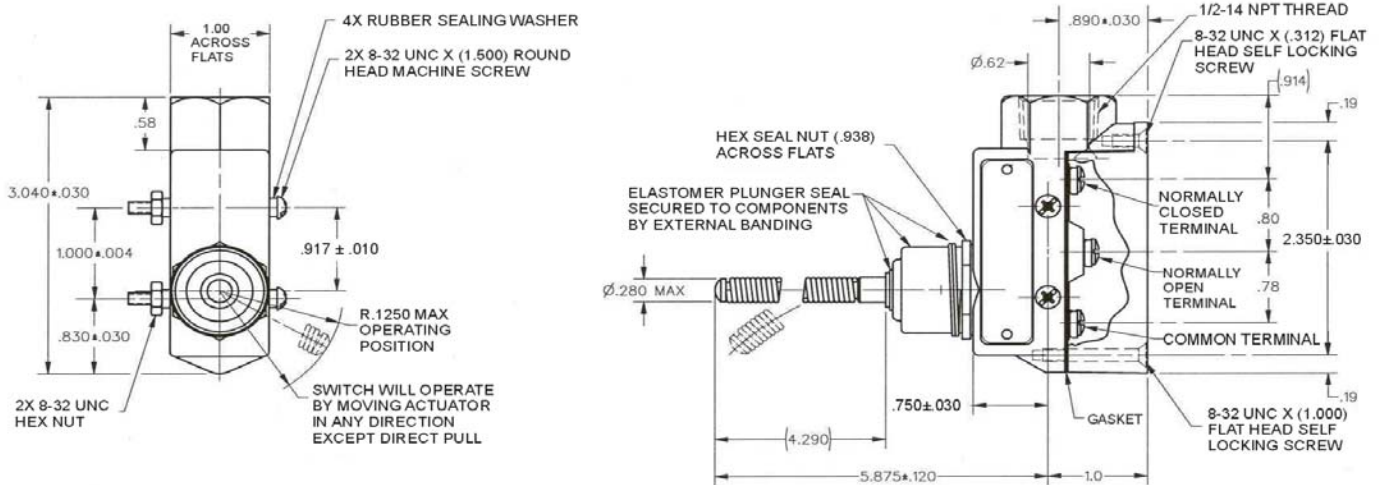


INSTALLATION INSTRUCTIONS SWITCH

CONTENTS:

Quantity	Description
1	Switch (Switch Enclosed in Die-Cast Zinc Housing; Wobble-Coil Spring Actuator)
1	Hardware Kit (mounting bracket with screw)
1	Hardware Kit (3/8" Romex-compatible, with 1/2 knock-out, strain relief assembly)
1	Hardware Kit (mounting screws, hex nuts and rubber washers)



INSTALLATION TOOLS REQUIRED:

Phillips Screwdriver
5/16" Hex Driver or Wrench

SWITCH INSTALLATION:

The switch is intended for commercial use and should be installed and maintained by qualified personnel. Position the unit to avoid damage and protect as required. Ensure the location provides for function as intended and does not interfere with operator's safe operation of the vehicle.

1. Select an appropriate location for mounting the switch, either at the reverse gear linkage or shift lever, so the outer end of the wobble-coil spring actuator will be moved a minimum of one inch (1") when vehicle is put into reverse. Contact with wobble-coil spring actuator should be made approximately 1-1/2" from the end.
2. Route two (2) 14 to 18 gage wires to the switch location. One from the positive terminal of the back-up alarm and the other from the positive terminal of a good source of electricity.
3. Remove lower switch housing. Install 3/8" Romex-compatible, with 1/2 knock-out, strain relief assembly and insert wires through strain relief assembly. Connect positive alarm wire to the terminal marked "NORMALLY OPEN" and the positive power wire to the terminal marked "COMMON".
4. Attach mounting bracket to upper switch housing (including switch) with #8-32x1.5" pan head machine screws, rubber sealing washers and hex nuts. Ensure that rubber sealing washers are in place between bracket and switch. Re-attach lower switch housing. Bolt bracket in position on vehicle.
5. Check back-up alarm system for proper operation before using vehicle.

NOTE: It may be necessary for the installer to seal the mounting holes and wire run hole in the mounting surface for a weatherproof seal. Proper fastener sealing will help prevent moisture from entering the vehicle through the mounting holes. To improve moisture resistance, apply a sealing compound around the wires at clamp after reassembly.

CAUTION: This switch is designed to handle the current draw of back-up alarms. No other circuit can be added to system without endangering life of switch.

WARNING: Where possible, install this product with the conduit opening pointed down and do not install at the low point of a conduit run. Following the manufacturer's instructions, install a fitting into the conduit opening. Ensure the fitting provides strain relief to the wires/cables, as well as sealing against contaminants that are typical to the application. In applications where fluids or moisture may be present, seal the fitting threads with a product such as Teflon tape or pipe dope.

SWITCH MAINTENANCE:

Back-Up Alarms should be listed on the daily maintenance report. The units on operating vehicles must be tested each day prior to the vehicle's operation. A record of test is to be recorded in the maintenance file. Check the switch for proper operation daily and log in the maintenance record.

SWITCH SPECIFICATIONS

1.0 Introduction:

This switch offers an optional normally open or normally closed circuit. It is a split housing, side mount design, made from die-cast zinc.

2.0 Physical Specifications:

- 2.1 Actuator: Wobble-Coil Spring, 5.9" long from center mounting hole to end of spring including plastic cap.
- 2.2 Circuitry: 1 NC, 1 NO, SPDT, Snap Action.
- 2.3 Circuit Package Type: Enclosed switch.
- 2.4 Housing: Zinc die-cast, split housing.
- 2.5 Mounting: Side mount, 2 #8-32 x 1.5" Phillips pan head machine screws, 4 rubber sealing washers, 2 #8-32 hex nuts on 1" centers.
- 2.6 Cable/Wire Ingress: ½"-14 NPT for conduit.

3.0 Electrical Specifications:

- 3.1 Supply voltage/current: 15A @ 125VAC, 15A @ 250VAC, 3A @ 500VAC, 15A @ 14VDC, 6A @ 30VDC and 0.4A @ 125VDC.
- 3.2 Approvals: UL recognized, CE and CSA certified.

4.0 Additional Specifications:

- 4.1 Warranty: 1 year limited warranty.
- 4.1 Operating Temperature: -25°C (-13°F) to +80°C (176°F).
- 4.2 Operating Force: 7 oz_f maximum to 12.3 oz_f maximum.
- 4.3 Sealed: Industrial.
- 4.4 Actuator Seal: Seal boot on plunger.
- 4.5 Mounting Bracket: Stamped steel, zinc plated.
- 4.6 Strain Relief: 3/8" Romex-compatible, with ½ knock-out, strain relief assembly.

MANUFACTURER LIMITED WARRANTY AND LIMITATION OF LIABILITY

Manufacturer warrants that on the Date of Purchase this Product will conform to Manufacturer's published specifications for the product, which are available from Manufacturer on request, and Manufacturer warrants that the product is free from defects in materials and workmanship. This Limited Warranty extends for twelve (12) months from the date of manufacture. Manufacturer will, at its option, repair or replace any product found by Manufacturer to be defective and subject to this Limited Warranty.

This Limited Warranty does not apply to parts or products that are misused; abused; modified; damaged by accident, fire or other hazard; improperly installed or operated; or not maintained in accordance with the maintenance procedures set forth in Manufacturer's Installation and Operating Instructions.

To obtain warranty service, you must ship the product(s) to the specified Manufacturer location within thirty (30) days from expiration of the warranty period. You must fill out the warranty claim form and include the form with the product. You must prepay shipping charges and use the original shipping container or equivalent. Return shipping charges within the United States, Canada, and Puerto Rico will be paid by Manufacturer. This Limited Warranty will apply only to a product purchased and located in the United States, Canada, or Puerto Rico.

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