Nordskog Performance Products

DP2001 ’68-’77 CORVETTE DIGITAL DASH PANEL

Kit contents: 1 speedometer circuit board, 1 tachometer circuit board, 1 center gauge cluster, 3 smoked acrylic covers, 1 oil pressure sender and 2 temperature sending units. Your factory fuel level and speed senders are to be used.

Note: To prevent electrical noise from causing the gauges to act abnormally, check to make sure that any signal wire between the senders to the gauges does not run next to the ignition system or spark plug wires. Resistor-type spark plugs and wires that are in good condition are also suggested. For safety reasons before installing this product we recommend disconnecting your battery.

1. Remove the original speedometer, tachometer and center gauge cluster.
2. Install one temperature sender in your engines oil system.
3. Remove and replace your coolant temperature sender with the one provided.
4. Install your new Nordskog circuit boards and wire as follows:
    a. Connect all **black** wires to a good chassis ground. The black wires for water temperature and oil temperature gauges must be grounded to the engine block as close as possible to their respective senders. This is because the gauges work by measuring the resistance between the temperature senders to ground. If a bad ground or additional resistance between the gauge and the sender exists, then the gauge will be inaccurate.
    b. Connect all **red** wires to 12v positive “ignition on” power.
    c. Connect all **purple** wires to the parking light circuit **<u>not</u>** the panel light circuit.
    d. Connect the **blue** wire on the cluster board to your new coolant temperature sender.
    e. Connect the **white** wire on the cluster board to your new oil temperature sender.
    f. Connect the **orange** wire on the cluster board to the oil pressure sender.
    g. Connect the **yellow** wire on the cluster board to your factory fuel level sender. **** NOTE**** The fuel gauge reads percent of full not gallons.
    h. Connect the **green** wire on the tachometer board to the tach output wire of the ignition system or the negative side of the coil depending on the application. **Do not connect the “TACH” input to the coil if using a CD ignition!**
    i. Connect the **blue** wire on the tachometer board to the headlight high beam indicator circuit.
    j. Connect the **orange** wire on the tachometer board to the right turn indicator circuit.
    k. Connect the **white** wires on the speedometer board to a momentary normally open switch (**not supplied**). This will allow you to go through the functions of the speedometer.
    l. Connect the **yellow** wire on the speedometer board to the left turn indicator circuit.

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m. Connect the **brown** wire on the speedometer board to the brake indicator circuit.
n. Connect the **gray** wire on the speedometer board to the speed sender if so equipped or you must purchase Nordskog part number S9013 if your car does not have a functional electronic speed sender. A 10' length of twisted shielded pair cable is provided with this kit. This cable is provided to shield the speedometer signal wire from picking up electrical noise, which would interfere with the proper function of your speedometer. If your speedometer displays some unusual values when the engine is running, it is recommended that this cable be used. Run your speedometer signal and ground wire from the sender through this cable to the speedometer. The shield (bare uninsulated wire) should only be grounded at the sender.
o. Connect the two white wires of the speedometer board to a momentary normally open switch (not provided). This switch will perform the trip function, calibration and for recalling the performance data.

DIGITAL PERFORMANCE SPEEDOMETER

Your digital panel is equipped with an electronic speedometer that has the capability to display your speed as well as your mileage traveled (odometer). It also has the ability to track your trip distance, record and display the highest speed you obtained as well as your 0-60 mph and ¼ mile elapsed times. Your speedometer will also allow you to adjust your readings (through electronic recalibration) to different tire or gear sizes.

Your speedometer comes with factory set defaults and must be recalibrated for your specific application. To accomplish this, you must locate a measured mile of highway where you can safely start and stop your vehicle. By running the vehicle over this measured distance, your speedometer will learn how many pulses your speedometer sensor is outputting in this measured distance. It will then use this acquired data to calibrate itself for accurate reading.

After installing your speedometer according to the installation instructions, with the ignition on or your car running, it should immediately exhibit the default display (figure 1): the first green light bar, the odometer display (small "0") and speedometer display (large "0"). If, for any reason, your instrument does not show this display, please thoroughly re-check all of your connections and try it again. If the problem persists, please contact us for assistance. In the right hand corner of the face, you will notice a small recall pushbutton. This will be used to calibrate and read all of the data involved with your speedometer. The unit is also equipped with wires that allow you to add an external recall button which can be mounted in a location which is easily reached during operation of the vehicle (Earlier models are not equipped with the wires. Please contact us if you have an earlier model and wish to have the wires installed).

THE FOLLOWING INSTRUCTIONS WILL INFORM YOU ON HOW TO CALIBRATE YOUR SPEEDOMETER. TO INSURE THAT IT IS DONE CORRECTLY, IT IS IMPARITIVE THAT YOU READ THROUGH THE INSTRUCTIONS COMPLETELY BEFORE YOU ATTEMPT TO PROGRAM OR OPERATE YOUR SPEEDOMETER!

Calibration

1.) While stopped at the beginning of the measured mile with your vehicle running, press and hold down the pushbutton inside the face until the odometer displays "HI-SP" (figure 2). IMMEDIATELY release the button.

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2.) On its own, the gauge will cycle through the performance data that it records in the following order "HI-SP," "0-60," "1/4," "CAL." (Figures 2-5).

3.) While "CAL" is being displayed quickly press and release the pushbutton one time. This will put the speedometer in the program mode and "PROG" will be displayed (figure 6) **(YOU MUST BE EXTREMELY CAREFUL TO DEPRESS THE PUSHBUTTON QUICKLY AND NOT HOLD IT DOWN.** If you miss stopping the display at "CAL", simply repeat the step). With "PROG" displayed, the speedometer is now waiting to record the data that will be accumulated over the measured mile.

4.) When you are ready to begin driving quickly press and release the pushbutton one time. The speedometer will display "CAL" and the odometer will show "0" (figure 5). Begin driving the vehicle at a safe speed (the level of speed is not important) through the measured mile. As you move, the odometer will begin showing the speedometer pulses as they are being calculated.

5.) At the end of the mile, bring the vehicle to a safe stop and quickly depress the pushbutton one time. The odometer will now display the number of speedometer pulses that were registered over the distance **(NOTE: If the number displayed is 12,800, either the speedometer received no signal from the sensor and you must recheck all connections or your stock speedometer sensor does not output the correct number of pulses per mile-between 2000 and 32,000- and must be replaced with our sensor #S9013. If the number displayed is 8000, the default setting, the speedometer was not put in the calibration mode and the pulses per mile were not recorded. You must repeat steps 2-4.)**.

6.) The odometer will continue to display the pulse reading for a few seconds. Once it reverts to the default mode (figure 1), your speedometer has been calibrated and is ready for operation.

Trip Distance

A single tap of the recall button will show the trip distance mileage in the odometer display. A decimal point will appear to in the odometer to indicate that you are in the trip odometer mode. Holding down on the button for a few seconds in this mode will clear the trip distance. To return to the default odometer display, tap the recall button. The decimal point will disappear to indicate that you are in the default odometer display.

Recording and Viewing Performance Data

To begin recording Performance Data (High speed, ¼ mile elapsed time and 0-60 mph elapsed time), execute the following:

1. Before each run your car must be at a complete stop at the starting position.
2. Press and hold the pushbutton until "HI-SP" is displayed (figure 2) and then **IMMEDIATELY** release the button. On its own, the gauge will cycle through the performance data that it records in the following order "0-60", "1/4"', "CAL" (figure 2-5).
3. At the end of your desired run, safely bring the vehicle to a complete stop.
4. 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 ¼ mile and 0-60 mph elapsed times and will begin once the vehicle starts moving. The highest speed measured over multiple runs will be retained in memory. To gather new data, repeat steps 1 thru 4.

If you wish to clear out all of the performance data and gather new data before each run, press and hold the pushbutton. Continue to hold the pushbutton as it cycles through the performance data. At the end it will say "RESET" and all of the performance data will then be cleared from memory (This will not affect your stored calibration value or the odometer reading.). Turning off the gauge then turning it back on can also clear the performance data.

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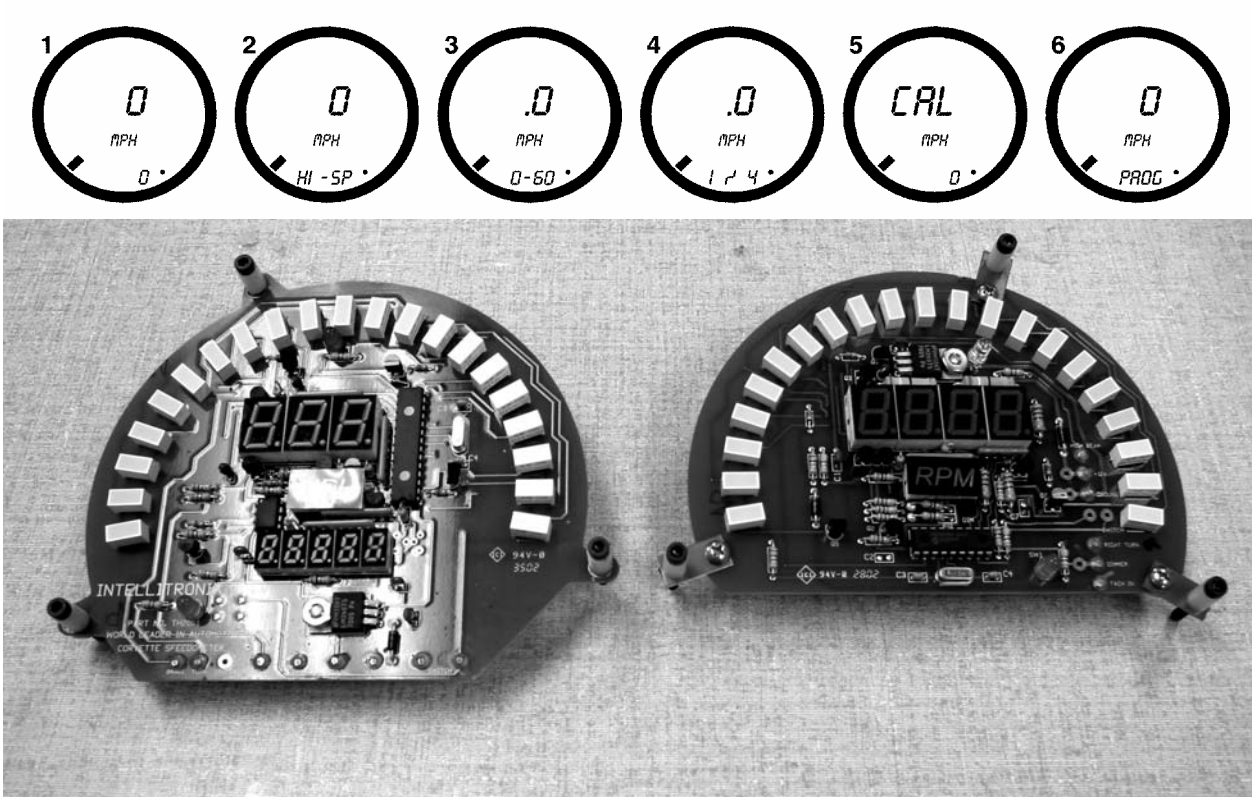

Pictured above are the speedo and tach boards with the included mounting hardware assembled on both boards. The 6/32 nuts are mounted on the backside of both boards on each of the screws. The three rectangular extender tabs used on the tach board may not be needed for all applications.

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