# **Pollak<sup>®</sup>**

A Stoneridge Company

engineered solutions to design challenges





# Pollak®



Since 1909, Pollak® has provided the transportation industry with innovative designs, reliable manufacturing, high quality standards, competitive pricing and low life cycle costs. More than 1000 employees located in three manufacturing locations totaling approximately 250,000 square feet of design, test and production space are now providing custom and standard components to OEM's and aftermarket suppliers in automotive, light, medium and heavy duty truck, agricultural, construction equipment, marine and related industries. Pollak® excels in its ability to design and manufacture from the concept stage through manual, semi-automatic and fully automated, high volume production. Pollak® is a certified ISO9001/QS9000 manufacturer and has also earned Q1 preferred status at Ford, General Motors' Mark of Excellence, Chrysler's Gold Pentastar, Navistar V and similar rankings with PACCAR, Freightliner, John Deere, Case, Caterpillar, Borg-Warner and other respected OEM's.



Pollak's **Control Devices Division** located in Canton, MA is a leading supplier of electrical connectors, switches, and sensors. This division

develops, manufactures and supplies a wide variety of electromechanical products including toggle, rocker, door, pedal and ignition switches, back-up alarms, circuit breakers and related items.



Control Devices Division 300 Dan Road, Canton, MA 02021 Tel. 781-830-0340 ◆ Fax: 781-830-9570

Pollak's **Electronics Division** located in El Paso, TX and Juarez, Mexico is the <u>largest independent</u> producer of electronic displays for the North

American Trucking industry. This division designs and manufactures electronic modules, power converters and instrument clusters for transportation related industries.



**Electronic Products Division** 11801 Miriam Drive, Suite B1, El Paso, TX 79936 Tel: 915-592-5700 ◆ Fax: 915-593-7379



For senior design engineers at major OEM's, the operator of a heavy duty truck or the weekend camper, the name Pollak® has always symbolized technology and quality.

As a Stoneridge Company, Pollak continues the tradition today.

# **ELECTRICAL CONTROLS**





SPD – Canton, MA EPD – El Paso/Juarez Alphabet – Warren, OH Hi-Stat – Lexington, OH

North American Sales Offices – Novi, MI

#### **Our Global Network**

DAV – France Positron – Brazil Berifors – Sweden Connecto AB – Poland

Sales & Engineering Offices –

- Frankfurt, Stuttgart, Munich Germany
- ◆ London, Mitcheldean, UK (Sales Office)
- Säo Paulo, Brazil

# **ALPHABETICAL INDEX**

#### (See Numerical Index, pages 66-67)

Adapters	14,16-17	Ignition Starter & Lock Switches	29-34
Adaptor Housing, Connector	9	Ignition Starter & Lock Switches (Marine)	33
Alarms, Back-up	55-58	Inserts, Plugs	6
Anti-Restart Ignition Switches	29-33	Inserts, Sockets	7-8
Axle Switches	24,39	Master Disconnect Switches	35,36
Back-up Alarms and Switches	55-58	Merchandisers	59-64
Back-up Lamp Switches (Ball Operated)	27-28	Molded Connectors	13
Battery Disconnect Switches	35-36	Momentary Start Switches	25,26
Battery Jumper Terminals	12, 49	Momentary Start Switches (Marine)	26
Boot Nut, Starter Switch	26	Panel Indicator Light (Pilot Light)	49
Brackets, Connector	8,10,12,14,15	Plug Interiors, Connector	6
Buzzer	49	Plunger Switches	26,39
Circuit Breakers	40-46	Push/Pull Switches (Marine)	24
Circuit Breakers Brackets	45	Push/Pull Switches	24
Circuit Breakers Sockets	9	Rocker Switches	21,22
Circuit Breakers Junction Box	48	Rocker Switches Accessories	22
Connector Hardware Kits	7,10	RV Connectors	10-15
Connectors, Molded	13	Sealed Beam Connectors	49
Connectors, Trailer	5-13	Starter Solenoid Switches	38
Dimmer Switches	38	Stop Light Switches	39
Displays (Merchandising)	59-64	Terminal Blocks	48
Door Switches	39	Toggle Accessories	21,22
Electronic Dimmer Switches	37	Toggle Switches	19-22
Fuel Tank Selector Valves	51-54	Trailer Connectors	6-15
Fuse Blocks	48	Transmission Mounted Switches	27,28
Fuse Holders	48	Universal Connector Brackets	8,10,14,15
Fuse Panels	48	Valves, Electrical Fuel Tank Selector	52-54
Harness, Trailer Wiring	14,16	Value Line Connectors and Adapters	64
Horn Buttons	49	Wiring Color Codes	65

#### WARRANTY

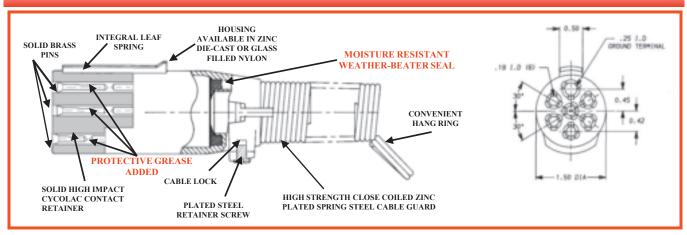
Our products are warranted to be free of manufacturing defects for one (1) year after date of manufacture. Buyer's exclusive remedy and seller's sole liability hereunder shall be limited to refund of the purchase price or replacement of product shown to be other than as warranted. Conditions resulting from misuse, negligence, accident or improper installation, maintenance or application shall absolve seller of all liability. The foregoing constitutes the sole warranty of Pollak® with respect to its products and is in lieu of all other warranties, expressed or implied, including any implied warranty of merchantability or fitness for a particular purpose. In no event shall Pollak® be liable of consequential or special damages.

The product information published in this catalog is subject to change without notice. Changes to materials, finishes, technical specifications and other product characteristics may be necessary at our discretion. It is the buyer's responsibility to determine the suitability of the Pollak® device for its application. Pollak® makes no warranties, and assumes no liability as to the suitability or sufficiency for buyer's application of the device.

# CONNECTORS & ADAPTERS



# 7-POLE PLUGS



#### ZINC GLASS **DIE-CAST** FILLED NYLON 11-910 11-902 Weather-Weather-Beater Beater Plug Plug with Cable with Cable Guard Guard 11-702 11-710 Standard 7-Pole Standard 7-Pole Plug with Cable Plug with Cable Guard Guard 11-900 Weather-Beater Plug 11-700 Standard 7-11-704 Pole Plug Standard 7-Pole Plug 11-904 Weather-Beater

# Insertion and Pull-Out Requirements

- Meets and exceeds all standards of **SAE J560**.
- Floating pins for ease of alignment and maximum contact.
- Will accept the widest range of wire gauges, from #16 wires to #8 ground wire.
- Tapered design fits comfortably and conveniently for easy hand-position pull.
   Jumbo finger pull grips and two hang-up holes.
- High-impact cycolac interior with extended lip for easy removal and replacement.
- Solid brass terminal screws.
- 40 amps continuous duty @ 6-28 VDC.
- WeatherBeater seal accommodates .450 minimum wire diameter.

NOTE: Pollak's® Terminal Pins are machined from solid brass bar stock unlike some competitors that provide unplated terminal pins stamped from sheet metal. Brass terminals ensure minimum voltage drop and dielectric grease protects against corrosion and resistance.

NOTE: Pollak's ® 7-Pole connectors are manufactured from quality materials and will help reduce maintenance cost and down-time associated with electrical failures.

#### **ACCESSORIES**

Plug

#### 11-762 Rubber Boot Seals against dust and moisture, 2.5" long. For .460-.720 dia. cable, fits 11-852, 11-700, 11-900,11-704, 11-904.

11-763 Cable Guard Plated steel, 3.56" long, fits 11-700, 11-704, 11-900, 11-904, and 11-852



11-764
Plug interior for
11-700,11-702,11-704,
11-710,11-900,11-902,
11-904,11-910.
Supplied with mounting screw.



# **7-POLE SOCKETS**

- Meets and exceeds all standards of SAEJ560 (SAE applies only to solid pins)
- Floating pins for ease of alignment and maximum contact.
- Optimum slant mount and drain slot rid
- Optimum stain mount and artain stot ria
   Will accept the widest range of gauges from #16 wires to #8 ground wire. Ground Terminal Pin #1 will accept #14 gauge min. to #8 gauge max. Other terminals will accept #16 gauge min. to #10 gauge max.
- 40 Amps continuous duty @, 6-28 VDC.
- Self grounded. (Zinc Die-Cast Units Only) to #1 Ground Terminal.
- Stainless steel spring.
- Recommended Mounting Hole is 2" diameter
- Interchangeable with competitive makes.

No.	Color	Wire Gauge	FMVSS- 121 Anti- Lock Gauge	Circuit	
1	White	10	8	Ground Return	
2	Black	12	12	Clearance, Side Marker and Identification Lamps	
3	Yellow	12	12	Left Turn & Hazard Signal	
4	Red	12	10	Stop Lamps & Anti-Lock Devices	
5	Green	12	12	Right Turn Signal & Hazard Signal	
6	Brown	12	12	Tail, Rear Clearance Marker, License Plate Lamp	
7	Blue	12	12	Auxiliary Circuit / ABS Power	

#### WIRE INSERTION STYLE SOCKETS





11-729 Solid Pin 3 hole mount

> 11-730 Split Pin 3 hole mount

POLLA/GLASS **GLASS FILLED NYLON** 

> 11-724 Nylon socket Split Pin

11-723 Nylon socket Solid Pin



#### **ACCESSORIES**

11-761 7 Pole Socket Rubber Socket Boot for 11-720,11-721, 11-723, 11-724, 11-729,11-730 and 11-852; seals against dust and moisture, 1.5" long. For .460-.720 diameter cable.



11 - 780Neoprene rubber gasket for 3 hole mount die-cast sockets. May be used as template 11-773 Same as 11-780 except for 2 hole

mount sockets.



11-771 7-Pole Socket bracket. Fits all 7-Pole Sockets including 11-851.



(except RV) 11-779

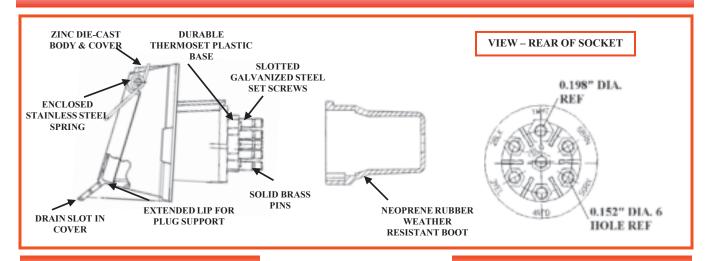
11-777 Hardware Kit

11-781 Hardware Kit for 7-Pole Zinc Die-Cast Socket Hardware Kit for 7-Pole Molded

Polla/Glass Sockets

for 7-Pole Plugs

# **7-POLE SOCKETS**



#### RING TERMINATION STYLE SOCKETS

#### 11-785

Same as 11-720 except with rear threaded terminals for ring terminals. Solid Pins.

<u>Note:</u> For some applications ring terminals provide a better mechanical connection than set screws when properly installed.

#### BULLET TERMINATION STYLE SOCKETS

#### 11-786

Bullet-Style solid brass terminals for push-on terminals. Will accept straight or "right angle" terminals. Extended hinge pin and external spring for increased closure force.

#### 11-797

Same as 11-786 except without extended hinge pin and external spring. Solid Pins

11-833 (Not Shown) Same as 11-797 except with glass filled nylon shell and lid



#### **ISO TYPE CONNECTORS**

12-812 ISO 7-Way Connector Socket





12-811 ISO 7-Way Plug with cable guard

# 7-POLE SOCKETS

#### WITH REPLACEABLE CIRCUIT BREAKERS



Base plate and back plate made from rugged glass filled nylon to resist breaking. Bottom lip has been extended to allow for better plug and cable support. Drain hole has been incorporated into the housing to allow accumulated moisture to escape. Will accept the widest range of wire gauges from #14 wire to #8 ground wire. Will accept all plugs conforming to **SAE J560** specifications. Ground may be tied to any screw mounting the rear terminal plate. Designed to provide easy serviceability of circuit breakers. Recommended that positive feed be attached to auxiliary post on circuit breaker.

#### WIRE INSERTION STYLE

**11-732** Solid Pin

**11-733** Split Pin



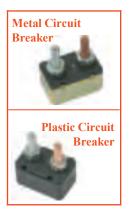
adapted to circuit breaker mounting plate without breakers. For use as a replacement of

Standard socket

original equipment when circuit breaker protection is not required.

#### RING TERMINATION STYLE

(Not shown) 11-796 Split Pin



Glass filled nylon nose box offers more durability and weight saving features. Replaces old style heavy weight metal boxes which can cause short circuits.

Amperage	Pin Type	Part No.	Replacement Circuit Breaker Metal Housing	Replacement Circuit Breaker Plastic Housing
15	Split	11-735	54-115	*
20	Solid	11-736	54-120	54-120PL
20	Split	11-737	54-120	54-120PL
30	Split	11-739	54-130	54-130PL

#### **COMPONENT PARTS**

Part No.	Description
11-801	Adapter Housing Gasket
11-802	Adapter Housing (Includes Grommet and Screws)

11-801

Adapter Housing Mounting Gasket provides weather resistant protection against rain and snow.

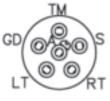


11-802 Adapter Housing



# **6-POLE CONNECTORS**

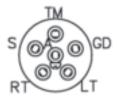
#### 6-POLE SOCKET



(Auxiliary in center)

Number	Color	Circuits	
GD	White	Ground Return	
TM	Brown	Tail Lights	
LT	Yellow	Left Turn	
S	Red	Stop and/or Electric Brake	
RT	Green	Right Turn	
A	Blue	Auxiliary Circuit (Center)	

#### 6-POLE **PLUG**



(Auxiliary in center)

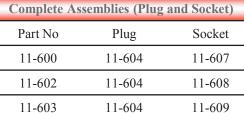
11-604 Plug, no cableguard

11-605 Plug with





cableguard



11-603 Assembly incorporates concealed terminals on socket side for exterior mounting. Recommended for RV and flat bed trailer use.



11-607 Socket, exposed terminals



12-720 6-Pole all Plastic Socket with rubber boot



Three socket versions to choose from: Exposed terminals, Rubber boot coverage, or Die-Cast shell coverage. High impact plug interiors keyed for proper assembly. Machined brass terminal pins for best conductivity, terminals accept up to #12 gauge wires. Plug available with or without cable guard. Replaceable plug interior helps reduce maintenance costs. Plated steel cable guard prevents cable chafing. Two 1/4" diameter mounting holes on 6-Pole sockets. 2-7/8" diameter on center. Mounts through 1-3/8" diameter hole.

Note: Pollak's ® 4-pole and 6-pole interiors are secured with a key and keyway to eliminate twisting (disorientation) and breakage with make and break forces that apply in normal function.



#### **ACCESSORIES**

#### 11-627

Connector Bracket Designed to fit under the trailer tongue, ball, or 2-hole frame mounting. Heavy gauge with black zinc coating for protection against rust and corrosion. Fits connectors 11-400, 11-408, 11-500, 11-600, 11-603, and 11-614.

Same at 11-627 except without black zinc coating for protection against rust and corrosion



#### 11-606 Plug interior



Rubber Boot for 11-607 and 11-614 Sockets



Hardware kit for 6 pole plugs

# **4 & 5-POLE CONNECTORS**

#### 4-POLE SOCKET



#### **4-POLE PLUG**

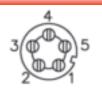


4-POLE POS	5-POLE POS	Color	Circuits
W	1	White	Ground Return
G	5	Green	Right Turn & Brake Lights
Y/R	3	Yellow or	Left Turn &
	4	Red	Brake Lights
В	2	Brown	Tail Lights

#### 5-POLE SOCKET



#### 5-POLE PLUG



#### 4-POLE CONNECTORS - 12-24 Volts, 35 Amp.

- Zinc Die-Cast 4-pole unit incorporates many new and improved features.
- Extended exterior and socket conceals terminals.
- Unique cable clamp prevents chafing, gives more cable support, and saves installation time.
- Integral finger grips for positive pull, difficult to shakes loose.
- Stainless steel spring.
- Dust and water resistant.
- Polarized for proper wiring
- Terminals accept up to #12 gauge wire.
- Two 1/4" diameter mounting holes on 4-pole sockets. 2-7/8" on center. Mounts through 1-3/8" diameter hole

#### Interchangeable with competitive brands.

#### 11-402

Plug, no cable guard



11-404 Connector socket

#### 11-403





Consist of 11-402 Plug and 11-404 Socket.

#### 4-POLE CONNECTORS - Chrome Plated, 12-24 Volts, 20 Amp

- Polarized design.
- Chrome Plated Die-Cast Zinc. with high impact insulators and split brass contacts.



11-410 Connector socket



11-408

Consists of 11-409 Plug and 11-410 Socket

#### 5-POLE CONNECTORS – 12-24 Volts, 15 Amps

- Polarized design.
- Chrome plated zinc housing with spring loaded cover.
- Durable interiors.
- Split brass contact for maximum current carrying capacity.
- Mounting holes 1 3/4" diameter on centers.

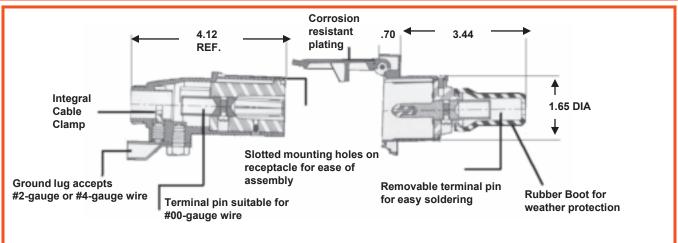


11-502 Connector socket



11-500 Consist of 11-501 Plug and 11-502 Socket

# SINGLE POLE CONNNECTORS



This rugged Single-pole
Connector has a continuous
duty capacity of 300 amps,
and is ideal for many power
applications on trucks,
agricultural equipment,
utility vehicles, winches, light
air-craft ground equipment,
etc. The connector is
interchangeable with
competitive brands.

Provides power for auxiliary equipment from battery.





#### TWO POLE CONNECTORS

#### 12-801

2 Pole Socket, 200 Amp service. One pole positive, one pole negative. Terminals accept 4 gauge cable.



#### 12-800

2 Pole Plug with cable guard. 200 Amp Service. One pole positive, one pole negative. Terminals accept 4 gauge cable.

# **CONNECTOR ASSEMBLIES**

12-24 Volts 20 Amp. Polarized design with high impact interior and split brass contacts for a perfect fit to ensure maximum current carrying capacity. Outer sleeves are unaffected by ozone or weather.



11-405 4-Pole Complete Assembly 12-24 Volts, 20 Amp



11-200 2-Pole Complete Assembly 12-24 Volts, 20 Amp

#### AUTOMOTIVE, MARINE, RECREATIONAL VEHICLES, TRUCKS

12 Volts, 15 Amps. Molded Inline connectors (Flat Type) are an economical means of connecting electrical systems. Wires are color coded for easy installation. Standard 18 gauge automotive wire, 12 " wire length, except where noted. Polarized design to insure proper connection. Molded case offers all-round weather protection.



2-Pole Complete Assembly, 18 gauge wire.

# FLAT TYPE

4-Pole Complete Assembly, 18 gauge wire.



4-Pole Complete Assembly with 48" wire leads of female (car) side. 12" leads on male (trailer) side



#### **SQUARE TYPE**



6-Pole Complete Assembly with 48" wire leads on female (car) side. 12" leads on male (trailer) side.



12-600

3 Way Male to Female 12" Loop



**12-400:** 4 Way Boot Cap

**12-401:** 4 Way Flat Female 12" **12-425:** 4 Way Flat Female 48"



**12-500: 5** Way Flat Female 60"



12-501: 5 Way Flat Male 60"



12-421: 4 Way Flat 12" Loop 12-412: 4 Way Flat 24" Loop 12-422: 4 Way Flat 36" Loop

**12-423:** 4 Way Flat 48" Loop **12-413:** 4 Way Flat 60" Loop

**12-414:** same as 12-413 with boot covers (all parts above are 4 Way Male to Female)



**12-418:** 4 Way Flat Male 12" 12-424: 4 Way Flat Male 48"

**12-419:** 4 Way Flat Male 12" Wishbone

12-405: 4 Way Flat Male 24" Wishbone **12-415:** 4 Way Flat Male 36" Wishbone

**12-417:** 4 Way Flat Male 48" Wishbone

12-402: 4 Way Flat Female 48" Wishbone

# 7-Pole RV Style Socket



11-893 - RV Socket 12V, 30 Amps



12-711U Mounting Bracket



11-998
Interlocking mating connector to the 11-893
Socket and 4' Harness

- Pollak's® sealed RV socket is designed to be dependable in one of the harshest mounting environments for an electrical device - an exposed external mounting under the rear bumper of a sport utility or pickup truck. This connector design continues to earn the distinction of becoming the industry standard.
- Manufactured from high-impact nylon that solves corrosion problems and eliminates rusting when mated with special interlocking sealed connector.
- Socket lid features stainless spring and runner gasket to guarantee against
  moisture intrusion when closed. Socket lid also designed with slot to
  prevent sand and dirt from impairing closure and lid has wiring diagram
  on cover to facilitate installation.
- Socket lid also has a drain slot and is angled down for drainage.
- Terminal pins are tin plated copper alloy providing higher conductivity and less resistance and are sealed at the back of socket with silicone sealant to prevent moisture from making contact with mating connector.
- Fits Ford style and new universal Pollak® 12-711U mounting bracket for other OEM applications. *NEW* Includes mounting hardware.

#### **SOCKET KITS**



#### 7-Pole RV Style Socket

#### 11-898P

Includes 11-893 Socket, 12-711U Bracket, Interlocking Connector and 4' Harness assembly with 0.5" convoluted tubing, and 7-wire leads color coded to RVI Standard (SHOWN)

#### 11-990P

Includes 11-893 Socket and 12-711U Bracket

**NEW** – Includes mounting hardware.



11-916 New 'twist and lock' socket, suitable as a

replacement for Pollak OEM sockets.

#### **ADAPTERS**

#### 11-933

Rectangular-To-Round Harness Adapter.

- Fits OEM Harnesses.
- Mates with Pollak<sup>®</sup> Socket 11-893 and 11-932P



11-893 Socket



**11-938 Kit** 11-893 Socket & 11-932 T-Connector

#### 11-932

T-Connector

- Adaptor for 5<sup>th</sup> Wheel & Bumper Mount Socket
- Quickly & Easily Installs a Second RV Socket
- Plug and Play without Splicing into OEM Harness
- Fits GM and Ford Trucks and SUV's
- Fits Chrysler Trucks when used with 11-933 Adapter
- Mates with Pollak<sup>®</sup> Socket 11-893



#### **7-POLE CONNECTOR**

#### 12-705 Series (7-Pole Set) Black Pollak® Plastic

12-705	Complete Set (12-707 and 12-706)
12-706	Trailer-End Only Plug
12-707	Car-End Only Socket
12-709	12-705 Plug & Socket with 12-711U Bracket
12-712	12-707 with a 12-711U Bracket

Plastic connector set eliminates rusting, poor appearance and difficulty in plug removal. Design offers dual grips for ease of plug removal from socket and incorporates vinyl inserts to keep out dirt and moisture. Interior design prevents internal short-circuiting, and the safety latch prevents damage from accidental pull-away. Color coded to RVI 12-702

#### 12-700 Series (7-Pole Set) Metal

12-700 80	eries (7-Pole Set) Metal	_Trailer End
12-700	12-703 Socket & 12-702 Plug	4000
12-702	Trailer-End Only Plug	
12-703	Car-End Only Socket	1
12-704	12-700 Plug & Socket with 12-701U Bracket	.00
12-710	12-703 with a 12-701U Bracket	

Traditional metal connectors. Heavily plated for maximum weather and corrosion resistance. Stainless steel cover spring. Jumbo welded pistol grip. Unique safety latch prevents damage from accidental pull-away. Specially designed vinyl inserts keep out dirt and moisture. Color coded to RVI standards.



Car End

	RECOMMENDED WIRE GAUGE					
	No.	Color	Gauge	Description		
	1	White	10	Ground Return		
	2	Blue	12	Electric Brake		
	3	Green	Tail, License and Runnin Lights			
	4	Black	Black 10 Battery Charge			
	5	Red	14	Stop & Left Hand Turn Signal		
1	6	Brown 14 Stop & Right Hand Turr Signal		Stop & Right Hand Turn Signal		
	7	Yellow	14	Auxiliary Circuit		

#### UNIQUE INTERIOR DESIGN **ELIMINATES SHORTING OUT-**

Non-corroding, shock-resistant interiors with unique terminal reinforcer dams that eliminate short circuiting by preventing contact from spreading. Center pin will take up to

8-gauge wire for battery charge system.

#### 9-POLE CONNECTOR

12 - 703

Car End

- Staking methods proven in long term usage. No possibility of molding compound contaminating contacts to cause "dead spots".
- Unique method of machining from solid bar (not stamping) and spring loading contacts give long trouble-free service. Over 1.5 million trucks utilize this type of heavy duty connector contacts.
- "Floating Pins" originating with POLLAK® and a standard for the trucking industry are self-aligning offering continuous wiping action and the most positive contact.
- Terminals designed for 2-8 gauge, 2-12 gauge and 5-14 gauge to new industry standard for minimum voltage drop.
- Contacts on BOTH trailer and car side spring loaded. Completely FIELD serviceable.

	RECOMMENDED WIRE GAUGE				
No.	Color	Gauge	Description		
1	White	8	Ground Return		
2	Blue	12	Electric Brake		
3	Green	Tail, License and Running Lights			
4	Black	8	Battery Charge		
5	Red	14	Stop & Left Hand Turn Signal		
6	Brown	14	Stop & Right Hand Turn Signal		
7	Yellow	14	Back-Up, Auxiliary Ground or Circuit		
8	Gray	12	Auxiliary Circuit		
9	Orange	14	Reefer (Tag) or Stop		





Car End

12-905 Series (9-Pole Set)

12-905	Complete for towing vehicle and trailer side
12-906	Trailer Side
12-907	Towing vehicle side
12-701U	Bracket for towing vehicle

#### MOUNTING BRACKETS

Right Angle Mounting Brackets for: 11-893. 12-703, 12-707, 12-907 NEW – Includes mounting hardware.



12-711U Black Epoxy Coated for protection against rust and corrosion 12-701U Constructed of Heavy Gauge Steel. Same as 12-711U but without black epoxy finish.

# **Trailer Tow Accessories**

#### TRAILER WIRING TIPS

Avoid splices wherever possible \* Establish a solid electrical ground \* Maintain clean and weatherproof wire connections \* Make sure that the various wires and harnesses are free of stress and are not dragging or likely to be snagged \*

#### 12-717 Connector Adaptor (6-Pole to 4-Pole)

- Converts 6-Pole Round Connector to a 4-Pole molded connector.
- Quick and easy to connect.
- Non-corrosive nylon shell and insert.
- Eliminates makeshift jumpers.



#### 12-716 Connector Adaptor (7-Pole to 4-Pole)

- Converts 7-Pole Blade Connector to a 4-Pole molded connector.
- Allows one vehicle to tow either campers or boat trailers without electrical brakes.
- Connects ground, L.T., R.T., and Stop Circuits.
- Tethered cap for protection from sand, dirt or moisture intrusion.
- Non-corrosive nylon shell and insert.
- · Eliminates makeshift jumpers.

#### 12-744 Connector Adaptor (7-Pole to 5-Pole; not shown)

#### 12-718 Connector Flex Adaptor (7-Pole to 5-Pole)

- Converts 7-Pole Blade Connector to a 5-Pole molded connector.
- Allows one vehicle to tow either campers or boat trailers with electrical brakes.
- Quick and easy to connect.
- Full-length plug shell insures positive latching.
- Non-corrosive nylon shell and insert.

#### 12-743 Connector Flex Adaptor (7-Pole to 4-Pole; not shown)

# vn)



#### 12-719 & 12-729 Connector Adaptor (7-Pole to 6-Pole)

- Converts 7-Pole Blade Connector to a 6-Pole Round Connector Plug.
- Allows one vehicle to tow either campers or Utility trailers.
- Quick and easy to connect.
- Non-corrosive nylon shell and insert.
- 12-719 Adapter had brake pin in center of 6-Pole (Shown)
- 12-729 Adapter has auxiliary pin in center of 6-Pole

# The second



#### 11-932 T-Connector

- Adaptor for 5th Wheel & Bumper Mount Socket
- Quickly & Easily Installs a Second RV Socket
- Plug and Play without Splicing into OEM Harness
- Fits GM and Ford Trucks and SUV's
- Fits Chrysler Truck when used with 11-933 Adapter
- Mates with Pollak Socket 11-893

#### 11-933 Rectangular-To-Round Harness Adapter

- Fits OEM Harnesses.
- Mates with Pollak® Socket 11-893 and 11-932



#### 12 Volt Adapter

# 12 Volt Power When You Need It "The Tailgater's Best Friend"

# Cable Assembly (Repairable)

# 14-117 Pollak® Plastic Trailer End 12-706 with 8 ft. of Cable.

**14-116:** same as 14-117 but with 3 ft. of Cable



#### 11-896

Power Adapter plugs into any 7-Pole Blade Connector to provide 12 volts of power



# **Trailer Tow Accessories**



7 Way Pin Plug to **12-724** 7 Way RV Type Socket

# **Adapters**



4 Way Flat Flex Adapter



6 Way Round Plug to 12-725 7 Way RV Type Socket



4 Way Flat Plug to **12-610** 6 Way Round Metal Socket



6 Way Round Male to 4 Way Flat Female Flex Adapter





4 Way Flat Plug to 7 Way Round Metal Socket



6 Way Round Plug to 5 Way Flat Adapter



12-742 7 Way Pin Plug to 4 Way Flat Adapter



12-727: Nylon 7 way RV plug to 7 Way HD Socket 12-728: Nylon 7 Way RV Plug to Zinc 7 Way HD Socket





#### **SWITCHES**

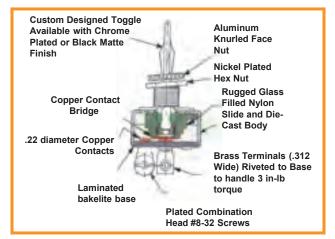
#### 50 AMPS 6-24 VOLT TOGGLE SWITCHES

Pollak® Toggle Switches designed for many high-current applications. Oversized internal copper contacts will carry up to 50 AMP current loads. Provides the longest possible service life. (Note: Quick-Connect Blade terminals will carry 30 AMPS.)

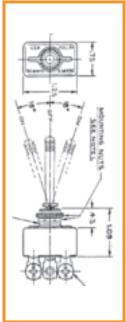
34-216 Standard Chrome Handle (Quick-Connect Terminals)



34-220 Long Chrome Handle #8-32 Screw Terminal



Part No.	Circuitry	No. of Terminals	Terminal Type	Handle Length	Handle Type	DC Volts	DC Amps		
	S.P.S.T (SINGLE POLE – SINGLE THROW)								
34-212	On-Off	2	Screw	Std. 1"	Chrome	12	50		
34-213	On-Off	2	Screw	Long 1.5"	Chrome	12	50		
34-216	On-Off	2	Blade	Std. 1"	Chrome	12	30		
34-219	On-Off	2	Screw	Std. 1"	Black	12	50		
34-226	On-Off	2	Blade	Std. 1"	Black	12	30		
		S.P.D.T (SINGL	E POLE – SINGL	E THROW)					
34-225	On-On	3	Screw	Std. 1"	Chrome	12	50		
34-218	On-Off-On	3	Screw	Std. 1"	Chrome	12	50		
34-222	On-Off-On	3	Screw	Std. 1"	Black	12	50		
34-215	Mom On-Off-Mom On	3	Screw	Std. 1"	Chrome	12	50		
34-223	Mom On-Off-Mom On	3	Screw	Std. 1"	Black	12	50		
34-220	Mom On-Off-Mom On	3	Screw	Long 1.5"	Chrome	12	50		



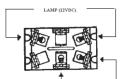
#### NYLON HANDLE DECORATOR STYLE 20 AMPS AT 12 VOLTS DC TOGGLE SWITCHES

Decorator style toggle switches designed with an O-Ring seal between toggle and bushing for splash proof reliability. Durable nylon housing, nylon face nut and brass terminals resist corrosion. Lighted versions have transparent Lexan handle. 20 AMPS @ 12 VDC.

34-586Q .250 Blade Terminals



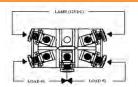
34-586Q

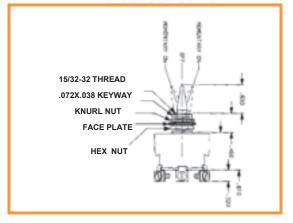


Part No.	Circuitry	No. of Terminals	Terminal Type	Handle Length	Handle Type				
	S.P.S.T ( SINGLE POLE – SINGLE THROW )								
34-581Q	On-Off	2	Blade	Std. 11/16"	Black				
34-586	On-Off	4	Screw	Std. 11/16"	Lighted				
34-586Q	On-Off	4	Blade	Std. 11/16"	Lighted				
	S.P.D.T ( S	INGLE POLE -	DOUBLE THR	ROW)					
34-588	On-Off-On	5	Screw	Std. 11/16"	Lighted				
34-588Q	On-Off-On	5	Blade	Std. 11/16"	Lighted				
Q = Quick Con	nect .250 Terminal	s							

(See page 23 for Circuit Diagrams)

34-588



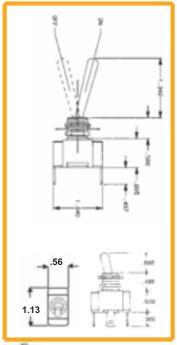


# **SWITCHES**

A complete selection of circuitry configurations for Truck, Off-Road, Automotive and Recreational Vehicle applications.

Provides durable and long lasting solutions to new and replacement requirements. 20 Amps @ 12 VDC.

Part No.	Circuitry	No. of Terminal Circuitry Terminals Type		Handle Length	Handle Type	Notes
			E POLE – SINGL	E THROW)		
33-302	On-Off	2	Screw	Std. 11/16"	Chrome	
34-571	On-Off	2	Screw	Std. 11/16"	Chrome	
34-571Q	On-Off	2	Blade	Std. 11/16"	Chrome	
34-571L	On-Off	2	Screw	Long 1.5"	Chrome	
34-571LQ	On-Off	2	Blade	Long 1.5"	Chrome	
34-579	On-Mom Off	2	Screw	Long 1.5"	Chrome	
34-579Q	On-Mom Off	2	Blade	Long 1.5"	Chrome	
34-570	Mom On-Off	2	Screw	Std. 11/16"	Chrome	
34-570Q	Mom On-Off	2	Blade	Std. 11/16"	Chrome	
	S.P.	D.T ( SINGLE	POLE – DOU	BLE THROW)		
34-572	On-On	3	Screws	Std. 11/16"	Chrome	
34-572Q	On-On	3	Blade	Std. 11/16"	Chrome	
34-573	On-Off-On	3	Screw	Std. 11/16"	Chrome	
34-573Q	On-Off-On	3	Blade	Std. 11/16"	Chrome	
34-575	Mom On-Off-Mom On	3	Screw	Std. 11/16"	Chrome	
34-575Q	Mom On-Off-Mom On	3	Blade	Std. 11/16"	Chrome	
34-653	Mom On-Off-Mom On	3	New	Std. 11/16"	Chrome	Coated 8" wire leads
34-596	On-Off-Mom On	3	Screw	Std. 11/16"	Chrome	
	D.P.	S.T. ( DOUBL	E POLE – SINO	GLE THROW)		
34-574	On-Off	4	Screw	Std. 11/16"	Chrome	
34-574Q	On-Off	4	Blade	Std. 11/16"	Chrome	
	D.P.I	D.T. ( DOUBL	E POLE – DOU	BLE THROW )		
34-576	On-On	6	Screw	Std. 11/16"	Chrome	
34-576Q	On-On	6	Blade	Std. 11/16"	Chrome	
34-577	On-Off-On	6	Screw	Std. 11/16"	Chrome	
34-577Q	On-Off-On	6	Blade	Std. 11/16"	Chrome	
34-577LQ	On-Off-On	6	Blade	Long 1.5"	Chrome	
34-578	Mom On-Off-On	6	Screw	Std. 11/16"	Chrome	
34-578Q	Mom On-Off-On	6	Blade	Std. 11/16"	Chrome	
34-580	Mom On-Off-Mom On	6	Screw	Std. 11/16"	Chrome	
34-580Q	Mom On-Off-Mom On	6	Blade	Std. 11/16"	Chrome	
34-580L	Mom On-Off-Mom On	6	Screw	Long 1.5"	Chrome	
34-580LQ	Mom On-Off-Mom On	6	Blade	Long 1.5"	Chrome	
34-591Q	Mom On-Off-Mom On	4	Blade	Std. 11/16"	Chrome	Reversing
34-591LQ	Mom On-Off-Mom On	4	Blade	Long 1.5"	Chrome	Reversing
34-592	On-On	6	Screw	Std. 11/16"	Chrome	Reversing
34-592Q	On-On	6	Blade	Std. 11/16"	Chrome	Reversing
34-593LQ	On-Off-On	6	Blade	Long 1.5"	Chrome	DHP Circuits Headlamp Switch





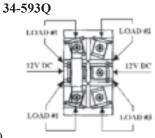
34-571L 34-592Q Long Handle Jumper Blade Screw Terminals Style

#### WIRING DIAGRAMS

34-591Q

(\*) VBC

(\*) POSet TOGGLE UP (\*)
(\*) POSet TOGGLE DOWN(\*)



ing

#### **ACCESSORIES**

The best combination of space-saving size and economy. Universal for Automotive, Light Truck, Off-Road and Recreational vehicles. Furnished with mounting hardware.



#### 33-300

2 Position Toggle Switch, On-Off 6 Volt-35 Amps 12 Volt-20 Amps Brass construction. Screw terminals. Toggle and Face Nut CHROME PLATED, Mounting Stem 3/8" Long, 7/16" diameter



Face Nut Indicator Plate, Back Nut and Terminal Screws

assembled.



#### 1/2 Toggle Boot

Same as Toggle Boot #25-370 except allows Toggle Handle (of any length) to protrude. Accommodates all toggle lever diameters from .155" - 240" including all Pollak toggles except nylon handle series.





34-504 Face Plate On-Off

See Page 23 For Wiring Diagrams, Terms and Tips.

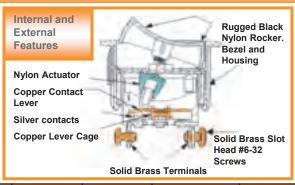
#### 25-370

Toggle Boot with 15/32-32 thread. Provides protection against salt spray and is resistant to weather and ozone. Can be used on toggle switches with 15/32" diameter mounting stem.

#### **UNIVERSAL DESIGN ROCKER SWITCHES - 20 AMPS AT 12 VDC**

12V

Universal Design for Automotive, Truck, Bus, Marine & Recreational Vehicles. Snap-in mounting fits .830 x 1.450 panel cutout in .093, .125, .187 thick panels. Brass screw or .250 blade terminals. Nylon bezel actuator and housing.



. (6)	WIRING DIAGRA 34-305						
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Part No.	Circuitry	No. of Terminals and Type	Actuator	Lens	Notes	Application					
	S.P.S.T. ( SINGLE POLE – SINGLE THROW)										
34-301	On-Off	2 Screw	Black			Signaling Switch, Day					
34-308	On-Off	2 Blade	Black			Signaling Switch, Day					
		S.P.S.T. ( SING	LE POLE – SING	LE THROW) WIT	H PILOT LIGHT						
34-305	On-Off	3 Screw	Black	Red	Red Pilot Light						
34-360	On-Off	3 Blade	Black	Red	Red Pilot Light						
34-306	On-Off	3 Screw	Black	Green	Green Pilot Light						
34-307	On-Off	3 Screw	Black	Amber	Amber Pilot Light						
34-310	On-Off	4 Blade	Black	Red	Red Pilot Light						
		D.P.D	.T. ( DOUBLE PO	LE – DOUBLE TH	IROW)						
34-311	Off-On-On	4 Blade	Black			Two Speed Windshield Wiper					
34-359	On-On	6 Blade	Black		Reversing	Selector Valves, Fans, Booms					
	D	.P.D.T. ( DOUBLE	POLE – DOUBLE	E THROW ) WITH	I DUAL CIRCUITRY						
34-312	High-Low-Off	6 Blade	Black		Dual Actuators High-Low-Off						



34-305

# **SWITCHES**

#### SEALED ILLUMINATED ROCKER SWITCHES

- Designed for complete protection against dust and moisture.
- Rated 20 Amps at 12 VDC.
- Features include black plastic housing, nylon bezel, silver contacts, white lens with LED bulb, and .250' quick connect terminals.
- May be used with Pollak's new single and modular mounting brackets.

34-230	On-Off, S.P.S.T	34-236	Mom. On-Off-Mom. On, S.P.D.T.
34-231	Mom. On-Off, S.P.S.T.	34-237	On-On, D.P.D.T.
34-232	Off-On-Off, S.P.S.T.	34-238	On-Off, D.P.S.T.
34-233	On-On, S.P.D.T.	34-239	Mom .On-Off-Mom. On, D.P.D.T.
34-234	On-Off-On, S.P.D.T.	34-240	Off-On-On, Progressive
34-235	On-On-On, S.P.3.T.	34-241	On-On-Mom. On, Progressive



(Panel cut-out dimension: .83 "W x 1.45" H)



#### ROCKER SWITCHES MOUNTING BRACKETS

- New Modular mounting brackets and single mounting bracket #34-260 (Not shown) for use with installing Pollak's ® new rocker switches #34-230 Series (Shown above).
- To be used when installing rocker switches in panels.
- Stackable mounting end brackets #34-258 are reversible and can be connected to either side of middle bracket #34-259.
- Single mounting bracket #34-260 may be used for a single switch mount.

34-255	Panel Gasket Seal
34-258	Mounting Bracket End Piece
34-259	Mounting Bracket Middle Piece
34-260	Single Mounting Bracket



#### WEATHER RESISTANT TOGGLE SWITCH

- Weather resistant plastic coating with O-Ring in stem.
- 2 Positions: On-Off, S.P.S.T., Rated 20 Amps, 12 VDC
- Knurled face nut, hex back nut, and 2 plastic coated wire leads 8" long.
- Chrome plated bat handle, mounting stem 15/32 diameter., 3/8" long.
- 34-111 Same as 34-571C except with 2 plastic coated wire leads 24" long.

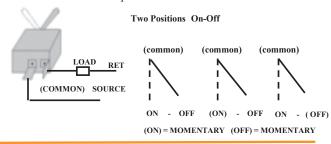


#### **TOGGLE SWITCH GUARD**

- Spring loaded snap action holds the guard cover in the up or down position.Switch cannot be operated with the cover in the down position.
- Recommended for use with two position (Off-On or On-On) toggle switches with standard 11/16" bat handle and 15/32" diameter mounting stem and keyway.
- Face plate is steel with black glossy finish. Switch cover coated with red urea.

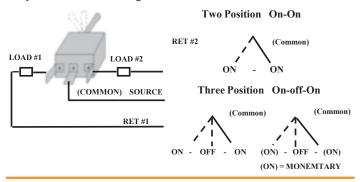
#### S.P.S.T, (Single Pole/Single Throw)

A two terminal switch which opens or closes one circuit.



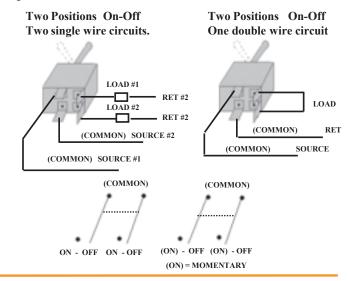
#### S.P.D.T. (Single Pole/Double Throw)

A three terminal switch that controls two single-wire circuits. Permits only one circuit to be energized at a time



#### D.P.S.T. (Double Pole/Single Throw)

A four terminal switch that controls one double wire circuit or two single wire circuits.

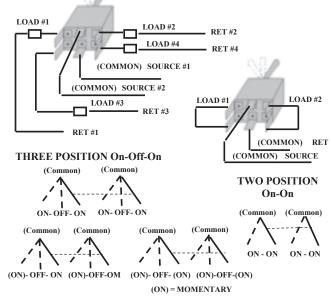


#### SERVICE TIP

- Replacement switch must have the same or higher rating as original switch.
- Unplug circuit or turn off power at electrical panel.
- Remove wires from old switch one-at-a-time and attach to new switch in same manner, or follow wiring diagram.
- For Screw Terminals Twist stranded wire together. Loop wire clockwise around screw. Tighten securely.
- For Blade Terminals Use Female push-on terminals. Crimp tightly on stranded wire. Make sure you have a snug fit.
- Turn on power

#### D.P.D.T. (Double Pole/Double Throw)

A six terminal switch that controls two double wire circuits permitting only one circuit to be energized at a time, or four single wire circuits permitting only two circuits to be energized at a tin



#### **ELECTRICAL TERMS**

**AMPERE** Electrical unit indicating rate of flow of electricity through a circuit.

**CIRCUIT** Path taken by electrical current flowing through conductor from one terminal source of supply to another.

**CURRENT** The movement of electrons through a conductor measured in amperes.

**DOUBLE POL** A switch that operates simultaneously in two separate electric circuits.

**DOUBLE THROW** A switch that alternately completes a circuit at either end of its extreme positions.

**DOUBLE POLE/SINGLE THROW** D.P.S.T -A switch that has four terminals and is used to connect or disconnect two pairs of terminals simultaneously.

**DOUBLE POLE DOUBLE/THROW D.P.D.T** A switch that has six terminals and is used to connect one pair of terminals to either of the other two pairs.

INDUCTIVE LOAD Initial amps needed to engage a circuit and/or a load which allows a momentary flow of current when a circuit is open. {Devices that create inductive loads are typically motor coils and solenoids.}

**LAMP LOAD** Light bulb current expressed in amps at a rated voltage. **MONENTARY** Momentary action is obtained by holding switch in position with pressure. Upon release the switch returns to the previous position.

**REVERSING** Reversing action is obtained by reversing the polarity of a switch with jumper wires or blades to change the rotation of a motor. Typical applications are winches, plows, radio antennas and fuel selector valves.

**SINGLE POLE** A switch that opens, closes, or changes connection in a single conductor of an electrical circuit to a common contact.

**SINGLE THROW** A switch that opens, closes or completes a circuit at only one of the extreme positions of its actuator.

**SINGLE POLE/SINGLE THROW** S.P.S.T. - A two terminal switch which opens or closes one circuit.

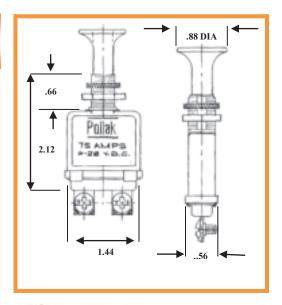
**SINGLE POLE/DOUBLE THROW** S.P.D.T. - A three terminal switch for connecting one terminal to either of two other terminals.

**VOLT** The unit that measures the potential difference in electrical force or "pressure" between two points on a circuit.

WATT The unit of power that indicates the rate at which a device converts electric current to another form of energy, either heat or motion.

# SWITCHES - PUSH-PULL





35-316

#### 35-306

6-28 VOLTS - 75 AMP D.C. 2 POSITION S.P.S.T. OFF-ON Die-Cast Body, CHROME PLATED, Knob, Copper Terminals, Mounting Stem 5/8" long, 15/32" Diameter

#### 35-331

Same as 35-306 with Red Metal Knob

#### 35-330

Same at 35-306 with Black Metal Knob

#### 35-319

Same at 35-306 except the hardware is assembled on the switch.

#### 35-316

#### 3 POSITION

12V OFF-ON-ON Combination Rheostat, Panel and Headlight. Push Pull for Headlights, Turn to Dim Panel. With 20 Amp Circuit Breaker, 5 Terminals, Bright Metal Knob, Mounting Stem 3/8" Long, 3/8" diameter.

#### 35-300

2 POSITION

OFF-ON 25 Amp at 6V 15 Amps at 12V. Mounting Stem 5/8" Long 7/16" diameter. Ivory Plastic Knob.



#### 33-400

3 POSITION
OFF-ON-BOTH ON FOR
CONTROLING RUNNING
LIGHTS, etc. Large 3/4"
diameter. Face Nut of
POLISHED CHROME.
Brass Back Nut and Washer.
CHROME PLATED plastic
knob. Mounting Stem
1-1/4"Long 7/16" diameter.

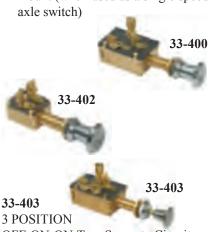
35-300

#### 33-402

2 POSITION 25 Amps at 6V 15 Amps at 12V OFF-ON POLISHED CHROME Face Nut and CHROME PLATED plastic knob. Brass Back Nut and Washer. Mounting Stem 1-1/4" Long, 3/8" diameter.



2 Position Off-On (Normally Off) – One Circuit. Rugged Nylon housing and mounting bracket. Bushing .59" long, .59 diameter Silver plated brass terminals mate with Mating Connector #52-642. Panel mount or transmission shaft mount (when used as a single speed axle switch)



OFF-ON-ON Two Separate Circuits. Brass Back Nut and Washer. BRASS CHROME PLATED Knob and Face Nut. Mounting Stem 1-1/4" Long, 3/8" diameter.

# **SWITCHES**

#### MOMENTARY PUSH SWITCHES

FOR TRUCKS, TRACTORS, FARM, MARINE, INDUSTRIAL APPLICATIONS – POPULAR FOR DIESEL STARTING
Momentary push-button switches function by having an operator push the plunger to make electrical contact. When the actuating force is
removed, the plunger returns to the original position, breaking the electrical contact.

Momentary Push Switches 2 Positions – Off-On, Normally Off (Push to On)

Zinc Die-Cast Housing, Silver Contacts, Brass Terminals.

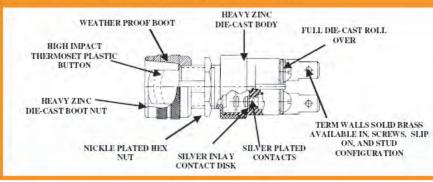
Operation: 50,000 Cycles Mounting stem: 5/8-32 Thread Accommodates panels up to 1/4" thick.

#### Contact Rating:

@ 14VDC: Make 70 Amps, Break 20 Amps Inductive Load
 @ 28 VDC: Make 35 Amps, Break 10 Amps Inductive Load

#### 24-359 -

- · Silver-plated contacts
- · Flush terminal screws in molded insulator
- Housing rolled over insulator to seal out Dust and Moisture
- · Hex Back Nut
- · Bright Polished Face Nut
- Black Molded Plunger
- Mounting Stem 5/8" Long, 5/8" Diameter Thread
- Overall Length 1-13/16\*
- Housing diameter 15/16"
- 24-360 WEATHER AND DUSTPROOF, Same as #24-359 except with #25-358 Cap and Face Not, to seal out Weather and Dust.
- 24-362 (Not Shown): Same as #24-359 except with #25-372 Protection Collar.
- 24-363 (Not Shown) Same as #24-392 except with #25-358 black rubber boot
- 24-373 (Not Shown) Same as #24-359 except with 2 Male Blade "quick connect" terminals.
- 24-391 (Not Shown). Same as #24-392 except without bex face not.
- 24-390 (Not Shown). Same as #24-359 except for hex not thickness.







24-392

24-392 - Same as #24-359 except with brass turret /button terminals. (Mates with Packard Connector #2973407)





24-394 Same as #24-359 except with black face nut and 3/8" long #8-32 threaded terminals. (Freightliner, Navistar)



24-393 - Same as #24-394 except with #25-358 back rubber boot, (Not Shown)

24-395 - Same as #24-393 except with #25-352 red rubber boot.





# **SWITCHES**

#### **BOOT NUT ASSEMBLIES**

WEATHER and DUSTPROOF Neoprene rubber type Boot Nut Assemblies. With 5/8-32 thread, Can be used on #52-611 and #33-200 and on other Momentary Switches with this Mounting Stem



Protective Collar - Safety Bezel with

5/8"-32 thread may be used on #24-359, #52-611, #33-200 and on other momentary switches with this mounting stem.



25-351 Same as 25-358 except with recessed "horn" symbol.



Yellow boot with recessed "cold start" symbol.



25-349 Same as 25-352 except with recessed "start" symbol.



52-613

Same as 52-611 except with 25-358 boot nut and PVC coated body for weather and dust protection. 14" wire loop.

52-600

25-352

Red

REPLACES: 21A11500A, Screw Terminals. 15 AMPS @ 6V, 10 AMPS @ 12V, 15/16" Mounting Hole Required. Mounting Stem 7/8"-20, .45" long. Supplied with 7/8"-20 palnut.

#### 52-611

Universal-Mounting Bushing 3/4"Long, 5/8"diameter. Hex Pal Back Nut knurled Face Nut assembled. 25 AMPS @ 6V, 15 AMPS & 12V. Mounts in 5/8 "diameter hole.

#### **MOMENTARY SWITCHES**

2 Positions: On- Off Normally On (Push to Off)



21-541

Momentary Switch -Normally On (Push to Off). Moisture Proof with two 6" 16 gauge wire leads with Packard Electric Connector #12010973 Mates with Packard #12015792

#### 21-560

Same as 21-541 except Normally Closed (Push to On). Mates with Packard # 15300027

#### MARINE

15 Amps at 12V



#### 33-200

ALL BRASS, CHROME PLATED Button and Face Nut Furnished. Brass Back Nut and Washer Mounting Stem 1 1/4" Long 5/8" diameter. 25 Amps @ 6V. Fits 1" thick panel.

#### SEALED PLUNGER SWITCHES

2 Positions: On- Off Normally On (Push to Off)



#### 52-624

Sealed Plunger Switch #52-620 and Mating Connector #52-622. 10 Amps at 14V. Self tapping thread. Self-Adjusting, Switch length 2 1/8". Mating connector has three 8" 18 gauge wire leads.



#### 52-623

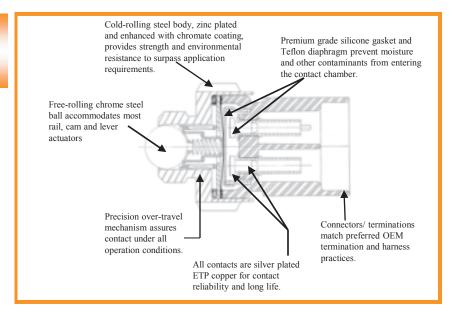
Door Jamb Switch to accept two Bullet terminals. 5 Amps at 12V. REPLACES: Ford OA1-13713, BOA-13713, B9MF-13713A, C3AZ-13713A.

# PRECISION BALL SWITCHES

As the leading manufacturer of precision ball-actuated switches, Pollak® has provided custom switches to meet the requirements of OEM's and aftermarket suppliers. Typical applications include: neutral and top gear sensing, back-up lamp switching, anti-lock brake switching, power takeoff interlock and operator presence detecting. The switches shown here represent the transportation industry's most commonly requested configurations. If the switch you need cannot be found on these charts, please contact us for your specific requirements.



Normally Open - Exposed Terminals





21-458 Screw Terminals

21-481
Turret Terminals

Part No.	Thread	Hex	Free Position	Make/Break	Connector Terminals	Mating Connector	Special Features
21-361	9/16-18	7/8	.421 / .416 (10.69-10.57)	.406 / .391 (10.31-09.93)	Stud Terminals		
21-381	9/16-18	7/8	.765 / .760 (19.43-19.30)	.730 / .715 (18.54-18.16)	Turret Terminals		
21-458	9/16-18	7/8	.421 / .416 (10.69-10.57)	.408 / .390 (10.36-09.93)	Screw Terminals	Ring Terminals	
21-481	9/16-18	7/8	.421 / .416 (10.69-10.57)	.408 / .390 (10.36-09.93)	Turret Terminals	PE 02973407	
21-487	9/16-18	7/8	.421 / .416 (10.69-10.57)	.408 / .390 (10.36-09.93)	Screw Terminals	Ring Terminals	21-458 with O-Ring
21-509	3/4-16	7/8	.577 / .551 (14.15-14.00)	.533 / .513 (13.54-13.03)	Screw Terminals		•

#### **CHARACTERISTICS:**

Normally Closed - Exposed Terminals

21-456 .250 Blade Terminals



21-517 .250 Blade Terminals



Part No.	Thread	Hex	Free Position	Make/Break	Connector Terminals	Mating Connector	Special Features
21-434	9/16-18	7/8	.421 / .416 (10.69-10.57)	.408 / .390 (10.36-09.93)	Turret	PE 02973407	
21-435	9/16-18	7/8	.421 / .416 (10.69-10.57)	.408 / .390 (10.36-09.93)	Screw	Ring Terminals	
21-437	9/16-18	7/8	.421 / .416 (10.69-10.57)	.408 / .390 (10.36-09.93)	Screw	Ring Terminals	Plating
21-448	3/4-16	7/8	.606 / .601 (15.39-15.27)	.600 / .384 (15.24-14.86)	Screw	Ring Terminals	Aluminum Washer resist Corrosion
21-456	9/16-18	7/8	.421 / .416 (10.69-10.57)	.408 / .390 (10.36-09.93)	.250 Blade	Rect. Receptacle Term	
21-517	9/16-18	7/8	.421 / .416 (10.69-10.57)	.408 / .390 (10.36-09.93)	.250 Blade	Rect. Receptacle Term	21-456 With O-ring

#### **CHARACTERISTICS:**

#### Normally Open - Sealed Terminals



21	-3	70

Part No.	Thread	Hex	Free Position	Make/Break	Connector	Mating Connector	Special Features
21-363	9/16-18	7/8	.421 / .416 (10.69-10.57)	.406 / .391 (10.31-09.93)	Packard 56 Series	029S4092	
21-364	9/16-18	7/8	.421 / .416 (10.69-10.57)	.408 / .390 (10.36-09.93)	Ford Automotive Type	C0AF-14A121-A	
21-370	9/16-18	7/8	.421 / .416 (10.69-10.57)	.406 / .391 (10.31-09.93)	Packard Weather Pack	12015792	
21-400	9/16-18	7/8	.421 / .416 (10.69-10.57)	.408 / .390 (10.36-09.93)	Ford Automotive Type	E2EB-14A464-AB	
21-443	M14*1.5	M22	.460 / .450 (11-68-11.43)	.435 / .415 (11.05-10.54)	Ford Automotive Type	D6ZB-14A336-BA	Teflon Tape Thread Sealant
21-465	9/16-18	7/8	.421 / .416 (10.69-10.57)	.406 / .391 (10.31-09.93)	Packard Metri-Pack	12052644	
21-491	5/8-18	7/8	.433 / .417 (11.00-10.59)	.405 / .380 (10.29-09.65)	Packard Weather Pack	12103784	
21-492	M14*1.5	M22	.577 / .567 (14.66-14.40)	.561 / .543 (14.25-13.79)	Packard Metri-Pack	12052644	
21-532	9/16-18	7/8	.421 / .416 (10.69-10.57)	.406 / .391 (10.31-09.93)	Packard Weather Pack	12015792	Teflon Tape Thread Sealant
21-595	M16*1.5	7/8	.980 / .970 (24.89-24.64)	.960 / .945 (24.38-24.00)	Packard Weather pack	12015792	Teflon Tape Thread Sealant

#### **CHARACTERISTICS:**

Normally Closed - Sealed Terminals

Part No.	Thread	Hex	Free Position	Make/Break	Connector	Mating Connector	Special Features
21-444	5/8-18	7/8	.433 / .417 (11.00-10.59)	.405 / .380 (10.29-09.65)	Packard Weather Pack	12103784	
21-495	9/16-18	7/8	.657 / .652 (16.69-16.56)	.644 / .625 (16.36-15.88)	Packard Weather Pack	12015792	Assembled with O-Ring
21-538	M16*1.5	M22	.609 / .598 (15.47-15.19)	.594 / .579 (15.09-14.71)	Packard Weather Pack	12103784	

#### **CHARACTERISTICS:**

Normally Open - Encapsulated with Wire Leads

Part No.	Thread	Hex	Free Position	Make/Break	Connector	Mating Connector	Special Features
21-467	9/16-18	7/8	.421 / .416 (10.69-10.57)	.408 / .390 (10.36-09.93)	Packard Metri-Pack	15300027	
21-493	M14*1.5	M22	.577 / .567 (14.66-14.40)	.561 / .543 (14.25-13.70)	Packard Metri-Pack	12052644	
21-562	9/16-18	7/8	.421 / .416 (10.69-10.57)	.406 / .391 (10.31-09.93)	Packard Metri-Pack	15300027	

#### **CHARACTERISTICS:**

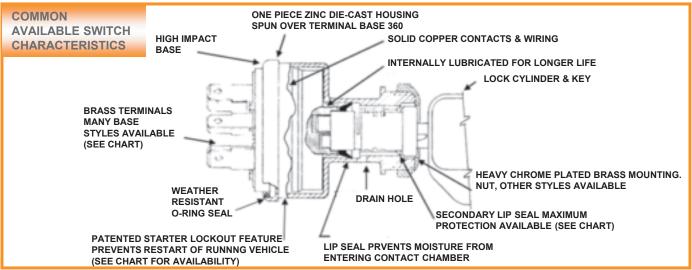
Normally Closed - Encapsulated with Wire Leads



Part No.	Thread	Hex	Free Position	Make/Break	Connector	Mating Connector	Special Features
21-478	9/16-18	7/8	.421 / .416 (10.69-10.57)	.408 / .390 (10.36-09.93)	Packard Weather Pack	12010973	
21-482	9/16-18	7/8	.421 / .416 (10.69-10.57)	.408 / .390 (10.36-09.93)	Packard Weather Pack	12010973	Assembled with O-Ring
21-547	9/16-18	7/8	.421 / .416 (10.69-10.57)	.408 / .390 (10.36-09.93)	Packard Metri-Pack	15300002	Assembled with O-Ring

#### **IGNITION STARTER SWITCHES**

## **Momentary Start Universal Type Die-Cast Housing**



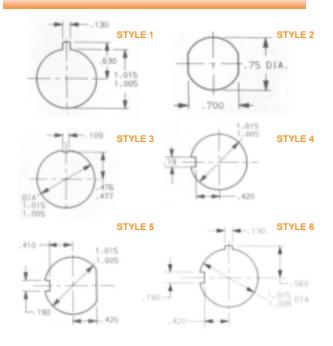


Typical Ratings @ 14 Volts DC (50,000 Cycles)									
Ignition Terminal	Accessory Terminal	Start Terminal							
8 Amps	30 Amps (Inductive)	75 Amps make 20 Amps Break							

Continuous Current Carrying Capacity – 30 Amps @ 14V. Accessory Terminal with #10 Gauge Wire.

For Specific Applications Consult Factory

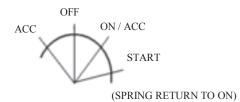
#### **MOUNTING HOLE PATTERNS**



#### **4-POSITION SWITCHES**

#### **FUNCTIONS & POSITIONS**

Key Removable in "Off" Position Only









Base Type	Part No.	Starter Lockout	Key Logo	Key code	# of Lip Seals	M/H/P	Remarks
1	31-103	N	Pollak	Various	0	2	
1	31-104	N	Pollak	PK556	0	2	
1	31-105	Y	Pollak	Various	0	2	
1	31-106	Y	Pollak	PK556	0	2	
1	31-109	N		No L/Cyl	0	1	No Base Hardware Supplied
1	31-110	N	Pollak	Various	0	1	No Base Hardware Supplied
1	31-111	N		No L/Cyl	0	1	No Base Hardware Supplied
1	31-131	N	Pollak	Various	0	1	Spc. Hardware Clips
1	31-159	N	None	Special	1	3	Key Code 31-159-100
1	31-178	N	L/Cyl Mfg	D250	2	5	
1	31-180	N	L/Cyl Mfg	Various	2	5	"O" Sealed Base
1	31-190	N	No Key	Universal	1	4	No Base Hardware or Keys Supplied
1	31-196	N	Pollak	Universal	1	4	
1	31-233	Y		No L/Cyl	0	2	
1	31-292	Y	Pollak	Various	0	2	Black Mounting Nut
1	31-292-801	Y	Pollak	C801	0	2	Black Mounting Nut
1	31-292-802	Y	Pollak	C802	0	2	Black Mounting Nut
1	31-292-803	Y	Pollak	C803	0	2	Black Mounting Nut
1	31-292-804	Y	Pollak	C804	0	2	Black Mounting Nut
1	31-292-805	Y	Pollak	C805	0	2	Black Mounting Nut
1	31-292-806	Y	Pollak	C806	0	2	Black Mounting Nut
1	31-305	Y	L/Cyl Mfg	D250	2	5	
1	31-607	N	Lever		0	2	
1	31-608	Y	Lever		0	1	
1	31-610	Y	Pollak	Universal	1	4	
2	31-124	N		No L/Cyl	0	3	Spc. Hardware Clips
3	31-228	N	Pollak	Universal			Terminal Ground ID Tag
2	31-242	Y	Pollak	Universal	1	4	Spc. Hardware Clips
3	31-132	N	L/Cyl Mfg	Various	0	Spc.	Bezel Mfg.

#### **4-POSITION SWITCHES**

**FUNCTIONS & POSITIONS** 

Key Removable in "Off" Position Only

OFF

ACC



(SPRING RETURN TO ON) (HOUSING TIED TO GROUND TERMINAL)



		Starter			# of Lip		
Base Type	Part No.	Lockout	Key Logo	Key code	Seals	M/H/P	Remarks
1	31-527		Pollak	D250	2	*	Spring return aux. / glow plug warmer New
2	31-112	N	Pollak	PK556	0	2	Special Hardware Clips
2	31-257	Y	L/Cyl Mfg	D250	1	5	O-Ring Sealed Base, Spc. Hdw Clip
3	31-114	N	Pollak	Various	0	1	Caution Tag on GND Term
3	31-152	N		No L/Cyl	0	1	Caution Tag on GND Term
3	31-229	N	L/Cyl Mfg	D250	2	5	
3	31-243	Y	Lever		1	5	
3	31-249	N	Pollak	PK556	0	1	Caution Tag on GND Term
3	31-289	N		No L/Cyl	0	1	Caution Tag on GND Term
3A	31-290	Y	L/Cyl Mfg	D250	1	5	O-Ring Sealed Base
3A	31-322	Y	Encap key	D250	1	5	No Logo on Encap keys
3A	31-324	Y	L/Cyl Mfg	D250	1	5	Black Mounting Nut
3	31-498	N	None	Various	0	3	Supplied with high durability double cut L/Cyl & keys
3A	31-139	N	L/Cyl Mfg	Various	0	Spc.	Bezel Mtg
3A	31-191	Y	L/Cyl Mfg	Various	1	5	O-Ring Sealed Base
3A	31-231	Y	L/Cyl Mfg	D250	1	5	O-Ring Sealed Base
3A	31-273	N	L/Cyl Mfg	Various	2	5	O-Ring Sealed Base
3A	31-280	N	None	Various	1	5	O-Ring Sealed Base, Mtg Nut Sold Separately
3	31-359	N	None	Various	0	3	

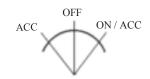
<sup>\* -</sup> Mounting hole pattern similar to MHP style 5 without key way.

#### **3-POSITION SWITCHES**

**FUNCTIONS & POSITIONS** 

Key Removable in "Off" Position Only





Base Type	Part No.	Starter Lockout	Key Logo	Key code	# of Lip Seals	M/H/P	Remarks
1	31-119	N		No L/Cyl	0	1	Extra Long Studs in all Positions
1	31-122	N	Pollak	C805	0	1	No Base Hardware Supplied
1	31-192	N		No L/Cyl	0	1	No Base Hardware Supplied
1	31-245	N	L/Cyl Mfg	D250	2	5	No Base Hardware Supplied, O-Ring Sealed Base
3	31-164	N		No L/Cyl	0	3	Mtg. Nuts Sold Seperately
4	31-600	N	Pollak	Various	0	.75" D	
7	31-223	Y	Lever		0	5	
4	31-601	N	Pollak	PK556	0	.75" D	

#### **3 POSITION SWITCHES**

**FUNCTIONS & POSITIONS** 

Key Removable in "Off" Position Only







Base Type	Part No.	Starter Lockout	Key Logo	Key code	# of Lip Seals	M/H/ P	Remarks
2	31-267	Y	L/CYL Mfg	D250	1	5	Black Mounting Nut, O-Ring Sealed Base
2	31-302	Y	Pollak	Universal	1	5	
2	31-345	N	Pollak	Universal	1	4	
3A	31-285	N	L/CYL Mfg	D250	2	5	O-Ring Sealed Base
3A	31-297	Y	Pollak	Universal	1	4	

Base Types (3, 3A & 7) fit Packard Connector #2984017

M/H/P = Mounting Hole Pattern

#### **3 POSITION SWITCHES**

**FUNCTIONS & POSITIONS** 

Key Removable in "Off" Position Only



(SPRING RETURN TO ON)





31-253

Base Type	Part No.	Starter Lockout	Key Logo	Key code	# of Lip Seals	M/H/P	Remarks
1	31-253	N	Lever	D250	1	5	O-Ring Sealed Base
1	31-609	N	Blank	Various	0	2	
3	31-309	Y	L/CYL Mfg	D250	1	5	
3	31-337	Y	Pollak	D250	1	5	

Base Types (3, 3A & 7) fit Packard Connector #2984017

M/H/P = Mounting Hole Pattern

**BASE TYPES** 

HOLE















STYLE 1

STYLE 2

#### 2-POSITION SWITCHES

**FUNCTIONS & POSITIONS** 

Key Removable in "Off" Position Only







Base Type	Part No.	Starter Lockout	Key Logo	Key code	# of Lip Seals	M/H/P	Remarks
5	31-288	N	Pollak	PK580	0	2	
5	31-602	N	None	Various	0	.75"D	
5	31-603	N	Pollak	PK556	0	.75"D	
5	31-604	N	Lever		0	.75"D	
6	31-117	N		No L/Cyl	0	2	
6	31-282S	N	Pollak	PK556	0	2	

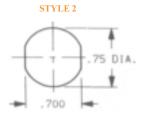
M/H/P = Mounting Hole Pattern

BASE TYPES



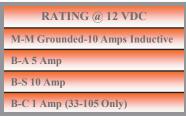


MOUNTING HOLE PATTERNS



#### MARINE STARTER SWITCHES - (for Magneto applications)

Magneto grounded in "Off" Position. Glass filled Delrin Housing, Stainless Steel Terminals. Molded Velox Base. 13/16" Diameter Mounting Bushing. Special weather proofing seal and drain hole. Furnished with Terminal Hardware, Mounting Nuts and Two Keys.



#### OFF (MAGNETO GROUNDED)







ON / ACC, BAT

START / ACC, BAT, SOL

(SPRING RETURN TO ON)

#### 33-104

Special long bushing allows mounting in panels up to 1 1/4" thick. Replaces - Johnson-Evinrude Numbers 386496, 379047, 378238. 33-150-100 Blank key for 33-104 and 33-150

#### 33-107

Same as 33-104 except all switches keyed alike. (Key #:33-150-101-31)

#### 33-105

Special "Push to Choke" feature eliminates need for separate Electronic Choke Switch. Switch mounts in panels up to 1/4".thick. Replaces - Johnson-Evinrude Numbers 388173, 390129, 390133.

#### 33-150

Delrin, Stainless Steel, 6 terminals, special weather-proofing seal and drain holes. Furnished with face nut and brass screws. Various key changes for security. Mounting bushing 1 1/4" thick. Length = 1/2" long. Switch mounts in panels up to 1/4" thick Replaces Johnson-Evinrude numbers 386496, 379047 and 378238.

## **IGNITION STARTER SWITCHES**

# (Special Applications)



#### SPECIAL 4 POSITION IGNITION SWITCH

Specially designed with glow plug 'warm' position.

31-537 (Not Shown)

Same as 31-527 except with lever.

#### 31-499

#### SPECIAL (HI POWER) IGNITION SWITCH

Ratings at 14VDC

Ign -15 Amps (8 Amps, standard)

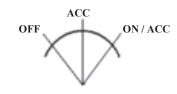
Acc - 40 Amps Continuous

(30 Amps Standard)

Start - 75 Amp Make, 20 Amp Break (Standard)

#### **Unique Features**

- Silver Plated Contacts
- Silver Plated Wiper Heat Disipating Contact Connections
- Enhanced features available in Standard Envelope.



**Keyless Operation** Off-Acc Key Removable in Off, Acc Only



31-132

Lock tumbler & keys assembled REPLACES: Jeep 931697





#### REPLACEMENT KEYS











31-332

31-166-001

31-600-103

31-159-001 31-339

#### **D-250 Series**

19564, Coined, 2 keys per ring. Replacement key for 31-178, 31-229, 31-231, 31-245, 31-257, 31-267, 31-285, 31-290, 31-305, 31-309, 31-322, 31-324, 31-337

#### **Universal key Series**

31-166-001, Coined, 2 keys per ring (Pollak Logo & Lightening Bolt)

31-332, Encapsulated, (Pollak Logo), 2 keys per ring 31-339, Encapsulated, (No Logo), 2 keys per ring Replacement keys for 31-190, 31-610, 64-242, 31-175, 31-302, 31-345, 31-297

(Unless otherwise noted, all keys sold individually.)

31-600-103 (PK556), Coined, 2 keys per ring (Pollak Logo) Replacement keys for 31-104, 31-106, 31-112, 31-249, 31-282S, 31-603

#### 31-173-104, blank key, Coined,

Blank replacement keys for 31-132, 31-139, 31-180, 31-191, 31-272, 31-280

#### 31-159-001

Replacement keys (2 per ring) for part No. 31-159

Blank replacement key for Part No. 33-104, 33-150

Blank replacement key for Part No. 33-105

## **SWITCHES**

# BATTERY MASTER DISCONNECT SWITCHES

Master disconnect switches designed for 12 VDC vehicles (Truck, Automotive, Marine, RV) to disconnect all circuitry to reduce possibility of theft or accidental electrical fires. Available in keyed or lever versions, with or without indexing pins, and various sizes of terminal studs.

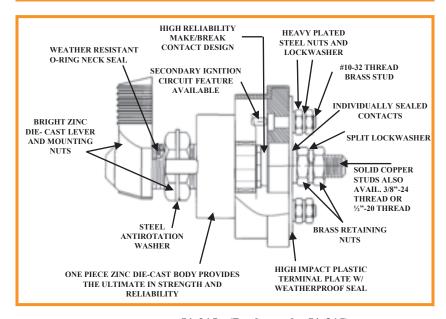
#### 51-902 (Replaces the 51-302) LEVER OPERATED 6-36 VDC 180 AMPS CONTINUOUS CAPACITY 1000 AMPS IN RUSH S.P.S.T. (OFF-ON) TWO STUD TERMINALS

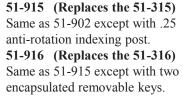
For battery circuit only. Does not disconnect alternator or generator field circuit. On vehicles equipped with alternators/engine must be shut off to avoid potential damage to alternator diodes. (See 51-904)

- Individually Sealed Contacts
- One piece die-cast housing sealed with O-rings at base and mounting stem to keep out dust and moisture.
- Large die-cast, lever for ease of operation.
- Two 3/8" copper alloy stud terminals with hex nuts and lock washers.
- Overall length 4 3/8". Diameter 2 5/8"approx.
- Conforms to requirements of U.L. #558
- Mounting stem 3/4" diameter, 1/2" long, with two hex nuts and lock washer.
   (Note: Mounting nuts not to exceed 12 ft. lbs. torque).
- Designed for protection against battery drain, electrical fires, tampering and theft.
- Fits panels up to 1/4" thick.

#### 51-927 (Replaces the 51-307) MASTER DISCONNECT SWITCH.

Continuous Rating (Make Break) = 180 AMPS @ 12VDC Intermittent Rating (Carrying Current Only) = 1800 AMPS @ 12VDC. 1 cycle = 4 seconds ON/20 Minutes OFF, Silver Plated 1/2" - 20UNF Copper Studs. Recommended wire size #00-gauge or larger for 1800 AMP application. OUR NEW ENCAPSULATED "REMOVABLE KEY" VERSION OFFERS THE ULTIMATE IN SECURITY AND EASE OF OPERATION (Anti-Rotation Pin Version, also available)





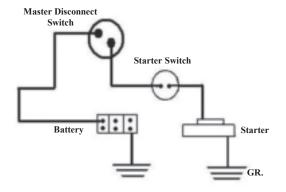


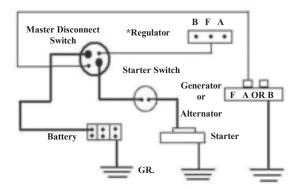




Part Numbers: 51-302, 51-315, 51-316, 51-307

Part Numbers: 51-304, 51-318, 51-319





NOTE: Hex nuts against base <u>Must</u>remain stationary and <u>Must</u> not be tightened or loosened. Secure power cables to mounting surface no greater than 10" from switch mounting

#### 51-904 (Replaces the 51-304) LEVER OPERATED - 6-36 VOLT D.P.S.T. (OFF-ON FOUR STUD TERMINALS)

For battery and alternator or generator field circuit. Designed to break alternator generator circuit prior to battery circuit disconnect.



- One piece die-cast housing sealed with O-rings at base and mounting stem to keep out dust and moisture.
- Two 3/8" and two #10-32 copper alloy stud terminals with hex nuts and lock washer.
- Overall length 4 1/8". Diameter 2 5/8" approx.
- Fits panels up to 1/4" thick. (Note: Mounting nuts not to exceed 12 ft. lbs. torque).



#### 51-303

FACE PLATE - For use with #'s 51-902,51-905, 51-904, 51-907 Master Disconnect Switches. Polished aluminum with black letters. 2.5" diameter., .76 diameter center hole, .032 thick.

**ACCESSORIES** 



#### 51-322

FACE PLATE - For use with #'s 51-915, 51-916, 51-917, 51-918, Master Disconnect Switches. Polished aluminum with black letters. 2.5" diameter, .76" diameter post, .032" thick.



#### 51-308 KIT

Replacement Zinc Die-Cast lever and Zinc Plated set crew for Pollak<sup>®</sup> Master Disconnect Switches.

Special flange plate and lever to accept a padlock for many lockout/tag-out safety regulations.



#### **RATING:**

Continuous Rating (Make Break) Large Studs – 180 Amps Small Studs – 20 Amps Intermittent Rating (Carrying) Large Studs – 1000 Amps (20 sec. "On" -5 Minutes "Off"

#### 51-918 (Replaces the 51-318)

Same as 51-904 except with .25" diameter anti-rotation indexing post.

#### 51-919 (Replaces the 51-319)

Same as 51-918 except with two encapsulated keys.



51-918

51-919

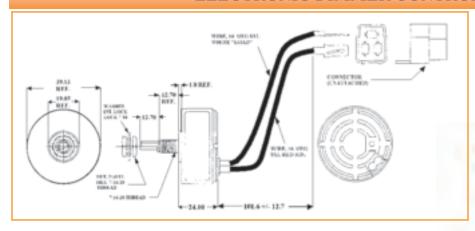
#### 31-332

Encapsulated Keys with Pollak<sup>®</sup> logo. Fits #'s 51-916 & 51-919 Disconnect Switches.



## **SWITCHES**

#### **ELECTRONIC DIMMER CONTROLS**





52-262         10 Amp         Packard Metri-pack #12034344         7/16"-28 Thread         Mack/Volvo/Gm*           52-263         10 Amp         Packard 56 Series         3/8"-32 Thread         Freightliner**,Peterbilt*					
52-263 10 Amp Packard 56 Series 3/8"-32 Thread Freightliner**,Peterbilt*	Part No.	Max Current Load	Connector Type	Panel Mount	Manufacturer Application
	52-262	10 Amp	Packard Metri-pack #12034344	7/16"-28 Thread	Mack/Volvo/Gm*
incinity.ii	52-263	10 Amp	Packard 56 Series	3/8"-32 Thread	Freightliner**,Peterbilt**, Kenworth**

<sup>\*</sup> Note: Does not apply to all Volvo/GM models. Check with Manufacturer.

If you can't afford the down time to have your lights go out contact your nearest Pollak® distributor today.

NOTE: If Panel Lamp Dimmer is hooked up backward, the unit will not work. This will not damage the
unit but it is important to insert terminals correctly

## PRODUCT DESCRIPTION

The Electronic Panel Lamp Dimmer Control is a cost effective reliable method of safely controlling the intensity of dash board lighting in the cab of vehicles. Pollak® Panel Lamp Dimmer controls have been specified by Mack Trucks, Freightliner, Peterbilt and Kenworth. These manufacturers know that electronic reliability keeps trucks on the road and out of the shop. An electronic Panel Lamp Dimmer eliminates the old fashion rheostat type control. Sophisticated electronic pulse width control circuitry and power MOSFET technology used in the panel lamp dimmer's design eliminates the heat build up found with traditional rheostats. Pollak's two wire design allows the Pollak® controls to be a drop in replacement for existing rheo-stat applications, (see chart for appropriate part number). State of the art surface mount electronic design reduces the housing size and weight while eliminating expensive product failure caused by vehicle vibration. This Pollak® Panel Lamp Dimmer is designed in accordance with stringent SAE J1455 recommendations. Load dump and transient conditions will not adversely affect the dimmer's operation and it is completely protected from continuous short circuit overload,

As dash panels become more complicated the strain on the panel dimmer is increased. The truck O.E.M.'s know this and have converted to electronic dimmers.

#### **PRODUCT FEATURES**

- Universal Application Design
- Simple Two Wire Design Replaces Old Three Wire Style
- Ground Connector Not Needed Works on positive or negative vehicle systems
- Small Housing Easily fits most dashboards
- Light weight
- Smooth gradual dimming control
- Reliability of electronic components
  - · Switch generates very low heat
  - Rugged vibration resistant design
- Operating temperature: -40C to + 85C
- Zinc die-cast housing
- Works on both 12 VDC & 24 VDC systems
- Wire strain relief
- Black plastic knob, white indicator arrow
- Power MOSFET Transistor design
- Meets SAE J1455
  - Fully short circuit protected
  - 150V load dump protected
  - 700V transient spike protected
  - Reverse Polarity protected
- Nominal 205° shaft rotation

<sup>\*\*</sup> Installation sheet included for connecting terminals to connector.

#### SOLENOID SWITCHES

AUTOMOTIVE, TRUCK, FARM TRACTOR, INDUSTRIAL, CONSTRUCTION, OFF-THE-ROAD, RECREATIONAL VEHICLE APPLICATIONS

TYPICAL APPLICATIONS INCLUDE: SNOW PLOWS, TRUCK WINCH, LIFT TRUCKS, LOW VOLTAGE EQUIPMENT,

- 6-24 VDC Systems
- Plated Steel or Phenolic Housings
- Ignition & Ground Terminals, # 10-32 thread
- Contact Terminals 5/16"-24 Thread
- Bracket Mounting Holes; 5/16" x 19/32"
- 2 1/8" on Center

#### Contact Factory for availability of additional solenoids.

CONTINUOUS DUTY (6-24VDC), 150Amps In Rush "S.P.S.T." Normally Open Contacts - Off - On

**52-307-01** 12V, 100 Amps, Continuous Duty, Insulated, with hardware. UL listed.

**52-312-01** Same as 52-307-01 except grounded with three terminals (not shown, not UL listed).

**52-315** Same as 52-307-01 except coated with protective grey plastic coating. (Dust & Moisture Resistant)

**52-324-01** Same as 52-307-01 except 24 Volt, continuous duty. 100 Amps, (not shown, not UL listed)



52-307-01



52-315

52-327 12 Volt, continuous duty. 100 Amps

52-329 12 Volt, continuous duty. 200 Amps

52-339 24 Volt, continuous duty. 200 Amps





#### **Double Pole Single Throw**

**52-330** 12 Volt, 2 circuits, DPST, Normally Open /Normally Closed, continuous duty. 100 Amps, insulated

**52-340** 24 Volt version of 52-330

INTERMITTENT DUTY (6-12VDC, 750Amps Make, 100 Amps Break) "S.P.S.T." Normally Open Contacts - Off - On

**52-305-01** UNIVERSAL - 12-V Applications - Grounded Base, Flat Bracket, Internally grounded to housing, other end connected to small terminal.



52-328 12V, 100 Amp, SPST, Insulated. Short Case





52-305-01

**52-331** (Replaces 52-304). 12V, 600 Amp make, 200 Amp break, Normally off, SPST, one circuit Off/On, Short Case.

**52-332** 24V, 2 Min Cycle version of 52-331



52-333 Heavy Duty, SAE J1171 Marine Rated, 10 Min. Duty Cycle

**52-334** Heavy Duty same as 52-333 but not Marine Rated

#### **DOOR SWITCHES**

**52-620** (SEALED) Door Jamb Switch for most Ford and Chrysler products, 14V at 10 Amps Lamp Load Overall length 2-1/8", Plunger travel 3/16", Self-tapping thread. Self-Adjusting.

**52-622 Mating Connector** for 52-620 Switch. Three 8" 18 gauge wire leads.

#### 52-624 (KIT)

52-620 Switch and 52-622 Mating Connector.

#### 52-616

UNIVERSAL, 5 Amps @ 12V, Screw Terminals "ON" when plunger is out. Dual Mounting Hole 1-3/8", 2-1/16 on center. REPLACES: Chrysler 882943, KF-204229,

#### 52-623

Door Jamb Switch to accept two Bullet Terminals. Weather Resistant plastic plunger and body. Accepts two bullet terminals. Pits panels .030" - .070" thick. Mounting hole .850 diameter. max., 5 Amps @ 12V. REPLACES: Ford OA1-13713, BOA-13713, B9MT-13713A, C3AZ-13713A.



**52-633** 52-620 with mounting hardware.



**52-625** – Shell for 52-622 **52-626** – Boot for 52-622

**52-627** – Pin for 52-622





#### AXLE SWITCH



#### 52-260

TWO SPEED AXLE SHIFT LIMIT SWITCH. For use in controlling the Eaton two speed electric axle. Phenolic insulator base with O-Rings on studs. Used with Pollak® #52-261 Axle Switch.

## AXLE SWITCH



#### 52-261

2 Position Both On controls. High and Low Axle Ranges. Die-cast body protected with rubber cover. Three Female Terminals to receive Bullet Terminals. For use in controlling the Eaton two speed electrical axle.

### STOPLIGHT SWITCH



**52-104 (N.O.)** HYDRAULIC (60-100 P.S.I.) Pressure switch

#### **DIMMER SWITCHES**

2 POSITIONS - ON Low Beam) ON (High Beam) S.P.D.T.



UNIVERSAL - Mounts through floorboard. Three 1/4" - 20 tapped holes, 3/4" and 1-3/4" on center, With 3 Flat Screw Terminals and 4 Bullet Terminals supplied in separate hardware kit. 3 Screw Terminals.



52-252

Floor Mounted Type. Mounting holes 1-5/8" on center, 7/32" diameter., 3 Special Terminals, for Plug connection.



52-253

Special Floor Mounted Type. Mounting holes 1-6/8" on center, 9/32" diameter., 3 Special Terminals for Plug Connection.

# CIRCUIT BREAKERS



# CIRCUIT BREAKERS

# What are Circuit Protection Devices and how do they work?

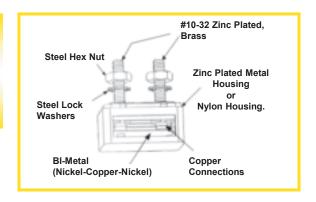
Circuit Protection Devices are manufactured for use in multiple power strips, boats, recreational vehicles, battery charges, welding equipment, portable generators, agricultural equipment, trucks, passenger and school buses and off-road construction equipment.

#### **GENERAL OPERATING PRINCIPLES**

Circuit Protectors are single pole thermal type devices. Basic construction consists of two terminals, one terminal with a composite alloy reed to which a precious metal contact has been attached, and the second terminal with a precious metal contact. When a circuit protector is assembled and in the operational mode, the precious metal contacts rest against each other. Current flow is from one terminal through the composite alloy reed to the contacts and out the second terminal. In general, the size, material composition and the way the reed is processed during manufacturing, coupled with the type of contacts and terminals, determines the current rating of the device. Under normal conditions, circuit protectors are designed to handle 100% of rated current on a continuous basis. When the current rating is exceeded heat will be generated and the composite alloy reed will bend up, separating the contacts. The speed at which this process occurs is dependent on two main variables, the amount of current in excess of rating and temperature. The method in which the breaker is reset depends on the types of breakers used.

#### **Automatic Reset**

Type 1 will cycle continuously during an over-current condition. The composite alloy material will bend and separate the contacts when an over current situation occurs and return to the run mode as it cools. This process will continue until the source of the over-current is removed or corrected.



#### **Modified Reset**

Type 2 Unlike the auto reset design, Type 2 has an additional resistive component built into it which raises the ambient temperature within the circuit protector. This limits the number of cycles (less than 10) by not allowing the composite alloy to cool and reset the circuit. The circuit will remain open with less than 1.0 amp current flow as long as the voltage is applied.

#### **Manual Reset**

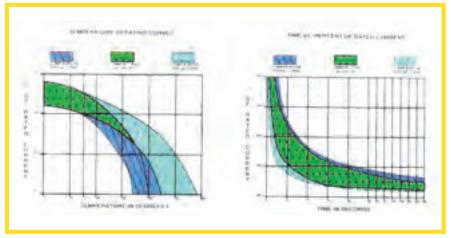
<u>Type 3</u> circuit protector introduces a noncurrent carrying object between the contacts when they open. To reset the contacts, an external button or lever must be activated to return to normal operation.

#### Sizing A Circuit Protector

Temperature and percent of rated current will affect the performance characteristics of a thermal circuit breaker. These parameters should be taken into consideration when specifying which size and type device is needed for your application. All Pollak® circuit protectors are designed to run continuously at 100% of rated current at 77°F. However, as a general rule you should size your breaker so that your continuous current is 75-80% of the rated current of your circuit protector. For example, if your application runs at a continuous 8 amps, you should choose a 10 amp breaker.

Another major factor to consider is the affect that temperature has on the rating of the circuit protector. As with all thermal devices, as temperatures change the continuous current rating of the circuit protector changes. As stated earlier, all Pollak circuit protectors are designed to run continuously at 100% or rated current at 77°F . The bottom chart shows the effect temperature has on the rated current for circuit protectors.

Notes: Circuit Breakers vs fuses		
	Circuit Breaker	Fuse
Resettable Cycles	Yes	No
Adjustable Ambient Compensation	Yes	No
Locate Anywhere (even under hood)	Yes	No
Permanent Mounting Capability	Yes	No



#### **Typical Circuit Breaker Applications**

Accessory Circuit, Cooling Fan, Door Locks, Headlamps, Tail Lamps, Window Lift, Sunroof, Trailering Package

#### CIRCUIT BREAKERS - TYPE I Cycling - Automatic Reset

**Single Pole Thermal Type Breakers Rating From:** 5A to 50A; 12VDC.

**Operating Temperature:** -10 F (-23°C) to 150°F

(65°C).

**Storage Temperature:** -20°F (-29°C) to 200°F

(93°C).

Applications: Battery charges, trucks, buses, RV's,

trolling motors, etc.

Approvals: Complies with SAE Standard J553.

Ampere Rating	Plastic Base 12 VDC	Metal Base 12 VDC
10	54-110PL	*
15	*	54-115
20	54-120PL	54-120
25	54-125PL	54-125
30	54-130PL	54-130
35	54-135PL	*
40	*	54-140
50	54-150PL	54-150
* Currently not available No Mounting Bracket		

Ampere Rating	Plastic Base 12 VDC	Metal Base 12 VDC
15	54-215PL	54-215
20	54-220PL	54-220
25	*	54-225
30	54-230PL	54-230
30	54-831PL (Plastic 24 VDC)	
40	54-240PL	54-240
50	54-250PL	54-250
* Currently not available 90 Mounting Bracket		

Ampere Rating	Plastic Base 12 VDC	Metal Base 12 VDC
10	54-510PL	*
15	54-515PL	54-515
20	54-520PL	54-520
25	*	54-525
30	54-530PL	54-530
40	54-540PL	54-540
50	54-550PL	54-550
* Currently not available Straight Mounting Bracket		

#### **NOTES: PLASTIC VS METAL**

- VIBRATION...Plastic housings with mounting brackets are one piece molded and are less prone to vibration. Metal housings with brackets are two piece designs. The bracket is attached by spot welding and can be loosened by vibration.
- SHORTING OUT...If a wire should loosen from a terminal on a plastic housing version, it will not short out against the housing as it may do with a metal housing.
- WEIGHT...The plastic housing is also lighter than the metal housing.

#### **NOTES: 24V VS 12V CIRCUIT BREAKERS**

\* A 24V Circuit Breaker may be used in a 12V application because of the thermal metals used in assembly. However a 12V Circuit Breaker in not recommended for 24V since the materials are Heat affected...not current affected.

Terminal Options – Battery Terminal has yellow dichromate plating Aux Terminal = Zinc Plating



TWO 10-32 STUDS; .66 (AUX & BAT)

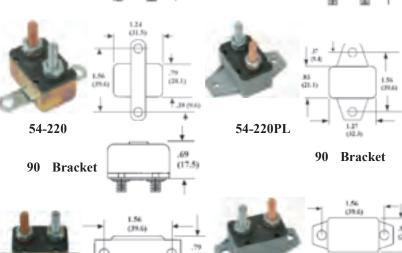
## METAL COVER PLASTIC COVER





1.27 (32.3)

54-520PL





1.27 (32.3)

54-520

## **Circuit Breakers - Type II**

#### **Stud Terminal Type**

#### Non-Cycling - Modified Reset

Designed with an additional resistive component this style breaker remains open as long as power is available or until the load is removed.

- Non-Cycling-Modified Reset conforms to SAE spec J553C Type II for 12 VDC only
- Metal Housing with zinc plating
- 10-32 stud terminals. Battery terminal has yellow dichromate plating. Auxiliary terminal has zinc plating



Stud Terminal Part#	Ampere Rating
54-221	20
54-231	30
54-241	40

#### Plug-In Terminal Type

#### Non-Cycling - Modified Reset

Designed with an additional resistive component this style breaker remains open as long as power is available or until the load is removed.

Special "snap-off" feature provides three lengths of .300, .500, or .750" (18 mm) H. Blades = .78" (19.9 . Body = 1" (25.27 mm) L  $\times$  .40" (10.03 mm) W  $\times$  (.70mm) L



Blade Type Part#	Ampere Rating
54-705	5
54-710	10
54-715	15
54-720	20
54-725	25
54-730	30

#### In 2009 Pollak® celebrated its 100th year in business.



Pollak's® Canton, Massachusetts manufacturing plant.

## NOTES: STUD TERMINALS VS .250QC BLADE TERMINALS

- **ACCESSIBILITY/VIBRATION...** If the circuit breaker is not easily accessible or subject to vibration then stud terminals/lock washers are preferred.

## **Sealed Circuit Breakers (Type I)**

- •Designed for exposed applications (moisture, dust, oil).
- With and without mounting brackets.
- Supplied with 12" wire loop.

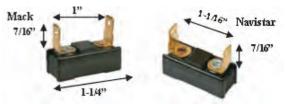
Ampere Rating	Sealed	Sealed with Bracket
20	54-920	54-921
30	54-930	54-931
40	54-940	54-941



#### Plug-In Type

Fits in Mack and Navistar breaker blocks. (.250" Quick Connect Terminals).

Ampere Rating	Blade Terminals (Mack)	Blade Terminals (Novistar)
10	*	*
15	54-891PL	54-901PL
20	54-892PL	54-902PL
25	54-893PL	54-903PL
30	54-894PL	54-904PL



#### CIRCUIT BREAKERS - TYPE II

#### Maxi-Style Plug-In

OEM style replacement circuit breaker for Ford, Paccar, & Freightliner Body= (29.mm) L x (8.90mm) W x (21.6mm) H Blades= (12.7mm) L



#### **ATO Style Plug-In**

OEM style replacement circuit breaker for Ford Class 8 Vehicles Body= (29.mm) L x (8.90mm) W x (21.6mm) H Blades= (12.7mm) L



#### Mini-Style Plug-In

OEM style replacement circuit breaker for Freightliner and Paccar Class 8 Vehicles Body= .98" (24.90mm) L x .40" (9.50mm) W x .70 (18.0mm) H Blades- .50" (11.00mm) L x 11" (2.90mm) W







#### MAXI STYLE METAL: TYPE II-Non-Cycling-Blade Terminals

	Ampere Rating	Blade Terminals	Style
I	20	54-950	Generic
	30	54-951	Generic

#### ATO STYLE METAL: TYPE II-Non-Cycling-Blade Terminals

Ampere Rating	Blade Terminals	Style
10	54-953	Ford HD 8
15	54-954	Ford HD 8
20	54-955	Ford HD 8
30	54-956	Ford HD 8

#### MINI BLADE METAL: TYPE II - Mon-Cycling-Blade Terminals

Ampere Rating	Blade Terminals	Style
10	54-597	Freightliner HD 8
15	54-958	Freightliner HD 8
20	54-959	Paccar HD 8
30	54-960	Paccar HD 8

#### **CIRCUIT BREAKERS - TYPE III**

#### **Push Button - Manual Reset**

Breaker remains open on overload and has to be manually reset with the push of the button.

## Single Pole Thermal Type Breakers

Rating From: 5A to 50A; 12VDC.

**Operating Temperature:** -10°F (-23°C) to 150°F (65°C). **Storage Temperature:** -20CF (-29°C) to 200°F (93°C). **Applications:** Battery charges, trucks, buses, RV's,

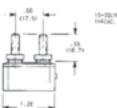
trolling motors, etc.

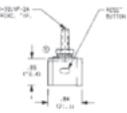
Approvals: Complies with SAE Standard J553.

Ampere Rating	Plastic	Plastic w/ 90 Bracket	Maxi-Style
10	*	*	54-311PL
15	*	54-616PL	*
20	*	*	54-321PL
25	*	*	*
30	54-630PL	54-631PL	54-331PL
40	54-640PL	54-641PL	*
50	54-650PL	54-651PL	*

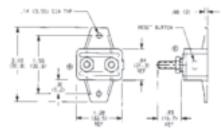
**Note:** Maxi-Style Breakers plug into Pollak Blade Type Fuse Panels. (See page 48)



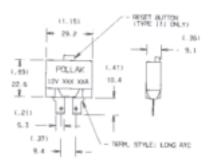












#### **CIRCUIT BREAKERS - HIGH AMP**

Type I & III Single Rate Thermal Type Breakers

Rating: from 40A to 150A; 12VDC.

**Operating Temperature:** -25 F(-32°C) to 180°F(82 C). **Storage Temperature:** -30 F(-34°C) to 300°F(149°C). **Applications:** Typically used in auxiliary and accessory

circuits - trucks, buses, RV's and marine applications. Others might include battery charges and DC audio systems. Sealed for engine compartment and bilge area applications.

Housing: Thermoset plastic: UL rated 94VO; 311°F (155'C).

Mounting: Panel or surface.

Indicator: Series 54-870 (Type III) have a unique reset mechanism which provides visible indication of tripped condition. Splash Proof, Dust Proof.

Operating Temperature: -25°F(-32°C) to 180°F(82°C).

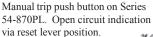
Storage Temperature: 15° to 250° F, (Available in other amperages upon

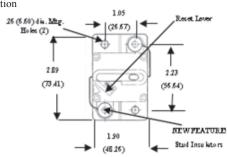
request - 50 to 150 Amps).

Approvals: Complies with SAE Standard J1625.

Ampere Rating	Type I Auto Reset Surface Mount	Type I Auto Reset Panel Mount
60	54-850PL	*
80	54-853PL	*
100	54-851PL	54-861PL
120	54-854PL	*
150	54-852PL	*

Ampere Rating	Type III Switchable Manual Reset Surface Mount	Type III Switchable Manual Reset Panel Mount
60	54-870PL	*
100	54-871PL	54-881PL
150	54-872PL	*
80	54-873PL	*
120	54-874PL	*





SURFACE MOUNT

TYPE III

MOLDED COVER

1.44

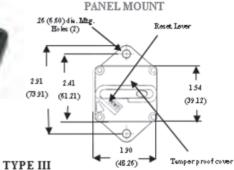
(36 58)

(10 16)

74-25 STUIS

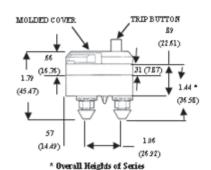


Type I Auto Reset





Type III Switchable



## **MOUNTING BRACKETS**

Rugged steel brackets with detents permit simple snap-in of 54-115 thru 54-150 (Type 1) series metal only circuit breakers.



52-241

No. Gangs	Part No.	Length	Mounting Hole Center
2	52-240	4.81"	4.00"
4	52-241	6.63"	5.81"
6	52-242	8.44"	8.44"
8	52-243	10.25"	10.25"



Bus bar for studded circuit breakers. .20 X .30 slots (.91 typ. On center)



**52-249** 7-Breaker Junction box

L 7..5" X W 3.75" X H 2..5"

# CIRCUIT BREAKERS ATC TYPE II – MODIFIED RESET

- Single pole thermal style breakers, 12 VDC.
- Gray Plastic Housing with silver cover.
- Body = (.84") L x (.25") W x (1.07") H.
- Blades (.43") L.
- Complies with SAE J553 Specifications.

Part No.	Ampere Rating
54-910	10
54-911	15
54-912	20

# CIRCUIT BREAKERS MINI TYPE I – AUTOMATIC RESET

- Single pole thermal style breakers, 12 VDC.
- Gray Plastic Housing with gold cover.
- Body = (.483") L x (.250") W x (1.06") H.
- Blades (.354") L. Compatible with 280 fuse blocks.
- Complies with DAE J553 Specifications.

Part No.	Ampere Rating
54-970	10
54-971	15
54-972	20

# CIRCUIT BREAKERS MINI TYPE II – MODIFIED RESET

- Single pole thermal style breakers, 12 VDC.
- Gray Plastic Housing with silver cover.
- Body = (.483") L x (.250") W x (1.06") H.
- Blades (.354") L. Compatible with 280 fuse blocks.
- Complies with DAE J553 Specifications.

Part No.	Ampere Rating
54-975	10
54-976	15
54-977	20

# CIRCUIT BREAKERS MAXI TYPE II – MODIFIED RESET

- Single pole thermal style breakers, 12 VDC.
- Gray Plastic Housing with silver cover.
- Body =  $(1.15^{\circ\circ})$  L x  $(.36^{\circ\circ})$  W x  $(.89^{\circ\circ})$  H.
- Blades (.50") L.
- Interchangeable with MAXI blade fuse.



Part No.	Ampere Rating
54-981	15
54-982	20
54-983	25



## SPECIALIZED ELECTRICAL PRODUCTS

#### **SPECIFICATIONS**

#### **Interchangeable Blade Terminals:**

Accepts ATC® blade-type fuses, or blade-type, auto or manual reset circuit breakers. **Wiring:** Output terminals - .250" x .032" OC rated 30A max. per circuit; Input terminals - #10-32 stud input rated 150A

**Positions:** Provides 6-24 protected output circuits.

**Material:** Black, UL rated 94 VO thermoplastic, -20°F to 150°F.

**Applications:** Compact and lightweight, yet rugged enough for use in trucks, buses, boats, RV's etc.

Other Features: No top cover needed; recessed trifurcated fuse contacts.

Recessed mounting holes.



52-406

#### ATC BLADE TYPE FUSE PANEL

Position	Blade Type	Dimensions	Mounting Hole Center
6	52-406	L 2.47"x D 3.38" x H 0.81"	0.62"
8	52-408	L 3.09"x D 3.38" x H 0.81"	1.25"
10	52-410	L 3.72"x D 3.38" x H 0.81"	1.87"
12	52-412	L 4.34"x D 3.38" x H 0.81"	2.50"

#### **FUSE PANEL**

Position	Blade Type	Blade Terminals	Dimensions
12	52-214	52-214Q	L 7.38" x D 2.0" x H 0.56"

For economical tight cluster mounting of 1/4" x 1-1/8" fuses. Breakaway design, 300 volt rating, UL Recognized, CSA Listed. Blocks are molded glass-filled thermoplastic, polyester clips are spring-bronze; Alboloy-plated.

#### **FUSE HOLDERS**

#### 52-116

30 Amp. Fuse Holder, 12 gauge wire.



Complete with 6"-16" gauge wire, looped, and fuse



20 AMP. Black Holder



52-216

In-Line Fuse holder for use with 25 or 30 Amp ATO Fuses Supplied with two 4" leads of 12 gauge wire.

**52-215** In-Line Fuse Holder for use with 3, 5, 7.5, 10, 15, and 20 Amp ATO Fuses. Supplied with 8" loop of 16 gauge wire.



**52-248** 10-Terminal Junction Box

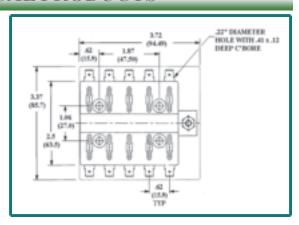


52-249
7-Circuit Breaker
Junction Box



**52-259 7-**Terminal
Junction Box

48



#### TERMINAL BLOCKS (Non Feed-Thru)

Rating: 30A, 12 VDC.

Operating Temperature: 250 F (120 C).

**Standards:** 2 to 10 steel studs on .750" centers and a "dog point" to guide nut into 10-24 thread. **Torque:** Recommended 20 in / lb (25 in / lb max).



52-244

No. of Gangs	Terminal Block	Length	Mounting Hole Center
4	52-244	4.5"	0.62"
6	52-245	6"	1.25"
8	52-246	7.5"	1.87"
10	52-247	9"	2.50"

## TERMINAL BLOCKS WITH INDEPENDENT FEEDS

No. of Gangs	Terminal Block	Dimensions	Mounting Hole Center
4	52-270	L 2.51" X W 1.37" X H 0.75"	2.18"
6	52-271	L 3.38" X W 1.37" X H 0.75"	3.06"
8	52-272	L 4.25" X W 1.37" X H 0.75"	3.93"
10	52-273	L 5.13" X W 1.37" X H 0.75"	4.81"
14	52-274	L 6.87" X W 1.37" X H 0.75"	6.56"

Rating: 20A, 12 VDC, UL & CSA

Center Spacing: 7/16"

Wiring: Terminals will accept maximum wire size of AWG #12

Terminal Screw Size: #6-32 philslot combination.

**Distance Between Barriers:** 0.353". **Mounting:** #6 Screws.

Temp. Rating: F(C); 302 (150) max. -40 (-40)min.

#### **BATTERY JUMPER TERMINALS**

- Jumper terminals designed to provide remote mounting for battery connections either inside or outside of the vehicle.
- Easily installed, the positive terminal can be individually used or in conjunction with the negative terminal as a pair.
- Rubber caps, solid brass studs, brass hex nuts and brass lockwashers.
- Dimension for grooved contact post: 13/16" (20.63mm) dia., 1-1/8" (28.77) long.



**52-138** Red Cap - Positive Terminal



**52-139** Black Cap - Negative Terminal

#### SEALED BEAM FLASHER CONNECTORS

#### 52-255

2 Wire connector assembly used on all vehicles with 2 prong seal beam lighting, or 2 prong flashers

#### 52-256

3 Wire connector assembly used on 3 prong seal beam lighting, or 3 prong flashers.





#### **PILOT LIGHT**

#### 52-115

12 VOLT PILOT LIGHT. Red 1/2" diameter faceted lens. For panel mounting through 5/16" hole. Has snap-out socket for conventional bulb replacement.



#### **BUZZER**

#### UNIVERSAL

Truck Low Air Pressure And Bus Rear Door Warning

#### 52-400

#### 52-400

12 Volt-2 Screw Terminals. 76dB @ 4: REPLACES: Ford FDM 2938A; GMC Truck and Coach 76023; Wayne Works Div., Divco-Wayne E-11811A and other 12 volt applications.



#### **HORN BUTTONS**

#### 52-660

Large IVORY Button, 1-11/16" Dia. with clamp-On Bracket. Fits Steering column up to 1-1/2".

#### 52-777

Large BLACK Button , Chrome Plated Housing.

#### 52-661

FLAT SURFACE MOUNTING BLACK Plastic Button, Nickel Plated Housing, Mounting Holes 2-1/8" on centers







## Look What's NEW...



 ${\sf Pollak}^{\it @}~{\sf has~a~"new~and~improved"}~{\sf website;~visit~us~at~\it www.pollakaftermarket.com}$ 



41-820

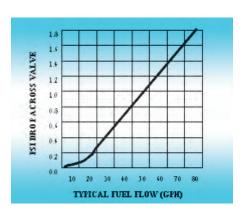
**Medium Duty Alarm** 

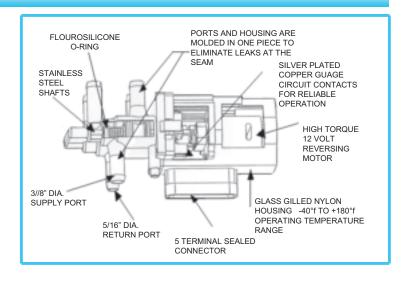






## **FUEL TANK SELECTOR VALVES**





#### **MOTORIZED FUEL SELECTOR VALVES -**

(Diesel or Gas) These valves are designed for use in applications which involve in-tank fuel pumps, not exceeding the rated pressure of the valve. Motorized valves are driven into position by an electric motor and are stable in either position. They only draw power for a fraction of a second during transfer. A switch in the valve shuts off the motor when the valve reaches the selected position.

**NOTE:** Another switch within the valve provides automatic fuel gauge readout for selected tank.

#### 42-159 (65 PSI) LIGHT TRUCK 6-PORT MOTOR DRIVEN VALVE

Incorporates six ports including return, draws -.5 amps. max. at 12 volts, fits 3/8" I.D. hose for fuel supply and 5/16" hose for return lines. Mounting holes: 2 5/16" threaded nuts on 1 3/16" centers. Valve remains in actuated position after power is disconnected. For new installations 42-203 connector and 34-592 toggle switch required. Installation sheet included.

#### 42-300

KIT - 6 PORT MOTORIZED VALVE; CONNECTOR, SWITCH AND FACE PLATE

Contains: 42-159, 42-203, 34-592, 42-201 Specifications: Same as 42-159

42-302P KIT - 6 PORT MOTORIZED VALVE AND CONNECTOR

Contains: 42-159, 42-203 Specifications: Same as 42-159



## **FUEL TANK SELECTOR VALVES**

#### 42-151 3 PORT MOTORIZED VALVE

Maximum Fuel System Pressure: 65 psi Fuel Hose: 3/8" ID. Connector (Required): 42-203 Recommended

Fuse: 7.5A

42-308 KIT-3 PORT MOTORIZED VALVE; CONNECTOR, SWITCH AND FACE PLATE

Contains: 42-151, 42-203, 34-592, 42-201 Specifications: Same as 42-151



#### **SERVICE TIPS**

**Motorized Valves** – *Use 18 AWG (or heavier wire for long runs) to insure* adequate voltage at the valve during operation. These valves are designed for use in vehicles with 12 volt systems.

Motorized Valve Common Solutions for the 42-159 & 42-151

<u>PROBLEM-</u> The gauge reads the fuel level in the wrong tank. Check the wiring for the fuel tank gauge sending units to the valve. Exchanging the wires to terminals "A" and "C" may correct this.

**PROBLEM-** *The valve won't switch tanks.* Check all wiring to the valve. The valve changes position when the voltage polarity at the terminals "D" and "E" is reversed. The valve should always have 12 volts between terminals "D" and "E".



42-201



34-592

#### General

*Always use fuel filters* between the tanks and the valve. Contamination from unfiltered fuel is a leading cause of valve damage and resultant failure.

These valves are not for marine applications.

**Not for use with water.** These valves are designed and manufactured to provide trouble free operation in multiple tank fuel systems. The internal components require diesel or gas fuel to lubricate the working parts.

Do not allow valves to remain dry for extended periods of time. Dried fuel will cause the internal seals to stick and can damage them when the valve is eventually actuated. The use of a fuel stabilizer during long term storage is recommended.

## **FUEL TANK SELECTOR VALVE ACCESSORIES**



34-592 **Toggle Switch** D.P.D.T.

Circuit: DPDT ON-ON Reversing

Positions: 2

Termination: 6 Screw 2 Jumper Blades Mounting: 15/32" Dia. Bushing



Rocker Switch 34-359 Reversing Rocker Switch, (Main/Aux.) On-On D.P.D.T.2 Positions, 6 Blade Terminals with Jumper Blades, Fits .830" x 1.450" Panel Cutout in .093, .125, .187 thick panels. Black Bezel & Actuator. Housing has nylon gasket for

protection against moisture

intrusion.



42-201 Faceplate (Supplied in 42-300) Material: Bright Nickel Plated Steel Legends: AUX, MAIN



25-371 1/2 Toggle Boot

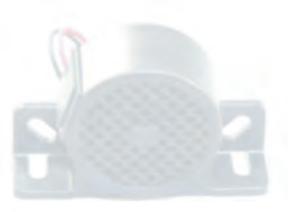
42-203

Same as Toggle Boot #25-370 except allows Toggle Handle (of any length) to protrude. Accommodates all toggle lever diameters from .155" - .240" including all Pollak toggles except nylon handle series.



25-370 **Toggle Boot** EPDM Rubber Boot with 15/32-32 thread. Provides protection against salt spray and is resistant to weather and ozone. Can be used on 34-570 Series and other toggle switches with 15/32" Dia. mounting stem.





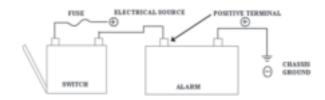


## **BACK-UPALARMS**

Pollak® provides a complete family of back-up alarms manually adjustable and single level. Selection of a back-up alarm should result in an alarm that has a sound level output higher than the ambient noise level of the work environment.

#### Features Standard To Pollak® Electronic Back-Up Alarms:

- Manufactured of high-impact, non-corroding nylon.
- 100% Factory Tested
- Solid state electronics sealed against dust, moisture, and vibration.
- Can be used in positive or negative ground vehicles.
- Steam cleanable.



#### 41-761 (9-24 Volts)

#### MANUALLY ADJUSTABLE 112/107/97db

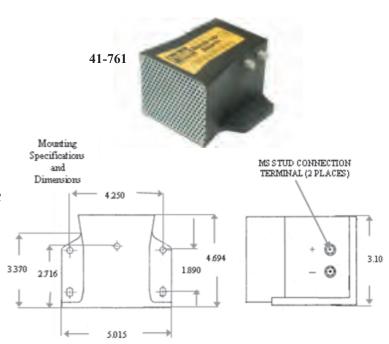
<u>Heavy-duty adjustable unit</u> for largest construction and mining vehicles, graders, dumps, crawlers, tractors, belly dumps, etc. Designed for high performance, the most compact lowest cost unit of this type available.

#### **SPECIFICATIONS:**

- Adjustable sound levels... 112dB... 107dB...97dB(A)
   ±4 @ 4'
- Multi-voltage 9 to 24 volts
- Voltage spike protected
- Current draw less than 1 amp
- Solid state electronics
- Certified conformance to S.A.E, J994, types A, B, & C
- Meets State, Federal, O.S.H.A., Bureau of Mines, and Army Corps of Engineers' requirements
- Size 5" W x 4.7" D x 3.1" H
- Mounting 2" x 4 -1/4" centers
- Net weight 2.0 lbs.

#### **FEATURES:**

- Made of high impact, non-corroding plastic
- Weather resistant and steam cleanable
- Operates in temperature ranges (-40° F to +170° F)
- Can be used on positive and negative ground vehicles





#### 41-802

- Robust Heavy Duty Switch
- Water Resistant
- 15 Amps @ 12VDC
- Single Pole Double Throw with 360 Degree Movement
- Mounting Bracket & Instruction Sheet Included



#### 41-706

- Switch for vehicles not equipped.
   with automatic back-up light circuit. Mounts adjacent to reverse shift
- Spring loaded lever permits overtravel
- Normally off
- 2.5 Amps Inductive @ 14-28V



For vehicles not equipped with an automatic back-up circuit. Use with any back-up alarm, but the "Pro's" trust Pollak®.

## **BACK-UPALARMS**

Pollak<sup>®</sup> provides a complete family of back-up alarms manually adjustable and single level. Selection of a back-up alarm should result in an alarm that has a sound level output higher than the ambient noise level of the work environment.

NEW: 41-851, 41-820, 41-821& 41-822

- Slotted mounting 'drop in' replacement
- Wire leads enhance corrosion protection (from traditional studs)
- New design smaller size, less heat, longer life
- Consult factory for additional models

#### 41-851 (12-24 Volts) SINGLE LEVEL 107db

A Medium to Heavy-Duty unit for off-highway trucks, dump trucks, loaders, cranes, backhoes, etc.

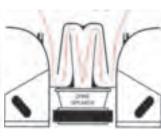
#### **SPECIFICATIONS:**

- Single level...107dB (A) ±4 @ 4'
- Voltage spike protected
- Reverse polarity protected
- Current draw less than 0.3 amps
- Solid state electronics
- Certified conformance to S.A.E. J994, type B
- Meets all European Standards for on and off-road vehicles (CE & E-Mark Certified)
- State, Federal, O.S.H.A., Bureau of Mines and U.S. Army Corps of Engineers' requirements
- 12" Wire Leads
- Size-5"Wx3.25"Dx3."H
- Mounting 2 slots .75"Lx.25"W and 2 slots 1"L x .25"W on 4.25" centers
- Net Weight 1.2 lbs.

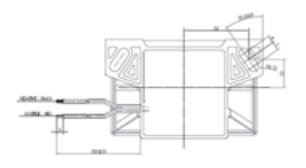
#### **FEATURES:**

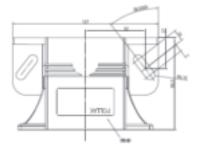
- Rugged Glass-Filled Nylon Housing
- Steam cleanable/Pressure Washable
- Low Current High Efficiency Dome Speaker
- Meets extreme requirements of off-highway equipment
- Operates in temperature ranges (-40° F to +185° F)
- Can be used on positive and negative ground vehicles





Patent Pending *Dome Speaker* demonstrating the self-cleaning feature; expelling concrete dust.





#### 41-820 (12-24 Volts) SINGLE LEVEL 97db

The rugged and compact 41-820 allows replacement of unnecessarily large and bulky alarms currently used on light and medium duty trucks, dump trucks, motor homes, campers, electric fork lifts and other similar applications.

#### **SPECIFICATIONS:**

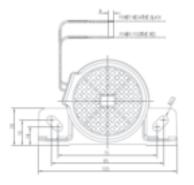
- Single level...97dB(A) ± 4 @ 4'
- Multi-voltage -12-24 volts
- Voltage spike protected
- Reverse polarity protected
- Current draw less than 0.3 amps
- Solid state electronics
- Certified conformance to S.A.E. J994, type C
- Meets State, Federal and U.S. Army Corps of Engineers' requirements
- Meets all European Standards for on and off-road vehicles (CE & E-Mark Certified)
- Size-4"Wx1.25"Dx2.5"H
- Mounting four .5"Lx .25"W slots on 3.25" centers

#### **FEATURES:**

- Rugged glass-filled nylon housing
- Steam Cleanable/Pressure Washable
- Can be used on positive and negative ground vehicles
- Compact size allows for horizontal or vertical mounting in protected areas

#### 41-821 (Not Shown) Same as 41-820 but with Stud Terminals







#### 41-822 (12 to 24 Volts) SINGLE LEVEL ALARM 107db

For use in medium to light duty applications where a louder warning level is required.

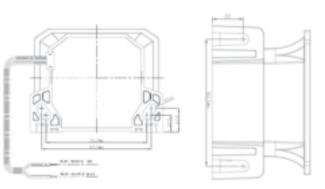
#### **SPECIFICATIONS:**

- Single level...107dB(A) ± 4 @ 4'
- Multi-voltage-12-24 volts
- Voltage spike protected
- Reverse polarity protected
- Current draw less than 0.3 amps
- Solid state electronics
- Certified conformance to S.A.E. J994, type B
- Meets State, Federal and U.S. Army Corps of Engineers' requirements
- Meets all European standards for on and off-road vehicles (CE & E-Mark Certified)
- Size 4"W x 2.5"D x 3."H
- Mounting two .5"Lx.25"W slots and two .75"Lx.25W slots on 3.25" center
- Net Weight 1 lb

#### **FEATURES:**

- Rugged glass filled nylon housing
- Steam Cleanable/Pressure Washable
- Low current, high efficiency dome speaker
- Can be used on positive and negative ground vehicles
- Compact size allows for horizontal or vertical mounting in protected areas

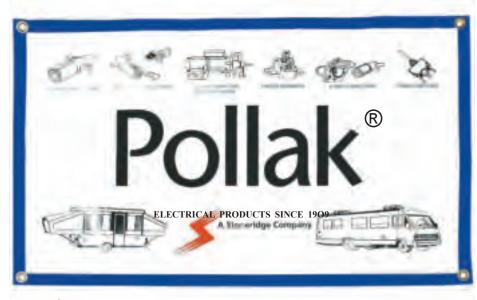






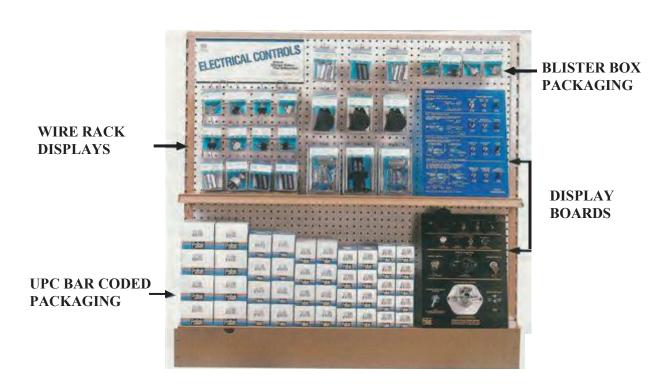


## **MERCHANDISING DISPLAYS**



BANNERS 18"H x 30"Wide 53-340 RV

Heavy Duty Banner 18"H x 30"Wide 53-340 HD



## **MERCHANDISING DISPLAYS**

#### **TOGGLE SWITCHES** Heavy Duty – 50 Amps, 12 Volt D.C.

**53-210** Contains Assortment 6 each #34-212 and #34-213

**53-212** Contains 12 #34-212, with Short Bat Handle

**53-213** Contains 12 #34-213, with Long Bat Handle.



#### **MOMENTARY START SWITCHES**

Extra Heavy Duty – 60 Amps, 12V, 40 Amps 24V

**53-359** Contains 12 #24-359

**53-360** Contains 12 #24-360

**53-372** Contains 12 #24-372



#### PUSH PULL SWITCHES

Heavy Duty – 75 Amps, 12 Volt D.C.

**53-306** Contains 12 #35-306

- Die Cut hole to accommodate standard peg hooks.
- Pull out easel enables flexible positioning on shelf or counter top.
- Sturdy 11" x 14" board, with colorful new graphics, puts 10 fast-moving #35-306 heavy duty push-pull switches in view of your customers.
- Boosts impulse sales and increases profits.



# Pollak® Connector & Towing Center



Pollak<sup>®</sup> Connector and Towing Center... supporting the **Great American Outdoors** 



End Cap Display: 53-136

(consult factory to create your own customized display)

#53-117

#### 53-117 FLEET DISPLAY BOARD Assortment contains each of the following: P/N 24-372 Momentary Start Switch P/N 31-103 Universal 4 Position Ignition Switch P/N 31-114 Universal International Harvester Type Replacement Ignition Switch P/N 34-212 Heavy Duty 2 Position Toggle Switch P/N 34-213 2 Position Toggle Switch With Extra Long Bat P/N 34-571 Heavy Duty 2 Position Toggle Switch Long Handle Marker Light Toggle Switch P/N 34-579 P/N 34-586 Lighted Toggle Switch P/N 35-306 75 Amp Extra Heavy Duty 2 Position Push-Pull Switch P/N 54-220 20 Amp Circuit Breaker 7 Pole Trailer Socket with 20 Amp Circuit P/N 11-737 **Breakers** Heavy Duty 7 Pole Trailer Connector P/N 11-752 P/N 41-820 97db Back-Up Alarm P/N 51-902 Heavy Duty Master Disconnect Switch P/N 11-900 Weather Beater 7-Way Plug

## Packaging & Merchandising Options

# Connectors, Adapters & Switches for the *Value* conscious consumer:

#### Currently available:

- 4-Pole Connectors
- 6-Pole Connectors
- 7-Pole Connectors
- RV Connector Adapters
- Heavy Duty Toggle Switches
- Heavy Duty Push-Pull Switches
- New Products added often, look for updates...
- Most popular connector and adapter items available
- Attractive packaging easy order box quantities
- Connectors certified to SAE J560 specifications
- All products validated in Pollak's® Certified Labs

## **Packaging Options**



**Bulk Packed** 





**Retail Bags** 



**53-134** *Spinner Rack.* Stand alone floor display - shown with Value Line retail bags.





Using Stoneridge's global manufacturing "footprint", Pollak® continues to expand its offering of price competitive alternatives to the renowned Pollak® North American products. In stock, ready to go, and priced to sell.

## Pollak<sup>®</sup>

ELECTRICAL CONTROLS SINCE 1909



Canton, Massachusetts Phone: 800-225-6046 Fax: 800-888-1126

Website:

www.pollakaftermarket.com

# **WIRING COLOR CODES**

	RECREATION VEHICLE									
	7 - POLE CONNECTORS									
No.	No. Color Circuits Recommended Wire Gauge									
1	White		Ground Return	10 Ga						
2	Blue		Electric Brake	12 Ga						
3	Green		Tail, License and Running Lights	14 Ga						
4	Black		Battery Charge	10 Ga						
5	Red		Stop & Left Hand Turn Signal	14 Ga						
6	Brow n		Stop & Right Hand Turn Signal	14 Ga						
7	Yellow		14 Ga							

	HEAVY DUTY TRUCK									
	7 - POLE CONNECTORS									
No.	Color Circuits Recommended Wire Gauge									
1	White		Ground Return	8 Ga						
2	Black		Clearance, Side Marker, and Identification Lamps	12 Ga						
3	Yellow		Left Turn & Hazard Signal	12 Ga						
4	Red		Stop Lamps & Anti-Lock Devices	10 Ga						
5	Green		Right Turn Signal & Hazard Signal	12 Ga						
6	Brow n		Tail, Rear Clearance, Marker, and License Plate Lamps	12 Ga						
7	Blue		Auxiliary Circuit/ABS	10 Ga						

	UNIVERSAL 6 - POLE CONNECTORS							
No.	Col	or	Circuits					
1	White		Ground Return					
2	Brow n		Tail Lights					
3	Yellow		Left Turn					
4	Red		Stop					
5	Green		Right Turn					
6	Blue		Auxiliary Circuit					

UNIVERSAL 4 - POLE CONNECTORS									
No. Color Circuits									
1	White		Ground Return						
2	Green		Right Turn & Brake Lights						
3	Yellow or Red		Left Turn & Brake Lights						
4	Brow n		Tail Lights						

For POLLAK® products, contact:

Note: Check all circuits before operating vehicles

## WIRE GUAGE SELECTION CHART

Note: This chart is based upon a 10% voltage drop. For 5% voltage drop, use double the measured wire length. When mechanical strength is a factor, use next larger wire gauge.

12-VOLT SYSTEM Total length of Cable in Circuit from Battery to Most Distant Lamp											
		2.5	5	10	20	30	40	50	60	80	100
AMPS	Candle	Ft.	Ft	Ft.	Ft.						
(Appl).	Power	GA.									
1.0	6	20	20	20	20	20	20	20	20	20	18
1.5	10	20	20	20	20	20	20	20	20	18	18
2	16	20	20	20	20	20	20	18	18	16	16
3	24	20	20	20	20	20	18	18	16	16	14
4	30	20	20	20	20	18	16	16	16	14	12
5	40	20	20	20	18	18	16	14	14	12	12
6	50	20	20	20	18	16	16	14	14	12	12
7	60	20	20	20	18	16	14	14	12	12	10
8	70	20	20	20	16	16	14	12	12	10	10
10	80	20	20	18	16	14	12	12	12	10	10
11	90	20	20	18	16	14	12	12	10	10	8

12-VOLT	SYSTEM	Total length of Cable in Circuit from Battery to Most Distant Lamp									
		2.5	5	10	20	30	40	50	60	80	100
AMPS	Candle	Ft.	Ft.	Ft.	Ft.	Ft.	Ft.	Ft.	Ft	Ft.	Ft.
(Appl).	Power	GA.	GA.	GA.	GA.	GA.	GA.	GA.	GA.	Ga.	Ga.
12	100	20	20	18	16	14	12	12	10	10	8
15	120	20	20	18	14	12	12	10	10	8	8
18	140	20	20	16	14	12	10	10	8	8	8
20	160	20	18	16	12	12	10	10	8	8	6
22	180	20	18	16	12	10	10	8	8	8	6
24	200	20	18	16	12	10	10	8	8	6	6
36		20	16	14	10	8	8	8	6	6	4
50		18	16	12	10	8	6	6	4	4	2
100		14	12	10	6	4	4	2	2	1	0
150		14	10	8	4	2	2	1	0	00	000
200		12	8	6	4	2	1	0	00	000	0000

# **Open Space for your notes:**

## **POLLAK®** Numerical Part Number Index

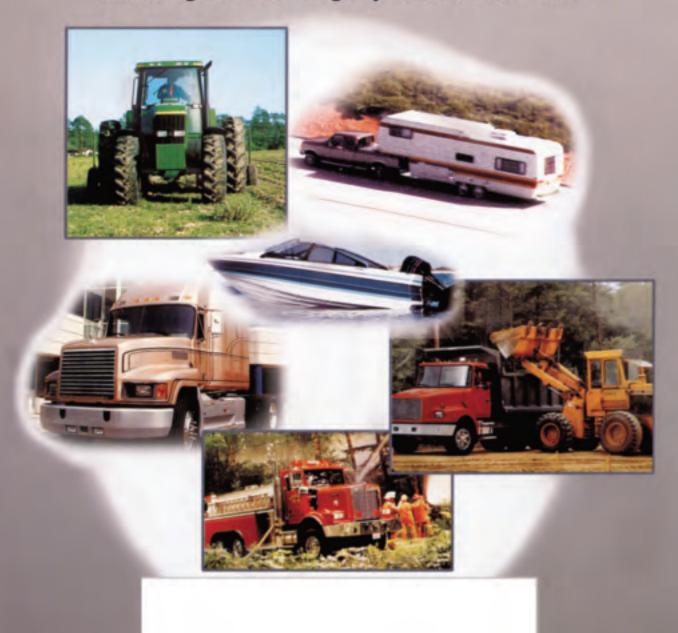
PART#	PAGE#	PART # PAGE	PART#	PAGE#	PART#	PAGE#	PART#	PAG
CONNECTORS		CONNECTORS CON'T	BALL SWITCHES		31-139	31	33-105	33
1-200	13	11-99014	21-361	27	31-152	'31	33-107	33
1-400		11-99814	21-363		31-159		33-150	33
1-402		12-20013	21-364		31-159-001		33-200	
		12-30013	21-370		31-164			
1-403			21-381		31-166-001		TOCCI E/DO	CIZED
1-404		12-400	I				TOGGLE/ROO	KEK
-405		12-40113	21-400		31-173-102		<u>SWITCHES</u>	
-408		12-40213	21-434		31-173-104		33-300	
-409	11	12-40513	21-435		31-178		33-302	20
-410	11	12-40313	21-437	27	31-180	30	33-400	24
-500	11	12-40413	21-443	28	31-190	30	33-402	24
-501	11	12-41017	21-444	28	31-191	31	33-403	24
-502		12-41117	21-448	27	31-192	31	34-111	
-600		12-412	21-456	27	31-196	30	34-212	
-602		12-41313	21-458		31-223		34-213	
			21-465		31-228		1	
-603		12-414	I				34-215	
-604		12-41513	21-467		31-229		34-216	
-605		12-41713	21-478		31-231		34-218	
-606	10	12-41813	21-481		31-233	30	34-219	19
-607	10	12-41913	21-482	28	31-242	30	34-220	19
-608	10	12-42113	21-487	27	31-243	31	34-222	19
-609		12-422	21-491	28	31-245	31	34-223	
-613		12-423	21-492		31-249		34-225	
		12-424	21-493		31-253		34-226	
-614			21-495		31-257		1	
-616		12-42513	I				34-230	
-617		12-42613	21-509		31-267		34-231	
-626		12-50013	21-517		31-273		34-232	
-627	10	12-50113	21-532		31-280		34-233	22
-700	6	12-60013	21-538	28	21-282S	33	34-234	22
-702	6	12-60113	21-541	26	31-285	32	34-235	22
-704		12-61017	21-547	28	31-288	33	34-236	
-710		12-61113	21-562	28	31-289	31	34-237	
-720		12-62517	21-595	28	31-290		34-238	
			1	20	31-292		1	
-721		12-70015	MOMENTARY				34-239	
-723		12-701U15	<u>SWITCHES</u>		31-292-801		34-240	
-724	7	12-70215	24-359	25	31-292-802		34-241	22
-729	7	12-70315	24-360	25	31-292-803	30	34-255	22
-730	7	12-70415	24-362	25	31-292-804	30	34-258	22
-732	9	12-70515	24-363	25	31-292-805	30	34-259	22
-733	9	12-70615	24-372	25	31-292-806	30	34-260	22
-735		12-70715	24-373		31-297	32	34-301	
-736		12-709	24-390		31-302	32	34-305	
-737		12-71015	24-391		31-305		34-306	
-739		12-711U14,15	24-392		31-309		34-307	
			I		31-322		1	
-761		12-712	24-393				34-308	
-762		12-71616	24-394		31-324		34-310	
-763	6	12-71716	24-395	25	31-332		34-311	21
-764	6	12-71816	25-348	26	31-337		34-312	21
-771	7	12-71916	25-349	26	31-339	34	34-359	21,5
-773		12-72010	25-350		31-345	32	34-360	
-777		12-72317	25-351		31-359		34-500	
-779		12-72417	25-352		31-498		34-504	
-780		12-72517	I		31-499		34-508	
-781			25-358		31-527		1	
		12-72617	25-370				34-513	
-785		12-72717	25-371		31-537		34-570	
-786		12-72817	25-372	26	31-600		34-570Q	
-796		12-72916	IGNITION SWIT	CHES	31-600-103		34-571	20
-797	8	12-74117	31-103		31-601	31	34-571C	22
-801	9	12-74217	31-104		31-602	33	34-571L	
-802	9	12-743	31-105		31-603		34-571LQ	
-833		12-74416	31-106		31-604		34-571Q	
-850		12-75017	I		31-607		34-572	
-851			31-109		31-608		1	
-852		12-75117	31-110				34-572Q	
		12-80012	31-111	30	31-609		34-573	
-853		12-80112	31-112	31	31-610		34-573Q	
-893		12-8118	31-114	31	33-104	33	34-574	20
-896	16	12-8128	31-117				34-574Q	20
-898	14	12-90515	31-119				34-575	
-900	6	12-906	I				1	
-902			31-122				1	
		12-90715	31-124					
-904		CABLES	31-131				1	
		14.116	31-132	30.34			I	
-910		14-11616	31-132				1	
-910 -932	14,16	14-11716	31-132					
I-904	14,16		66					

# **POLLAK<sup>®</sup> Numerical Part Number Index**

PART # PAGE#	PART#	PAGE#	PART#	PAGE#	PART#	PAGE#	
TOGGLE/ROCKER	MISC. ELECTRICAL	<u>L</u>	DISPLAY MERO	CHANDISE	CIRCUIT BREA	KERS	
SWITCHES CON'T	PRODUCTS		53-117	62	CON'T		
34-575Q20	51-318		53-134		54-641PL		
34-57620	51-319		53-136		54-650PL		
34-576Q20	51-322		53-210		54-651PL		
34-57720	52-100		53-212		54-705		
34-577LQ20 24-577Q20	52-104 51-115		53-213 53-306		54-710 54-715		
34-57820	52-116		53-359		54-720		
34-578Q20	52-13812		53-360		54-725		
34-57920	52-139		53-372		54-730		
34-579Q20	52-214	.48			54-831PL		
34-58020	52-214Q	.48	CIRCUIT BREA	KERS	54-850PL	45	
34-580L20	52-215	.48	54-110PL		54-851PL	45	
34-580LQ20	52-216	.48	54-115		54-852PL	45	
34-580Q20	52-239		54-120		54-853PL		
34-581Q19	52-240		54-120PL	42	54-854PL		
34-58619	52-241		54-125	42	54-861PL		
34-586Q19	52-242		54-125PL		54-870PL		
34-588	52-243 52-244		54-130		54-871PL 54-872PL		
34-591LQ20	52-245		54-130PL		54-873PL		
34-591Q20	52-246		54-135PL		54-874PL		
34-59252,54	52-247		54-140		54-891PL		
34-592Q20	52-248		54-150 54-150PL		54-892PL		
34-593Q20	52-249	.45,48	54-215		54-893PL	43	
34-593LQ20	52-250	.39	54-215PL		54-894PL	43	
34-59620	52-252	.39	54-220		54-901PL		
34-65320	52-253		54-220PL		54-902PL		HIGA LIDG CHAPE
	52-255		54-221		54-903PL		USA UPC CHART
PUSH-PULL SWITCHES	52-256		54-225	42	54-904PL		AVAILABLE UPON
35-30024	52-259		54-230	42	54-910		REQUEST.
35-30624	52-260 52-261		54-230PL		54-911 54-912		
35-31624	52-262		54-231		54-920		· · · · · · · · · · · · · · · · · ·
35-31924 35-32024	52-263		54-240		54-921		Pollak ®
35-33024	52-270		54-240PL		54-930		300 Dan Road
35-33124	52-271		54-241 54-250		54-931		Canton MA USA
30 331	52-272	.48	54-250PL		54-940	43	Canton, MA USA
BACK-UP ALARMS	52-273	.48	54-311PL		54-941	43	Tel. 781-830-0340
41-70656	52-274		54-321PL		54-950		Fax. 781-830-9570
41-76156	52-304-01		54-331PL		54-951		
41-80256	52-305-01		54-510PL	42	54-953		
41-82058	52-307-01 52-312-01		54-515	42	54-954 54-955		For Customer
41-82158	52-315		54-515PL		54-956		Service, Please refer
41-82258	52-324-01		54-520		54-957		to the Back Cover
41-85157	52-327		54-520PL		54-958		
	52-328		54-525		54-959		
FUEL SELECTOR	52-329	.38	54-530 54-530PL		54-960	44	
<u>VALVES</u>	52-330	.38	54-540		54-970	46	
42-15153 42-15952	52-331		54-540PL		54-971		
42-20152,53,54	52-400		54-550		54-972		
42-203	52-406		54-550PL	42	54-975		
42-300	52-408		54-597	44	54-976		
42-30252	52-410 52-412		54-616PL		54-977 54-981		
42-30852	52-600		54-630PL		54-982		
	52-611		54-631PL		54-983		
MASTER DISCONNECT	52-613		54-640PL	44			
<b>SWITCHES</b>	52-616	.39					
51-31136	52-620	26,39					
51-90235	52-622	26,39					
51-903	52-623						
51-90436	52-624	. ,					
51-92735	52-625						
51-908	52-626						
51-91635	52-627 52-633						
51 710	52-642						
	52-660						
	52-661						
	52-777						
			67				
	1						l

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