



Nordskog Performance Products

M9222 Digital Performance Speedometer

Congratulations on purchasing a Nordskog Performance instrument! We pride ourselves on producing the finest automotive and marine instruments available today. 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 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 two white wires that allow you to add an external momentary normally open switch for a 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 IMPARTIVE 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,

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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

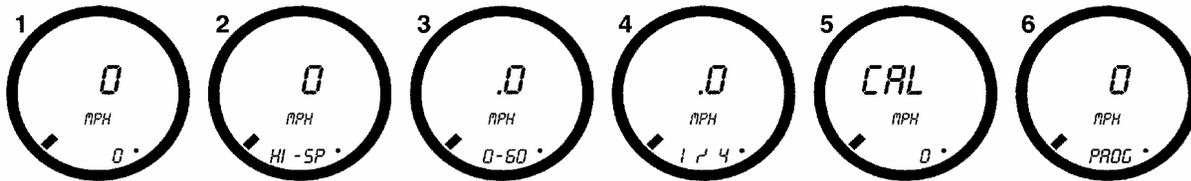
A single tap of the recall button will show the trip distance mileage in the odometer display. A decimal point will appear to in the odometer to indicate that you are in the trip odometer mode. Holding down on the button for a few seconds in this mode will clear the trip distance. To return to the default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

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.



Wiring Instructions

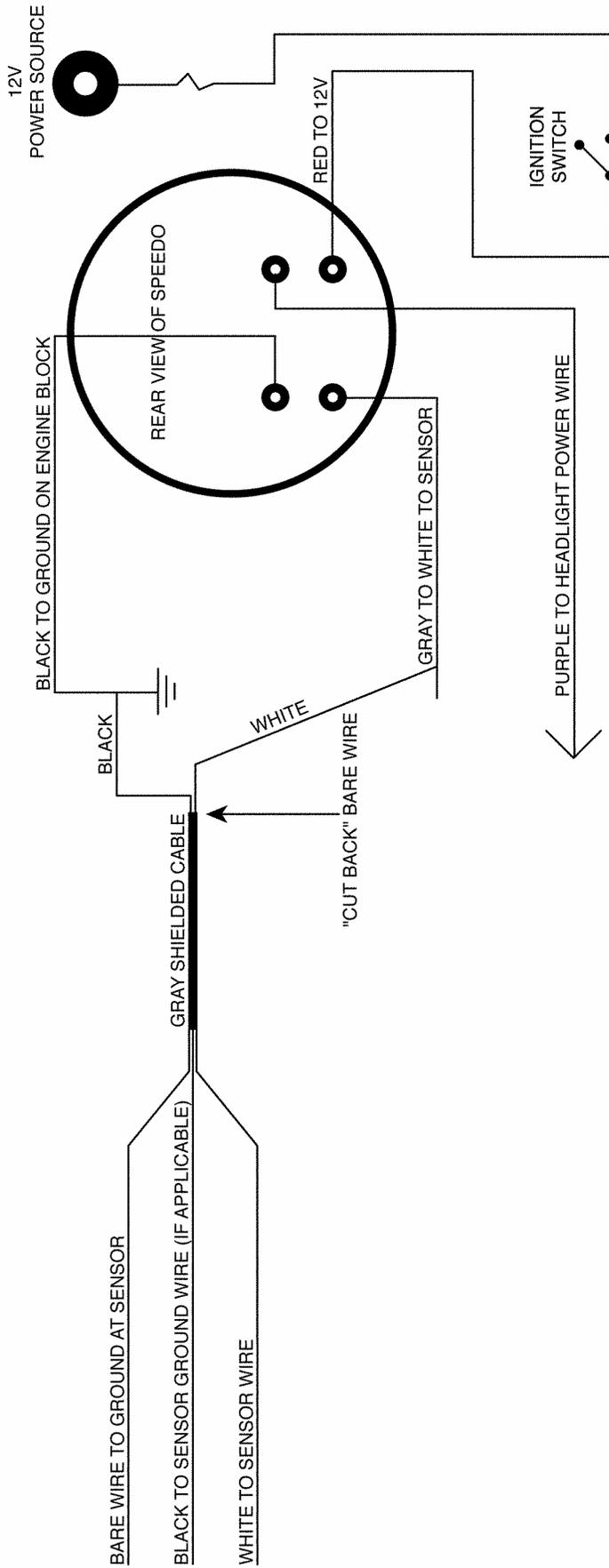
This speedometer requires the use of a pulse generating signal sensor to operate. If the speedometer in your vehicle is driven by a cable you must purchase our sensor #S9013. Carefully follow the wiring instructions on the back of this page.

In order to isolate the signal wire from electrical noise interference, we recommend that you use the twisted shield cable enclosed with this kit to connect to your sensor. Be sure to run the cable as far away from the ignition system and any power wires to electric fuel pumps, motors or blowers possible, particularly spark plug wires. For best results, we also recommend the use of resistor-type spark plugs and spark plug wires that are in good working condition.

1. Identify the signal wire from your sensor located on the transmission (this is the tan wire on our S9013 sensor) and, using the twisted shield cable included, connect it to the **GRAY** sensor input wire on the speedometer. In some instances, as an alternate to the transmission-mounted sensor, you may connect to the speedometer sensor wire on the back of your existing electrical speedometer or cruise control.
2. Connect the **PURPLE** wire to a headlight power wire (a wire that supplies current to the headlights). This enables the display on your gauge to dim for better nighttime viewing. **DO NOT CONNECT THIS WIRE TO THE HEADLIGHT DIMMING WIRE.** Connecting to this rheostat type of switch will cause the gauge to malfunction. If you choose not to utilize the dimming feature, connect the purple wire to ground.
3. Connect the **BLACK** wire to a good engine ground (chassis or wire wall grounds can often be inadequate).
4. Connect the **RED** wire to a 12 volt source which is adequately fused and turns on and off with the ignition switch.
5. Optional: If you wish to utilize a remote mount recall button, attach the **two small WHITE** wires to a momentary normally open switch (not supplied). This switch will perform the same function as the pushbutton switch found on the speedometer. These wires should not come in contact with any type of power source. If you do not intend on using this feature, you may either cut the wires or insulate the wires to prevent them from shorting together or to anything else.

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REV 2.0

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