



## **Nordskog Performance Products**

### **DP4003 '82-'83 CAMARO DIGITAL DASH PANEL**

#### INSTRUMENT PANEL MOUNTING

1. FOR SAFETY REASONS, IT IS ADVISABLE TO DISCONNECT THE POSITIVE BATTERY CABLE.
2. Remove the dash pad by removing the screws in the defroster ducts and the screws under the lip of the dash pad.
3. Remove the left hand radio speaker and disconnect the speaker wires.
4. Remove the instrument cluster faceplate.
5. Remove the "cluster to dash" securing screws. Disconnect the speedometer cable from the rear of the odometer unit, if the vehicle is so equipped.
6. Pull the cluster from the dash far enough to reach behind it and remove the screws that hold the odometer unit in the cluster from the rear of the cluster. Remove the retaining clip.
7. Remove the bolt securing the Vehicle Speed Sensor male connector to the cluster. This is the small plastic box located next to the wiring harness connector behind the tachometer side of the cluster. Disconnect the wiring connector from the cluster housing printed circuit board.
8. Remove the original factory instrument cluster housing and reinsert the screws.
9. Run the wires from the new Digital Dash Panel through the housing to the rear. Mount the new Digital Dash Panel into the factory instrument cluster housing and reinsert the screws.

#### INSTRUMENT PANEL WIRING

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.

1. Connect the **BLACK** (GND) wire(s) to a good chassis ground. The best location is on the engine block. The included sending units provide a resistance value to the gauges. If any additional resistance is seen (because of having the grounds of the sending units and gauges grounded at different locations) the readings on the gauges will be inaccurate.
2. Connect the **RED** (+12V) wire(s) to the ignition switch circuit or an accessory fuse.
3. Insert the new water temperature sender in place of the factory water temperature sender. Connect the **BLUE** (TEMP) wire to the wire that goes to the water temperature sender on the engine block.
4. Connect the **ORANGE** (OIL) wire to the wire that connects to the factory oil pressure sender on the engine block.
5. Connect the **YELLOW** (FUEL) wire to the wire that connects to the factory fuel level-sending unit.
6. Connect the **GREEN** (TACH) wire to the negative side of the coil or, if you are using a capacitive discharge ignition system, then use the "tach out" of the ignition box. **Do not connect the "TACH" input to the coil if using a CD ignition!**
7. Connect the **GRAY** (SPEED) wire to the cruise control or vehicle speed sensor output wire. If your vehicle is not equipped with either, you will need to purchase a Nordskog Performance Product/Intellitronix speed sensor, part number S9013.
8. Connect the **PURPLE** (DIM) wire(s) to your headlights. This will cut the brightness in half when the headlights are turned on.
9. Install the tinted Plexiglas faceplate over the new Digital Dash Panel. (Be careful not to damage the momentary switch on the speedometer)
10. Reinstall the instrument cluster into the dash.
11. Reinstall the factory faceplate.

## DIGITAL PERFORMANCE SPEEDOMETER

Your electronic speedometer 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 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 also notice a small recall pushbutton. This will be used to calibrate and read all of the data involved with your speedometer.

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

- 1.) While stopped at the beginning of the measured mile with your vehicle running, press and hold down the pushbutton on the face until the odometer displays "HI-SP" (figure 2). **IMMEDIATELY** release the button.
- 2.) On its own, the gauge will cycle through the performance data that it records in the following order "0-60," "1/4," "CAL." (figures 2-5). While "CAL" is being displayed, quickly depress 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.
- 3.) When you are ready to begin driving, quickly depress 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.
- 4.) 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, your stock speedometer sensor does not put out enough pulses per mile and must be replaced with our sensor #S9013. If the number displayed is 8000, the default setting, the pulses per mile were not recorded and steps 2-4 must be repeated. If, after a second attempt, 8000 is still displayed, you must check your speedometer sensor and wiring as there is a problem that is not allowing the pulses to be transmitted to the speedometer).**
- 5.) 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 push of the recall button will show the trip distance mileage in the odometer display. Holding down on the button for a few seconds in this mode will clear the trip distance.

### **Recording and Viewing Performance Data**

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

With your car stopped in its starting position, press and hold the recall button until "HI-SP" is displayed (figure 2) and then **IMMEDIATELY** release the button (\*\*NOTE: **Depressing the button for an extended period of time will cause the speedometer's memory to clear the pulse calibration. This would require it to be reprogrammed using steps 1-4 above.**) 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). At the end of your desired run, safely bring the

vehicle to a complete stop. Hold down the recall button until "HI-SP" appears in the odometer display. On its own, the gauge will cycle through the newly acquired performance data. 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 and will begin once the vehicle starts moving.

