

Classic Instruments

OLED PRNDL

Installation Manual

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Welcome from the Team at Classic Instruments!

Our congratulations and appreciation for your purchase of one of the finest quality sets of specialty instruments ever produced! Your instrument set has been conceived, designed, and manufactured by Classic Instruments, Inc. in the U.S.A. Each instrument has been tested and certified for accuracy and quality before packaging and shipping.

For trouble-free installation and operation follow the instructions exactly as outlined. Your instruments were assembled to precise specifications and although each has a seven (7) year warranty covering defective parts and workmanship – this warranty will not cover instruments or sender units which have been installed incorrectly.

Follow our recommended procedures for installation and proper hookup to maintain the value and appearance of your instrument set during many future years of accurate and dependable service!

LIMITED WARRANTY

Classic Instruments, Inc. (CI) warrants to the original purchaser that any CI product manufactured or supplied by CI will be free from defects in material and workmanship under normal use and service for a period of seven (7) years from date of purchase.

Improper installation, use of sending units other than CI's or attempted repair or adjustments by other than CI shall void this warranty. Disassembly of any instruments or senders for whatever reason shall specifically void this warranty.

It's always easy to look to a part for an issue with your set. Before you conclude that a part may be bad, thoroughly check your work. Today's semiconductors and passive components have reached incredibly high reliability levels, but there is still room for error in our human construction skills. However, on rare occasions a sour part can slip through. Please be aware that testing can usually determine if the part was truly defective or damaged by assembly or usage. Don't be afraid of telling us that you "blew it", we're all human and in most cases, replacement parts are very reasonably priced.

Purchaser requesting a product to be repaired or replaced under warranty must first call CI at 1-800-575-0461 before the return of defective part. Send defective part to 826 Moll Drive, Boyne City, MI 49712, USA. Include a written description of the failure with defective part.

Purchaser agrees and accepts that under no circumstances will a warranty replacement be furnished until CI has first received, inspected, and tested the returned part.

All other warranties expressed or implied are hereby excluded including any implied warranty of merchandise and implied warranty of fitness for a particular purpose. The sole and exclusive remedy for breach of this warranty is limited to the replacement set forth above.

It is expressly agreed that there shall be no further remedy for consequential or other type of damage, including any claim for loss of profit, engine damage or injury.

TECHNICAL ASSISTANCE

1-800-575-0461

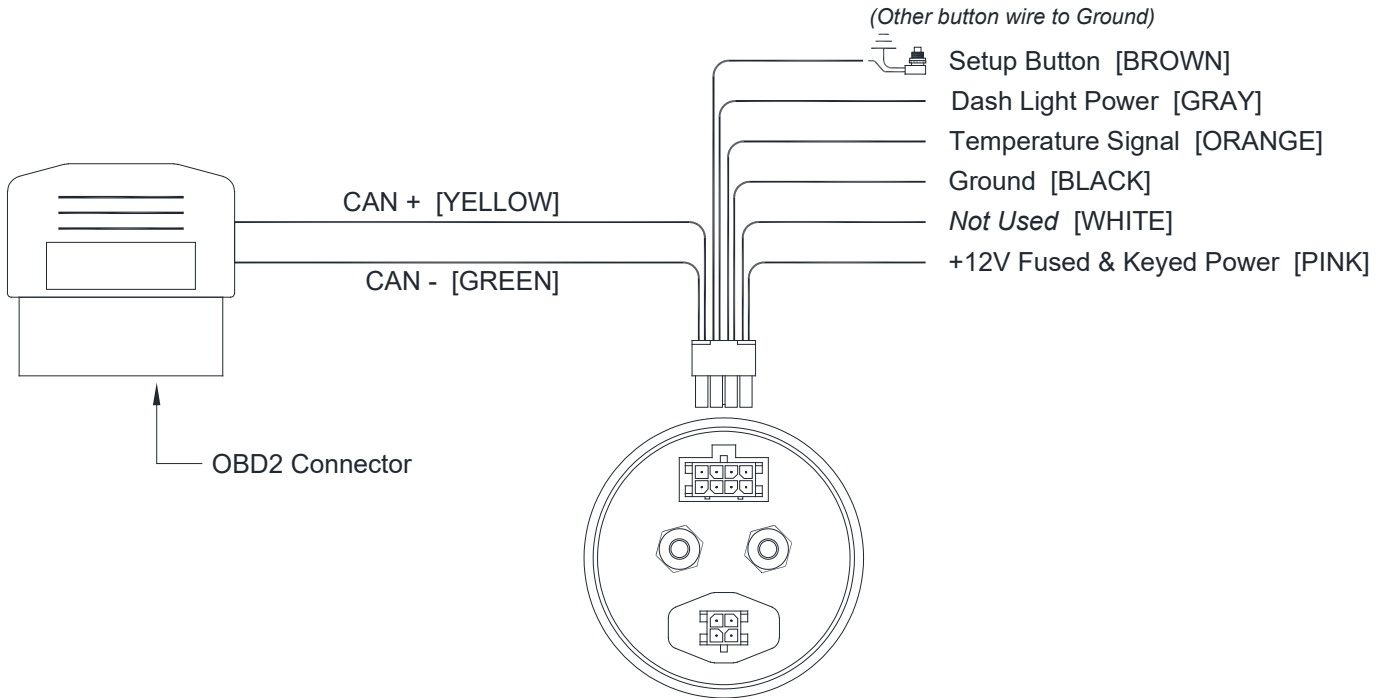
OR

Visit our website for the latest in gauge design and updates to our installation manual

www.classicinstruments.com

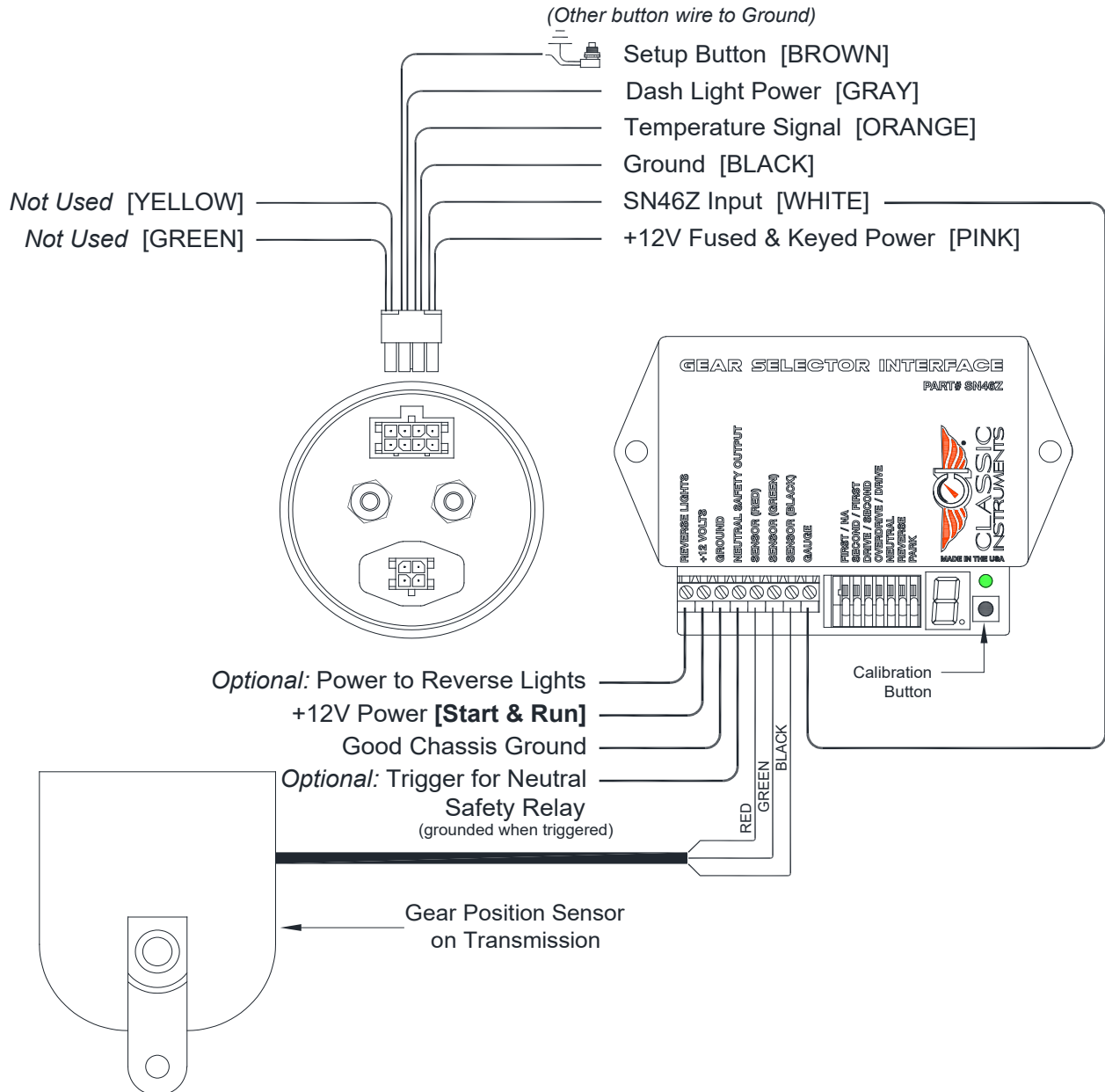
Wiring Using OBD2 Gear Signal

- 1) Connect a +12V Fused / Keyed power to the **PINK** wire of the gauge harness.
- 2) Connect a good ground to the **BLACK** wire of the gauge harness.
- 3) Connect the transmission temperature sender to the **ORANGE** wire of the gauge harness.
- 4) Connect dash light power to the **GRAY** wire of the gauge harness.
- 5) Connect one wire of the setup button to the **BROWN** wire of the gauge harness.
 - a. Connect the other wire of the setup button to ground.
- 6) Connect the OBD2 plug of the gauge harness to your vehicle's OBD2 port
- 7) The **WHITE** wire of the gauge harness is NOT USED.



Wiring Using SN46Z Gear Signal

- 1) Connect a +12V Fused / Keyed power to the **PINK** wire of the gauge harness.
- 2) Connect a good ground to the **BLACK** wire of the gauge harness.
- 3) Connect the transmission temperature sender to the **ORANGE** wire of the gauge harness.
- 4) Connect dash light power to the **GRAY** wire of the gauge harness.
- 5) Connect one wire of the setup button to the **BROWN** wire of the gauge harness.
 - a. Connect the other wire of the setup button to ground.
- 6) Connect the **WHITE** wire of the gauge harness to the terminal marked "GAUGE" on the SN46Z.
- 7) The OBD2 plug of the gauge harness is NOT USED.



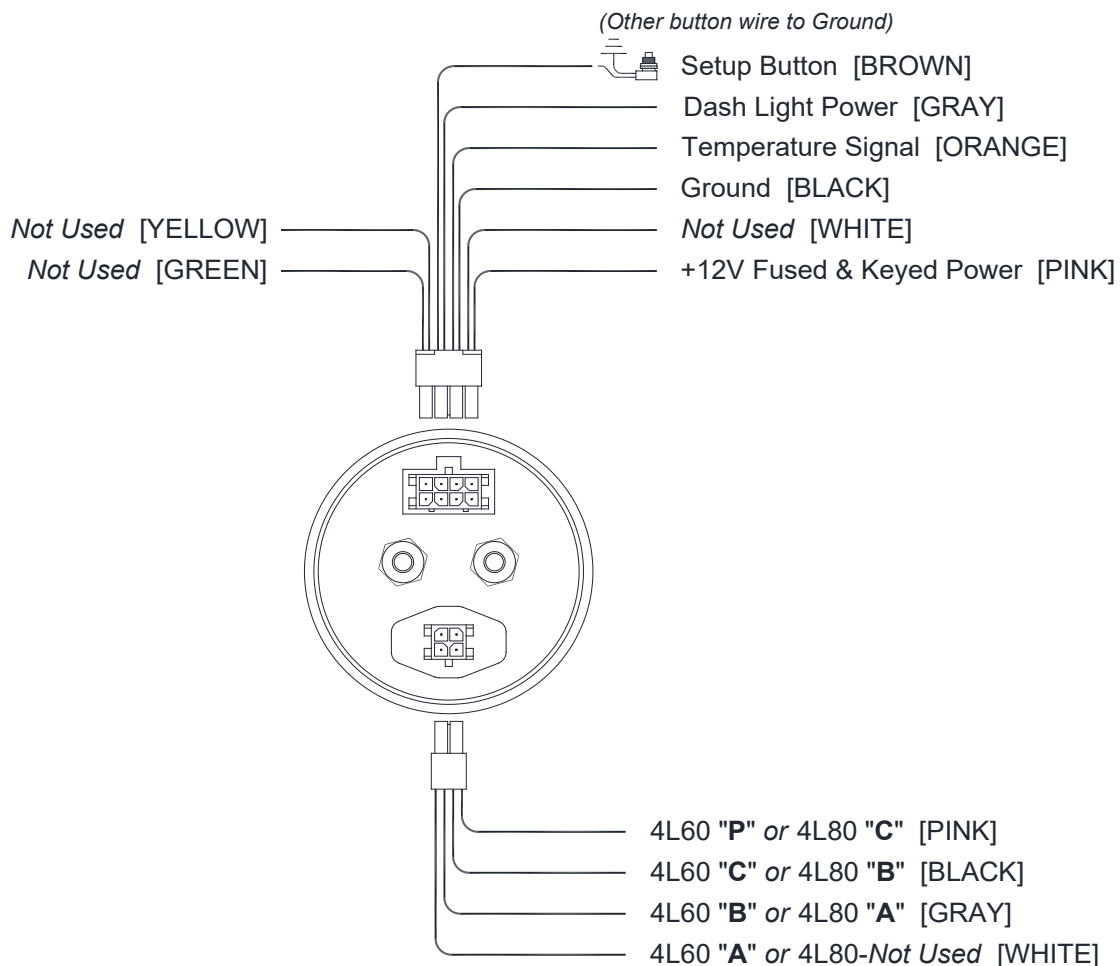
Wiring Using 4L60 or 4L80 Range Switch Signal

8-pin Harness

- 1) Connect a +12V Fused / Keyed power to the **PINK** wire of the 8-pin gauge harness.
- 2) Connect a good ground to the **BLACK** wire of the 8-pin gauge harness.
- 3) Connect the transmission temperature sender to the **ORANGE** wire of the 8-pin gauge harness.
- 4) Connect dash light power to the **GRAY** wire of the 8-pin gauge harness.
- 5) Connect one wire of the setup button to the **BROWN** wire of the 8-pin gauge harness.
 - a. Connect the other wire of the setup button to ground.
- 6) The **WHITE** wire of the 8-pin gauge harness is NOT USED.
- 7) The OBD2 plug of the 8-pin gauge harness is NOT USED.

4-pin Harness

- 1) Connect the "P" wire from a 4L60 range switch or "C" wire from a 4L80 range switch to the **PINK** wire of the 4-pin gauge harness.
- 2) Connect the "C" wire from a 4L60 range switch or "B" wire from a 4L80 range switch to the **BLACK** wire of the 4-pin gauge harness.
- 3) Connect the "B" wire from a 4L60 range switch or "A" wire from a 4L80 range switch to the **GRAY** wire of the 4-pin gauge harness.
- 4) Connect the "A" wire from a 4L60 range switch to the **WHITE** wire of the 4-pin gauge harness.
This wire is not used for 4L80 transmission range switches.



Gauge Calibration Using SN46Z Signal

There are three parts to calibrating the SN46Z. First, set how many forward gears the transmission has (2, 3 or 4). Second, calibrate the sensor position at each of the gears. Third, calibrate the gauge for each gear position. You must perform each of these parts consecutively to successfully calibrate the SN46Z.

For these instructions:

“Calibration button” refers to the button on the SN46Z.

“Setup button” refers to the button connected to the gauge’s harness.

Enter Calibration Mode on SN46Z and Gauge

- 1) With power off, press and hold the calibration button on the SN46Z and setup button of the gauge.
- 2) While still pressing the buttons, apply power. Continue to press and hold the buttons for 5 seconds after power has been applied, then release the buttons.
- 3) The display on the SN46Z should show “C” and the gauge should show “Setup Menu”.

Setting number of forward gears on SN46Z

- 1) Tap the calibration button to change the SN46Z display to “2” indicating 2 forward gears.
 - a. Continuing to tap the button causes the display to cycle between 2, 3 and 4 (indicating the number of forward gears).
 - i. 4 forward gears would be used for transmissions that have overdrive. 3 forward gears would be used for transmissions without overdrive.*
- 2) Push and hold the calibration button for approximately 10 seconds to select the number of forward gears indicated by the LED display.
 - a. A solid “C” will display to confirm the value is saved.

Setting the SN46Z Sensor Calibration

3 Forward Gears (NON-Overdrive) Calibration

- 1) Tap the calibration button to enter sensor calibration mode.
 - a. A flashing “P” will be indicated on the display.
- 2) Make sure the transmission is in Park, and then press the calibration button.
 - a. The “P” should remain on steady to indicate the sensor Park position is programmed.
- 3) Tap the calibration button again. An “r” will begin flashing on the display.
- 4) Shift the transmission into Reverse, and then press the calibration button.
 - a. The “r” should remain on steady to indicate the sensor Reverse position is programmed.
(The sensor position must change to cause the display to stop flashing. If the display doesn’t stop flashing, check to make sure the sensor is moving when you shift gears)
- 5) Tap the calibration button again. An “n” will begin flashing on the display.
- 6) Shift the transmission into Neutral, and then press the calibration button.
 - a. The “n” should remain on steady to indicate the sensor Neutral position is programmed.
(The sensor position must change to cause the display to stop flashing. If the display doesn’t stop flashing, check to make sure the sensor is moving when you shift gears)
- 7) Tap the calibration button again. A “3” will begin flashing on the display.

- 8) Shift the transmission into Drive, and then press the calibration button.
 - a. The “3” should remain on steady to indicate the sensor Drive position is programmed.
(The sensor position must change to cause the display to stop flashing. If the display doesn’t stop flashing, check to make sure the sensor is moving when you shift gears)
- 9) Tap the calibration button again. A “2” will begin flashing on the display.
- 10) Shift the transmission into 2nd gear, and then press the calibration button.
 - a. The “2” should remain on steady to indicate the sensor 2nd gear position is programmed.
(The sensor position must change to cause the display to stop flashing. If the display doesn’t stop flashing, check to make sure the sensor is moving when you shift gears)
- 11) Tap the calibration button again. A “1” will begin flashing on the display.
- 12) Shift the transmission into 1st gear, and then press the calibration button.
 - a. The “1” should remain on steady to indicate the sensor 1st gear position is programmed.
(The sensor position must change to cause the display to stop flashing. If the display doesn’t stop flashing, check to make sure the sensor is moving when you shift gears)
- 13) Tap the calibration button once more to indicate that all gears have been programmed.
- 14) Programming for the sensor is now completed.
 - a. To verify that the calibration was successful, slowly shift the transmission back to Park. The display should properly change values as you shift through each gear.

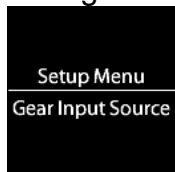
4 Forward Gears (Overdrive) Calibration

- 1) Tap the calibration button to enter sensor calibration mode.
 - a. A flashing “P” will be indicated on the display.
- 2) Make sure the transmission is in Park, and then press the calibration button.
 - a. The “P” should remain on steady to indicate the sensor Park position is programmed.
- 3) Tap the calibration button again. An “r” will begin flashing on the display.
- 4) Shift the transmission into Reverse, and then press the calibration button.
 - a. The “r” should remain on steady to indicate the sensor Reverse position is programmed.
(The sensor position must change to cause the display to stop flashing. If the display doesn’t stop flashing, check to make sure the sensor is moving when you shift gears)
- 5) Tap the calibration button again. An “n” will begin flashing on the display.
- 6) Shift the transmission into Neutral, and then press the calibration button.
 - a. The “n” should remain on steady to indicate the sensor Neutral position is programmed.
(The sensor position must change to cause the display to stop flashing. If the display doesn’t stop flashing, check to make sure the sensor is moving when you shift gears)
- 7) Tap the calibration button again. A “4” will begin flashing on the display.
- 8) Shift the transmission into Overdrive, and then press the calibration button.
 - a. The “4” should remain on steady to indicate the sensor Overdrive position is programmed.
(The sensor position must change to cause the display to stop flashing. If the display doesn’t stop flashing, check to make sure the sensor is moving when you shift gears)
- 9) Tap the calibration button again. A “3” will begin flashing on the display.
- 10) Shift the transmission into Drive, and then press the calibration button.
 - a. The “3” should remain on steady to indicate the sensor Drive position is programmed.
(The sensor position must change to cause the display to stop flashing. If the display doesn’t stop flashing, check to make sure the sensor is moving when you shift gears)
- 11) Tap the calibration button again. A “2” will begin flashing on the display.
- 12) Shift the transmission into 2nd gear, and then press the calibration button.
 - a. The “2” should remain on steady to indicate the sensor 2nd gear position is programmed.
(The sensor position must change to cause the display to stop flashing. If the display doesn’t stop flashing, check to make sure the sensor is moving when you shift gears)
- 13) Tap the calibration button again. A “1” will begin flashing on the display.

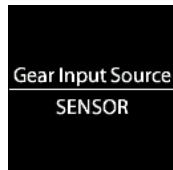
- 14) Shift the transmission into 1st gear, and then press the calibration button.
 - a. The “1” should remain on steady to indicate the sensor 1st gear position is programmed.
(The sensor position must change to cause the display to stop flashing. If the display doesn’t stop flashing, check to make sure the sensor is moving when you shift gears)
- 15) Tap the calibration button once more to indicate that all gears have been programmed.
- 16) Programming for the sensor is now completed.
 - a. To verify that the calibration was successful, slowly shift the transmission back to Park. The display should properly change values as you shift through each gear.

Gauge Setup

- 1) Select “Gear Input Source” in the gauge Setup Menu by tapping the setup button to cycle through the setup options.



- a. Once “Gear Input Source” is shown, press and hold the setup button for approximately 4 seconds to edit the setting.
 - i. Select “Sensor” by tapping the button to cycle between Sensor, Range Switch and CAN.



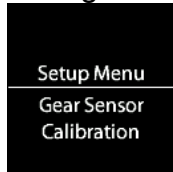
1. Once “Sensor” is shown, press and hold the setup button for approximately 4 seconds to set that option.

- 2) Select “Pattern Selection” in the gauge Setup Menu by tapping the setup button to cycle through the setup options.

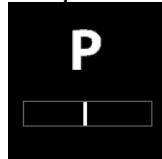


- a. Once “Pattern Selection” is shown, press and hold the setup button for approximately 4 seconds to edit the setting.
 - i. Select the pattern corresponding to your transmission by tapping the button to cycle through the options. (PRND21, PRND321, PRNOD21, PRN1234) *Note: PND21R pattern will not work if using the SN46Z.*
 1. Once the desired pattern is shown, press and hold the setup button for approximately 4 seconds to set that option.

- 3) Select “Gear Sensor Calibration” in the gauge Setup Menu by tapping the setup button to cycle through the setup options.



- a. Once “Gear Sensor Calibration” is shown, press and hold the setup button for approximately 4 seconds to edit the setting.
 - i. The gauge will display a gear with a bar below it with a line inside the bar (similar to the picture below).



- b. Proceed with the SN46Z gauge calibration.

Setting the SN46Z Gauge Calibration

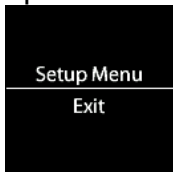
- 1) Push and hold the calibration button for approximately 10 seconds until the SN46Z display shows a solid “g”.
 - a. The SN46Z will now be in the gauge calibration mode.
- 2) Push and hold the calibration button again until the SN46Z display starts alternating between “g” and the number corresponding with the gear being programmed. (*starting with Park*)
 - a. Park is indicated as “P”, reverse as “2”, neutral as “3”, etc...
- 3) Push and hold the calibration button to change the gauge display to indicate the gear indicated on the SN46Z display.
 - a. The first time the button is pressed and held, the gauge will move through the gears toward low. The second time the button is pressed and held, the gauge will move through the gears toward Park. The button will alternate the gauge movement direction each time it is pressed.
 - b. Once the desired gear is shown on the gauge, continue holding the button to move the line in the bar beneath the gear indication so it is centered on the letter / number.



For example, programming Park should look like this:

- 4) Once the gauge indicates the correct gear, wait approximately 8 seconds without pushing the button.
 - a. The SN46Z display will change back to a solid “g” to indicate the gauge position has been saved.
- 5) Repeat steps 2 – 4 for the rest of the gear positions (2, 3, 4, 5, 6, 7*) of the transmission. If you programmed 3 forward gears, the SN46Z display will change to “C” after setting the gauge 6 position. If you programmed 4 forward gears, the SN46Z display will change to “C” after setting the gauge 7 position.
- 6) Once the display shows “C”, push and hold the calibration button for approximately 10 seconds until the display turns off.

- 7) On the gauge, press and hold the setup button to exit the “Gear Sensor Calibration” mode.
 - a. Select “Exit” in the gauge Setup Menu by tapping the setup button to cycle through the setup options.



- b. Once “Exit” is shown, press and hold the setup button for approximately 4 seconds to exit the gauge calibration mode.

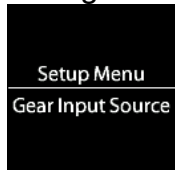
Gauge Calibration Using OBD2 Signal

Enter Calibration Mode on Gauge

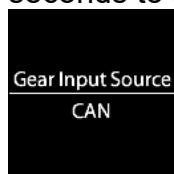
- 1) With power off, press and hold the setup button of the gauge.
- 2) While still pressing the button, apply power. Continue to press and hold the setup button for 5 seconds after power has been applied, then release the button.
- 3) The display on the gauge should show “Setup Menu”.

Gauge Setup

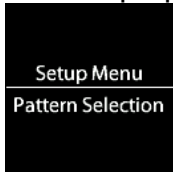
- 1) Select “Gear Input Source” in the gauge Setup Menu by tapping the setup button to cycle through the setup options.



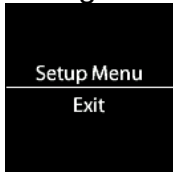
- a. Once “Gear Input Source” is shown, press and hold the setup button for approximately 4 seconds to edit the setting.
 - i. Select “CAN” by tapping the button to cycle between Sensor, Range Switch and CAN.
 1. Once “CAN” is shown, press and hold the setup button for approximately 4 seconds to set that option.



- 2) Select “Pattern Selection” in the gauge Setup Menu by tapping the setup button to cycle through the setup options.



- a. Once “Pattern Selection” is shown, press and hold the setup button for approximately 4 seconds to edit the setting.
 - i. Select the pattern corresponding to your transmission by tapping the setup button to cycle through the options. (PRND21, PRND321, PRNOD21, PRN1234) *Note: PND21R pattern will not work if using the SN46Z.*
 1. Once the desired pattern is shown, press and hold the setup button for approximately 4 seconds to set that option.
- 3) To exit gauge setup, select “Exit” in the gauge Setup Menu by tapping the setup button to cycle through the setup options.



- a. Once “Exit” is shown, press and hold the setup button for approximately 4 seconds to exit the gauge calibration mode.

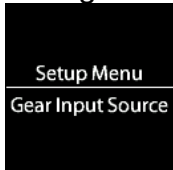
Gauge Calibration Using 4L60 or 4L80 Range Switch

Enter Calibration Mode on Gauge

- 1) With power off, press and hold the setup button of the gauge.
- 2) While still pressing the button, apply power. Continue to press and hold the setup button for 5 seconds after power has been applied, then release the button.
- 3) The display on the gauge should show “Setup Menu”.

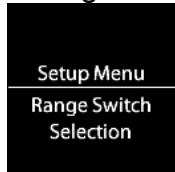
Gauge Setup

- 1) Select “Gear Input Source” in the gauge Setup Menu by tapping the setup button to cycle through the setup options.



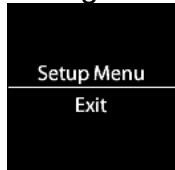
- a. Once “Gear Input Source” is shown, press and hold the setup button for approximately 4 seconds to edit the setting.
 - i. Select “RANGE SWITCH” by tapping the setup button to cycle between Sensor, CAN and Range Switch.
 1. Once “RANGE SWITCH” is shown, press and hold the setup button for approximately 4 seconds to set that option.

- 2) Select “Range Switch Selection” in the gauge Setup Menu by tapping the setup button to cycle through the setup options.



- a. Once “Range Switch Selection” is shown, press and hold the setup button for approximately 4 seconds to edit the setting.
 - i. Select either “4L60” or “4L80” by tapping the setup button to cycle between the two options.
 1. Once the desired setting is shown, press and hold the setup button for approximately 4 seconds to set that option.

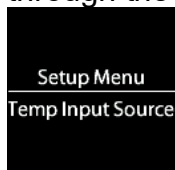
- 3) To exit gauge setup, select “Exit” in the gauge Setup Menu by tapping the setup button to cycle through the setup options.



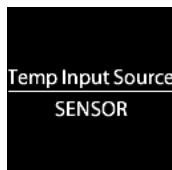
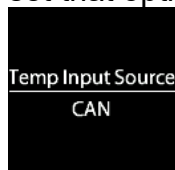
- a. Once “Exit” is shown, press and hold the setup button for approximately 4 seconds to exit the gauge calibration mode.

Gauge Transmission Temperature Settings

- 1) With power off, press and hold the setup button of the gauge.
- 2) While still pressing the button, apply power. Continue to press and hold the button for 5 seconds after power has been applied, then release the button.
- 3) The display on the gauge should show “Setup Menu”.
- 4) Select “Temp Input Source” in the gauge Setup Menu by tapping the setup button to cycle through the setup options.



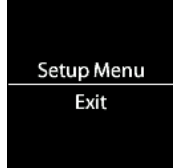
- a. Once “Temp Input Source” is shown, press and hold the setup button for approximately 4 seconds to edit the setting.
 - i. Tap the button to cycle between the options of Sensor and CAN. Once the desired option is shown, press and hold the setup button for approximately 4 seconds to set that option.



- 2) Select “Temp Alarm” in the gauge Setup Menu by tapping the setup button to cycle through the setup options.



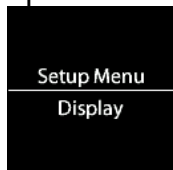
- a. Once “Temp Alarm” is shown, press and hold the setup button for approximately 4 seconds to edit the setting.
 - i. Tap the setup button to change the temperature alarm value between 180 and 320 in 10-degree increments. Once the desired value is shown, press and hold the setup button for approximately 4 seconds to set that option.
- 3) To exit gauge setup, select “Exit” in the gauge Setup Menu by tapping the setup button to cycle through the setup options.



- a. Once “Exit” is shown, press and hold the setup button for approximately 4 seconds to exit the gauge calibration mode.

Other Gauge Settings

- 1) With power off, press and hold the setup button of the gauge.
- 2) While still pressing the button, apply power. Continue to press and hold the button for 5 seconds after power has been applied, then release the button.
- 3) The display on the gauge should show “Setup Menu”.
- 4) Select “Display” in the gauge Setup Menu by tapping the setup button to cycle through the setup options.



- a. Once “Display” is shown, press and hold the setup button for approximately 4 seconds to edit the setting.
 - i. Select “Style Selection” in Display Menu by tapping the setup button to cycle through the options.
 1. Once “Style Selection” is shown, press and hold the setup button for approximately 4 seconds to edit the setting.
 - a. Tap the setup button to cycle through the options:
 - i. Gear / Temp
 - ii. Gear Only
 - iii. Temp Only
 - b. Once the desired setting is shown, press and hold the setup button for approximately 4 seconds to set that option.

ii. Select “Rotation Selection” in Display Menu by tapping the setup button to cycle through the options.

1. Once “Rotation Selection” is shown, press and hold the setup button for approximately 4 seconds to edit the setting.

a. Tap the setup button to cycle through the options:

i. Normal

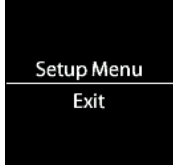
ii. 90

iii. 180

iv. 270

b. Once the desired setting is shown, press and hold the setup button for approximately 4 seconds to set that option.

5) To exit gauge setup, select “Exit” in the gauge Setup Menu by tapping the setup button to cycle through the setup options.



a. Once “Exit” is shown, press and hold the setup button for approximately 4 seconds to exit the gauge calibration mode.

Normal Gauge Operation

1) If the gauge display setting was set to “Gear / Temp”, tapping the setup button while in normal operation will toggle between the gear screen and temperature screen.

a. After a short time, if the gear hasn’t changed, the screen will change to show temperature automatically. If at any time the gear changes, the screen will automatically change from temperature to show the current gear.