



Nordskog Performance Products

UNIVERSAL 6 GAUGE DIGITAL DASH PANEL

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 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 to the ignition switch circuit or an accessory fuse.
3. Connect the **PURPLE** (DIM) wire to the vehicle's headlights. This will cause the display brightness to dim by 50% when it receives +12 volts.
4. Connect the **WHITE** (LTURN) wire to the left turn signal.
5. Connect the **WHITE** (RTURN) wire to the right turn signal.
6. Connect the **BROWN** (HIGH B) wire to the high beam.
7. Connect the **ORANGE** (OIL) wire to one of the poles on the new oil pressure-sending unit. Connect the other pole on the sending unit to ground. This is an isolated ground sender, so it does not matter which pole you connect to.
8. Connect the **BLUE** (TEMP) wire to the new water temperature-sending unit. Make sure not to use Teflon tape on the threads because the sender must be grounded to operate properly.
9. Connect the **GRAY** (SPEED) wire to the tan wire on the new speedometer sending unit (if needed). 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.
10. Connect the black wire on the sending unit to a good ground, preferably to the same location as the ground from the main digital panel.
11. Connect the **YELLOW** (FUEL) wire to your fuel level-sending unit and make sure that the fuel-sending unit is also properly grounded. This fuel gauge is designed to be used with GM 0-90 ohms, Ford/Chrysler 73-10 ohms, VDO 10-180 ohms and universal fuel sending units 240-33 ohms. Please see the "Fuel Selector Switch" instruction page in this manual for switch settings. This gauge reads in 0-99% remaining, not gallons.
12. 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!**
13. **Optional.** Connect the two thinner **26 gauge WHITE** wires to a remote momentary normally open switch. This switch will perform the same function as the pushbutton switch found on the speedometer. If you do not wish to use this feature you may either cut the wires or cover each of the wires to prevent them from shorting to anything.

Revision 4 01/27/04

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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 IMPERATIVE 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 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 thru 5). While "CAL" is being displayed, quickly tap 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 TAP 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 tap 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 tap 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 a pulse per mile count between 2000 and 32,000. If the number displayed is 8000, the default setting, the pulses per mile were not recorded and steps 2-4 must be repeated.)**
- 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.

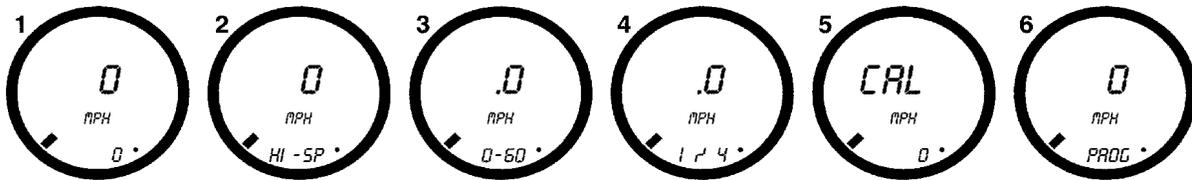
Trip Distance

A single 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.
5. 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.



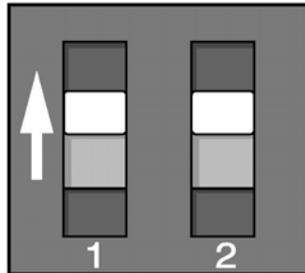
Fuel Selector Switch Position

Manufacturer

Switch Position

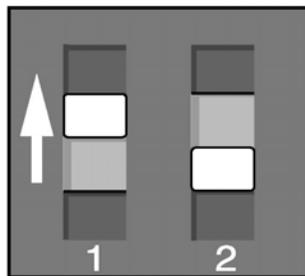
Ohm Range (Empty to Full)

Ford/
Chrysler



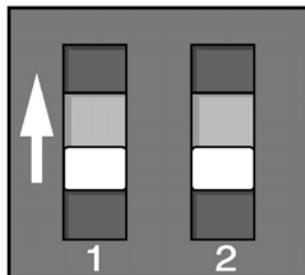
73-10 OHM

GM



0-90 OHM

VDO



10-180 OHM

Universal/
Stewart
Warner



240-33 OHM

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