

# warning devices, pilot lights, panel lamps, sockets

**N1** WARNING DEVICES

# **Buzzers & Alarms**

#### 4099 Universal Buzzer 12V DC 📴

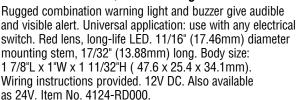
Hundreds of uses. For 'door ajar' warning, bus driver alert, low air pressure, temperature, etc. Works with any temperature, pressure, door or momentary switch. Electrical contacts are designed for instant response and uninterrupted signal.

Impact-resistant ABS resin case. Moisture-repellent insulator. Two screw terminals with lockwashers. Size: 1 7/32"L x 2 1/2"W x 2 17/32"H (30.9 x 63.2 x 64.3mm). 24V buzzer available. Order number 40151

Replaces: Ford FDM-2938-A, GMC 1116882, Superior Coach 76032, Divco-Wayne E-11811-A.



#### 4112-RC000 Buzzer/LED Pilot Light "Dual Alarm" 📴





#### 40100 Buzzer Pull Switch

Attaches to a cord. For use by passengers in buses and rapid transit vehicles. Extra heavy duty construction. Use with Cole Hersee buzzers or buzzer/flashers: 4099. 4112-RC000, 4124-RD000. SPST Off-Mom. On. Normally Off, pull to On, spring return to Off. For use with systems up to 36V DC. Two screw terminals. Neutral gray enamel finish cover. Operates with a pull cord.

Replaces: Delco 1998723, 18998802, 1998020.



눚 Rapid ship item. 📴 Available in retail clamshell pack. 🖈 Minimum order quantity may apply. Part numbers needed in BOX require a -BX suffix on the purchase order.





WARNING DEVICES

# M-40177BP Marine Engine Warning Kit 📴

For inboard and outboard engines with 12V DC electrical system. Handy kit includes buzzer 4099, temperature switch 84251, see page 105, and pressure switch 8606, see page 106. Alarm sounds when oil pressure is too low and/or engine coolant temperature is too high. Installation instructions included. Available in BP only.

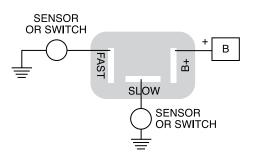


#### 40212 Dual Rate Electronic Alarm 12V DC

Utilizes advanced integrated circuit surface mount technology. Negative ground. Use with two input sources to warn of two different hazardous conditions. Sounds at two different rates: one sensor triggers a fast-rate alarm, the second actuates a slower rate alarm tone.

Minimum sound level: 90dB. Lightweight molded plastic housing. Solid-state circuitry. Size: 2.005"L x 1.185"W x .930"H (50.4 x 30.3 x 23.6mm). Plugs into Cole Hersee Sealed Beam Connector 3032 or 3029, Delphi (Packard) 12033871, or accepts individual connectors for 1/4" (6.4mm) blades. (Not supplied)





#### 3261-01 Low Air Pressure Flasher Kit

Lamp flashes when pressure switch triggers at 60+10 psi (413+ 69kPa). Includes heavy duty Air Pressure Switch 8640 (has 1/4-18 NPTF thread). Aluminum faceplate with red enamel finish, 2.94"W x 2.09"H (74.7 x 52.1mm). Pilot light with flashing bulb. Two 16AWG wire leads, one 18" (457.2mm) and one 8" (203.0mm). Installation instructions included.





# **Super-Bright LEDs**



New 58312 series rocker switches have long lasting LED lights and high-visibility wrap-around lenses. See page 1.

# **Back-Up Alarm Switch**



The 75125 switch is designed for vehicles without an automatic back up switch circuit. Simply mount the switch adjacent to the reverse switch. Spring handle allows overtravel. See page 153.





# **LED Pilot Lights**





12V DC. With rugged light-emitting diode light source that ensures long hours of service. Never needs bulb replacement. Mounting hole: 0.546" diameter(13.9mm). Quick connect .250" (6.4mm) terminals are polarized for ease of wiring. Body length 1.248" (31.7mm), maximum bezel diameter 0.630" (16.0mm). Fits into panels .020" through .300" thick (0.5 to 7.6mm). Nickel-plated washer and hexnut. Also available in 24V- Contact Cole Hersee.

PL-612-R Red Lens

PL-612-G Green Lens

PL-612-B Blue Lens 💷

PL-612-A Amber Lens

# **Incandescent Pilot Lights**

Corrosion-resistant construction. Spring-actuated brass contacts assure proper contact with the bulb. 16AWG (1.0mm²) insulated stranded copper leads. 8" (203mm) long. Many items are available with custom imprinting: contact Cole Hersee

# **Single Contact, Insulated**

#### Smooth Lens

Plastic socket.

#### PL-6-RC000 With Small 5/16" Lens, Chrome Bezel

Red lens. Chrome-plated brass bezel. 7/8" (22.2mm) diameter. 3/4" (19.1mm) diameter mounting stem, 11/16" (17.5mm) long, 3/4-32 UN-2A. 5/16" (7.9mm) diameter lens. 12V #56 bulb supplied.



#### PL-2 Series With Small 3/16" Lens

12V #53 bulb supplied. 3/16" (4.76mm) diameter lens. 5/16" (7.9mm) diameter mounting stem, 3/8" (9.5mm) long. Plated brass bezel, satin finish, 1/2" (12.7mm) diameter.



PL-2-AC000\* Amber Lens

PL-2-BC000 Blue Lens

PL-2-GC000 Green Lens

PL-2-RC000 Red Lens

#### PL-118 Series, Rear Mounting

Mount through rear of the panel. Satin finish or black aluminum bezel, 15/16" (23.8mm) diameter. 12V #1893 bulb supplied. 5/8" (15.9mm) diameter lens. 11/16" (7.5mm) diameter mounting stem, 1/4" (6.4mm) long. Available with custom imprinting: contact Cole Hersee.



PL-118-AC000 Satin Bezel, Amber Lens

PL-118-GC000 Satin Bezel. Green Lens

PL-118-RC000 Satin Bezel, Red Lens

PL-118-AC001 Black Bezel, Amber Lens

PL-118-GC001 Black Bezel, Green Lens

PL-118-RC001 Black Bezel, Red Lens

# 24 Volt

All incandescent pilot lights are supplied with a 12V bulb. To convert to 24V use, replace the supplied bulb with a 24V bulb. Cole Hersee can provide pilot lights with 24V bulbs - contact us.





**HEAVY-DUTY PILOT LIGHTS** 

#### PL-116 Series, Front Mounting

Mount from the front of the panel, fasten from the back. Satin finish or black aluminum bezel, 15/16." (23.8mm) diameter. 12V #1893 bulb supplied. 5/8" (15.9mm) diameter lens. 3/4" (19.1mm) diameter mounting stem, 3/8" (9.5mm) long. Available with custom imprinting: contact Cole Hersee.



PL-116-GC000 Satin Bezel, Green Lens

PL-116-RC000 Satin Bezel, Red Lens

PL-116-RC001 Black Bezel, Red Lens

#### PL-20 Series with Extra Wire For Ground

12V #53 bulb supplied. 17/32" (13.5mm) diameter lens. 3/4" (19.1mm) diameter mounting stem, 11/16" (17.5mm) long. Chrome-plated brass bezel, 7/8" (22.2) diameter. Available with custom imprinting: contact Cole Hersee.



PL-20-AC000 Amber Lens

PL-20-BC000\* Blue Lens

PL-20-GC000 Green Lens

PL-20-RC000 Red Lens

PL-20-RC033\* Red Lens, 'Oil' Imprint

### **Faceted Lens**

#### PL-36 Series with Honeycomb Lens, Stainless Bezel

Lenses have honeycomb pattern on the internal side, smooth on the outside. Satin finish stainless steel bezel, 3/4" (19.1mm) diameter. 1/2" (12.7mm) diameter mounting stem, 3/8" (9.5mm) long. 5/16" (8.0mm) diameter lenses. 12V #53 bulb supplied.



PL-36-AC000 Amber Lens

PL-36-BC000 Blue Lens

PL-36-GC000 Green Lens

PL-36-RC000 Red Lens

# Single Contact. Grounding

Self-grounding to metal panels.

### Smooth Lens

#### PL-1 Series with Small 3/16" Lens, Chrome Bezel

12V #53 bulb supplied. 3/16" (4.8mm) diameter lens. 5/16" (7.9mm) diameter mounting stem, 3/8" (9.5mm) long. Chrome-plated brass bezel, satin finish, 1/2" (12.7mm) diameter.



PL-1-BC000 Blue Lens

PL-1-GC000 Green Lens

PL-1-RC000 Red Lens

#### PL-5-RC000 With Small 5/16" Lens, Chrome Bezel

Red lens. Chrome-plated brass bezel. 7/8" (22.2mm) diameter. 3/4" (19.1mm) diameter mounting stem, 11/16" (17.5mm) long. 5/16" (7.9mm) diameter lens. 12V #53 bulb supplied.



### **HEAVY-DUTY PILOT LIGHTS**

#### PL-19 Series with Chrome Bezel

12V #53 bulb supplied. 17/32" (14.5mm) diameter lens. 3/4" (19.1mm) diameter mounting stem, 11/16" (17.5mm) long. Chrome-plated brass bezel, 7/8" (22.2mm) diameter. Available with custom imprinting: contact Cole Hersee.



PL-19-AC000 Amber Lens

PL-19-BC000 Blue Lens

PL-19-GC000 Green Lens

PL-19-RC000 Red Lens

#### PL-117 Series with Extended Snap-In Lens.

Mount through rear of the panel. Satin finish or black aluminum bezel, 15/16" (23.8mm) diameter. 12V #1893 bulb supplied. 5/8" (15.9mm) diameter lens. 11/16" (7.5mm) diameter mounting stem, 1/4" (6.4mm) long. Available with custom imprinting: contact Cole Hersee.



PL-117-RC000 Red Lens, Satin Bezel

PL-117-RC001 Red Lens. Black Bezel

#### **Faceted Lens**

#### **PL-85 Series**

12V #67 bulb supplied. 15/16" (23.8mm) diameter lens, gasketsealed. 7/8" (22.2mm) diameter mounting stem, 3/4" (19.1mm) long. Plated brass bezel, 1 1/4" (31.8mm) diameter. Faceted outer lens surface.



PL-85-AC000 Amber Lens

PL-85-GC000 Green Lens

PL-85-RC000 Red Lens

#### PL-35-RC000 with Honeycomb Lens, Stainless Bezel

Red lens with honeycomb pattern on the internal side, smooth outer surface. Satin finish stainless steel bezel. 3/4" (19.1mm) diameter, 1/2" (12.7mm) diameter mounting stem, 3/8" (9.5mm) long. 12V #53 bulb supplied. 5/16" (8.0mm) diameter lenses.



## **Double Contact**

#### PL-86 Series large 15/16" Lens

Insulated. 12V #68 bulb supplied. 15/16" (23.8mm) diameter faceted lens, gasket-sealed. 7/8" (22.2mm) diameter mounting stem, 3/4" (19.1mm) long. Plated brass bezel, 1 1/4" (31.8mm) diameter.



PL-86-AC000 Amber Lens

PL-86-BC000 Blue Lens

PL-86-GC000 Green Lens

PL-86-RC000 Red Lens

# Forward & Reverse Module

Sealed module handles high power motor reversing and features dynamic braking. See page 99.



N3 MARINE PILOT LIGHTS

# Single Contact

Plastic socket. Insulated 16AWG (1.0mm2) insulated stranded copper leads, 8" (203mm) long. Many items are available with custom imprinting: contact Cole Hersee

#### M-320 Series With Smooth Lens

17/32" (13.5mm) diameter lens. Chrome-plated brass bezel, 7/8" (22.2mm) diameter. 3/4" (19.1mm) diameter mounting stem, 1 1/16" (27.0mm) long. 12V #53 bulb supplied. Available with custom imprinting: contact Cole Hersee.



M-320-GC Green Lens M-320-RC Red Lens 💷

# M-328-RC With Honeycomb Lens

Red lens, 5/8" (15.9mm) diameter with honeycomb pattern on the internal side. Satin finish stainless steel bezel, 3/4" (19.1mm) diameter. 1/2" (12.7mm) diameter mounting stem, 7/8" (22.2mm) long. 12V #53 bulb supplied.



## **Double Contact**

Metal socket.

#### PL-16 Series With Smooth Lens

17/32" (13.5mm) diameter lens. Chrome-plated brass bezel, 1 1/8" (28.6mm) diameter. 7/8" (22.2mm) diameter mounting stem, 1 1/8" (28.6mm) long. 12V #68 bulb supplied. Moisturerepellent insulator. Available with custom imprinting: contact Cole Hersee.



PL-16-AC000 Amber Lens PL-16-GC000 Green Lens PL-16-RC000 Red Lens

#### M-326 Series With Faceted Lens

15/16" (23.8mm) diameter lens, gasket-sealed. Plated brass bezel, 1 1/4" (31.8mm) diameter. 7/8" (22.2mm) diameter mounting stem, 1 1/4" (31.8mm) long. 12V #68 bulb supplied. Moisture-repellent insulator.



M-326-AC Amber Lens M-326-RC Red Lens

# **Economical**



Illuminated tip toggle switches M-54111-01 and M-54111-02 combine the properties of a switch and a pilot light. Switch tips are illuminated White when Off - which makes it easier to locate in the dark.

When the switch is On, the tip is illuminated Red. See page 16.



#### **HOODED PANEL LAMPS**

For illumination of maps or other items, with minimal interference of driving visibility. Hood can be rotated to direct the light beam (except DL-75-12V, which has a fixed hood). 16AWG (1.0mm²) insulated stranded copper leads, 8" (203mm) long, except where noted.

# **Single Contact, Self-Grounding**

Self-grounding in metal panels.

#### DL-13 Wide-Aperture, Chrome Hood 📴

Bright chrome-plated brass hood with wide aperture. Mount through the panel. 11/16" (17.5mm) diameter mounting stem, 3/8" (9.5mm) long. Accommodates single-contact bayonet bulb. Suggested lamps (not included): #63 (6V), #67 (12V), #623 (24V).



#### DL-21 Wide-Aperture. Black Hood

Same as DL-13, but with black finish steel hood.



#### **DL-3 Small Aperture**

Bright chrome-plated brass hood with low illumination aperture. 3/8" (9.5mm) diameter mounting stem, 23/32" (18.3mm) long. Bulb not included. Suggested lamps: #51 (6V), #53 (12V), #356 (24V).



# **New Ignition Switches**

New 95060 Series is fully sealed and has an integral Deutsch connector. See page 29.



# **Multi-Purpose Utility Light** With Fixed Hood

#### DL-75-12V

Snap-in mounting. Brass socket. One 18AWG (0.8mm) wire lead, 30" long (793mm), with blade terminal. Snaps into 1 1/4" (31.8mm) holes in panels .150" to .250" (3.8 to 6.4mm) thick. One spring prong is eliminated for indexing in keyed holes. Gasket-sealed lens and weatherproof sleeve. Frosted nonglare lens. Chrome-plated brass bezel/hood 1.52" (38.7mm) diameter. Supplied with 12V #67 bulb.



# **Double Contact, Insulated**

Chrome-plated brass construction for exposed applications.

#### M-458 Through-Panel Mount

Bright chrome-plated brass hood. 11/16" (17.46mm) diameter mounting stem, 3/8" (9.5mm) long. Bulb not included: suggested lamps: #64 (6V), #68 (12V), #1252 (24V).

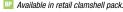


#### M-451 Flange Mount, With Switch 📴

Bright chrome-plated brass hood, Flange mounting, with two 9/64" (3.6mm) diameter mounting holes, 1 3/16" (30.16mm) on centers. Two screw terminals. Integral On-Off switch in the stem. Bulb not included: suggested lamps: #64 (6V), #68 (12V), #1252 (24V).







涬 Rapid ship item. \, 📴 Available in retail clamshell pack. 🖈 Minimum order quantity may apply. 🏻 Part numbers needed in BOX require a -BX suffix on the purchase order.



LAMP SOCKETS & ACCESSORIES

# **Bavonet Base Sockets**

Sockets accept incandescent or LED bulbs with corresponding bases.16AWG (1.0mm²) insulated stranded copper leads, 8" (203mm) long, except where noted.

Single contact sockets accept BA15s base lamps. Suggested lamp numbers: 63, 67, 81, 87, 93, 97, 103, 209,1073, 1129, 1133, 1141, 1156.

Double contact sockets accept BA15d base lamps. Suggested lamp numbers: 64, 68, 82, 88, 90, 210, 1004, 1076, 1130, 1142, 1158, 1176, 1178.

Double contact indexed sockets accept BA15z base lamps. Suggested lamp numbers: 1154, 1157, 1157A, 1157NA, 1534, 2057, 2057NA, 2357, 2357NA.

# **Standard Base**

# Single Contact

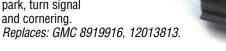
#### 26145

For back-up, tail, stop, turn signal and cornering. Ground wire. Replaces: GMC 8909518. International 57121C91. Motorcraft LS-22.

## **Double Contact, Indexed** Indexed with J-slots.

### 26152

For back-up, marker, park, turn signal and cornering.



#### 26146

For tail, stop and turn signal. Accepts BAZ15d. Replaces: Ford DOAZ. D1AZ. D20Z-13410B.



#### 26162

For tail, stop, park and turn signal. Ground wire. Replaces: AMC 3690736, 8124663, Chrysler 3588833, 3764123, Ford D4ZZ-13234A, D5VY-13410A, D3AZ-13410B.



## **Wedge Base**

Accept lamp socket BA9 base lamps, lamp numbers 158, 161, 168, 194, 194A, 194NA (amber bulb).

#### 25104

For side marker, tail, cornering and license plate. Replaces: AMC 4489535, Ford D0DZ-15A434B, D4)Z-13410E, D5VY-15A442A, D7AZ, DD7FZ-13412A, E1FZ-13410A, GMC 6294015, 6298886, 6298892, 6298935, 8918527, International 4189977C91, Motorcraft LS-18.



#### 25106\*

For marker, stop, tail, turn signal, cornering and license plate. Replaces: Ford EOSZ-15A442B, GMC 12001470.



#### 25102\*

For side marker and license plate. Replaces: Chrysler 3588314, 3588650, Ford E25Y-13410B.



# **With Flange**

#### 2035\* Single Contact, Front Mount

Flange has two 9/64" (3.6mm) holes, 1 3/16" (30.2mm) on centers. Screw terminals, molded plastic insulator. Socket accepts BA15s base bulb.



#### 26041\* Single Contact, Wire Lead, Front Mount

Flange has two 3/16" (4.8mm) diameter holes 1 1/2" (38.1mm) on centers. Socket accepts BA15s base bulb.









Rapid ship item. 📴 Available in retail clamshell pack. 🖈 Minimum order quantity may apply. Part numbers needed in BOX require a -BX suffix on the purchase order.



#### LAMP SOCKETS & ACCESSORIES

# Without Flange

### 2645\* Single Contact

43/64" (17.1mm) outside diameter.



#### 2601\* Single Contact

11/16" (17.5mm) outside diameter.



#### 2602\* Double Contact

Same as 2601, but double contact, two wire leads. Socket accepts BA15d base bulb.

#### 2006\* Double Contact

11/16" (17.5mm) outside diameter. Screw terminals, molded plastic insulator.



### 2316 Double Contact

11/16" (17.5mm) outside diameter. Screw terminals. Can be used with 2911 brass sleeve for quicker socket assembly or replacement.



### 26114\* Double Contact, Indexed

Indexed J slots. 3/4" (19.0mm) outside diameter. 8" (203.0mm) wire leads.



#### 26100 Double Contact. Brass Socket

11/16" (17.5mm) outside diameter. Molded plastic insulator.



### **Snap-In Mounting**

Plated steel, snap-in mounting sockets.

### 2611\* Single Contact

Mounting fits 3/4" (19.0mm) diameter hole.



#### 2612 Double Contact

Mounting fits 3/4" (19.0mm) diameter hole.

# **Bracket Mounting**

Plated steel.

### 2609 Single Contact, Side Bracket

Plated steel side bracket, with one 3/16" (4.8mm) hole.



#### 2610 Double Contact, Side Bracket

Plated steel side bracket, with one 3/16" (4.8mm) hole.

## 3575 Single Contact, Bottom Bracket

Plated steel bottom bracket, with two 13/64" (5.2mm) holes. 1/2" (12.7mm) on centers.



# **Smart Battery Isolators**

Prevents loads on an auxiliary battery from draining the starting battery. More versatile than conventional isolators, it works with all types of alternator, and allows bi-directional charging from alternator to shore power. See page 92.





LAMP SOCKETS & ACCESSORIES

# **Nut & Lockwasher Mounting**

Screw terminals. 11/16" -32 mounting stem. Nut and lockwasher are included.

#### 2106\* Double Contact



#### 2203 Single Contact



#### 2014 Double Contact

Molded plastic insulator. Same as 2013, except socket accepts BA15d base bulb.

#### 2356\* Double Contact



### Miniature Base Sockets

Plated steel sockets. Snap-In Mounting. Single contact, snaps in to 5/8" (15.9mm) diameter hole. 8" (203.0mm) wire lead. Sockets accept BA9 base bulb.

#### Accepts BA9 base lamps.

Suggested lamp numbers: 51 (6V), 53 (12V), 356 (24V).

#### 2505

Also available: socket with spacer rings to fit other panel thicknesses. Consult Cole Hersee.



#### 2506

Ground lead is attached to the shell.



# **Piqtail Assemblies**

Cole Hersee supplies pigtail assemblies for replacement and OEM applications. For different lead lengths, colors and materials, please contact Cole Hersee. Leads are made from high quality 16AWG (1.0mm²) thermoplastic jacketed wire. Phenolic washers insulate the assemblies.

#### 2560 Single Contact

Fits the following sockets: 2601, 2609, 2611, 2645, 2670, 3575, 26003, 26041.



#### 2564 Double Contact, Standard

Ears in line with contacts. Fits the following sockets: 2602, 2608, 2610, 2612, 26041.



### 2561\* Single Contact Miniature

Fits the following sockets: 2504, 2505, 2506, 2526, 2520.



# **Lamp Bases**

Lamp bulbs are frequently classified by industry standard numbers (63, 103, 1156 etc.) which indicate the type of bulb.

Automotive-type bayonet base 15 (BA15) has other numbers to further characterize it: BAs refers to a single contact on the base of the socket (and bulb), and BAd refers to a double contact, with two projections on the lamp base. The Z (as in BAZ15d) refers to a special type in which the two bayonet projections on the base of the bulb are offset.



Rapid ship item. 📴 Available in retail clamshell pack. 🖈 Minimum order quantity may apply. Part numbers needed in BOX require a -BX suffix on the purchase order.



LAMP SOCKETS & ACCESSORIES

# **Prefocus Sockets**

Plated steel.

# **Single Contact**

Accepts single contact prefocus P30s-10.3 base lamps.

#### 2723-Y\* With Screw Terminals

1 3/4" (22.45mm) outside diameter. Four 1/8" (3.2mm) holes, screw terminals.



#### 2721\* With Wire Lead Terminal

1 3/4" (44.4mm) outside diameter. Four 1/8" (3.2mm) holes. 8" (203.0mm) wire lead.



### **Double Contact**

Accepts double contact prefocus P30d-10.3 base lamps.

#### **27018 With Screw Terminals**

Unique configuration minimizes interference. 1 3/4" (44.4mm) outside diameter. Three 1/8" (3.2mm) holes, screw terminals.



#### 2702\* With Wire Lead Terminal, Snap-In

Snap-in or press fit mounting. 1 5/16" (33.4mm) outside diameter. 8" (203.0mm) wire leads.



# **Wedge Base Sockets**

Molded plastic shell, brass contacts. Twist lock into slotted hole. Accept lamp numbers 158, 161, 168, 192, 193, 193E, 194, 194A, 194NA (amber bulb).

#### 25100 Fits 1/2" Hole

Fits 1/2" (12.7mm) diameter slotted hole.



#### 25101\* Fits 5/8" Hole

Fits 5/8" (15.9mm) diameter slotted hole.



# **Lamp Socket Accessories**

### 1624 Accessory Plug

Single contact. Permits the use of a 12V double wire circuit from a standard automotive accessory plug. .822" (20.9mm) diameter.



#### 3573 Boot

Protects wire connections for sockets with 11/16" (17.5mm) outside diameter.



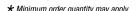
### 1465 Converter Plug

Converts double wire to single contact. .800" (15.2mm) diam-













For orders or questions please call 617-268-2100 or visit us on the web at www.colehersee.com

# **Long and Short Stud**



Connect the short stud to battery + ;long stud to auxiliary. It makes sense - there will typically be only one connection from the breaker to the battery, but there might be several connections to loads on the longer stud.

# **Metal or Plastic?**



### Which body best suits your application?

There's not a lot of difference between metal body and plastic body circuit breakers: both are about the same weight and structural integrity, but the plastic type is more resistant to denting and corrosion. One type of plastic-body breaker, the 30427 series (on page 124), is also weather-resistant.