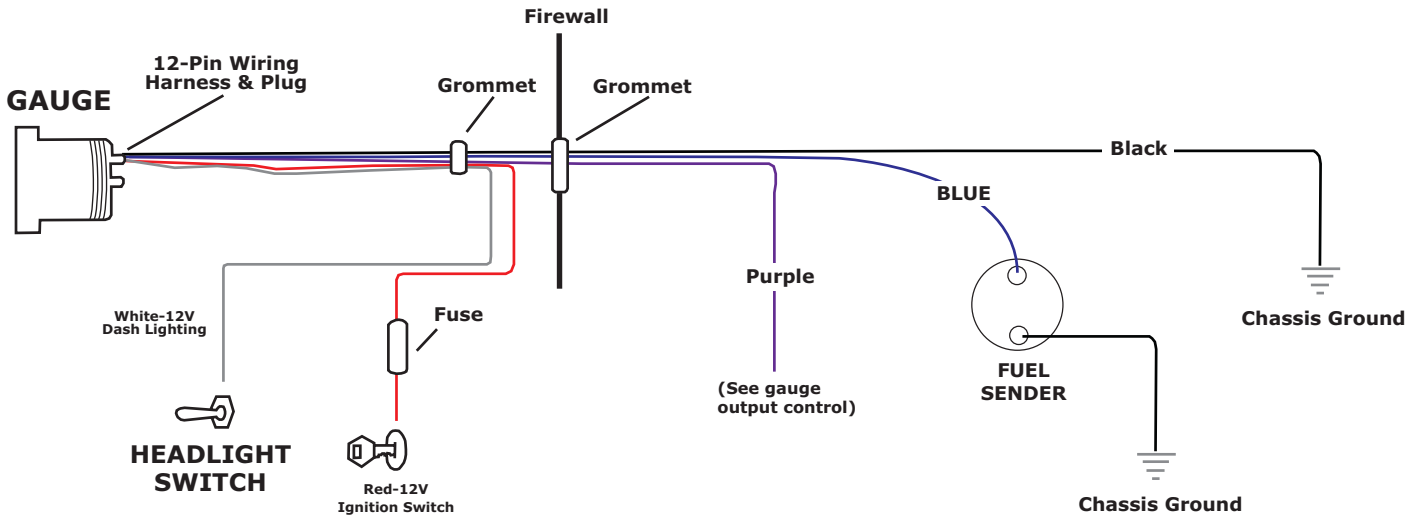
Wiring Installation Instructions for : Fuel Level
2 1/16”

WIRING:

RED: Switched, key on power.
BLACK: Chassis, or engine ground.
WHITE: Dash lights dimming circuit. (power controlled, not ground controlled)
BLUE: To fuel level sender.
PURPLE: Used for triggering (grounding) relay coil when low set point of the gauge is triggered.



CAUTION: As a safety precaution, the red wire of the gauge should be fused before connecting to the positive (+) output side of the ignition switch. We recommend using a 3 Amp, automotive type fuse inline between the power supply source and the red wire of the gauge.

PROGRAMMING CALIBRATION FOR VARIOUS SENDER TYPES:

1. With power off, push the middle button, and turn power on while still holding the button.
2. Continue to hold the button as the pointer swings to Full, then Empty, then steps up then down in 1/8 scale increments.
3. Release the button when the pointer reaches the desired setting (for example if you want it set for 0-90Ω range, release the button at 3/8 otherwise see chart below).
4. For all settings (except for custom calibration) you are now finished. If you chose Custom Calibration then read on:

If custom calibration is entered (7/8), the tank must be empty*, and the pointer will swing to E.

Push and release the middle button to capture the empty sender value. The pointer will now swing to F.

Leave power turned on, and fill the tank. Push and release the middle button to capture the full sender value.

The gauge will now exit calibration and enter into normal operation mode.

*When starting the custom calibration, you may start this with a couple gallons in the tank, rather than being completely Empty. The gauge will learn this as Empty, thus giving you a little reserve of fuel when the pointer reads E after calibration.

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User Calibrate Mode		
Sender Input Type		**Pointer Position**
Ford Pre-'89	(73-10 Ω)	E
Ford '89 – Present	(16-158 Ω)	1/8
GM Pre-'65	(0-30 Ω)	1/4
GM '65 –‘96	(0-90 Ω)	3/8
Auto Meter Sender	(240-33 Ω)	1/2
Eclipse '90 - '02 Civic '88 - '00	(107.5-7 Ω)	5/8
Civic '01 - '03	(131-12 Ω)	3/4
Custom Calibration	(Up to 300 max)	7/8

PROGRAMMING GAUGE FUNCTIONS

The programming is achieved in steps, using the middle button on the face of the gauge. Think of the middle button, as a “Mode” button. The Left & Right buttons are basically “Down” & “Up” buttons. Please note, that each push & release of the buttons require about a 1 second push to activate. A quick tap may not register to the gauge, that you have pushed the button.

ILLUMINATION BRIGHTNESS (WHEN NO POWER FROM DASH LIGHTING IS USED)

This is one of the only steps that you do NOT use the middle button for. Simply push and hold the left button to lower the brightness, or push and hold the right button to increase the brightness. The gauge pointer will raise and lower with the brightness, however will return to normal fuel reading almost immediately after the last button push.
This also must not be in low warn, so that the gauge is NOT warning you of low fuel level so that your able to see the change in brightness. In other words, either lower your LOW Warn set point, or adjust the brightness when the level is above your LOW Warn set point.

PEAK

With power on, the first press & release of the middle button will display **PEAK**. The pointer will move to the peak fuel level reading, and the word Peak will continue to flash.
If no button push for about 30 seconds, the gauge will default back to the current fuel level reading, and peak automatically clears.To clear the peak, without waiting for the time-out, push either the left or the right button while in peak-mode.

HIGH WARN SET POINT

While in Peak mode, push & release the middle button. The pointer will move to the current high set point, and the word **HI** will continue to flash.
While in **HI** set mode, push and hold left button to move set point lower, or push and hold right button to move the set point higher.
If no button is pushed for about 30 seconds, the gauge will default back to the current fuel level reading. It will also store the last **HI** set point adjustment.
The gauge simply illuminates the word **HI** when in **HI** warn mode.

LOW WARN SET POINT

While in High Warn Set Point, push & release the middle button. The pointer will move to the current low set point, and the word **LOW** will continue to flash.

While in **LOW** set mode, push and hold left button to move set point lower, or push and hold right button to move the set point higher.
If no button is pushed for about 30 seconds, the gauge will default back to the current fuel level reading. It will also store the last **LOW** set point adjustment.
When in **LOW** Warn, the gauge color will flash on & off red and the word **LOW** will be lit. The purple relay output wire will also become grounded while in **LOW** Warn which can be used to activate a relay for operating an external warning device.

GAUGE ILLUMINATION COLOR SET POINT

While in Low Warn Set Point, push and release the middle button. The pointer will move to a predetermined reading on the scale (associated with the current color chosen), and the face illumination flash together about once every second.
Push and release the left button to move the pointer down which also changes the illumination color. Push and release the right button to move the pointer back up, which changes the illumination color. Each left and right button push requires about a 1-second push.
will begin to flash, about once every second. The words Peak, Low, and HI, will also If no button is pushed for about 30 seconds, the gauge will default back to the current fuel level reading, and the last color chosen will be stored.
If no color (illumination color off) is chosen, the lighting will remain off, except for the lit pointer. The face will still warn and light up in red if low fuel level is detected.

CHANGING ILLUMINATION BRIGHTNESS

(Quick Set Mode)

While in normal operation mode, simply push and hold the left button to lower the brightness, or push and hold the right button to raise the brightness.

-Or-

While in the Gauge Illumination Color Set Point Mode, push and release the middle button. The color will continue to flash like it does in Gauge Illumination Color Set mode, however the PEAK HI LOW indicators will no longer be flashing.
Now press and hold the left button and the middle button at the same time. The pointer will step its way all the way up to maximum gauge reading while you are holding the pair of buttons in. Release the buttons when maximum gauge reading is achieved.

Now, you may use the left and right buttons to adjust the illumination brightness. You may either press and release the middle button to store it, and to return to normal function, or just let it time out after about 30 seconds.

DEMO MODE

While in Gauge Illumination Color Set Point mode, push and hold the middle button, and the right button at the same time, and continue to hold until the pointer reaches maximum reading. Release the two buttons.
The gauge will now continuously operate in **DEMO** mode (changing colors, and sweeping back and forth) until the middle button is pushed and released. It will then return to normal operation.

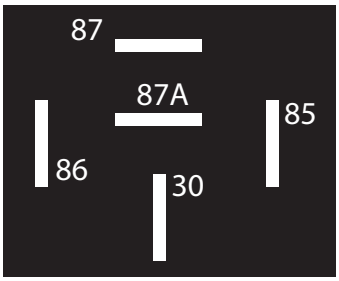
FACTORY RESET

While in **PEAK** mode, press and hold the middle button, and the right button at the same time until the pointer moves to maximum reading. Release both buttons. The gauge will now reset to all factory default settings.

GAUGE OUTPUT CONTROL WIRE (PURPLE WIRE).

The purple wire can be used to ground/activate a relay if you want to control another device whenever the gauge goes into LOW Warning.
The purple wire will ground the "coil-side" of a common relay, with a maximum load capability of 1.5A (on the purple wire). Generally you would run a key-on power source to terminal 85. Run the purple wire to terminal 86. Connect your power source (most cases battery positive) for the device that you want to control to terminal 30. Terminal 87 will now be that same power source leading to your controlled device anytime the relay is activated (when fuel level goes to the **LOW** Warn Set Point).
Whatever you are running off of this (in most cases a warning light), the purple wire will click "off", or "de-energize" the relay once fuel level rises above your **LOW** Warn set point.

Typical Relay Terminal Layout



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