part No. 103589020900.				
TRANSMISSION, Automatic			SLF	
CAPACITY, Total Fill ¹ :			Liters	Qt
C Class:				
2002-05 C32 AMG	8.0	8.5		
1999-00 C43 AMG	9.4	9.9		
2005-07 C55 AMG	8.7	9.2		
1999-05 C230, C240, C280	8.0	8.5		
2006-07 C230, C280, C350	8.5	9.0		
2002-05 C320	8.0	8.5		
CL Class:				
2001-06 CL55 AMG	9.1	9.6		
2005-06 CL65 AMG	7.5	7.9		
1999-01 CL500, CL600	9.1	9.6		
2002-04 CL500	8.0	8.5		
2005-06 CL500	9.0	9.5		
2007 CL550	9.0	9.5		
2002 CL600	9.1	9.6		
2003-07 CL600	7.5	7.9		
CLK Class:				
2001-07 CLK55 AMG	9.1	9.6		
1999-04 CLK320	8.0	8.5		
2006-07 CLK350	9.0	9.5		
1999-03 CLK430	9.1	9.6		
2003-06 CLK500	9.1	9.6		
2007 CLK550	9.1	9.6		
CLS Class:				
2006-07 CLS55 AMG	8.7	9.2		
2006-07 CLS500:				
w/o code A25	9.0	9.5		
w/code A25	6.7	7.1		
E Class:				
1999-02 E55 AMG	9.1	9.6		
2004-06 E55 AMG	7.5	8.0		
2007 E63 AMG	8.5	9.0		
1999 E300	8.0	8.5		
1999-06 E320	7.5	7.9		
2005-06 E320 CDI	9.1	9.6		
2007 E320 Bluetec	9.2	9.7		

CAPACITY, Total Fill ¹ :			Liters	Qt
2006 E350	8.0	8.4		
2007 E350	9.2	9.7		
1999-00 E430	9.1	9.6		
2001-02 E430:				
RWD	8.6	9.1		
4WD	7.5	8.0		
2003-05 E500	7.5	8.0		
2006 E500	8.0	8.4		
4 Matic	6.5	6.8		
2007: E550	9.2	9.7		
E550 4 Matic	8.1	8.5		
G Class:				
2003-07 G55	8.5	9.0		
2002-07 G500	8.5	9.0		
GL Class:				
2007 GL450	9.0	9.5		
ML Class:				
1999-01 ML55 AMG, ML430	9.4	9.9		
2002-03 ML55 AMG	9.1	9.6		
2007 ML63 AMG	9.0	9.5		
1999-01 ML320	7.5	7.9		
2002 ML320	8.0	8.5		
2003-07 ML350	9.0	9.5		
2002-06 ML500	9.1	9.6		
2007 ML500	9.0	9.5		
R Class:				
2006-07 R63 AMG, R350	9.0	9.5		
2006-07 R500	9.0	9.5		
S Class:				
2001-06 S55 AMG, S430, S500, ...	9.1	9.6		
2003-07 S65 AMG, S600	7.5	7.9		
1999 S320	6.0	6.3		
2006 S350	7.5	7.9		
1999-00 S430, S500	9.1	9.6		
2007 S550	9.0	9.5		
1999-02 S600	9.1	9.6		
SL Class:				
2007 SL55 AMG Evo	8.7	9.2		
2003-06 SL55 AMG	8.0	8.5		
2004-07 SL65, SL600 AMG	7.5	7.9		
1999 SL320	6.0	6.3		
1999-01 SL500, SL600	9.4	9.9		
2002-06 SL500	9.1	9.6		
2007 SL550	9.0	9.5		
2002 SL600	9.1	9.6		
SLK Class:				
2002-04 SLK32 AMG	8.0	8.5		
2005-07 SLK55 AMG	9.0	9.5		
1999-04 SLK230	8.0	8.5		
2006-07 SLK280	9.0	9.5		
2001-04 SLK320	8.0	8.5		
2005-07 SLK350	9.0	9.5		
1 Total fill, add less fluid when refilling.				
TRANSMISSION, Manual			GLS	
CAPACITY, Refill:			Liters	Pt
C230:				
1999-00, 2002	1.5	3.2		
2003-07	1.2	2.5		
C240				

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MERCEDES-BENZ Continued

CAPACITY, Refill:	Liters	Pt	CAPACITY, Refill:	Liters	Pt	CAPACITY, Refill ¹ :	Liters	Qt
CL Class:			R Class 2006-07:			CL63 AMG 2008	8.75	9.2
2001-02: CL55 AMG	1.6	3.4	Front	1.1	2.3	CL63 AMG 2009-10	9.4	9.9
2003-04: CL55 AMG	2.0	4.2	Rear:			CL65 AMG 2008-10	9.5	10.0
2005-06: CL55 AMG	1.9	4.0	R350, R500 195mm HAM			CL550 2008-10	8.5	9.0
CL65 AMG	1.9	4.0	w/o differential lock	1.1	2.3	CL600 2008-10	9.0	9.5
2002-06: CL500	1.6	3.4	S Class:			CLK63 AMG 2008-09	8.8	9.3
2007 CL550, CL600: 215mm	1.2	2.5	2002 S55 AMG	1.6	3.4	CLK350 2008-10	8.0	8.5
240mm	1.6	3.4	2003-05 S55 AMG	2.0	4.2	CLK550 2008-10	8.5	9.0
1999 CL600	1.6	3.4	2002-05 S430, S500:			CLS63 AMG 2008-09	8.8	9.3
2002 CL600	1.6	3.4	Front	0.6	1.3	CLS550 2008-09	8.5	9.0
2003-06 CL600	1.9	4.0	Rear	1.6	3.4	E Class:		
CLK Class:			1999: S600	1.4	3.0	E63 AMG 2008-10	8.8	9.3
2002 CLK55 AMG	1.3	2.7	2001-05: S600	1.9	4.0	E300 4MATIC 2009	8.5	9.0
2004-06 CLK55 AMG	1.6	3.4	2006:			E320 2008-09	8.5	9.0
2007 CLK 63 AMG	1.1	2.3	Front All 4Matic	0.6	1.3	E350 2008-10	8.0	8.5
1999-02 CLK320	1.3	2.7	Rear:			E350 4Matic 2008-10	7.0	7.5
2003-05 CLK320	1.2	2.5	S55 AMG, S65 AMG	1.9	4.0	E550 2008-10	8.5	9.0
2006-07 CLK350	1.1	2.3	S350, S430 4Matic,			G Class:		
1999-03 CLK430	1.2	2.5	S500 4Matic	1.1	2.3	G55 2008	8.5	9.0
2003-06 CLK500	1.6	3.4	S430, S500	1.6	3.4	G500 2008	8.0	8.4
2007 CLK550	1.1	2.3	S600	1.9	4.0	GL Class:		
CLS Class:			2007: Front All 4Matic	0.6	1.3	GL320 CDI 2008-09	8.5	9.0
2006:			Rear:			GL350 Bluetec 4MATIC 2010	8.5	9.0
CLS55 AMG w/code 030 ¹	1.2	2.5	200mm	1.1	2.3	GL450 2008-10	9.0	9.5
CLS500, CL55 AMG w/o code 030:			215mm	1.2	2.5	GL550 2008-10	9.0	9.5
187mm	1.0	2.1	240mm: 240FE	1.6	3.4	GLK350 4MATIC 2010	7.0	7.5
198mm	1.1	2.3	240V	1.9	4.0	ML Class:		
210mm	1.6	3.4	SL Class:			ML63 AMG 2008-10	9.7	10.3
215mm	1.2	2.5	1999-01 SL500	1.4	3.0	ML320 CDI 2008-09	8.5	9.0
2007:			2002 SL500	1.6	3.4	ML350 2008-10	8.0	8.5
CLS55, CLS55 AMG,			2003-05 SL500, SL55	1.4	3.0	ML350 4MATIC 2010	8.5	9.0
CLS63 AMG: 215mm	1.2	2.5	1999-02 SL600	1.4	3.0	ML450 Hybrid 4MATIC 2010	8.0	8.5
CLS550: 198mm, 200mm	1.1	2.3	2004-05 SL600	1.4	3.0	ML550 2008-10	9.0	9.5
E Class:			2006: SL500, SL600,			R Class:		
1999-06 E55 AMG	1.3	2.7	SL55 AMG w/o code 030:			R320 CDI 4MATIC 2008-09	8.5	9.0
1999-01 E320:			198mm	1.1	2.3	R350 2008-09	8.0	8.5
Front	0.5	1.0	210mm	1.6	3.4	R350 Bluetec 4MATIC 2010	8.5	9.0
Rear	1.3	2.7	215mm	1.2	2.5	R350 4MATIC 2008-10	8.0	8.5
1999-00 E430:			240mm	1.9	4.0	R550 4MATIC 2008	9.0	9.5
Front	0.5	1.0	SL55 AMG w/code 030 ¹ ,			S Class:		
Rear	1.3	2.7	SL65 AMG	1.2	2.5	S63 AMG 2008	8.75	9.2
E320 Front:			2007: SL55 AMG,			S63 AMG 2009-10	9.4	9.9
2002-03	0.5	1.1	SL65 AMG ¹ 215mm	1.2	2.5	S65 AMG 2008	10.5	11.0
2004-05	0.6	1.3	SL550, SL600:			S65 AMG 2009-10	9.5	10.0
E350: 2006	0.6	1.3	198mm	1.1	2.3	S400 Hybrid 2010	8.0	8.5
2007	1.6	3.4	210mm	1.6	3.4	S450 4MATIC 2008-09	8.5	9.0
2001-02 E430	0.5	1.1	215mm	1.2	2.5	S550 2008-10	8.5	9.0
2004-06 E500	0.6	1.3	240mm	1.9	4.0	S550 4MATIC 2008-10	8.5	9.0
2007 E550	1.6	3.4	SLK Class:			S600 2008-10	9.0	9.5
E320:			2002-05 SLK32 AMG, SLK320	1.2	2.5	SL55 AMG 2008	8.5	9.0
Rear:			2005-07 SLK55 AMG	1.2	2.5	SL63 AMG 2009	8.0	8.5
2002	1.3	2.7	SLK230	1.3	2.7	SL65 AMG 2008-09	8.0	8.5
2003	1.0	2.1	2005-07 SLK350	1.1	2.3	SL550 2008-09	8.5	9.0
2004	1.3	2.7	2006-07 SLK280	1.0	2.1	SL600 2008-09	8.0	8.5
2003 4Matic, Wagon	1.3	2.7	¹ Use Castrol SAF-XJ.			SLK55 AMG 2008-10	8.0	8.5
2004-05 4Matic, Wagon	1.0	2.1	LIMITED-SLIP IDENTIFICATION:			SLK280 2008	8.0	8.5
2007 Bluetec	1.3	2.7	Metal plate on rear of differential, rear fill plug.			SLK300 2009-10	8.0	8.5
2005-06 CDI	1.3	2.7	OTHER COMPONENTS			SLK350 2008-10	8.0	8.5
E350:			Power Steering:			¹ Includes filter. On Models with oil coolers, additional oil may be		
2006-07 ex. 4Matic, Wagon	1.0	2.1	1999-00 C-Series, 1999 CL-Series,			needed when oil cooler is drained. Allow 5 minutes after refilling or		
2006 4Matic, Wagon	1.0	2.1	1999-03 CLK-Series, 1999-03 E-Series,			turning engine off before checking oil level.		
2007 4Matic, Wagon	1.6	3.4	2007 GL-Series, 1999-07 ML-Series,			TRANSMISSION/TRANSAXLE		
2001-06 E55 AMG	1.3	2.7	2006-07 R-Series, 1999 S-Series,			Automatic		
2007 E63 AMG	1.2	2.5	1999-02 SL-Series,			All		SLF
2001-02 E430	1.3	2.7	1999-04 SLK-Series		PS¹	CAPACITY, Refill^{1, 2}:	Liters	Qt
2003-06 E500	1.3	2.7	2001-07 C-Series, 2000-07 CL-Series,			C Class:		
2007 E550	1.3	2.7	2003-07 CLK-Series, 2006-07 CLS-Series,			C63 AMG 2008-10	9.1	9.6
2007 E550 4Matic	1.6	3.4	2003-07 E-Series, 2000-07 S-Series,			C230 2008-09	9.0	9.5
G Class:			2003-07 SL-Series,			C300, C300 Sport 2008-10	9.0	9.5
G500, G55 Front	1.4	3.0	2005-07 SLK-Series		SLF¹	C300 4Matic, C300 4MATIC		
Rear	1.8	3.8	2002-05 G-Series:		SLF	Sport 2008-10	9.7	10.2
GL Class:			Brake Master Cylinder		HBH	C350 2008-10	9.0	9.5
GL450 2006:			Clutch Master Cylinder		HB²	C350 4Matic, C350 4MATIC		
Front	1.1	2.3	Engine Control Linkage & 300TD Level			Sport 2008-10	9.7	10.2
Rear:			Control		SLF	C350 Sport 2008-10	9.0	9.5
195mm HAM			Body & Sunroof Rails		LM	CL63 AMG 2008-10	8.75	9.25
w/o differential lock	1.1	2.3	¹ For 2003 model year, CLK-series with designation 208 is PS, CLK-series with designation 209 is SLF, E-series with designation 210 is PS, and E-series with designation 211 is SLF.			CL65 AMG 2008-10	8.7	9.2
230mm HAM			² Fluid meeting DOT 4 plus requirements.			CL550 2008-09	9.8	10.0
w/differential lock	1.6	3.4	2008-10 ALL MODELS EX.			CL550 2010	10.0	10.6
ML Class: 2000-01 ML55 AMG:			2009-10 G SERIES			CL600 2008-09	7.7	8.1
Front	1.1	2.3	CRANKCASE			CL600 2010	7.5	7.9
Rear	1.5	3.2	All		SEO	CLK63 AMG 2008-09	8.7	9.2
2002-03 ML55 AMG:			All Temps			CLK350 2008	8.5	9.0
Front	1.2	2.5	Below -4°F (-20°C)			CLK350 2009	9.0	9.5
Rear	1.6	3.4	Above -4°F (-20°C)			CLS63 AMG 2008	8.5	9.0
ML320, ML430:			Above 5°F (-15°C)			CLS63 AMG 2009	8.8	9.3
Front	1.1	2.3	Above 23°F (-5°C)			CLK550 2008-09	9.0	9.5
Rear	1.5	3.2	CAPACITY, Refill¹:	Liters	Qt	CLS550 2008-09	9.2	9.7
2002 ML320:			C Class:			E Class:		
Front	1.2	2.5	C63 AMG 2008-10	8.5	9.0	E63 AMG 2008-09	8.8	9.3
Rear	1.65	3.5	C230 2008-09	8.0	8.5	E300 4MATIC 2009	8.1	8.6
2003-05 ML350:			C300, C300 Sport 2008-10	8.0	8.5	E320 2008-09	9.2	9.7
Front	1.2	2.5	C300 4MATIC, C300 4MATIC			E350, E550 2008-09	9.2	9.7
Rear	1.6	3.4	Sport 2008-10	7.0	7.5	E350 4MATIC, E550 4MATIC 2008-09	8.1	8.6
2002-05 ML500:			C350, C350 Sport, C350			E350, E350 4MATIC, E550,		
Front	1.2	2.5	4MATIC 2008-10	8.0	8.5	E550 4MATIC 2010	9.0	9.5
Rear	1.65	3.5	C350 4MATIC Sport 2008-10	8.0	8.5	G Class:		
2006-07 ML350, ML500:			G Class:			G55 2008	8.5	9.0
Front	1.1	2.3	G500 2008	8.5	9.0	G500 2008	8.5	9.0
Rear: 195mm HAM			GL Class:			GL Class:		
w/o differential lock	1.1	2.3	GL320, GL350, GL450,			GL320, GL350, GL450,		
230mm HAM			GL550 2008-10			GL550 2008-10	9.0	9.5
w/differential lock	1.6	3.4	GLK350, GLK350 4MATIC 2010			GLK350, GLK350 4MATIC 2010	9.0	9.5

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MERCEDES-BENZ Continued • MINI • MITSUBISHI

CAPACITY, Refill ^{1, 2}	Liters	Qt
ML Class:		
ML63 AMG 2008-10	9.2	9.7
ML320 CDI, ML350, ML550 2008-10	9.0	9.5
ML450 Hybrid 2010	12.7	13.4
R Class:		
R350 2008-10	9.0	9.5
R350 4MATIC 2008-10	9.0	9.5
R550 4MATIC 2008	9.0	9.5
R320 CDI 4MATIC 2008-09	9.0	9.5
S Class:		
S63 AMG 2008-10	8.75	9.2
S65 AMG 2008-10	8.7	9.2
S400 Hybrid 2010	9.3	9.8
S450 4MATIC 2009	9.6	10.1
S450 4MATIC, S550 4MATIC 2010	10.0	10.6
S550 2008-10	9.8	10.3
S550 4MATIC 2008-09	9.6	10.1
S600 2008-10	7.7	8.1
SL55 AMG 2008	8.6	9.1
SL63 AMG 2009	8.8	9.3
SL65 AMG 2008-09	7.5	7.9
SL550 2008-09	9.0	9.5
SL600 2008-09	7.5	7.9
SLK55 AMG 2008-10	8.7	9.2
SLK280 2008	9.0	9.5
SLK350 2008-09	9.0	9.5
SLK300, SLK350 2010	9.3	9.8

1 With engine at operating temperature, shift transmission through all gears. Check fluid level in PARK and add fluid as needed.
2 Total capacity shown. Add less fluid when refilling.

TRANSMISSION/TRANSAXLE, Manual

All		GLS
CAPACITY, Refill	Liters	Pt
C230 2009	1.2	2.5
C300, C300 Sport 2008-10	1.5	3.2
SLK280 2008	1.5	3.2
SLK300 2009-10	1.5	3.2
SLK350 2008-10	1.5	3.2

TRANSFER CASE

All			SLF
CAPACITY, Refill	Liters	Pt	
C300 4MATIC, C300 4MATIC			
Sport 2008	NS	NS	
C350 4MATIC 2008	NS	NS	
E300 2009	0.6	1.3	
E350, E550 4MATIC 2008-09	0.6	1.3	
GL320 CDI 2008-09: single speed	0.5	1.1	
double speed	1.5	3.2	
GL350 2010: single speed	0.5	1.1	
double speed	1.5	3.2	
GL450 2008-10: single speed	0.5	1.1	
double speed	1.5	3.2	
GL550 CDI 2008-10: single speed	0.5	1.1	
double speed	1.5	3.2	
GLK350 4MATIC 2010	0.6	1.3	
ML63 AMG 2010	0.5	1.1	
ML320 CDI 2008-09	0.5	1.1	
ML350 2008-10	0.5	1.1	
ML450 Hybrid 2010	0.5	1.1	
ML550 2009-10	0.5	1.1	
R350 All 2010	0.5	1.1	

DIFFERENTIAL

Front		GLS
Rear		GLS
CAPACITY, Refill	Liters	Pt
Front:		
C230 4MATIC, C230 4MATIC Sport 2008	1.0	2.1
C230 4MATIC 2009	0.6	1.3
C300 4MATIC, C300 4MATIC Sport 2008-10	1.1	2.3
C350 4MATIC, C350 4MATIC Sport 2008-10	1.1	2.3
E300 2009	1.6	3.4
E350 4MATIC 2008-09	1.6	3.4
E550 4MATIC 2008-09	1.6	3.4
GL, ML, R Series 2008-10	1.1	2.3
GLK 350 4MATIC 2010	0.6	1.3
Rear:		
C63 AMG 2008-10	1.2	2.5
C230, C230 Sport 2008-09	1.0	2.1
C300, C300 Sport 2008-09	1.0	2.1
C300, C300 Sport 2010	1.1	2.3
C300 4MATIC, C300 4MATIC Sport 2008-09	1.0	2.1
C300 4MATIC, C300 4MATIC Sport 2010	1.1	2.3
C350, C350 Sport 2008-10	1.1	2.3
C350 4MATIC 2008-10	1.1	2.3
CL63 AMG 2008-10	1.2	2.5
CL65 AMG 2010	1.6	3.4
CL550 2008	1.2	2.5
CL550 2009-10	1.8	3.8
CL600 2008-10	1.6	3.4
CLK63 AMG 2008-09	1.2	2.5
CLK350 2008-09	1.1	2.3
CLK550 2008-10	1.2	2.5
CLS63 AMG 2008-09	1.2	2.5
CLS550 2008-09	1.3	2.7
E63 AMG 2008-09	1.2	2.5

CAPACITY, Refill	Liters	Pt
E63 AMG 2010:		
w/187FE	1.0	2.1
w/200FE	1.1	2.3
w/215FE	1.2	2.5
E320 2008-09	1.3	2.7
E300 2009	1.6	3.4
E350 2008-09	1.0	2.1
E350 Sedan 2010	1.1	2.3
E550 2008-09	1.3	2.7
E550 Sedan 2010	1.2	2.3
E350, E550 4MATIC 2008-09	1.6	3.4
GL320 CDI 2008-09:		
w/o Differential lock	1.1	2.3
w/Differential lock	1.6	3.4
GL350 2010:		
w/o Differential lock	1.1	2.3
w/Differential lock	1.6	3.4
GL450 2008-09:		
w/o Differential lock	1.1	2.3
w/Differential lock	1.6	3.4
GL550 2008-09:		
w/o Differential lock	1.1	2.3
w/Differential lock	1.6	3.4
GLK350 2010	1.1	2.3
GLK350 4MATIC 2010	1.0	2.1
ML63 AMG 2008-10	1.1	2.3
ML320 CDI 2008-09	1.1	2.3
ML350 2008-10	1.4	3.2
ML350 Bluetec 4MATIC, ML350 4MATIC 2010	1.1	2.3
ML450 Hybrid 2010	1.1	2.3
ML550 2008-10	1.1	2.3
R320 CDI 4MATIC 2008-09	1.1	2.3
R350 2008-10	1.1	2.3
R350 4MATIC 2008-10	1.1	2.3
R550 4MATIC 2008	1.1	2.3
S63 AMG 2008-10	1.2	2.5
S65 AMG 2008-10	1.6	3.4
S400 Hybrid 2010	1.0	2.1
S450 2008-10	1.8	3.8
S550 2008-10	1.2	2.5
S550 4MATIC 2008-10	1.8	3.8
S600 2008-10	2.0	4.2
SL55 2008	1.2	2.5
SL63 AMG 2009	1.2	2.5
SL65 AMG 2008-09	1.2	2.5
SL550 2008-09	1.2	2.5
SL600 2008-10	1.2	2.5
SLK55 AMG 2008-10	1.2	2.5
SLK280 2008	1.0	2.1
SLK300 2009-10	1.0	2.1
SLK350 2008-10	1.1	2.3

OTHER COMPONENTS

Brake Fluid Reservoir	.HBH
Power Steering Reservoir	.PS
Clutch Master Cylinder	.HBH

MINI

2002-09 COOPER, COOPER S

CRANKCASE

All		SEC
CAPACITY, Refill¹:	Liters	Qt
2002-08 1.6L: W10	4.5	4.8
Supercharged W11	4.8	5.1
2007-09 1.6L N12, N14	4.2	4.4

1 Capacity shown includes filter. After refill check oil level.

TRANSAXLE, Automatic

ECVT (Electronic Continuously Variable Transmission)		VTF
6-Speed AT GA6F21WA		TIV
CAPACITY, Refill:	Liters	Qt
2004-08 ECVT	5.0	5.3
2005-09 6-Speed GA6F21WA (Pan removal)	4.0	4.2

TRANSAXLE, Manual

All		GLS
CAPACITY, Refill:	Liters	Qt
Cooper (R50) 2002-06:		
Up to 7/2004 Production	2.0	4.2
From 7/2004 Production	1.7	3.6
Cooper (R56) 2007-09	1.7	3.6
Cooper S (R53) 2002-06	1.7	3.6
Cooper S (R56) 2007-09	1.9	4.0
Cooper S Convertible (R52) 2005-09	1.7	3.6

OTHER COMPONENTS

Brake Fluid Reservoir	.HB
Clutch Fluid Reservoir	.HB
Power Steering Reservoir	.PS
Wheel Bearings	.LM

MITSUBISHI

1999 ALL MODELS EX. MONTERO, MONTERO SPORT

CRANKCASE: .API★

3000 GT: 3.0L Non-Turbo:	
Above 0°F (-18°C)	.10W-30
Below 100°F (38°C)	.5W-30 ¹

3.0L Turbo:	
Above 32°F (0°C)	.20W-40
Above -10°F (-23°C)	.10W-30
Below 60°F (16°C)	.5W-30 ²

Diamante, Mirage:	
Above 0°F (18°C)	.10W-30
Below 100°F (38°C)	.5W-30 ¹

Eclipse 1999:	
2.0L Non-Turbo:	
Above -10°F (-23°C)	.10W-30
Below 100°F (38°C)	.5W-30 ¹

2.0L Turbo:	
Above 32°F (0°C)	.20W-40
Above -10°F (-23°C)	.10W-30
Below 60°F (16°C)	.5W-30 ²

2.4L:	
Above 0°F (-18°C)	.10W-30
Below 100°F (38°C)	.5W-30 ¹

Galant 1999:	
Above 0°F (-18°C)	.10W-30
Below 100°F (38°C)	.5W-30 ¹

CAPACITY, Refill ² :	Liters	Qt
3000 GT:		
3.0L Non-Turbo	4.3	4.5
3.0L Turbo	4.6	4.9

Diamante:		
3.0L	4.3	4.5
3.5L	4.3	4.5

Eclipse:		
2.0L Non-Turbo	4.3	4.5
2.0L Turbo	4.4	4.7
2.4L	4.3	4.5

Galant:		
2.4L	4.3	4.5
3.0L	4.3	4.5

Mirage:		
1.5L	3.3	3.5
1.8L	3.8	4.0

1 Preferred.
2 SAE 5W-30 may be used in cold climate areas where lowest temperature is below -10°F (-23°C).
3 Capacity shown is with filter. After refill, check oil level.

TRANSAXLE, Automatic

All		S/LF
CAPACITY, Initial Refill ^{1, 2}	Liters	Qt
3000 GT	3.0 ³	3.2 ³
Diamante	8.5 ³	9.0 ³
Eclipse:		
2.0L Non-Turbo	3.8	4.0
2.0L Turbo	2.5 ³	2.6 ³
2.4L	3.8	4.0
Galant	3.5 ³	3.8 ³
Mirage	3.5 ³	3.8 ³

1 With the engine at operating temperature, shift transmission through all gears. Check fluid level in NEUTRAL and add fluid as needed.

2 Total capacity. When refilling, add ATF until fluid level is at cold mark on dipstick. Start engine & allow transmission/transaxle to reach operating temperature, then refer to Note 1.

3 Initial refill capacity when transmission is drained BOTH through cooler line with engine running and then plug on bottom of transmission with engine off.

TRANSAXLE, Manual

1999 Eclipse, 2.0L Non-Turbo	.GLS ¹
Others	.GL-4

All Temperatures .75W-90, 75W, 85W

CAPACITY, Refill:	Liters	Pt
Eclipse:		
FWD	2.0	4.2
AWD	2.3	4.9

Galant:		
2.4L	2.2	4.7
3.0L	2.8	5.9

Mirage:		
1.5L	2.1	4.4
1.8L	2.2	4.7

3000 GT:		
FWD	2.3	4.9
AWD	2.4	5.1

1 Texaco MTX Fluid FM

TRANSFER CASE .GL-4, GL-5

CAPACITY, Refill:		
3000GT	Liters	Pt
	0.3	0.6
Eclipse	0.5	1.1

DIFFERENTIAL, AWD Rear .GL-5

Above -10°F (-23°C), -30° to -10°F (-34° to -23°C)	.90, 85W-90, 80W-90
Below -30°F (-34°C)	.80W, 80W-90

CAPACITY, Refill:	Liters	Pt
3000GT	1.1	2.3
Eclipse	0.9	1.9

CARS & LIGHT TRUCKS

MITSUBISHI Continued • NISSAN

OTHER COMPONENTS

Brake Fluid Reservoir	HB
Clutch Fluid Reservoir	HB
Power Steering Reservoir	PS

2000-10 ALL MODELS EX.

ENDEAVOR, MONTERO, MONTERO SPORT, OUTLANDER, RAIDER

CRANKCASE: .SL, API★

2000-04:	
ex. Turbo:	
Above 0°F (-18°C)	10W-30
Below 100°F (38°C)	5W-30 ¹
w/Turbo	10W-30

2005-07:	
ex. Turbo:	
Below 100°F (38°C)	5W-20 ¹
Above 0°F (-18°C)	10W-30
with Turbo	
All temperatures	10W-30 ¹

2008-10:	
Eclipse, Galant:	
Above 100°F (38°C)	10W-30
Below 100°F (38°C)	5W-20 ¹
Lancer:	
w/turbo	5W-30
w/o turbo	5W-20

CAPACITY, Refill ² :	Liters	Qt
Diamante, Eclipse, Galant:		
ex. 2004-10 3.8L	4.3	4.5
2004-10 3.8L	4.6	4.9
Lancer ex. Lancer Evolution:		
2.0L	3.8	4.0
2.4L, 2008-10 2.0L	4.3	4.5
Evolution 2.0L:		
2003-05	5.1 ³	5.4 ³
2006	5.3 ³	5.6 ³
2009-10	5.1	5.4
Mirage:		
1.5L	3.3	3.5
1.8L	3.8	4.0

- 1 Preferred.
- 2 Capacity shown includes filter. After refill, check oil level.
- 3 Use 10W-30 fully synthetic engine oils. Use of conventional motor oils may cause engine or turbocharger damage.

TRANSAXLE, Automatic

2008-10 Lancer .VTF

All others .SLF

CAPACITY, Refill ¹ :	Liters	Qt
Mirage 2000-02	3.5 ²	3.7 ²
Galant: 2000-03	3.5 ²	3.7 ²
2004-10:		
2.4L	7.7 ³	8.1 ³
3.8L	8.4 ³	8.9 ³
Eclipse:		
2.4L	7.7 ³	8.1 ³
3.0L, 3.8L	8.4 ³	8.9 ³
Diamante	8.4 ³	8.9 ³
Lancer:		
2002-07	7.7 ³	8.1 ³
2008-10	7.6 ³	8.2 ³

- 1 With the engine at operating temperature, shift transmission through all gears. Check fluid level in NEUTRAL and add fluid as needed.
- 2 Initial refill capacity when transmission is drained BOTH through cooler line with engine running and then plug on bottom of transmission with engine off.
- 3 Total capacity. When refilling, add ATF until fluid level is at cold mark on dipstick. Start engine & allow transmission/transaxle to reach operating temperature, then refer to Note 1.

TRANSAXLE, Manual

2006-10 Eclipse .75W-80 GL-3¹

2008-10 Lancer Turbo .GLS

2008-10 Lancer Non-Turbo .75W-80 GL-3

Others .GL-4

All temperatures: 2006-09 Eclipse .75W-80

All Others .75W-90, 75W-85W

CAPACITY, Refill:	Liters	Pt
Diamante	2.8	5.9
Eclipse: 2000-05:		
2.4L	2.2	4.7
3.0L	2.8	5.9
2006-10	2.2	4.7
Galant:		
2.4L	2.2	4.7
3.0L	2.8	5.9
Lancer ex. Lancer Evolution:		
2000-07	2.2	4.7
2008-10	2.5	5.3
Lancer Evolution:		
5-speed:		
2003-04	2.8	6.0
2005-06	2.2	4.7
6-speed:		
2003-06	2.8	5.9
2008-10	7.5	15.9
Mirage:		
1.5L	2.1	4.4
1.8L	2.2	4.7

¹ DiaQueen New Multi Gear.

TRANSFER CASE

2003-06 .90 GL-5

2008-10 .GLS

CAPACITY, Refill:

	Liters	Pt
2003-06	0.6	1.3
2008-10	0.8	1.7

DIFFERENTIAL, Rear

2003-06 .GL-5★

2008-10 .GLS

CAPACITY, Refill:

	Liters	Pt
Lancer Evolution	0.6	1.3

OTHER COMPONENTS

Brake Fluid Reservoir	HB
Clutch Fluid Reservoir	HB
Power Steering Reservoir	PS

1999-09 PICKUP, MONTERO, MONTERO SPORT, OUTLANDER, ENDEAVOR, RAIDER

2010 ENDEAVOR, OUTLANDER

CRANKCASE .API★

1999-2004:	
Above 0°F (-18°C)	10W-30
Below 100°F (38°C)	5W-30 ¹

2005-09 ex. Raider	
Above 0°F (-18°C)	10W-30
Below 100°F (38°C)	5W-20 ¹

2005-09 Raider

All temperatures .5W-30

2008-10 Endeavor, Outlander:

All temperatures .5W-20

CAPACITY, Refill:²

	Liters	Qt
2.4L:		
1999-2006	4.3	4.6
2008-10	4.6	4.9

3.0L:

Montero	4.9	5.2
Montero Sport	4.5	4.8
Outlander	4.3	4.6

3.5L:

Montero	4.9	5.2
Montero Sport	4.6	4.9

3.7L:

Raider	4.7	5.0
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3.8L:

Endeavor	4.3	4.6
Montero	4.9	5.2

4.7L:

Raider	5.6	6.0
--------	-----	-----

- 1 Preferred.
- 2 Capacity shown is with filter. After refill, check oil level.

TRANSMISSION, Automatic

1999:

Montero .AF2

Montero Sport:

4AT Trans. .AF2

INVECS-II 4AT Trans. .SLF

2000:

Montero .AF2

Montero Sport .SLF

2001-10 All ex. CVT .SLF

2010 w/CVT .VTF

CAPACITY, Initial Refill¹:

	Liters	Qt
Montero:		
1999-2000	5.5	5.8
2001-02	2.0	2.1
2003-05	9.3 ²	9.8 ²
2006	9.7 ²	10.2 ²
Pickup	1.9	2.0
Montero Sport	9.3 ²	9.8 ²
Outlander: 2003-09:		
FWD	7.7 ²	8.1 ²
AWD	8.1 ²	8.6 ²
2010:		
w/CVT	7.5 ²	7.9 ²
ex. CVT:	2	2
w/Tow Pkg	10.0 ²	10.6 ²
w/o Tow Pkg.	9.5 ²	10.0 ²
Endeavor:		
FWD	8.4 ²	8.9 ²
AWD	8.8 ²	9.3 ²
Raider:		
42RLE	3.8 ³	4.0 ³
545RFE 2WD	5.2 ³	5.5 ³
545RFE 4WD	6.2 ³	6.6 ³

- 1 With the engine at operating temperature, shift transmission through all gears. Check fluid level in NEUTRAL and add fluid as needed.
- 2 Total capacity. When refilling, add ATF until fluid level is at cold mark on dipstick. Start engine & allow transmission/transaxle to reach operating temperature, and then refer to Note 1.
- 3 Service fill capacity. When refilling, add ATF until fluid level is at cold mark on dipstick. Start engine & allow transmission/transaxle to reach operating temperature, and then refer to Note 1.

TRANSMISSION, Manual

All ex. Raider

All temperatures .75W-90, 75W-85 GL-4

Raider .AP4

CAPACITY, Refill:

	Liters	Pt
Montero Sport:		
1999: R5M21 trans.	2.3	4.9
V5MT1 trans.	2.5	5.3
Outlander: FWD	2.2	4.7
AWD	2.3	4.9
Raider G238 trans	2.2	4.7

TRANSFER CASE

2003 Outlander .75W-90 or 75W-85 GL-4

2004-10 Endeavor, Outlander .GL-5

All Temperatures .90

Raider .AP4

All Others .GL-4

All Temperatures .75W-90, 75W-85

CAPACITY, Refill:

	Liters	Pt
Endeavor	0.6	1.2

Montero:

1999-2000	2.5	5.3
2001-06	2.8	6.0

Montero Sport:

1999:		
w/MT	2.3	4.9
w/AT	2.5	5.3

2000-04	2.5	5.3
Outlander	0.5	1.1

Raider:

NV233	1.2	2.5
NV244	1.4	2.9

DIFFERENTIALS

All ex. Raider

Limited-Slip .GL-5★

Standard .GL-5

Above -10°F (-23°C), .90, 85W-90, 80W-90

-30° to -10°F (-34° to -23°C) .80W, 80W-90

Below -30°F (-34°C) .75W

Raider:

Front .GL-5

All temperatures .75W-90

Rear .GL-5

All temperatures .75W-140

CAPACITY, Refill:

	Liters	Pt
Front:		

Montero:

1999-2000	1.1	2.3
2001-06	1.2	2.6

Montero Sport:

1999	1.1	2.3
2000-04	0.9	1.9

Raider	1.7	3.6
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Rear:

Endeavor	1.1	2.3
Outlander	0.5	1.1

Montero:

1999-2000	3.2	6.8
2001-06	1.6	3.4

Montero Sport:

2.4L	1.5	3.2
3.0L	2.6	5.5
3.5L	3.2	6.8

Raider:

8 1/4" axle	2.0 ¹	4.4 ¹
9 1/4" axle	2.1 ¹	4.5 ¹

- 1 For limited slip, add 4 oz Limited Slip Additive MS-10111.

OTHER COMPONENTS

Brake Fluid Reservoir .HB

Clutch Fluid Reservoir .HB

Power Steering Reservoir:

1999 .AF2

2000-10:

All ex. Raider .PS

Raider .AP4

Suspension & Steering Linkage,

Propeller Shaft, Wheel Bearings .LM

NISSAN

1999 ALL MODELS EX. FRONTIER, PATHFINDER, PICKUP TRUCK, XTERRA

CRANKCASE .API★

All temperatures, Others .5W-30¹

CAPACITY, Refill²:

	Liters	Qt
200SX	3.4	3.6
Altima	3.4	3.6
Maxima	4.0	4.2
Quest	3.8	4.0

Sentra:

1.6L	3.0	3.2
2.0L	3.4	3.6

1 Preferred.

2 Capacity shown is with filter. After refill, check oil level.

TRANSMISSION/TRANSAXLE, Automatic

All .AF3¹

CAPACITY Refill²:

	Liters	Qt
Altima, Quest, Stanza	9.4	10.0
Maxima:		
SOHC	7.4	7.8
DOHC	9.4	9.9

CARS & LIGHT TRUCKS

NISSAN Continued

CAPACITY Refill ² :			Liters	Qt
Sentra, 2003SX:				
3-speed			6.3	6.6
4-speed			7.0	7.3
1 Continental USA & Alaska, use NissanMatic D. Canada use Nissan ATF. Dexron III®/Mercon® may be used as alternative.				
2 Total (dry) fill shown. When refilling, measure amount drained & refill with equal amount of new fluid. Start engine & allow transmission to reach operating temperature. With service & parking brake applied, move gear shift through all gear positions ending with park. Check fluid level with dipstick.				
TRANSMISSION/TRANSAXLE, Manual				
All				
200SX, Altima, Sentra, Maxima:				
All temperatures			.80W-90	
All Others:				
Above 50°F (10°C)				.140
30° to 100°F (-1° to 38°C)				.90
10° to 85°F (-12° to 29°C)				.85W
Below 100°F (38°C)			.75W-90, 80W-90 ¹	
Below 85°F (29°C)			.80W	
Below 50°F (10°C)			.75W	
1 75W-90 preferred, RWD, 80W-90 preferred, FWD				
CAPACITY, Refill:			Liters	Pt
200SX, Sentra:				
4-speed			2.7	5.8
5-speed:				
1.6L			3.0 ¹	6.4 ¹
2.0L			3.6 ¹	8.0 ¹
Altima			4.8 ¹	10.1 ¹
Maxima:				
RS5F50A			4.8 ¹	10.1 ¹
RS5F50V			4.5 ¹	9.5 ¹
Stanza			4.7	10.0
1 To prevent overfilling at oil changes, add 0.5 liter (0.5 quart) less than capacity shown, start engine, let run until engine operating temperature is approximately 60°C (140°F). Switch engine off, wait 3 minutes, check fluid level. May be more or less than 0.5 liter (0.5 quart) depending on the model.				
OTHER COMPONENTS				
Brake Fluid Reservoir			.HB	
Clutch Fluid Reservoir			.HB	
Power Steering Reservoir			.AF2, AF3	
2000-09 ALL MODELS EX. 370Z, ARMADA, CUBE, FRONTIER, MURANO, PATHFINDER, PICKUP TRUCK, TITAN, XTERRA				
CRANKCASE				.API★
All ex. Altima Hybrid;				
All temperatures			.5W-30 ¹	
Altima Hybrid:				
2007-09 all temperatures			.0W-20 ³	
CAPACITY, Refill ² :			Liters	Qt
350Z				
2003-06			4.7	5.0
2007-09			4.9	5.2
Altima:				
2.4L 2000-01			3.4	3.6
2.5L:				
2002			4.0	4.2
2003-06			4.2	4.4
3.5L 2002-06			4.2	4.4
2007-09			4.6	4.9
Maxima:				
2000-01			4.0	4.2
2002-08			4.2	4.4
2009			4.6	4.9
Quest:				
2000-02			3.8	4.0
2004-08			4.0	4.2
2009			4.2	4.4
Sentra:				
1.8L			2.7	2.9
2.0L				
1999-2001			3.4	3.6
2007-08			3.9	4.1
2.5L:				
2002			4.2	4.4
2003-06			4.0	4.2
2007-09			4.3	4.5
Versa:				
2007-08			3.9	4.1
2009			4.1	4.3
1 Preferred.				
2 Capacity shown is with filter. After refill, check oil level.				
3 In warm and hot climates 5W-20, or 5W-30 may be used if 0W-20 is not available.				
TRANSMISSION/TRANSAXLE, Automatic				
350Z				
Altima:				
2000-04			.AF3 ¹	
2005-06:				
w/4-cyl			.AF3 ¹	
w/6-cyl			.SLF	
2007-09 w/CVT ex. Hybrid			.VTF ³	
2007-09 Hybrid			.VTF ⁴	
Maxima:				
2000-03			.AF3 ¹	
2004-08:				
w/4-speed			.AF3 ¹	
w/5-speed			.SLF	
2007-09 CVT			.VTF	
Quest:				
2000-02			.AF3 ¹	
2004-06:				
w/4-speed			.AF3 ¹	
2004-09			.SLF	
Sentra:				
2000-06			.AF3 ¹	
2007-09 CVT			.VTF	
Versa				
Automatic			.SLF	
w/CVT			.VTF	
CAPACITY Refill ² :			Liters	Qt
350Z 2003-08				
Altima:			10.3	10.9
2000-01			9.4	9.9
2002-04			9.2	9.7
2005-06:				
w/4-cyl			9.2	9.7
w/6-cyl			7.3	7.7
2007-09 CVT ex. Hybrid:				
2.5L			8.3	8.8
3.5L			10.2	10.8
2007-09 Hybrid			4.1	4.3
Maxima:				
2000-01			9.4	9.9
2002-03			8.5	8.9
2004:				
4-speed			8.9	9.4
5-speed			7.3	7.7
2005-06			7.3	7.7
2007-08 CVT			10.0	10.6
2009 CVT			10.2	10.8
Quest:				
2000-02			9.4	9.9
2004-07:				
w/4-speed			8.9	9.4
w/5-speed			7.3	7.7
2008-09			7.4	7.8
Sentra:				
2000-06				
1.8L, 2.0L			7.0	7.4
2.5L			8.5	9.0
CVT:				
2007-08			8.3	8.8
2009:				
2.0L			7.3	7.7
2.5L			7.5	7.9
Versa:				
RE4F038B			7.9	8.3
CVT:				
2007-08			8.3	8.8
2009:				
RE0F08A			8.3	8.8
RE0F08B			7.4	7.8
1 Continental USA & Alaska, use NissanMatic D. Canada use Nissan ATF. Dexron III®/Mercon® may be used as alternative. 2004-07, 350Z Using automatic transmission fluid other than Genuine Nissan Matic J ATF will cause deterioration in drivability and durability, and may damage transmission, which is not covered by the Nissan new vehicle limited warranty.				
2 Total (dry) fill shown. When refilling, measure amount drained & refill with equal amount of new fluid. Start engine & allow transmission to reach operating temperature. With service & parking brake applied, move gear shift through all gear positions ending with park. Check fluid level with dipstick.				
3 Using transmission fluid other than genuine Nissan CVT fluid NS2 will damage the CVT transmission, which is not covered by the NISSAN new vehicle limited warranty.				
4 Use Nissan Matic W ATF.				
TRANSMISSION/TRANSAXLE, Manual				
350Z				
All temperatures:				
2003-09			.75W-85, 75W-90	
Altima, Maxima:			.GL-4	
All temperatures:				
2000			.80W-90	
2001-02			.75W-85, 75W-90	
2003			.75W-85, 80W-90	
2004-09			.75W-85	
Sentra			.GL-4	
All temperatures:				
2000-01			.80W-90	
2002-03			.75W-85, 80W-90	
2004-06:				
w/1.8L			.75W-90, 80W-90	
w/2.5L			.75W-85	
2007-09:				
w/2.0L			.75W-80	GL-4
w/2.5L			.75W-85	GL-4
Versa			.GL-4	
2007-08			.75W-80	
2009: 5-Speed			.75W-85	
6-speed			.75W-80	
CAPACITY, Refill:			Liters	Pt
350Z 2003-08				
Altima:			2.9	6.1
2000-01			4.5-4.8	9.5-10.1
2002			3.2	6.8
2003-04			2.3	4.8
2005-06			2.2	4.6
2007-09			1.7	3.6
Maxima:				
2000-01			4.5	9.5
2002-04			2.3	4.9
2005-07			2.2	4.6
Sentra:				
2000-01			3.0	6.3
2002-06: 1.8L			3.0	6.3
2.0L 2007-09			2.0	4.2
2.5L:				
2002-08			2.3	4.8
2009			1.7	3.6
2007-08			2.0	4.2
Versa: 2007-08			2.0	4.2
2009:				
5-speed			2.6	5.5
6-speed			2.0	4.2
DIFFERENTIAL				GL-5
All temperatures				
Altima:			.80W-90	
2003-08			temperatures above 32°F (0°C)	.90
CAPACITY, Refill:			Liters	Pt
350Z				
Altima:			1.4	2.9
OTHER COMPONENTS				
Brake Fluid Reservoir			.HB	
Clutch Fluid Reservoir			.HB	
Power Steering Reservoir:				
2000-07			.AF3	
2008-09			.AF6	
1999-2009 ARMADA, FRONTIER, MURANO, PATHFINDER, TITAN, XTERRA				
1999-2003 INFINITI QX4				
CRANKCASE				.API★
All temperatures				
Altima:			.5W-30 ¹	
CAPACITY, Refill ² :			Liters	Qt
Armada:				
2005-08			6.2	6.6
2009			6.5	6.9
Frontier, Xterra				
2.4L:				
1999-2003: 2WD			3.5	3.7
4WD			3.9	4.1
2004			3.5	3.7
2.5L:				
2005-08			4.9	5.2
2009			4.6	4.9
3.3L			3.3	3.5
4.0L			5.1	5.4
Murano:				
2003-08			4.0	4.2
2009			4.9	5.2
Pathfinder:				
3.3L			3.7	3.9
3.5L			5.0	5.3
4.0L			5.1	5.4
5.6L:				
2008			6.2	6.6
2009			6.5	6.9
QX-4:				
3.3L			3.7	4.6
3.5L			5.0	5.3
Titan:				
2004-08			6.2	6.6
2009			6.5	6.9
1 Preferred				
2 Capacity shown includes filter. After refill, check oil level.				
TRANSMISSION, Automatic				
Murano				
Titan 2004-09			.SLF	
All Others ex. Murano, Titan:				
1999-2004			.AF3 ¹	
2005-09			.SLF	
CAPACITY, Total Fill ² :			Liters	Qt
Armada				
10.6				11.2
Frontier, Xterra:				
1999-2004:				
2.4L			7.9	8.3
3.3L:				
2WD			8.3	8.8
4WD			8.5	9.0
2005-09			10.3	10.9
Pathfinder:				
1999-2004:				
2WD:				
1999			8.3	8.8
2000			8.1	8.6
2001-04			8.5	9.0
4WD			8.5	9.0
2005-07			10.3	11.0

CARS & LIGHT TRUCKS

NISSAN Continued

CAPACITY, Total Fill ² :			Liters	Qt				
2008-09:								
4.0L	10.3	10.9						
5.6L	10.6	11.2						
Infiniti QX4:								
2WD:								
1999	8.3	8.8						
2000	8.1	8.6						
2001-03	8.5	9.0						
4WD	8.5	9.0						
Murano CVT	10.2	10.8						
Titan	10.6	11.2						
1 Continental USA & Alaska, use NissanMatic D. Canada use Nissan ATF. Dexron III®/Mercon® may be used as alternative.								
2 Total (dry) fill shown. When refilling, measure amount drained & refill with equal amount of new fluid. Start engine & allow transmission to reach operating temperature. With service & parking brake applied, move gear shift through all gear positions ending with park. Check fluid level with dipstick.								
TRANSMISSION, Manual								
All Models: 1999-2009	.GL-4							
All temperatures								
1999-2001	.75W-90							
2002-09	.75W-85							
CAPACITY, Refill:								
Armada, Pathfinder, QX4:								
1999-2003:								
2WD:								
1999-2000	2.4	5.1						
2001-03	2.8	5.9						
4WD	5.0	10.6						
2004-05	5.1	10.8						
Frontier, Xterra:								
1999-2003								
2.4L:								
2WD	2.0	4.2						
4WD	4.8	10.1						
3.3L:								
2WD	2.8	6.0						
4WD	5.1	10.8						
2004	2.0	4.2						
2005-09:								
Frontier:								
5-Speed	2.9	6.1						
6-Speed:								
2WD	4.0	8.5						
4WD	4.2	8.8						
Xterra:								
2WD	4.0	8.5						
4WD	4.2	8.8						
TRANSFER CASE								
All ex. Murano	.AF3 ¹							
Murano	.GL-5							
All temperatures	.80W-90							
CAPACITY, Refill:								
Armada	3.0	6.3						
Frontier, Pathfinder, Xterra:								
Part Time:								
1999-2004	2.2	4.6						
2005-09	2.0	4.2						
All Mode	3.0	6.3						
Murano	0.3	0.6						
Titan	2.0	4.2						
1 Continental USA & Alaska, use NissanMatic D. Canada use Nissan ATF. Dexron III®/Mercon® may be used as alternative.								
DIFFERENTIAL								
Limited-Slip	.GL-5★							
All temperatures	.80W-90							
Above 0°F (-18°C)	.90 may be used							
Standard:								
1999-2003:								
All ex. 2003 Murano	.GL-5							
0°F to 100°F (-1 to 38°C)	.90							
10°F to 84°F (-12 to 29°C)	.85W							
Above 50°F (10°C)	.140							
Below 50°F (10°C)	.75W							
Below 84°F (29°C)	.80W							
Below 100°F (38°C)	.75W-90, 80W-90							
2003-09 Murano	.80W-90 ^{1,2}	GL-5						
2004-09 All ex. Armada, Murano	.GL-5							
Front	.80W-90 ^{1,2}							
Rear:								
Frontier, Xterra:								
C200 axle	Synthetic 75W-90							
M226 axle	Synthetic 75W-140							
Pathfinder:								
2004	.80W-90 ^{1,2}							
2005-09	Synthetic 75W-90							
2005-09 Armada	.GL-5							
Front	.80W-90 ^{1,2}							
Rear	Synthetic 75W-90							
CAPACITY, Refill:								
Armada:								
Front	1.6	3.3						
Rear	1.8	3.8						
Front:								
Frontier:								
1999-00 R180A	1.3	2.7						
1999-01 R200A	1.5	3.2						
2002-04 R200A	1.8	3.7						
2005-09	0.9	1.8						
CAPACITY, Refill:								
Armada, Pathfinder, QX4:								
1999-2004								
Front:								
1999-00 H190A	1.5	3.2						
1999-04 C200	1.3	2.7						
1999-04 H233B	2.8	5.9						
2005-09 C200	1.6	3.4						
2005-09 M226	2.0	4.2						
Xterra:								
2000-02:								
w/2.4L	1.5	3.2						
w/3.3L	2.8	5.9						
2003-04:								
C200	1.3	2.7						
H233B	2.8	5.9						
2005-09:								
C200	1.6	3.4						
M226	2.0	4.2						
Murano	0.6	1.3						
Pathfinder, QX4:								
1999-2004								
Front:								
1999-00	1.8	3.8						
Rear:								
1999-00	2.8	5.9						
2005-07:								
Front:								
2005-07	0.8	1.7						
Rear:								
2005-07	1.4	3.0						
2008-09:								
Front:								
4.0L	0.85	1.7						
5.6L	1.6	3.4						
Rear:								
4.0L	1.4	3.0						
5.6L	1.75	3.7						
Titan:								
Front:								
2004	1.7	3.7						
Rear:								
2004	2.0	4.2						
2005-06	2.1	4.4						
2007	2.1	4.4						
2008-09	2.0	4.2						
1 Preferred.								
2 For hot climates, SAE 90 is suitable for temperatures above 32°F (0°C).								
OTHER COMPONENTS								
Brake Fluid Reservoir	.HB							
Clutch Fluid Reservoir	.HB							
Power Steering Reservoir:								
1999-2007	.AF3							
2008-09	.AF6							
2009-10 GT-R								
CRANKCASE								
All	.SM, API★							
All temperatures	Synthetic 0W-40 ¹							
CAPACITY, Refill²:								
Liters	Qt							
3.8L	5.5	5.8						
1 Mobil1 synthetic 0W-40 is the only oil recommended by Nissan. If Mobil1 0W-40 is not available, Mobil1 synthetic 10W-40 may be used, but a loss of performance may be noticed.								
2 Capacity shown is with filter. After refill, check oil level.								
TRANSMISSION, Manual								
All	.SLF ¹							
CAPACITY, Total fill:								
Liters	Pt							
2009-10	9.7	20.5						
1 Use Nissan transmission oil R35 special.								
DIFFERENTIAL								
All	.75W-140 GLS ¹							
CAPACITY, Refill:								
Liters	Pt							
Front	0.65	1.4						
Rear	1.55	3.3						
1 Use Castrol SAF-XJ.								
OTHER COMPONENTS								
Brake Fluid Reservoir	.HB ¹							
Power Steering Reservoir	.AF6							
1 Use Nissan brake fluid R35 special DOT4 to ensure best performance and proper operation.								
2008-10 ROGUE								
CRANKCASE								
All	.API★							
All temperatures	.5W-30							
CAPACITY, Refill¹:								
Liters	Qt							
2.5L	4.6	4.9						
1 Capacity shown is with filter. After refill, check oil level.								
TRANSMISSION/TRANSAXLE, Automatic								
All	.VTF							
CAPACITY, Total fill:								
Liters	Qt							
2008:								
2WD:								
w/fluid cooler	8.5	9.0						
w/o fluid cooler	8.3	8.8						
AWD:								
w/fluid cooler	9.5	10.0						
w/o fluid cooler	9.3	9.8						
2009:								
2WD:								
w/fluid cooler	7.3	7.7						
w/o fluid cooler	7.5	7.9						
CAPACITY, Total fill:								
Liters	Qt							
2008:								
2WD:								
w/fluid cooler	8.4	8.9						
w/o fluid cooler	8.6	9.1						
2010:								
2WD:								
w/fluid cooler	7.3	7.7						
w/o fluid cooler	7.5	7.9						
AWD:								
w/fluid cooler	8.3	8.8						
w/o fluid cooler	8.5	9.0						
TRANSFER CASE								
All	.80W-90	GL-5						
CAPACITY, Refill:								
Liters	Pt							
2008-10	0.38	0.8						
DIFFERENTIAL								
All	.80W-90 ¹	GL-5						
CAPACITY, Refill:								
Liters	Pt							
2008-10	0.55	1.2						
1 For ambient temperatures above 32°F (0°C), 90 is suitable.								
OTHER COMPONENTS								
Brake Fluid Reservoir	.HB							
2010 ALTIMA								
CRANKCASE								
All	.SM, API★							
All temperatures	.5W-30 ¹							
CAPACITY, Refill²:								
Liters	Qt							
2010: 2.5L	4.6 ²	4.9 ²						
3.5L	4.8 ²	5.1 ²						
1 Nissan recommends Genuine Nissan Ester Engine Oil or equivalent.								
2 Capacity shown is with filter. After refill, check oil level.								
TRANSMISSION/TRANSAXLE, Automatic								
Altima	.VTF ¹							
Altima Hybrid	.VTF ²							
CAPACITY, Total fill¹:								
Liters	Qt							
2010 ex. Hybrid:								
2.5L	7.3 ¹	7.7 ¹						
3.5L	10.2 ¹	10.8 ¹						
Hybrid	4.1 ²	4.3 ²						
1 Using transmission fluid other than Genuine Nissan CVT Fluid NS-2 will damage the CVT transmission.								
2 Use Nissan Matic W ATF.								
Manual								

CARS & LIGHT TRUCKS

NISSAN Continued • OLDSMOBILE

CAPACITY, Refill¹:	Liters	Qt
1.6L	3.0	3.2
1.8L	4.1	4.3

1 Capacity shown is with filter. After refill, check oil level.

TRANSMISSION/TRANSAXLE, Automatic	
CVT	VTF
RE4F03B	AF3¹

CAPACITY, Total fill²:	Liters	Qt
CVT:		

2009:		
REOF08A	8.3	8.8
REOF08B	7.4	7.8
2010 REOF08B	7.4	7.8
RE4F03B:		
2009	7.9	8.3
2010:		
w/1.6L	7.7	8.1
w/1.8L	7.9	8.3

1 Continental USA & Alaska use Nissan Matic D.

2 Total (dry) fill shown. When refilling, measure amount drained & refill with equal amount of correct fluid. Start engine & allow transmission to reach operating temperature prior to checking fluid level.

TRANSMISSION/TRANSAXLE, Manual	
All	GL-4

2009-10:		
5-speed	.75W-85	
6-speed	.75W-80 ¹	

CAPACITY, Refill:	Liters	Pt
2009-10:		

5-speed	2.6	5.5
6-speed	2.0	4.2

1 Use Nissan gear oil (ETL 8997B) 75W-80 or equivalent.

OTHER COMPONENTS

Brake Fluid Reservoir	.HB
Clutch Fluid Reservoir	.HB

2010 FRONTIER, XTERRA

CRANKCASE

All	API★
All temperatures	.5W-30¹

CAPACITY, Refill²:	Liters	Qt
2010: 2.5L	4.6 ²	4.9 ²
4.0L	5.1 ²	5.4 ²

1 Preferred.

2 Capacity shown is with filter. After refill, check oil level.

TRANSMISSION/TRANSAXLE, Automatic	
All	SLF

CAPACITY, Total fill¹:	Liters	Qt
2010	10.3	10.9

1 Total (dry) fill shown. When refilling, measure amount drained & refill with equal amount of correct fluid. Start engine & allow transmission to reach operating temperature prior to checking fluid level.

TRANSMISSION/TRANSAXLE, Manual	
All	GL-4

All temperatures	.75W-85
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CAPACITY, Refill:	Liters	Pt
2010: Frontier 5-speed	2.9	6.1
2WD 6-speed	4.0	8.5
4WD 6-speed	4.2	8.9

TRANSFER CASE

TRANSFER CASE	
All	AF31
CAPACITY, Refill:	Liters Pt
2010	2.0 4.2

1 Use only Nissan Matic D ATF.

DIFFERENTIAL	
All	GL-5

Front	.80W-90²
-------	----------------------------

Rear: C200 Axle	Synthetic 75W-90
M226 Axle	Synthetic 75W-140¹

1 Used on Frontier M226 Axle.

2 For ambient temperatures above 32°F (0°C), 90 is suitable.

CAPACITY, Refill:	Liters	Pt
Front	0.9	1.8
Rear:		

C200	1.6	3.4
M226	2.0	4.2

OTHER COMPONENTS

Brake Fluid Reservoir	.HB
Power Steering Reservoir	AF6

2010 MAXIMA

CRANKCASE	
All	API★

All temperatures	.5W-30
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CAPACITY, Refill¹:	Liters	Qt
2010	4.6	4.9

1 Capacity shown is with filter. After refill, check oil level.

TRANSMISSION/TRANSAXLE, Automatic	
All	VTF

CAPACITY, Total fill¹:	Liters	Qt
2010	10.2	10.8

1 Total (dry) fill shown. When refilling, measure amount drained & refill with equal amount of correct fluid. Start engine & allow transmission to reach operating temperature prior to checking fluid level.

OTHER COMPONENTS

Brake Fluid Reservoir	.HB
Clutch Fluid Reservoir	.HB

Power Steering Reservoir **AF6**

2010 MURANO

CRANKCASE	
All	API★

All temperatures	.5W-30
------------------	---------------

CAPACITY, Refill¹:	Liters	Qt
2010	4.6	4.8

1 Capacity shown is with filter. After refill, check oil level.

TRANSMISSION/TRANSAXLE, Automatic	
All	VTF

CAPACITY, Total fill¹:	Liters	Qt
2010	10.2	10.7

1 Total (dry) fill shown. When refilling, measure amount drained & refill with equal amount of correct fluid. Start engine & allow transmission to reach operating temperature prior to checking fluid level.

TRANSFER CASE

All	GL-5
All temperatures	.80W-90

CAPACITY, Refill:	Liters	Pt
2010	0.3	0.6

DIFFERENTIAL

All	GL-5
All temperatures	.80W-90^{1,2}

CAPACITY, Refill:	Liters	Pt
2010	0.6	1.1

1 Preferred.

2 For ambient temperatures above 32°F (0°C), 90 is suitable.

OTHER COMPONENTS

Brake Fluid Reservoir	.HB
Power Steering Reservoir	AF6

2009-10 370Z

CRANKCASE	
All	API★

All temperatures	.5W-30¹
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CAPACITY, Refill²:	Liters	Qt
2009-10	4.9	5.2

1 Nissan recommends Genuine Nissan Ester Engine Oil or equivalent.

2 Capacity shown is with filter. After refill, check oil level.

TRANSMISSION/TRANSAXLE, Automatic	
All	SLF

CAPACITY, Total fill¹:	Liters	Qt
2009-10	9.2	9.7

1 Total (dry) fill shown. When refilling, measure amount drained & refill with equal amount of correct fluid. Start engine & allow transmission to reach operating temperature prior to checking fluid level.

TRANSMISSION/TRANSAXLE, Manual	
All	GL-4

All temperatures	.75W-85, 75W-90
------------------	------------------------

CAPACITY, Refill:	Liters	Pt
2009-10	2.8	6.0

DIFFERENTIAL

All	GL-5
All temperatures	.80W-90^{1,2}

CAPACITY, Refill:	Liters	Pt
2008-09	1.4	3.0

1 Preferred.

2 For ambient temperatures above 32°F (0°C), 90 is suitable.

OTHER COMPONENTS

Brake Fluid Reservoir	.HB
Clutch Fluid Reservoir	.HB

Power Steering Reservoir **AF6**

2010 PATHFINDER

CRANKCASE	
All	API★

All temperatures	.5W-30
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CAPACITY, Refill¹:	Liters	Qt
4.0L	5.1	5.4
5.6L	6.5	6.9

1 Capacity shown is with filter. After refill, check oil level.

TRANSMISSION/TRANSAXLE, Automatic	
All	SLF

CAPACITY, Total fill¹:	Liters	Qt
4.0L	10.3	10.9
5.6L	10.6	11.2

1 Total (dry) fill shown. When refilling, measure amount drained & refill with equal amount of correct fluid. Start engine & allow transmission to reach operating temperature prior to checking fluid level.

TRANSFER CASE	
All	AF3

CAPACITY, Refill:	Liters	Pt
Part Time	2.0	4.2
All Mode	3.0	6.3

DIFFERENTIAL

Front	.80W-90^{1,2}
Rear	Synthetic 75W-90 GL-5

CAPACITY, Refill:	Liters	Pt
Front:		

4.0L	0.85	1.7
5.6L	1.6	3.4

Rear:		
4.0L	1.4	3.0
5.6L	1.75	3.7

1 Preferred.

2 For ambient temperatures above 32°F (0°C), 90 is suitable.

OTHER COMPONENTS

Brake Fluid Reservoir	.HB
Clutch Fluid Reservoir	.HB

Power Steering Reservoir **AF6**

2010 SENTRA

CRANKCASE	
All	API★

All temperatures	.5W-30¹
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CAPACITY, Refill²:	Liters	Qt
2010:		

2.0L	3.9	4.1
2.5L	4.3	4.5

1 Preferred.

2 Capacity shown is with filter. After refill, check oil level.

TRANSMISSION/TRANSAXLE, Automatic	
CVT	VTF²

CAPACITY, Total fill¹:	Liters	Qt
2010:		

2.0L	7.3 ²	7.7 ²
2.5L	7.5 ²	7.9 ²

1 Total (dry) fill shown. When refilling, measure amount drained & refill with equal amount of correct fluid. Start engine & allow transmission to reach operating temperature prior to checking fluid level.

2 Using transmission fluid other than Genuine NISSAN CVT Fluid NS-2 will damage the CVT transmission.

Manual

All	GL-4
2010:	

2.0L	.75W-80 ¹
2.5L	.75W-85

CAPACITY, Refill:	Liters	Pt
2010:		

2.0L	2.0	4.2 ¹
2.5L	1.7	3.6

1 Use Nissan gear oil (ETL 8997B) 75W-80 or equivalent.

OTHER COMPONENTS

Brake Fluid Reservoir	.HB
Clutch Fluid Reservoir	.HB

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SILHOUETTE—SEE CHEVROLET & GMC TRUCKS

1999-2004 BRAVADA

CRANKCASE	API★
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3.8L All, 4.0L 1999:	
Above 0°F (-18°C)	.10W-30¹
Below 60°F (16°C)	.5W-30

Others:

Above 0°F (-18°C)	.10W-30
All temperatures	.5W-30^{1,3}

CAPACITY, Refill²:	Liters	Qt
2.2L 2002-04	4.8	5.0
3.1L, 3.4L, 3.8L	4.3	4.5

3.5L	5.7	6.0
4.0L	7.1	7.5

Others:

3.8	4.0
-----	-----

1 Preferred.

2 Capacity shown is with filter. Recheck oil level after filling.

3 Where temperature falls below -20°F (-29°C) it is recommended that you use either an SAE 5W-30 synthetic oil or an SAE 0W-30 oil meeting GM standard GM6094M.

TRANSAXLE, Automatic:	
All	AF6

CAPACITY, Initial Refill¹:	Liters	Qt
4T40E, 4T45E	6.5	6.9
4T65E	7.0	7.4

4T80E	10.4 ²	11.0 ²
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1 With engine at operating temperature, shift transmission through all gears. Let engine slow idle in PARK for 3 minutes or more. Check fluid level and add fluid as needed. Do not overfill.

2 Both pan and drain plug removed.

TRANSAXLE, Manual	
All	GLS

CAPACITY, Refill:	Liters	Pt
1999	1.9	4.0
2000-04	1.7	3.6

OTHER COMPONENTS

Power Steering	.PS
Brake Master Cylinder	.HB

Clutch Fluid Reservoir

CARS & LIGHT TRUCKS

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**FIREFLY—SEE GEO,
CHEVROLET-PONTIAC
AZTEK, MONTANA,
MONTANA SV6, TORRENT, TRANS
SPORT—SEE CHEVROLET & GMC
TRUCKS**

1999-2009 ALL

2010 VIBE

CRANKCASEAPI★

3.4L Code X, 3.8L:		
Above 0°F (-18°C)	10W-30 ¹	
Below 60°F (16°C)	5W-30	
All temperatures 2004-06 GTO	5W-30 ³	
All temperatures 2007-09 Solstice 2.0L	5W-30 ⁶	

Others:		
Above 0°F (-18°C) 1999-04	10W-30	
All temperatures 1999-03	5W-30 ^{1,5}	
All temperatures 2004-09	5W-30 ^{4,5}	

CAPACITY, Refill²:

	Liters	Qt
1.8L:		
2003-06 Code 8	3.7	3.9
2007-10 Code 8	4.2	4.4
2003-06 Code L	4.4	4.6

2.0L:		
Turbo Code X	4.8	5.0
2.2L:		
2002-09 Code F	4.7	5.0
1999-03 Code 4	4.3	4.5

2.4L:		
1999-2002	4.3	4.5
2006-2007	4.8	5.0
2009-10	3.8	4.0

3.1L:		
1999 Code M	4.3	4.5
2000-03 Code J	4.3	4.5

3.4L:		
DOHC	4.3	4.5
SOHC	4.3	4.5
2007	3.8	4.0

3.5L	3.8	4.0
3.6L	5.2	5.5
G8	6.7	7.0

3.8L	4.3	4.5
3.9L	3.8	4.0
4.6L	7.1	7.5
5.3L	5.7	6.0

5.7L:		
1999-03	5.2	5.5
2004	5.7	6.0
6.0L 2005-06 GTO	6.2	6.6
6.0L, 6.2L G8	7.5	8.0

1 Preferred.		
2 Capacities include filter change, Recheck oil level after refilling.		
3 2004 use oil meeting standard GM6094M. 2005-06 use oil meeting standard GM4718M.		
4 Use oil meeting standard GM6094M.		
5 Where temperature fall below -20°F (-29°C) it is recommended that you use either an SAE 5W-30 synthetic oil or an SAE 0W-30 oil meeting GM standard GM6094M.		
6 Use synthetic oil GM standard GM4718M.		

TRANSMISSION/TRANSAXLE, Automatic

1999-2009 ex. Vibe	AF6
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Vibe: 2003-08	TIV
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2009-10	WS
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CAPACITY, Initial Refill¹:

	Liters	Qt
Vibe:		
2003-08:		
A246E	3.0	3.2
U341F FWD	2.1	2.2
U341F AWD	2.9	3.1

2009-10:		
U140F (MVA)	3.5	3.7
U250E (MVD)	3.5	3.7
U341 (MVB)	2.9	3.1

MU4 (FWD)	3.1	3.3
MU5 (AWD)	2.9	3.1
3T40, THM125	3.8	4.0
4T40E ²	6.5	6.9

4T45E:		
1999-07	6.5	6.9
2008-09	6.6	7.0
4T60E, 4T65E	7.0	7.4
4L60E, 4L65E	4.7	5.0
5L40E Solstice	4.7	5.0
5L40E G8	6.0	6.3
6T70E, 6T40	6.0	6.3
6L80 G8	5.7	6.0

1 All ex. 4T40E, with the engine at operating temperature, shift transmission through all gears. Let engine slow idle in PARK for 3 minutes or more. Check fluid level and add fluid as needed. Do not overfill.		
2 Has no fluid level indicator. Not owner serviceable.		

TRANSMISSION/TRANSAXLE, Manual

Vibe:	
2003-08:	

G5	GLS
----	-----

G6 2006-07	GL-4
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All temperatures	75W-80
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Vibe:		
2003-07	75W-85	GL-4
2008-10	75W-90	GL-5

2003-07	75W-85	GL-4
2008-10	75W-90	GL-5

All temperatures	75W-90
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CAPACITY, Refill:

	Liters	Pt
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Vibe:		
5-Speed 2003-08	1.9	4.0
6-Speed 2003-08	2.3	4.9

2009-10:		
1.8L	1.9	4.0
2.4L	2.5	5.3

FWD:		
1999	1.9	4.0
2000-05	1.7	3.6
G5: MU3	1.9	4.0
GETRAG	1.6	3.3
G6	2.9	6.1

RWD:		
Firebird:		
5-Speed	3.2	6.8
6-Speed	3.8	8.0
G8 2009	3.5	7.4
GTO 2004-06	4.4	9.3

Solstice:		
2006	2.2	4.6
2007-09	2.6	5.5

TRANSFER CASE (AWD)

Vibe	GL-5
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All temperatures	80W-90
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CAPACITY, Refill:

	Liters	Pt
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Vibe: 2003-08	0.8	1.7
2009-10	0.5	1.1

DIFFERENTIAL

G8	GLS
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GTO 2004-06	GL-5★
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All temperatures	75W-140
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Q8 2005	3.3	7.4
GTO 2004-06	4.4	9.3

Solstice:		
Standard	GL-5	
All temperatures	75W-90	
Limited-Slip	GL-5★	
All temperatures	75W-90	

Vibe	80W-90	GL-5
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All temperatures	80W-90
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CAPACITY, Refill:

	Liters	Pt
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Firebird	1.7	3.6
G8	1.25	2.6
GTO 2004-06	1.6	3.4

Solstice 2006-09:		
Drain plug removed	1.1 ¹	2.3 ¹
w/Limited slip	1.2	2.5
w/o Limited slip	1.3	2.7

Vibe:		
2003-06	0.5	1.1
2009-10	2	2

1 With limited slip add 3.38 oz with rear cover removed, with drain plug removed 2.37 oz GM P/N 1052358 or equivalent.		
2 Fill to oil surface is within 5mm (0.197in) of the lowest position of the differential plug filler opening.		

OTHER COMPONENTS

Power Steering: ex. GTO, Vibe	PS
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GTO, Vibe	AF3
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Brake Master Cylinder	HB
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Clutch Fluid Reservoir	HB
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Suspension & Steering Linkage, Parking	
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Brake Cable Guides, Shift Linkage,	
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Clutch Cross Shaft	LB
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Wheel Bearings ex. 1999-02 Firebird	GC
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PORSCHE

1999-2007 911, BOXSTER,

2002-05 911 GT2 & GT3

2001-06 911 TURBO

2003-06 CAYENNE

2006-07 CAYMAN

CRANKCASESynthetic API★

Cayenne 3.2L:		
All temperatures,	0W-30, 0W-40	
Above -13°F (-25°C)	5W-40, 5W-50	

Others:		
All temperatures,	0W-40	
Above -13°F (-25°C)	5W-40, 5W-50	

CAPACITY, Refill^{1, 2}:

	Liters	Qt
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911		
1999-2001 3.4L	8.3	8.8
2001-05 All ex. 2001 w/3.4L	8.8	9.3
2002-05 GT2, GT3	8.8	9.3
2005-07: Carrera 3.6L	8.3	8.8
Carrera 3.8L	8.5	9.0

Boxster:		
1999-2002	8.8	9.3
2003-04	8.3	8.8
2005-07	7.8	8.2
Cayenne: 3.2L	6.3	6.6
Cayman: 2006-07	7.8	8.2
4.5L	8.8	9.3

1 A drain down time of 20 minutes is required to attain accurate level on dipstick. 911 Turbo, no dipstick installed on engine. Use electronic display on instrument panel.		
2 Oil capacity listed in Owner's Manual may differ from listed amount. In such cases, use amount listed in Owner's Manual.		

TRANSAXLE, Automatic¹

911 Turbo, 911 GT2	SLF
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911: 1999-2005	AE
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2006-07	SLF ³
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Boxster, Boxster S	AE
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Cayenne	TIV
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Cayman, Cayman S	AE
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CAPACITY, Initial Refill²:

	Liters	Qt
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911 Turbo, 911 GT2, GT3:		
1999-2001	4.0	4.2
2002-07	4.5	4.8
Boxster, Boxster S	3.5	3.7
Cayman, Cayman S	3.5	3.7

Cayenne:		
To Trans 09D00036D, G or H	8.5	9.0
From Trans 09D00037D, G or H	9.6	10.1

1 Final drive serviced separately.		
2 With engine at operating temperature, shift transmission through all gears. Check fluid level in PARK and add fluid as needed.		
3 Porsche Part No. 000 043 30400.		

TRANSAXLE, ManualGL-5

All Temperatures	75W-90
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CAPACITY, Refill¹:

	Liters	Pt
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911: 1999-2004	2.7	5.7
2005-07	2.6	5.5
911 Turbo	3.0	6.3
Boxster, Cayman	2.2	4.6
Boxster S, Cayman S	2.8	5.9
GT2	3.6	7.6
GT3 2004	2.4	5.1

1 Includes final drive.		
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FINAL DRIVE, w/ATGL-5

All Temperatures	75W-90
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CAPACITY, Refill:

	Liters	Pt
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911	0.9	1.9
911 Turbo, 911 GT2	1.2	2.5
Boxster, Boxster S	0.8	1.7

DIFFERENTIAL, FRONT

911	GL-5
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All Temperatures	75W-90
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Cayenne	GLS
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CAPACITY, Refill:

	Liters	Pt
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911	1.5	3.2
Cayenne	1.0	2.1

DIFFERENTIAL, REAR

Cayenne	GLS
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CAPACITY, Refill:

	Liters	Pt
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Cayenne:		
ex. V6:		
w/o locking differential	1.4	3.0
w/locking differential	1.6	3.4

V6 w/MT:		
w/o locking differential	1.3	2.7
w/locking differential	1.6	3.4

TRANSFER CASEAE¹

CAPACITY, Refill:

	Liters	Pt
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Cayenne	0.75	1.6
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1 The factory fill is blue in color. The AE for topping off/adjusting or changing is red in color.		
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OTHER COMPONENTS

Brake Fluid Reservoir	HBH ¹
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Clutch Fluid Reservoir	HBH ¹
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CARS & LIGHT TRUCKS

SAAB Continued • SATURN

2004-07:		
9-3, 9-5		0W-30 ⁶
2008-09		0W-30, 0W-40, 5W-30, 5W-40 ⁶
CAPACITY, Refill¹:	Liters	Qt
2.3L: 9-3 1999-2002	.....	4.0 4.2
9-5 1999-2006	.....	4.0 4.2
2007-08 2.3L:		
w/oil cooler	.....	5.4 5.7
w/o oil cooler	.....	4.0 4.2
2009:		
w/oil cooler	.....	5.4 5.7
w/o oil cooler	.....	4.4 4.6
2.0L Turbo:		
1999-2002	.....	4.0 4.2
2003-05	.....	6.0 6.3
2006-09	.....	6.75 7.1
2.5L	.....	4.3 4.5
2.8L	.....	7.0 7.4
3.0L	.....	4.5 4.8

- 1 Preferred.
- 2 Saab Turbo Engine Oil or oil meeting API-SL/SM or ILSAC GF-3 requirements.
- 3 1998, in extremely hot climates 15W-40, 15W-50, 20W-50.
- 4 Must be full or semi synthetic oil.
- 5 Capacity shown includes filter, after refill check oil level.
- 6 Synthetic meeting specification GM-LL-A 025.

TRANSAXLE, Automatic

1999-2001	.....	AF3
2002:		
9-3	.....	AF3
9-5	.....	TIV
2003-09: 9-3:		
5-speed	.....	TIV
6-speed	.....	SLF
9-5	.....	TIV
CAPACITY Initial Refill:	Liters	Qt
1999-2001, 9-3 & 9-5	.....	3.2 ¹ 3.4 ¹
2002-03:		
9-3	.....	3.2 ¹ 3.4 ¹
9-5	.....	7.3 ² 7.7 ²
2004:		
9-3	.....	4.0 ¹ 4.2 ¹
9-5	.....	7.0 ² 7.4 ²
2005-07:		
9-3:		
5-speed	.....	7.2 ² 7.6 ²
6-speed	.....	2.8 ¹ 3.0 ¹
9-5	.....	7.0 ² 7.4 ²
2008:		
9-3:		
5-speed	.....	7.2 ² 7.6 ²
6-speed	.....	2.5 ¹ 2.6 ¹
9-5	.....	7.0 ² 7.4 ²
2009:		
9-3:		
5-speed	.....	7.2 ² 7.6 ²
6-speed	.....	2.5 ¹ 2.6 ¹
9-5	.....	7.2 ² 7.6 ²

- 1 Initial refill capacity.
- 2 Total capacity including torque converter and oil cooler shown. When refilling, use less fluid than specified.

TRANSAXLE, Manual

1999-2004	.....	SLF ¹
2005-09	.....	SLF

- 1 May use Synthetic AF3 for topping up only when SLF is not available.

CAPACITY, Refill:	Liters	Pt
1999-2004 9-3:		
w/5-speed	.....	1.8 3.8
w/6-speed	.....	3.0 6.3
2005-09 9-3:		
5-speed: ex. model F17	.....	1.9 4.0
model F17	.....	1.6 3.4
6-speed	.....	2.4 5.1
1999-2009 9-5	.....	2.0 4.2

OTHER COMPONENTS

Brake Fluid Reservoir	.....	HBH
Clutch Fluid Reservoir	.....	HBH
Power Steering Reservoir	.....	PS

2005-06 9-2X

CRANKCASE	.....	API★
All temperatures	.....	5W-30
CAPACITY, Refill¹:	Liters	Qt
All	.....	4.0 4.2

- 1 Capacity shown includes filter. After refill check oil level.

TRANSMISSION, Automatic

2005	.....	AF3
2006	.....	SLF
CAPACITY Total Refill:	Liters	Qt
All	.....	9.5 ¹ 10.0 ¹

- 1 Total (dry) fill shown. Use less fluid when refilling.

TRANSAXLE, Manual

All	.....	75W-90 GL-5
CAPACITY, Refill:	Liters	Pt
All	.....	3.5 7.4

DIFFERENTIAL

Rear	.....	75W-90 GL-5
CAPACITY, Refill:	Liters	Pt
Front w/AT	.....	1.3 2.7
Rear	.....	0.8 1.7

OTHER COMPONENTS

Brake Fluid Reservoir	.....	HBH
Clutch Fluid Reservoir	.....	HBH
Power Steering Reservoir	.....	PS

2005-09 9-7X

CRANKCASE	.....	API★
All temperatures ex. 6.0L	.....	5W-30 ^{1,3}
All temperatures w/6.0L	.....	Synthetic 5W-30 ^{1,4}

CAPACITY, Refill²:	Liters	Qt
4.2L	.....	6.6 7.0
5.3L	.....	5.7 6.0
6.0L	.....	5.7 ⁴ 6.0 ⁴

- 1 Preferred.
- 2 Capacity shown includes filter. After refill check oil level.
- 3 Where temperature falls below -20°F (-29°C) it is recommended that you use either an SAE 5W-30 synthetic oil or an SAE 0W-30 oil meeting GM standard GM6094M.
- 4 Oil meeting GM standard GM4718M.

TRANSMISSION, Automatic

All	.....	AF6
CAPACITY Initial Refill:	Liters	Qt
All	.....	4.7 5.0

TRANSFER CASE

CAPACITY, Refill:	Liters	Pt
Front	.....	1.8 3.8

DIFFERENTIAL

Standard	.....	GL-5
All temperatures	.....	.75W-90
Limited-Slip	.....	GL-5★
All temperatures	.....	.75W-90

CAPACITY, Refill:	Liters	Pt
Front	.....	0.8 1.7
Rear: 6-cyl.	.....	1.7 3.6
8-cyl 5.3L	.....	2.0 4.3
8-cyl 6.0L	.....	2.6 ¹ 5.5 ¹

- 1 Add 5.5 oz of friction modifier P/N 1052358 or equivalent.

OTHER COMPONENTS

Brake Fluid Reservoir	.....	HB
Power Steering Reservoir	.....	PS

SATURN

1999-2002 S SERIES

CRANKCASE	.....	API★
Above 40°F (4°C)	.....	.30 ¹
Above 20°F (-7°C)	.....	.10W-30
All temperatures	.....	.5W-30 ²

CAPACITY, Refill²:	Liters	Qt
All	.....	3.8 4.0

- 1 Use only if other viscosities are not available. Use SJ oil.
- 2 Preferred.
- 3 Capacity shown is with filter.

TRANSAXLE, Automatic

All	.....	SLF
CAPACITY, Initial Refill^{1,2}:	Liters	Qt
All	.....	4.0 4.2

- 1 With the engine at operating temperature, shift transaxle through all gears. Let engine slow idle in PARK for 3 minutes or more. Check fluid level and add fluid as needed.
- 2 With pressure filter change.

TRANSAXLE, Manual

All	.....	SLF
CAPACITY, Refill:	Liters	Pt
All	.....	2.5 5.3

OTHER COMPONENTS

Brake Fluid Reservoir	.....	HB
Clutch Fluid Reservoir	.....	HB
Power Steering Reservoir	.....	PS

2000-05 L SERIES

CRANKCASE	.....	API★
2000-02: Above 20°F (-7°C)	.....	.10W-30 ³
Below -20°F (-29°C)	.....	Synthetic 5W-30, 0W-30
2003-05: All temperatures	.....	.5W-30 ^{1,3,4}

CAPACITY, Refill²:	Liters	Qt
All	.....	4.7 5.0

- 1 Preferred.
- 2 Capacity shown is with filter.
- 3 Only engine oil meeting GM standard GM6094M and showing the API certified for gasoline engines starburst symbol.
- 4 Where temperature falls below -20°F (-29°C) it is recommended that you use either an SAE 5W-30 synthetic oil or an SAE 0W-30 oil meeting GM standard GM6094M.

TRANSAXLE, Automatic

CAPACITY, Initial Refill¹:	Liters	Qt
All	.....	6.5 6.9

- 1 With the engine at operating temperature, shift transaxle through all gears. Let engine slow idle in PARK for 3 minutes or more. Check fluid level and add fluid as needed.

TRANSAXLE, Manual

CAPACITY, Refill:	Liters	Pt
All	.....	1.9 4.0

OTHER COMPONENTS

Brake Fluid Reservoir	.....	HB
Clutch Fluid Reservoir	.....	HB
Power Steering Reservoir	.....	PS

2002-09 VUE

2003-07 ION

CRANKCASE

ex. 2004-07 VUE 3.5L:		
2002-04 Above 0°F (-18°C)	.....	.10W-30 ^{2,4,5}
2002-09 All temperatures	.....	.5W-30 ^{1,2,4,5}
2004-07 VUE 3.5L	.....	.5W-20

CAPACITY, Refill²:	Liters	Qt
2.0L Supercharged:		
2004	.....	6.4 6.7
2005-07	.....	5.7 6.0
2.2L, Code D, F	.....	4.7 5.0
2.4L, 3.0L	.....	4.7 5.0
3.5L: 2004-07	.....	4.3 4.5
2008-09	.....	3.8 4.0
3.6L 2008-09	.....	5.2 5.5

- 1 Preferred.
- 2 Supercharged engine synthetic oil must be used.
- 3 Capacity shown is with filter.
- 4 Where temperature falls below -20°F (-29°C) it is recommended that you use either an SAE 5W-30 synthetic oil or an SAE 0W-30 oil.
- 5 Only engine oil meeting GM standard GM6094M and showing the API certified for gasoline engines starburst symbol.

TRANSAXLE, Automatic CVT

VT25-E (M16/M75)		
(no dip stick)	.....	.VTF, VTA ¹

CAPACITY, Refill²:	Liters	Qt
VT25-E (M16/M75) Total fill	.....	8.0 8.5

- 1 Use variable Transmission Fluid. Add every 50,000 miles Variable Transmission Fluid Additive, or when variable Transmission Fluid is changed.
- 2 See appendix for fluid level checking procedure.

TRANSAXLE, Automatic

4T45-E, 4T40-E, 6T70, 2MT70 All	.....	AF6
5AT-5-speed VUE	.....	SLF
AF33-5, AF23-5		
(with dip stick)	.....	TIV ¹

CAPACITY, Refill²:	Liters	Qt
AF23-5, AF33 (M45)	.....	4.0 4.2
5AT-5-speed VUE:		
FWD	.....	4.5 4.8
AWD	.....	4.1 4.3
2002-07 4T45-E, 4T40-E	.....	6.5 6.9
2008-09 4T45-E	.....	6.6 7.0

2009:		
6T70	.....	6.0 6.3
2MT70	.....	7.0 7.4

- 1 Do not use any other fluids.
- 2 With engine at operating temperature, shift transmission through all positions. With lever in park at idle, check level.

TRANSAXLE, Manual

All ex. ION w/MU3 Trans	.....	GLS
MU3 Trans	.....	SLF

CAPACITY, Refill:	Liters	Pt
All ex. MU3	.....	1.7 3.6
MU3 Trans	.....	1.9 4.0

POWER TRANSFER UNIT

Getrag 760 2008-09	.....	.75W-90 GL-5
MJ8	.....	GL-5

NVG900	.....	SLF
CAPACITY, Refill:	Liters	Pt
Getrag 760	.....	0.8 1.7
VUE: NVG900	.....	0.5 1.1
MJ8	.....	0.4 0.8

REAR DRIVE MODULE

2002-07	.....	SLF
2008-09	.....	.75W-90 GL-5

CAPACITY, Refill:	Liters	Pt
VUE 2002-07	.....	0.8 1.7
2008-09	.....	0.5 1.1

OTHER COMPONENTS

Brake Fluid Reservoir	.....	HB
Clutch Fluid Reservoir	.....	HB
Power Steering Reservoir	.....	PS

2005-07 RELAY

CRANKCASE	.....	API★
All temperatures	.....	.5W-30 ^{2,3}

CAPACITY, Refill¹:	Liters	Qt
All	.....	3.8 4.5

- 1 Capacity shown is with filter.
- 2 Where temperature falls below -20°F (-29°C) it is recommended that you use either an SAE 5W-30 synthetic oil or an SAE 0W-30 oil.
- 3 Only engine oil meeting GM standard GM6094M and showing the API certified for gasoline engines starburst symbol.

TRANSAXLE, Automatic

All	.....	AF6
CAPACITY, Initial Refill¹:	Liters	Qt
2005: FWD	.....	7.0 7.4
AWD	.....	7.4 7.8
2006-07 All	.....	7.0 7.4

- 1 With the engine at operating temperature, shift transaxle through all gears. Let engine slow idle in PARK for 3 minutes or more. Check fluid level and add fluid as needed.

POWER TRANSFER UNIT

CAPACITY, Refill:	Liters	Pt
All	.....	0.3 0.6

REAR DRIVE MODULE

CAPACITY, Refill:	Liters	Pt
All	.....	1.9 4.0

CARS & LIGHT TRUCKS

SATURN Continued • SCION • SMART CAR • SUBARU

OTHER COMPONENTS

Brake Fluid Reservoir	HB
Power Steering Reservoir	PS

2008-09 ASTRA

CRANKCASE

All temperatures .5W-30

CAPACITY, Refill ¹ :	Liters	Qt
1.8L	4.5	5.0

1 Where temperature falls below -20°F (-29°C) it is recommended that you use either an SAE 5W-30 synthetic oil or an SAE 0W-30 oil meeting GM standard GM609M.

TRANSMISSION/TRANSAXLE

All TIV

CAPACITY, Initial Refill ¹ :	Liters	Qt
All	4.0	4.5

1 With engine at operating temperature, shift Transmission through all gears. Let engine slow idle in PARK for 3 minutes or more. Check fluid level and add fluid as needed.

TRANSMISSION/TRANSAXLE, Manual

All SLF

CAPACITY, Refill:	Liters	Qt
All	1.6	3.4

OTHER COMPONENTS

Brake/Clutch Fluid Reservoir	HB
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2007-09 AURA

CRANKCASE

All temperatures .5W-30^{2,3}

CAPACITY, Refill ¹ :	Liters	Qt
2.4L	4.7	5.0
3.5L	3.8	4.5
3.6L	5.2	5.5

1 Capacity shown is with filter.

2 Where temperature falls below -20°F (-29°C) it is recommended that you use either an SAE 5W-30 synthetic oil or an SAE 0W-30 oil.

3 Only engine oil meeting GM standard GM6094M and showing the API certified for gasoline engines starburst symbol.

TRANSAXLE, Automatic

All .AF6

CAPACITY, Initial Refill ¹ :	Liters	Qt
4T45	6.6	7.0
6T40	6.0	6.3
6T70 ²	6.0	6.3

1 With the engine at operating temperature, shift transaxle through all gears. Let engine slow idle in PARK for 3 minutes or more. Check fluid level and add fluid as needed.

2 Start engine and operate until the Transmission fluid reaches 180°-200°F (82°-93°C). Apply parking brake, depress the brake pedal and move the shift lever slowly through all gears, pausing approximately 3 seconds in each range. Return lever to PARK position and turn engine off. Pull the transmission level indicator from the transmission in order to check the proper fluid level on the gauge.

OTHER COMPONENTS

Brake Fluid Reservoir	HB
Power Steering Reservoir	PS

2007-09 SKY

CRANKCASE

All temperatures .5W-30

CAPACITY, Refill ¹ :	Liters	Qt
2.0L	4.7 ²	5.0 ²
2.4L	4.7	5.0

1 Capacity shown includes filter.

2 Synthetic oil required GM standard GM4718M.

TRANSAXLE, Automatic

All .AF6

CAPACITY Total Refill ¹ :	Liters	Qt
5L40-E	8.9	9.4

1 With the engine running check level through check fill plug.

TRANSAXLE, Manual

All .75W-90 GL-3

CAPACITY, Refill:	Liters	Pt
All	2.6	5.5

DIFFERENTIAL

Standard .GL-5

All Temperatures .75W-90

Limited-Slip .GL-5^{★1}

All Temperatures .75W-90

CAPACITY, Refill:	Liters	Pt
w/Limited Slip	1.2 ¹	2.5 ¹
w/o Limited Slip	1.3	2.7
w/Drain plug removed	1.1	2.3

1 Add limited slip additive GM PN. 1052358 or equivalent. With rear cover removed add 3.38 oz., with drain plug removed add 2.37 oz.

OTHER COMPONENTS

Brake Fluid Reservoir	HB
Clutch Fluid Reservoir	HB
Power Steering Reservoir	PS

2007-09 OUTLOOK

2008-10 BUICK ENCLAVE,

GMC ACADIA, CHEVY TRAVERSE

CRANKCASE

All temperatures .5W-30^{2,3}

CAPACITY, Refill ¹ :	Liters	Qt
3.6L	5.2	5.5

1 Capacity shown is with filter.

2 Where temperature falls below -20°F (-29°C) it is recommended that you use either an SAE 5W-30 synthetic oil or an SAE 0W-30 oil.

3 Only engine oil meeting GM standard GM6094M and showing the API certified for gasoline engines starburst symbol.

TRANSAXLE, AUTOMATIC

All .AF6

CAPACITY, Initial Refill ¹ :	Liters	Qt
All	6.0	6.3

1 Start engine and operate until the Transmission fluid reaches 180°-200°F (82°-93°C). Apply parking brake, depress the brake pedal and move the shift lever slowly through all gears, pausing approximately 3 seconds in each range. Return lever to PARK position and turn engine off. Pull the transmission level indicator from the transmission in order to check the proper fluid level on the gauge.

TRANSFER CASE

All .75W-90 GL-5

CAPACITY, Refill:	Liters	Pt
All	0.8	1.7

REAR DRIVE MODULE

All .75W-90 GL-5

CAPACITY, Refill:	Liters	Pt
All	0.8	1.7

OTHER COMPONENTS

Brake Fluid Reservoir	HB
Power Steering Reservoir	HB

SCION

2005-10 SCION tC

2004-06 SCION xA, xB

2008-10 SCION xB, xD

CRANKCASE

2004-06 All temperatures .5W-30

2007-10 All temperatures .5W-20, 0W-20¹

CAPACITY, Refill ² :	Liters	Qt
2005-10 tC	3.8	4.0
2004-06 xA, xB	3.7	3.9
2008-10 xB	4.3	4.5
2008-10 xD	4.2	4.4

1 Preferred.

2 Capacity shown includes filter. After refill check oil level.

TRANSMISSION/TRANSAXLE

Automatic

2004-06 All TIV

2007-10 All WS

CAPACITY, Initial Refill ¹ :	Liters	Qt
2005-07 tC	3.5	3.7
2004-06 xA, xB	2.9	3.1
2008-10 All	3.5	3.7

Manual

All .75W-90 GL-5

CAPACITY, Refill:	Liters	Pt
tC	2.5	5.3
xA, xB, xD	1.9	4.0

1 With the engine at operating temperature, shift transmission through all gears. Check fluid level in PARK and add fluid as needed.

OTHER COMPONENTS

Brake Fluid Reservoir	HB
Clutch Fluid Reservoir	HB
Power Steering	AF3

SMART CAR

2008-10 FORTWO

CRANKCASE

All .SEO

All temperatures .0W-30, 0W-40, 5W-30²

CAPACITY, Refill ¹ :	Liters	Qt
1.0L	3.3	3.5

1 Capacity shown includes filter.

2 Use only synthetic engine oil meeting MB Sheet 229.5 or MB Sheet 229.51.

TRANSMISSION/TRANSAXLE, Manual

All GLS¹

CAPACITY, Initial Refill ¹ :	Liters	Pt
All	1.4	2.9

1 Use Castrol Manual BOT 328.

OTHER COMPONENTS

Brake Fluid Reservoir	HBH
-----------------------	-----

SUBARU

1999-2010

CRANKCASE

1999-2009: .API★

Warm climate & HD applications .30, 40,

10W-50, 20W-40, 20W-50

Above -4°F (-20°C) .10W-30, 10W-40

Below 105°F (40°C) .5W-30¹

Above -4°F (-20°C) .10W-30, 10W-40

All Temperatures .5W-30¹

2010 all temperatures .5W-30

CAPACITY, Refill ² :	Liters	Qt
---------------------------------	--------	----

B9 Tribeca:

2006 5.5 5.8

2007 5.7 6.0

Baja 4.0 4.2

Forester: 1999-2006 4.0 4.2

2007-10:

2.5L 4.2 4.4

2.5L Turbo 4.3 4.5

CAPACITY, Refill²:

Liters Qt

Impreza:

1999-2001 4.0 4.2

2002-04:

Turbo 2.0L 4.5 4.8

2.5L & STI 4.0 4.2

2005-06 4.0 4.2

2007-08:

2.5L 4.2 4.4

2.5L Turbo 4.3 4.5

2009-10:

WRX 4.2 4.4

WRX STI 4.3 4.5

Legacy: 1999-2000:

2200cc 4.0 4.2

2500cc 4.5 4.8

2001-06 4.0 4.2

2007-10:

2.5L 4.2 4.4

2.5L Turbo 4.3 4.5

2008-09 3.0L 5.7 6.0

2010 3.6L 6.3 6.7

Outback:

1999 4.5 4.8

2000-01 4.0 4.2

2.5L:

2002-06 4.0 4.2

2007-10: 4.2 4.4

Turbo 4.3 4.5

3.0L:

2002 6.8 7.2

2003-04 5.6 5.9

2005-06 5.5 5.8

2007-10 5.7 6.0

2010 3.6L 6.3 6.7

Tribeca 2008-10 6.5 6.9

1 Preferred.

2 Manufacturer does not state if shown capacity is with or without oil filter change. When replacing oil filter additional oil MAY be needed. After refill, check oil level.

TRANSAXLE, Automatic¹

2005-10 Forester, Impreza, Legacy,

Outback, Tribeca ex. 2005 Forester .SLF

All others .AF3

CAPACITY, Total Fill ^{2,3} :	Liters	Qt
---------------------------------------	--------	----

B9 Tribeca, Tribeca (Total Capacity) 9.6 10.1

Baja Pickup, Legacy, Outback

(Total Capacity):

2.2L 8.4 8.9

2.5L 9.3 9.8

3.0L 9.3 9.8

2005-10 5-Speed 9.8 10.4

Forester (Total Capacity) 9.3 9.8

Impreza (Total Capacity):

2.0L 9.3 9.8

2.2L 8.4 8.9

2.5L:

1999-2001 9.3 9.8

2002 9.5 10.0

2003-10 9.3 9.8

2010 Legacy, Outback w/CVT 12.5 13.2

1 Final drive serviced separately.

2 With engine at operating temperature, shift transmission through all gears. Check fluid level in PARK and add fluid as needed.

3 Total capacity. When refilling, add ATF until ATF level is at cold mark on dipstick. Start engine & allow transaxle to reach operating temperature.

TRANSAXLE, Manual

All GL-5

Above 32°F (0°C) .90

Above -20°F (-30°C) .85W

Below 90°F (32°C) .80W

All temperatures 1999-2003 .80W-90

All temperatures 2004-10 .75W-90

CAPACITY, Refill:	Liters	Pt
-------------------	--------	----

All ex. 2005-10 B9, Outback 3.5 7.4

Impreza:

ex. WRX, STI 3.5 7.4

WRX, STI 4.1 8.7

Legacy, Outback:

1999-09 5-Speed 3.5 7.4

2007-09 6-Speed 4.1 8.7

2010 6-Speed 3.7 7.8

FINAL DRIVE

Front w/AT .GL-5

Above 32°F (0°C) .90

Above -20°F (-30°C) .85W

Below 90°F (32°C) .8

CARS & LIGHT TRUCKS

SUBARU Continued • SUZUKI

CAPACITY, Refill:	Liters	Pt
All models ex. STi	0.8	1.6
STi:		
2004	0.9	1.8
2005-10	1.0	2.1
OTHER COMPONENTS		
Power Steering		AF3
Brake & Clutch Master Cylinder		HB

SUZUKI

2002-07 AERIO, AERIO SX

1999-2002 ESTEEM

1999-2001 SWIFT

CRANKCASE

Aerio, Aerio SX:		
Above -4°F (-20°C)	.10W-30	
All temperatures	.5W-30 ¹	
Estern 1999-2002:		
Above 0°F (-18°C)	.10W-30	
All temperatures	.5W-30 ¹	
Swift:		
1999-2001:		
Above -4°F (-20°C)	.10W-30	
All temperatures	.5W-30 ¹	

CAPACITY, Refill²:	Liters	Qt
1.3L, 1.6L	3.3	3.5
1.8L, 2.0L, 2.3L	4.7	4.9
1 Preferred.		
2 Capacity shown includes filter. After refill, check oil level.		

TRANSAXLE, Automatic

Capacity, Initial Refill¹:	Liters	Qt
Aerio, Aerio SX:		
2002-03	2.9	3.0
2004-07	4.5	4.8
Esteem	2.6	2.7
Swift	0.8	1.7
1 With the engine at operating temperature, shift transmission through all gears. Check fluid level in PARK and add fluid as needed.		

TRANSAXLE, Manual

All temperatures	.75W-80, 75W-90	
Above 5°F (-15°C)	.80W-90	
2007: All temperatures	.75W-85, 75W-90	
Above 4°F (-20°C)	.80W-90	

CAPACITY, Initial Refill:	Liters	Pt
Aerio, Aerio SX:		
2002-03	2.0	4.2
2004-07	2.3	4.9
Esteem:		
1.6L	2.4	5.1
1.8L	2.2	4.6
Swift	2.4	5.0
1 Recommended.		

TRANSFER CASE

All temperatures	.75W-85, 75W-90	
CAPACITY, Refill:	Liters	Pt
Aerio, Aerio SX	0.7	1.5
1 Recommended.		

DIFFERENTIAL, Rear

2003-04 All temperatures	.80W-90	
2005-07 All temperatures	.80W-90	
Above 32°F (0°C)	.90	
CAPACITY, Refill:	Liters	Pt
Aerio, Aerio SX	0.7	1.5

1999-2010 GRAND VITARA,

VITARA, XL-7

CRANKCASE

All		API★
1999-2010 All:		
Above 0°F (-18°C)	.10W-30 ¹	
All temperatures	.5W-30 ²	

CAPACITY, Refill³:	Liters	Qt
1.6L	4.2	4.4
2.0L	5.2	5.5
Grand Vitara:		
1999-2005	5.5	5.8
2006-08	4.8	5.1
2009-10:		
2.4L	4.8	5.1
3.2L	6.0	6.3
XL-7:		
2001-06	5.5	5.8
2007-08	5.2	5.5
2009:		
4-speed	2.5	2.6
5-speed	3.0	3.2

1 Do not use 10W-30 in the 2007-08 XL-7.		
2 Preferred.		
3 Capacity shown includes filter. After refill, check oil level.		

TRANSMISSION/TRANSAXLE, Automatic

1999-2005 All

Grand Vitara:

2006-10

XL-7:

2006

2007-08

2009

CAPACITY, Initial Refill¹:	Liters	Qt
1999-2005: 2WD	2.8	3.0
4WD	2.5	2.6
Grand Vitara:		
2006-08	3.0	3.2
2009-10:		
4-speed	2.5	2.6
5-speed	3.0	3.2
XL-7:		
2006	3.0	3.2
2007-08	4.0	4.2
2009:		
AF33-5	4.0	4.2
6T70/6T75	4.0-6.0	4.2-6.3

1 With engine at operating temperature, shift transmission through all gears. Check fluid level in PARK and add fluid as needed.		
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TRANSMISSION/TRANSAXLE, Manual

Grand Vitara, XL-7:

1999-2008:

All temperatures

Above -4°F (-20°C)

2009-10

Vitara

All temperatures

Above -4°F (-20°C)

1 75W-90 preferred.

CAPACITY, Refill:

Grand Vitara:

1999-2005

2006-10

Vitara:

1999-2002

2003-04

XL-7:

2002-03

2004-06

TRANSFER CASE

Grand Vitara, XL-7:

1999-2004

2005-06: w/motor shift

w/lever shift

Grand Vitara:

2007-10:

All temperatures

Above -4°F (-20°C)

Vitara

XL-7: 2007-09

CAPACITY, Refill:

1999-2004

2005:

Lever Shift 2WD

Lever Shift 4WD

Motor Shift

2006:

Grand Vitara

XL-7

2007-09 XL-7

Grand Vitara:

Motor Shift

Lever Shift

2009-10:

Grand Vitara:

Motor shift

Non-shift

1 Above -4°F (-20°C) 80W-90.

2 Preferred.

DIFFERENTIAL

Grand Vitara, XL-7:

1999-2004

2005-06: Front

Rear

2007-10:

Grand Vitara

All temperatures

Above 32°F (0°C)

XL-7: Rear

Vitara

CAPACITY, Refill:

Front:

All ex. XL-7

XL-7

Rear:

1999-2005 All ex. XL-7

XL-7:

2001-06

2007-09

Grand Vitara:

2006-07:

2WD

4WD

2008:

2WD

4WD

2009-10:

2WD: w/4-speed

w/5-speed

4WD

1 Preferred.

OTHER COMPONENTS

Brake Fluid Reservoir

Clutch Fluid Reservoir

Power Steering Reservoir:

1999-2010

2004-08 FORENZA

2005-08 RENO

2004-06 VERONA

CRANKCASE

All ex. 2004-06 Verona:

Above -4°F (-20°C)

All temperatures

2004-06 Verona:

Above -4°F (-20°C)

All temperatures

CAPACITY, Refill²:

2.0L

2.5L

1 Preferred.

2 Capacity shown includes filter. After refill, check oil level.

TRANSAXLE, Automatic

CAPACITY, Initial Refill¹:

All

1 With engine at operating temperature, shift transmission through all gears. Check fluid level in PARK and add fluid as needed.

TRANSAXLE, Manual

All temperatures

CAPACITY, Refill:

All

OTHER COMPONENTS

Brake Fluid Reservoir

Clutch Fluid Reservoir

Power Steering Reservoir

2007-10 SX4

CRANKCASE

Above -4°F (-20°C)

All temperatures

CAPACITY, Refill²:

2.0L

1 Preferred.

2 Capacity shown includes filter. After refill, check oil level.

TRANSAXLE, Automatic

CAPACITY, Initial Refill¹:

All

1 With engine at operating temperature, shift transmission through all gears. Check fluid level in PARK and add fluid as needed.

TRANSAXLE, CVT

CAPACITY, Refill¹:

2010

1 With engine at operating temperature, shift transmission through all gears. Check fluid level in PARK and add fluid as needed.

TRANSAXLE, Manual

All temperatures

Above -4°F (-20°C)

CAPACITY, Refill:

All

TRANSFER CASE

All temperatures

Above -4°F (-20°C)

CAPACITY, Refill:

All

1 Recommended.

DIFFERENTIAL, Rear

All temperatures

Above 32°F (0°C)

CAPACITY, Refill:

All

OTHER COMPONENTS

Brake Fluid Reservoir

Clutch Fluid Reservoir

Power Steering Reservoir

2009 SUZUKI EQUATOR

CRANKCASE

All

All temperatures

CAPACITY, Refill¹

2.5L

4.0L

1 Capacity shown is with filter. After refill, check oil level.

TRANSMISSION/TRANSAXLE, Automatic

All

CAPACITY, Total fill:

All

1 Use Nissan Matic S ATF.

TRANSMISSION/TRANSAXLE, Manual

5 Speed

6 Speed

CAPACITY, Total fill:

5 Speed

6 Speed:

2WD

4WD

CARS & LIGHT TRUCKS

SUZUKI Continued • TOYOTA

TRANSFER CASE

All	AF3
CAPACITY, Refill:	Liters Pt
TX15B	2.0 4.2

DIFFERENTIAL

Front	.80W-90 ¹	GL-5
Rear:		
C200	Synthetic 75W-90	GL-5
M226	Synthetic 75W-140	GL-5

CAPACITY, Refill:	Liters Pt
Front	0.85 1.8
Rear:	
C200	1.6 3.4
M226	2.0 4.2

¹ For ambient temperatures above 32°F (0°C), 90 is suitable.

OTHER COMPONENTS

Brake Fluid Reservoir	.HB
-----------------------	-----

TOYOTA

1999 ALL MODELS EX. 4RUNNER, LAND CRUISER, PICKUPS, PREVIA VAN, RAV4

CRANKCASE

Avalon, Corolla:	
-20°F (-29°C) to above 100°F (38°C)	.5W-30 ¹
Camry:	
-20°F (-29°C) to above 100°F (38°C)	.5W-30 ¹
Celica, Tercel:	
-20°F (-29°C) to above 100°F (38°C)	.5W-30 ¹

CAPACITY, Refill:	Liters Qt
Avalon	4.7 5.0
Camry:	
2.2L	3.6 3.8
3.0L	4.7 5.0
Celica:	
1999	3.9 4.1
Corolla	3.7 3.9
Sienna	4.7 5.0
Solara:	
2.2L	3.6 3.8
3.0L	4.7 5.0
Tercel	2.8 3.0

¹ Preferred.
² Capacity shown is with filter.

TRANSMISSION/TRANSAXLE, Automatic

All¹

CAPACITY, Initial Refill:

Avalon, Camry, Solara:	
4-cyl.	2.5 2.6
V6	4.7 5.0
Celica 2.2L 1999	2.5 2.6
Corolla:	
3-speed	2.5 2.6
4-speed	3.1 3.3
Sienna	3.5 3.7
Tercel:	
3-speed	2.5 2.6
4-speed	3.1 3.3

¹ Differential is serviced separately in: Camry & Solara 4-cyl., Corolla & Tercel 3-speed, Sienna.
² With the engine at operating temperature, shift transmission through all gears. Check fluid level in PARK and add fluid as needed.

TRANSMISSION/TRANSAXLE, Manual¹

All

CAPACITY, Refill:

Camry, Solara:	
4-cyl.	2.2 4.6
V6	4.2 8.8
Celica:	
2.2L	2.2 4.6
Corolla	1.9 4.0
Tercel	1.9 4.0

¹ FWD, includes front differential

FINAL DRIVE, FWD w/AT

CAPACITY, Refill:

Avalon, Camry, Solara:	
4-cyl.	1.6 3.4
V6	0.9 2.0
Corolla, Tercel	1.4 3.0
Celica, 2.2L	1.6 3.4
Sienna	0.9 2.0

OTHER COMPONENTS

Power Steering	AF2, AF3
Brake & Clutch Master Cylinder	.HB
Wheel Bearings, 4WD Steering	
Knuckle & Propeller Shafts	.LM

2000-10 ALL MODELS

EX. 4RUNNER, FJ CRUISER, HIGHLANDER, LAND CRUISER, RAV4, SEQUOIA, TACOMA, TUNDRA, VENZA

CRANKCASE

2000-02	
All temperatures	.5W-30 ¹
Above 0°F (-18°C)	.10W-30
2007-09 Camry 4-cyl., 2008 Solara	.5W-20, 0W-20 ¹
2003-10 All others ex. 2010 Camry,	
2009-10 Corolla, Matrix, Prius	.5W-30 ¹
2009-10 Corolla, Matrix	.5W-20, 0W-20
2010 Camry:	
2.4L	.0W-20
2.5L	.5W-20, 0W-20
3.5L	.5W-30
2010 Prius:	.0W-20

CAPACITY, Refill:

Avalon:	
2000-04	4.7 5.0
2005-10	6.1 6.4

Camry, 2000-08 Solara:

4-cyl:	
2000-01	3.6 3.8
2002-06	3.8 4.0
2007-09	4.3 4.5
2010 2.5L	4.4 4.6
3.0L	4.7 5.0
3.3L	4.7 5.0
3.5L	6.1 6.4
Camry Hybrid	4.3 4.5

Celica 2000-05:

1.8L	4.2 ³ 4.4 ³
1.8L H.O.	4.5 4.8

Corolla:

2000-2008:	
1.8L	4.2 ³ 4.4 ³
1.8L HO	4.4 4.7
2009-10:	
1.8L	4.2 4.4
2.4L	3.8 4.0

Echo:

2000-03	3.6 3.8
2004-05	3.7 3.9

Matrix:

2003-05	
Std.	4.2 ³ 4.4 ³
H.O.	4.4 4.7
2006-08	4.2 4.4
2009-10:	
1.8L	4.2 4.4
2.4L	3.8 4.0

MR2:

2001-03	3.6 3.8
2004-09	3.7 3.9
2010	4.2 4.4

Prius:

2000-07	4.7 5.0
2008-10	6.1 6.4
Yaris	3.7 3.9

Sienna:

2000-07	4.7 5.0
2008-10	6.1 6.4
Yaris	3.7 3.9

¹ Preferred.
² Capacity shown is with filter. After refill, check oil level.

³ 2003-05 capacity shown is in combination with updated dipstick, Part No. 15301-22050. Capacity with originally installed dipstick, Part No. 154301-2230 is 0.6L (0.5 quarts) less.

TRANSMISSION/TRANSAXLE, Automatic

Avalon, 2005-10

Camry: 2000-06

2007-10

Celica, 2000-05

Corolla¹, 2003-08

Echo, 2000-05

Matrix: 2003-08

2009-10

Prius:

2001-03

2004-10

Sienna¹: 2004-06

2007-10

Solara: 4-cyl.: 2002-07

4-cyl., 2008

6-cyl., 2008

Yaris

All others¹

CAPACITY, Initial Refill:

Avalon:

2000-04	4.7 5.0
2005-07	3.5 3.7
2008-10	2.8 3.0

Camry:

2000-01: 4-cyl.	2.5 2.6
V6	4.7 5.0
2002-05: 4-cyl.	3.9 4.1
V6	3.5 3.7
2006 All:	3.5 3.7
2007-08: 4-cyl.	3.5 3.7
V6	2.8 3.0
Hybrid	4.1 4.3
2009: 4-cyl.	3.5 3.7
V6 (Total Fill)	6.5 6.9
Hybrid	4.1 4.3
2010: 4-cyl.	2.7 2.8
V6	2.8 3.0
Hybrid	4.1 4.3

CAPACITY, Initial Refill:

Celica:

2000-05:

1.8L

1.8L H.O.:

2000-02

2003-05

Corolla: 3-speed¹

2004-08 4-speed

2009-10: 4-speed

5-speed

Echo

Matrix:

2003, 2WD (U240E)

2003-06 2WD (A246E)

2003-06 AWD (U341F)

2007-08 (U246E)

2009-10:

4-speed

5-speed

Prius: 2001-03

2004-09

2010

Sienna¹:

2000

2001-03

2004-05:

2WD

4WD

2006-10

Solara:

2000-01

2002-03:

2.4L

3.0L

2004-08

Yaris 2007-10

CAPACITY, Refill:

2000-10 Camry, 2000-08 Solara:

4-cyl.:

2000-01

2002-09

2010

3.0L:

2000-03

2004-06

3.3L, 3.5L

Celica: 1.8L

H.O.

Corolla:

5-speed

6-speed

2.4L

Echo

MR2:

Standard transmission:

w/limited slip

w/o limited slip

Sequential transmission:

w/limited slip

w/o limited slip

Matrix:

5-speed

6-speed

2009-10 w/2.4L

Yaris

TRANSFER CASE

Matrix, Sienna

2008-10 Sienna:

Above 0°F (-18°C)

Below 0°F (-18°C)

All others

CAPACITY, Refill:

Matrix

Sienna

FINAL DRIVE, FWD w/AT

CAPACITY, Refill:

Avalon 2000-03

Camry & Solara, 4-cyl.

Corolla

Sienna 2000-03

DIFFERENTIAL

Matrix

Above 0°F (-18°C)

Below 0°F (-18°C)

Sienna

Center & Front

Rear

Above 0°F (-18°C)

Below 0°F (-18°C)

CARS & LIGHT TRUCKS

TOYOTA Continued

CAPACITY, Refill:	Liters	Pt	CAPACITY, Refill:	Liters	Pt	CAPACITY, Refill ¹ :	Liters	Qt
Matrix	0.5	1.1	Rear:			3.4L:		
Sienna:			2.4L	1.4	2.8	2000-04: 2WD	5.4	5.7
Center & Front	0.9	1.9	2.7L, 3.4L:			4WD	5.2	5.5
Rear	0.9	1.9	ex. w/locking diff.	2.8	5.8	4.0L:		
OTHER COMPONENTS			w/locking diff.	3.0	6.2	2005-10: 2WD	4.5	4.8
Brake Fluid Reservoir		.HB	4WD X-long:			4WD, 2WD PreRunner	5.2	5.5
Clutch Fluid Reservoir		.HB	ex. locking diff.	2.1	4.2	Venza:		
Power Steering:			w/locking diff.	3.0	6.2	2.7L	4.4	4.7
ex. MR2		.AF2, AF3	Land Cruiser:			3.5L	6.1	6.4
MR2		.PS	Front	1.7	3.6	¹ Capacity shown includes filter. After refill, check oil level.		
1999 4RUNNER, LAND CRUISER, RAV4, T100, TACOMA			Rear:			² Preferred.		
CRANKCASE		.API★	ex. limited-slip	3.2	6.8	TRANSMISSION, Automatic		
All 1999, All temperatures		.5W-30 ²	w/limited-slip	3.3	7.0	4-Runner:		
CAPACITY, Refill¹:	Liters	Qt	RAV4 ²	0.9	2.0	2000-02		.AF3
4Runner:			T100:			2003-04:		
4-cyl.	5.0	5.3	Front	1.9	4.0	w/4-speed		.TIV ²
V6	5.2	5.5	Rear:			2004:		
Land Cruiser:	6.8	7.2	2WD	2.8	6.0	w/5-speed		.WS ³
RAV4	3.9	4.1	4WD	3.0	6.2	2005-10		.WS ³
T100:			¹ Models with Automatic Disconnecting Differential (A.D.D.) do not have locking hubs.			FJ Cruiser		.WS ³
4-cyl.	5.3	5.6	² RAV 4, applies to models w/AT only.			Highlander:		
V6:			OTHER COMPONENTS			2000-07 ex. 2006-07 Hybrid		.TIV ²
2WD	5.2	5.5	Power Steering:			2006-10 Hybrid		.WS ³
4WD	4.7	5.0	ex. RAV4 EV		.AF3	2008-10		.WS ³
Tacoma:			RAV4 EV		.PS	Land Cruiser:		
4-cyl.:			Brake & Clutch Master Cylinder		.HB	2000-02		.AF3
2WD	5.1	5.4	Wheel Bearings, 4WD Steering			2003		.TIV ²
4WD	5.0	5.3	Knuckle & Propeller Shafts		.LM	2004-10		.WS ³
V6:			2000-10 4RUNNER, FJ CRUISER, HIGHLANDER, LAND CRUISER, RAV4, SEQUOIA, TACOMA, TUNDRA, VENZA			RAV4:		
2WD	5.1	5.4	CRANKCASE		.API★	2000:		
4WD	4.9	5.2	Highlander:			FWD		.AF3
¹ Capacity shown is with filter.			2.4L 2007		.5W-20, 0W-20	4WD		.TIV ²
² Preferred.			2.7L 2009-10		.5W-20, 0W-20	2001-05		.TIV ²
TRANSMISSION, Automatic			2004-08 all ex. tow pkg		.5W-30	2006-10		.WS ³
RAV4, 4WD		.TTA	2008-10 V6:			Sequoia:		
All others		.AF3	w/tow pkg		.5W-30	2000-02		.AF3
CAPACITY, Initial Refill¹:	Liters	Qt	w/o tow pkg		.5W-20	2003-04		.TIV ²
4Runner:			Highlander Hybrid:			2005-10		.WS ³
2WD	1.6	1.7	2006-07		.5W-30	Tacoma:		
4WD	2.0	2.1	2008-10		.5W-20, 0W-20 ²	2000-02		.AF3
Land Cruiser	3.5	3.7	2010 4Runner, FJ Cruiser		.0W-20	2003-04:		
RAV4	3.3	3.5	2007-10 Tundra 5.7L		.5W-20, 0W-20 ²	2.4L		.AF3
T100:			2010 Sequoia, Tundra 4.2L		.0W-20	2.7L, 3.4L		.TIV ²
2WD	1.6	1.7	2006-07 RAV4 2.4L, 2.5L		.5W-20, 0W-20	2005-07		.TIV ²
4WD	2.0	2.2	2008-10 RAV4, Tacoma, Venza 4-cyl.		.5W-20, 0W-20 ²	2008-10:		
Tacoma:			2008-10 Landcruiser, Sequoia 5.7L		.0W-20, 5W-20	4-speed		.TIV ²
2WD:			Venza 3.5L		.5W-30	5-speed		.WS ³
2.4L	2.4	2.5	All others: Above 0°F (-18°C)		.10W-30	Tundra:		
2.7L, 3.4L	1.6	1.7	All temperatures		.5W-30 ²	2000-02		.AF3
4WD	2.0	2.1	CAPACITY, Refill¹:	Liters	Qt	2003-04		.TIV ²
¹ With the engine at operating temperature, shift transmission through all gears. Check fluid level in PARK and add fluid as needed.			4Runner:			2005-10		.WS ³
TRANSMISSION, Manual			4-cyl.	5.0	5.3	Venza		
RAV4, 4WD		.GL-5	V6 2000-09	5.2	5.5	CAPACITY, Initial Refill¹, 4:	Liters	Qt
All temperatures		.75W-90	V6 2010	6.2	6.6	4Runner:		
All others		.GL-4, GL-5	V8	6.2	6.5	2000-02:		
All temperatures		.75W-90	FJ Cruiser: 2007-09	5.2	5.5	2WD	1.6	1.7
CAPACITY, Refill:	Liters	Pt	2010	6.1	6.4	4WD	2.0	2.1
4Runner, Tacoma:			Highlander:			2003-04:		
4-cyl.:			4-cyl.	3.8	4.0	4-speed	2.0	2.1
2.4L	2.6	5.4	V6: 3.3L, Hybrid	4.7	5.0	5-speed	3.0	3.2
2.7L	2.5	5.2	3.5L	6.1	6.4	2005-07 5-speed	3.0	3.2
V6:			Land Cruiser:			2008-09	1.3	1.3
2WD	2.6	5.4	2000-07	6.8	7.2	2010:		
4WD	2.2	4.6	2008-09	7.0	7.4	4-cyl.	2.7	2.9
RAV4:			2010:			V6	3.0	3.2
2WD	3.9	8.2	w/blue dipstick	7.0	7.4	FJ Cruiser	3.0	3.2
4WD	5.0	10.6	w/green dipstick	7.5	7.9	Highlander:		
T100:			RAV4:			2001-03: 2WD	3.3	3.5
2WD	2.6	5.4	2000	4.1	4.3	4WD	3.9	4.1
4WD	2.2	4.6	2001-03	4.2	4.6	2004-10: 2WD	3.5	3.7
TRANSFER CASE		.GL-4, GL-5	2004-05	3.8	4.0	4WD	3.6	3.8
All temperatures		.75W-90	2006-10:			Highlander Hybrid:		
CAPACITY, Refill:	Liters	Pt	2.4L	4.3	4.5	2006-07:		
4Runner, Tacoma:			2.5L	4.4	4.6	Front:		
ex. Electronic type	1.0	2.2	6-cyl	6.1	6.4	w/Towing Package	4.2	4.4
Electronic type	1.2	2.6	Sequoia, Tundra:			w/o Towing Package	3.9	4.1
Land Cruiser	1.3	2.8	V6:			Rear	2.0	2.1
Previa	1.3	2.8	2000-04	5.2	5.5	2008-09:		
RAV4 ¹	0.7	1.4	2005-06	4.5	4.8	Front	3.9	4.1
T100	1.1	2.4	2007-10	5.2	5.5	Rear AWD	1.8	1.9
¹ RAV 4, applies to models w/AT only.			V8: 4.7L	6.2	6.5	2010:		
DIFFERENTIAL			5.7L: 2007-09	7.0	7.4	Front	4.2	4.4
4WD 4Runner, T100, Tacoma			2010	7.5	7.9	Rear AWD	1.8	1.9
w/Auto. Disc. Diff.		.GL-5	Tacoma:			Land Cruiser:		
All temperatures		.75W-90	2.4L 2001-04	5.5	5.8	2000-02	3.5	3.7
Land Cruiser w/limited-slip		.GL-5★	2.7L:			2003-10	3.0	3.2
Others ¹		.GL-5	2000-03:			RAV4:		
Above 0°F (-18°C)		.90	2WD	5.5	5.8	2000	3.3	3.5
Below 0°F (-18°C)		.80W, 80W-90	4WD & PreRunner	5.4	5.7	2001-10	3.5	3.7
CAPACITY, Refill:	Liters	Pt	2004:			Sequoia:		
4Runner, Tacoma:			2WD	5.4	5.7	2003-04	2.0	2.1
Front:			4WD	5.2	5.5	2005-07	3.0	3.2
ex. A.D.D.	1.1	2.3	2005-10	5.8	6.0			
w/A.D.D. ¹	1.2	2.4						

TOYOTA Continued

CAPACITY, Initial Refill^{1, 4}:			CAPACITY, Refill:			Sequoia:		
2008-10:			4Runner:			2001-02:		
5-speed	1.7	1.8	2000-02: Standard	1.0	2.1	Front		GL-5
6-speed:			Electronic type	1.2	2.5	All temperatures		.75W-90
A760E, A760F	3.0	3.2	2003-09	1.4	3.0	Rear		GL-5
AB60, AB60F	2.1	2.2	2010:			Below 0°F (-18°C)		.80W, 80W-90
Tacoma:			Fulltime	1.4	2.9	Above 0°F (-18°C)		.90
2000-01: 2WD: 2.4L	2.4	2.5	Partime	1.0	2.2	2003-07:		
2.7L, 3.4L	1.6	1.7	2007:			Front		GL-5
4WD	2.0	2.1	Part Time	1.0	2.1	All temperatures		.75W-90
2002-04:			Full Time	1.4	3.0	Rear		GL-5
2WD	2.4	2.5	w/AT	1.0	2.2	All temperatures		Synthetic 75W-140
4WD & PreRunner	2.0	2.1	w/MT	1.4	2.9	2008-10		GL-5
2005-10: 4-speed	2.0	2.1	Highlander	0.9	1.9	75W-85		
5-speed	3.0	3.2	Land Cruiser	1.3	2.7	Tacoma:		
Tundra: 2003-04	2.0	2.1	RAV4:			2000:		
2005-10	3.0	3.2	2000	0.7	1.5	Front:		
Venza	2.7	2.9	2001-05	0.9	1.9	w/o A. D. D.		GL-5
1 Models with Dipsticks: With the engine at operating temperature, shift transmission through all gears. Check fluid level in PARK and add fluid as needed.			2006-10	0.5	1.1	All temperatures		.80W, 80W-90
2 Use Toyota ATF Type T-IV Part No. 08886-81015 or equivalent.			Sequoia:			w/A. D. D. ¹		GL-5
3 Use Toyota Type WS ATF, or equivalent.			2001-04	1.2	2.5	All temperatures		.75W-90
4 Models without dipstick, refer to the appendix of the transmission fluid service guide for fluid level check procedure.			2005-10	1.4	3.0	Rear		GL-5
TRANSMISSION, Manual			Tacoma:			All temperatures		.75W-90
All ex. 2000 RAV4 4WD		GL-4, GL-5	Standard	1.0	2.1	2001:		
All temperatures		.75W-90	Electronic type	1.2	2.5	Front		GL-5
2000 RAV4 4WD		GL-5	Tundra	1.0	2.1	All temperatures		.75W-90
All temperatures		.75W-90	Venza	0.8	1.7	Rear:		GL-5
CAPACITY, Refill:			DIFFERENTIAL			Below 0°F (-18°C)		.80W, 80W-90
4Runner, Tacoma:			4Runner:			Above 0°F (-18°C)		.90
2.4L:			2000-01:			2002-08:		
2000-03:	2.6	5.5	Front:			Front:		GL-5
2004:			w/o A. D. D.		GL-5	All temperatures		.75W-90
2WD	2.6	5.5	All temperatures		.80W, 80W-90	Rear:		GL-5
4WD	2.5	5.3	w/A. D. D. ¹		GL-5	w/limited slip		GL-5★
2.7L:			All temperatures		.75W-90	Below 0°F (-18°C)		.80W, 80W-90
2000-03:	2.5	5.3	Rear		GL-5	Above 0°F (-18°C)		.90
2004-05:			All temperatures		.80W, 80W-90	2009-10 Front, Rear		.75W-85 GL-5
2WD	2.6	5.5	2002:			Tundra:		
4WD	2.5	5.3	Front:			2000-02:		
2006-10:			w/o A. D. D.:		GL-5	Front		GL-5
2WD	2.6	5.5	Below 0°F (-18°C)		.80W, 80W-90	All temperatures		.75W-90
4WD	2.2	4.6	Above 0°F (-18°C)		.90	Rear:		GL-5
3.4L:			w/A. D. D. ¹		GL-5	Below 0°F (-18°C)		.80W, 80W-90
2000-2002:			All temperatures		.75W-90	Above 0°F (-18°C)		.90
2WD	2.6	5.5	Rear		GL-5	2003-06:		
4WD	2.2	4.6	All temperatures		.80W, 80W-90	Front		GL-5
4.0L:			2003-10:			All temperatures		.75W-90
2005:			Front		GL-5	Rear:		
2WD	2.6	5.5	All temperatures		.75W-85	w/o Limited Slip		GL-5
4WD	2.5	5.3	Rear:			All temperatures		Synthetic 75W-140
2006-10:	1.8	3.8	w/Limited Slip		GL-5★	w/Limited Slip		GL-5★
FJ Cruiser:			All temperatures		.75W-85	Above 0°F (-18°C)		.90
2007-10:	1.8	3.8	w/o Limited Slip		GL-5★	Below 0°F (-18°C)		.80W, 80W-90
RAV4:			All temperatures		.75W-85	2007-10		.75W-85 GL-5
2000:			FJ Cruiser: 2003-10:			Venza		GL-5
2WD	3.9	8.2	Front		GL-5	Below 0°F (-18°C)		.80W, 80W-

CARS & LIGHT TRUCKS

TOYOTA Continued • VOLKSWAGEN

CAPACITY, Refill:	Liters	Pt
Highlander, Venza	0.9	1.9
Land Cruiser:		
2000-04:		
Front	1.6	3.4
Rear:		
w/o locking diff.	3.3	7.0
w/limited-slip	3.2	6.8
2005-07:		
Front	1.6	3.6
Rear	3.3	7.0
2008-10:		
Front	1.9	2.0
Rear	4.2	4.4
RAV4: 2000-06 ²	0.9	1.9
2007-10 ²	0.5	1.1
Sequoia:		
2001-04: Front	1.2	2.5
Rear	3.7	7.8
2005-07:		
Front	1.2	2.5
Rear:		
2WD	3.9	8.2
4WD	3.7	7.8
2008-10: Front	2.1	4.4
Rear	1.6	3.4
Tacoma:		
Front:		
2000-03:		
w/o A. D. D.	1.1	2.3
w/A. D. D.	1.2	2.5
2004:		
ex. Pre runner	1.2	2.5
2005-10	1.5	3.2
Rear:		
2000-04:		
2.4L 2WD ex. Prerunner	1.4	2.8
2.7L Short wheelbase:		
Standard	2.6	5.5
Limited slip	2.7	5.6
2.7L X-long wheelbase:		
Standard	2.5	5.3
Limited slip	3.0	6.2
3.4L 2WD ex. Prerunner	2.6	5.5
2005-08:		
2WD ex. Prerunner	3.3	7.0
4WD, Prerunner:		
w/o locking diff.	2.8	5.9
w/locking diff	3.0	6.2
2009-10:		
2WD ex. Prerunner	3.3	7.0
4WD, Prerunner	2.8	5.9
Tundra:		
2000-06:		
Front	1.2	2.5
Rear:		
2WD:		
w/o limited slip	3.8	8.0
w/limited slip	3.2	6.8
4WD:		
w/o limited slip	3.5	7.4
w/limited slip (2000-05)	3.0	6.2
w/limited slip (2006)	2.9	6.1
Double Cab:		
w/o limited slip	4.0	8.4
w/limited slip	3.3	7.0
2007-10:		
Front	2.1	4.4
Rear 4.0L, 4.6L, 4.7L:		
standard bed	4.0	8.4
long bed, double & crew cab	4.6	9.7
5.7L: reg cab, std bed	3.45	7.3
reg cab, long bed, crew cab 4WD	3.6	7.6
double cab, std bed	3.6	7.6
double cab long bed, crew cab 2WD 3.75	7.9	

1 Models with Automatic Disconnecting Differential do not have locking hubs.

2 RAV 4, applies to 4WD models only.

OTHER COMPONENTS

Power Steering	AF2, AF3
Brake & Clutch Master Cylinder	HB
Wheel Bearings, 4WD Steering	
Knuckle & Propeller Shafts	LM

VOLKSWAGEN

1999-2006 ALL DIESEL MODELS

2004-08 TOUAREG DIESEL CRANKCASE

1999-03	CF-4, CG-4
2004-08	SEO
1999-04:	
ex. Energy conserving oils:	
All temperatures	.5W-50, 10W-50, 10W-60
Above 5°F (-15°C)	.15W-40, 15W-50,
	.20W-40, 20W-50
Below 60°F (15°C)	.5W-30, 5W-40,
	.10W-30, 10W-40
Energy conserving oils:	
All temperatures	.5W-30, 5W-40,
	.10W-30, 10W-40

2004-06: All temperatures	.5W-40
Touareg:	
2004-05 All temperatures	.5W-30, 5W-40
2006-08 All temperatures	.0W-40, 5W-30, 5W-40
CAPACITY, Refill¹:	Liters Qt
Others	4.5 4.7
Touareg:	
2004-07	11.5 12.0
2008	13.5 14.3
1 Capacity shown includes filter. After refill, check oil level. To prevent overfilling, add approximately .5 qt. less than capacity. Start engine & operate until temperature is approximately 140°F (60°C). Turn off ignition switch & wait 3 minutes. Check oil level with dipstick. Add oil as necessary.	
TRANSAXLE, Automatic	
Touareg	TIV
O9A Trans	SLF
Others	AE¹
CAPACITY, Initial Refill²:	Liters Qt
Touareg (Total Fill)	9.0 9.5
O9A Trans	2.5 2.6
ex. O9A Trans	3.0 3.2
1 Final drive serviced separately.	
2 Add specified quantity. With engine at operating temperature, 1997 w/096 transmission temperature must be 140°F (60°C), shift transmission through all gears. Check level in PARK and add fluid as needed. All models do not have a dipstick.	
TRANSAXLE, Manual	
All	GL-4¹
All temperatures	Synthetic 75W-90
CAPACITY, Refill:	Liters Pt
All	2.0 4.2
1 VW Part No. G005000, G052911 1A, if not available 80W GL-4 may be used.	
FINAL DRIVE w/AT	
All models	GL-4
All temperatures	Synthetic 75W-90
CAPACITY, Refill:	Liters Pt
All FWD w/AT	0.8 1.6
DIFFERENTIAL, Front	
Touareg:	
2004-05	.75W-90 GL-4
2006-08	.3
All temperatures	Synthetic 75W-90
CAPACITY, Refill:	Liters Pt
All	1.0 2.1
DIFFERENTIAL, Rear	
Touareg:	
w/o locking differential	GLS¹
w/locking differential	GLS²
CAPACITY, Refill:	Liters Pt
Touareg:	
2004-05	1.0 2.1
2006-09:	
w/GLR dif	1.25 2.6
w/HLV dif	1.6 3.3
1 Use Volkswagen P/N G052 145 52.	
2 Use Volkswagen P/N G 052 196 A2.	
3 Contact local dealership for fluid type.	
TRANSFER CASE	
2004-05	AE
2006-08	GLS
CAPACITY, Refill:	Liters Pt
Touareg	0.8 1.7
1999-2009 ALL GASOLINE MODELS CRANKCASE	
1999-04:	
1.8L Passat, 1.8L Turbo	SEO
All others	
ex. 2004 w/VIN code R, Phaeton	API ★
2004 VIN code R, Phaeton	SEO
2005-09	SEO
1999:	
Above 68°F (20°C)	.40
32° to 86°F (0° to 30°C)	.30
Below 23°F (-5°C)	.10W
14° to 50°F (-10° to 10°C)	.20W-20
Above 14°F (-10°C)	.20W-40, 20W-50
Above 14°F (-10°C) 1998	.15W-40, 15W-50
All temperatures	.5W-50, 10W-50, 10W-60
Below 60°F (15°C)	.5W-30, 5W-40, 10W-30, 10W-40
2000-03:	
All temperatures	.5W-30, 5W-40
2004-09:	
All temperatures	.0W-40, 5W-30, 5W-40
CAPACITY, Refill¹:	Liters Qt
1.8L Turbo:	
Golf, GTI, Jetta, New Beetle:	
1999	3.5 3.7
2000	4.4 4.6
2001-04	4.5 4.8
2005:	
Beetle	4.2 4.4
Others	4.5 4.8
2006	4.5 4.8

CAPACITY, Refill¹:	Liters Qt
Passat:	
1999	3.5 3.7
2000-02	3.7 3.9
2003	3.9 4.3
2004	4.0 4.2
2005	4.1 4.3
2.0L:	
1999	4.0 4.2
2000	4.0 4.2
2001-02	4.2 4.4
2003-04	4.0 4.2
2005-07	4.2 4.4
2008-09	4.6 5.0
2.5L:	
2006-09 ex. 2008-09 Jetta	6.0 6.3
2008-09 Jetta	5.5 5.8
2.8L:	
Eurovan:	
1999	5.7 6.0
2000-03	5.5 5.8
Golf, GTI, Jetta:	
1999-03	5.8 6.1
GTI, Jetta:	
2004-05	5.5 5.8
Passat:	
1999:	
ex. 3rd Gen	5.7 6.0
3rd Gen	6.0 6.3
2000-02	6.2 6.5
2003	5.0 5.7
2004:	
FWD	6.0 6.3
AWD	5.0 5.7
2005	6.0 6.3
Phaeton:	
V-8	7.5 7.9
W-12	11.8 12.5
3.2L:	
EOS	5.5 5.8
Touareg	6.3 6.7
3.6L:	
Touareg: 2007	6.9 7.3
2008-09	6.3 6.7
Others 2006-07	6.0 6.3
4.2L:	
2004	8.5 9.0
2005	7.6 8.0
2006	7.5 7.9
2007	9.1 9.6
2008-09	8.5 9.0
1 Capacity shown includes filter. After refill, check oil level. To prevent overfilling add approximately .5 qt less than capacity. Start engine & operate until temperature is approximately 140°F (60°C). Turn off ignition switch & wait 3 minutes. Check oil level with dipstick. Add additional oil as necessary.	
TRANSMISSION/TRANSAXLE, Automatic¹	
02E trans	SLF
Golf, Jetta 5-speed 09A trans	SLF
Beetle, Golf, GTI, Jetta, Rabbit 09G	TIV
Phaeton 09L trans	SLF
Touareg 6-speed 09D trans	TIV
Others	AE
CAPACITY, Initial Refill²:	Liters Qt
Beetle 02E	4.5 4.7
Beetle, Golf, GTI, Jetta	
09G 2005 ³	7.0 7.4
EOS w/09G	7.0 7.4
EuroVan	3.5 3.7
Golf, Jetta:	
4-speed 01M ³	5.3 5.6
5-speed 09A trans	2.5 2.6
Passat:	
1999: 1.8L Turbo	2.6 2.7
2.8L	3.5 3.7
2000-05	2.6 2.7
Phaeton ³	9.8 10.3
Touareg ³	9.0 9.5
All other models	3.0 3.2
2006-09:	
Beetle, Jetta w/02E	5.2 5.5
Beetle, Jetta, Passat, Rabbit w/09G	7.0 7.4 ³
Golf, GTI, w/01M	3.0 3.2
w/09A	7.0 7.4 ³
Touareg w/09G	9.0 9.5 ³
1 Final drive service separately.	
2 All models do not have a dipstick.	
3 Total fill.	
TRANSAXLE, Manual	
1999-2009	GL-4¹
All temperatures	Synthetic 75W-90
CAPACITY, Refill:	Liters Pt
Beetle:	
w/OA4 trans	1.8 3.8
2005-09:	
Golf, GTI, Jetta, EOS	
02M, 02Q trans	2.3 4.8
Golf, GTI, Jetta w/02J trans	2.0 4.2
Jetta, Rabbit w/OA4 trans	1.9 4.0
New Beetle 1.8L Turbo 02M	2.3 4.8
Passat	2.3 4.8

CARS & LIGHT TRUCKS

VOLKSWAGEN Continued • VOLVO

CAPACITY, Refill:			Liters	Pt
R32			2.6	5.5
Others			2.0	4.2
1 Volkswagen P/N G005000, G052911A, if not available 80W GL-4 may be used.				
FINAL DRIVE, w/AT (ex. 09A Trans.)				
All models				GL-4
All temperatures			Synthetic 75W-90	
CAPACITY, Refill:			Liters	Pt
All FWD w/AT			0.8	1.6
Eurovan			1.1	2.4
Touareg			1.0	2.2
TRANSFER, GEARBOX				
Passat				GL-4
All temperatures			Synthetic 75W-90	
Touareg:				
2004-05				AE
2006-09				GLS
CAPACITY, Refill:			Liters	Pt
Passat			0.8	1.7
Touareg			0.8	1.7
REAR DIFFERENTIAL, 4WD				
Passat				GL-5
All temperatures				.90
CAPACITY, Refill:			Liters	Pt
Passat			1.5	3.2
DIFFERENTIAL, Front				
Touareg:				
2004-05			.75W-90	GL-4
2006-08				³
CAPACITY, Refill:			Liters	Pt
All			1.0	2.1
DIFFERENTIAL, Rear				
Touareg:				
w/o Locking differential				GLS¹
w/Locking differential				GLS²
CAPACITY, Refill:			Liters	Pt
Touareg:				
2004-05			1.0	2.1
2006-09:				
w/GLR diff			1.25	2.6
w/HLV diff			1.6	3.3
1 Use Volkswagen P/N G 052 145 52.				
2 Use Volkswagen P/N G 052 196 A2.				
3 Contact local dealership for fluid specifications.				
OTHER COMPONENTS				
Brake Fluid Reservoir				HB
Clutch Fluid Reservoir				HB
Power Steering fluid Reservoir				HB

VOLVO

1999-2007

CRANKCASE			Liters	Qt	API★
-4° to 104°F (-20° to 40°C)					.10W-30
Below 86°F (30°C)					.5W-30
Below 104°F (40°C), S40 & V40					.5W-40
2007 V50					.5W-30
CAPACITY, Refill¹:			Liters	Qt	
C70, 5-cyl: 1999-2005			5.8	6.1	
2006: w/oil level sensor			5.5	5.8	
w/o oil level sensor			5.8	6.1	
2007:			5.8	6.1	
S40, V40:					
1.9L Turbo.			5.4	5.7	
2.4L w/oil level sensor			5.5	5.8	
2.5L:					
Non-Turbo			5.8	6.1	
Turbo:					
w/oil level sensor			5.5	5.8	
w/o oil level sensor			5.8	6.1	
2007 S40 w/2.4L, 2.5L			5.8	6.1	
S60: 2001-04:					
Non-Turbo			5.5	5.8	
Turbo			5.8	6.1	
2005-06:					
w/oil level sensor			5.5	5.8	
w/o oil level sensor			5.8	6.1	
2007:			5.8	6.1	
S60R:					
2004 2.5L Turbo			5.2	5.5	
2005-06: w/oil level sensor			5.5	5.8	
w/o oil level sensor			5.8	6.1	
2007:			5.5	5.8	
S70 1999-2000			5.8	6.1	
S80:					
1999			6.5	6.9	
2000-03			6.9	7.3	
2004-06 2.5L Turbo:					
w/oil level sensor			5.5	5.8	
w/o oil level sensor			5.8	6.1	
2005 2.9L			6.7	7.1	
2007: 3.2L			7.7	8.1	
4.4L			6.7	7.1	
V50:					
2005-06 2.4L, 2.5L Turbo;					
w/oil level sensor			5.5	5.8	
wo oil level sensor			5.8	6.1	
2007:			5.8	6.1	

CAPACITY, Refill¹:			Liters	Qt
V70:				
1999-2004:				
Non-Turbo			5.5	5.8
Turbo			5.8	6.1
2005-06:				
w/oil level sensor			5.5	5.8
w/o oil level sensor			5.8	6.1
2007:			5.8	6.1
V70R:				
2004: 2.5L Turbo			5.2	5.5
2005:				
w/oil level sensor			5.5	5.8
w/o oil level sensor			5.8	6.1
2006-07:			5.5	5.8
XC70:				
2003 2.5L Turbo			5.2	5.5
2004 2.5L Turbo			5.8	6.1
2005-06:				
w/oil level sensor			5.5	5.8
w/o oil level sensor			5.8	6.1
2007			5.8	6.1
XC90:				
2003-04: 2.5L Turbo			6.6	7.0
2.9L Turbo			7.2	7.6
2005-06:				
w/oil level sensor			5.5	5.8
w/o oil level sensor			5.8	6.1
2006 4.4L			6.6	7.0
2007 4.4L			6.7	7.1
1 Capacity shown includes filter. After refill, check oil level. On models with oil cooler, additional oil may be needed if cooler is drained.				
TRANSMISSION/TRANSAXLE, Automatic				
C70:				
1999-2000			AF3, MA	
2001-07			TIV	
S40, V40:				
2000 AW50-42			AF3, MA	
2001-07 AW55-50/SI SN			TIV	
S60, S60R:				
AW55-50SN			TIV	
AW50AWD			TIV	
S70:				
AW50-42			AF3	
AW55-50SN			TIV	
AW42AWD			AF3	
S80:				
4T65EV			AF3	
2005-06: AW50/51 AWD			TIV	
AW55-50SN			TIV	
2007 TF-80SC			TIV	
V50, V70, V70R, XC70:				
1999-2000: AW42AWD			AF3	
AW50-42			MA	
1999-2007: AW50AWD			TIV	
AW55-50SN			TIV	
2007 TF-805C			TIV	
XC90:				
4T65AWD			AF3	
AW50AWD			TIV	
2006-07 TF80SCAWD			TIV	
CAPACITY, Initial Refill¹:			Liters	Qt
C70:				
1999-2000 AW50-42			7.6 ²	8.0 ²
2001-07 AW55-50			7.6 ²	8.0 ²
S40 2000-07			7.6 ²	8.0 ²
S60:				
2001-03:				
AW55-50SN			3.0	3.2
AW55-50			7.5 ²	7.9 ²
2004-05 AW55-50			7.2 ²	7.6 ²
2006-07 AW55-50/51			7.1 ²	7.5 ²
S60R:				
2004-05:				
AW55-50			7.2 ²	7.6 ²
AW50			7.1 ²	7.5 ²
2006-07 TF-80SCAWD			6.7 ²	7.1 ²
S70:				
1999-2000:				
AW50-42			7.6 ²	8.0 ²
AW55-50SN			3.0	3.2
AW42AWD			7.6 ²	8.0 ²
S80:				
1999-2003 4T65EV-GT			7.5 ²	7.9 ²
1999-2004 4T65EV			7.5 ²	7.9 ²
2005:				
4T65EV-GT			11.9 ²	12.5 ²
AW50/51AWD			7.2 ²	7.6 ²
AW55-50SN			7.2 ²	7.6 ²
2006:				
AW50/51AWD			7.2 ²	7.6 ²
AW55-50SN			7.2 ²	7.6 ²
TF-80SC			6.7 ²	7.1 ²
V50:				
2005:				
AW55-50			7.6 ²	8.0 ²
AW50/51AWD			7.2 ²	7.6 ²
2006-07			7.6 ²	8.0 ²

CAPACITY, Initial Refill ¹ :		Liters	Qt
V70:			
1999-2000:			
AW50-42		7.6 ²	8.0 ²
AW55-50SN		3.0	3.2
AW42AWD		7.6 ²	8.0 ²
AW50AWD		7.6 ²	8.0 ²
2001-04 AW55-50		7.5 ²	7.9 ²
2005-07		7.1 ²	7.5 ²
V70R:			
2004 AW55-50		7.5 ²	7.9 ²
2005 AW55-50		7.1 ²	7.5 ²
2006-07 TF80SC		6.7 ²	7.1 ²
XC70:			
2003-04		7.5 ²	7.9 ²
2005		7.2 ²	7.6 ²
2006		7.1 ²	7.5 ²
XC90:			
2003		7.5 ²	7.9 ²
2004-05:			
AW50/51AWD		7.2 ²	7.6 ²
AW55-50SN		7.2 ²	7.6 ²
4T65AWD		11.9 ²	12.5 ²
2006-07:			
AW50/51AWD		7.1 ²	7.5 ²
AW55-50/51		7.1 ²	7.5 ²
TF-80SCAWD		6.7 ²	7.1 ²
1 With engine at operating temperature, shift transmission through all gears. Check fluid level in PARK and add fluid as needed.			
2 Total capacity.			
TRANSAXLE, Manual		GLS	
CAPACITY, Refill:		Liters	Pt
5-Speed		2.1	4.4
6-Speed		2.0	4.2
TRANSFER CASE, 4WD		GLS	
AWD bevel gear			
CAPACITY, Refill:		Liters	Pt
1999-2000 S, V70		0.8	1.6
2005-07 w/AOC		0.8	1.6
DIFFERENTIAL		GL-5★	
4WD Rear			
CAPACITY, Refill:		Liters	Pt
2006 S60, S80		0.7	1.5
2007 S60		0.7	1.5
1999-2004 S70, V70		1.4	3.0
2005-07 V70		0.7	1.5
2003-07 XC70		0.7	1.5
OTHER COMPONENTS			
Power Steering			PS
Brake Master Cylinder			HBH
2008-10 C30, C70, S40, V50			
CRANKCASE		SL, API★	
Above 86°F (30°C)		.5W-40, 0W-40	
Below 86°F (30°C)		.5W-30 ^{1,2}	
CAPACITY, Refill ³ :		Liters	Qt
All		5.8	6.1
1 Preferred.			
2 Synthetic oils meeting 0W-30 or 0W-40 are recommended for driving in extreme temperatures (hot or cold), when towing a trailer over long distances, and when driving in mountainous areas.			
3 Capacity shown is with filter. After refill, check oil level.			
TRANSAXLE, Automatic		TIV	
CAPACITY, Total fill ¹ :		Liters	Qt
All		7.75	8.2
1 Total or dry fill shown.			
TRANSAXLE, Manual		GLS ¹	
CAPACITY, Refill:		Liters	Pt
C30		2.0	4.2
2009-10 C70		2.0	4.2
S40, V50: 5-Speed		2.1	4.4
6-Speed w/Turbo		2.0	4.2
w/Turbo		2.0	4.2
w/o Turbo		2.1	4.4
1 MTF 97309-10			
OTHER COMPONENTS			
Brake/ Clutch Fluid Reservoir			HBH
Power Steering Reservoir			PS ¹
1 WSS M2C204-A.			
2008-09 S60			
CRANKCASE		SL, API★	
Below 86°F (30°C)		.5W-30 ^{1,2}	
CAPACITY, Refill ³ :		Liters	Qt
2008		5.5	5.8
2009		5.8	6.1
1 Preferred.			
2 Synthetic oils meeting 0W-30 or 0W-40 are recommended for driving in extreme temperatures (hot or cold), when towing a trailer over long distances, and when driving in mountainous areas.			
3 Capacity shown is with filter. After refill, check oil level.			
TRANSAXLE, Automatic		TIV	
CAPACITY, Total fill ¹ :		Liters	Qt
All		7.2	7.6
1 Total or dry fill shown.			
TRANSAXLE, Manual		GLS	

CARS & LIGHT TRUCKS

VOLVO Continued

CAPACITY, Refill: Liters Pt All 2.0 4.2 1 MTF 97309.			DIFFERENTIAL ..... .GLS CAPACITY, Refill: Liters Pt All 0.7 1.5			DIFFERENTIAL ..... .GLS CAPACITY, Refill: Liters Pt All 0.7 1.5		
OTHER COMPONENTS Brake/ Clutch Fluid Reservoir ..... .HBH Power Steering Reservoir ..... .PS¹ 1 Volvo synthetic power steering fluid (Pentosin CHF 11S) P/N 1161529.			OTHER COMPONENTS Brake/ Clutch Fluid Reservoir ..... .HBH Power Steering Reservoir ..... .PS¹ 1 WSS M2C204-A2.			OTHER COMPONENTS Brake/ Clutch Fluid Reservoir ..... .HBH Power Steering Reservoir ..... .PS¹ 1 Volvo synthetic power steering fluid (Pentosin CHF 11S) P/N 1161529.		
2008-10 V70 CRANKCASE ..... .API★³ Below 104°F (40°C) 0W-30 or 0W-40 -22°F to 104°F (-35°C to +40°C) 5W-30 ² -13°F to 104°F (-25°C to +40°C) 5W-40 ² CAPACITY, Refill¹: Liters Qt V70: 2008-10 7.4 7.8 1 Capacity is shown with filter. After refill, check oil level. On models with oil cooler additional oil may be needed if cooler is drained. 2 Preferred. 3 Synthetic oils meeting 0W-30 or 0W-40 are recommended for driving in extreme temperatures (hot or cold), when towing a trailer over long distances, and when driving in mountainous areas.			2008-10 XC70 CRANKCASE ..... .SL, API★ Below 86°F (30°C) 5W-30 ^{1,2} CAPACITY, Refill³: Liters Qt All 7.4 7.8 1 Preferred. 2 Synthetic oils meeting 0W-30 or 0W-40 are recommended for driving in extreme temperatures (hot or cold), when towing a trailer over long distances, and when driving in mountainous areas. 3 Capacity shown is with filter. After refill, check oil level.			2010 XC60 CRANKCASE ..... .API★³ Below 86° F (30° C) 5W-30 ^{1, 2} CAPACITY, Refill: Liters Pt All 7.4 7.8 1 Capacity is shown with filter. After refill, check oil level. On models with oil cooler additional oil may be needed if cooler is drained. 2 Preferred. 3 Synthetic oils meeting 0W-30 or 0W-40 are recommended for driving in extreme temperatures (Hot or Cold), when towing a trailer over long distances and when driving in mountainous areas.		
TRANSMISSION/TRANSAXLE, Automatic 2008-10 V70 ..... .TIV CAPACITY, Initial Refill¹: Liters Qt 2008-10 7.0 ² 7.4 ² 1 With engine at operating temperature, shift transmission through all gears. Check fluid level in PARK and add fluid as needed. 2 Total capacity.			TRANSMISSION/TRANSAXLE, Automatic TF-80SC ..... .TIV CAPACITY, Total fill¹: Liters Qt TF-80SC 7.0 7.4 1 Total or dry fill shown.			TRANSMISSION/TRANSAXLE, Automatic TF-80SC ..... .TIV CAPACITY, Total Fill¹: Liters Pt TF-80SC 7.0 7.4 1 Total or dry fill.		
OTHER COMPONENTS Brake Fluid Reservoir ..... .HBH Power Steering Reservoir 2008-10 ..... .PS			TRANSFER CASE ..... .GLS CAPACITY, Refill: Liters Pt All 0.8 1.6 DIFFERENTIAL ..... .GLS CAPACITY, Refill: Liters Pt All 0.7 1.5 OTHER COMPONENTS Brake/ Clutch Fluid Reservoir ..... .HBH Power Steering Reservoir ..... .PS¹ 1 WSS M2C204-A2.			TRANSFER CASE ..... .GLS CAPACITY, Refill: Liters Pt All 0.8 1.6 DIFFERENTIAL ..... .GLS CAPACITY, Refill: Liters Pt All 0.7 1.5 OTHER COMPONENTS Brake Fluid Reservoir ..... .HBH Power Steering Reservoir ..... .PS		
2008-10 S80 CRANKCASE ..... .SL, API★ Below 86°F (30°C) 5W-30 ^{1,2} CAPACITY, Refill³: Liters Qt 3.0L 7.4 7.8 3.2L 7.3 7.7 V8 7.0 7.4 1 Preferred. 2 Synthetic oils meeting 0W-30 or 0W-40 are recommended for diving in extreme temperatures (hot or cold), when towing a trailer over long distances, and when driving in mountainous areas. 3 Capacity shown is with filter. After refill, check oil level.			2008-10 XC90 CRANKCASE ..... .SL, API★ Below 86°F (30°C) 5W-30 ^{1,2} CAPACITY, Refill³: Liters Qt 3.2L 7.3 7.7 V8 AWD 6.7 7.1 1 Preferred. 2 Synthetic oils meeting 0W-30 or 0W-40 are recommended for diving in extreme temperatures (hot or cold), when towing a trailer over long distances, and when driving in mountainous areas. 3 Capacity shown is with filter. After refill, check oil level.					
TRANSAXLE, Automatic TF-80SC ..... .TIV CAPACITY, Total fill¹: Liters Qt TF-80SC 7.0 7.4 1 Total or dry fill shown.			TRANSAXLE, Automatic TF-80SC ..... .TIV CAPACITY, Total fill¹: Liters Qt TF-80SC 7.0 7.4 1 Total or dry fill shown.					
TRANSFER CASE ..... .GLS CAPACITY, Refill: Liters Pt All 0.8 1.6			TRANSFER CASE ..... .GLS CAPACITY, Refill: Liters Pt All 0.8 1.6					

MEDIUM & HEAVY TRUCKS

GENERAL SPECIFICATIONS

AUTOCAR

LUBRICANT GRADE

CRANKCASE

DIESEL ENGINES:

Cummins *Refer to Cummins engine section*
Volvo *Refer to Volvo engine section*

TRANSMISSION

Refer to appropriate transmission section.

DIFFERENTIAL

Refer to appropriate differential section.

BERING

LUBRICANT GRADE

CRANKCASE

Caterpillar *Refer to Caterpillar engine section*
Cummins *Refer to Cummins engine section*
Detroit Diesel *Refer to Detroit Diesel engine section*

TRANSMISSION

Allison *Refer to Allison transmission section*
Eaton/Fuller *Refer to Eaton/Fuller transmission section*
ZF *Refer to ZF transmission section*

DIFFERENTIAL

Refer to appropriate differential section.

OTHER LUBRICATION POINTS

Brake & Clutch Reservoir **HBH**
DOT 4
Chassis Grease Fittings **LM**
NLGI No. 2
Power Steering **PS**
PSF-3 type fluid
Wheel Bearings **GC**
NLGI No. 1 (Ba Al BASE)

CHEVROLET/GMC

LUBRICANT GRADE

CRANKCASE

GASOLINE ENGINES

1998 **SJ, SL, SM**
Above 40°F (4°C) 30
Above 10°F (-12°C) 15W-40
Above 0°F (-18°C) 10W-30
All Temperatures 10W-30¹
1999-2001 **SJ, SL, SM**
2002-04 **SL, SM**
2004.5-09 **SM**
All Temperatures 5W-30^{1,2}

DIESEL ENGINES:

Caterpillar *Refer to Caterpillar engine section*
Isuzu *Refer to Isuzu engine section*
GM & Duramax Engines:
6.5L
1998-2003 **CH-4, CI-4, CJ-4**
Above 0°F (-18°C) 15W-40¹
Above 32° (Above 0°C) 30
Below 32°F (0°C) 10W-30
6.6L
2003-04 **CH-4, CI-4, CJ-4**
2005-06 **CI-4, CJ-4**
2007-09 **CJ-4³**
Above 0°F (-18°C) 15W-40
Above 32° (Above 0°C) 10W-30
Below 32°F (0°C) 5W-40

¹ Preferred.

² Do not use other viscosity oils, such as 20W-50.

³ 2007-09 model year engines must use CJ-4 only. CJ-4 may be used in place of CI-4 w/CI-4 PLUS, CI-4, H-4 & CG-4.

CAPACITY, Refill^{1, 2}:

	Liters	Qt
GASOLINE ENGINES:		
5.7L 1998-2000	5.7	6.0
6.0L: 1998-2000	9.5	10.0
2001-09	5.7	6.0
7.0L 1998-2000	9.5	10.0
8.1L: 2001-05	6.2	6.5
2006-09	9.5	10.0

DIESEL ENGINES:

Refer to appropriate engine section.

GM & Duramax Engines:

6.5L	7.6	8.0
6.6L	13.8	14.6

¹ Includes filter change.

² Approximate. Capacities may vary due to accessories & optional equipment. Make final inspection w/dipstick.

TRANSMISSION

Allison *Refer to Allison transmission section*
Fuller *Refer to Eaton/Fuller transmission section*
Isuzu *Refer to Isuzu transmission section*
Spicer *Refer to Dana/Spicer transmission section*

DIFFERENTIAL

Refer to appropriate differential section.

OTHER LUBRICATION POINTS

Axle Shifter, 1998-2003 **RO**
GM P/N 5416 959
Brake Master Cylinder **HB**
Cab Tilt Hydraulic System ex. 1998-99 **CTF**
Chassis Grease Fittings **LB, GC-LB**
Clutch Release Bearing **HG**
Exhaust Brake Ball Joint Cap **HG**
Hydraulic Clutch System **HB**
GM Part No. 12345347 preferred
Multi-Pac Air Cylinder **VO**
Oil Cups **MO**
Prop. Shaft Slip Joint **GC, GC-LB**
Prop. Shaft U-Joints **GC, GC-LB**
Power Steering:
W4, W5, W3500, W4500, W5500 **AF3**
ex. W Series **PS**
Spring Brake Hydraulic Pump **AF3**
Steering Gearbox **LS**
Water Pump Bearing **EP LM**
Wheel Bearings:
Grease Lubricated **GC, GC-LB**
Oil lubricated W-series 90 **GL-5**
Canada, 80
Oil lubricated, ex. W-Series **GLS¹**
¹ 2003-96 75W-90 synthetic GM Part No. 12345841.

FORD

LUBRICANT GRADE

CRANKCASE

GASOLINE ENGINES:

1998-2001 **SJ, SL, SM**
2002-04 **SL, SM**
2004.5-09 **SM**
All Temperatures 5W-20

DIESEL ENGINES:

Caterpillar *Refer to Caterpillar engine section*
Cummins *Refer to Cummins engine section*
Detroit Diesel *Refer to Detroit Diesel engine section*
International *Refer to International engine section*

CAPACITY, Refill^{1, 2}:

	Liters	Qt
GASOLINE ENGINES:		
1998: E450 6.8L	5.7	6.0
ex. E450 7.0L	8.5	9.0
1999-2000: E450 6.8L		
F450-550:		
5.4L	5.7	6.0
6.8L	5.7	6.0
2001-03: E450 6.8L	5.7	6.0
F450-550:		
5.4L	5.7	6.0
6.8L	5.7	6.0
2004: E450 6.8L	5.7	6.0
F450-550:		
5.4L	6.6	7.0
6.8L	6.6	7.0
2005: E450 6.8L 5	5.7	6.0
F450-550:		
5.4L	6.6	7.0
6.8L	6.6	7.0
2006: E450 6.8L	5.7	6.0
F450-550:		
5.4L	6.6	7.0
6.8L	6.6	7.0
2007: E450 6.8L	5.7	6.0
F450-550:		
5.4L	6.6	7.0
6.8L	6.6	7.0
2008-09:		
E450: 5.4L	5.7	6.0
6.8L	6.6	7.0
F450-550: 5.4L	6.6	7.0
6.8L	6.6	7.0

DIESEL ENGINES:

Refer to appropriate engine section.

¹ Approximate. Capacities may vary due to accessories & optional equipment.

² Includes filter change.

TRANSMISSION

Refer to appropriate transmission section.

DIFFERENTIAL

Refer to appropriate differential section.

OTHER LUBRICATION POINTS

Air Cleaner, oil bath **MO**
Above 32°F (0°C), 30; below 32°F (0°C), 20W
Ford engines, use crankcase grade
Axle Shifter, Louisville,
Aeromax 10W-30 **SJ, SL, SM**
Others 10W **SJ, SL, SM**
Below 0°F (-18°C), mix 25% kerosene
Body Hinges & Latches **SLS**
Brake Camshaft (S-Cam Air Brakes)
& Slack Adjusters **EP LM**

Brake & Clutch Master Cylinders **HBH**
Brake Torque Plate Rails **BL**
Cab Lift Pump **CTF**
Chassis Grease Fittings¹ **EP LM**
Driveshaft U-joints, Slip Yokes,
Power Steering Gear Output Shaft² **HG**
Hydro-Max Booster Pump **MA**
Below 0°F (-18°C), use hydraulic oil VG 22
Parking Brake, Speedometer,
Tachometer Cables **SP**
Power Steering Pump **MA**
Spring Leaves, Transmission Linkage Pivots,
Brake/Clutch Pedal Pivots & Clevis,
Transmatic Detent Stop,
Starter Motor 10W-30 **SJ, SL, SM**
Steering Gearbox (Manual)
Synthetic 75W-90 **GL-5**
Wheel Bearings:
Grease Lubricated **EP LM**
Oil lubricated
1996-2003 80W-90 **GL-5**
2001-02 option Synthetic 75W-140 **GL-5³**
¹ Ex. driveshaft U-joints, slip yokes, and power steering gear output shaft.
² Part No. XY-75W140-QL.
³ Preferred.

FREIGHTLINER

LUBRICANT GRADE

CRANKCASE

DIESEL ENGINES:

Caterpillar *Refer to Caterpillar engine section*
Cummins *Refer to Cummins engine section*
Detroit Diesel *Refer to Detroit Diesel engine section*
Mercedes-Benz *Refer to Mercedes-Benz engine section*

GASOLINE ENGINES:

1995-97 **SJ, SL, SM**
Above 0°F (-18°C), 10W-30¹
Below 100°F (38°C), 5E-30

¹ Preferred.

CAPACITY, Refill^{1, 2}:

	Liters	Qt
5.9L, 1995-97	4.7	5.0
8.0L, 1995-97	6.6	7.0

¹ Includes filter change.

² Approximate. Make final check w/dipstick.

TRANSMISSION

Refer to appropriate transmission section.

DIFFERENTIAL

Refer to appropriate differential section.

OTHER LUBRICATION POINTS

Axle Shifter 10W **SJ, SL¹**
Below 0°F (-18°C), mix w/25% kerosene
Bearing Cap (Sheppard Power
Steering) **EP LM**
Brake Slack Adjusters, 1996-2003
Meritor/Rockwell: **EP HG**
Gunite:
-40° to -20°F (-40° to -29°C), Lubriplate Aero
Above -20°F (-29°C), Mobil Grease No. 77
Haldex/Eaton:
-20°F (-29°C) and above **EP LM**
Below -20°F (-29°C), Low Temp **EP LM**
Cargo Models **EP HG**
Use a high temp. water-proof grease (NLGI grade 1)
Others **LM**
Brake Camshaft Bracket Bushings **EP LM**
Cab Tilt Pump **CTF**
Chassis Grease Fittings **EP LM**
Clutch Master Cylinder (Cargo) **HB**
Clutch Release Bearing **HG***
* Meritor/Rockwell use NLGI No. 3. Others use No. 1 or 2.
Door Hinges & Latches **MO**
Fan Clutch (Evans) **HG**
Lincoln Multiluber:
Above 32°F (0°C), 90 or 140 GL-5
Below 32°F (0°C), 30 SJ
Do not use SCL gear oil
Moisture Ejection Valve: Bendix 10W **MO**
Power Steering:
Cargo **MA**
Others:
1996-2003: Ross, Sheppard, TRW **AF3, PS²**
Others **AF3**
Speedometer & Tachometer Cables
1996-2003 **SP**
Steering Driveline Deck Bearing
(FLA, FLB only) **MO**

MEDIUM & HEAVY TRUCKS

GENERAL SPECIFICATIONS CONTINUED

Steering Gearbox, Manual	GL-5
Above 30°F (-1°C), 90	
Below 30°F (-1°C), 75	
Stewart-Warner Oil Mist	SJ, SL, SM
Summer, 30; winter, 10W	
Universal Joints & Splines	EP LM
Wedge Brake	LM
Wheel Bearings:	
Grease Lubricated	GC
Oil Lubricated	GL-5
Same viscosity as differential.	
Windshield Wiper Motor	
Dow-Corning No. 200 or equivalent.	
1 Sulfated ash content must not exceed 1.85%. May also use AF3 for all temperatures. Do not mix kerosene or engine oil w/ATF.	
2 Condor may use Fleetrite® PSF or Texaco TL-1833.	

HINO

LUBRICANT GRADE

CRANKCASE

DIESEL ENGINES

1998-2000	CH-4, CI-4, CJ-4 ¹
2004	CI-4, CJ-4 ¹
Above 50°F (10°C),	
32° to 90°F (0° to 32°C),	40
Below 32°F (0°C),	10W-30
-10° to 70°F (-23° to 21°C),	20W-20
Above -10°F (-23°C),	15W-40
2005-06	CI-4, CJ-4 ²
32° to Above 104°F (0° to 40°C),	40
32° to 100°F (0° to 39°C),	30
-22° to 100°F (-30° to 40°C),	10W-40
2007-09	CJ-4 ³
32° to Above 104°F (0° to 40°C),	40
32° to 100°F (0° to 39°C),	30
-22° to 100°F (-30° to 40°C),	10W-40
1 CJ-4 may be used in place of CI-4 w/CI-4 PLUS, CI-4, CH-4, CG-4.	
2 CJ-4 may be used in place of CI-4 w/CI-4 PLUS, CI-4, CH-4, CG-4.	
3 2007-09 model year engines must use CJ-4 only.	

Capacity, Refill ¹	Liters	Qts.
1998-99: FA4J, FB4J	9.56	10.1
FD2J, FE2J, FF2J, SG1J, SG2J	13.5	14.3
2000: FA4J, FB4J	10.0	10.6
FD2J, FE2J, FF2J, SG1J, SG2J	13.5	14.3
2001-02: FA4J, FB4J	9.7	10.2
FD2J, FE2J, FF2J, SG1J, SG2J	12.6	13.3
2003-04 FA4J, FB4J	9.7	10.2
FD2J, FE2J, SG1J	12.6	13.3
2005-07: 145	—	—
165	—	—
185	—	—
238	—	—
258LP	—	—
268, 268A	—	—
338	—	—
2008-09: 145	10.1	10.7
165	10.1	10.7
185	10.1	10.7
238	10.1	10.7
258ALP, 258LP	15.3	16.2
268, 268A	15.3	16.2
338, 338CT	15.3	16.2
1 Approximate. Capacities may vary due to accessories & optional equipment. Make final inspection w/dipstick.		

TRANSMISSION

Refer to appropriate transmission section.

DIFFERENTIAL

Refer to appropriate differential section.

OTHER LUBRICATION POINTS

Brake & Clutch Fluid	HB
Brake Adjusters & Cam Brackets	HG
Brake Slack Adjusters	HG
Chassis Grease Fittings	EP LM
Clutch Shaft & Release: 2000-03 use No. 2 LM; 1996-99 use HG	
Manual Steering Box	90 GL-4
Power Steering Fluid	AF2
Starter Bearings: 1998-2004	No. 2 EP LM
Tie Rods, Drag Link, Steering Shaft	
U-Joint & Spline	Moly LM
Water Pump	HG
Wheel Bearings	EP LM
1 Polyurea grease preferred.	

INTERNATIONAL

LUBRICANT GRADE

CRANKCASE

DIESEL ENGINES:

Caterpillar	Refer to Caterpillar engine section
Cummins	Refer to Cummins engine section
Detroit Diesel	Refer to Detroit Diesel engine section
International	Refer to International engine section

TRANSMISSION

Refer to appropriate transmission section.

DIFFERENTIAL

Refer to appropriate differential section.

OTHER LUBRICATION POINTS

Brake & Clutch Master Cylinders	HB
Brake Shoe Anchor Pins	EP LM
Cab Hydraulic Tilt Pump: Cargostar	CTF
CO-5870, -9670	AF
Chassis Grease Fittings	EP LM
Input Shaft Bearing Cap,	
Sheppard Power Steering	EP LM
Manual Steering Box:	
International	90W, 85W-140 GL-5
Nissan trans. grade	GL-4
Power Divider Lock Shift Motor	10W MO
Power Steering:	
Nissan	AF3
Saginaw	PS
Sheppard & Ross:	
1000-8000, 9600, 9700 Series	PS
5000, 9100, 9200, 9500, 9500	
Series	15W-40 SJ/CD
Output Shaft Seal	EP LM
Slack Adjusters	EP LM
Speedometer & Tachometer Cables	EP LM
Steering Column Flex Coupling	EP LM
Transmission Air Cylinder	
Linkage	10W MO ¹
Wheel Bearings:	
Grease lubricated	GC
Oil lubricated	GL-5
Same viscosity as differential. Front axle may use 50 MO or 50 syn-	
thetic transmission oil.	
1 Below 0°F (-18°C), mix w/25% kerosene.	

ISUZU

LUBRICANT GRADE

CRANKCASE

GASOLINE ENGINES

1998	SJ, SL, SM
Above 40°F (4°C)	30
Above 10°F (-12°C)	15W-40
Above 0°F (-18°C)	10W-30
All Temperatures	10W-30 ¹
1999-2001	SJ, SL, SM
2002-04	SL, SM
2004-09	SM
All Temperatures	5W-30 ^{1,2}

DIESEL ENGINES:

Caterpillar	Refer to Caterpillar engine section
Isuzu	Refer to Isuzu engine section
Detroit Diesel	Refer to Detroit Diesel engine section
Mercedes-Benz	Refer to Mercedes-Benz engine section

1 Preferred.		
2 Do not use other viscosity oils, such as 20W-50.		
CAPACITY, Refill ¹ :	Liters	Qt
GASOLINE ENGINES:		
1998-2002 NPR 5.7L	5.7	6.0
2003 NPR: 5.7L	5.7	6.0
6.0L	5.7	6.0
2004-05 C4, C5 8.1L	2	2
C6, C7, C8 8.1L	6.2	6.5
2006-09 C4, C5 8.1L	9.5	10.0
C6, C7, C8 8.1L	9.5	10.0
2004-09 NPR: 5.3L	5.7	6.0
6.0L	5.7	6.0
1 Approximate. Capacities may vary due to accessories & optional equipment.		
2 First design oil pan, 6.5 qts., second design oil pan, 10 qts.		

TRANSMISSION

Refer to appropriate transmission section.

DIFFERENTIAL

Refer to appropriate differential section.

OTHER LUBRICATION POINTS

Brake Master Cylinder	HB
Brake Slack Adjusters & Camshafts	EP LM
Chassis Grease Fittings	EP LM

Power Steering

NPR, NQR, 1999-2003, Diesel, FRR	AF3
NPR, NPR HD, 1999, gas	AF2
NPR, 1998	AF2
FSR, FTR, FVR, 1998-2003	PS
Water Pump Bearing	EP LM
Wheel Bearings: Grease lubricated	GC, GC-LB
Oil lubricated, 1998-2003	Synthetic 75W-90

KENWORTH

LUBRICANT GRADE

CRANKCASE

DIESEL ENGINES:

Caterpillar	Refer to Caterpillar engine section
Cummins	Refer to Cummins engine section
Detroit Diesel	Refer to Detroit Diesel engine section

TRANSMISSION

Refer to appropriate transmission section.

DIFFERENTIAL

Refer to appropriate differential section.

OTHER LUBRICATION POINTS

Cam Brake Camshaft Splines, Disc Brake Shaft Splines & Slide Pin Retainers,	
Brake Clevis Pins	BL1
Brake Camshaft Bushings	No. 2 EP LM
Brake Treadle	10W MO
Cab Tilt Pump	CTF
Chassis Grease Fittings	EP LM
NLGI No. 2	
Clutch Master Cylinder	HB
Clutch Release Bearing	HG ²
Driveline Center Bearing 2001-98	HG ²
Driveshaft U-Joints	EP LM
Fan Clutch or Hub	EP LM
Pedal Pivots (Mid-Ranger)	SLS
Power Steering: 1998-2001	AF2
Cold climate conditions:	
Above -22°F (-30°C), ATF Type A	
Below -22°F (-30°C), ATF Type B	
Steering Gearbox	80W-90 GL-5
Wheel Bearings:	
Grease lubricated	No. 2 EP LM
Oil lubricated	80W-90 GL-5
1998-2001 models may use Synthetic 75W-90 GL-5	
Winch: Braden	140 GL-2
Carco, Tulsa	140 GL-5
1 Antiseize grease, Meritor/Rockwell spec. 0-637.	
2 Chevron SRI Mobil Grease HP, Texaco Multifax 2, or equivalent.	

MACK

LUBRICANT GRADE

CRANKCASE

DIESEL ENGINES:

Caterpillar	Refer to Caterpillar engine section
Cummins	Refer to Cummins engine section
Mack	Refer to Mack engine section

TRANSMISSION

Refer to appropriate transmission section.

DIFFERENTIAL

Refer to appropriate differential section.

OTHER LUBRICATION POINTS

Accelerator Hinge Pin	MO
Brake Treadle Hinge Pin	MO
Cab Tilt System	CTF
Chassis Grease Fittings	EP LM
Clutch Release Bearing	EP LM
Dynamax (oil) Clutch	AF
Power Steering	10W-30, 10W-40, SJ, SL, SM
Radiator Shutter Control Bar	
and Vane Bearings	MO
Shift Tower WL, WS	GL-5
Slack Adjusters	EP LM
Speedometer Adapter	1
Spring Trunnion Oil Plug	GL-5
Steering Gearbox	GL-5
Tachometer Adapter, Mack V-8	1
Wheel Bearings: Grease lubricated	EP LM
Oil lubricated	GL-5
Semi-fluid grease lubricated	LB
Note: Where GL-5 is specified, use same viscosity and quality as differential.	
1 Anderol 766 or equivalent.	

MEDIUM & HEAVY TRUCKS

GENERAL SPECIFICATIONS CONTINUED

MARMON

LUBRICANT GRADE

CRANKCASE

DIESEL ENGINES:

CaterpillarRefer to Caterpillar engine section

TRANSMISSION

Refer to appropriate transmission section.

DIFFERENTIAL

Refer to appropriate differential section.

MITSUBISHI FUSO

LUBRICANT GRADE

CRANKCASE

DIESEL ENGINES:

MitsubishiRefer to Mitsubishi engine section

TRANSMISSION

Refer to appropriate transmission section.

DIFFERENTIAL

Refer to appropriate differential section.

OTHER LUBRICATION POINTS

Brake & Clutch Master CylindersHB

Chassis Grease FittingsLB

Driveshaft Center BearingEP LM

Driveshaft U-Joints & SplinesEP LM

KingpinsLB

Power SteeringAF2

Slack Adjusters: FK, FMEP LM

Wheel BearingsEP LM

NISSAN/UD

LUBRICANT GRADE

CRANKCASE

1998-2003CH-4, CI-4, CJ-4¹

2004CI-4, CJ-4¹

Above 86°F (30°C)40

41° to 104°F (4° to 40°C)30

20° to 104°F (-7° to 40°C)20W-40

20° to 77°F (-7° to 25°C)20W-20

10° to 104°F (-12° to 40°C)15W-40

0° to 77°F (-18° to 25°C)10W-30

0° to 50°F (18° to 10°C)10W

2005-06CI-4, CJ-4¹

2007-09CJ-4²

32° to 104°F (0° to 40°C)30

32°F & Above (0° & Above)40

-13°F & Above (-25° & Above)20W-50

-22° to 104°F (-30° & 40°C)15W-40, 10W-30

1 CJ-4 may be used in place of CI-4 w/CI-4 PLUS, CI-4, CH-4 & CG-4.

2 2007-09 model year engines must use CJ-4 only.

Engine Oil Capacity **Liters¹** **Qts.¹**

FD46TA: 1999-200410.1 10.7

FE6TA: 199815.0 15.9

1999-200417.0 18.0

MD-175: 2005-0710.4 11.0

2008-099.5 10.0

MD-230: 2005-0715.4 16.3

2008-0912.7 13.4

TD42TI: 199814.3 15.1

1 Approximate. Capacities may vary due to accessories & optional equipment. Make final inspection w/dipstick.

TRANSMISSION

Refer to appropriate transmission section.

DIFFERENTIAL

Refer to appropriate differential section.

OTHER LUBRICATION POINTS

Brake & Clutch Master CylindersHB

Chassis Grease FittingsEP LM

NLGI No. 2 or 3.

Power SteeringAF2

Wheel BearingsEP LM

PETERBILT

LUBRICANT GRADE

CRANKCASE

DIESEL ENGINES:

CaterpillarRefer to Caterpillar engine section

CumminsRefer to Cummins engine section

Detroit DieselRefer to Detroit Diesel engine section

TRANSMISSION

Refer to appropriate transmission section.

DIFFERENTIAL

Refer to appropriate differential section.

OTHER LUBRICATION POINTS

Brake Anchor Pins & Cam BearingsHG¹

Brake Treadle Valve10W MO

Cab Tilt SystemCTF

Chassis FittingsEP LM

Clutch Release BearingHG

DriveshaftEP LM

Fan Hub/Water PumpHG

1998-2000 models ex. 330

Front Driving Axle Bearings & U-JointsEP LM

Pedal Pivots (Mid-Ranger)SLS

Power Steering ReservoirHF

Slack AdjustersEP LM

Speedometer & Tachometer

CablesSP

Steering Gearbox: Model 33080W-90 GL-5

Wheel Bearings: Grease

lubricatedEP LM

Oil lubricated 1998-200380W-90 GL-5

Some models may use synthetic 75W-90 GL-5

Windshield Wiper Motor

Dow Corning 200, Sprague Wiper Lube, or equivalent

1 High Temp. grease, Timken Spec. 0-616.

STERLING

LUBRICANT GRADE

CRANKCASE

DIESEL ENGINES:

CaterpillarRefer to Caterpillar engine section

CumminsRefer to Cummins engine section

Detroit DieselRefer to Detroit Diesel engine section

Mercedes-BenzRefer to Mercedes-Benz section

MitsubishiRefer to Mitsubishi Section

TRANSMISSION

Refer to appropriate transmission section.

DIFFERENTIAL

Refer to appropriate differential section.

OTHER LUBRICATION POINTS

Axle ShifterSAE 10 SJ, SL, SM¹

Below 0°F (-18°C), mix w/25% Kerosene.

Brake Camshaft

(S-Cam Air Brakes)EP LM

Brake Slack Adjusters:

Gunite:

-40° to -20°F (-40° to -29°C), Lubriplate

Aerogrease

Above -20°F (-29°C), Mobil Grease No. 7

Hallex/Eaton:

20°F (-29°C) and above,EP LM²

Below -20°F (-29°C), Low Temp.,EP LM

MeritorEP HG

Use a high temp. water-proof grease. (NLGI grade 1)

Chassis Grease FittingsEP LM

including clutch fittings

Clutch Master CylinderHB

Cargo models

Clutch Release BearingHG

Door Hinges & LatchesMO

Driveshaft U-Joints & Slip YokesEP LM

Power Steering Gear Output ShaftEP LM²

Power Steering Reservoir: CargoMA

OthersAF3, PS³

* w/engine oil installed⁴, 10W-40 Union, Texaco, Mobil or Chevron;

15W-40 Union; 30 Shell Rotella T. Condor Models: w/Hydraulic

fluid installed use Chevron Torque 5 or Exxon Nuto H32. Do not

mix lubricant types.

1 Sulfated ash content must not exceed 1.85%. May also use AF3

for all temperatures. Do not mix kerosene or engine oil w/ATF.

2 DO NOT USE automatic or power grease guns.

3 Condor may use Fleetrite® PSF or Texaco TL-1833.

4 Do not mix motor oil w/ATF.

VOLVO

LUBRICANT GRADE

CRANKCASE

DIESEL ENGINES:

CaterpillarRefer to Caterpillar engine section

CumminsRefer to Cummins engine section

Detroit DieselRefer to Detroit Diesel engine section

VolvoRefer to Volvo engine section

TRANSMISSION

Refer to appropriate transmission section.

DIFFERENTIAL

Refer to appropriate differential section.

WESTERN STAR

LUBRICANT GRADE

CRANKCASE

DIESEL ENGINES:

CaterpillarRefer to Caterpillar engine section

CumminsRefer to Cummins engine section

Detroit DieselRefer to Detroit Diesel engine section

TRANSMISSION

Refer to appropriate transmission section.

DIFFERENTIAL

Refer to appropriate differential section.

WHITE/WHITE GMC

LUBRICANT GRADE

CRANKCASE

DIESEL ENGINES:

CaterpillarRefer to Caterpillar engine section

CumminsRefer to Cummins engine section

Detroit DieselRefer to Detroit Diesel engine section

VolvoRefer to Volvo engine section

TRANSMISSION

Refer to appropriate transmission section.

DIFFERENTIAL

Refer to appropriate differential section.

OTHER LUBRICATION POINTS

Brake Cams (air brakes)LM

Brake Master CylindersHB

Brake Pedal Shaft (N10, N12)30 MO

Chassis Grease FittingsEP LM

Clutch Hydraulic SystemDOT4

Clutch Release BearingHG

Clutch Release ShaftLM

Drive Shaft Pillow BlockLM

Power SteeringAF3

Wheel Bearings: Grease lubricatedEP LM

Oil lubricated: Front, 1998-2003

Above -15°F (-25°C), 30, 15W-40MO

Above -40°F (-40°C), 75W-90GL-5

Oil lubricated: RearGL-5

WORKHORSE

LUBRICANT GRADE

CRANKCASE

GASOLINE ENGINES

1999-2001SJ, SL, SM

2002-04SL, SM

2004.5-09SM

All Temperatures5W-30^{1,2}

DIESEL ENGINES:

CaterpillarRefer to Caterpillar engine section

InternationalRefer to International engine section

GM & Duramax Engines:

6.5L: 1998-2003CH-4, CI-4, CJ-4

Above 0°F (-18°C)15W-40¹

Above 32° (Above 0°C)30

Below 32°F (0°C)10W-30

6.6L: 2003-04CH-4, CI-4, CJ-4

2005-06CI-4, CJ-4

2007-09CJ-4³

Above 0°F (-18°C)15W-40

Above 32° (Above 0°C)10W-30

Below 32°F (0°C)5W-40

1 Preferred.

2 Do not use other viscosity oils, such as 20W-50.

3 2007-09 model year engines must use CJ-4 only.

CAPACITY, Refill^{1,2}: **Liters** **Qt**

Gasoline Engines:

5.7L 1999-20005.7 6.0

6.0L: 1999-20009.5 10.0

2001-095.7 6.0

7.0L 1999-20009.5 10.0

8.1L: 2001-056.2 6.5

2006-099.5 10.0

DIESEL ENGINES:

Refer to appropriate engine section for

additional engine makes.

GM & Duramax Engines: 6.5L7.6 8.0

6.6L13.8 14.6

1 Includes filter change.

2 Approximate. Capacities may vary due to accessories & optional

equipment. Make final inspection w/dipstick.

TRANSMISSION

Refer to appropriate transmission section.

DIFFERENTIAL

Refer to appropriate differential section.

MEDIUM & HEAVY TRUCKS

DIESEL ENGINES

CATERPILLAR

CRANKCASE

1998-2003 **CH-4, CI-4, CJ-4¹**

2004-06 **CI-4, CJ-4¹**

15° to 122°F (-26° to 50°C)	15W-40
5° to 122°F (-15° to 50°C)	15W-40
0° to 122°F (-18° to 50°C)	15W-40, 10W-40, 10W-30
-4° to 104°F (-20° to 40°C)	10W-30
-20° to 104°F (-29° to 40°C)	10W-30
-22° to 104°F (-30° to 40°C)	5W-40
-22° to 68°F (-30° to 20°C)	5W-30
-30° to 104°F (-34° to 40°C)	5W-40
-30° to 68°F (-34° to 20°C)	5W-30
-40° to 104°F (-40° to 40°C)	0W-40
-40° to 68°F (-40° to 20°C)	0W-30
-40° to 50°F (-40° to 10°C)	0W-20

2007-09 **CJ-4²**

-40° to 86°F (-40° to 30°C)	0W-30
-40° to 104°F (-40° to 40°C)	0W-40
-22° to 86°F (-30° to 30°C)	5W-30
-22° to 122°F (-30° to 50°C)	5W-40
0° to 104°F (-18° to 40°C)	10W-30
0° to 122°F (-18° to 50°C)	10W-40
15° to 122°F (-9.5° to 50°C)	15W-40

1 CJ-4 may be used in place of CI-4 w/CI-4 PLUS, CI-4, CH-4 & CG-4.

2 2007-09 model year engines must use CJ-4 only.

Engine Oil Capacity ¹	Liters	Qts.
C7: 2003-06	2.4	2.4
2007-09	2.6	2.6
C9: 2003-06	32.2 ²	34.0 ²
2007-09	29.8 ²	31.5 ²
C10: Shallow Pan	30.3	32.0
Deep Pan	34.1	36.0
Center Sump	34.1	36.0
C101305 (1997-99) Marmon Truck	34.1	36.0
C11	39.7 ²	42.0 ²
C12: Shallow Pan	30.0	32.0
Deep Pan	34.1	36.0
Center Sump	34.1	36.0
C13: 2003-06	39.7 ²	42.0 ²
2007-09	5	5
C15: 2000-06 Less Brake Saver	37.8	40.0
2000-06 w/Brake Saver & Front Sump	49.2	52.0
2000-06 w/Brake Saver & Rear Sump	37.8 ²	40.0 ²
2007-09	38.8 ²	41.0 ²
C16: Less Brake Saver	37.8	40.0
w/Brake Saver & Front Sump	49.2	52.0
w/Brake Saver & Rear Sump	37.8	40.0
3116	3	3
3126	19.9	21.0
3126 1998 Louisville, Aeromax	28.4	30.0
3126B, 3126E	4	4
3176	27.4 ²	29.0 ²
3176B	28.4	30.0
3208	15.1	16.0
3306B	34.1	36.0
3306C	38.8 ²	41.0 ²
3406B	34.1	36.0
3406E: Less Brake Saver	37.8	40.0
w/Brake Saver & Front Sump	49.2	52.0
w/Brake Saver & Rear Sump	37.8	40.0

1 Approximate. Capacities may vary due to accessories & optional equipment. Make final inspection w/dipstick.

2 Includes filter.

3 Shallow pan, 21.0 qts. Deep pan, 34.0 qts.

4 Shallow pan, 22.0 qts. Deep pan, 30.0 qts.

5 With front or rear sump, 1 filter 38.5 qts., w/2 filters 41.0 qts.

6 Shallow pan, 19.0 qts. Deep pan, 26.5 qts.

CUMMINS

CRANKCASE

1998-2003 **CH-4, CI-4, CJ-4¹**

2004-06 **CI-4, CJ-4¹**

Below 68°F (20°C)	5W-30
Below 32°F (0°C)	0W-30
10° to 122°F (-12° to 50°C)	15W-40
Above 5°F (-15°C)	15W-40
-5° to 68°F (-21° to 20°C)	10W-30
-22° to 68°F (-30° to 20°C)	10W-30
-40° to 68°F (-40° to 20°C)	5W-30

2007-09 **CJ-4²**

0°F & Above (-18°C & Above)	5W-40, 15W-40
-4°F & Above (-20°C & Above)	10W-30
-20° to 68°F (-29° to 20°C & Above)	5W-30
0°F & Below (-18°C & Below)	0W-30

1 CJ-4 may be used in place of CI-4 w/CI-4 PLUS, CI-4, CH-4 & CG-4.

2 2007-09 model year engines must use CJ-4 only.

Engine Oil Capacity ¹	Liters	Qts.
B Series: 3.9L	11.0	11.6
5.9L	16.4	17.3
C Series 16	18.9	20.0
Dodge Ram 6.7L	11.4	12.0
ISBe: 4.5L	13.0	13.7
6.7L	16.7	17.6

Engine Oil Capacity ¹	Liters	Qts.
ISC	22.7	24.0
ISC/285	19.9	21.0
ISDe: 4.5L	13.0	13.7
6.7L	16.7	17.6
ISL	26.5	28.0

ISM 56001, 56001 Series:		
2001-03	36.9	39.0
2004-09	34.1	36.0
ISM: ex. in International Truck	36.9	39.0
in International Truck	41.6	44.0
ISM Kenworth 2007-09	38.8	41.0
ISMe	34.1	36.0
ISX	41.6	44.0
ISX Kenworth 2007-09	38.8	41.0
L10	36.7	38.8
M11	36.7	38.8
M11E Select, Plus	39.0	41.2
N14, N14E Select	38.6	40.8

1998-2000:

M11/280, 330E	26.5-34.1 ¹	28-36 ¹
8.3/210	15.2-19 ¹	16-20 ¹

2001-06:

ISM/330E:		
M11/330	36.9 ¹	39.0 ¹
8.3/210	19.0 ¹	20.0 ¹
N14/435	38.8 ¹	41.0 ¹
ISC/240	19.9 ¹	21.0 ¹

1 Approximate. Make final inspection w/dipstick.

DETROIT DIESEL

CRANKCASE

1998-2003 **CH-4, CI-4, CJ-4¹**

2004-06 **CI-4, CJ-4¹**

41° to 104°F (5° to 40°C)	40
32° to 95°F (0° to 35°C)	30
14° to Above 104°F (-10° to above 40°C)	15W-40
-4° to Above 104°F (-20° to above 40°C)	10W-40
-4° to Above 95°F (-20° to above 35°C)	10W-30
Below -4°F (-20°C)	15W-40, 5W-30, 10W-30, 10W-40
-13° to Above 104°F (-25° to above 40°C)	5W-40
-13° to 95°F (-25° to 35°C)	5W-30

2007-09 **CJ-4²**

13°F & Above (-10° C & Above)	15W-40
-4°F & Above (-20° C & Above)	10W-40
-4° to 95°F (-20° to 35°C)	10W-30
-13°F & Above (-25° C & Above)	5W-40
-13° to 95°F (-25° to 35°C)	5W-30

1 CJ-4 may be used in place of CI-4 w/CI-4 PLUS, CI-4, CH-4 & CG-4.

2 2007-09 model year engines must use CJ-4 only.

Engine Oil Capacity	Liters ¹	Qts. ¹
DDC 638	8.5	9.0 ²
Series 50, Series 55	30.3	32.0
Series 60	36.0	38.0 ²
MBE904	16.1	17.0 ²
MBE906, MBE926	29.3	31.0 ²
MBE4000	41.6	44.0 ²

1 Approximate. Capacities may vary due to accessories & optional equipment. Make final inspection w/dipstick.

2 Includes filter.

INTERNATIONAL

CRANKCASE

1998-2003 **CH-4, CI-4, CJ-4¹**

2004-06 **CI-4, CJ-4¹**

Below 50°F (10°C)	0W-30
Above 30°F (-1°C)	30
20° to above 100°F (-7° to 38°C)	15W-40
Above 20°F (-7°C)	15W-40
10° to above 100°F (-12° to 38°C)	15W-40
10° to 90°F (-12° to 32°C)	10W-30
10° to 20°F (-12° to -20°C)	10W-30
Above 10°F (-12°C)	20W-40
Above 0°F (-18°C)	15W-40
-20° to 50°F (-28 to 10°C)	5W-30
-20° to 30°F (-28 to -2°C)	5W-30
-20° to 0°F (-28 to -18°C)	0W-30
Below -20° to 50°F (-28 to 10°C)	0W-30

2007-09 **CJ-4²**

Below 50°F (10°C)	0W-30, 0W-40
All Temperatures	5W-40
0° to 50°F (-18° to 10°C)	10W-30
20°F & Above (-7°C & Above)	15W-40

1 CJ-4 may be used in place of CI-4 w/CI-4 PLUS, CI-4, CH-4 & CG-4.

2 2007-09 model year engines must use CJ-4 only.

Engine Oil Capacity ¹	Liters	Qts.
1998-2002 530	26.5	28.0
1998-2003 530E	26.5	28.0
1998 DT466	26.5	28.0
2001-2009 DT466	26.5 ²	28.0 ²
1998-2008 DT466E	26.5	28.0
1998-2003 DT530	26.5	28.0
2004-2008 DT570	30.3	32.0
1998-2003 DTA466	18.9	20.0

Engine Oil Capacity ¹	Liters	Qts.
1998-2003 DT466	20.8	22.0
Ford: E450:		
6.0L 2004-09	14.2 ³	15.0 ³
7.3L: 1999	13.2 ³	14.0 ³
2000-03	14.2 ³	15.0 ³

F450-550:		
6.0L: 2003	14.2	15.0
2004-07	14.2 ³	15.0 ³
6.4L 2008-09	14.2	15.0
7.3L: 1999	13.2 ³	14.0 ³
2000-03	12.3 ³	13.0 ³
2004-2009 HT570	30.3	32.0
2007-09 MaxxForce 10	28.4	30.0
2007-09 MaxxForce DT	28.4	30.0
2005-09 MaxxForce5	14.2 ³	15.0 ³
2007-09 MaxxForce7	28.4	30.0
1998-2008 T444E	18.5	19.5
2002 T444E	18.5	19.5
2000-2009 V365	18.0	19.0

1 Capacities will vary depending upon optionally installed equipment. Always make a physical final inspection of all fluid levels.

2 Plus 6.0 quarts for 3400, 3800 and 4400 Models.

3 With oil filter.

ISUZU

CRANKCASE

4BD2-TC & 6HE1-TC

1998-2000 CH-4, CI-4, CJ-4¹	
Above 77°F (25°C)	40, 50
32° to 86°F (0° to 30°C)	30
Above 5° (-15°)	15W-40, 20W-40, 20W-50
5° to 59°F (-15° to 15°C)	20W-20
-22° to 86°F (-30° to 30°C)	10W-30
-22° to 32°F (-30° to 0°C)	10W

4HE1-TC **CH-4, CI-4, CJ-4¹**

Above 80°F (27°C)	40/50
32° to 90°F (0° to 32°C)	30
0° to Above 90°F (-18° to above 32°C)	15W-40, 15W-50, 20W-40, 20W-50
0° to 60°F (-18° to 16°C)	20/20W
-20° to Above 90°F (-29° to above 32°C)	10W-40
-20° to 90°F (-29° to 32°C)	10W-30
-20° to 32°F (-29° to 0°C)	10W

6HK1-TC

1999-2003 **CH-4, CI-4, CJ-4¹**

2004-06 **CI-4, CJ-4¹**

32° to 86°F (0° to 30°C)	30
Above 5° (-15°)	20W-20
5° to 59°F (-15° to 15°C)	15W-40, 20W-40, 20W-50
-22° to 32°F (-30° to 0°C)	10W

2007-09 **CJ-4²**

Above 77°F (25°C)	40
10° & Above (-12°C & Above)	15W40, 20W-40, 20W-50
32° to 86°F (0° to 30°C)	30
-20° to Above 90°F (-29° to above 30°C)	10W-40
90°F & Below (30°C & Below)	10W-30

4HK1-TC

2004-06 **CI-4, CJ-4¹**

Above 77°F (25°C)	40, 50
0° to Above 90°F (0° to above 30°C)	15W-40, 15W-50, 20W-40, 20W-50
32° to 86°F (0° to 30°C)	30
Above 5° (-15°)	15W-40, 15W50, 20W-40, 20W-50
5° to 60°F (-15° to 15°C)	20, 20W
-20° to Above 90°F (-29° to above 30°C)	10W-40
-20° to 90°F (-29° to 30°C)	10W-30
-20° to 32°F (-29° to 0°C)	10W

2007-09 **CJ-4²**

Above 77°F (25°C)	40
10° & Above (-12°C & Above)	15W40, 20W-40, 20W-50
32° to 86°F (0° to 30°C)	30
-20° to Above 90°F (-29° to above 30°C)	10W-40
90°F & Below (30°C & Below)	10W-30

1 CJ-4 may be used in place of CI-4 w/CI-4 PLUS, CI-4, CH-4 & CG-4.

2 2007-09 model year engines must use CJ-4 only.

Engine Oil Capacity ¹	Liters	Qts.
4BD2	11.4	12.0
4HE1	13.7	14.5
4HE1-TC, 4HK1-TC	12.9	13.6
6HE1	15.0	15.9
6HK1-TC	2	2

1 Approximate. Capacities may vary due to accessories & optional equipment. Make final inspection w/dipstick.

2 Shallow pan: 14.8 qts., Deep pan: 24.0 qts.

MEDIUM & HEAVY TRUCKS

DIESEL ENGINES CONTINUED

MACK

CRANKCASE

1998-2003	CH-4, CI-4, CJ-4 ¹
2004-06	CI-4, CJ-4 ¹
2007-09	CJ-4 ²
Above 0°F (-18°C)	5W-40 Synthetic, 15W-40
Below 0°F (-18°C)	5W-40 Synthetic, 10W-40

1 CJ-4 may be used in place of CI-4 w/CI-4 PLUS, CI-4, CH-4 & CG-4.

2 2007-09 model year engines must use CJ-4 only.

Engine Oil Capacity ¹	Liters	Qts.
2003-07 AC-310	37.9	40.0
2007 AC-365	39.3	41.5
2003-06 AI-300A	37.9	40.0
2003-07 AI-350	37.9	40.0
2003-07 AMI-300	37.9	40.0
2003-07 ASET AC	37.9	40.0
1998-2002 E3-190	21.0	22.2
2003-04 E3-210	21.0	22.2
1998-2002 E3-220	21.0	22.2
1998 E7-350	2	2
1998-2002 EM6-275L	2	2
1998-2002 EM7-300	2	2
2008-09 MP7-325	37.9	40.0
2006-07 MP7-405	2	3
2007 MP7-365	2	3
2004-07 MP7-365C	2	3
2008-09 MP8-415-425	37.9	40.0

1 Approximate. Includes filter, cooler & oil lines. Make final inspection w/dipstick.

2 ESI engines, 33.5 qts., ESI Plus engines, 58.5 qts.

3 Without oil filters, 38.0 qts., w/two full flow oil filters, 42.5 qts.

MERCEDES-BENZ

CRANKCASE

2000-03	CH-4, CI-4, CJ-4 ¹
2004-06	CI-4, CJ-4 ¹
2007-09	CJ-4 ²
All Temperatures	15W-40, 5W-30, 10W-30, 10W-40

1 CJ-4 may be used in place of CI-4 w/CI-4 PLUS, CI-4, CH-4 & CG-4.

2 2007-09 model year engines must use CJ-4 only.

Engine Oil Capacity ¹	Liters	Qts.
2000-03 MBE904	16.1	17.0 ²
2000-07 MBE906	29.3	31.0 ²
2002-07 MBE4000	41.6	44.0 ²
2004-07 MBE926	29.3	31.0 ²

1 Approximate. Capacities may vary due to accessories & optional equipment. Make final inspection w/dipstick.

2 With oil filter.

MITSUBISHI FUSO

CRANKCASE

1998-2003	CH-4, CI-4, CJ-4 ¹
2004-06	CI-4, CJ-4 ¹
2007-09	CJ-4 ¹
Above 86°F (30°C)	40
23° to 104°F (-5° to 40°C)	30
Above 5°F (-15°C)	15W-40
5° to 59°F (-15° to 15°C)	20W-20
Below 32°F (0°C)	10W-30

1 2007-09 model year engines must use CJ-4 only. CJ-4 may be used in place of CI-4 w/CI-4 PLUS, CI-4, CH-4 & CG-4.

Engine Oil Capacity ¹	Liters	Qts.
3.3L	8.5	9.0
3.9L	9.0	9.5
4.9L: ex. FH100	9.5	10.0
FH100	11.0	11.6
5.9L	10.4	11.0
6.6L	12.5	13.2
7.5L ex. FM260	12.8	13.5
FM260	13.7	14.5

1 Approximate. Capacities may vary due to accessories & optional equipment. Make final inspection w/dipstick.

VOLVO

CRANKCASE

1998-2003	CH-4, CI-4, CJ-4 ¹
2004-06	CI-4, CJ-4 ¹
-5° to 120°F (-20° to 49°C)	10W-40 ³
-5° to 85°F (-20° to 29°C)	10W-30 ³
0° to 120°F (-18° to 49°C)	5W-40 ³
-40° to 120°F (-40° to 49°C)	5W-40 ³
-40° to 85°F (-40° to 29°C)	5W-30 ³

2007-09 CJ-4²

All Temperatures 15W-40

1 CJ-4 may be used in place of CI-4 w/CI-4 PLUS, CI-4, CH-4 & CG-4.

2 2007-09 model year engines must use CJ-4 only.

3 Generally, use the highest viscosity oil that still meets cold start-up temperature requirements.

Engine Oil Capacity ¹	Liters	Qts.
2000-2003 D12C/345	-	-
1998 D7/230	20.8 ²	22.0 ²
2008-09 VE D13 335	36.0	38.0
2007-09 VE D13 355-485	36.0	38.0
2007-09 VE D16 450-535	3	3
2007-09 VE D16 450-600	52.0	55.0
1998-01 VE210/250	32.2	34.0
1998-99 VE-250	20.8 ²	22.0 ²
2000-03 VE-345/465	35.0 ²	37.0 ²
2007-09 VE-D11/325-405	36.0	38.0
2007-09 VE-D12 365-465	33.1	35.0
2000-03 VE-D12/365	32.2 ²	34.0 ²

2004-06 VHD Models:

w/VE D12/365/395/425/435 Engine	41.6	44.0
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2004-06 VN, VNL Models:

w/VE D12/365/395/425/435 Engine	36.9	39.0
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2006 VE-D16/500	52.0	55.0
1998-1999 VE-D300	20.8	22.0 ²

1 Approximate. Capacities may vary due to accessories & optional equipment. Make final inspection w/dipstick.

2 Includes filter.

3 Oil pan can have 2 different capacities: 44.0 quarts and 55.0 quarts.

AUTOMATIC & AUTOMATED TRANSMISSIONS

AISIN

All	AF3
CAPACITIES Total ¹	Liters Qts.
A450-43LE	14.0 14.8
465	14.0 14.8
M036A6	13.2 14.0

ALLISON

All TES 295, TES389¹⁷

CAPACITIES Total ^{1, 2}	Liters	Qts.
AT-542, 545 (Initial fill)	3	3
B500 (World)	4	4
B500P (World)	5	5
CBT-5000, 6000 (Series)	6	6
CBT-8000, 9000 (Series)	71.9	76.0
CLBT-5000, 6000 (Series)	6	6
CLBT-8000, 9000 (Series)	71.9	76.0
CRT-3000, 5000 (Series)	20.8	22.0
CRT-7000 (Series)	42.5	45.0
CT-5000, 6000 (Series)	6	6
CT-8000, 9000 (Series)	71.9	76.0
DP-5000, 6000 (Series)	6	6
DP-8000, 9000 (Series)	7	7
HD-4060 (World)	4	4
HD-4060P (World)	5	5
HD-4560 (World)	4	4
HD-4560P (World)	5	5
HT-700 (Initial fill)	15.1	16.0
HT-741 (Initial fill), HT-747 (Initial fill)	15.1	16.0
HT-754 (Initial fill), HT-755 (Initial fill)	15.1	16.0
LCT-1000, 2000, LCT-2400	8	8
M-5000, 6000 (Series)	6	6
M-8000, 9000 (Series)	7	7
MD-3060 (World)	24.6	26.0
MD-3060-P	27.4	29.0
MD-3070PT (World)	36.9	39.0
MD-3560 (World)	24.6	26.0
MD-3560-P	24.6	26.0
MD-WVR (World) (Initial fill)	15.6	16.5
MT-600 (Initial fill)	15.1	16.0
MT-643	9	9
MT-648 (Initial fill)	15.1	16.0
MT-653 (Initial fill), MT-654 (Initial fill)	15.1	16.0
700 (Series)	10	10
S-5000, 6000 (Series)	6	6
S-8000, 9000 (Series)	7	7
653DRG 15	9	9
1000 & 2000 Series	11	11

CAPACITIES Total^{1, 2}

3000 Series	12	12
4000 Series	13	13

ARVIN/MERITOR (ROCKWELL)/ZF

ESS (ENGINE SYNCHRO SHIFT) & SURESHIFT

Heavy Duty Engine Oil API SJ, SL, SM

Above 10°F (-12°C), 40, 50

Above -15°F (-26°C), 30

Gear Oil API GL-1¹⁴

Above 10°F (-12°C), 90

Below 15°F (-26°C), 80W

Synthetic Oil O-81¹⁵

Above -40°F (-40°C), 50

CAPACITIES¹ Liters Qts.

Arvin/Meritor/ZF:

9 SPEED ESS

M-11G9A-X11, M-12G9A-X12	9.7	10.2
M-13G9A-X13, M-14G9A-X14	9.7	10.2
M-15G9A-X15	9.7	10.2
M0-11G9A-X11, M0-12G9A-X12	9.7	10.2
M0-13G9A-X13, M0-14G9A-X14	9.7	10.2
M0-11G9B-X11	9.7	10.2
M0-12G9A-X12, M0-13G9A-X13	9.7	10.2
M0-14G9A-X14, M0-15G9A-X15	9.7	10.2

9 SPEED SURE SHIFT

M-11G9A-S11, M-12G9A-S12	9.7	10.2
M-13G9A-S13, M-14G9A-S14	9.7	10.2
M-15G9A-S15	9.7	10.2
M0-12G9A-S12, M0-13G9A-S13	9.7	10.2
M0-14G9A-S14	9.7	10.2
M0-11G9B-S11	9.7	10.2

CAPACITIES¹

M0-12G9B-S12, M0-13G9B-S13	9.7	10.2
M0-14G9B-S14, M0-15G9B-S15	9.7	10.2

10 SPEED ESS

M-11G10A-X11, M-12G10A-X12	9.7	10.2
M-13G10A-X13, M-14G10A-X14	9.7	10.2
M-15G10A-X15, M-16G10A-E16	9.7	10.2
M0-11G10A-X11, M0-12G10A-X12	9.7	10.2
M0-13G10A-X13, M0-14G10A-X14	9.7	10.2
M0-15G10A-X15	9.7	10.2
M0-14G10A-E16	9.7	10.2
M0-16G10A-X16	9.7	10.2
M0-16G10A-E18	9.7	10.2

CAPACITIES¹

M0-11G10C-X11, M0-12G10C-X12	9.7	10.2
M0-13G10C-X13, M0-14G10C-X14	9.7	10.2
M0-15G10C-X15, M0-16G10C-X16	9.7	10.2
M0-16G10C-X16, M0-16G10C-X18	9.7	10.2
M0-17G10C-E17, M0-17G10C-E19	9.7	10.2
M0-18G10C-E18	9.7	10.2
M0-18G10C-X20	9.7	10.2

10 SPEED SURE SHIFT

M-11G10A-S11, M-12G10A-S12	9.7	10.2
M-13G10A-S13, M-14G10A-S14	9.7	10.2
M-15G10A-S15, M-16G10A-S16	9.7	10.2
M0-11G10A-S11, M0-12G10A-S12	9.7	10.2
M0-13G10A-S13, M0-14G10A-S14	9.7	10.2
M0-15G10A-S15, M0-16G10A-S16	9.7	10.2
M0-16G10A-S16, M0-16G10A-S18	9.7	10.2
M0-11G10C-S11, M0-12G10C-S12	9.7	10.2
M0-13G10C-S13, M0-14G10C-S14	9.7	10.2
M0-15G10C-S15, M0-16G10C-S16	9.7	10.2
M0-16G10C-S16, M0-16G10C-S18	9.7	10.2
M0-17G10C-S17, M0-17G10C-S19	9.7	10.2
M0-18G10C-S18, M0-18G10C-S20	9.7	10.2

ZF FREEDOM LINE

All Synthetic Oil

Above -60°F (-51°C), 50

CAPACITIES¹ Liters Qts.

ZF FREEDOM LINE 12 SPEED

M-13Z12A-A13, M-14Z12A-A14	11.0	11.6
M0-14Z12A-A14, M0-15Z12A-A15	11.0	11.6
M0-16Z12A-A16	11.0	11.6

ZF FREEDOM LINE 16 SPEED

M0-14Z16A-A14, M0-15Z16A-A15	11.8	12.4
M0-16Z16A-A16	11.8	12.4

FORD MOTOR CO.

4R75E	MA5
4R100	MA
5R110W	MSP
TorqShift	MSP
CAPACITIES Total fill ¹	Liters Qts.
4R75E	13.1 13.9
4R100	16.7 17.7
5R110W	18.0 19.0
TorqShift 5 Speed	17.8 18.8

MEDIUM & HEAVY TRUCKS

AUTOMATIC & AUTOMATED TRANSMISSIONS CONTINUED

CHRYSLER LLC

46RH, 68RFE & AS68RC	AP4
CAPACITIES, Total Fill¹:	Liters Qt
46RH	9.7 10.3
68RFE	15.5-16.5 16.4-17.5
AS68RC	13.0 13.7

EATON/FULLER

Automated Transmission
(Includes Hybrid) **Synthetic**

All Temperatures, SAE 50

CAPACITIES¹	Liters	Qt
ULTRASHIFT HV 6 SPEED		
FO-5406B-DM3, FO-5506B-DM3	18.9	20.0
FO-6406B-DM3, FO-6506B-DM3	18.9	20.0

ULTRASHIFT 10 SPEED		
RTO-10910B-DM3	24.6	26.0
RTO-12910B-DM3	24.6	26.0
RTO-14910B-DM3	24.6	26.0
RTO-16910B-DM3	24.6	26.0
RTOM-16910B-DM3	24.6	26.0
FM-14D310B-LST	24.6	26.0
FM-15D310B-LST	24.6	26.0

ULTRASHIFT LHP 13 SPEED		
RTLO-16913L-DM3	26.5	28.0
RTLOM-16913L-DM3	26.5	28.0
FO-16D313-LFP	26.5	28.0
FOM-16D313-LFP	26.5	28.0

AUTOSHIFT 18 SPEED		
RTLO-14918A-AS3	26.5	28.0
RTLO-16918A-AS3	26.5	28.0
RTLO-18918A-AS3	26.5	28.0
RTLO-20918A-AS3	26.5	28.0
RTLO-22918A-AS3	26.5	28.0

SUPER 10 TOP 2		
RTL-11710-T2	26.5	28.0
RTLO-11610-16610-T2	29.3	31.0
RTAO-14710B-AC	16	16
RTAO-14710B-AS	16	16

SUPER 13 TOP 2		
RTLO-14/16713-T2	25.5	27.0

CAPACITIES¹	Liters	Qt
RTLO-18913-T2	26.5	28.0
SUPER 18 TOP 2		
RTLO-14/16718-T2	25.5	27.0
RTLO-18918-T2	26.5	28.0
CEEMAT		
11/13/1409-AT	83.2	88.0
11/13/1416109-ATE	84.2	89.0
AUTOSELECT		
RTAO-10/12/14/16710-AC	24.6	26.0
AUTOSHIFT		
RTAO-10/12/14/16710-AS	24.6	26.0
HYBRID		
EH-8E306A-CD	18.4	19.5
EH-8E306A-U	18.4	19.5
EH-8E306A-UP	18.5	19.6

GENERAL MOTORS CORP.

4L80E, 4L80-EHD & 4L85E **AF6**

CAPACITIES¹	Liters	Qt
4L80E (Initial fill)	7.3	7.7
4L80-EHD (Initial fill)	3.6	3.85
4L85E (Initial fill)	7.3	7.7

JATCO

AK 106 & RGE40A **AF3**

CAPACITIES¹	Liters	Qt
AK 106 (Initial fill)	2.9	3.15
RGE40A (Initial fill)	5.9	6.3

MITSUBISHI FUSO

M2A3, M4A4 & M03A4 **AF3**

CAPACITIES¹	Liters	Qt
M2A3 (Initial fill)	3.7	4.0
M4A4 (Initial fill)	15.1	16.0
M03A4 (Initial fill)	6.7	7.1

AUTOMATIC & AUTOMATED TRANSMISSION NOTES

- 1 Approximate. Make final inspection w/dipstick.
- 2 **Warning:** The Drain/Refill Capacities are engineering estimates only, and will vary depending on lengths/sizes of cooler lines, cooler sizes, transmission fluid temperature and duration of drain time. The technician **MUST** check the transmission fluid level before placing the transmission in service. Overfilling and/or under filling are both harmful and will result in transmission failure. Allison Transmissions on highway service.
Note: For 1000/2000/2400, AT, HT, MT transmissions equipped w/external filter, an Allison high efficiency filter may be used until the change filter lamp indicates contamination or until it is in service for three years.
- 3 4 inch pan, 8.5 liters 9 qts.; 5 inch pan, 15.1 liters 16 qts.
- 4 With shallow sump, 37 liters 40 qts.; w/standard sump 45.4 liters 48 qts.
- 5 With shallow sump, 40.7 liters 43 qts.; w/standard sump 48.2 liters 51 qts.
- 6 With straight-through gear box, 70 liters 74 qts.; w/dropbox, 49.2 liters 52 qts.
- 7 With straight-through gear box, 71.9 liters 76 qts.; w/dropbox, 121.1 liters 128 qts.
- 8 With shallow pan, 12.3 liters 13 qts.; w/standard pan, 14.2 liters 15 qts.
- 9 With shallow pan, 17 liters 18 qts.; w/deep pan, 21.7 liters 23 qts.
- 10 With 4 1/2 inch deep oil pan, 28.8 liters 30.5 qts.; w/6 inch deep oil pan, 31.2 liters 33 qts.; w/7 inch deep oil pan, 31.2 liters 33 qts.; w/8 1/2 inch deep oil pan, 35 liters 37 qts. Add 2.4 liter 2.6 qts for drop-box.
- 11 Initial fill, w/shallow sump, 12.7qts.; w/standard sump, 14.8 qts. Refill, w/shallow sump, 7.4 qts.; w/standard sump, 10.6 qts.
- 12 With 4 inch sump, 27.4 liters 29 qts.; w/2 inch sump 24.6 liters 26 qts.
- 13 With 4 inch sump, 45.4 liters 48 qts.; w/2 inch sump 37.8 liters 40 qts. Transmissions w/ PTO, add 2.8 liters 3 qts.
- 14 With rust & oxidation inhibitor.
- 15 Meritor specification.
- 16 Fill to bottom of filler plug hole.
- 17 Allison specification.

MANUAL TRANSMISSIONS

ARVIN/MERITOR (ROCKWELL)/ZF

ESS (ENGINE SYNCHRO SHIFT) & SURESHIFT

Heavy Duty Engine Oil **API SJ, SL, SM**

Above 10°F (-12°C), 40, 50

Above -15°F (-26°C), 30

Gear Oil **API GL-1 14**

Above 10°F (-12°C), 90

Below 15°F (-26°C), 80W

Synthetic Oil **O-81 15**

Above -40°F (-40°C), 50

CAPACITIES	Liters	Qt
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9 SPEED MANUAL		
M-11G9A-M11, M-12G9A-M12	9.7	10.2
M-13G9A-M13, M-14G9A-M14	9.7	10.2
M-15G9A-M15	9.7	10.2
M-12G9A-M12, M-13G9A-M13	9.7	10.2
M-14G9A-M14	9.7	10.2
M-11G9B-M11, M-12G9B-M12	9.7	10.2
M-13G9B-M13, M-14G9B-M14	9.7	10.2
M-15G9B-M15	9.7	10.2

10 SPEED MANUAL		
M-11G10A-M11, M-12G10A-M12	9.7	10.2
M-13G10A-M13, M-14G10A-M14	9.7	10.2
M-15G10A-M15, M-16G10A-M16	9.7	10.2
M-11G10A-M11, M-12G10A-M12	9.7	10.2
M-13G10A-M13, M-14G10A-M14	9.7	10.2
M-15G10A-M15, M-16G10A-M16	9.7	10.2
M-16G10A-M16, M-16G10A-M18	9.7	10.2
M-11G10C-M11, M-12G10C-M12	9.7	10.2
M-13G10C-M13, M-14G10C-M14	9.7	10.2
M-15G10C-M15, M-16G10C-M16	9.7	10.2
M-16G10C-M16, M-16G10C-M18	9.7	10.2
M-17G10C-M17, M-17G10C-M19	9.7	10.2
M-18G10C-M18, M-18G10C-M19	9.7	10.2

13 SPEED MANUAL		
RM013-145A	10.4	11.0

ZF		
M6HD	5.4	5.7
S5-35	NA	NA
S6-65	9.4	9.9
S6-650	6.0	6.3

PLATFORM F MANUAL TRANSMISSION		
M-14F10A-M16	9.7	10.2
M-14F10A-M16	9.7	10.2
M-14F10C-M16	9.7	10.2
M-14F10C-M18	9.7	10.2
RM9-115A, RM9-125A	9.4	9.9
RM9-135A, RM9-145A	9.7	10.2

CAPACITIES	Liters	Qt
RM9-155A	9.7	10.2
RM09-125A	9.4	9.9
RM09-135A, RM09-145A	9.7	10.2
RMX9-125A	9.4	9.9
RMX9-135A, RMX9-145A	9.7	10.2
RM09-115B, RM09-125B	9.4	9.9
RM09-135B, RM09-145B	9.7	10.2
RMX9-115B, RMX9-125B	9.4	9.9
RMX9-135B	11.8	12.4
RMX9-145B, RMX9-155B	9.7	10.2
RMX9-115R, RMX9-125R	9.4	9.9
RMX9-135R, RMX9-145R	9.7	10.2
RM10-115A, RM10-125A	9.4	9.9
RM10-135A, RM10-145A	9.7	10.2
RM10-155A	9.7	10.2
RMX10-115A, RMX10-125A	9.4	9.9
RMX10-135A, RMX10-145A	9.7	10.2
RMX10-155A, RMX10-165A	9.7	10.2
RMX10-115C, RMX10-125C	9.7	10.2
RMX10-135C, RMX10-145C	9.7	10.2
RMX10-155C, RMX10-165C	9.7	10.2
RM013-145A	11.8	12.4
RS9-115A, RS9-125A	9.4	9.9
RS9-135A, RS9-145A	9.7	10.2
RS9-155A	9.7	10.2
RSX9-125A, RSX9-135A	9.7	10.2
RSX9-145A	9.7	10.2
RSX9-115B, RSX9-125B	9.4	9.9
RSX9-135B	11.8	12.4
RSX9-145B, RSX9-155B	9.7	10.2
RSX9-115R, RSX9-125R	9.4	9.9
RSX9-135R, RSX9-145R	9.7	10.2
RS10-115A, RS10-125A	9.4	9.9
RS10-135A, RS10-145A	9.7	10.2
RS10-155A	9.7	10.2
RSX10-115A, RSX10-125A	9.4	9.9
RSX10-135A, RSX10-145A	9.7	10.2
RSX10-155A, RSX10-165A	9.7	10.2
RSX10-115C, RSX10-125C	9.7	10.2
RSX10-135C, RSX10-145C	9.7	10.2
RSX10-155C, RSX10-165C	9.7	10.2
RS013-145A	11.8	12.4

CLARK

POWERSHIFT TRANSMISSION & TORQUE CONVERTER

Above 32°F (0°C) **30 SM, CD, C-4**

Above -10°F (23°C) **10W SM, CD, C-4**

Above -30°F (23°C) **AF**

Below 0°F (-18°C) **MIL-L-46167**

CAPACITIES	Liters	Qt
450	4.5	4.7
550	5.0	5.3

DANA/SPICER

Dana Spicer 5/6/7/12/14 Speed,

ESO66-7B **CE, GF-4**

All Temperatures, 50

Dana Spicer ES65-5A, PS140-7,

PS150-7, 1372A, 6052A **SM**

Above 0°F (-18°C), 50

Below 0°F (-18°C), 30

Spicer Non Synchronized,

5552A **CC, CD, CE, GL-1, SM**

All Temperatures, 50

Above 10°F (-12°C), 40, 50, 90

Below 10°F (-12°C), 30, 80W

Spicer 5/6/7/10 Speed **CD, GL-1, SM**

All Temperatures, 50

Above 10°F (-12°C), 40, 50, 90

Below 10°F (-12°C), 30, 80W

Above 0°F (-18°C), 30, 50

Below 0°F (-18°C), 30

Spicer PS97-7A **CC, CD**

Above 0°F (-18°C), 30, 50

Below 0°F (-18°C), 30

Spicer SST-9072AA **GL-5**

All Temperatures, 50

Above 0°F (-18°C), 30, 50

Below 0°F (-18°C), 30

CAPACITIES	Liters	Qt
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AMO1000-4 6.6 7.0

ASO125-102S, ASO140-10S,

ASO150-10S, ASO-165S 12.7 13.4

CM 4054-A, D 5.7 6.0

CM 4954-A, D 6.1 6.4

CM 5052-A, B, C, D 8.0 8.4

CM 5552-A, B, C, D, 5852-A 8.0 8.4

CM 5952-A, C, D, E 8.0 8.4

CM 6052-A, B, C, D, 6252-A, B,

6253-A, B 8.5 9.0

ESO66-7B 10.4 11.0

ESO66-7B (MK9) 5.2 5.5

ES42-5A, D 5.7 6.0

ES43-5 5.7 6.0

ES52-5A, D 6.1 6.4

ES52-7B 10.4 11.0

ES52-7B (MK8) 5.2 5.5

ES53-5 5.7 6.0

MEDIUM & HEAVY TRUCKS

MANUAL TRANSMISSIONS CONTINUED

CAPACITIES			CAPACITIES			CAPACITIES		
	Liters	Qt		Liters	Qt		Liters	Qt
ES60-5A, C, D, E	8.0	8.4	955AL	11.8	12.4	RTL0-13610B, B-T2	13.2	14.0
ES62-5	8.0	8.4	1056AA	13.7	14.5	RTL0-14610A, B, B-T2	13.2	14.0
ES65-5A, B, D, E	8.5	9.0	8206	9.8	10.3	RTL0-15610B, B-T2	13.2	14.0
ES67-5	8.0	8.4	11606	12.3	13.0	RTL0-16610B, B-T2	13.2	14.0
LPS0125-10S	8.5	9.0	7 SPEED			RTO-6610	5.6	5.9
LPS0140-10S	8.5	9.0	T-8607A, B	17.0	18.0	RTO-11608LL	14.6	15.4
LPS0150-10S	8.5	9.0	T-11607A, B	14.2	15.0	RTO-11610, B	13.2	14.0
P595-9A, PSI 25-9A, PSI40-9A,			RT-11707	13.2	14.0	RTO-11708LL	13.2	14.0
PSOI 25-9A, PSOI 40-9A &			T-14607, A, B	17.0	18.0	RTO-11908LL	13.2	14.0
PSOI 50-9A	8.5	9.0	TX-14607, A, B	17.0	18.0	RTO-14608LL	13.7	14.4
PSOI100-10S, PSOI125-10S,			955AL	13.2	14.0	RTO-14610	12.3	13.0
PSOI140-10S & PSOI150-10S	12.7	13.4	8 SPEED			RTO-14708LL	13.2	14.0
PSO-125-10S	8.5	9.0	RT-9508, 9508A	11.8	12.4	RTO-14908LL	13.2	14.0
PSO-125-10V	8.5	9.0	RT-11608	12.3	13.0	RTO-16210C	11.3	12.0
PSO-140-10S	8.5	9.0	RT-14608	13.2	14.0	RTO-16908LL	13.2	14.0
PSO140-12B	14.2	15.0	RTO-1157DL	12.7	13.4	RTO-610	5.6	5.9
PSO-145-10V	8.5	9.0	RTO-11607L	13.2	14.0	RTX-11610	12.3	13.0
PSO-150-10S	8.5	9.0	RTX-11708LL	13.2	14.0	RTX-11710B, C	12.3	13.0
PSO 150-16A	21.6	22.8	1157DL	6.5	6.8	RTX-12610	12.3	13.0
PSO150-16B, PSO165-16B,			11607L	13.2	14.0	RTX-12710B, C	12.3	13.0
PSO175-16B & PSO165-16M	14.2	15.0	7608 LL	8.8	9.3	RTX-13710B, C	12.3	13.0
PSO-165-10S	8.5	9.0	8608 LL	8.8	9.3	RTX-14610	12.3	13.0
PSO165-18A, PSO175-18A &			11708 LL	12.8	13.5	RTX-14710B, C	13.2	14.0
PSO175-18M 30			14708 LL	12.8	13.5	RTX-15710B, C	13.2	14.0
PS97-7A	19.4	20.5	9 SPEED			RTX-16710B	12.3	13.0
PS105-7LL, PS130-6L	14.2	15.0	RT-6609	5.9	6.2	7608LL	9.2	9.7
PS110-7A, B & PS145-7A	22.7	24.0	RT-6609, A	5.6	5.9	9/1258LL	13.2	14.0
PS125-7B, PS140-7A	22.7	24.0	RT-6609 (MT3)	2.8	2.9	11/14608LL	13.7	14.4
1207-2A	14.2	15.0	RT8608L	12.7	13.4	11708LL	13.2	14.0
1310-2A, 4A	19.4	20.5	RT-8609, A	7.1	7.5	14708LL	13.7	14.4
1352-A, 1452-A, 1453-A, PS130-5A	18.0	19.0	RT-8709-B	12.7	13.4	8/11/14/16908LL	13.2	14.0
1362-A, B, C, 1364-C, 1463-A,			RT-8709 MS9)	6.1	6.4	610	5.6	5.9
PS130-6B, PS140-6A	19.4	20.5	RT-11509, A	11.8	12.4	910	11.8	12.4
1372-A	22.7	24.0	RT-11607LL	14.6	15.4	1110	11.8	12.4
1414-2A, 3A	14.2	15.0	RT-11609, A, B, P, R	12.7	13.4	6610	5.6	5.9
9072	19.4	20.5	RT-11707LL/DLL	13.2	14.0	9710	12.3	13.0
			RT-11709H	12.7	13.4	11210-16210	11.1	11.7
			RT-12609A, B, P, R	12.7	13.4	11610-14610	12.3	13.0
			RT-12709H	12.7	13.4	11710-16710	12.3	13.0
			RT-13609A, B, P, R	12.7	13.4	12510	11.8	12.4
			RT-13709H	12.7	13.4	15610	12.7	13.4
			RT-14609A, B, P, R	12.7	13.4	11 SPEED		
			RT-14709H	12.7	13.4	RTO-11709MLL, RTO-11909ALL	13.2	14.0
			RTO-11609, 11609A, B, P, R	12.7	13.4	RTO-14709MLL, RTO-16909ALL	13.2	14.0
			RTO-11609A, B	12.7	13.4	RTO-11909ALL	13.2	14.0
			RTO-12609A, B, P, R	12.7	13.4	11/14709, 11/14909MLL	13.2	14.0
			RTO-14609A, B	12.7	13.4	13 SPEED		
			RTL0C-16909A-T2	13.2	14.0	RT-613	13.2	14.0
			RTL0C-18909A-Ts	13.2	14.0	RT-6613	7.5	7.9
			RT0C-18909A	13.2	14.0	RT-11613	13.2	14.0
			RT0C-18909A	13.2	14.0	RT-14613	13.7	14.4
			RT0C-9509B	11.8	12.4	RT-15613	13.7	14.4
			RTX-11609B, R	12.7	13.4	RT-613	13.2	14.0
			RTX-11709H	12.3	13.0	RT-6613	7.5	7.9
			RTX-12609A, B, P, R	12.7	13.4	RTL0-12713A	13.2	14.0
			RTX-12709H	12.7	13.4	RTL0-12913A	13.2	14.0
			RTX-13609A, B, P, R	12.7	13.4	RTL0-14613B	13.2	14.0
			RTX-13709H	12.7	13.4	RTL0-14713A	13.2	14.0
			RTX-14609A, H, P, R	12.7	13.4	RTL0-14913A	13.2	14.0
			RTX-14709H	12.3	13.0	RTL0-16713A	13.2	14.0
			RTX-16709B, H	12.7	13.4	RTL0-16913A	13.2	14.0
			906	11.8	12.4	RTL0-18913	13.2	14.0
			9509	11.8	12.4	RTL0-18913A	13.2	14.0
			1157DLL	13.7	14.5	RTL0-20913A	13.2	14.0
			8709	12.3	13.0	RTO-11613	13.2	14.0
			8608L	12.7	13.4	RTO-14613	13.7	14.4
			10 SPEED			RTO-15613	13.7	14.4
			FR-9210B, FR-11210B	11.1	11.7	RTOF-14613	13.7	14.4
			FR-12210B, FR-13210B	11.1	11.7	RTX-11613	13.2	14.0
			FR-14210B, FR-15210B	11.1	11.7	913, 9513	12.7	13.4
			FRM-15210C	11.1	11.7	11613-15613	13.7	14.4
			FRO-9210B, FRO-11210B	11.1	11.7	11813-15813	13.7	14.4
			FRO-12210B, FRO-13210B	11.1	11.7	12513	12.7	13.4
			FRO-14210B, FRO-15210B	11.1	11.7	15 SPEED		
			FRO-16210B, FRO-11210C	11.1	11.7	RT-11615	13.2	14.0
			FRO-12210C, FRO-13210C	11.1	11.7	RT-11715	14.2	15.0
			FRO-14210C, FRO-15210C	11.1	11.7	RT-14615	14.2	15.0
			FRO-16210C, FRO-17210C	11.1	11.7	RT-14715	13.2	14.0
			FRO-18210C	11.1	11.7	RT-14915	13.2	14.0
			R-6610, RT-610, RT-6610	5.7	6.0	RT-15615	14.2	15.0
			RT-7608LL	9.2	9.7	RT-15715	13.2	14.0
			RT-8908-LL	13.2	14.0	RTO-11615	13.2	14.0
			RT-11608LL	13.7	14.4	RTO-11715	13.2	14.0
			RT-11610	12.3	13.0	RTO-14615	14.2	15.0
			RT-11708LL	13.2	14.0	RTO-14715	13.2	14.0
			R/RT-11710, B, C	12.3	13.0	RTO-14915	13.2	14.0
			RT-12610	12.3	13.0	RTO-15615	14.2	15.0
			R/RT-12710, B, C	12.3	13.0	RTO-15715	13.2	14.0
			R/RT-13710, R/RT-14610	12.3	13.0	RTO-16915	13.2	14.0
			R/RT-14710, B	12.3	13.0	RTX-11715	14.2	15.0
			R/RT-15710, R/RT-16710	12.3	13.0	RTX-15715	13.2	14.0
			RT-11608LL	14.6	15.4	915	13.2	14.0
			RT-11610	12.3	13.0	12515	13.2	14.0
			RT-11710B, C	12.3	13.0	11615	13.2	14.0
			RT-12610	12.3	13.0	11/14/15715	13.2	14.0
			RT-13710B, C	13.2	14.0	14/15615	14.2	15.0
			RT-14610	12.3	13.0	14/16915	13.2	14.0
			RT-14710B, C	12.3	13.0	18 SPEED		
			RT-610, RT-6610	5.7	6.0	RTL0-14618A	13.2	14.0
			RT-7608LL	9.4	9.9	RTL0-14718B	13.2	14.0
			RTF-610	5.7	6.0	RTL0-14918B	13.2	14.0
			RTL-11710-14710	13.2	14.0	RTL0-16618A	13.2	14.0
			RTL0-11610B, B-T2	13.2	14.0	RTL0-16718B	13.2	14.0
			RTL0-12610B, B-T2	14.6	15.4	RTL0-16918B	13.2	14.0

EATON/FULLER/ ROAD RANGER

Linehaul
500,000 Mile Extended Drain
& Vocational 180,000 Mile Drain
Interval Lubricant**Synthetic**
All Temperatures, SAE 50
Other Manual Transmissions ...**HD Engine Oil**
All Temperatures, SAE 50
All Temperatures, CAT T0-4 SAE 40, 50

CAPACITIES	Liters	Qt
MID-RANGE TRANSMISSIONS		
5 SPEED		
FS-3005	4.5	4.7
FS-4005	4.5	4.7
FS-4205	5.4	5.7
FS-4205A, B, C	5.9	6.2
FS-4205A (MSG)	2.3	2.4
FS-4205A (MSC)	2.3	2.4
FS-5005	5.0	5.3
FS-5205, A, B	5.9	6.2
FS-5205A (MPU)	2.5	2.6
FS-5205C (MNC)	2.9	3.0
FS-5306	9.2	9.7
FS-5406	8.5	9.0
FS-5406A	9.2	9.7
FS-6105, FS-6106	9.0	9.5
FS-6205, FS-6305	9.0	9.5
FS-6305A, B	9.2	9.7
FS-6305A (MKO)	4.5	4.7
FS-6305B (MLO)	4.5	4.7
FS-6306	8.5	9.0
FS-6406A	9.2	9.7
FSO-5206A	6.5	6.8
6 SPEED		
FS-5106	8.5	9.0
FS-5306	8.5	9.0
FS-5406	8.7	9.2
FS-5406A	9.2	9.7
FS-6106	9.0	9.5
FS-6206	8.5	9.0
FS-6306	9.0	9.5
FS-6406A	9.2	9.7
FS-6406	8.7	9.2
FS-7206	9.0	9.5
FS-8206	9.5	10.0
FS-7206	9.0	9.5
FS-8406	8.7	9.2
FSB-5406A	9.2	9.7
FSB-5406A	9.2	9.7
FSB-6406B	9.2	9.7
FSO-6406B	9.2	9.7
FSO-8406	9.2	9.7
7 SPEED		
FS-8607	9.4	9.9
T Series	17.0	18.0
HEAVY DUTY TRANSMISSIONS		
5 SPEED		
T-905, 905A, B, C, P	10.4	11.0
TO-11605	10.4	11.0
6 SPEED		
906	12.3	13.0

MEDIUM & HEAVY TRUCKS

MANUAL TRANSMISSIONS CONTINUED

CAPACITIES	Liters	Qt
RTLO-18718B	13.2	14.0
RTLO-18918B	13.2	14.0
RTLO-20918B	13.2	14.0
RTLO-22918B	13.2	14.0
RTLO-9118	13.2	14.0
RTO-15618	13.2	14.0
15618	13.2	14.0
AUXILIARY TRANSMISSION		
AT-1202	5.2	5.5
2-A-92	5.6	5.9

HINO

All			GL-4
Above 90°F (32°C), 140			
10° to 90°F (-12° to 32°C), 90			
CAPACITIES	Liters	Qt	
FS-4205, 5205	5.4	5.7	
FS-6205, 6305	9.0	9.5	
FS-5306, 6306	8.5	9.0	
FS-5406	8.5	9.0	
FS-6406	9.2	9.7	
FSO-8406	9.2	9.7	
LE05S	5.3	5.6	
LF05S	6.0	6.3	
LH05S	5.3	5.6	
LJ06S	8.0	8.4	
MF06S	11.5	12.1	
MG06S	9.5	10.0	

ISUZU

Isuzu MBG5A, MBG5F, MBG5H, MBG5K, IMLD6F, MLD6Q & MLH5G			GL-5
14° to 95°F (-10° to 35°C), 90			
Above -13°F (-25°C), 80W-140			
Isuzu MBP6P, MLD6Q, MSA5D, MXA5C, MXA5D & MZZ			SJ, SL, SM
Above 90°F (35°C), 40			
Below 90°F (35°C), 5W-30			
CAPACITIES	Liters	Qt	
MBG5B, MBG5F	4.7 ¹	5.0	
MBP	5.3	5.6	
MLD6 & MLD6Q	6.5 ¹	6.8	
MLH5G	9.8	10.3	
MSA5D	2.5	2.6	
MXA5C	3.2	3.4	
MZZ	4.4	4.6	

MACK

Transmission Fluid			TO-A Plus
All Temperatures, SAE 40, 50			
Gear Oil			Mack GO J & GO J Plus
Mineral All Temperatures, 80W-90, 80W-140, 85W-140			
Synthetic All Temperatures, 75W-90, 75W-140, 80W-140			
CAPACITIES ²	Liters	Qt	
T305	9.4	9.9	
T306	11.3	11.9	
T306G	9.4	9.9	
T307, T307M	14.2	15	
T308	11.3	11.9	
T308M	14.2	15	
TM308	11.3	11.9	
TM308M	14.2	15	
T309, T309L, T309LR	11.3	11.9	
TM309	11.3	11.9	
TM309M	14.2	15	
T310	11.3	11.9	
T310M, T310ME, T310MLR	14.2	15.0	
T313, T313L, T313LR, T313L21, T313LR21	14.2	15.0	
T318, T318L, T318LR, T318L21, T318LR21	14.2	15.0	
T-2050, 2050A	9.4	9.9	
TRDL-107, 107A, 1070, 1070A	10.4	11.0	
TRXL-107, 1071	10.4	11.0	
TRDLG-1070, 1070A	10.4	11.0	
TRL-1076, 1078	10.4	11.0	
T-2060, 2070, 2070C, 2070F, 2080, 2080C, 2090, 2090B, 2100	11.3	11.9	
TRTXL-107, 107A, 1070	13.2	13.9	
T-2070A, 2070B, 2070D, 2080B, 2080D, 2130, 2130B, 2180, 2180B	14.2	15.0	

MERCEDES-BENZ

Mercedes Benz Five-Speed			SM, AF2
14° to 68°F (-10° to 20°C), 20W-20			
-4° to 32°F (-10° to 0°C), 10W			
Note: General Motors stopped licensing Dexron III after Dec. 31, 2006. Dexron VI is to be used when seal and O-ring materials have been changed based on a serial number breakpoint.			
Mercedes Benz Six-Speed			GL-4
CAPACITIES	Liters	Qt	
AK 6-80, 6-90, S6-80 & 6-90	12.7	13.4	
AK 6-80V & S6-80V	14.2	15.0	
GV 4/110	19.0	20.0	

CAPACITIES	Liters	Qt
MBG 3/40 & 3/60	5.2	5.5

MITSUBISHI FUSO

General Use	80W	GL-3
Warm Region	80W, 90	GL-3
Tropical Region	80W, 90	GL-4
CAPACITIES	Liters	Qt
M3S5	4.5	4.7
M5S5 & M6S5	4.5	4.7
M8S5	7.4	7.8
M8S2X5	17.0 ⁴	18.0
M8S6	5	5
M035S5	5	5
M036S5	3.6	3.8
M036S6	4.3	4.5
M040S5	5	5
M050S5	5.4 ³	5.7
M060S5	5.6 ³	5.9
M060S6	6.7 ³	7.1
M070S6	8.1 ³	8.6

MUNCIE

CH & SM-465	80W-90	GL-5
CAPACITIES	Liters	Qt
CH & SM-465	3.8	4.0

NEW PROCESS/VENTURE

440 & 833		AF3
433, 434, 540, 541 & 542		GL-4, GL-5
Above 10°F (-12°C), 90		
Below 10°F (-12°C), 80W		
435, 7500 & 7550		GL-4, GL-5
Above 10°F (-12°C), 90		
Below 10°F (-12°C), 80W		
NV3500		GLS
NV4500	75W-85	Synthetic
CAPACITIES	Liters	Qt
540, 541, 542, 5400	4.7	5.0
7550, 7590	10.4	11.0
NV3500	6	6
NV4500	3.8	4.0

NISSAN UD

MES50A, MES50B, MES50C, MHS61A		GL-4
Below 104°F (40°C), 75W-90, 80W-90		
Below 86°F (30°C), 80W		
Above 50°F (10°C), 140		
Below 50°F (10°C), 75W		
32° to 104°F (0° to 40°C), 90		
13° to 86°F (-11° to 30°C), 85W		
MHS50U, MHS60A, MLS61A, MLS61B, MLS62B, MPS50V, MPS60B, MPS62T		GL-5
12° to 122°F (-11° to 50°C), 90		
12° to 104°F (-11° to 40°C), 85W-90		
13° to 104°F (-25° to 40°C), 80W-90		
-13° to 95°F (-25° to 35°C), 80W		
MHS62A, MLS63B		GL-4
15° to 120°F (-9° to 49°C), 90		
15° to 105°F (-9° to 41°C), 85W-90		
-15° to 105°F (-26° to 41°C), 80W-90		
-15° to 95°F (-26° to 35°C), 80W		
CAPACITIES	Liters	Qt
MES50A, MES50B & MES50C	3.9	4.1
MHS50U & MHS60A	5.0	5.3
MHS62A	10	10
MLS61A & MLS61B	7	7
MLS63B	9	9
MPS50V	7.9	8.3
MPS60B	7.0	7.4
MPS62T	8	8
TMH425	7.5	7.9
TMH464	7.1	7.5

SPICER TRANSMISSION TECHNOLOGIES

Dana Spicer 5/6/7/12/14 Speed,			
ESO66-7B		CE, CG-4	
All Temperatures, 50			
Dana Spicer ES65-5A, PS140-7, PS150-7, 1372A, 6052A		SM	
Above 0°F (-18°C), 50			
Below 0°F (-18°C), 30			
Spicer Non Synchronized, 5552A		CC, CD, CE, GL-1, SM	
All Temperatures, 50			
Above 10°F (-12°C), 40, 50, 90			
Below 10°F (-12°C), 30, 80W			

Spicer 5/6/7/10 Speed		CD, GL-1, SM
All Temperatures, 50		
Above 10°F (-12°C), 40, 50, 90		
Below 10°F (-12°C), 30, 80W		
Above 0°F (-18°C), 30, 50		
Below 0°F (-18°C), 30		
Spicer PS97-7A		CC, CD
Above 0°F (-18°C), 30, 50		
Below 0°F (-18°C), 30		
Spicer SST-9072AA		GL-5
All Temperatures, 50		
Above 0°F (-18°C), 30, 50		
Below 0°F (-18°C), 30		

CAPACITIES	Liters	Qt
AMO1000-4	6.6	7.0
AS0125-102S, ASO140-10S, ASO150-10S, ASO-165S	12.7	13.4
CM 4054-A, D	5.6	5.9
CM 4954-A, D	6.1	6.4
CM 5052-A, B, C, D	8.0	8.4
CM 5552-A, B, C, D, 5852-A	8.0	8.4
CM 5952-A, C, D, E	8.0	8.4
CM 6052-A, B, C, D, 6252-A, B, 6253-A, B	8.5	9.0
ESO66-7B	10.4	11.0
ESO66-7B (MK9)	5.2	5.5
ES42-5A, D	5.6	5.9
ES43-5	5.6	5.9
ES52-5A, D	6.1	6.4
ES52-7B	10.4	11.0
ES52-7B (MK8)	5.2	5.5
ES53-5	5.6	5.9
ES60-5A, C, D, E	8.0	8.4
ES62-5	8.0	8.4
ES65-5A, B, D, E	8.8	9.3
ES67-5	8.0	8.4
LPSO125-10S	8.5	9.0
LPSO140-10S	8.5	9.0
LPSO-150-10S	8.5	9.0
P595-9A, PSI 25-9A, PSI40-9A, PSOI 25-9A, PSOI 40-9A & PSOI 50-9A	8.5	9.0
PSO100-10S, PSO125-10S, PSO140-10S & PSO150-10S	12.7	13.4
PSO-125-10S	8.5	9.0
PSO-125-10V	8.5	9.0
PSO-140-10S	8.5	9.0
PSO140-12B	14.2	15.0
PSO-145-10V	8.5	9.0
PSO-150-10S	8.5	9.0
PSO 150-16A	21.6	22.8
PSO150-16B, PSO165-16B, PSO175-16B & PSO165-16M	14.2	15.0
PSO-165-10S	8.5	9.0
PSO165-18A, PSO175-18A & PSO175-18M	14.2	15.0
PS97-7A	19.4	20.5
PS105-7LL, PS130-6L	14.2	15.0
PS110-7A, B & PS145-7A	22.7	24.0
PS125-7B, PS140-7A	22.7	24.0
1207-2A	14.2	15.0
1310-2A, 4A	19.4	20.5
1352-A, 1452-A, 1453-A, PS130-5A	18.0	19.0
1362-A, B, C, 1364-C, 1463-A, PS130-6B, PS140-6A	19.4	20.5
1372-A	22.7	24.0
1414-2A, 3A	14.2	15.0
9072	19.4	20.5

VOLVO

F6 Five- & Six-Speed		GL-1, GL-4
Above -13°F (-25°C), 80W, Below -13°F (-25°C)		
FE6 & FE7: Five & Six-Speed		CD, GL-1, GL-4
Above -13°F (-25°C), 80W, 80W-90		
-13° to 86°F (-25° to 30°C), 40		
-13° to 32°F (-25° to 0°C), 30		
FE6, FE7, N10 & N12 Eight-Speed		CD, GL-1
Above -13°F (-25°C), 80W-90		
-13° to 86°F (-25° to 30°C), 40		
F7 & N-10 (R-63) Eight-Speed		CD, GL-1
Above 86°F (30°C), 140		
14° to 86°F (-10° to 30°C), 90		
Severe cold, 75W		
Do not use multigrade motor oils.		
CAPACITIES	Liters	Qt
AT12512C, ATO2512C, AT2812C & ATO3112C1	NA	NA
R50	8.0	8.4
R51 & R52	9.0	9.5
R62	12.3 ¹¹	13.0
CAPACITIES	Liters	Qt
SR62	14.6 ¹¹	15.4
R70 & SR70	9.9 ¹³	10.4
R1000	9.4 ¹²	9.9
R1400 & R1700	12.3 ¹²	13.0
SR1400 & SR1900	13.2 ¹²	14.0

MEDIUM & HEAVY TRUCKS

MANUAL TRANSMISSIONS CONTINUED

MANUAL TRANSMISSION NOTES

- 1 With PTO, add 0.9 liters 0.9 qts.
- 2 Refer to nameplate on transmission housing for model identification.
- 3 PTO add 0.4 liters 0.8 pts.

- 4 PTO add 0.9 liters 1.9 pts.
- 5 Fill to bottom of filler plug.
- 6 2WD, 2.3 liters 5 pts.; 4WD, 2.0 liters 4.4 pts.
- 7 1998 models, 6.4 liters 6.7 qts. 1999-2003 models less PTO, 6.2 liters 6.5 qts.; w/PTO, 6.7 liters 7.1 qts.
- 8 1998 models, fill to bottom of filler plug hole. 1999-2003 models less PTO, 7.7 liters 8.1 qts.; w/PTO, 8.0 liters 8.4 qts.
- 9 Less PTO, 6.8 liters 7.2 qts.; w/PTO, 7.3 liters 7.7 qts.

- 10 Less PTO, 5.2 liters 5.5 qts.; w/PTO, 5.9 liters 6.2 qts.
- 11 Add 0.4 liter 1 pt for PTO.
- 12 With oil cooler add 0.9 liters 2 pts.; w/single PTO add 0.4 liters 1 pts.; w/double PTO, add 0.7 liters 1.5 pts.
- 13 With oil cooler add 0.9 liters 2 pts.; w/PTO add 0.4 liters 1 pts.
- 14 With rust & oxidation inhibitor.
- 15 Meritor specification.

TRANSFER CASES

FABCO

Heavy Duty Engine Oil **MIL-L-21048B**
Above 10°F, SAE 50
Below 10°F, SAE 30

Mineral Gear Oil
Above 10°F, SAE 90
Below 10°F, SAE 80W

MIL-L-2105B E.P. Oil,
ex. Sulfurchlorine-lead type
Above 10°F, SAE 90
Below 10°F, SAE 80W

CAPACITIES	Liters	Qt
TC-33	7.0	7.4
TC-35	6.6	7
TC-38	1	1
TC-65	8.5	9
TC-80	9.7	10.2
TC-110	9.7	10.2
TC140	18.9	20.0
TC141	18.9	20.0
TC-142	17.0	18.0
TC-142PD	20.8	22.0
TC143	14.6	15.4
TC160 & 160T	9.4	9.9
TC-170	6.1	6.4
TC-170PD	6.1	6.4

CAPACITIES	Liters	Qt
TC-200	9.4	9.9
TC237	6.1	6.4
TC270	10.4	11.0
TC-1421	18.9	20.0

MACK

Gear Oil **Mack GO J & GO J Plus**
Mineral All Temperatures, 80W-90, 80W-140, 85W-140
Synthetic All Temperatures, 75W-90, 75W-140, 80W-140

CAPACITIES	Liters	Qt
TC-15	9.4	9.9
TC-25	9.4	9.9

MERITOR

Gear Oil **API GL-12**
Above 10°F (-12°C), 90
Below 15°F (-26°C), 80W
Heavy Duty Engine Oil **API SJ, SL, SM**
Above 10°F (-12°C), 40, 50
Above -15°F (-26°C), 30
Synthetic Oil **O-81³**
Above -40°F (-40°C), 50

CAPACITIES	Liters	Qt
MTC-4208, MTC-4210 T MTC-4213	6.1	6.4

MITSUBISHI FUSO

General Use **GL-3** 80W
Warm Region **GL-3** 90
Tropical Region **GL-4** 80W

CAPACITIES	Liters	Qt
TF3	2.4	2.5

TIMKEN/ROCKWELL

Gear Oil **API GL-12**
Above 10°F (-12°C), 90
Below 15°F (-26°C), 80W
Heavy Duty Engine Oil **API SJ, SL, SM**
Above 10°F (-12°C), 40, 50
Above -15°F (-26°C), 30
Synthetic Oil **O-81³**
Above -40°F (-40°C), 50

CAPACITIES	Liters	Qt
All	1	1

TRANSFER CASE NOTES

- 1 Fill to bottom of filler plug.
- 2 With rust & oxidation inhibitor.
- 3 Meritor specification.

DIFFERENTIALS

EATON

Differential (Linehaul 500,000
Mile Extended Drain Interval
Lubricant) **Synthetic**

All Temperatures, SAE 75W-90
Differential (Vocational 180,000 Mile
Drain Interval Lubricant) **Synthetic**

All Temperatures, SAE 75W-90, 80W-140
Differential **Mineral Based ⁴**

CAPACITIES	Liters	Qt
SINGLE REDUCTION SINGLE DRIVE AXLES		
13101, 15101	10.8	11.4
15040S	9.9	10.4
15131	10.8	11.4
16121, 16131	15.6	16.5
17101, 17103	17.5	18.5
17120, 17121, 17123	17.5	18.5
17131, 17133	17.5	18.5
17401, 17421	17.5	18.5
18101, 18121, 18123	17.5	18.5
19060D, 19060S	13.2	14.0
19101, 19121	17.5	18.5
20101, 20121	17.5	18.5
21060D, 21060S	13.2	14.0
21121, 21131, 21133, 21421	17.5	18.5
22060S	13.2	14.0
22121, 22123, 22131, 22133	17.5	18.5
22421	17.5	18.5
23080, 23080S	18.9	20.0
23085D, 23085S	18.9	20.0
23105S, 23105D	22.7	24.0
23105S	26.5	28.0
23121, 23123, 23133, 23421	19.4	20.5
23431	18.9	20.0
26080P	18.9	20.0
26085P	18.9	20.0
26105	26.5	28.0
26105S	53.0	56.0
26121	19.4	20.5
26421	19.4	20.5
30105S	26.5	28.0
30127	19.4	20.5
30427	19.4	20.5

2 SPEED & PLANETARY DOUBLE REDUCTION SINGLE DRIVE AXLES

CAPACITIES	Liters	Qt
E2300S	5	5
15	10.8	11.4
16	15.5	16.3

CAPACITIES	Liters	Qt
17/18	17.5	18.5
21/22	17.5	18.5
23/26	19.4	20.5
30/35	19.4	20.5
15040	11.3	11.9
15040T/P	11.3	11.9
15201	10.8	11.4
15301	10.8	11.4
16244	15.6	16.5
16344	15.6	16.5
17201, 17221, 17301, 17321	7.5	7.9
18201, 18221, 18301, 18321	7.5	7.9
19050	16.0	16.9
19050T/P	15.6	16.5
19055T/P	16.5	17.4
19060T/P	16.5	17.4
21060T/P	16.5	17.4
21065	16.0	17.0
21065T/P	16.0	17.0
22065T/P	16.5	17.4
22221	17.5	18.5
22321	17.5	18.5
23070	18.4	19.4
23070T/P	18.4	19.4
23080T/P	19.4	20.5
23085T/P	19.4	20.5
23221	19.4	20.5
23321	19.4	20.5
26080T/P	19.4	20.5
26085	17.0	18.0
26221	19.4	20.5
26321	19.4	20.5
30055P	17.0	18.0
30227	19.4	20.5
30327	19.4	20.5
30505P	21.7	23.0
35055P	17.0	18.0
35327	19.4	20.5

SINGLE REDUCTION TANDEM DRIVE AXLES

CAPACITIES	Liters	Qt
DD404, DS404	6	6
DS340, DS341	18.4	19.4
DS344	15.1	16.0
DS380, DS380-P	18.4	19.4
DS381, DS381-P	18.4	19.4
DS400-P	18.4	19.4
DS401, DS401-P	18.4	19.4
DS402, DS402-P	33.1	35.0
DS403, DS403-P	18.4	19.4
DS404	18.4	19.4
DS440-P	20.8	22.0

CAPACITIES	Liters	Qt
DS451	18.4	19.4
DS454P	14.6	15.4
DS451-P	18.4	19.4
DS460-P	20.8	22.0
DS461-P	20.3	21.4
DS480-P	20.3	21.4
DS521	19.8	20.9
DS581-P	19.8	20.9
DSH44	15.1	16.0
RS340, RS341	17.0	18.0
RS344	14.2	15.0
RS380, RS381	17.0	18.0
RS400, RS401, RS402, RS404	17.0	18.0
RS440	18.9	20.0
RS451	17.0	18.0
RS460, RS461	18.9	20.0
RS480	18.9	20.0
RS521	18.4	19.4
RS581	8.4	8.9
RSH44	14.6	15.4
34DS	13.7	14.4

DUAL RANGE PLANETARY DOUBLE REDUCTION TANDEM DRIVE AXLES

CAPACITIES	Liters	Qt
DT340	18.4	19.4
DT341	18.4	19.4

FABCO

Fabco **GL-5**
Above 32°F (0°C), 80W-140
Below 32°F (0°C), 80W-90

CAPACITIES	Liters	Qt
FSD-8A, FSD-10A, FSD-12A, FSD-14A	3	3
SDA-9, SDA-12	3	3

HINO

Hino **GL-5**
Above 90°F (32°C), 140
10° to 90°F (-12° to 32°C), 90

CAPACITIES	Liters	Qt
MS12-113	6.6	7.0
MS-113	7.6	8.0
RS-13-120	7.6	8.0
RS-17-145	15.9	16.8
RS-19-145	15.7	16.6
RS-21-145	15.3	16.2
RS-23-160	18.7	19.7
SH13 & SS13	3.7	3.9

MEDIUM & HEAVY TRUCKS

DIFFERENTIALS CONTINUED

CAPACITIES	Liters	Qt
SH14 & SS14	5.5	5.8
SH16 & SS16	9.9	10.4
SS12	3.5	3.7
SS15	7.1	7.5
SS17	7.1	7.5

MACK

Gear Oil **Mack GO J & GO J Plus**
Mineral All Temperatures, 80W-90, 80W-140, 85W-140
Synthetic All Temperatures, 75W-90, 75W-140, 80W-140

CAPACITIES	Liters	Qt
23105	26.5	28.0
30105	25.5	28.0
30055	17.0	18.0
CRD (LP) (PC) 92 (1)	32.6	34.4
CRD (L) 93 (1)	32.6	34.4
CRD (P) 95	35.0	37.0
CRD 96	35.0	37.0
CRD 113	32.6	34.4
CRD 201	33.3	35.2
CRD201-1	16.3	17.2
CRD (P) 202 (1)	33.3	35.2
CRD 203 (1)	33.3	35.2
CRD203-1	16.3	17.2
CRD203-1-A	13.2	14.0
CRDP 200	33.3	35.2
CRDPC 112	32.6	34.4
DS405(P)	29.3	31.0
DS462P	43.3	45.7
ES60C, Type D.R. ¹	35.0	37.0
EW48C-W ¹ , Type D.R.	41.6	44.0
EW60C ¹ , Type D.R.	35.0	37.0
P769-03 ²	9.0	9.5
P1040 ²	14.0	14.8
P1041	15.3	16.2
P1140 ²	14.0	14.8
P1141	15.3	16.2
RAD529C, Type D.R.	NA	NA
RAD23C, Type D.R.	14.6	15.4
RAD231C, Type D.R.	14.6	15.4
RAD29C, Type D.R.	14.6	15.4
RAD38C, Type D.R.	14.6	15.4
RAS512C, Type S.R.	NA	NA
RAS23C, Type S.R.	13.2	14.0
RA23 (w/CRD93 1 A Carrier)	13.2	14.0
RA23 (w/CRD203 1 Carrier)	16.3	17.2
RA23C, Type S.R.	NA	NA
RA30	16.3	17.2
SA38C-W, Type D.R.	27.9	29.5
SA441C-W, Type D.R.	NA	NA
SC34C-W, Type D.R.	NA	NA
SC342C-W, Type D.R.	27.4	28.9
SC38C-W, Type D.R.	27.9	29.5
SH34C-W, Type D.R.	27.9	29.5
SH342C-W, Type D.R.	27.4	28.9
SHB342C-W, Type D.R.	27.4	28.9
SHB38C-W, Type D.R.	27.9	29.5
SH38C-W, Type D.R.	27.9	29.5
SH441C-W, Type D.R.	NA	NA
SS34C-W, Type D.R.	27.9	29.5
SS342C-W, Type D.R.	27.4	28.9
SS38C-W, Type D.R.	27.9	29.5
SSB38C-W, Type D.R.	27.9	29.5
SS381C-W, Type D.R.	NA	NA
SS440C, Type D.R.	27.9	29.5
SS441C, Type D.R.	23.4	24.7
SS50C, Type D.R.	26.0	27.4
SS58C, Type D.R.	26.0	27.4
ST34C-W Type D.R.	27.9	29.5
ST38C-W, Type D.R.	NA	NA
SV34C-W Type D.R.	NA	NA
SV38C-W, Type D.R.	NA	NA
SW342C-W, Type D.R.	27.4	28.9
SWB342C-W, Type D.R.	27.4	28.9
SW38C-W, Type D.R.	27.9	29.5
SWB38C-W, Type D.R.	27.9	29.5
SW440C, Type D.R.	27.9	29.5
SW441C, Type D.R.	23.1	24.4
SW50C, Type D.R.	26.0	27.4
SW58C, Type D.R.	26.0	27.4
RAD530C, Type D.R.	NA	NA
SS65C-W, Type D.R.	35.0	37.0
SW65C-W, Type D.R.	35.0	37.0
SW80W, Type D.R.	35.0	37.0
SWP800W, Type D.R.	35.0	37.0
SWP801W, Type D.R.	35.0	37.0

MERCEDES-BENZ

All	 90, 85W-140	GL-5
CAPACITIES	Liters	Qt
HL4-7.6	5.5	5.8
HL4-8.8	5.5	5.8
HL4-10	5.5	5.8
HL5/Z-10	11.0	11.6
HL5-10	11.0	11.6

MERITOR

Gear Oil **GL-5**
Above 10°F (-12°C), 85W-140
Above -15°F (-26°C), 80W-90
Above -40°, 75W-90, 75W-140
-40° to 36°F (-40° to 2°C), 75W
Use Meritor-approved fluids
Above -40°, 75W-90 Synthetic, 75W-140 Synthetic

CAPACITIES	Liters	Qt
SINGLE SPEED AXLE		
MX-10-120, MX-12-120	7.5	7.9
MX-14-120, MX-16-120	7.5	7.9
MX-21-160, MX-23-160	20.3	21.4
RF-7-120, RF-9-120	7.2	7.6
RF-12-120, RF-12-125	7.2	7.6
RF-16-145	17.2	18.1
RF-21-155	13.2	13.9
RF-21-156	13.2	13.9
RF-21-160	20.6	21.7
RF-21-185	18.6	19.6
RF-21-355	13.2	13.9
RF-22-166	20.6	21.7
RF-23-180	18.6	19.6
RF-23-185	18.6	19.6
RS-13-120	7.1	7.5
RS-15-120	7.1	7.5
RS-16-140	15.9	16.8
RS-17-140	15.1	15.9
RS-17-141	15.9	16.8
RS-17-144	15.3	16.1
RS-17-145	15.9	16.8
RS-19-144	15.3	16.1
RS-19-145	17.0	18.0
RS-21-145	16.5	17.4
RS-21-160	18.7	19.7
RS-23-160	20.3	21.4
RS-23-160A	18.7	19.7
RS-23-161	17.5	18.5
RS-23-180, RS-23-185, RS-23-186	18.4	19.4
RS-25-160	18.4	19.4
RS-25-160A	17.6	18.6
RS-26-160	24.1	25.4
RS-26-180, RS-26-185	18.0	19.0
RS-30-180, RS-30-185	18.0	19.0
TWO SPEED AXLE		
All	3	3
TANDEM AXLE FORWARD CARRIERS		
All	3	3

MITSUBISHI FUSO

Mitsubishi	 GL-5	
Above 104°F (40°C), 140		
Below 104°F (40°C), 90		
CAPACITIES	Liters	Qt
D1H	3.0	3.1
D2H	2.7	2.8
D3H	2.7	2.8
D4H 13	6.5	6.8
D8H 13	6.5	6.8
D033H	8.0	8.4
D035H	8.0	8.4
D040H	4.5	4.7
D050H	6.5	6.8

NISSAN UD

1100, 1200, 1300, 1400, 1800CS	.....	GL-5
Below 104°F (40°C), 75W-90, 80W-90		
Below 86°F (30°C), 80W		
Above 50°F (10°C), 140		
Below 50°F (10°C), 75W		
32° to 104°F (0° to 40°C), 90		
13° to 86°F (-10° to 30°C), 85W		
550, 600, 1800, 1800HD, 2000, 2300,		
2300D, 2300L, 2600, 2800, 3000H,		
3000S, 3300		
.....		GL-5
14° to 104°F (-10° to 40°C), 85W-140		
13° to 95°F (-11° to 35°C), 90		
-13° to 95°F (-25° to 35°C), 80W-140		
-13° to 86°F (-25° to 30°C), 80W-90		
Above 32°F (0°C), 140		
CAPACITIES	Liters	Qt
H296	6.1	6.3
RS55	7.0	7.4
RS75	9.0	9.5
SRHD	6.0	6.3
SRHF-2	4.0	4.2
SRHF-3	7.2	7.6
SRHH-1	6.5	6.8
SRHH-2	9.0	9.5
SRHL	12.0	12.7
SRHL-1	13.0	13.7

ROCKWELL

Gear Oil **GL-5**
Above 10°F (-12°C), 85W-140
Above -15°F (-26°C), 80W-90
Above -40°, 75W-90, 75W-140
-40° to 36°F (-40° to 2°C), 75W
Use Meritor-approved fluids
Above -40°, 75W-90 Synthetic, 75W-140 Synthetic

CAPACITIES ¹	Liters	Qt
SINGLE AXLES		
A-150	2.6	2.7
B-100	4.7	5.0
B-140	5.6	5.9
B-150	1.6	1.7
C-100	5.9	6.2
D-100	5.9	6.2
D-140	5.9	6.2
E-100	7.1	7.5
E-105	5.9	6.2
E-150	4.2	4.4
F-100	6.1	6.4
F-106	6.1	6.4
F-120	7.1	7.5
F-121	7.1	7.5
F-140	6.6	7.0
F-14D	3	3
F-147	3	3
FDS-75	6.1	6.4
FDS-78	6.1	6.4
FDS-85	6.1	6.4
FDS-90	6.1	6.4
FDS-93	6.1	6.4
FDS-750	6.5	6.8
FDS-1600	9.9	10.4
FDS-1800	13.2	14.0
FDS-1805	13.2	14.0
FDS-1807	13.2	14.0
FDS-1808	13.2	14.0
FDS-2100	13.2	14.0
FDS-2101	13.2	14.0
FDS-2102	20.3	21.4
FDS-2107, FDS-2110, FDS-2111	3	3
FDS-2117	3	3
G-161	9.9	10.4
H-100	9.4	9.9
H-140	9.9	10.4
H-150	5.2	5.5
H-162	9.4	9.9
H-170	12.7	13.4
H-171	3	3
H-172	12.7	13.4
H-173	3	3
H-175	3	3
H-176	3	3
L-100	10.8	11.4
L-140	11.3	12.0
L-155	11.3	12.0
L-155C	11.3	12.0
L-172	12.7	13.4
L-172C	12.7	13.4
M-172	12.7	13.4
Q-100	14.6	15.4
Q-145	11.3	12.0
QT-140	11.3	12.0
R-100	14.2	15.0
R-140	13.2	14.0
R-155	13.2	14.0
R-160	18.9	20.0
R-163	16.0	17.0
R-170	20.3	21.4
R-173	3	3
R-255	3	3
R-270	26	27.4
R-355	3	3
RL-170	22.7	24
RS-13-120	8.7	9.2
RS-15-120	8.7	9.2
RS-15-210	6.7	7.0
RS-17-140	14.6	15.4
RS-17-145	15.9	16.8
RS-17-220	14.5	15.3
RS-19-145	15.7	16.6
RS-19-220	14.6	15.4
RS-21-145	15.3	16.1
RS-21-160	18.7	19.7
RS-21-230	18.4	19.4
RS-23-160	18.7	19.7
RS-23-161	17.6	18.6
RS-23-180	22.3	23.5
RS-23-240	18.0	19.0
RS-23-380	30.1	31.8
RS-26-160	22.4	23.6
RS-26-180	22.0	23.2
RS-26-380	27.5	29.0
RS-30-180	22.0	23.2
RS-30-380	22.0	23.2
RS-38-380	27.5	29.0
S-170	20.3	21.4
U-140	11.3	11.9
U-170	20.3	21.4
U-240	3	3
U-270	26	27.4
U-340	3	3

MEDIUM & HEAVY TRUCKS

DIFFERENTIALS CONTINUED

CAPACITIES ¹	Liters	Qt
U-2400B	3	3
W-170	20.3	21.4
W-270	26.0	27.4
59722	14.3	15.1
59723	14.3	15.1
59732	14.3	15.1
59733	14.3	15.1
59843	14.3	15.1
61142	19.8	20.9
61143	19.4	20.5
TANDEM AXLES		
DPRP-650	3	3
PBDD	3	3
RH-171	3	3
RN-4671	3	3
RT-34-135	14.1	14.9
RT-34-140	12.3	13
Rear Only	16.5	17.4
RT-34-145	14.0	14.8
Rear Only	12.0	12.7
RT-34-145P	12.1	12.8
Rear Only	11.0	11.6
RT-40-140	14.3	15.1
Rear Only	10.7	11.3
RT-40-145	14.3	15.1
Rear Only	12.0	12.7
RT-40-145P	14.4	15.2
Rear Only	12.2	12.9
RT-44-145	13.8	14.6
Rear Only	11.8	12.4
RT-44-145P	13.8	14.6
Rear Only	11.8	12.4
RT-46-160	18.5	19.5
Rear Only	16.2	17.1
RT-46-160P ⁴	18.5	19.5
Rear Only	16.2	17.1
RT-48-180 ⁹	28.9	30.5
Rear Only	18.3	19.3
RT-48-380 ⁹	28.9	30.5
Rear Only	18.3	19.3
RT-52-160	20.9	22.0
Rear Only	19.5	20.6
RT-52-160P	20.9	22.0
Rear Only	19.5	20.6
RT-52-180 ⁹	26.5	28.0
Rear Only	19.5	20.6
RT-52-380 ⁹	26.5	28.0
Rear Only	27.5	29.0
RT-58-180 ⁹	26.5	28.0
Rear Only	17.0	18.0
RT-58-380 ⁹	26.5	28.0
Rear Only	27.5	29.0
RT-70-380 ⁹	25.7	27.1
Rear Only	25.1	26.5
RT-145	12.3	13.0
RT-160	17.5	18.5
SDHD	7.5	8.0
SFDD	13.2	13.9
SLHD	15.3	16.1
Rear Only	15.1	16
SLHR	3	3
SL-100	18.7	19.7
Rear Only	17.8	18.8
SL-100P	NA	NA
Rear Only	NA	NA
SPRR-1735	14.2	15

CAPACITIES	Liters	Qt
SPRC-1927	22.0	23.4
SQHD	16.0	16.9
Rear Only	14.6	15.4
SQHP	18.9	20.0
Rear Only	15.1	16
SQ-100	18.7	19.7
Rear Only	17.8	18.8
SQ-100A	19.0	20.0
Rear Only	17.5	18.5
SQ-100P	19.8	20.9
Rear Only	17.5	18.5
SQ-101	3	3
Rear Only	3	3
SQR-100	17.0	18.0
Rear Only	15.6	16.5
SQR-100P	18.0	19.0
Rear Only	15.6	16.5
SRHD	18.4	19.4
Rear Only	17.0	18.0
SRD	10.4	11.0
SRDD ⁸	10.4	11.0
SRMD	17.0	18.0
SR-170	26.0	27.4
Rear Only	20.3	21.4
SSHHD	16.0	16.9
Rear Only	13.2	14
SSRD	3	3
Rear Only	3	3
STDD	3	3
Rear Only	3	3
STHD	16.0	16.9
Rear Only	13.2	14.0
ST-170	26.0	27.4
Rear Only	20.3	21.4
SUDD	21.7	22.9
SUHD	16.0	16.9
Rear Only	13.2	14
SU-170	26.0	27.4
Rear Only	20.3	21.4
SW-170	26	27.4
Rear Only	20.3	21.4

SPICER

Differential (Linehaul 500,000 Mile Extended Drain Interval Lubricant)	Synthetic
All Temperatures, SAE 75W-90	
Differential (Vocational 180,000 Mile Drain Interval Lubricant)	Synthetic
All Temperatures, SAE 75W-90, 80W-140	
Differential	Mineral Based ⁴
All Temperatures, SAE 75W, 75W-90, 80W-90, 85W-140	
CAPACITIES	Liters Qt
D1H	3.0 3.7
D2H	2.7 2.8
D3H	2.7 2.8
D4H	6.5 6.8
D8H	6.5 6.8
D033H	3.1 3.2
D035H	3.9 4.1
D040H	4.5 4.7
D050H	6.5 6.8

CAPACITIES	Liters	Qt
G175-S, T/M190-S/T, M210-T, M220-S/T & M230-T	3	3
J175-S, J190-S, J210-S, J220-S & W230-S	3	3
J340-S, J380-S, J400-S:		
Front	14.2	15.0
Rear	11.8	12.4
N340-S & N400i	3	3
S135-S	11.6	12.5
S150-S	11.6	12.5
S400	26.0	27.4
W440-S, W460-S:		
Front	14.2	15.0
Rear	11.8	12.4
15040	9.9	10.4
19050	11.8	12.4
19055	16.0	16.9
19060	13.2	13.9
21060	13.2	13.9
21065	16.0	16.9
21080	18.9	20.0
22060	13.2	13.9
22065	16.0	16.9
23070	18.9	20.0
23080	18.9	20.0
23085	18.9	20.0
23105C	25.5	27.0
23105S/D/A	26.5	28.0
26105C	25.5	27.0
26105S/D/A	26.5	28.0
30105C	24.6	26.0

VOLVO

Volvo	GL-5
32° to 120°F (0° to 49°F), 140	
15° to 120°F (-9° to 49°C), 85W-140	
-25° to 115°F (-32° to 46°C), 80W-140	
-25° to 85°F (-32° to 29°C), 90	
CAPACITIES	Liters Qt
EV45	9.0 9.5
EV76	8.5 9.0
EV80	7 7
EV85	12.7 13.4
EV87	10 10
EV90	9.4 9.9

DIFFERENTIAL NOTES

- With PTO, add 0.9 liters (0.9 qts).
- Refer to nameplate on transmission housing for model identification.
- Fill to bottom of filler plug.
- Must meet spec. SAE J2360.
- With axle angle at 0°, 22.7 liters (24 qts); 3°, 44 pts.; 5°, 19.8 liters (21 qts).
- Front 14.6 liters (15.4 qts); Rear 13.2 liters (13.9 qts).
- Axles less hub reduction, 9 liters (9.5 qts). Front axle w/hub reduction, 28.8 liters (30.4 qts); rear axle w/hub reduction, 27 liters (28.5 qts).
- Add 0.9 liters (2 pts) of lubricant to inter-axle differential housing when new or reconditioned drive unit is installed in addition to specified amount of lubricant in housing.
- Forward carrier w/oil pump system.
- Front axle, 19.8 liters (21 qts); rear axle, 9 liters (9.5 qts).

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