

5" Speedometer & Tachometer Multifunction with 6 Pin Connectors and 4, 6, & 8 CYL Jumper Harness

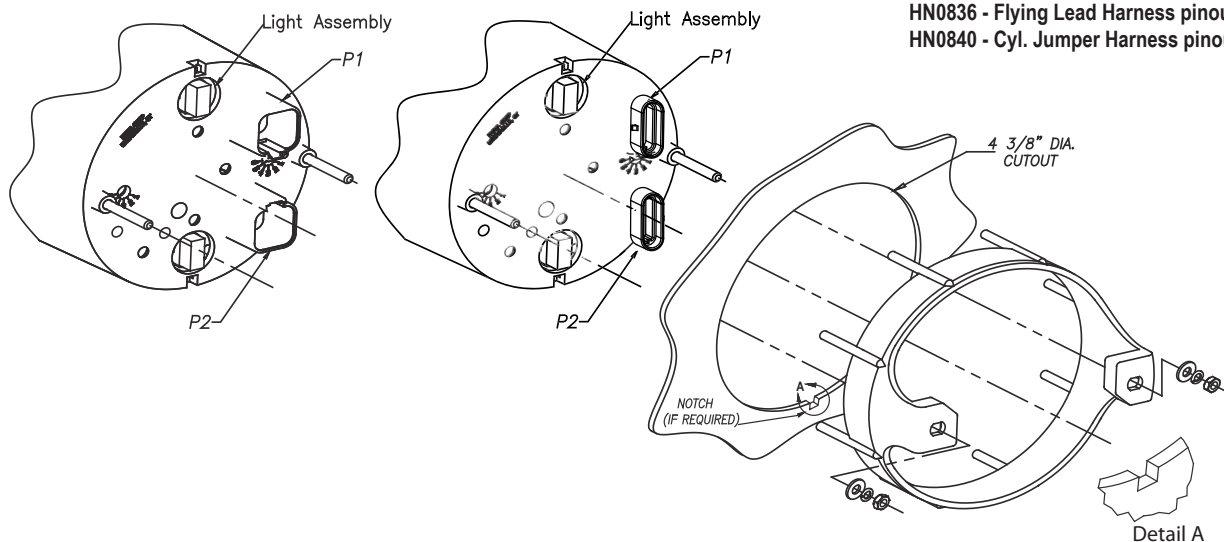
Installation Instructions

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 is sufficient.** Over tightening could result in damage to the instrument and may void your warranty.

1. Location: Some interference (erratic operation) may be noticed on the gauge during radio transmissions. This will neither damage the gauge nor affect accuracy when not transmitting.
2. Be certain to use stranded, insulated wire not lighter than 18AWG.
3. Cut a 4-3/8" diameter hole in the dash and mount the tachometer with the back clamp supplied. If required cut a .175" wide by .115" deep notch to accept the key on the case. These instruments are available with both a Packard connector case and a Duetsch connector case.

Deutsch Case

Packard Case



See Connection Tables
 HN0836 - Flying Lead Harness pinout & functions.
 HN0840 - Cyl. Jumper Harness pinout & functions.

CAUTION:

Ensure wire insulation is not in danger of melting from engine exhaust heat or interfering with moving mechanical parts when connecting sensors.

NOTE:

To change light bulb, twist out socket assembly one-eighth turn counterclockwise until it pops out. Bulb pulls straight out of assembly. Replace with a GE No. 168 instrument lamp.

HN0836/HN0848

WARNING:

Be sure that you have selected the P1 location for this application. See P1 (6 Pin connector) (HN0836/HN0848) harness function table (Wiring Diagram) for details. This connection may be made using a 6 pin Packard or Deutsch connector, depending on case used.

4. *If Required* - Connect the (White) wire from pin 4/D to the terminal or wire originating from the unrectified side of the alternator. Tachometer plug-in harnesses are sometimes available from the engine manufacturer to simplify the hookup.
5. *If Required* - Connect the (Green) wire from pin 3/C to the Speed Sender.

Installation Instructions

6. *If Required* - Connect the (Yellow) wire from pin 2/B to an external button.
This button should be a momentary switch which when pressed connects to ground. This will allow the user to operate the Odometer functions available.
7. Connect the (Red) wire from pin 6/F to the '+' (positive) 12Vdc circuit that is activated by the ignition switch.
8. Connect the (Black) wire from pin 5/E to the vehicle's electrical ground, generally available in several locations at or near the instrument panel.
9. Connect the (Blue) wire from pin 1/A to the positive portion of the lighting circuit.

HN0840/HN0849

WARNING:

Be sure that you have selected the P2 location for this Jumper harness application. (See P2 (6 Pin Connector) (HN0840/HN0849) (Wiring Diagram) for wire function selection details. This connection may be made using a 6 pin Packard or Deutsch connector, depending on case used. As required make the connections as follows;

10. *If Required* - **For 4 cylinder engines**, connect the (Grey) wire from pin 1/A (SW Comm), with the butt connector, to the (Brown) wire from pin 4/D (4 CYL).
11. *If Required* - **For 6 cylinder engines**, connect the (Grey) wire from pin 1/A (SW Comm), with the butt connector, to the (Tan/White) wire from pin 5/E (6 CYL).
12. *If Required* - **For 8 cylinder engines**, connect the (Grey) wire from pin 1/A (SW Comm), with the butt connector, to the (Tan/Black) wire from pin 6/F (8CYL).
13. Connect the (Pink) wire from pin 3/C (OIL/FUEL) to the Oil Pressure or Fuel Sender.
14. Connect the (Tan) wire from pin 2/B (TEMP) to the Temperature Sender.
15. Reconnect the battery.

Speedometer Operations

The Speedometer has two modes "NORMAL" and "SETUP".

"NORMAL" operation has two functions, "Trip" and "Odometer". The "trip" mode is initially set. To switch between them, momentarily press the external button.

Trip "trIP"



Odometer "OdO"



In the Odometer mode the displayed mileage is in miles.



In Trip mode the displayed mileage is in tenths.



Reset the Trip Odometer

Hold the button down while the display is in "TRIP" mode,



the display will show "rESEt"



and will then show the trip mileage flashing.



A short button push will reset the trip mileage to zero, and a long push will return to the "ODO" mode with no change. After the trip is cleared, a long push will return to "ODO" mode.



Setup

To get into "SETUP" mode, hold the button down while powering up until the display shows "SEt UP".



Speedometer Operations

In the "SETUP" menu, a short button push will cycle through the selections; "CAL", "SIGnAL" and "PrG". A long push will select the function shown in the display.

CAL



"CAL" will allow you to set the Pulse Per Mile (PPM). Press the button with a short push. The display shows "SEt".



After 3 seconds the display changes and shows the Pulse Per Mile display.



Each digit will flash and a short push will increment it. Wait 3 seconds and the next digit will flash. This will continue for all digits and start over. When you are done setting the PPM, a long button press will save it and return to the main "CAL" menu.



SIGnAL



"SIGnAL" will allow you to set the speedometer input sensitivity, low ("LO A"), medium ("b") or high ("HIGH C").



Note - Setting "b" is appropriate for most applications

A short button push will cycle through the three options and a long push will save the setting and return to the main "SIGnAL" menu.



CALdAnn - Calibrate (Drive A Mile)



PrG



"PrG" displays the current software revision. A long button push display a numerical value of the program.



A long button push will return to the main "PrG" menu.



When finished with the "SETUP" menu, cycle power to restart the speedometer in "NORMAL" mode.



Calibrate (Drive A Mile)

Use the Drive A Mile function to calibrate the Speedometer. With the vehicle stopped and engine off, press the remote button while starting the engine. The display will show the SETUP menu after the self test is performed.



A short press of the remote button will cycle display. Press again until the display shows the Drive a Mile calibration screen.



A long push of the remote button will make the Speedometer go into the calibration mode. The screen will change and a group of numbers will be displayed and will flash. These numbers represent the current pulses per mile and will change after calibration.



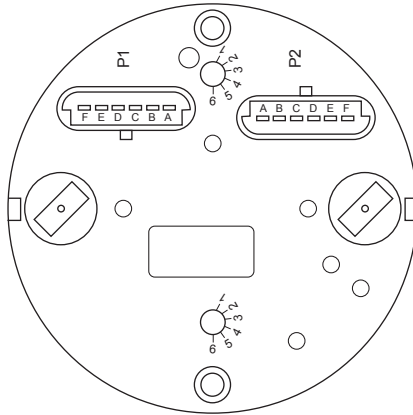
Press the remote button and the screen will change to the starting position.



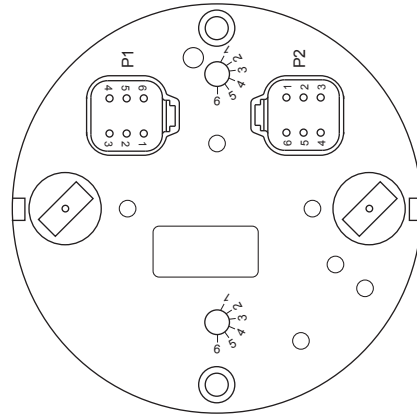
Drive a mile. Stop the vehicle. Press the remote button again. Restart engine. The Speedometer is calibrated.

Wiring Diagram

Packard Connection Case



Deutsch Connection Case

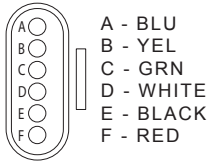
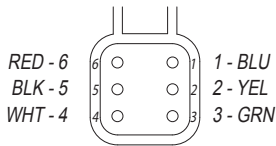


P1 (6-pin connector)

Pin	Wire Color	Function	5" 3-n-1 Spd, O, T	5" 2-n-1 Spd, Tach	5" 3-n-1 Tach, F, V
1/A	Blue	Lights	*	*	*
2/B	Yellow	Ext. Button	*	*	N/C
3/C	Green	Speedo Sig	*	*	N/C
4/D	White	Tach Sig	N/C	*	*
5/E	Black	Ground	*	*	*
6/F	Red	12vDC (Wake)	*	*	*

P2 (6-pin connector)

Pin	Wire Color	Function	5" 3-n-1 Spd, O, T	5" 2-n-1 Spd, Tach	5" 3-n-1 Tach, F, V
1/A	Grey	SW COMM	N/C	*	*
2/B	Tan	Temperature	*	N/C	N/C
3/C	Pink	Oil/Fuel	OIL	N/C	FUEL
4/D	Brown	4 Cyl	N/C	*	*
5/E	Tan/White	6 Cyl	N/C	*	*
6/F	Tan/Black	8 Cyl	N/C	*	*



WIRE SIDE

HN0848



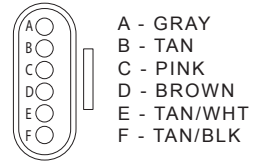
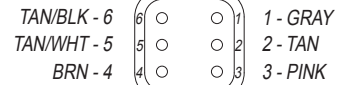
HN0836



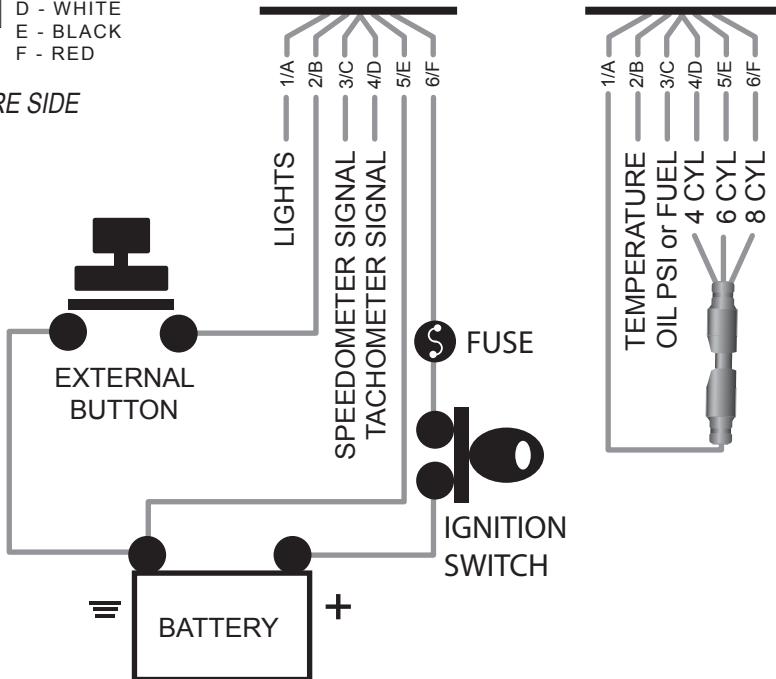
HN0840



HN0849



WIRE SIDE



Note: This Jumper is important for Tachometer Operations. Install the jumper based on your engine's configuration.