



**Nordskog Performance Products**

## **DP10007 STREET ROD PANEL KIT**

### **Parts List**

- 1 - DP10007 Digital Instrument Panel
- 1 - LNSDP10007 Tinted Lens
- 1 - S8011 15 PSI Oil Pressure Switch
- 1 - S8013 Water Temp Sender
- 1 - S9013 Speedometer Sender
- 1 - 10' length of shielded cable.
- 1 - 73 to 10 ohm (Ford/Chrysler) Fuel Level IC Chip
- 1 - 240 to 33 ohm (Stewart Warner/Universal) Fuel Level IC Chip
- 1 - 0 to 90 ohm (GM) Fuel Level IC Chip

### **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. 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 side of the cable.

1. Disconnect the negative battery cable.
2. Remove the original instrument cluster from the dashboard.  
*NOTE: Unless stated, the wires listed below are 18 gauge.*
3. Connect the **RED** wire to +12 volts supplied when ignition is on.
4. Connect the **BLACK** wire to a ground on the engine block (chassis or wire wall grounds are often inadequate). To help prevent inaccurate readings, ground the gauge to the same location as the individual senders.
5. Remove the speedometer cable from the transfer case and install the digital speedometer sensor. You will need to connect the tan and black wires for the sensor to the new digital speedometer circuit board. If your transmission has an electronic speedometer sender installed, usually our speedometer can use the signal supplied by it. It is recommended that the supplied shielded cable noted above be used between the sender and the speedometer.

6. Connect the **GRAY** wire to the signal from the speedometer sender.
7. Connect the **BLUE** wire to the supplied temp sender.
8. Before handling the IC chips included in this kit, be sure to ground yourself to reduce the possibility of static electricity shocking these components. Select the correct Fuel Level IC chip for the fuel level sender being used. The 0 to 90 ohm Fuel Level IC chip is installed in the socket of the Fuel Level gauge. Insert the selected IC chip with the blue marking of the IC chip and socket on the same side. Be sure that all of the leads of the IC insert correctly into the socket. RTV silicone sealant on the ends of the IC chip and socket to insure the IC chip stays seated in the socket may be used.
9. Connect the **YELLOW** wire to the fuel level sender. If any circuitry (such as a slosh circuit) exists between the sender and the gauge, it must be removed for our gauge to work correctly.
10. Connect the **ORANGE** wire to the high beam headlight circuitry.
11. Connect the **BROWN** wires to the turn signal circuitry. Each of the wires will go to either the green right or left turn indicators.
12. Connect the **GREEN** wire to your parking brake circuitry.
13. Install the 15-PSI Low Oil Pressure Switch. Do not use Teflon tape or thread sealer when mounting the switch into the engine block. The switch uses this connection as the return for the signal. Adding sealant to the threads may cause the switch to be inoperative.
14. Connect the **WHITE** wire to the supplied 15 PSI Low Oil Pressure Switch.
15. Connect the two thinner 22 gauge **WHITE** wires to a momentary normally open switch (not supplied). This switch serves the same function as the pushbutton switch found on the speedometer. If you do not intend on using this feature, you may either cut the wires or insulate the wires to prevent them from shorting.
16. Connect the **PURPLE** wire to the headlight/parking light switch that will supply +12 volts when turned on. This must not be connected to a rheostat-controlled line.
17. Install the new panel supplied with a tinted acrylic lens. Make sure to align the openings of the lens with the LEDs on the panel.
18. Reconnect the negative battery cable.

## **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 IMPARTITIVE 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.
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 push of the recall button will show the trip distance mileage in the odometer display (the presence of a decimal point denotes that you are in the odometer mode). Holding down on the button for a few seconds in this mode will clear the trip distance.

### Record and View 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.

