

# **Installation Instructions for 41620, 41621, 41622, 41623, 41630 & 41640**

## **5-Gauge Universal Digital Dash Panel**

### **KIT COMPONENTS:**

- One (1) Digital Dash Panel
- One (1) Lens
- One (1) Water Temperature Sending Unit
- One (1) Oil Pressure Sending Unit
- One (1) Mounting Kit

**++ Note:** This electronic speedometer will work with most hall-effect or magnetic pulse sending units w/ a pulse range of 2,000 to 32,000 pulses per mile. This includes most OEM and aftermarket electronic speedometer sending units. The wiring instructions shown below are for sending units JEGS #'s 41610, 41611 & 41612. If you are using a different sending unit consult the service manual or instruction sheet for that sending unit (most two wire sending units have a ground and a signal wire, most three wire sending units have a power, ground, and signal wire). The signal wire is attached to the gray wire on the gauge panel.

### **WIRING INSTRUCTIONS:**

#### Power

1. Connect the **BLACK** ground wire directly to the engine block.
2. Connect the **RED** wire to a switched +12 volt source (ignition switch).

#### Lights/Signals

1. Connect the **PURPLE** wire to the headlight switch to dim the LED's 50% when the headlights are on. However, do not connect to the headlight rheostat control wire; the dimming feature will not work properly.
2. There are (2) 18-gauge **WHITE** wires, one for the Left Turn Signal and one for the Right Turn Signal. Each wire is labeled on the printed circuit board as "LEFT" and "RIGHT". Connect the **LEFT WHITE** wire to the left turn indicator circuit. Connect the **RIGHT WHITE** wire to the right turn indicator circuit.
3. Connect the **BROWN** wire to the high beam circuit.

#### Oil Pressure

1. Disconnect the wire from your factory oil pressure sending unit (if equipped) and remove the sender. Insert the oil pressure sending unit in place of the original sender. Do not use Teflon tape or other sealer on the new sending unit threads to avoid inaccurate ground connections as the sending units get their ground from the threads.
2. Connect the **ORANGE** wire on the dash panel to the new pressure sending unit.

#### Water Temperature

1. Disconnect the wire from the existing water temperature sending unit and remove the sender.
2. Insert the new water temperature sending unit in place of the original temperature sender. Do not use Teflon tape or other sealer on the new sending unit threads to avoid inaccurate temperature readings. Connect the **BLUE** wire on the JEGS dash panel to the new temperature sending unit.

#### Speedometer

1. Disconnect the mechanical speedometer cable from the transmission and thread the new electronic sensor onto the transmission. Connect the **GRAY** wire from the digital panel to the **WHITE** wire on the electronic speed sensor. Connect the **BLACK** wire on the sending unit to Ground. Connect the **RED** wire to power with the ignition switch ON.

#### Fuel Sending Unit

1. Connect the **YELLOW** wire to the factory fuel sending unit. Use the 2-position DIP switch on the back of the panel to select the type of sender you are using. Refer to the diagrams below to properly set the switch.

### **DIGITAL PERFORMANCE SPEEDOMETER:**

Your JEGS dash panel is equipped with our Digital Performance Speedometer. This electronic speedometer displays speed and includes an odometer, trip meter, high speed recall, 0-60 time and 1/4 mile elapsed time (ET). It can be calibrated with the push of a button to adjust the speedometer for different tire sizes, wheel sizes and gear ratios. The single pushbutton is used by a quick "TAP" to switch from odometer to trip meter and then back again if so desired. The microprocessor can distinguish from a quick "Tap" to a press and hold which will reset the trip meter in trip mode or it will display the performance data if in odometer mode.

### **CALIBRATION:**

The speedometer leaves the factory with an industry standard pre-set setting of 8000 pulses per mile. Chances are high that you may not need to recalibrate your speedometer. You may need to recalibrate the speedometer if you have changed the original tire size or rear end gear ratio. NOTE, Do not attempt to recalibrate your speedometer until after it is working properly and you have determined that the speed is incorrect. The calibration procedure will NOT correct a faulty installation or improper wiring. If you attempt to recalibrate your speedometer without making sure the speedometer is receiving pulses from the sending unit, the speedometer will display "Err" and go back to the factory default setting of 8000 pulses per mile.

To recalibrate, locate a measured mile where you can safely start and stop your vehicle. By running the vehicle over this measured distance, the speedometer will learn the number of pulses output by the speedometer sensor during a specific measured distance. It will then use this acquired data to calibrate itself for accurate reading. There is a small recall pushbutton in the center of the panel used to calibrate and read all of the data stored in the speedometer. After installing your speedometer according to the wiring instructions, with the ignition on it should immediately display the default screen of 0 MPH. You will then need to drive your vehicle to the predetermined measured mile. During this trip, the speedometer should read something other than 0 MPH. If it does not, return and locate the problem. Otherwise proceed with the calibration by stopping at the beginning of the measured mile with your vehicle



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and locate the problem. Otherwise proceed with the calibration by stopping at the beginning of the measured mile with your vehicle running and in odometer mode and not trip mode, press and "hold" the pushbutton until the odometer displays "HI-SP". On its own, the gauge will then cycle through the recorded performance data in the following order: "0-60", "1/4", and "CAL." While "CAL" is being displayed, quickly TAP the pushbutton briefly one time. This will put the speedometer in Program Mode. The letters "CAL" will be displayed on the 3 large digits and 0 will be displayed on the odometer digits. If you did not tap the button when the word cal was displayed, the pulses per mile will be displayed on the odometer and the display will go back to MPH mode. If you did TAP the button, you will now be setting this to a new number. This quick tap will let the microprocessor know that you wish to enter a new number and 0 will now be displayed.

It is very important that you drive to the end of the measured mile and tap the button again. **WARNING:** If while in "CAL" mode you do not move at all and press the button again, the microprocessor will NOT have received any data whatsoever and the unit will display Err and revert back to the factory setting of 8000 pulses per mile. At a minimum, drive some distance and you can always go back and start again if need be.

If you miss stopping the display at "CAL", simply repeat the steps. With "CAL" displayed, the speedometer is now waiting to record the pulse count data accumulated over the measured mile.

When you are ready, begin driving and you will notice that the reading will start counting up. The odometer will display the incoming pulse count. Drive the vehicle through the measured mile (speed is not important). As you move, the odometer will begin showing the speedometer pulses as they are being counted.

At the end of the mile, stop and press the pushbutton again. The odometer will now display the new number of speedometer pulses that were registered over the distance.

The odometer will continue to display the pulse reading for a few seconds. Once it reverts to the default mode, you have calibrated the speedometer.

### Trip Distance

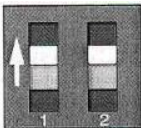
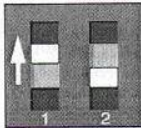
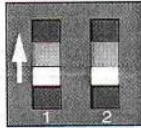
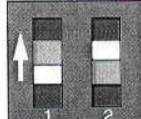
A single tap of the recall button will activate the trip meter in the odometer display. A decimal point will appear to indicate that you are in trip meter mode. Holding the recall button down for several seconds will clear the trip distance. To return to the default odometer display, "TAP" the recall button again. The decimal point will disappear to indicate that you are back in the default odometer display.

### Recording and Viewing Performance Data

Follow these steps to record and recall Performance Data (high speed, 1/4 mile ET and 0-60 time):

1. Before each run your car must be at a complete stop at the starting position. Press and hold the pushbutton as it cycles through the performance data. At the end, the odometer will "RESET" and all performance data will be cleared from memory. This will not affect your stored calibration value or the odometer reading.
2. Now press the pushbutton until "HI-SP" is displayed. On its own, the gauge will cycle through the performance data that it records in the following order "0-60", "1/4", "CAL"
3. Start the run, pass, session, etc.
4. When finished, repeat Step 2 to view the data gathered from this run. While stopped, you can view this data as many times as you wish. However, once it finishes scrolling one time, the memory is ready to record new data for the 1/4 mile and 0-60 mph times and will begin recording again once the vehicle starts moving.

The highest speed measured over multiple runs will be retained in memory.

Manufacturer	Fuel Selector Switch Position		Ohm Range (Empty to Full)
	Switch Position		
Ford / Chrysler			73 – 10 OHM
GM			0 – 90 OHM
VDO			10 – 180 OHM
Universal / Stewart Warner			240 – 33 OHM



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