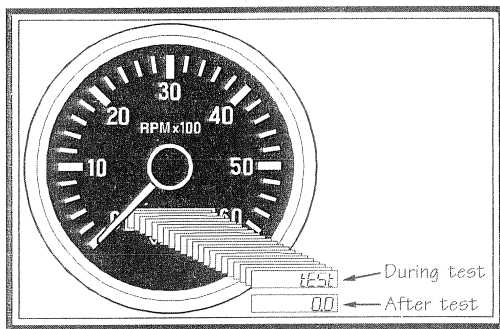


**Diagram C**

Proper mounting of the VDO Tachometer

3 a second piece of wire (long enough to reach the light switch) into another spade connector. Attach this connector to a terminal on the remaining lamp socket, which will be referred to as Socket B.

9. Reconnect the battery and turn on the ignition to make sure the tachometer is working. When you turn on the ignition, the tachometer will do an automatic self-test. During this self-test, the pointer moves over the whole scale range, and the LCD display shows the word "TEST." After the test is completed, the display will show the current working hour on the engine hourmeter. Since this is the first time power has been applied to the instrument, the reading will be 0.0. (See Diagram E.) If everything is working properly, the installation is complete. If it isn't, re-check your wiring and your connections and try the self-test again.



**Diagram E**

The LCD on the tachometer will show this display

### III. Calibrating the Tachometer

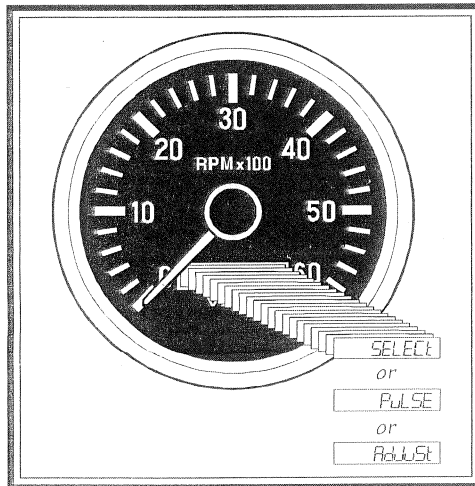
Calibration of the VDO Tachometer with Hourmeter is a relatively simple procedure, and can be accomplished in any of three ways:

- By programming in the number of cycles and the number of cylinders in the gasoline engine you are using...
- By the input of the known pulse-per-revolution for the diesel engine and ignition system being used with the tachometer...
- Using a reference point for adjustment or fine tuning.

The display lists the select mode as *SELECT*; the pulse-per-mile mode as *PULSE*; and the reference/fine-tune mode as *ADJUST*. When you see the method you wish to use, let go of the button and that function will be enabled. See Diagram F.

You gain access to the calibration functions by pressing the button on the back of the tachometer and holding it in while you turn on the ignition. As you continue to hold in the button, the display will change...scrolling through the three calibration methods and stopping on each one for about two seconds.

The display lists the cylinder/engine-type selection mode as *SELECT*; the impulse-per-revolution mode as *PULSE*; and the reference/fine-tune mode as *ADJUST*. When you see the method you wish to use, let go of the button and that function will be enabled. See Diagram F.

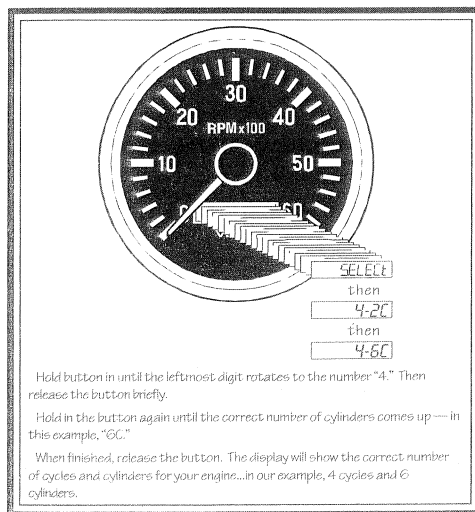


**Diagram F**

Calibration modes as displayed on the Tachometer's LCD

#### 1. Programming the Cylinder/Engine type (*SELECT*)

Programming the tachometer for the number of cylinders in your gasoline engine can be done easily using the *SELECT* mode.



**Diagram G**

LCD Sequences as they appear when programming in the "SELECT" mode

To use the *SELECT* mode:

1. Press the button on the back of the tachometer, hold it in, and turn on the ignition. Release the button when the tachometer display reads, "SELECT."
2. Now you must enter two values: one for the number of cycles in the engine you are using; the second for the number of cylinders in the engine. To program the tachometer for use with a 4-cycle, 6-cylinder engine, for example, push and hold the button until the digit "4" appears. Release the button for a second, then push and hold it again, until the digit "6" appears, as shown in Diagram G. Then release the button. After several seconds, the display will automatically revert to its normal mode.

#### 2. Manual Calibration with a known value (*PULSE*)

If you know the exact calibration value for the vehicle and type of sensor you are using (pulse-per-revolution), you may use that value to manually calibrate the tachometer.

To calibrate your VDO Tachometer manually:

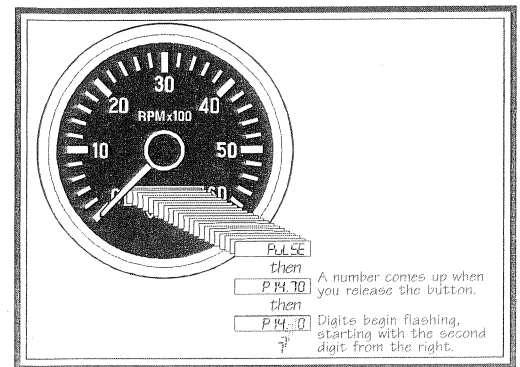
1. Press and hold in the button on the tachometer as you start the engine. Hold in the button until the word "PULSE" is displayed on the LCD readout.
2. As soon as you see the word "PULSE," release the button. After a few seconds, the display will start flashing a series of numbers (factory default setting) that you can change to represent the impulse-per-revolution value of the ignition in your vehicle. For example, a number like "P 14.70" will show on the display, with each digit flashing in turn from right to left, except the right-most digit, a zero, which is fixed.
3. As each number flashes, press the button and hold it until the correct digit appears. Refer to Diagram H.

For example, let's say the number that represents the correct calibration value for the diesel engine and ignition system in your vehicle is 16.5 pulses-per-revolution. When you begin the manual calibration process, the LCD displays a default value. When the first digit starts flashing, press the button to start cycling through the numbers. When the number "5" appears, release the button.

At this point, the number "5" is set, and the digit to its immediate left begins to flash. Press the button again, and hold it until the number "6" appears. Release the button. Repeat the procedure until the "1" appears. Again, release the button. At this point, the correct calibration for the tachometer/ignition combination has been properly set...in our example, 16.5 pulses-per-revolution. After a few seconds, the value you have entered will be downloaded into the tachometer's microprocessor, and the LCD display will automatically revert to its normal mode. Manual calibration of the tachometer is now complete.

In the future, you can use this method to update the calibration value stored in the computer should it ever become necessary. This function also allows you to manually adjust the calibration value after you perform the automatic calibration process.

[text continues at #9] →



**Diagram H**

LCD Sequences that appear when calibrating in the "PULSE" mode