

# DMI Vehicle Installation Kit (PN-1080/1081)

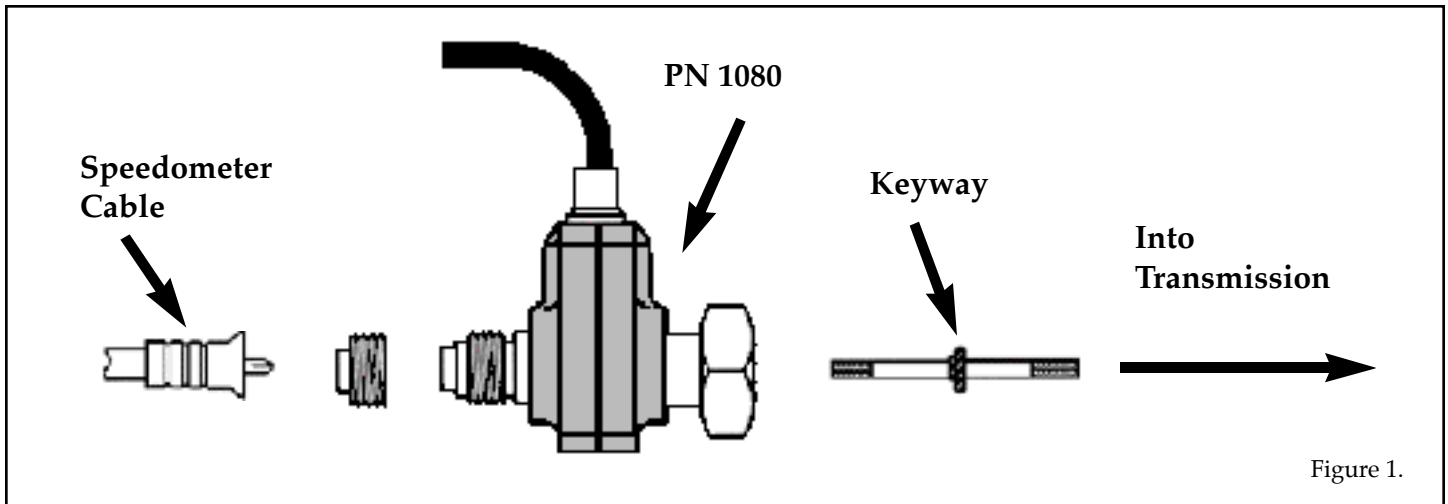


Figure 1.

The PN-1080 or PN-1081 is designed to work with most vehicles that are equipped with mechanical transmission sensors. This interface converts the mechanical rotation of the speedometer cable and supplies an amplified electronic signal to your Nu-Metrics DMI to accurately compute traveled distances.

## NOTE

If this is a new installation on this vehicle refer to PN-1030 installation instructions prior to beginning the following steps.

# CAUTION!!!

All power must be disconnected from the Red (positive) wire at the vehicle battery before installing the PN-1080 or PN-1081 transmission sensor. Failure to disconnect the positive battery lead may cause damage to the sensor and/or it's components.

**STEP 1:** Remove power from the terminal block by disconnecting the single Red power wire from the positive terminal of the battery or remove the in line fuse.

**STEP 2:** Disconnect and remove the old Nu-Metrics sensor from the vehicle and discard.

**STEP 3:** Connect the New PN-1080 or PN-1081 Transmission sensor to the terminal block as follows: The sensor has one cable exiting the mechanical housing. Connect the cable (3 wires - Red, Black and White) to the terminal block as shown in Figure 2.

**STEP 4:** Disconnect the vehicle's speedometer cable from the transmission and install the PN-1080 or PN-1081 transmission sensor into the transmission.

# CAUTION!!!

Be sure to position the transmission sensor keyway into the hole that the original cable was taken from.

**STEP 5:** Plug the speedometer cable into the PN-1080 or PN-1081 transmission sensor.

**STEP 6:** Reconnect the Red power wire to the positive terminal of the battery and follow the calibration procedure outlined in your manual.

You should have a calibration number between 400 & 1200 or as close to 900 as possible (The calibration number is the number beside the Car1 at the end of the calibration procedure).

# CAUTION!!!

Calibration numbers outside the 400 - 1200 range may cause the measurements to be inaccurate. Be sure your calibration number is within this range to prevent any such inaccuracies.

## NOTE

If you are installing a PN-1080 Transmission sensor onto your transmission you should refer to Fig. 1 at the top of this page. If you are installing a PN-1081 Metric Transmission sensor onto your transmission you should refer to Fig. 3 on the reverse side.

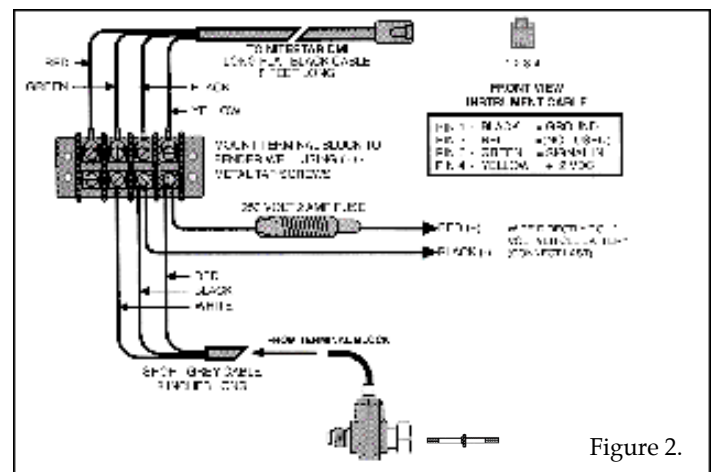


Figure 2.

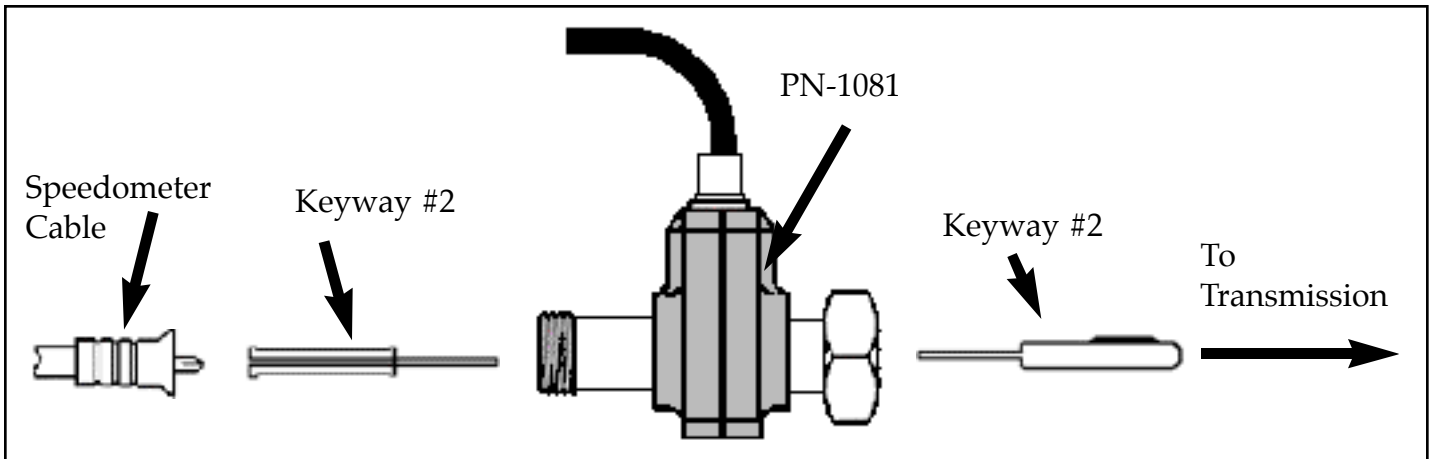


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# TROUBLESHOOTING:



Follow these simple steps to determine if there may be a problem with the equipment or your installation. There are basically three types of problems that are encountered by customers during installations and all three of those are addressed in the following steps. Please refer to your specific problem by answering the following questions:

- 1) Does your meter power up and seem to work, but will not count at all? (If yes Refer to TG 1)
- 2) Does your meter Count all the time or at any time you feel it should not? (If yes refer to TG 2)
- 3) Does your meter seem to be counting just fine but it is not accurate enough? (If yes Refer to TG 3)
- 4) Does your meter have a problem involving the MPH displayed? (If yes Refer to TG 3)

## TG 1

If your meter seems to be working correctly, but will not count at all, this could be a very simple problem to correct. Follow these simple steps to determine where your problem may be. Be sure to retest your meter after each step or if the trouble is found.

**Step 1:** Recheck all the wiring (fig 2).

**Step 2:** Recheck the mechanical linkage to ensure that the transmission cable is turning the PN-1080 or PN-1081 Sensor. This can be checked by watching your speedometer. If the speedometer in the car is running the linkage is correct.

**Step 3:** Ensure the calibration number in the DMI is not set to zero. To check the calibration number, simply turn the meter on and press the "1Cal" key. The display should read "Car 1" and some value. If that number is zero type 1000 and press mark/enter.

**Step 4:** At this point you will want to do a thorough test of the Nu-Metrics equipment. To do this, simply follow the steps below and keep the results for reference when you speak with the Nu-Metrics Customer Service Dept.

1) Turn the meter on and press the "9Prm" key, the "1Cal" key and mark/enter. The meter will then appear to go into a power up self-test mode. Once that is complete press the Run/Hold key. The meter should count at this point without the vehicle moving at all. If the meter fails to count, contact the Customer Service Department at (724) 438-8750.

2) Perform the tap test as described in your DMI manual and contact the service department. Be sure to have the results of all these tests when you call to help the customer service department determine where your specific problem may be.

## TG 2

If your meter is counting all the time or at any time it should not, you are probably having engine noise or electrical interference causing this. To correct this problem perform the following steps;

# CAUTION!!!

If you did not hook up the positive & negative leads directly to the battery it may lead to this problem.

**Step 1:** Ensure that all wiring is as far away from the vehicle's electrical components as possible (ie. Coil, plug wires, Alternator...).

**Step 2:** Contact the service department at (724) 438-8750.

## TG 3

If your meter is having these types of problems it may be due to an improper calibration of the meter. Please refer to the calibration instructions in your manual. If the problem cannot be found, please contact the service department for additional assistance.

## SPECIAL NOTE

Due to the additional length of the speedometer cable, you may find it necessary to re-route the cable through the engine compartment. Be sure to remove any angled or sharp bends in the cable. These kinks may cause the cable to bind in the housing and cause the accuracy of the meter to suffer. The speedometer in your vehicle will appear to jump or surge as the cable is repeatedly caught and released. By simply rerouting the cable to remove these kinks you will prevent this from happening.