



This 2-inch Tachometer connects to the Alternator signal. The tachometer has four range selections for rough calibration and an adjustment potentiometer for fine adjustment.

The use of DIP switches on the back of this tachometer allows a rough calibration selection for the desired frequency.

Caution

Disconnect the battery during installation. Tighten nuts on the back clamp only slightly more than you can tighten with your fingers. Six inch-pounds of torque are sufficient. Over tightening may result in damage to the instrument and may void your warranty. Use stranded, insulated wire not lighter than 18 AWG.

Be certain wire insulation is not in danger of melting from engine or exhaust heat or interfering with moving mechanical parts.

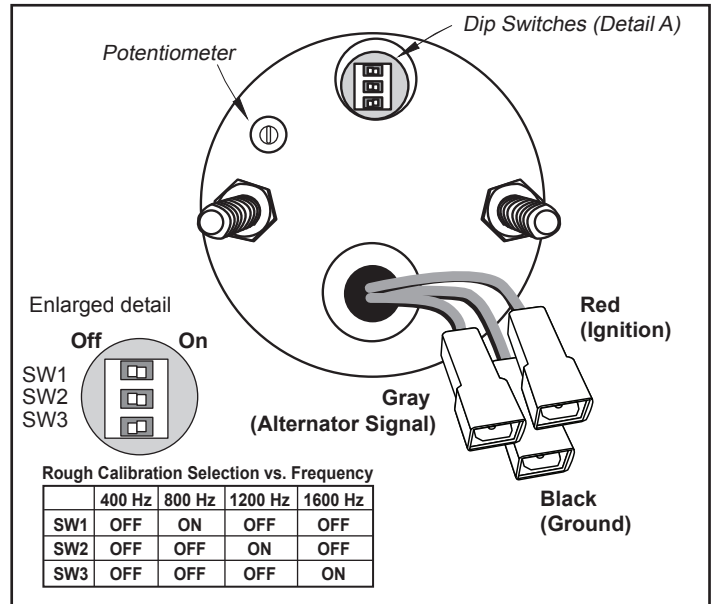
Parts

QTY	Description
1	Tachometer
1	Mounting Bracket (BC0077)
2	#8 Brass Nut (5/16")
2	#8 Brass Flat Washer
2	#8 Split Washer

Installation

1. Location: Some interference (erratic operation) may be noticed on the tachometer during radio transmissions. This will neither damage a tachometer nor affect accuracy when not transmitting.
2. Cut a 2.0625" (53 mm) diameter hole in the dash and mount the tachometer with the backclamp supplied.
3. Connect the RED wire with connector to a 12VDC circuit that is activated by the ignition switch.
4. Connect the GRAY wire with connector to the Alternator signal. Connect the signal wire to the "W" or "A/C" terminal on the alternator.
5. Connect BLACK wire with connector to the electrical ground, generally available in several locations at or near the instrument panel.
6. Reconnect the battery.

Wiring Diagram



Calibration

In order to calibrate the electronic tachometer correctly a mechanical master tach should be used. The shaft of the master tach should contact the drive shaft of the engine directly. Calibration is a two person operation, one to work with the master tach, the other one to calibrate the electronic tachometer.

The tachometer has four range selections for rough calibration and a flat blade potentiometer for fine adjustment. Prior to calibration it is suggested that the potentiometer adjustment be placed roughly in the center of it's rotation.

If the signal frequency at 4000 RPM is known, set the switches per the above table to the closest setting for that frequency (there is overlap between the settings). Then adjust the potentiometer to so that the tachometer reading matches the master tach.

If the signal frequency is not known, operate the engine at near normal RPM, apply the master tach and select the switch setting that gives the closest reading.

Specifications

Calibration: Tachometer: 0-4000 RPM accurate to within $\pm 2\%$ of full scale
Required Specs The Tachometer meets the requirements of SAE J1455 as specified below.

Temperature

Operating -20°C to +85°C
Storage -40°C to +85°C

Voltage

Normal Operating 11.5 to 15 VDC at $25^\circ \pm 3^\circ$ C with GY0065 adapter 22-32 VDC at $25^\circ \pm 3^\circ$ C
Extreme variations 9 to 18 VDC at $25^\circ \pm 3^\circ$ C with GY0065 adapter 20-36 VDC at $25^\circ \pm 3^\circ$ C

Abnormal Voltage Conditions

Over Voltage 18 VDC for 5 minutes with GY0065 adapter 36 vDC for 5 minutes
Reverse Polarity The instrument can withstand reversed battery terminal polarity indefinitely without damage or permanent shift of calibration.

Environmental

Shock 50 +/- 2 G and a half sine duration of 11 +/- 2 ms. per MIL-STD-202, Method 213
Vibration 4 G peak, 10 to 200 Hz SAE J1455 Appendix A
Salt Spray Front is Corrosion resistant per ASTM B117-73
Water Leakage Instrument is sealed for water entry from the front.
Weather Resistance Instrument has been tested to resist weather conditions.

Dimensions

