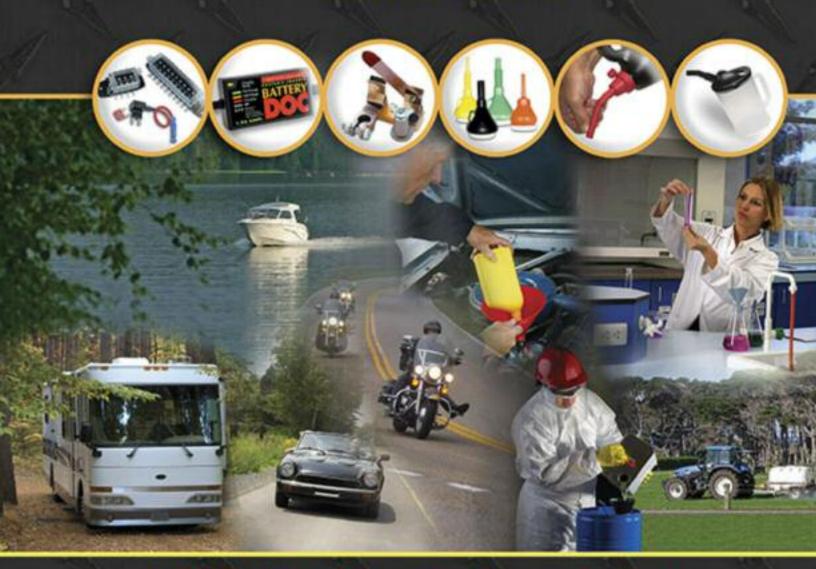


BATTERY & FUSE BLOCK ACCESSORY DIVISION



FLUID CONTROL DIVISION

INDUSTRIAL DIVISION



WirthCo Engineering, Inc.

"MAY WE HELP YOU WITH YOUR 'PRIVATE LABEL' BRANDING REQUIREMENTS?"

WirthCo is entering our third decade as a prime manufacturer of practical products for making life easier and safer

as a prime manufacturer of practical products for making life easier and safer — at home, in the workplace, on the road, in the campground, and on the water. We are exceedingly grateful for valued employees, customers and providers. We are dedicated to continuing growth based upon integrity and service. We are also proud of our heritage of providing innovative quality products.

Our innovative quality is reflected in over twenty patents and trademarks, a number that continues to grow. Our products have been proven, both in the laboratory and the marketplace. In addition to marketing our WirthCo brand, we proudly serve some of the world's largest and most successful distributors, retailers and OEM's which have selected WirthCo products for distribution under their own names. We invite you to review these pages, and to let us know how we can best serve you today...and during the decades to come.

CONTACT

MAIL	7491 Cahill Road, Minneapolis, MN 55439-2726		
PHONE	Toll Free: 800-959-0879 • Minneapolis Area: 952-941-9073		
FAX	952-941-0659		
E-MAIL	Sales@wirthco.com		





Please visit our redesigned website at www.wirthco.com. Browse our online catalog...where you can create an account and submit RFQ's. Also visit our new websites at www.batterydoc.com and www.batterychargerstore.com.

LEGEND

BOHS.	RoHS compliant. WirthCo believes in the protection of planet Earth against known hazardous materials and continually strives to provide products that comply with the worldwide Restriction of Hazardous Substances Directive (RoHS).
54	Items that help our planet, one product at a time!
(3)	Packaging is made from recycled material.
63	Product is made from recycled material.

-SPO	Items with part numbers ending in <i>-SPO</i> indicates item is available for <i>Special Order</i> .		
-7	Items with part numbers ending in <i>-7</i> indicates a <i>bulk item</i> (no retail package).		
-10	-10 Indicates 10/bag		
-50	-50 Indicates 50/bag		

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Harness the power of the sun:

Battery Doctor® Solar offers Green Technology for today's energy needs...and tomorrow's, too! Easy to install and simple to use.

SOLAR COMPACT GENERATOR PANELS A SOLAR BRIEFCASE GENERATOR

- Portable solar generator.
- Built in protective briefcase with magnetic closures and carry-handle.
- Angled supports promote maximum sun exposure.
- LED shows working condition.
- Ideal for boats, RVs, trucks, campers.
- 13 watts from amorphous silicon.
- Use with deep cycle and gel-cell 12 volt batteries.
- Dimensions: 26 ½" L x 20 ½" W x ¾" D (open).

#23100





Accessories included:

- Solar charger.
- Male output adapter (cigarette lighter adapter).
- Alligator clips.
- Female output adapter (cigarette lighter adapter).



SOLAR BATTERY CHARGERS

- Converts daylight into electricity to charge 12 volt batteries and extend battery life.
- Amorphous solar panel charges even in cloudy and overcast weather.
- Plastic frame and plastic corner sleeves (included with aluminum frame style) prevent scratching.
- Quick connect.
- Built-in blocking diode prevents reverse charging.
- Includes mounting kits for quick installation.
- Use with deep cycle and gel-cell 12 volt batteries.

Aluminum Frame — 5 watts

Dimensions: 18"L x 12 1/2" W x 1" D

Accessories included:

- Male output adapter (cigarette lighter adapter).
- Alligator clips.





#23113

Plastic frame — 4.8 watts

Dimensions: $13^{7/8}$ " L x $13^{1/8}$ " W x 5/8" D

12 VOLT 7 AMP **SOLAR REGULATOR**

- Protects 12 volt batteries from overcharging and discharging.
- Handles up to 7 amps (100 watts) of solar charging.
- Quick and easy connection to solar panel and battery.

#23115



12 VOLT 10 AMP SOLAR REGULATOR

- Charges, maintains and regulates 12 volt batteries from overcharging and discharging.
- Includes digital volt meter display.
- Handles up to 10 amps (120 watts) of array current.
- Maintenance-free protection of your solar panel and batteries.
- Maintains 12 volt batteries in a fully charged state.
- Small, compact and easy to mount.
- For use with gel-cell and lead-acid 12 volt batteries.

#23120





12 VOLT 30 AMP SOLAR REGULATOR

- Charges, maintains and regulates 12 volt batteries from overcharging and discharging.
- LED indicators show four levels of charging status.
- Easily mounted.
- Handles up to 30 amps of array current and up to 500 watts of solar power.
- Continuously displays the charging current or battery voltage on the LCD digital meter.
- Automatically indicates the charged condition of your battery on the LED bar graph.
- For use with gel-cell and lead-acid 12 volt batteries.



We are pleased that your requirements have allowed us to expand our growing BATTERY DOCTOR® 12 volt and fuse block accessory family!

Ideal for RVs, motorcycles, boats, cars, ATVs, gas powered aolf carts and other applications where space is tight. All are manufactured in an ISO approved factory and are individually tested for quality control.

- Engineered with the most advanced charging technology.
- Ultra light and compact.
- Won't harm your battery/dual charge mode.
- Short circuit and reverse polarity protected.







BATTERY DOC® INSTANT "STATE OF CHARGE" TESTER

A push of a button tells you if your battery is weak or fully charged.

Simply attach the ring terminals directly onto your battery. If your battery needs charging, simply attach the BATTERY DOC® Charger directly to your BATTERY DOC® Tester for a simple, tool-free connection. Comes with peel and stick velcro for easy mounting directly on or near your battery. Reverse polarity protected.

Accessories

included with

Clips

Ring

Fuse

Terminal



E-Z connect adaptor can be used with all Battery Doc® chargers.





BATTERY DOC®RAINPROOF® BATTERY CHARGER & MAINTAINER

- 12 volt, 2 amp.
- Sealed, water-resistant rated IP66 Potted
- Small and lightweight.
- Overcharge protection.
- Reverse polarity protection.
- UL, cUL listed.
- Universal AC input: 100-240 VAC: 50/60 HZ.
- Suitable for charging of wet-cell and fully sealed lead-acid, gel-cell batteries, plus AGM and deep cycle batteries.
- Charges and maintains batteries from 5 to 200 amp hours.
- Maintains batteries up to 400 amp hours.

INCLUDES:

- 2 amp charger with 6 foot output cable lead.
- 6 inch AC input cable lead.
- Three color LED charge indicator.
- Alligator clips with 12 inch connector.
- Ring terminals with 12 inch connector and in-line 3 amp fuse.
- · 12 volt accessory connector with 12 inch adapter for easy connection.

WirthCo Engineering, Inc.













12 Volt Connector





BATTERY DOC® SPORT CHARGER





#20039

- 12 volt, 1.25 amp, 3 stage.
- Compact...4" W x 2 1/4" H x 1 1/2" D, weighs only 6 oz.
- Charges and maintains batteries from 5 to 200 amp hours.
- Maintains batteries up to 400 amp hours.
- Can be left on your battery indefinitely without concern of overcharge.
- Reverse polarity protection.
- Suitable for charging of wet-cell and fully sealed lead-acid. and gel-cell batteries, plus AGM and deep cycle.
- UL 1236: CE; TUV/GS: cUL listed.

INCLUDES:

- 1.25 amp charger with 6 foot output cable lead.
- 6 inch AC input cable lead.
- Three color LED charge indicator.
- · Alligator clips with 12 inch connector.
- Ring terminals with 12 inch connector and in-line 3 amp fuse.
- 12 volt accessory connector with 12 inch adapter for easy connection.
- · Storage case.

#20039





Toll Free: 1-800-959-0879



BATTERY DOC® WALL MOUNT 3 STAGE BATTERY CHARGERS/MAINTAINERS/CONDITIONERS

- Automatic "switching technology" switches from full charge mode to float/maintenance mode.
- Three color LED charge indicator.
- Reverse polarity protection.
- Suitable for safe charging and maintenance of 12 volt, wet-cell, lead-acid, fully sealed lead-acid and gel-cell batteries, plus AGM and deep cycle.
- Ergonomic grip.
- UL 1236 and cUL listed.

WALL MOUNT CHARGERS INCLUDE:

- 12 foot output cable lead.
- Three color LED charge indicator.
- Alligator clips with 12 inch connector.
- Ring terminal with 12 inch connector and in-line 3 amp fuse.
- 12 volt accessory connector with 12 inch adapter for easy connection.
- Storage case.



WALL MOUNT 2 12 VOLT 2 AMP

- Charges and maintains batteries from 5 to 200 amp hours.
- Maintains batteries up to 400 amp hours.

#20033



WE HAVE BATTERIES

- → Wet-Cells
- Lead-Acids
- ✓ Gel-Cells
- ✓ AGM
- Deep Cycle

Accessories included with #20030 & #20033:









BATTERY DOC® DOC-KING™ MASTER DOCKING STATION

Simply the lowest-cost, most convenient solution to the complex challenge of keeping multiple batteries in peak operating condition! Does not take up valuable outlet space. Designed exclusively for use with WirthCo's BATTERY DOC® WALL MOUNT 1 or WALL MOUNT 2, the DOC-KING™ Docking Station holds up to five Wall Mount 1 and/or Wall Mount 2 chargers/maintainers...in either a wall mount or floor mount position. The DOC-KING™ Station insures that all chargers receive ventilation for simultaneous safe and full charging.



BATTERY DOC® JUNIOR 3-STAGE AUTOMATIC BATTERY CHARGER

• Charges and maintains all 12 volt lead-acid batteries — automotive, marine, deep cycle and maintenance-free — VRLA, AMG, gel-cell.

• 750 mA charger.

• Fully automatic 3-stage charging logic to ensure peak battery performance.

- Reverse polarity protection.
- Includes indicator to show charging status.
- Supplied with both alligator clips and ring terminal harness for multiple applications.
- UL and cUL listed.

#20060 - 12 volt 750 mA #20066 - 6 volt 750 mA







Battery

Doctor

BATTERY DOC® 6/12 VOLT 900 mA FULLY AUTOMATIC BATTERY CHARGER/MAINTAINER

- Fully charges battery automatically then switches to trickle mode when full-charge is reached.
- 2 stage with pulse mode technology.
- Prevents over-charging your battery.
- Reverse hook-up protection.
- Includes quick connect ring terminals and alligator clips.
- 3 LED displays indicate charge status at a glance.
- Suitable for safe charging and maintenance of 12 volt, wet-cell, lead-acid, fully sealed lead-acid and gel-cell batteries, plus AGM and deep cycle.
- UL and cUL listed.
- 12 foot output cable lead.





#20025

BATTERY DOC® RAINPROOF® JR. BATTERY CHARGER/MAINTAINER

- 12 volt, 1 amp.
- Sealed, water resistant rated IP68 Potted (Battery Charger unit only).
- Overcharge protection.
- Reverse polarity protection.
- Three color LEDs indicate charge status.
- Compact...just 3 7/8" x 1 7/8" x 1 1/2".
- Charges and maintains batteries from 5 to 80 amp hours.
- Maintains batteries up to 100 amp hours.

#20029





Ring Terminals

with Fuse

Accessories included Alligator Clips #20073-7 Ring Terminals with Fuse #20075-7

E-Z Connect

Alligator Clips

BATTERY DOC® PLUS! 4-STAGE AUTOMATIC BATTERY CHARGER

 Charges and maintains all 12 volt lead-acid batteries — automotive, marine, deep cycle and maintenance-free — VRLA, AMG, gel-cell.

- 1.25 amp charger.
- Fully automatic 4 stage charging logic to ensure peak battery performance.
- Temperature compensated.
- Reverse polarity protection.
- Includes indicator to show charging status.
- Supplied with both alligator clips and ring terminal harness for multiple applications.
- UL and cUL listed.

#20070 - 12 volt 1.25 amp #20076 - 6 volt 1.25 amp







ALLIGATOR CLIPS WITH BULLET-STYLE E-Z CONNECT

• For use with charger #20025, #20029, #20060, #20066, #20070, #20076, #20085 & #20097



RING TERMINALS WITH BULLET-STYLE E-Z CONNECT

• For use with charger #20025, #20029, #20060, #20066, #20070, #20076, #20085 & #20097

#20075-7

BATTERY DOC® 2/4/8 AMP 12 VOLT SMART CHARGER/MAINTAINER



- 7-step charging program (Stages: Refresh, Soft Start, Bulk Charge, Absorption, Equalizing, Analysis and Float).
- Refresh technology (breaks down internal battery resistance resulting from sulfation or a heavily discharged battery).
- Fully automatic smart charging technology with new electronic switching control technology.
- Reverse hook-up polarity protection (spark resistant).
- LED indicates the selected charging rate (2, 4 or 8 amps).
- Water resistant enclosure with coating to protect circuit board.
- Automatically detects defective batteries.
- Thermal resistor automatically senses the internal temperature of the charger to avoid damages due to over-heating or high ambient temperature.
- Voltage surge protected.
- Short circuit protected.
- Universal AC input, 100-140 VAC, 60 Hz.
- 6 foot AC cable and 8 foot DC cable included.
- Includes alligator clips and ring terminal harness for multiple applications.
- UL and cUL approved.

#20085





BATTERY DOC® 2/8/16 AMP 12 VOLT SMART CHARGER/MAINTAINER



- High frequency switching mode 7-step charging program (Stages: Refresh, Soft Start, Bulk Charge, Absorption, Equalizing, Analysis and Float).
- Fully automatic smart charging technology microprocessor controlled.
- Refresh technology (breaks down internal battery resistance due to lead sulfate crystallization or a heavily discharged battery).
- Reverse hook-up protection (spark resistant).
- LED indicates the selected charging rate (2, 8, or 16 amps).
- IP30 rated enclosure designed with louver for ventilation.
- Automatically detects defective batteries.
- Thermal resistor automatically senses the internal temperature of the charger to avoid damages due to over-heating or high ambient temperature.
- Voltage surge protected.
- Short circuit protected.
- AC input 100-140 VAC, 60 Hz.
- Heavy-duty 6 foot AC cable and 8 foot DC cable included.
- Includes alligator clips and ring terminal harness for multiple applications.
- UL and cUL approved.

#20087





BATTERY DOC® 2.7 AMP 36 VOLT SMART CHARGER/MAINTAINER



- 6-step charging program (Stages: Refresh, Soft Start, Bulk Charge, Absorption, Equalizing and Float).
- Refresh technology (breaks down internal battery resistance resulting from sulfation or a heavily discharged battery).
- Fully automatic smart charging technology with new electronic switching control technology.
- Reverse hook-up polarity protection (spark resistant).
- Water resistant enclosure with coating to protect circuit board.
- Automatically detects defective batteries.
- Thermal resistor automatically senses the internal temperature of the charger to avoid damages due to over-heating or high ambient temperature.
- Voltage surge protected.
- Short circuit protected.
- Universal AC input, 90-140 VAC, 60 Hz.
- 6 foot AC cable and 8 foot DC cable included.
- Includes alligator clips and ring terminal harness for multiple applications.
- UL and cUL approved.





BATTERY DOCTOR® **VOLT POWER STATION** TH LCD MONITOR

#20096 and #20098 are Available for Our Battery Manufacturing O.E.M. Customers





Our Battery Doctor® portable 12 volt instant power supply 17aH battery.



USB Port Jumper Cable Studs

for Battery Access

unit holds up to 1 rechargeable

Unscrew Tray

#20096* without battery

Ask us about branding this product for you! *PLEASE NOTE: At catalog's time of publishing, #20096 and #20098 available by Special Order Only.

- Lightweight, compact rugged plastic casing.
- Timer for controlling the on/off of power source.
- LCD screen that displays: time, battery status and status of battery charge.
- Automatic power cut-off (disconnect) when 12 volt battery is under 8.0V.
- Two 12 volt output sockets for 12 volt accessories.
- One 12 volt input (cigarette lighter adapter) for recharging the battery power source via vehicle 12 volt output.
- One USB (Universal Serial Bus) power source output (5V, 500 mA) for charging cameras, PDA's, media players, iPods® and many more accessories!
- One 12 volt 0.75 mA fully automatic battery charger included.
- Positive and negative studs for connection to jumper cables to jump start vehicles.
- Measures: 9 ½" x 4 ¼" x 11 ¼".
- Weight: 14 lbs. (with 17aH battery).





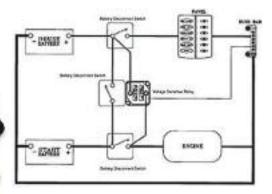
VOLTAGE SENSITIVE RELAY

• Rating 12 VDC, 140 amps.

#20098* with battery

Our Voltage Sensitive Relay (VSR) allows two batteries to be charged at the same time. When the engine is started the start battery reaches 13.7 volts, the VSR engages, allowing two battery banks (starter and house) to be charged simultaneously. When the voltage drops below 12.8 volts (for example, the engine is stopped), the VSR disengages — effectively separating the batteries. This system eliminates the possibility of draining the wrong battery and protects sensitive electronic equipment powered from the house

#20395-7



BATTERY ISOLATOR SERIES

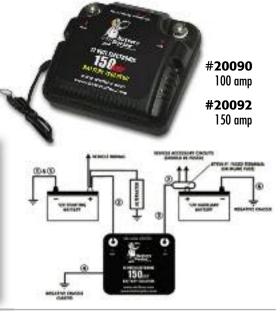
battery from harmful engine start-up spikes.

Our new state-of-the-art, fully automatic dual battery controller is suitable for any vehicle with an auxillary battery. Smaller and lighter than other standard battery isolators, the Battery Doctor® 100 and 150 amp Battery Isolator employs electronic switching control technology. Our high-performance electronic isolator allows you to charge two batteries from a single alternator, and keeps the starting battery isolated from the second battery. Also, with a single push of the override/reset button, you can change the batteries to parallel mode for jump starting.

- Water resistant suitable for marine use (IP62)!
- Priority charging for starting battery.
- Includes mounting bracket.
- Over current and surge protected for vehicles with electronic systems.
- Manual override for starting battery.
- Automatically charges auxiliary battery.



Specifications			
Voltage	12 Volt		
Charging Current	100 amp/150 amp Peak		
Charge Type	Parallel		
Control	Electronic		
Mounting	Surface/Fire Wall/Battery Side		
Current Draw	Charging 500 m/(Standby 300 mA)		
Voltage Draw	None		
Surge Protection	Built In		
Approval	EMC		



BATTERY DOC® SURGE PROTECTOR & CHARGE MONITOR







3-IN-1 MONITOR:

- Protects and displays the condition of your battery with the push of a button.
- Protects and displays the condition of your charging system with the push of a button.
- Protects engine computer and 12 volt accessories from damaging surges when jump-starting or recharging.
- Instant installation mounts to the top of your battery with the attached adhesive backing.
- Includes two 20 inch wire leads with 3/8 inch diameter ring terminals.
- For all 12 volt batteries.

Cutting edge technology!

#20099



BATTERY LIFE PRESERVER® BATTERY REVIVER





- Emits a high frequency pulse that reduces sulfate deposits from the battery's plates.
- Helps prevent sulfation in new batteries and helps break up sulfation in older batteries.
- Improves battery chemistry and extends battery life and performance.
- Delays disposal of batteries and helps reduce environmental waste.

Why control sulfation?

Sulfation, a normal part of a battery's chemistry, is a residue that collects and remains on the plates of a battery after current is produced. Sulfation increases with each charge and discharge cycle. Over time this residue (resistance) will choke out the battery's ability to produce an electrical charge. Some estimates indicate up to 80% of lead-acid batteries are replaced prematurely due to the sulfation that occurs on the lead plates.



#20059 For batteries over 70 amp hours

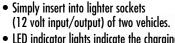
For batteries under 70 amp hours

LIGHTER TO LIGHTER JUMPER CABLE

- Jump-start quickly with no trouble.
- No need to open hood.

#20057

Starts automobiles in minutes.



• LED indicator lights indicate the charging process whether charging or ready. Heavy-duty construction.







Our patented Battery Doctor® switches are easy to install and simple to use.





All of our knife-blade switches:

- Mount on negative battery post.
- Disconnect batteries quickly and easily.
- Stop unwanted battery drain.
- Help prevent theft, tampering and unauthorized use.
- Improve safety and security of stored vehicles, RVs and seasonal equipment.
- Are rated 250 amps continuous and 750 amps surge at 12 volts.

FOR TOP POST BATTERIES, LOW VERTICAL OPERATION

Switches recommended to mount on negative battery post to disconnect ground and battery. Easy to reach and operate.



With 5/8 inch diameter post for receiving standard battery cable clamp.
3" wide x 4" long x 2" high.

#20138



With 5/8 inch diameter post, plus 5/16-18 stud and wing nut for extra connections.

3" wide x 4" long x $2^{1}/4$ " high.

#20148



With 5/16-18 bolt for receiving eyelet cable connectors.

3" wide x 4" long x 2" high.

#20168

FOR TOP POST BATTERIES, LOW PROFILE HORIZONTAL OPERATION

Opens and closes horizontally where clearance above battery is limited.



With post for receiving standard battery cable clamp.

 $3^{1/2}$ " wide x $3^{3/4}$ " long x $1^{1/2}$ " high.

#20108



With post, plus 5/16-18 stud and wing nut for extra connections.

 $3^{1/2}$ " wide x $3^{3/4}$ " long x $2^{1/2}$ " high.

#20109

12/24-VOLT HEAVY EQUIPMENT SWITCH

Double-pole, double-throw switch connects two 12 volt batteries either in parallel for maximum current and charging, or in series for 24 volt starting power. Instructions included.



Open switch disconnects both batteries for storage or electrical work. Surface mounted. 4 3/4" wide x 6 3/8" long x 2" high.

DUAL BATTERY SWITCHES

Allows use of one battery for accessories while reserving second battery for starting. Selected battery is connected to provide power and receive charging from vehicle; non-selected battery remains idle. Surface mounted.



Double blade selects either or both batteries. 2" wide \times 6 $^{1}/_{2}$ " long \times 2" high.

#20228

#20218

SURFACE MOUNTED "IN-LINE"/REMOTE MOUNT SWITCHES

For concealed installations, or where battery box space is limited. One side connects to the battery cable; other side connects to the vehicle cable.



Both terminals are $\frac{5}{16}$ inch bolts for receiving eyelet cable connectors. 3" wide x 4" long x 2" high.

#20188



One terminal is $\frac{5}{8}$ inch post for receiving standard battery cable clamp, the other terminal is $\frac{5}{16}$ " bolt for receiving eyelet cable connector. 3" wide x 4" long x 2" high.

#20198

FOR SIDE TERMINAL BATTERIES

Mounts on negative side battery terminal. Provides 3/8-18 bolt for receiving standard eyelet cable connector. $3^{1}/4^{\prime\prime}$ wide x $3^{3}/4^{\prime\prime}$ long x $1^{1}/2^{\prime\prime}$ high.



DOUBLE POST ACCESSORY SWITCH

Allows uninterrupted power to vehicle while switch controls power to accessory equipment. Ideal for use with winches, snow plows, generators and power pick-up camper accessories.

Mounts on negative top post of battery. Provides one un-switched 5/8 inch post, plus one switched 5/8 inch post. 31/4" wide x 4" long x 2" high.



All our Compact Battery Switches feature:

- Easy to install on negative battery post.
- Battery is disconnected by unscrewing the knob a few turns, and reconnected by tightening the knob.
- Knob can be removed completely to deter theft.
- Compact size fits most battery compartments.
- Rated 500 amps surge and 125 amps continuous at 12 volts.

#20309 and #20310 include a 15 amp fused bypass that maintains computer settings, radio, clock, etc., while battery is disconnected.

 Retail package includes battery terminal markers #20250, as shown on page 29.



Battery

Doctor

TOP MOUNT WITHOUT FUSED BYPASS



SIDE MOUNT WITHOUT FUSED BYPASS



TOP MOUNT WITH FUSED BYPASS



SIDE MOUNT WITH FUSED BYPASS



LEVER OPERATED SWITCH

Master battery isolator disconnect switch. 100 amps continuous at 12 volts.

#20304



SIDE TERMINAL TO POST TERMINAL CONVERTERS

Converts side terminal batteries to accept top terminal battery cables and accessories. Die cast lead with zinc plated steel stud. Posts have 3/8" threaded stud to screw into side terminal batteries. Makes for easy charging with conventional charging equipment.

#20253-7 — Positive and negative post pair

#20305-7 — Negative post

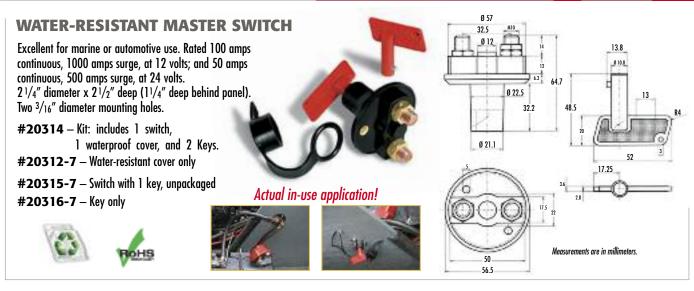
#20306-7 — Positive post

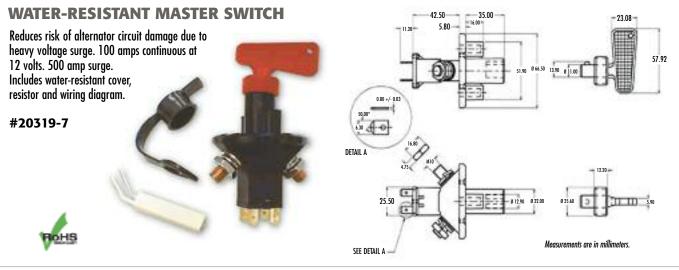












BATTERY QUICK DISCONNECT CAPS

- Fits top post batteries and 4 to 6 gauge wire.
- Manufactured of copper-zinc plated steel.
- Fits side post batteries with standard post adapters.
- Attach to battery terminal by clamping down on cap.
- Lift cap to remove from battery terminal.
- Rated 500 amps continuous, 800 amps surge at 12 volts.
- Color-coded caps: red and black.



QUICK RELEASE BATTERY BOLTS

• Anti-corrosive steel bolts.

Replaces standard 5/16 inch battery terminal bolt.
Color-coded polypropylene levers.
No tools required.
Cam action tightens and loosens bolts.
Sold in pairs.
#20251 — Heat treated steel
#20252 — Stainless steel
Special order only

13

BATTERY DISCONNECTS & ISOLATOR SWITCHES

- Incorporates flange for panel mounting from front or rear.
- For discreet appearance, panel mounting from rear requires only a single hole plus two mounting holes.

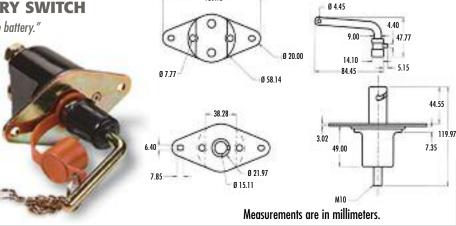


HEAVY-DUTY SINGLE BATTERY SWITCH

"Key turns 90° to instantly connect or disconnect the battery."

- Rated 500 amps continuous, 5000 amps surge, at 12 volts; and 250 amps continuous, 2500 amps surge, at 24 volts.
- 5" long x 21/2" wide x 45/8" deep (3" deep behind panel).
- Two 1/2 inch diameter mounting holes on 4 inch centers.
- Key is captive in "on" position and removable in "off" position.
- Weather-resistant cover included.

#20259-7

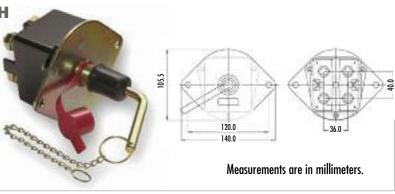


HEAVY-DUTY DUAL BATTERY SWITCH

"Key turns 90° to instantly connect or disconnect dual batteries."

- Engages or disconnects two batteries simultaneously.
- Rated 500 amps continuous, 5000 amps surge, at 12 volts: and 250 amps continuous, 2500 amps surge, at 24 volts.
- $5^{1/2}$ " long x $4^{1/8}$ " wide x 5" deep (3" deep behind panel).
- Two 1/2 inch diameter mounting holes on 4 inch centers.
- Key is captive in "on" position and removable in "off" position.
- Weather-resistant cover included.

#20258-7

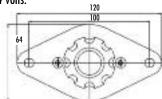


EMERGENCY PUSH BUTTON BATTERY ISOLATOR DISCONNECT SWITCH

"Twist to connect...push to disconnect!"

- Allows electrical circuit of vehicle to be killed with push of button.
- To operate, twist the red button until it clicks into "on" position to make contact. To turn switch off just press the button!
- Heavy-duty weighs 1 lb. 5 oz.
- Rated 500 amps continuous, 5000 amps surge at 12 volts; and 250 amps continuous, 2500 amps surge at 24 volts.

 Ideal for emergency vehicles. industrial, agricultural, marine. automotive and all heavy-duty industrial use.



#20256-7



FIXED HANDLE BATTERY ISOLATOR DISCONNECT SWITCH

"Turn to connect...turn back to disconnect!"

- Allows electrical circuit to be switched on and off with a turn of the handle.
- To operate turn handle to connect. Turn handle to disconnect.
- Heavy-duty fixed die cast handle.
- Rated 500 amps continuous, 5000 amps surge at 12 volts; and 250 amps continuous, 2500 amps surge at 24 volts.

#20257-7 Measurements are in millimeters.

BATTERY DOCTOR® MINI MASTER BATTERY DISCONNECT SWITCHES

These new Battery Doctor® master disconnect switches come in a wide variety of styles. Choose from either knob or key style and with or without a bottom cover for panel mounting or mounting through the fire wall. For application up to 48 volts DC and can be in either a 2 or 4 position. All new disconnect switches are ISO 8846 approved.



Product #	Label	Function	Key/Knob	Bottom Cover
#20370-SPO	1 880	ON/OFF ON/OFF	Key	No
#20373-SPO	0 000	ON/OFF ON/OFF	Кпов	No
#20375-SPO	1 390	ON/OFF ON/OFF	Key	Yes
#20377-SPO	• • • • • • • • • • • • • • • • • • • •	ON/OFF ON/OFF	Knob	Yes
#20379-SPO	COP COM	ON/OFF	Key	No
#20383-SPO		ON/OFF	Knob	No
#20385-SP0	608	ON/OFF	Key	Yes
#20387 STOCKED		ON/OFF	Knob	Yes
#20389-SPO	1 055	OFF/1 BOTH/2	Кпов	No
20393 Stocked	1 PFF	OFF/1 BOTH/2	Кпов	Yes

Specifications subject to change without notice.

MASTER BATTERY DISCONNECT ISOLATOR & SELECTOR SWITCH

- For application 6-36 volts DC.
- 4-position: Both/1/2/Off.

#20360-7

- Continuous rating: 310 amps.
- Intermittent rating: 500 amps.
- Mounting dimensions: 5 ³/₄ inches.
- Overall height: 2 5/8 inches.
- Surface or panel mount.



Our Battery Bolts feature:

- Easy and reliable direct connections to the battery.
- Studs accommodate one or several 3/8 inch ring terminals.
- Excellent for trailer brake controls and other accessories requiring direct power.
- Direct-to-battery power circuits help reduce noise in stereo, communication and other electronic equipment.
- All models are solid brass.

FOR TOP POST BATTERIES:

Replaces nut on cable connector bolt. Keeps ring terminals away from corrosion at battery terminal.

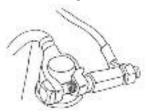


TOP MOUNT BOLT, **STANDARD**

#30600 Retail Pack



Bulk Pack 50/Bag





TOP MOUNT BOLT, SMALL

#30650-7 Special order only





THREADED BRASS BOLT #30675-7 Special order only

Battery Bolt Dimensions

Part Number	Overall Length	Nominal Diameter	Coupler Thread	Battery Insert	Stud Thread	Stud Length
#30600	1.440"	1/2" hex	3/8-16 F .70" deep	N/A	5/16-18	.400"
#30650-7	1.10"	1/2" hex	3/8-16 F .50" deep	N/A	3/8-16	.360"
#30675-7	2.219"	3/8" square	N/A	3/8-16 .45" long	1/4-20	1.50"

PATENTED FRAME GROUND TAP/SIDE MOUNT TERMINAL TAP

- Simple and reliable connection of accessory ground leads.
- Up to 3 slip-on terminals can be connected to each triple tap.
- Can be stacked to provide multiple taps at one location.
- Special shape allows optional attachment directly to battery side terminals.



PATENTED TAP TERMINAL/GROUND TAP

- Simple and reliable connection of accessory ground leads.
- Attaches to top post cable bolt without removing bolt.
- Incorporates one #8 hole for optional use as frame ground.
- Up to 3 slip-on terminals can be connected to each triple tap.
- Can be stacked to provide multiple taps at one location.



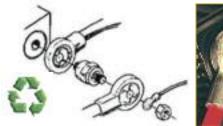
Toll Free: 1-800-959-0879

FOR SIDE TERMINAL BATTERIES:

Replaces the standard bolt in the battery terminal with a threaded stud.

SIDE TERMINAL BOLT, STANDARD







SIDE TERMINAL BOLT, SMALL

#30322-7 #30322-50 Bulk Pack 50/Bag

GM ADAPTER – USE WITH #30300 (SEE ABOVE)

#30680-7Special order only





OEM SIDE TERMINAL BOLT



SIDE TERMINAL BOLT, LONG



DOUBLE CABLE SIDE TERMINAL BOLT, GM TRUCK





Don't see your dimension here? Let us design and build for you!

Battery Bolt Dimensions

Part Number	Overall Length	Nominal Diameter	Coupler Thread	Battery Insert	Stud Thread	Stud Length
#30300	1.590″	5/8" hex	3/8-16	.400 long	3/8-16	.400″
#30322-7	1.250"	9/16" hex	3/8-16	.400 long	5/16-18	.400"
#30400	1.750″	5/8" hex	3/8-16	.400 long	3/8-24	.680″
#30500	1.832"	5/8" hex	3/8-16	.250 long	3/8-16	.960"
#30680-7	.991″	5/8" hex	3/8-16 .43" deep	N/A	3/8-16	.363″
#30692-7	1.250″	3/4" round	N/A	3/8-16 .4375" long	N/A	N/A

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Battery Doctor

FUSE TAPS FOR OCCUPIED SLOTS IN FUSE BLOCK

- Taps clip onto existing fuses to provide an additional connection point for slip-on terminals.
- A tap installed at "cold" end of fuse slot is protected by existing fuse.
- A tap installed at "hot" end of fuse slot requires installation of additional in-line fuse for new circuit.

FUSE TAPS FOR ATO BLADE FUSES



#30001 Kit: 3 taps, 6 slip-on terminals

Retail Pack #30001-50

Bulk Pack 50/Bag



FUSE TAPS FOR AGC ROUND GLASS FUSES



Bulk Pack 50/Bag



PATENTED FUSE TAPS FOR **MINI-BLADE FUSES**



Retail Pack

#30800-50

Bulk Pack 50/Bag

TAPS FOR VACANT ENERGIZED **SLOTS IN MINI-FUSE BLOCK**

- Provides tap for connecting slip-on terminal.
- Requires installation of in-line fuse for new circuit.



#30100 Kit: 3 taps, 6 slip-on terminals

Retail Pack

#30100-50

Bulk Pack 50/Bag



ISO 8820 STANDARD BLADE FUSES ATO/ATC FUSES & ATM MINI-FUSES

Comply with:

- SAE J1284 ATO/ATC
- SAE J2077 ATM
- UL 275A Standard ATO/ATC and ATM/Mini



Color	Amp	ATO/ATC	ATM/Mini	Maxi
Violet	3	#24353-50	#24103-50	
Tan	5	#24355-50	#24105-50	
Brown	7.5	#24357-50	#24107-50	
Red	10	#24360-50	#24110-50	
Blue	15	#24365-50	#24115-50	
Yellow	20	#24370-50	#24120-50	#24520-SP0
Clear	25	#24375-50	#24125-50	
Green	30	#24380-50	#24130-50	#24530-SP0
Orange	40			#24540-SPO
Red-Maxi	50			#24550-SPO
Blue-Maxi	60			#24560-SPO

Bulk Pack 50/Bag

LOW PROFILE FUSES

These new smaller, lower profile ATM Mini Fuses are used in newer vehicles and any place where space is limited. (Toyota Aygo, Toyota Prius, Honda Civic, Vauxhall Corsa, Citroen or Peugeot and many others.)



Bulk Pack 50/Bag

80 PIECE ATM MINI-FUSE KIT

Includes 10 pieces each: 3 amp, 5 amp, 7.5 amp, 10 amp, 15 amp, 20 amp, 25 amp and 30 amp fuses.





What a BRILLIANT Idea!



ATO/ATC - ATM ILLUMINATING LED FUSES... FOR ALL 12 VOLT VEHICLES

These fuses do the thinking for you by lighting up when they burn out.

- Ideal for automotive, marine, agricultural, RV and more!
- Save time and remove the guesswork searching for a burned out fuse.
- Ideal for those hard to see areas!
- Each fuse is color coded to indicate the amperage.
- All feature an enclosed element to prevent shocks, sparks and corrosion.
- Designed to OEM specifications.



ATO/ATC LED FUSES



#24400 — ATO/ATC Fuse 5 Pack Assortment, 1 each — 10, 15, 20, 25, 30 amps

#24403 — ATO/ATC Fuse 10 Pack Assortment, 2 each - 10, 15, 20, 25, 30 amps



Amps	Part Number	Color
3	#24303-7	Purple
5	#24305-7	Amber
7	#24307-7	Brown
10	#24310-7	Red
15	#24315-7	Blue
20	#24320-7	Yellow
25	#24325-7	Clear
30	#24330-7	Green

ATM LED MINI-FUSES



#24100 — ATM Mini Fuse 5 Pack Assortment, 1 each - 10, 15, 20, 25, 30 amps

#24103 — ATM Mini Fuse 10 Pack Assortment, 2 each — 10, 15, 20, 25, 30 amps



Available in bulk:

Amps	Part Number	Color
3	#24003-7	Purple
5	#24005-7	Amber
7	#24007-7	Brown
10	#24010-7	Red
15	#24015-7	Blue
20	#24020-7	Yellow
25	#24025-7	Clear
30	#24030-7	Green



#04000 7		
#24003-7	Purple	
#24005-7	Amber	
#24007-7	Brown	
#24010-7	Red	
#24015-7	Blue	
#24020-7	Yellow	
#24025-7	Clear	
#24030-7	Green	
	#24007-7 #24010-7 #24015-7 #24020-7 #24025-7	



GLASS FUSES



Glass Fuse Guide						
Amp	AGC	AGU				
1	#24600-SP0					
2.5	#24602-SP0					
4	#24604-SP0					
5	#24605-SP0					
7.5	#24607-SPO					
10	#24610-SPO					
15	#24615-SPO					
20	#24620-SP0					
25	#24625-SP0					
30	#24630-SP0	#24633-SPO				
40		#24640-SPO				
50		#24650-SPO				
60		#24660-SPO				

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FAST ACTING AUTOMOTIVE MidiDoc™ LIMITER FUSE

- 30mm Center to Center Bolt-On.
- Interrupting rating: 1000A @ 32VDC.
- Operating temperature; $-40^{\circ} \sim 125^{\circ}$ C.

Amps	Part Number	Color
50	#24215-10	Red
80	#24218-10	Clear
100	#24221-10	Blue
150	#24225-10	Grey







FUSE BLOCK FOR MidiDoc™ LIMITER **FUSES WITH PROTECTIVE COVER**

- Use with MidiDoc[™] limiter fuses.
- Lexan protective cover prevents accidentally touching exposed terminal studs.
- 32VDC, Max 300 amps.
- Phenolic laminate, flame retardant base.



Fuse not included



Battery Doctor® Fast Acting and Very Fast Acting heavy-duty fuse limiters are recommended for use with high power DC, forklifts, marine and other large battery applications.



FAST ACTING FUSE LIMITER

- Fast acting automotive/marine limiter.
- Bakelite/gold plated copper.
- Interrupting rating: 1000A @ 32VDC 1500A @ 250VAC
- Voltage Rating: 250VAC, 32VDC.





VERY FAST ACTING FUSE LIMITER

- Very fast acting automotive/marine limiter.
- Fiberglass/gold plated copper.
- Interrupting rating: 1000A @ 32VDC 1500A @ 250VAC
- Voltage Rating: 250VAC, 32VDC.

Amps	Part Number
100	#24250-10
125	#24252-10
150	#24255-10
200	#24260-10
250	#24265-10



Bulk Pack 10/Bag



FAST ACTING AUTOMOTIVE MegaDoc™ LIMITER FUSE

- 2 inch (50.8 mm) Center to Center Bolt-On.
- Interrupting rating: 250A @ 32VDC.
- Operating temperature: -40° ~ 125° C.



Amps	Part Number	Color		
100	#24200-10	Yellow		
125	#24203-10	Green		
150	#24205-10	Orange		
175	#24207-10	White/Clear		
200	#24209-10	Blue		
250	#24210-10	Pink		

Bulk Pack 10/Bag



MidiDoc™ HIGH AMP FUSE HOLDER WITH HINGED COVER

MASTER TERMINAL ASSEMBLY (MTA)

- Use with MidiDoc[™] limiter fuses.
- Material: PA66 (Polyamide Nylon 66). • Includes 2 eyelets for E-Z hold



#24226-7



FUSE BLOCK FOR OPEN LINK STYLE FUSE LIMITERS WITH PROTECTIVE COVER

- Use with Fast Acting and Very Fast Acting fuse limiters.
- Not to exceed 300 amps.
- 125VAC.
- Material:

Base: Polyester impact/electrical — black with mineral and glass fiber added. ULR Cert #E40654.

Cover: Polycarbonate UL 94VO.

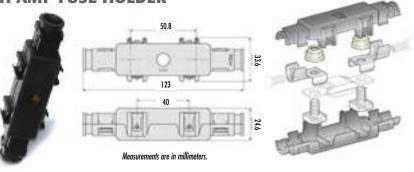


SNAP-TOGETHER MegaDoc™ HIGH AMP FUSE HOLDER

- Use with MegaDoc™ limiter fuses.
- Two-part fuse holder snaps together for secure protection.
- Internal hardware screws and self-locking nuts included.
- Circular viewing window for easy inspection of fuse.
- Shell Material: PA66 (Polyamide Nylon 66), GF30 (Glass reinforced polymers).

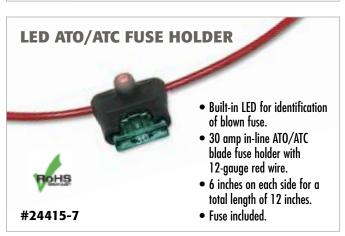
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SELF STRIPPING ATO/ATC FUSE HOLDERS

- No need to strip wire.
- Rated to 40 amps.
- Simply insert each wire and crimp the holder closed, then insert fuse to complete the circuit.



Fuse and lead wires not included





Part Numbe	r Description	Amp Rating	Color		
31855-7	Fits 14-18 gauge wire	Fits 14-18 gauge wire 40 amps			
31855-50	San	Same as above — Bag of 50			
31857-7	Fits 18-22 gauge wire	Fits 18-22 gauge wire 30 amps Red			
31857-50	San	Same as above — Bag of 50			

QUICK SPLICE CONNECTORS

- No need to strip wires.
- Extends one wire with the addition of another separate wire.



Lead wires not included

Open Position



Part Number	Description	Color
31870-7	Fits 10-12 gauge wire	Yellow
31870-50	Same as abov	re - Bag of 50
31875-7	Fits 14-16 gauge wire Blue	
31875-50	Same as abov	e — Bag of 50
31877-7	Fits 18-22 gauge wire	Red
31877-50	Same as above — Bag of 50	

ATO/ATC TAPA CIRCUIT™ DUAL FUSE HOLDER

DESIGNED FOR USE WITH ISO 8820 ATO/ATC FUSES.

SAE J1284-ATO/ATC FUSES
 UL 275A STANDARD-ATO/ATC FUSES

- Turns one fuse slot into two!
- Plugs into occupied or vacant energized fuse block slot.
- Provides one fuse holder to protect existing circuit, and a second fuse holder to protect new circuit.
- 10-amp rating at 12 volts.
- 16-gauge lead for new circuit is 5 inches long; includes insulated crimp-type coupler.
- Fuses not included.

#30003

For information on our Mini Fuse Tapa Circuit™ Fuse Holder #30103, please see page 23.







- DVD players
- Satellite radio
- GPS
- Cell phones
- Car alarms
- Remote starters
- Car locators (theft recovery systems)
- Engine block heaters









UNIVERSAL IN-LINE ATO/ATC FUSE HOLDER WITH COVER



30 amp fuse holder accepts 12-gauge wire. Fuse included.

#31840-7

IN-LINE ATO/ATC FUSE HOLDER



30 amp in-line blade fuse holder with $5\frac{1}{2}$ inch loop length; overall 12-gauge red wire is 11 inches. Fuse included.

#31810-7

#31810-50

Bulk Pack 50/Bag



IN-LINE ATO/ATC STACKABLE



30 amp in-line blade fuse holder with water resistant cover, and loop length of $5\frac{1}{2}$ inches; overall 12-gauge red wire is 11 inches. Fuse included.

#31815-7

IN-LINE ATO/ATC FUSE HOLDER



#31820-50 Bulk Pack 50/Bag



WEATHERPROOF ATO/ATC FUSE HOLDER

- 5 inch 10-gauge orange wire leads.
- Snap-on cover included.

• Rated to 20 amps.

#31850-7

#31850-50



IN-LINE 3 AG FUSE HOLDER



20 amp in-line for 3 AG fuses with 14-gauge wire. Durable threaded screw cap and 12 inch red wire loop. Fuse included.

#31800-7

#31800-50

Bulk Pack 50/Bag



Fuse holder contains 15 amp mini fuse with ring terminals (5/16" dia.) attached to 31/4 inch wires. Overall 12-gauge black wire is 105/8 inches. Fuse included.

#20311-7

IN-LINE ATM STACKABLE MINI-FUSE HOLDER





30 amp mini blade fuse holder with 12-gauge red wire; waterproof cover. $5\frac{1}{2}$ inch wire leads. Fuse included.

#31830-7



30 amp in-line mini blade fuse holder with 12-gauge red wire and water resistant cover. 41/2 inch loop length; overall wire is 9 inches. Fuse included.

#31825-7

ATM MINI-FUSE TAPA CIRCUIT™ DUAL FUSE HOLDER

DESIGNED FOR USE WITH ISO 8820 ATO/ATC FUSES.

- SAE J2077-ATO/ATC FUSES UL 275A STANDARD-ATO/ATC FUSES
- Turns one fuse slot into two!
- Plugs into occupied or vacant energized fuse block slot.
- Provides one fuse holder to protect existing circuit, and a second fuse holder to protect new circuit.
- 10 amp rating at 12 volts.
- 16-gauge red wire lead for new circuit is 5 inches long; includes insulated crimp-type coupler.
- Fuse not included.

#30103

USE OUR TAPA CIRCUIT™ DUAL FUSE HOLDER TO WIRE POWER TO CAR ACCESSORIES:

- DVD players
- Car alarms
- Satellite radio
- Remote starters
- GPS
- Car locators (theft recovery systems)
- Cell phones
- Engine block heaters

For information on our ATO/ATC Tapa Circuit™ Fuse Holder #30003, please see page 22.



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ATO/ATC FUSE BLOCKS



#30	11	4-7

Part Number	Description	Α	В	C	D
#30109-7	2-Way Case	42 mm	52 mm	33 mm	55 mm
#30110-7	4-Way Case	42 mm	52 mm	65 mm	86 mm
#30111-7	6-Way Case	42 mm	52 mm	93 mm	116 mm
#30112-7	8-Way Case	42 mm	52 mm	130 mm	153 mm
#30113-7	10-Way Case	42 mm	52 mm	158 mm	163 mm
#30114-7	12-Way Case	42 mm	52 mm	188 mm	210 mm

- 30 amps per circuit at 12 volt DC.
- Cases accommodate 2 to 12 fuses.
- ATO/ATC blade fuse holder for slip-on terminals.
- Clear acrylic dust cover with bolt-style screw included.

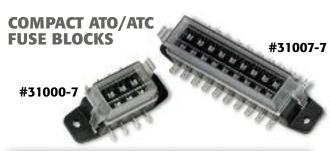
 #30110 and #30111 also available in retail packaging.





Battery

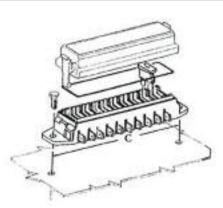
Doctor

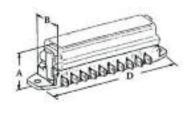


Part Number	Description		В	C	D
#31000-7	4-Way Case	36.5 mm	27 mm	65 mm	80 mm
#31003-7	6-Way Case	36.5 mm	27 mm	85 mm	100 mm
#31005-7	8-Way Case	36.5 mm	27 mm	105 mm	120 mm
#31007-7	10-Way Case	36.5 mm	27 mm	115 mm	140 mm



Part Number	Description				D
#31010-7	4-Way Case	36.5 mm	27 mm	65 mm	80 mm
#31013-7	6-Way Case	36.5 mm	27 mm	85 mm	100 mm
#31015-7	8-Way Case	36.5 mm	27 mm	105 mm	120 mm
#31017-7	10-Way Case	36.5 mm	27 mm	115 mm	140 mm





- ATM Mini blade fuse holder for slip-on terminals.
- 15 amps per circuit at 12 volt DC.
- Includes water resistant dust cover with rubber seal.
- Contact: nickel plated copper alloy.
- Cover material: polycarbonate.
- Base material: nylon UL 94VO.



ATO/ATC RAISED FUSE BLOCKS MASTER TERMINAL ASSEMBLY (MTA)



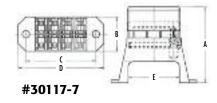
Includes terminal protective cover.

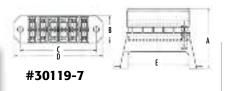
- 30 amps per circuit at 12 volt DC.
- Individual fused circuits enter/exit from underneath for mounting in narrow locations.
- ATO/ATC ¼ inch spade female connectors for slip-on terminals.
- Materials:

Base: PA66 (Polyamide Nylon 66), GF 30 (glass reinforced polymers)

Cover: Polycarbonate

Part Number	Description	A	В	C	D	
30117-7	4-Way Case	57.5 mm	26 mm	53.2 mm	65.2 mm	39 mm
30119-7	6-Way Case	57.5 mm	26 mm	73.2mm	85.2 mm	59 mm





ATO/ATC FUSE PANELS



6-Way ATO/ATC Fuse Panel

8-Way ATO/ATC Fuse Panel

10-Way ATO/ATC Fuse Panel

12-Way ATO/ATC Fuse Panel

6-Way ATO/ATC Fuse Panel with Ground Terminals

8-Way ATO/ATC Fuse Panel with Ground Terminals

#31027-7

#31020-7 #31023-7

#31025-7

#31027-7

#31030-7

#31033-7

For ATO/ATC fuses or plug-in circuit breakers. #10-32 stud terminal with hex nut, flat washer and lock washer supplied. Four .218 diameter mounting holes for #10 screws.

• Base: Polycarbonate

• Cover: Clear polycarbonate

• Maximum amperage per circuit: 25 amps

Maximum voltage: 32VDC

Maximum amperage per block: 150 amps



Fuse Panel with Common Ground



#31030-7

Part Number	
#31050-7	6 Position ATO/ATC Fuse Panel with Cover
#31052-7	8 Position ATO/ATC Fuse Panel with Cover
#31054-7	10 Position ATO/ATC Fuse Panel with Cover
#31056-7	12 Position ATO/ATC Fuse Panel with Cover



Part Number	Description	
#31060-7	6 Position ATO/ATC Fuse Panel with Common Ground and Cover	
#31062-7	8 Position ATO/ATC Fuse Panel with Common Ground and Cover	
#31064-7	10 Position ATO/ATC Fuse Panel with Common Ground and Cover	
#31066-7	12 Position ATO/ATC Fuse Panel with Common Ground and Cover	

#31035-7 10-Way ATO/ATC Fuse Panel with Ground Terminals #31037-7 12-Way ATO/ATC Fuse Panel with Ground Terminals

ATO/ATC FUSE PANELS WITH LED INDICATORS

#31020-7

Part Number	Description
#31074-7	4-Way ATO/ATC LED Fuse Panel
#31076-7	6-Way ATO/ATC LED Fuse Panel
#31080-7 10-Way ATO/ATC LED Fuse Panel	

- LED indicators for easy open fuse identification.
- 1/4 inch spade quick connects.
- Lexan dust cover included.
- Base material: black thermoplastic (UL Rated 94VO).
- Maximum current rating: 30 amps per circuit, 100 amp maximum input.





SINGLE LED FUSE HOLDER

- For use with ATO/ATC fuses only.
- LED enclosed in fuseholder, glows when fuse is blown.
- Includes clear dust cover.
- Rated: 124 volt DC, 30 amp maximum.
- Base: Nylon body (UL flame: 94V-2).
- Cover: Polycarbonate (UL flame: 94V-2).

#30107-7

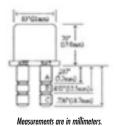




BLADE STYLE AUTO RESET



Amps	Part Number	Bulk Pack 50/Bag
10	#31180-7	#31180-50
15	#31181-7	#31181-50
20	#31182-7	#31182-50
25	#31183-7	#31183-50
30	#31184-7	#31184-50









STUD MOUNTED



	Amps	Type 1 (Auto Reset) Part Number	Type 1 (Auto Reset) Bulk Pack 50/Bag
	8	#31100-7	#31100-50
٩	10	#31101-7	#31101-50
is.	15	#31102-7	#31102-50
METAL HOUSING	20	#31103-7	#31103-50
IAL	25	#31104-7	#31104-50
WE	30	#31105-7	#31105-50
	35	#31106-7	#31106-50
	40	#31107-7	#31107-50
	50	#31108-7	#31108-50

	Amps	Type 1 (Auto Reset) Part Number	Type 1 (Auto Reset) Bulk Pack 50/Bag
	8	#31300-7	#31300-50
HOUSING	10	#31301-7	#31301-50
S	15	#31302-7	#31302-50
	20	#31303-7	#31303-50
Ѥ	25	#31304-7	#31304-50
PLASTIC	30	#31305-7	#31105-50
	35	#31306-7	#31306-50
	40	#31307-7	#31307-50
	50	#31308-7	#31308-50

ANGLE BRACKET



	Amps	Type 1 (Auto Reset) Part Number	Type 1 (Auto Reset) Bulk Pack 50/Bag
	8	#31320-7	#31320-50
98	10	#31321-7	#31321-50
HOUSING	15	#31322-7	#31322-50
욷	20	#31323-7	#31323-50
뜮	25	#31324-7	#31324-50
PLASTIC	30	#31325-7	#31125-50
	35	#31326-7	#31326-50
	40	#31327-7	#31327-50
	50	#31328-7	#31328-50

BRACKET



	Amps	Type 1 (Auto Reset) Part Number	Type 1 (Auto Reset) Bulk Pack 50/Bag
	8	#31120-7	#31120-50
ۅؚ	10	#31121-7	#31121-50
METAL HOUSING	15	#31122-7	#31122-50
皇	20	#31123-7	#31123-50
ΙV	25	#31124-7	#31124-50
ME	30	#31125-7	#31125-50
	35	#31126-7	#31126-50
	40	#31127-7	#31127-50
	50	#31128-7	#31128-50

	Amps	Type 1 (Auto Reset) Part Number	Type 1 (Auto Reset) Bulk Pack 50/Bag
	8	#31310-7	#31310-50
98	10	#31311-7	#31311-50
S	15	#31312-7	#31312-50
욷	20	#31313-7	#31313-50
몵	25	#31314-7	#31314-50
PLASTIC HOUSING	30	#31315-7	#31315-50
	35	#31316-7	#31316-50
	40	#31317-7	#31317-50
	50	#31318-7	#31318-50





• All Circuit Breakers listed above comply with SAE Standard J553.

MANUAL & SWITCHABLE RESET CIRCUIT BREAKERS

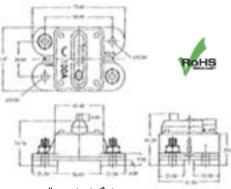
- Water resistant.
- Panel or surface mounted.
- Made of thermoset plastic.
- 30 volt DC 3,000 amp interrupt capacity.
- Complies with SAE Standard JI625.

Amps	With Protective Cover	With Terminal Covers	Retail Pack
70	#31210-7	#31200-7	_
80	#31211-7	#31201-7	#31201
100	#31212-7	#31202-7	#31202
120	#31213-7	#31203-7	_
140	#31215-7	#31205-7	_
150	#31216-7	#31206-7	#31206
180	#31218-7	#31208-7	_
200	#31219-7	#31209-7	_





#31215-7



With Terminal Covers #31202-7

4 PRONG IGNITION/EMERGENCY KILL SWITCH

Pull cord for emergency battery disconnect.

- Four prong lead installation.
- Rated 12 amps continuous at 12 volts.
- Red nylon casing.



2 WIRE IGNITION/EMERGENCY KILL SWITCH

Pull cord for emergency battery disconnect.

- Two wire lead installation.
- Rated 12 amps continuous at 12 volts.

START/IGNITION PANEL

• Toggle switch with cover - 25 amps at 12 volts.

Red nylon casing.

• Length of cord: 17 inches.

• Wire: 18 gauge.



#20342-7

• 3 switch/2 LED.

• Polished aluminum panel.

Toggle switch without cover

25 amps at 12 volts.

• Two indicator lights (red and green).

• Starter button — 16 amps at 12 volts.



START/IGNITION PANEL

- 2 switch/1 LED.
- Polished aluminum panel.
- Toggle switch with cover 25 amps at 12 volts.
- Red indicator light.
- Starter button 16 amps at 12 volts.
- 4 mounting holes.











#20283-7

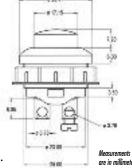
• 4 mounting holes.



MOMENTARY PUSH-ON BUTTON SWITCH

For controlling apparatus that requires temporary power and manned operation.





- Heavy-duty momentary push-on switch.
- Water-resistant cover.
- 30 amps at 12 volts.

#20303-7



DIE-CAST PUSH-ON STARTER SWITCH



- momentary on.
- Water-resistant cover.
- 16 amps at 12 volts.

#20302





27

CIRCUIT & SPARK PLUG TESTER

High quality tester instantly locates wiring problems such as bad connections, faulty or broken wires and sockets in 12 volt - 24 volt systems. A light will shine if the battery's condition is sound. No light will be visible if there is a short circuit or the battery is low. Includes alligator ground clip and 3 inch metal probe with cover.

 Overall length: 8 inches with a full 45 inch lead wire.

#21049 - Retail Pack #21049-7 - Bulk



Battery Doctor® double action valve with shut-off nozzle stops the flow to prevent overfilling.

- Heavy injected molded body.
- 2 quart capacity.





BATTERY FLUID FILLER WITH FLEX BULB

- One piece construction prevents leaks at bulb area.
- Acid resistant.
- Overall length: 10 inches.

#20410



BATTERY HYDROMETER WITH THERMOMETER

- Temperature compensating.
- Built-in thermometer compensates for temperature variations to provide more accurate reading of the condition of battery fluid and its state of charge.
- Plastic housing.
- Overall length: 111/4 inches.

#21040-7

MINI BATTERY HYDROMETER

Battery tester with floating balls that indicate the condition of battery fluid by testing its state of charge. Scale measures specific gravity. Extension fits into hard-to-reach areas.



BATTERY TESTER

Standard battery tester instantly reveals battery charge.

- Tests all 6 volt, 12 volt and 24 volt systems.
- Instructions imprinted on product.
- Overall length: 12 inches.

#21045-7



BATTERY CLEANING BRUSH - PLASTIC

Outer brush easily removes rust and corrosion from battery posts, terminals and connectors. Inner metal bristles fit and clean standard posts.
Remove cap to reveal brush.
Plastic case.

#21003-7





- Side terminal top terminal auxiliary brush.
- Two handled terminal cleaner with metal bristles housed within the handles.

#21005-7

4-WAY BATTERY POST & TERMINAL CLEANER



Metal terminal cleaner marked to indicate positive and negative posts.

#21007-7

SIDE TERMINAL CLEANER BRUSH

Plastic handled brush with two metal bristle brushes. Cleans side terminals and battery contacts. 5/16 inch hex in handle services GM connectors.

• Overall length: 6 inches.



BATTERY CLEANING BRUSH – METAL

Heavy-duty outer metal brush for removing corrosion and rust from posts and terminals. Inner bristles fit and clean standard battery posts. Remove cap to reveal brush.

Metal case.

#21000-7

BATTERY DOC® SIDE TERMINAL CLEANER

Heavy-duty injection molded body with peel-and-stick coarse 65 grit sandpaper. Replacement adhesive pads available.

#21015-7



J-TYPE BATTERY HOLD-DOWN BOLTS

Heavy-duty tempered steel "J" bolts with wing nuts and protective rubber washers to attach battery to tray. Use with Replacement Trays #21085 or #21087. 5/16 inch thread.

#21060-7 — 8" J-Type #21063-7 — 10" J-Type #21067-7 — 12" J-Type

L-TYPE BATTERY HOLD-DOWN BOLTS

Heavy-duty tempered steel "L" bolts with wing nuts and rubber washers to attach battery to tray. Use with Replacement Trays #21085 or #21087. 5/16 inch thread.



HOLD-DOWN KIT

Heavy-duty low carbon steel 10 inch "J" bolt with wing nut, rubber washers and hold-down bracket. Use with Replacement Trays #21085 or #21087. 5/16 inch thread.



UNIVERSAL ADJUSTABLE BATTERY HOLD-DOWN

Fits the top of any Group Battery! Battery Doctor® hold-down secures the battery to the small or large "Replacement Battery Tray" (sold separately). Adjustable to size. Our corrosion resistant vinyl-coated low carbon steel hold-down comes with two 81/2 inch "J" steel bolts and wing nuts for securing the hold-down to the battery and thus the battery to the bottom tray (sold separately). 3/8 inch thread.



UNIVERSAL ADJUSTABLE CROSS BAR

Red 6 3/4" inch vinyl-coated rolled steel cross bar Battery Hold-Down with adjustable brackets. Use with appropriate aftermarket replacement OEM Hold-Down Bolts (please see above) and Replacement Trays #21085 or #21087.

#21075-7



REPLACEMENT BATTERY TRAY

High quality replacement battery tray.

Black vinyl-coated metal (16 gauge) battery tray provides a sturdy battery base. Coated to resist corrosion, rust, and battery movement!

Slotted drain holes eliminate moisture build up and condensation.

#21085 – Small Tray (11" x 7" x 11/4") for Group 24 batteries.

#21087 — Large Tray (13" x 7" x 11/4") for Group 27-31 batteries.



TERMINAL PROTECTOR BOOTS

Insulate terminals to prevent short circuits.

Protective color-coded PVC terminal boots also extend the battery life by preventing corrosive build-up. Universal. Sold in pairs.



BATTERY TERMINAL PROTECTORS

Prevent corrosion build-up with these anti-rust chemically treated polyester fiber battery terminal protectors for various types of terminals. Two per package.

#21500-7



SIDE TERMINAL BATTERY WRENCH

Designed for installing and removing OEM 5/16 inch side terminal bolts. Reversible ratcheting wrench features an easy grip handle. Fits all standard side mount bolts. 51/4 inches long.

#21020 - Retail Pack #21020-7 - Bulk



BATTERY TERMINAL LIFTER

Heavy-duty steel terminal clamp puller for removing corroded and troublesome battery terminals. Also pulls small gears, pulleys, and bearings. 11/4 inch jaw spread. Tough, forged steel.

#21027 – Retail Pack #21027-7 – Bulk



BATTERY TERMINAL MARKERS

Highly visible identification of terminals helps prevent damage to battery and alternator. 1" diameter, self-adhesive markers in red and black with large raised "+" and "-" symbols. Packaged in pairs of positive and negative.

#20250 - Retail Pack #20250-7 - Bulk Pair



Phone: 952-941-9073



ACCESSORY POWER CONNECTORS DISPLAYS

- Two complete systems for connecting accessory power to vehicles and boats.
- Shows customers where to find unique solutions to everyday problems.
- Captures extra sales not available from any other product line.



- 12 popular items, 36 total pieces.
- 24" wide x 16" high.
- Removable legs for wall mounting.

#30900 - Complete package

Each Display Contains:

DESCRIPTION	Part Number	Display #23010	Display #30900
Battery bolt for side mount terminal batteries	#30300	3	3
Battery bolt for side mount terminal batteries, long stud	#30400	3	3
Battery bolt for side mount terminal batteries, fits double cables	#30500	3	3
Battery bolt for top post batteries	#30600	3	3
Tapa-Circuit for ATO/ATC fuse blocks	#30003	3	3
Tapa-Circuit for mini fuse blocks	#30103	3	3
ATO fuse block case, 4 position	#30110	2	-
ATO fuse block case, 6 position	#30111	2	-
Fuse tap kits for ATO fuses	#30001	3	3
Fuse tap kits for AGC fuses	#30200	3	3
Frame ground tap, also used as a side terminal "triple-tap"	#30700	3	3
Top post "triple-tap", also used as a frame ground	#30703	3	3
Fuse tap kits for mini fuses	#30800	3	3
Fuse taps for ATM/mini fuse blocks	#30100	3	-
Accessory Power Connector Kit (24 pieces)	#30995	3	3
Battery-cable quick connector/disconnector	#20158	2	-
Quick cable clamp bolts (pair)	#20251	2	-
Knob battery switch for top post batteries	#20308	2	-
Knob battery switch with bypass for top post batteries	#20309	2	_
Knob battery switch with bypass for side mount batteries	#20310	2	-
Key operated switch kit, 100 amp	#20314	2	-
Knife switch for side terminal batteries	#20128	2	-
Knife switch for top post batteries	#20138	2	-
Knife switch for top post batteries with stud	#20148	2	-
Knife switch for in-line batteries, eye to eye	#20188	2	-
Total Pieces		62	36





• Free standing, or remove legs for wall or gondola mounting.

#23010 - Complete package

BATTERY DISCONNECT DISPLAY 4-PRONG RACK WITH "DEMO BATTERY"

Self-service display PROMOTES SALES by offering your customers a hands-on product demonstration.



#20261 DISPLAY RACK INCLUDES:

- One Top Mount Battery Disconnect Switch (#20138).
- "Demo Battery."
- 4-Color Poster.
- Wire Rack: 11" wide x 23" high x 8" deep.

Easy To Assemble:

- Holds up to 12 Battery Disconnect Switches.
- No assembly required.
- Free standing for shelf or counter.
- Built-in hooks allow for pegboard or gondola mounting.

#20261 - Display rack only.

#20263 — Contains eight of the most popular

Battery Disconnect Switches.

Contents: Display rack #20261;

2 of #20128

2 of #20138

2 of #20148

2 of #20188

#20265 — Contains 12 of the most popular

Battery Disconnect Switches.

Contents: Display rack #20261;

3 of #20128

3 of #20138

3 of #20148

3 of #20188

12 VOLT ACCESSORY POWER CONNECTOR KITS

- A complete system for connecting accessory power to vehicles and boats.
- Attractive sell-through packaging.
- Back panel of kit shows contents.



Each Kit Contains:

DESCRIPTION	Part Number	Kit #30995	Kit #30997
Fuse tap kits for ATO/ATC fuses	#30001-7	2	6
Fuse tap kits for AGC fuses	#30200-7	2	6
Battery bolt for side mount terminal batteries	#30300-7	2	2
Battery bolt for top post batteries	#30600-7	2	2
Frame ground tap, also used as a side terminal "triple tap"	#30700-7	2	6
Top post "triple tap", also used as a frame ground	#30703-7	2	6
Fuse tap kits for mini fuses	#30800-7	2	6
Blue terminals for 16 gauge-14 gauge wire	#30870-7	4	12
Red terminals for 22 gauge-18 gauge wire	#30873-7	4	12
Yellow terminal for 12 gauge-10 gauge wire	#30876-7	2	6
Total Pieces		24	64

R.V. "LOCKING" BUMPER PLUG

Won't Fall Out!

- Securely holds sewer hoses in place.
- Fits standard 4" bumper.
- Push in center to lock.
- No drilling or welding.
- No hinges.
- Weather and UV resistant.

#30000 – Packaged

#30000 -7 - Bulk

#30124 - Display of 24





31



INTERESTED IN RECYCLING OIL OR OTHER FLUIDS? **COLLECT EVERY LAST DROP!**

B.O.B.

"Bottom of the Bottle" oil bottle draining system.

- Save money by using every last drop of oil.
- Help the environment by keeping motor oil out of landfills.
- Free standing or mounts to wall.
- Available in black color only.

#32947









17-QUART MONSTER FUNNEL

- Polyethylene
- Overall Length: 14 inches
- Top ID: 13 inches
- Spout Length: 21/2 inches
- Spout OD: 11/2 inches

#32017



6-QUART DRAIN BASIN

Polypropylene

• Overall Length: $13\frac{1}{2}$ inches

• Top ID: 11 1/2 inches

• Height: 41/2 inches

#32950



POLYETHYLENE DRUM FUNNEL FOR OPEN OR CLOSED HEAD DRUMS

Direct hazardous materials into the drain of a drum with sloped channels designed to hold filters, bottles, funnels or other chemical containers. Includes cover with hinged bolt. Fits 2 inch bung openings.

• Top ID: 21 1/2 inches • Overall Height: 7 inches

Spout ID: 1½ inches

• Hole for padlock.

#32420



4-GALLON PLASTIC OIL DRAIN PAN INCLUDES E-Z GRIP HANDLES

• Heavy-duty polyethylene.

• Top ID: 173/4 inches

• Spout OD: 1 inch

• Overall Height: 51/2 inches

#32953



INDUSTRIAL GRADE BUCKETS

- High density polyethylene.
- Hinged metal handle with comfort grip.
- UN certification available.
- Includes one-color imprint design for private labeling.
- Mix-n-match, available with or without lids...your choice!

Bucket Models	#32960	#32963	#32965
Capacity	3 1/2 gallon	5 gallon	4 gallon
ID	11 1/4"	11 1/2"	9 3/8" x 9 3/4"
Depth	10 3/8"	14"	13"
Max Temp	160° Fahrenheit	190° Fahrenheit	160° Fahrenheit

Lid Models	#32967	#32969
Fits: #32960 3 1/2 gallon Fits: #32963 5 gallon	Standard Lid	Flex Spout Lid Spout ID: 1/2" Spout Length: 1 3/4"



DRUM ACCESSORIES

4-QUART DRUM FUNNEL

- Polypropylene
- Overall Height: 43/8 inches
- Top ID: 113/4 inches
- Thread: 2 inches
- Spout Length: 1 1/2 inches
- Spout OD: $2\frac{1}{2}$ inches

#32900 - with screen

#32910 - without screen



DRAIN TOP FOR DRUM FUNNEL • Polypropylene • Top ID: 113/4 inches • Drainage lid fits our 4-quart Drum Funnel #32900 and #32910 or any 5 gallon pail. #32940

3-QUART POLYETHYLENE DRUM FUNNEL

- Overall Height: 93/16 inches
- Top ID: 71/2 inches
- Spout Length: 17/16 inches
- Spout OD: 21/4 inches
- Max Temp: 250° Fahrenheit

#32400 - 2 inch Thread

#32410 - 1 inch Thread





PLUNGER PUMP

Self-priming plunger pump fits 15-55 gallon drums. Intake tube is 11/4" OD x 18" long; screw-on extension increases total length to 373/8 inches. Stroke length of 17 inches delivers 7.5 oz. per stroke. Includes 2 inch bung adapter with set screw for height adjustment. Output fits standard garden hose connector; includes adapter with barb that accepts 3/4 inch ID tubing.

#95800



E-Z SMART DRUM FUNNEL

Smart Funnel prevents overfilling of barrels.

The Secret:

With the funnel extension, trapped air stops the liquid from filling to the top of the barrel. It leaves just enough room to add 2 gallons more to the barrel, which is the capacity of the E-Z SMART DRUM FUNNEL.

In order for the Smart Funnel to work properly, it must be removed immediately when fluid no longer flows freely.

This means the drum is full and cannot take any more fluid.





TRANSLUCENT LOW-DENSITY POLYETHYLENE PUSH BOTTOM **DISPENSERS/OILERS**

- Chemically resistant.
- Top unscrews.
- Cap stores on body when in use.
- Spark, leak, rust and dent-proof. • Ideal for acids, oils, adhesives,
- lubricating chemicals, etc.
- Removable base.
- Long-lasting, yet lightweight.





#90320

16 oz.

Model	#90290	#90300	#90310	#90320
Capacity	2 oz. (57 ml.)	6 oz. (170.5 ml.)	10 oz. (284 ml.)	16 oz. (473 ml.)
Color	Natural	Natural	Natural	Natural
Overall Height	4"	51/2"	63/4"	91/2"
Body Dimensions	21/4" D x 13/4" H	31/4" D x 2" H	31/4" D x 33/4" H	5" D x 3" H
Cap/Spout Length	21/2"	3″	3″	6"
Spout Diameter	3/32"	1/8"	1/8"	3/16"

PUSH-STYLE GREASE GUNS

• These compact guns get grease into tight spaces. • The piston-style construction allows one-handed operation; simply hold the barrel and push down to dispense grease.

• Each gun comes with both standard hydraulic and flush style couplers.

• Plastic barrel.

#32980

OAL 8 inches, 65 ml/2 oz.

#32990

OAL 8 inches, 80 ml/ $2^{1/2}$ oz.

#32985

Red cap, one coupler, OAL 6 1/2 inch, 65 ml/2 oz.

8 OZ. MEASURING CUP

- One side measures 1/4, 1/2, 3/4, 1 cup
- Other side measures $1/_3$, $2/_3$, 1 cup

3 3/4"L x 2"w x 2 1/2"h

#48303



HIGH DENSITY POLYETHYLENE PITCHER

- Longer gradual sloping spout for hard to reach areas.
- Two handles makes pouring easier.
- Raised quart and liter measurements.
- Gas and oil compatible.



Model	#32375	#32377
Capacity	6 Ltr.	10 Ltr.
Diameter	111/2"	13"
Height	13"	15"
Spout Length	113/4"	131/2"

THE PROP'R MEASURE "TIP & MEASURE" **CONTAINER**

Patented 2-in-1 measuring and storage container. 16-oz. storage capacity. Accurately measures 1-6 ounces before pouring. Chemically resistant polyethylene.

- Translucent for easy and accurate measuring.
- Heavy-duty.
- Reusable.





1. Tip to pre-measure.



3. Remove cap and pour. 4. Replace cap and store.

HEAVY-DUTY GRADUATED MEASURING CONTAINERS

Heavy-duty polypropylene measuring containers are chemically resistant, spark-proof, dent-proof, rust-proof and boil-proof (up to 212° F).

- Molded raised letter graduations in U.S., metric and imperial.
- Translucent material keeps contents visible.
- Big grip handle and sturdy non-tip base.
- Ideal for mixing chemicals, oil, gas and powders.

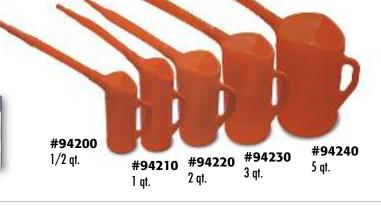
Model	#94020	#94026	#94040	#94046
Capacity	87 oz. (2.5 L.)		155 oz. (4.5 L.)	
Diameter	6"	#94040 except	7"	#94040 except with black
Height	8″	4" spout	81/4"	4" spout



INDUSTRIAL ORANGE FLEX SPOUT MEASURERS

- Raised measurements molded on side: quarts and liters.
- Manufactured of heavy-duty polyethylene.
- Removable spout.
- #94240: Also available in natural color.

Model	#94200	#94210	#94220	#94230	#94240
Capacity	1/2 quart	1 quart	2 quart	3 quart	5 quart
Diameter	3″	31/2"	41/4"	5″	63/4"
Height	4"	51/2"	63/4"	91/2"	113/4"
Spout Length	11"	11"	13"	13″	13"



GENERAL PURPOSE GRADUATED MEASURING CONTAINERS

Chemically resistant polypropylene measurers.

- Easy-to-read U.S. and metric graduations printed in blue.
- Translucent for easy and accurate measuring.
- #94110 #94160 have strong reinforced handle.



#**94100** 100 ml.

Model	#94100	#94110	#94120	#94130	#94140	#94150	#94160
Capacity	100 ml. (3 oz.)	250 ml. (1/4 qt.)	500 ml. (1/2 qt.)	1 Liter (1 qt.)	2 Liter (2 qt.)	3 Liter (3 qt.)	5 Liter
Diameter (approx)	21/4"	3″	4"	5"	6"	63/4"	83/8"
Height (approx)	23/4"	43/4"	51/2"	63/4"	81/2"	91/2"	101/2"



TRANSLUCENT HIGH DENSITY GRADUATED MEASURING CONTAINERS

- Polyethylene heavy-duty construction.
- Raised guart and liter measurements.
- Extended screw-on flexible large spout for easy pouring.
- Top lid keeps debris out.

Model	#94350	#94353	#94355	#94357
Capacity	1 Liter (1 qt)	2 Liter (2 qt)	3 Liter (3 qt)	5 Liter (5 qt)
Diameter	41/2"	5"	6"	8"
Height	63/4"	83/4"	10"	111/4"
Spout Length	8"	81/4"	81/4"	12"





RED POLYETHYLENE FUNNELS



Model	#32090	#32091	#32001	#32002	#32005	#32006
Capacity	1 pint		2 quart		6 quart	
Color	2 1/4"	Similar to	Red	Similar to	Red	Similar to
Top ID	4 1/2"	#32090	6 1/2"	#32001	8 1/4"	#32005
Spout OD	1/2"	except	1 1/16"	except	1 5/16"	except
OA Height	6"	with screen	8 1/2"	with screen	10 1/2"	with screen
Spout Length	2 1/4"		2 3/8"		1 5/8"	

3-QUART GUZZLER SWIVEL SPOUT

Polyethylene

• Overall Length: 12 inches

• Top ID: 71/2 inches

• Spout Length: 47/16 inches

• Spout OD: 5/8 inch

#32301 - with screen

#32300 - without screen



4-QUART GARAGE FUNNEL WITH SCREEN

Inside Dimensions:
 101/4" x 65/8"

• Spout ID: 15/16 inch

• Spout Length: 41/8 inches

• Overall Height: 113/4 inches

#32019



EXTRA HEAVY-DUTY POLYETHYLENE FUNNELS

- Manufactured of white virgin and black regrind polyethylene.
- Chemically resistant, spark-proof, dent and boil-proof.
- Ideal for lab and industry.
- Translucent for accuracy and safety.
- Anti-splash rings available on two models.
- Removable mesh 100 grit (fine) filter included with each funnel.





- Filter fits any extra heavy-duty polyethylene funnel in this section and #90260 and #90670, please see page 38.
- Mesh, 100 grit (fine).

#90000-7



Model	#90080	#90090	#90092	#90150	#90190
Capacity	120 oz. (3.4 L.)	144 oz. (4 L.)	144 oz. (4 L.)	24 oz. (681 ml.)	144 oz. (4 L.)
Color	Natural	Natural	Black	Natural w/ black anti-splash ring	Natural w/ black anti-splash ring
Top ID	8"	9"	9"	5 ³ /4" splash ring 3 ¹ /4"	9" splash ring 6 ¹ /2"
Spout OD	7/8"	1 1/8"	1 1/8"	5/8"	1 1/8"
OA Height	10"	10 1/2"	10 1/2"	6 1/2"	10 1/2"
Spout Length	5 1/2"	3 1/2"	3 1/2"	2 1/4"	3 1/2"

E-Z MEASUREMENT FUNNEL

- Fluid can be measured when funnel is upright or inverted.
- Translucent for easy and accurate measuring.
- Caps eliminate spills and contaminants.
- Removable spout for easy measuring and pouring!

Clean fluids help prevent mechanical damage.

Chemically resistant polyethylene.

#32	1	0	7





FOLDING POLYETHYLENE FUNNELS

- Save storage space.
- Chemically resistant.
- Great for RV, kitchen, craft projects or anywhere space is limited.



Model	#32610	#32700	#32701
Capacity	12 oz.	16 oz.	
Color	White	Red	Similar to
Top ID	4 3/4"	6 1/4"	#32700 except with
Spout OD	5/16"	1"	stainless
OA Height	5 1/4"	7″	screen.
Spout Length	1 1/8"	1"	

HEAVY-DUTY POLYETHYLENE FUNNELS

WirthCo's lab and industrial funnels are sturdy and long lasting. Superior to ordinary funnels when quality and safety count.

- Chemically resistant, spark-proof, rust-proof, dent-proof and boil-proof.
- Translucent for safer accuracy.



Model	#95010	#95020	#95040	#95050	#95070
Capacity	1 oz. (28 ml.)	2 oz. (57 ml.)	8 oz. (227 ml.)	14 oz. (398 ml.)	28 oz. (795 ml.)
Color	Natural	Natural	Natural	Natural	Natural
Top ID	1 1/2"	2"	4"	5″	7"
Spout OD	3/8"	1/4"	1/2"	5/8"	5/8"
OA Height	2 1/4"	2 1/2"	4 1/4"	5″	7 1/2"
Spout Length	1"	1/2"	1 1/8"	1 3/8"	2 3/8"

DOUBLE CAPPED FUNNELS – "KEEPS THE DRIPS IN & THE DIRT OUT!" THE ULTIMATE "STORAGE" FUNNEL







• Chemically resistant polyethylene.



#32	130
#32115 #32135	#32145 #32110 #32140
#32120	#32105

Model	#32105	#32110	#32115	#32120	#32125	#32130	#32135	#32140	#32145
Capacity	1 pint	1 1/4 qt.	1 1/4 qt.	1 1/4 qt.	1 1/3 qt.	1 1/2 qt.	1 1/2 qt.	1 1/2 qt.	1 ² / ₃ qt.
Color	Orange	Light Blue	Dark Blue	Dark Green	Black	Red	Yellow	Green	Dark Red
Top ID	3″	4"	4"	4"	4"	4"	4"	4"	4"
Spout OD	1/2"	9/16"	3/4"	1 1/8"	1 3/8"	9/16"	3/4"	1 1/8"	1 3/8"
Height without cap	8 3/4"	13 1/2"	10 1/2"	9 1/2"	11"	17"	14 1/4"	13 1/4"	14 1/4"

FUNNEL KING® Fluid Control Products

LONG LASTING SCOOPS

Heavy-duty polypropylene scoops are chemically resistant, spark-proof and rust-proof. Also available in "shrink-wrapped" combination packs.



Model	#93105	#93108	#93120
Capacity	16 oz.	32 oz.	82 oz.
Color	Natural Translucent	Natural Translucent	Natural Translucent
OA Length	10"	11 1/2"	143/4"
Body Dimensions	6 1/2"L x 3 1/2"W x 2 1/2"H	6 1/2"L x 5 1/2"W x 3 1/2"H	9 3/4"L x 5 3/4"W x 3 1/2"H

16 OZ. SAFETY FUNNEL WITH FILL LEVEL INDICATOR

• Floating indicator signals when tank is full.

• Chemically resistant co-polymer propylene.

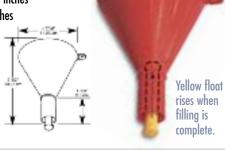
• Overall Length: 5 1/2 inches

• Top ID: 4 7/16 inches

Spout Length: 1 ³/₈ inches
Spout OD: 1 ¹/₈ inches

• Capacity: 16 oz.

#32037



OFFSET FUNNEL FOR LAWNMOWERS... & OTHER "TIGHT-SPOT"





- Chemically resistant polyethylene.
- Includes screen #90000 (please see page 36).
- Overall Length: 5 5/8 inches
- Capacity: 9 oz.

#90260

TRANSLUCENT SCOOPS

Heavy-duty natural polypropylene scoops are chemically resistant, spark-proof and rust-proof.

- Translucent for ease of use.
- Heavy-duty secure handles do not conduct heat.



Model	#93100	#93110	#93140
Capacity	8 oz.	52 oz.	104 oz.
Color	Natural Translucent	Natural Translucent	Natural Translucent
OA Length	8"	12"	10"
Body Dimensions	2 1/4"L x 3"W x 2"H	7"L x 5 1/2"W x 3 1/4"H	10"L x 6 1/2"W x 6"H

HIGH DENSITY FAST FILL FUNNELS

Molded-in screen to keep out unwanted debris.

- Clear flexible spout makes pouring more accessible.
- Molded-in hand grip for easy handling.
- Large spout outlet allows for use with powders.



Model	#94300	#94310	#94320
Capacity	1 quart	2 quart	3 quart
Top ID	3 1/4"	4 1/2"	5 1/4"
Spout OD	1"	1 1/16"	1 7/16"
Flexible Spout OD	3/4"	3/4"	1"
Spout Length	9 1/4"	9 1/4"	14"
OA Height	16"	15 1/4"	21 1/2"

FLAT SIDE FUNNEL

- Great "tight-space" funnel.
- Chemically resistant polyethylene.

Removable

- Includes screen #90000 (please see page 36).
- Overall Length: 7 inches
- Top ID: 5 inches
- Spout Length: 3 inches
- Spout OD: 1/2 inch
- Capacity: 35 oz.

E-Z FLOW™ POUR SPOUT

- Screws onto quart and gallon size containers.
- Air intake allows fast efficient flow.
- Includes cap eliminates unwanted dripping.
- Chemically resistant.
- Overall Length: 14 3/4 inches.
- Spout OD: 1 inch.

#32177-7



HEAVY-DUTY FILLER EXTENSION

- Fits select Funnel King® funnels and measurers.
 #90150, #95070, #94026 and #94046 pages 35, 36.and 37.
- Spout OD: 5/32 inch.
- Overall Length: 14 1/4 inches.



8 OZ. FUNNEL WITH FIXED FUNNEL ADAPTER

- Stabilizes funnel for safe filling applications.
- Vent structure eliminates air-lock.
- Top ID: 4 inches.
- Spout OD: 3/4 inch, fits quart bottles.
- Spout OD: 1 1/8 inch, fits gallon bottles.
- Height: 4 inches.

#95855

#95850-7 Funnel adapter also sold separately



SNAP-ON POUR SPOUT

Polyethelene.

Fits most gallon containers.

 Includes cap to keep out debris.

#32147-7



Available with

your name here!

CLIP-ON SPOUT FOR QUART & GALLON CONTAINERS



Two sizes available, 2-in-1 or Gallon Size Only

Convenient to use; helps protect against spills and drips into engine compartment or work area. One side clips onto neck of plastic gallon container, other side clips onto neck of plastic quart container. Chemically resistant co-polymer polypropylene. 21/2" L x 2" W, spout OD 7/8 inch. Assorted colors.

#32257-7 — 2 in 1, unpackaged #32259-7 — Gallon size only, unpackaged #32296 — 2 in 1, clip strip of 12 units of #32251

Available for imprinting.

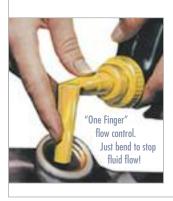


#**32251** Clip strip packaging.



#32255This package utilizes existing shelf/inventory space... and requires no additional shelf space to display!

FLEXIBLE SPOUT FUNNEL - INCLUDES CAP



- Fits gallon, quart, and most pint containers.
- Handles a variety of applications including:
 - · Automotive/RV · Household · Lawn/Garden · Marine · Farm · Industrial and more.
- Great for Chainsaws!
- Manufactured of thermoplastic elastomer.

#32157 - Individual SKU

#32197 - 12 units on a clip strip with header card (Custom headers available).





Air-Tight "Closure Cap" Included!



Recycle and Reuse!Convert fluid containers into your own custom funnels.



39



1-QUART POLYETHYLENE FUNNEL WITH SPLASH RING & FLEXIBLE SPOUT

1-quart economy funnel with filter screen and 10 inch removable flexible spout. Includes removable splash ring with 4 inch ID.

Specifications			
Capacity	l quart		
Color	Black		
Top ID	5 1/4"		
Spout ID	1/2"		
Funnel Height	6 1/2"		
Length	15" with flexible spout		



POLYETHYLENE ECONOMY FUNNELS



Specifications	#32833	#32831
Capacity	8 oz.	1 pint
Color	Yellow	Blue
Top ID	3 1/2"	5 1/8"
Spout ID	5/16"	1/2"
Height	4 1/4"	4 1/2"
Spout Length	1 1/8"	1 1/2"

POLYPROPYLENE FUNNELS

Outer ribbing eliminates air lock. Custom colors available on special order.







Specifications	2 oz	4 oz	8 oz
Top ID	2 3/8"	3 1/8"	3 3/4"
Spout ID	1/4"	1/4"	5/16"
OA Height	2 5/8"	3"	4 3/4"
Spout Length	3/4"	1"	1 7/8"

Color	2 oz	4 oz	8 oz
Black	#32020	#32040	#32078
Clear	#32021	Special Order	Special Order
Green	#32023	#32041	#32080
White	#32022	#32042	#32085

4 PACK POLYETHYLENE ECONOMY FUNNEL SET



	Specifications						
Capacity	3/4 oz.	2 oz.	6 oz.	10 oz.			
Color	Orange	Orange	Orange	Orange			
Top ID	1 3/4"	2 5/8"	3 1/2"	4 1/4"			
Spout ID	7/32"	1/4"	5/16"	3/8"			
Height	3 1/4"	4"	5 1/4"	5 1/2"			
Spout Length	1 3/4"	2″	2 1/2"	2 3/4"			

2 1/2-QUART LOW RISE FUNNEL

• Polystyrene, FDA approved.

• Top ID: 9 1/2 inches.

• Overall Height: 5 inches.

#32800-7 - Spout OD: 2 1/4 inches

#32810-7 - Spout OD: 1 1/2 inches

TOOL BOX 9-COMPARTMENT DRAWER ORGANIZER TRAYS

- Heavy-duty polypropylene.
- Great for holding: pencils, rulers, gauges, wrenches, drill bits, batteries, nuts and bolts, fuses and other items for easy organization!
- 10 ¾" L x 7 ½" W x 1 ¼" D
- Sold in pairs.



- Great extra storage for your favorite catalog.

TOOL BOX POCKET ORGANIZER

- Easy access for commonly used tools.
- Attaches to side or back of tool cart.
- 12" L x 3 5/8" W x 8" D

#45248



TOOL TRAY

Made of tough chemically resistant polymers. 14" L x 9" W x 1" D

#40107



3-COMPARTMENT TRAY

4 3/4" L x 8 1/4" W x 1" D

#45414



5-COMPARTMENT TRAY

7" L x 9 1/2" W x 1" D

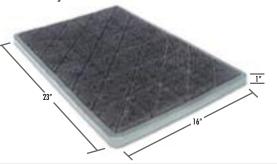
#45606



KNEELING PAD/ANTI-FATIGUE MAT/PRECISION TOOL CUSHION

- 6,000 + soft, supportive fingers 1/2 inch deep.
- Manufactured of thermoplastic elastomer (TPE).
- Slip-resistant and easy to clean.
- Remains flexible in cold temperatures.
- Holds and protects tools, gauges, parts, etc.
- Provides years of dependable service.

#40102



Also ideal for...

- Ergonomic anti-fatique mat.
- Clean room mat.
- Scraping entrance mat.
- Precision measuring and cutting tools and machine parts cushion.



MULTI-USE MAT BOOT TRAY

- Heavy-duty polypropylene.
- Unlimited use in the home, RV, garage, car, trunk, boat.
- Protects marine craft and trunks against gas/oil can spills.
- 25" L x 15" W x 3/4" D

#40098



BOOT TRAY

- Durable polypropylene.
- Economical.
- 23" L x 15" W x 1/2" D

#40100



DRIP TRAY

- Made of durable polypropylene.
- Resistant to chemicals.
- Excellent for containing spills and drips from machinery, vehicles and drums.
- 22" W x 22" L x 11/2" D

#40092



CHRISTMAS TREE & PLANTER TRAY

- Made of durable polypropylene.
- Stabilizes tree on carpet.
- Decorative primary green color.
- Protects floors from spills and scratches.
- 22" W x 22" L x 11/2" D



Fax: 952-941-0659

MR. MIXER

The 30-second solution for small batch concrete projects!

- Use with 5 gallon bucket, 3/8 inch electric drill.
- Add concrete and water.
- Mix for 30 seconds.
- Recommended batch size, 1/2 bucket or 40 lbs.

#10175





EXTRA HEAVY-DUTY **POLYPROPYLENE SHOVELS**

Push Blade:

- Non-sparking wood handle with "D" grip.
- Curved blade: 20" W x 12" H
- Overall Length: 54 inches

#12105

Flat Blade:

• Non-sparking wood handle with "D" grip.

- Blade: 17" W x 14" H
- Overall Length: 51 inches

#12110

D-GRIPS

Private label inserts available!

#12121 $- 1^{1/8}$ inches inside diameter

#12123 - 1 inches inside diameter

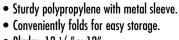
#12125 - 11/4 inches inside diameter



#12110

NON-SPARKING FOLDING SHOVEL

Perfect for spill kits. A must for the trunk of every vehicle!



• Blade: 12 1/2" x 12"

• Overall Length: 42 inches, folds to 21 1/2 inches.

#12150



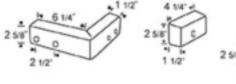
#12105

"BUMPIT BUMPERS"

Hollow-Back Thermoplastic Rubber Bumpers



- Prevent damage to docks, industrial equipment, vehicles.
- Impervious to extreme weather, fresh/salt water. atmospheric deterioration.
- 1/4 inch mounting hole accepts 5/16 inch carriage bolt.
- Counterbore Hole Diameter: 3/4 inch.
- Temperature Range: -20° to +200° Fahrenheit.
- Manufactured of resilient, high quality thermoplastic rubber. More flexible than solid rubber.



2 112			1 1/2"
Specifications	Black	White	
Straight: 41/4" x 25/8" x 11/2"	_	#77776	
Straight: 121/4" x 25/8" x 11/2"	#77787	#77777	#77770
Corner: 15" x 2 ⁵ /8" x 1 ¹ /2"	#77788	#77797	Red reflector hole inserts.

KANGAROO™ TUFFSACK

Strong tear-resistant, UV vinyl treated bag with zipper closure holds up to 50 lbs. Slits cut on each end for easy carrying. Full width opening allows easy filling and emptying.

30" x 16"

It's splash resistant!

#50500



ISHY FISHY® SOAP DOPE CLEANSER

- All-purpose biodegradable cleaning agent.
- Excellent for fiberglass and stainless steel.
- Cleans everything from "hands to hulls"!
- Environmentally safe.
- Formulated with pumice.

#16010 - 407.

A satisfied customer writes...

"We have a fishing boat that we clean with your product because it takes out the fuel and fish odors..."



SAFETY SHIELD WITH FLEX ARM

- Manufactured of 1/8" thick polycarbonate.
- Optically clear and resists grease and oil.
- Curved safety edges direct debris away from operator.
- Shield 12" x 11", flex arm 18 inches.





#10135 Safety shield with clamp mount base

#10137

Replacement safety shield

THIRD HAND

Our "Third Hand" products provide an extra hand when and where it is needed, and allows easy positioning of blueprints, instructions, work lights, parts for assembly or welding and more.

- Flexible 18 inch nickel plated arm, that stays in place when you bend it.
- Rubber tipped steel clamps open to 2 inches.



THIRD HAND

- Flexible 18 inch nickel plated arm, that stays in place when you bend it.
- Powerful magnetic base for secure mounting (magnet diameter: 33/8 inches).
- Rubber tipped steel clamp opens to 2 inches.

#10105



CABLE TIE ANCHOR

Fits 1/4 inch hole. Accepts all standard cable ties. Just thread cable tie through slotted head.

#75102 - 50 Pack

#75102-7 - Bulk



EMERGENCY RADIATOR/HEATER HOSE REPAIR KIT

- Installs in seconds.
- Splice and mend small hoses from 1/2" to 3/4".
- Splice and mend large hoses from 1 1/4" to 2"
- Contains 2 hose connectors, tape. razor, 6-qt. water bag.





LINKED V-BELT

- Auto, marine and truck.
- Replaces broken fan, alternator and power steering belts.
- No tools or cutting required.
- 5 feet of adjustable 7/16 inch links.
- Belt is open ended to avoid obstacles.
- Snap apart the links.
- Reusable.

#10012





INDUSTRIAL LINKED V-BELT REPAIR KITS

For A/4L or B/5L Sheave Drives. Avoid Expensive Shutdowns!

- For machine shop equipment.
- No tools or cutting required.
- 5 feet of adjustable links.
- Belt is open ended to avoid obstacles.
- Durable polyurethane.
- Resists heat, cold, oil, water, chemicals.
- Belt transmits same horsepower.

#10013 $-\frac{5}{8}$ " inch links for B/5L drives



#10015 $- \frac{1}{2}$ " inch links for A/4L drives

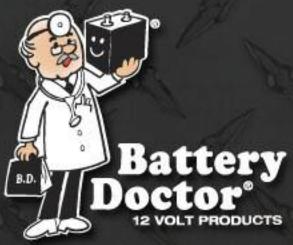


BLIZZARD BUCKET

- Winter survival kit.
- Conveniently stores in the trunk of any vehicle.
- Contains: Candle, matches, "Call Police" sign, energy bars (2), space blanket, aspirin, bandages, cup, tissue, zip lock bag.

Customizing available.







INDUSTRY ASSOCIATIONS









WirthCo Engineering, Inc.

"Understanding and Fulfilling Customer Needs" ...since 1980

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