

# Pilot Lights and Warning Devices

Panel, Map and Utility Lamps

**Alarms and Buzzers** 

**Motor Flashers** 













# Heavy Duty Pilot Lights

Corrosion resistant construction • Spring actuated brass contacts to assure proper contact with bulb. 16 gauge insulated copper wire leads, 8" long except where noted.

#### **Ordering Information**

is required, order with a **D** in place of **C** in the part number:

All pilot lights are supplied with 12 volt bulbs. If a 24 volt bulb If a 6 volt bulb is required, use an A in place of the C in the

part number.

Example: PL-116-R**C** is 12 volt, PL-116-R**D** is 24 volt.

Example: PL-5-RC is 12 volt, PL-5-RA is 6 volt.

The PL-116, PL-117 and PL-118 series pilot lights may be obtained with lens imprints for OEM applications.

# Smooth extended snap-in lens, insulated • Mount through front of panel, fasten from the back. — Single contact • Plastic socket



Lens: %" (15.87mm) dia.

Bezel: satin or black finish aluminum, 15/16" (23.81mm) dia. Bulb: 12V #1893 bulb supplied, socket accepts miniature

bayonet base bulbs.

**Mounting stem**: 3/4" (19.05mm) diameter, 3/8" (9.52mm) long.

Part No. Satin Bezel	Lens Color	Part No. Black Bezel
<b>⊖</b> PL-116-AC	Amber	→ PL-116-AC001
<b>⊖</b> PL-116-BC	Blue	<b>⊖</b> PL-116-BC001
PL-116-GC	Green	<b>⊖</b> PL-116-GC001
PL-116-RC	Red	PL-116-RC001
	Satin Bezel  → PL-116-AC  → PL-116-BC  PL-116-GC	Satin BezelColor→ PL-116-ACAmber→ PL-116-BCBluePL-116-GCGreen

# Smooth extended snap-in lens, insulated • Mount through rear of panel, fasten from the front.

Single contact • Plastic socket



Lens: %" (15.87mm) dia.

Bezel: satin or black finish knurled aluminum 15/16" (23.81mm) dia. Bulb: 12V #1893 bulb supplied, socket accepts miniature bayonet

base bulbs.

**Mounting stem**: 11/16" (17.46mm) diameter, 1/4" (6.35mm) long.

Lens Color	Part No. Satin Bezel	Lens Color	Part No. Black Bezel
Amber	PL-118-AC	Amber	PL-118-AC001
Green	PL-118-GC	Green	PL-118-GC001
Red	PL-118-RC	Red	PL-118-RC001

# Smooth extended snap-in lens, self grounding in metal panels. Mount through rear of panel, fasten from the front.

Single contact • Metal socket



Bezel: satin or black finish knurled aluminum 15/16" (23.81mm) dia. Bulb: 12V #1893 bulb supplied, socket accepts miniature bayonet

base bulbs.

Mounting stem: 11/16" (7.46mm) dia., 1/4"(6.35mm) long.

Lens Color	Part No. Satin Bezel	Lens Color	Part No. Black Bezel
Amber	<b>⊖</b> PL-117-AC	Amber	<b>⊖</b> PL-117-AC001
Green	<b>⊖</b> PL-117-GC	Green	<b>⊖</b> PL-117-GC001
Red	PL-117-RC	Red	PL-117-RC001

#### Smooth lens, self grounding in metal panels. –



Single contact • Metal socket

Lens: 3/16" (4.76mm) dia.

Bezel: chrome plated brass 1/2" (12.70mm) dia.

Bulb: 12V #53 bulb supplied, socket accepts miniature bayonet base bulbs.

**Mounting stem**: 5/16" (7.94mm) dia., 3/8" (9.53mm) long.

Lens Color	Part No. Satin Finish
Amber	OPL-1-AC
Blue	PL-1-BC
Green	PL-1-GC
Red	PL-1-RC

### Smooth lens, insulated. -

Single contact • Plastic socket



**Lens**: 3/16" (4.76mm) dia.

Bezel: chrome plated brass 1/2" (12.70mm) dia.

Bulb: 12V #53 bulb supplied, socket accepts miniature bayonet base bulbs.

**Mounting stem**: 5/16" (7.94mm) dia., 3/8" (9.53mm) long.

Lens Color	Part No. Satin Finish
Amber	OPL-2-AC
Blue	PL-2-BC
Green	PL-2-GC
Red	PL-2-RC
	•

# Smooth lens, self grounding in metal panels.

Single contact • Metal socket



**Lens**: 17/32" (13.49mm) diameter. Bezel: chrome plated brass, 7/8" (22.22mm) diameter.

Bulb: 12V #53 bulb supplied, socket accepts miniature bayonet

base bulbs.

base bulbs.

Mounting stem: 3/4" (19.05mm) diameter, 11/16" (17.46mm) long.

Lens Color	Part No.
Amber	PL-19-AC
Blue	OPL-19-BC
Clear	PL-19-CC
Green	PL-19-GC
Red	PL-19-RC

With imprinted lenses.

Lens Imprint	Part No.
ALT	<b>⊖</b> PL-19-RC005
LOW	<b>⊖</b> PL-19-RC013
OIL	<b>⊖</b> PL-19-RC014
WATER	<b>⊖</b> PL-19-RC004

Red lens with black lettering standard. Amber, blue, clear and green lenses also available. International symbols and other wording available.

# Smooth lens, insulated, additional wire lead for ground. –

Single contact • Plastic socket



**Lens**: 17/32" (13.49mm) diameter. Bezel: chrome plated brass 7/8" (22.22mm) diameter.

Bulb: 12V #53 bulb supplied, socket accepts miniature bayonet

**Mounting stem**: 3/4" (19.05mm) diameter, 11/16" (17.46mm) long.

Lens	
Color	Part No.
Amber	PL-20-AC
Blue	OPL-20-BC
Green	PL-20-GC
Red	PL-20-RC

With imprinted lenses.

Lens Imprint	Part No.
ALT	<b>→</b> PL-20-RC013
LOW	→ PL-20-RC032
OIL	PL-20-RC033

Red lens with black lettering standard. Amber, blue, clear and green lenses also available. International symbols and other wording available.

# Smooth imprinted lens, insulated. -

Single contact • Plastic socket

**Lens**: 7/8" (22.22mm) diameter. Bezel: satin finish plated brass 1 1/4" (31.75mm) diameter.

Bulb: 12V #53 bulb supplied, socket accepts miniature

bayonet base bulbs.

**Sealing**: gasket sealed lens for weather and dirt protection. **Mounting stem**: 7/8" (22.22mm) diameter, 3/4" (19.05mm) long.

Lens	
Imprint	Part No.
ALT	<b>⊖</b> PL-58-RC006
LOW AIR	<b>⊖</b> PL-58-RC004
WATER	<b>⊖</b> PL-58-RC003
ANTI-LOCK	➡ PL-58-AC001
	Amber lens, black letters.

Red lens with black lettering standard. Amber, blue, clear and green lenses also available. International symbols and other wording available.

## Faceted lens, insulated.

Double contact • Metal socket

Lens: 15/16" (23.81mm)

diameter.

Bezel: Plated brass 1 1/4" (31.75mm) diameter.

Bulb: 12V #68 bulb supplied, socket accepts double contact bayonet base bulbs.

Mounting stem: \%" (22.22mm) diameter, 3/4" (19.05mm) long. Sealing: gasket sealed lens.



Lens Color	Part No.
Amber	PL-86-AC
Blue	PL-86-BC
Clear	<b>⊖</b> PL-86-CC
Green	PL-86-GC
Red	PL-86-RC

#### Faceted lens, self grounding in metal panels.

Single contact • Metal socket

Lens: 15/16" (23.81mm)

diameter.

Bezel: plated brass 1 1/4" (31.75mm) diameter.

Bulb: 12V #67 bulb supplied, socket accepts single contact

bayonet base bulbs.

Mounting stem: 7/8" (22.22mm) diameter, 3/4" (19.05mm) long. Sealing: gasket sealed lens.



PL-85-GC

PL-85-RC

Green

Red

# **Pilot Lights**

# Internal honeycomb lens.

Single contact

Lens: 5/16" (7.94mm) diameter.

**Bezel**: satin finish stainless steel, <sup>3</sup>/<sub>4</sub>" (19.05mm) diameter. **Bulb**: 12V #53 bulb supplied, socket accepts miniature

bayonet base bulbs.

Mounting stem: 1/2" (12.70mm) diameter, 3/8" (9.53mm) long.

# Self grounding in metal panels.

Metal socket.



# Insulated. Plastic socket.



# 

Ambei	<b>→</b> PL-35-AC
Blue	OPL-35-BC
Clear	OPL-35-CC
Green	OPL-35-GC
Red	PL-35-RC

#### Lens Color Part No.

_0110 00101	. u
Amber	PL-36-AC
Blue	PL-36-BC
Clear	<b>→</b> PL-36-CC
Green	PL-36-GC
Red	PL-36-RC

### Smooth lens.

Single contact

**Lens**: 5/16" (7.94mm) diameter.

**Bezel**: chrome plated brass, 7/8" (22.22mm) diameter. **Bulb**: 12V #53 bulb supplied, socket accepts miniature

bayonet base bulbs.

Mounting stem: 3/4" (19.05mm) diameter, 11/16"

(17.46mm) long.

# Self grounding in metal panels.

Metal socket.



Insulated.
Plastic socket.



## Lens Color Part No.

Amber	OPL-5-AC
Clear	OPL-5-CC
Green	OPL-5-GC
Red	PL-5-RC

#### Lens Color Part No.

Amber	OPL-6-AC
Blue	OPL-6-BC
Green	OPL-6-GC
Red	PL-6-RC

# Marine Construction Pilot Lights -

# Smooth lens, insulated.

Single contact • Plastic socket

Lens: 17/32" (13.49mm)

diameter.

Bezel: chrome plated brass, 7/8"

(22.22mm) diameter. **Bulb**: 12V #53 bulb supplied, socket accepts miniature bayonet

base bulbs.

**Mounting stem**: <sup>3</sup>/<sub>4</sub>" (19.05mm) diameter, 1 <sup>1</sup>/<sub>16</sub>" (26.98mm) long.



Lens	
Color	Part No.
Amber	<b>↔</b> M-320-A0

Green M-320-GC Red M-320-RC

# Smooth lens, insulated.

Double contact • Brass socket and terminals.

**Lens**:  $\frac{1}{32}$ " (13.49mm) diameter. **Bezel**: chrome plated brass, 1 ½" (28.57mm) diameter.

**Bulb**: 12V #68 bulb supplied, socket accepts double contact bayonet base bulbs.

Mounting stem: %" (22.22mm) diameter, 1 %" (28.57mm) long. Insulator: moisture repellent.



Lens Color	Part No.
Amber	PL-16-AC
Clear	PL-16-CC
Green	PL-16-GC
Dod	DI 16 DC

# Faceted lens, insulated.

Double contact • Metal socket

**Lens**:  $^{15}/_{16}$ " (23.81mm) diameter **Bezel**: plated brass. 1  $^{1}/_{4}$ "

(31.75mm) diameter.

molded phenolic.

**Bulb**: 12V #68 bulb supplied, socket accepts double contact bayonet base bulbs.

**Mounting stem**: 7/8" (22.22mm) diameter, 1 1/4" (31.75mm) long.

**Sealing**: gasket sealed lens. **Insulator**: moisture repellent



#### Lens Color Part No.

Amber	M-326-AC
Blue	<b>↔</b> M-326-BC
Clear	<b>↔</b> M-326-CC
Green	<b>↔</b> M-326-GC
Red	M-326-RC

# Internal honeycomb lens, self grounding in metal panels.

Single contact • Plastic socket

**Lens**: 5/8" (15.87mm) diameter.

Bezel: satin finish stainless steel

3/4" (19.05mm) diameter. **Bulb**: 12V #53 bulb supplied, socket accepts miniature

bayonet base bulbs. **Mounting stem**: ½" (12.70mm) diameter, ¾" (22.22mm) long.

Additional ground wire for mounting in insulated panels.

,	
Lens	
Colo	r Part No.
Amb	er
Rlue	

Color	Part No.
Amber	<b>↔</b> M-328-AC
Blue	<b>↔</b> M-328-BC
Clear	<b>↔</b> M-328-CC
Green	<b>↔</b> M-328-GC
Red	M-328-RC

# Panel, Map and Utility Lamps

Self grounding in metal panels

Single contact

No. DL-9

Hood: Bright chrome plated brass with wide angle aperture.

Mounting: flange mounted: two mounting holes %16" (14.29mm) dia., 1 %16" (30.16mm) on center. Bulb: accommodates S.C. bayonet bulb No. G-6. Suggested lamps: #63 (6V), #67 (12V), #623 (24V).

Switch: integral ON-OFF.

Single contact

No. DL-13

Hood: bright chrome plated brass with wide angle aperture.

**Mounting stem**: 11/16" (17.46mm) diameter. 3/8" (9.52mm)

Bulb: accommodates S.C. bayonet bulb No. G-6. Suggested lamps: #63 (6V), #67 (12V), #623 (24V).



No. DL-21

Same as No. DL-13 except with black finish steel hood.

O No. DL-13-12V

Same as No. DL-13 except with a 12V #67 bulb.

Single contact

No. DL-3

Hood: bright chrome plated brass with low illumination aperture.

Mounting stem: %" (9.52mm) dia., 23/32" (18.25mm) long. **Bulb**: accommodates S.C. bayonet bulbs No. G-3 ½, G-4 ½.

Suggested lamps: #51 (6V), #53 (12V), #356 (24V).

Double contact, one contact grounded to housing.



O No. DL-7

Hood: bright chrome plated brass with wide angle aperture.

Mounting: flange mounted: two mounting holes %4" (3.57mm) dia., 1 3/16" (30.16mm) on center.

Bulb: accommodates D.C. bayonet bulb No. G-6. Suggested lamps: #63 (6V), #67 (12V), #623 (24V).

Terminal: one screw. Switch: integral ON-OFF.

#### Insulated

Chrome plated brass construction for exposed applications.

Double contact



No. M-458

Hood: bright chrome plated brass with wide angle aperture.

**Mounting stem**: <sup>11</sup>/<sub>16</sub>" (17.46mm) dia., <sup>3</sup>/<sub>8</sub>" (9.52mm) long. Bulb: accommodates D.C. bayonet bulb No. G-6. Suggested lamps: #64 (6V), #68 (12V), #1252 (24V).

Double contact

No. M-451

Hood: bright chrome plated brass with wide angle aperture.

Mounting: flange mounted, two mounting holes %4" (3.57mm) dia., 1 3/16" (30.16mm) on center. Bulb: accommodates D.C. bayonet bulb No. G-6. Suggested lamps: #64 (6V), #68 (12V), #1252 (24V).

Terminals: two screw. Switch: integral ON-OFF.

# Multi Purpose Utility Light

Single contact

Self grounding in metal panels

No. DL-75-12V

Terminations: one 18 gauge wire lead, 30" long with blade terminal.

Mounting: snaps into 1 1/4" (31.75mm) dia. holes in panels .150" to .250" (3.81mm to 6.35mm) thick. One spring prong eliminated for indexing in keyed hole.

Socket: brass.

Sealing: gasket sealed lens and weatherproof sleeve to protect against moisture, dirt, etc.

Lens: frosted non-glare.

Hood: chrome plated brass bezel/hood

1.52" (38.73mm) dia.

Bulb: supplied with 12V #67 bulb, accommodates single contact bayonet base bulb.





# Electronic Daytime Running Light Module

Made in U.S.A. • For two or four headlamp systems • For domestic & foreign cars, trucks, RVs and buses.

**Automatic operation**: turns on low beam headlights when the ignition switch is turned on. Automatically brings headlights to full brightness when the headlamp switch is actuated.

Ten second delay after ignition switch is turned on reduces starting load on battery.

**Reduced intensity**: 75% illumination extends headlamp longevity. **Activation**: activated when the parking brake is released and deactivated when the parking brake is set with the ignition switch on. **Deactivation**: deactivates when high beams are flashed for signalling.

**Construction**: 100% electronic. **Sealing**: environmentally sealed. Wiring instructions included.

Complies with FMVSS 108 for headlamp intensity (candela output); CMVSS-108 and CAN/CSA=D603-88, Type 2.

## **DRL History**

Avis, Inc • A seven month test showed a 69% damage reduction with DRL equipped vehicles.

Canada • A 22% reduction in frontal accidents after DRLs were mandated.

Nordic Countries • Studies in Finland, Sweden and Norway reported accident reductions ranging from 11% to 28% through the use of DRL systems.



#### No. 48600

**Terminations**: six 28" long wire leads and six Cole Hersee No. 30223 Quick Tap wire splicers.

Screws: two self tapping mounting screws supplied.

#### No. 48600-01

Same as No. 48600 except without No. 30223 splicers and mounting screws.

# Heavy Duty Motor Driven Flashers

Specially designed for school buses, ambulances, sanding trucks, snow plows and fire, police and other emergency vehicles.

Synchronized flashing of one or more lights at a required number of cycles per minute.

Cycling of flasher is constant - not controlled or varied by lamp load.

Performance tested by Electrical Testing Laboratory for 3,000,000 cycles.

Exceeds state regulations • Installation and wiring instructions supplied.



No. 3034

For 12 volt, D.C. electrical systems.

O No. 30024

For 24 volt, D.C. electrical systems.

# Motor Flasher Repair Kit -





#### No. 6001

Repair kit for No. 3034 and No. 30024 flashers, includes all parts for repairing switch portion of the unit.

#### Low Air Pressure Alarm Kit

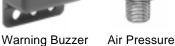
Warning buzzer sounds when air pressure is too low to safely operate brakes. For 12 VDC electrical systems.

#### No. 40178-BP

Buzzer: (No. 4099) has impact resistant ABS resin case and moisture repellent insulator. Buzzer sounds when engine is started and continues until operating air pressure

Air pressure switch: (No. 8640) operates at 60 to 70 p.s.i. Installation instructions: included.







Available in Bubble Pack

# Marine Engine Warning Kit

Warning buzzer sounds when oil pressure is too low and/or engine coolant temperature is too high. For inboard and I/O engines with 12 VDC electrical systems.

#### No. M-40177-BP

Buzzer: (No. 4099) has impact resistant ABS resin case and moisture repellent insulator. Buzzer sounds when engine is started and continues until operating oil pressure is reached.

Oil pressure switch: (No. 8606) operates at 2 to 6 p.s.i. Temperature switch: (No. 84251) operates at 200°F (± 10°F).

Installation instructions: included.



Warning Buzzer



Oil Temperature Pressure Switch Switch



Available in Bubble Pack

### Universal Buzzers

Switch

For bus "door open" warning, bus operator signal, low air pressure warning, etc.

Electrical contacts designed for instant response and uninterrupted signal.

Case: impact resistant ABS resin. Insulator: moisture repellent.

Terminals: two screw with lockwashers.

Size: 1 \(^1/\_{32}\)"Lx 2 \(^1/\_2\)"W x 2 \(^1/\_{32}\)"H.

#### No. 4099

For 12 VDC electrical systems.

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

#### O No. 4098

For 6 VDC electrical systems.

Replaces: Ford IC-18736-A2 Superior Coach 76022

Divco-Wayne E-11809A

#### No. 40151

For 24 volt, D.C. electrical systems.

# **Dual Alarms** -

Combination warning light and buzzer operate simultaneously for two way warning of hazardous conditions.

Applications include: low air, oil, vacuum, high or low engine temperature, door ajar warning, hoist or dump body alarm, monitor in cab for back-up alarm, camper to cab emergency signal.

No. 4112-RC For 12 VDC electrical systems.

Lens: red, snaps out for easy bulb replacement.

**Mounting stem**:  $^{11}/_{16}$ " (17.46mm) diameter,  $^{17}/_{32}$ " (13.38mm) long.

Bulb: included.

Body size: 1 1/8"L x 1"W x 1 11/32"H (47.62mm long x 25.40mm wide

x 34.13mm high).

Suggested wiring diagrams: included.

### No. 4124-RD

Same as No. 4112-RC except for 24 volts, D.C.

# Signal Buzzer Control Switch

SPST • Off-On, Normally Off • Pull to On, spring return to Off • For up to 36 VDC applications.

For buses, rapid transit and other public transportation

Used to energize signal alarms such as Cole Hersee No. 4099 buzzer, No. 4112 and No. 4124 dual alarms. Extra heavy duty.





## No. 40100

Terminals: two screw.

**Operation**: operates with a non-metal pull cord attached to ring.

Cover: neutral grey enamel finish.

Replaces: **Delco** 1998723, 1998802, 1998020.



### **Dual Rate Alarm**

Sounds a warning alarm for two different hazardous conditions.

For 12 VDC electrical systems.

Operates from two different sensors: one sensor triggers a fast rate alarm, the second triggers a slower rate alarm. Can be operated by any switch (sensor) that completes a circuit to negative (ground).

Applications include high water or oil temperature, high or low oil pressure or vacuum, low fluid level.



#### No. 40212

**Minimum sound level**: 90 decibels. **Housing**: lightweight molded plastic.

Circuitry: solid state.

**Connection**: plugs into Cole Hersee sealed beam connector No. 3032 (with mounting bracket), connector No. 3029 (with wire leads), Packard connector #12033871 or accepts individual connectors for ½" blades.

**Size**: 2.005"L x 1.185"W x .930"H (50.43mmL x 30.33mmW x 23.62mmH.)

# Hazard Warning Kit



E.T.L., New York State & New Jersey approved.

For use on vehicles with up to six 32 candlepower lamps flashing simultaneously.

Silver contacts and contactors to accommodate heavy load of all lamps operating together.

#### O No. 8261

Fuse holder: in line with 15 amp fuse in place.

Face plate: red enamel.

Flasher socket: receives three prong flasher unit

(flasher not included).

Bulb: uses No. 57 pilot light bulb and No. 550 or

No. R-432 flasher for 12 volts.

Complete wiring and installation instructions included.

# Low Air Pressure Flashing Warning Kit





#### No. 3261-01

Operation: lamp flashes when pressure switch activates, operates as pressure drops into 75-50 P.S.I. range.

Pilot light: complies with SAE specification J588F.

Air pressure switch: heavy duty No. 8640 air pressure

switch included.

Warning light: imprinted LOW.

Face plate: aluminum with red enamel finish, 2.94" (74.67mm) wide x 2.09" (52.08mm) high.

Terminations: two 16 gauge wire leads 18" (457.20mm)

ong.

Installation instructions: included.

# Emergency Relay • Normally OFF

A manually operated solenoid designed for school bus applications in conjunction with the No. 91050 momentary door switch to operate both amber and red flashing lights in states where such a system is required.

For 12 VDC electrical systems.



No. 91052

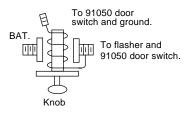
Contacts: copper.
Housing: plated steel.

Terminals: copper, small terminals 10-32 thread, large

terminals 5/16"-24 thread.

Mounting stem: brass, 1/2"-20 thread, 5/8" (15.87mm)

long for panel mounting.



See page 67 for specifications of No. 91050 door switch.