







MECHANICAL PRESSURE GAUGE INSTALLATION INSTRUCTIONS




1  Disconnect batteries. Do not reconnect battery power until system is fully configured to avoid risk of shock or fire.

2  For gauges other than fuel pressure, or for the connection between an isolator and a fuel pressure gauge, use the included R7110 tubing kit to connect the gauge to the pressure port. The tubing kit comes with one male 1/8" NPT compression fitting to connect to the pressure port, one 1/8" NPT to 1/4" NPT adapter in case the port is 1/4" NPT, and one female 1/8" NPT compression fitting to connect to the back of the gauge. See also sections 12 & 13 below.

I C O N K E Y	
	CAUTION
	Tools may be required
	Shown in picture

 **DO NOT attempt to install in a location exposed to fuel rail pressure on common rail systems, as these systems typically operate at over 20,000 PSI.**

 **If gauge is used to measure fuel pressure, it must either use an isolator such as ISSPRO R7797, or be installed outside of the passenger compartment, with a braided steel hose such as ISSPRO R78824-6 connecting it to the fuel system.**

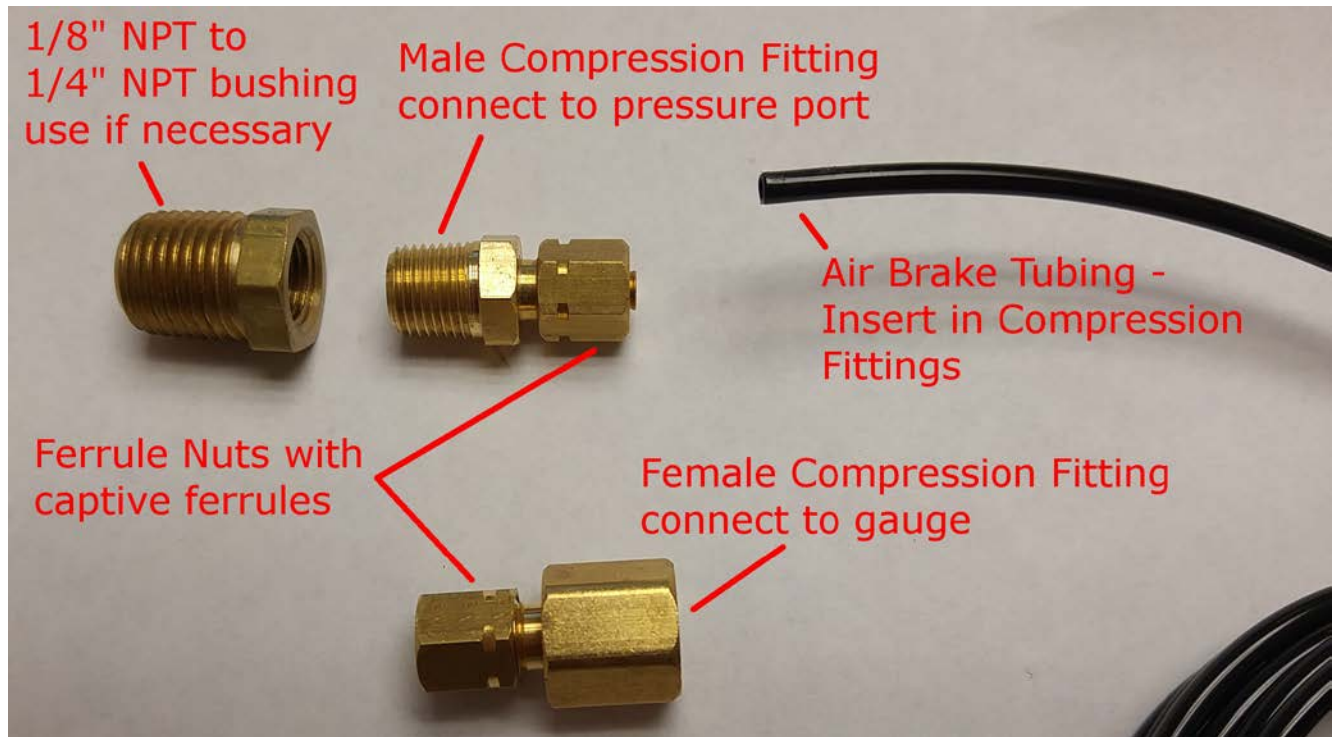






Figure 1: R7110 Tubing Kit Components 6 FT
 R7110-10 Tubing Kit Components 10 FT
 R7110-14 Tubing Kit Components 14 FT
 R7110-25 Tubing Kit Components 25 FT

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- 3  Connect the male compression fitting to the vehicle or isolator pressure port, using the 1/8" NPT to 1/4" NPT bushing (or other adapter) if necessary. If necessary, thread sealant such as Teflon tape may be used.
 Using ONLY the larger hex surface of the fitting, tighten to approximately 1.69nm/15 lb-in
- 4  Connect the female compression fitting to the port on the back of the gauge. If necessary, thread sealant such as Teflon tape may be used.
 Using ONLY the larger hex surface of the fitting, tighten to approximately 1.69nm/15 lb-in

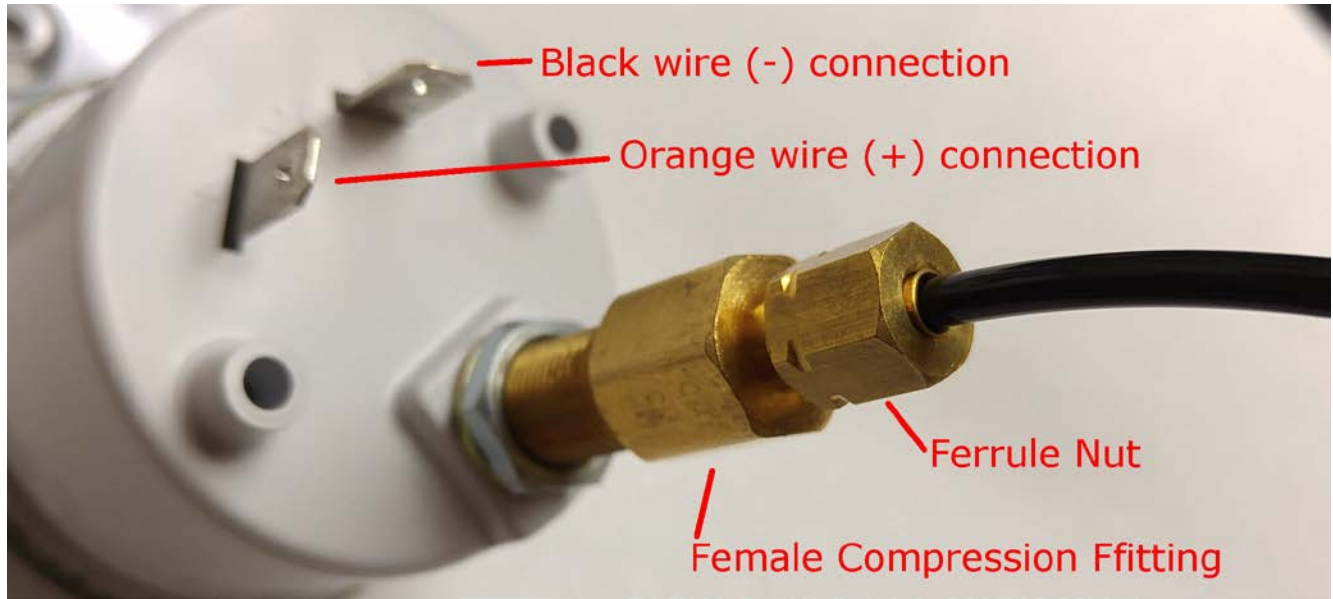









Figure 2: Gauge tubing and wiring connections.

- 5  Insert the Tubing into the ferrule on the Compression Fitting at the vehicle or isolator pressure port and press it in until it stops, tighten the Ferrule Nut until the Tubing cannot be rotated by hand within the fitting, then tighten 1/4 turn more.
- 6  Route the Tubing from the pressure port to the intended gauge mounting location, using grommets as appropriate when passing through the firewall.
- 7  Trim excess length from the Tubing, then repeat steps 5 & 6 at the compression fitting at the back of the gauge, leaving enough length to pull the gauge from its mount without disconnecting the tubing.
- 8  Connect the orange wire's push-on connector to the terminal marked "+" on the gauge, then connect the black wire's push-on connector to the terminal marked "-" on the gauge.
- 9  Connect the free end of the orange wire to one wire of the included fuse holder using the included crimp splice, and connect the other wire of the fuse holder to the factory gauge dimmer circuit by either tapping into the in-cab fuse block or by connecting directly to the wire running from the dimmer on the headlight switch.

- 10**  Connect the free end of the black wire to a clean ground on the vehicle such as the battery negative terminal or a factory ground bolt.
- 11**  Secure all wiring so that it does not interfere with moving parts or chafe on sharp edges. This may be accomplished by routing the wiring within the factory wire harness sheath, using wire ties and sheathing, and using appropriate grommets when passing through the firewall.
- 12** Specific information for boost gauges:
Find a location where boost pressure can be measured such as an existing port on the intake, or cut the MAP (Manifold Absolute Pressure) line and insert a Tee fitting (obtain from your local automotive supply store). If there is an M8 x 1.25 intake bolt exposed to intake pressure (as with 5.9L & 6.7L Cummins), it can be replaced with R7741, a hollow boost bolt. Alternatively, drill and tap the intake elbow for 1/8" NPT.
- 13** Engine specific information for fuel pressure gauges:
Cummins 1989-2002:
If using the stock fuel filter housing, install tapped banjo bolt R7743 on fuel filter output banjo fitting (for the hose which runs to the injection pump, typically on the bottom of the fuel filter housing). If using an aftermarket lift pump with self-contained filters, use the test port on the fuel pump/filter assembly. Use a snubber such as ISSPRO R7800 between the fuel system and the braided hose running to the R7797 isolator.
Cummins 2003-2012:
If using the stock fuel filter housing, install tapped banjo bolt R7743 on fuel filter output banjo fitting (for the hose which runs to the injection pump, typically on the bottom of the fuel filter housing). If using an aftermarket lift pump with self-contained filters, use the test port on the fuel pump/filter assembly.
Powerstroke 1994.5-1997 – install snubber R7800 in the test port of the fuel pressure regulator then connect the braided hose to the R7797 isolator.
Powerstroke 1999-2003 – install adapter R7855 in the test port of the fuel bowl then connect the braided hose to the R7797 isolator.
Powerstroke 2003.5-2007 – install adapter R7962 in the test port of the fuel bowl then connect the braided hose to the R7797 isolator.