

# INSTALLATION INSTRUCTIONS

760 SERIES

18-12 CATALOG NO. 4185

# SW

# STEWART-WARNER ELECTRIC TACHOMETER

Using Switch Model 762-J
For Auto-Lite Distributors 8 Cyl.

READ THESE INSTRUCTIONS CAREFULLY

### A. PARTS REQUIRED

A complete installation requires three units: (1) Tachometer, (2) Switch and (3) Wire Cable.

- 1. Tachometers are supplied with steering post mounting brackets. If panel mounting is desired, bracket kits are available: No. 418051 kit for small sized instruments and No. 416582 for large instruments (Vac Tach).
- 2. Wire Cable No. 415237 is required for all installations.
- 3. The 762-J Sending Switch fits only 8 cylinder Auto-Lite Distributors found on the following passenger cars: Chrysler, DeSoto and Dodge (1949-current models. The 8 cylinder Auto-Lite distributors found on these cars must use distributor cap IAR-1003 and distributor rotor IGP-1016B. Check catalog #2303 for complete list of applications to make sure the 762-J Sending Switch is the proper one for your car.

#### B. PREPARATION

- 1. Remove distributor cap by releasing snap spring clamps.
  - 2. Remove rotor from distributor.
  - 3. Remove dust cover.

## C. INSTALL DISTRIBUTOR SWITCH

CAUTION - Be sure each part is set properly in place and aligned. Misalignment will cause failure and possible breakage of rotor.

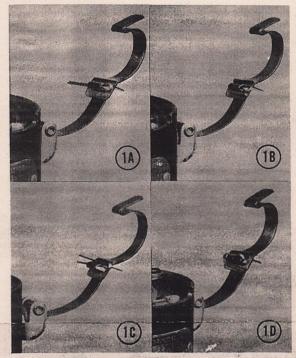


FIG. 1

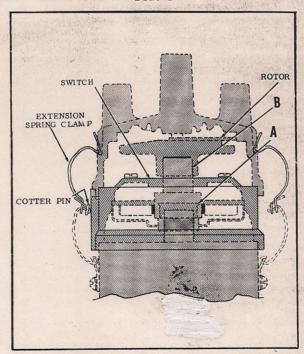


FIG. 2

IMPORTANT - SEE THAT TACHOMETER VOLTAGE (6 OR 12V.) IS SAME AS VOLTAGE SYSTEM OF VEHICLE.

- 1. Attach the extension snap spring clamps. The clamp has a slot into which the distributor clamp fits. Insert cotter pin through the loop in the distributor clamp that protrudes through the slot of the extension clamp. The cotter pin may be installed one of two ways:
  - a. Whenever possible, the prongs should be spread and folded back in a hairpin turn on each side of the joined clamps (Figs. 1A & 1B).
  - b. If a close fit prohibits the spreading of the prongs, slide one prong only into place, then bend both prongs around on one side of the joined clamp (Figs. 1C & 1D).
- 2. Place Stewart-Warner Switch on distributor rotor shaft.
  - a. Turn rotor shaft, making sure indexing flats are aligned, then seat all the way down on distributor cam shaft, see A, Figure 2.
  - b. Seat Distributor Switch all the way down making sure index points of Switch line up with those of the distributor.
  - c. Tap top of Switch rotor lightly with screw-

- driver handle, while holding switch securely in place, to seat rotor snugly on distributor cam shaft.
- d. Check rotor shaft to see that it is perfectly tight on distributor cam shaft.
- 3. Install rotor on switch, align and seat properly on rotor shaft, see B, Figure 2.
  - 4. Install distributor cap:
    - a. Line up distributor index points with those on switch, and seat properly.
    - b. Lock distributor cap with extended spring clamps (Figure 2).

CAUTION - Hold downward pressure on distributor cap until both clamps are securely in place.

- 5. Check for clearance. After distributor cap is installed, (a) make sure there is no tension on the distributor lead wires, and (b) there is clearance between distributor and other motor equipment.
  - 6. Check installation See Below

# SPECIAL INSTRUCTIONS READ CAREFULLY

One of the most important steps in making a good Electric Tachometer installation is that of making a preliminary test after the Switch, rotor and cap have been assembled on distributor. Turn over engine with starter or run the engine a few seconds.

After this is done, check rotor and cap to see whether the rotor is hitting, by looking at the brass posts in the cap. If there are scratches on these posts, the rotor is hitting, and a thorough check for misalignment should be made. If necessary, file end of rotor contact arm sufficiently to give clearance.

### ROTOR STABILITY

There is side play in the Tachometer Switch rotor shaft because a bearing is not required. The only "pressure" exerted against the rotor shaft comes from the three sets of brushes in the Switch which are in constant contact with the rotor shaft. The felt washer is used to keep dirt and oil from getting on the brushes. It is not intended to be a bearing

or bushing. There is a little more taper on the Stewart-Warner Switch rotor shaft than on the distributor shaft. This assures the rotor having a snug fit.

If the rotor and Switch shaft are pressed snugly on the distributor shaft, there should be no side play.

If the rotor hits the points in the cap after the switch has been installed, check (1) to see if all parts are seated properly, (2) alignment is correct and (3) if rotor contact arm is clean. It is normal for the rotor to build up a protrusion due to constant arcing.

#### THINGS TO REMEMBER

Clean Off "Built-Up" Metal On Old Rotor!

Do Not Lubricate any Part of Switch.

Tachometer Switches and Distributor Caps MUST BE SEATED ALL THE WAY DOWN!

When installing Tachometer Switch, REMOVE DUST COVERS!

### D. INSTALL TACHOMETER AND WIRING

- Install Electric Tachometer in desired position using brackets supplied or panel mounting kits listed on page 1.
  - 2. Install Wire Cable (No. 415237) with spade terminal wires at tachometer end. DETERMINE POLARITY OF BATTERY BEFORE INSTALLING.
    - a. If positive post (+) of battery is the ground, connect BLACK wire to IGNITION switch, and RED wire to a good GROUND.
- If negative post (-) of battery is the ground connect RED wire to IGNITION switch, and BLACK wire to a good GROUND.
- 3. Plug Tachometer lead into Wire Cable socket.
  - 4. Punch out plug or cut hole in fire wall.
- 5. Feed Wire Cable through fire wall from the cab side.
- 6. Plug lead on distributor switch into socket on Wire Cable.

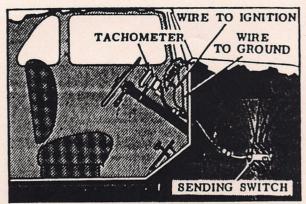


FIG. 3

7. Clamp or tape wiring in position to keep clear of motor or hot surfaces.

WARNING: Spade terminal wires must be at Tachometer end. See Figure 3.

## VACUUM GAUGE CONNECTIONS

The Vacuum Gauge in the Vac-Tach instrument can

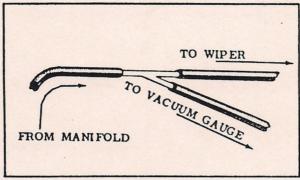


FIG. 4

be connected to the windshield wiper hose.

- a. If the vehicle does not have a vacuum booster, insert a T or Y fitting in the wiper hose. (Figure 4)
- b. If the vehicle has a vacuum booster, install T fitting before booster at manifold, and run wiper hose from fitting to vacuum gauge.