

# SW-50 Speed Switch

## Installation and Calibration Instructions

**Installation:** Mount the SW-50 to a secure bracket off the engine. If on-engine mounting is necessary, shock mounts are recommended. Wire according to connection diagram on reverse. Shielded cable is recommended. Shield should be brought to ground directly. The SW-50 will work with most magnetic pickups provided the signal amplitude is greater than 50 mVrms and less than 70 Vrms. Mount pickup according to manufacturer's instructions.

**Calibration:** Determine the setpoint frequencies from an RPM value using the following formula:

$$\text{Frequency} = \frac{\text{RPM} \times \text{No. of Teeth (Holes)}}{60}$$

**Verify current calibration:** Connect a signal generator — such as the Dynalco F-16 — to the SW-50 magnetic pickup input (signal input).

- ◆ Set the signal generator to a low frequency. Slowly increase the frequency. Using an ohmmeter across each relay contact, in turn, determine the frequency at which the relays change state. (Note: overspeed relay will latch if terminal 4 is not grounded.)

**Change the setpoints:** Remove the screws in the access holes for the relay adjustment trim pots.

- ◆ Set the signal generator to the frequency at which the relay should change state.
- ◆ Using a small, flat screwdriver, adjust the trim pot for the appropriate relay until the relay changes state.
- ◆ Decrease the frequency, then slowly increase it to verify that the relay trips at the appropriate point.

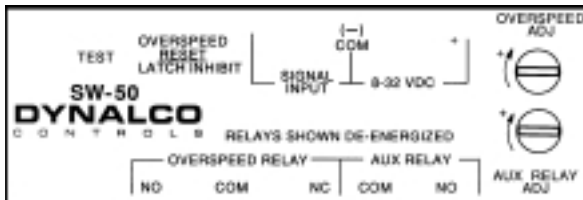
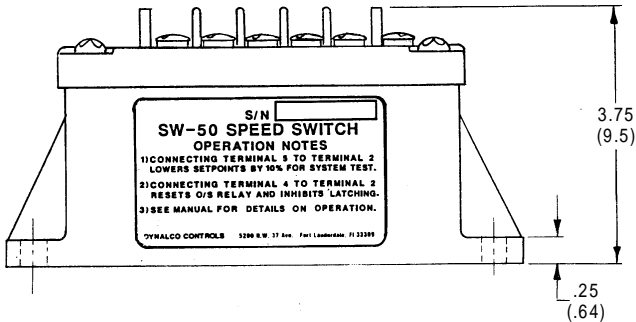
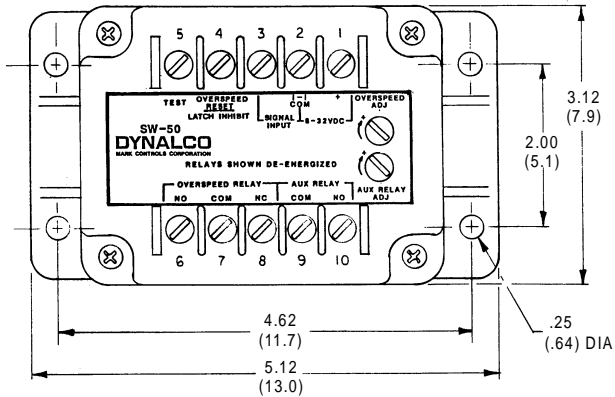
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# SW-50 CONNECTION DRAWING



Dimensions  
inches  
(centimeters)