

## **FUEL-20, Fuel Rail Adapter - Making an Adapter for Non-Metric Thread Fuel Pressure Gauges**

### **Introduction**

If you live in the United States and you want to check the fuel pressure on your 944 you have two choices. The first choice is to buy a fuel pressure gauge with metric fittings and metric adapters. However, these are typically very expensive and if you own other cars that are made in the USA, you won't be able to use the fuel pressure gauge on them.

The second choice is to buy a cheap 0-100 fuel pressure gauge which is made to check the fuel pressure on cars made in the US. However, you'll have to make a Metric-to-SAE adapter to be able to use it. The procedure that follows will describe two methods of making an adapter to use an SAE thread fuel pressure gauge.

Most fuel pressure gauges made for US cars use a female 1/4" flare fitting for the gauge. So, this procedure is written assuming that your particular gauge has that fitting. If you find that your pressure gauge has some other size fitting, you'll have to adjust the procedure accordingly.

### **Tools and Materials**

#### **NOTE**

When you are looking for a brass fitting, you may find it easier to locate a 1/4" NPT to 1/4" flare fitting. If so, you'll need a 1/4" NPT tap instead of a 1/8" NPT tap. The reason I chose the 1/8" NPT fitting is that when you're drill half way through each side of the adapter and then threading it, it's easier to see the transition from one type of thread to the other with the 1/8" NPT thread on one side.

- 1 Piece of Round Stock, Aluminum or Mild Steel, 7/8" to 1" diameter (minimum 7/8"), approximately 1" long (Option 2)
- 1/8" NPT Tap (Option 1 and 2)
- 12 mm x 1.5 Tap (Option 2)
- Brass male-to-male fitting (1/8" NPT to 1/4" flare) (Option 2)
- Spare fuel rail cap nut, Porsche P/N 928 110 475 01 (Option 1)
- Teflon thread tape (Option 1 and 2)

### **Option 1**

1. Obtain a spare fuel rail cap nut. You can get one from numerous aftermarket parts vendors for less than \$5 USD.
2. Drill and tap a 1/8" NPT thread hole in the center of the cap.
3. Apply teflon thread tape to the brass male-to-male fitting and thread into cap nut.

### **Option 2**

1. Center punch an indent in the middle of the round stock and drill a small pilot hole all the way through.
2. From one end drill about half way through the piece of round stock using a 10 mm or 13/32" drill bit.
3. Thread the opening just drilled with a 12 mm x 1.5 pitch tap.
4. From the other end drill about half way through using an 11/32" drill bit.
5. Thread the opening just drilled with a 1/8" NPT thread tap.
6. Go to a plumbing supply store and get a 1/8" NPT to 1/4" flare (male-to-male) fitting and thread into adapter.
7. You may also want to cut flats on each side of the adapter so you can turn it with a wrench. I cut mind to accept a 17 mm wrench.



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