Application: 1978–1982 C3 Corvette

Search: *Gauges*
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LED Gauges, Dash and Console

Part Includes

Digital Dash Panels
Smoked Lenses
1 – Water Temperature Sending Unit
1 – Oil Temperature Sending Unit
1 – Universal Speedometer Sensor

SKILL LEVEL 3

Tools Needed

HIGHLY RECOMMENDED FOR THIS PROJECT:
Service Manual or Assembly instruction manual for year of car getting the gauge installation. Wiring diagram for that year Corvette.

STEP 1.
Remove your factory gauges from your instrument cluster and insert our digital panels.

STEP 2.
Remove the existing lights that are behind the instrument clusters. Only the lights that are in the housing behind the original gauges.

STEP 3.
Remove protective paper coating from both sides of the Plexiglas lens.

STEP 4.
Insert the wires for both the Intellitronix Speedometer and Tachometer gauges. The tachometer will have one set of red and black wires. One set will clip to the existing signal posts in the housing and the other set will go through the back of the housing and connect to the speedometer.

STEP 5.
Mount the Gauges into the housing using the hardware provided.

STEP 6.
Wire gauges and sending units into designated areas as instructed below.

WIRING INSTRUCTIONS

STEP 1.
Connect the **BLACK** ground wire to a designated ground.

STEP 2.
Connect the **RED** wire to a switched +12 volt source (ignition switch).

STEP 3.
Connect the **PURPLE** wire to the headlight switch to dim the LEDs 50% when the headlights are on.

DASH WIRE COLOR	PURPOSE	C3 WIRE COLOR
Black	Ground	Black
Red	12 vDC	Pink/Black Striped
Green	Tachometer	White
Orange	Oil Pressure	Tan
Blue	Water Temp.	Green
White	Speedometer	Tan (Cruise Sender)
Grey	Push Button	Trip/Odo. Set
Orange/White Striped	Oil Temp.	Green/White Striped
Yellow	Fuel	Pink
Tan/White Striped	Volts	No Sending Wire

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Description (cont.)

STEP 4.
WARNING – *Do not connect to the headlight rheostat control wire, nor the existing dimmer switch; the dimming feature will not work properly if you connect to these.*

STEP 5.
Connect the **GREEN** wire directly to the negative terminal of the ignition coil or a direct tach output lead from the distributor or electronic control module. If you are using an aftermarket capacitive discharge ignition system, such as MSD, you must use the designated "tach output" connection on the electronic box. Do not make any connections directly to the coil with this type of high performance ignition system.

STEP 6.
The default tach setting is for an 8–cylinder engine.

STEP 7.
Connect the **ORANGE** wire on the dash panel to your factory oil pressure sending unit.

NOTE
If you wish to use the oil temperature gauge you will need to insert the new temperature sending unit that does not have the bushing into either a "T" connection with the oil pressure sender or into the plug that is on the side of the block above the oil filter. Connect the ORANGE and WHITE STRIPED wire to this temperature sender.
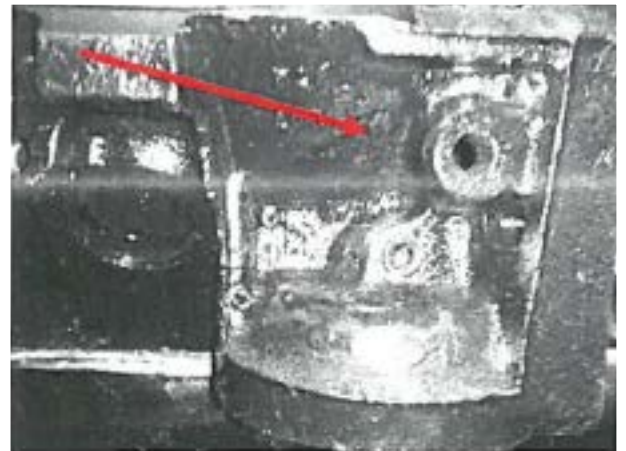
Insert the new water temperature sending unit in place of the original temperature sender. Do not use Teflon tape or other sealer on the new sending unit threads to avoid inaccurate temperature readings. Connect the **BLUE (OILTEMP)** wire on the Intellitronix dash panel to the new temperature sending unit.

Disconnect the mechanical speedometer cable from the transmission and thread the new electronic sensor onto the transmission. Connect the **WHITE** wire from the digital panel to the white wire on the electronic speed sensor. Connect the black wire to Ground and the Red wire to switched +12 volts. Run the wires from the dash panel to the speedometer sensor installed in the transmission.

NOTE
If you are using cruise control function you will need to use an alternate type of sender and hook it in line with your speed cable and cruise control.

STEP 8.
Connect the two GREY wires to one of the two included push button switches. Mount the switch in a convenient location such as under the steering column, so that you can reset your trip odometer and access your other speedometer functions.

STEP 9.
Connect the **YELLOW** wire to the factory fuel sending unit.

STEP 10.
Connect **TAN and WHITE STRIPED** wire to the alternator.

WARNING
Will only work if using the original alternator setup.

Description (cont.)

DIGITAL PERFORMANCE SPEEDOMETER
Your Intellitronix 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 ¼ 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. 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 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.

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.

WARNING
If while in "Cal" mode you do not move at all and press the button again, the microprocessor will not have received any date 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.

Description (cont.)

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):

STEP 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.

STEP 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"

STEP 3.
Start the run, pass, session, etc.

STEP 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 1f4 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.