

Fuel Pump Piston Upgrade, 2.0T FSI**034 MOTOR
SPORT**

034Motorsport's Fuel Pump Piston Upgrade is a relatively easy way to yield up to 50% flow increase over the factory HPFP. With a DLC coated piston and cylinder, these high-precision machined internals allow for reduced friction and increased performance, and will meet the demands of E85 optimized tunes

Installation Spiciness Rating: MILD

Installation of your 034Motorsport Fuel Pump Piston Upgrade is a straightforward process that will take approximately 30 minutes to complete.

Supplied Parts:

- Fuel pump piston
- Fuel pump sleeve
- Fuel pump spring retainer
- Fuel pump lock collars

Tools Needed:

- 24mm Wrench
- 17mm Wrench
- 13mm Wrench
- 10mm Wrench
- 18mm Deep Socket
- Screwdriver
- T30 Torx Bit
- Trim Removal tool

Getting Started

Confirm you have received all the parts included with your purchase by reading the complete guide, if there are missing components, please contact:

customerservice@034motorsport.com

About This Guide

This Install Guide documents the installation process on a B7 Audi A4. There may be minor differences depending on specific vehicle, market, options, etc.

Install Steps

Step 1

Use a trim removal tool to access the fuse box.



Step 2

Locate the fuel pump fuse(#28) and remove it.



Step 3

To relieve the pressure, run the car until it dies.

Step 4

Open the hood of your car.

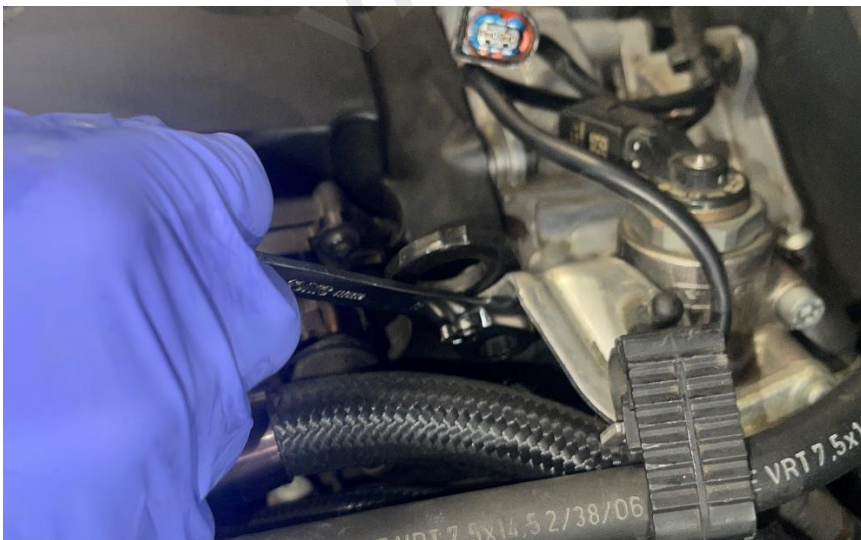


Step 5

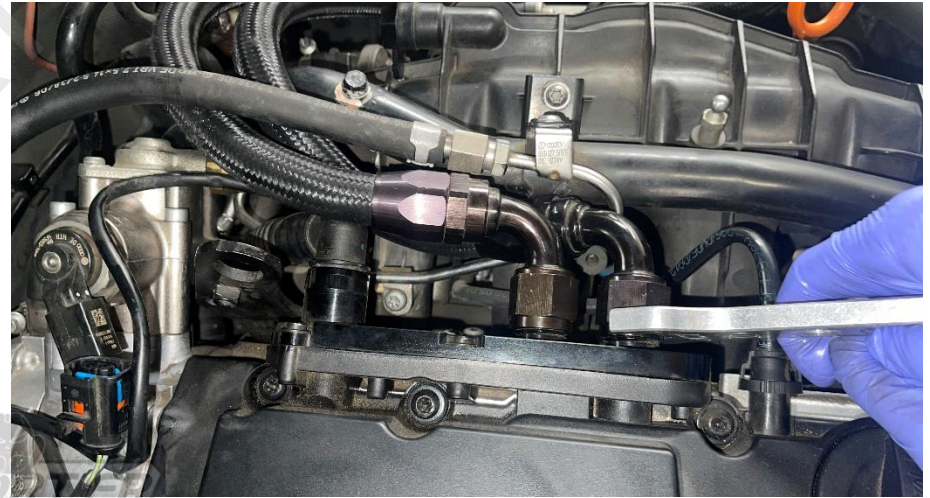
Remove the engine cover by pulling it up.

**Step 6**

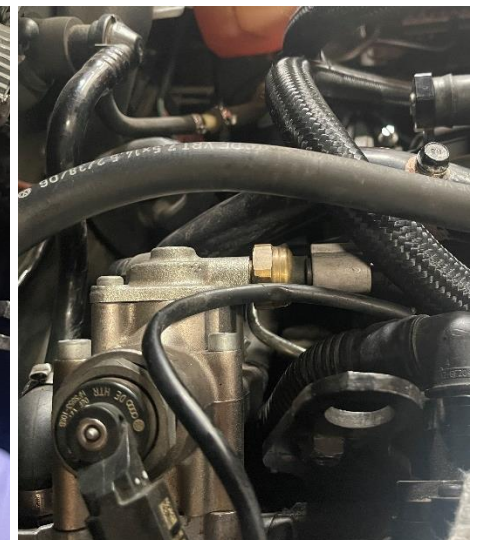
To free up some work space, disconnect the hose and remove the bracket with a 10mm socket.

**Step 7**

We had to remove one of the catch can lines and loosen the other to access the high pressure fuel sensor.

**Step 8**

Squeeze and pinch to remove the clips from the fuel pressure sensor and HPFP.



Step 9

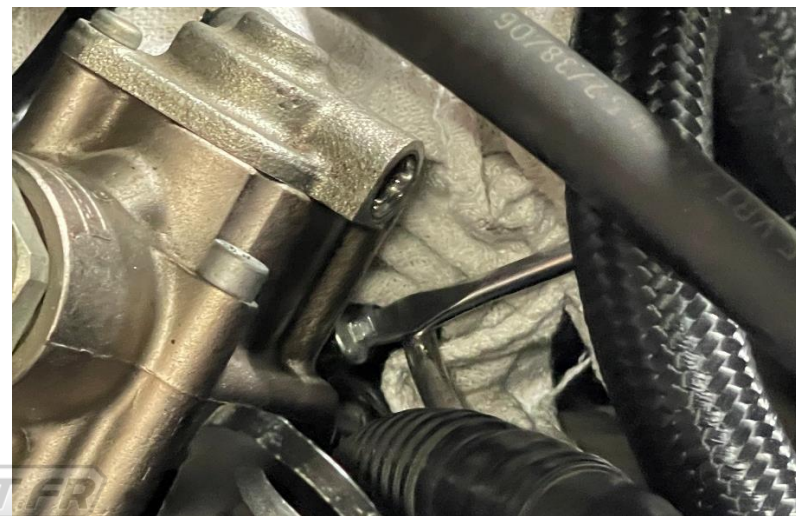
Put a rag under the pump and use a 24mm wrench to remove the fuel pressure sensor.

**Step 10**

Use a 17mm wrench to remove the high pressure feed line fitting (it's a tight fit).

**Step 11**

Use a screwdriver to remove the clamp on the low pressure feed hose. Remove the hose.

**Step 12**

Unscrew the cap from the HPFP bleed screw. Use a 13mm wrench to remove the bleed screw.



Step 13

Use a Torx T30 bit to remove the 3 HPFP bolts holding it to the head in a triangle pattern.

**Step 14**

Remove the pump.

**Step 15**

Inspect/ replace cam follower since you have access.

**Step 16**

Put the pump in a vice.



Step 17

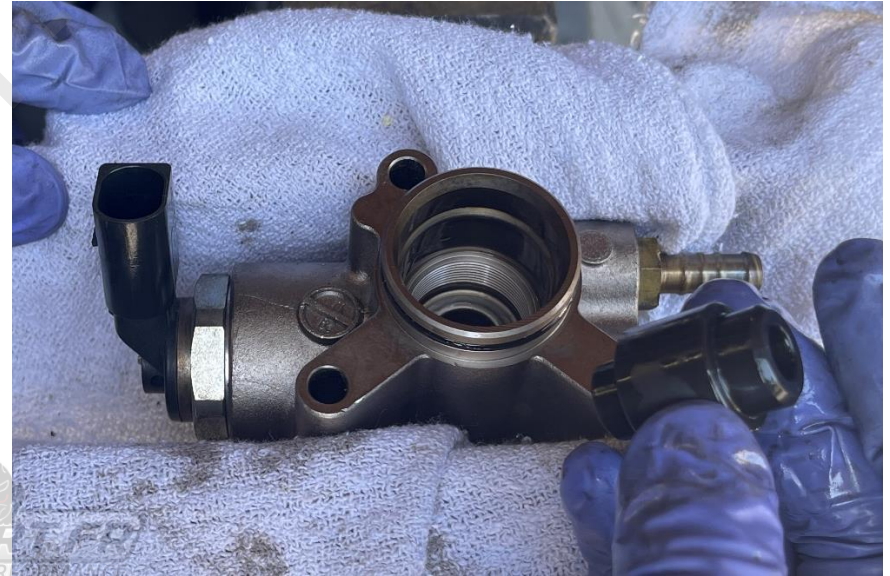
Simply pull the spring and piston off the assembly. Note the orientation of the parts as you remove them.

**Step 18**

Using an 18mm deep socket, remove the retaining nut.

**Step 19**

Remove and replace the OE sleeve with the one provided.



Step 20

Insert the 034 fuel pump piston into the retaining nut and extend it to its maximum height.

Step 21

Transfer the spring from the stock piston to the new piston/retainer assembly.

**Step 22**

Install the retaining washer on the piston.

**Step 23**

Install the locking collars onto the groove cut into the piston, push the washer over the tapered ends to lock in place.



Step 24

Use a few drops of oil to re-lubricate the o-ring on the pump assembly.

**Step 25**

Put assembly back into pump body, there's no true torque spec, tighten as tight as it was when you took it apart.

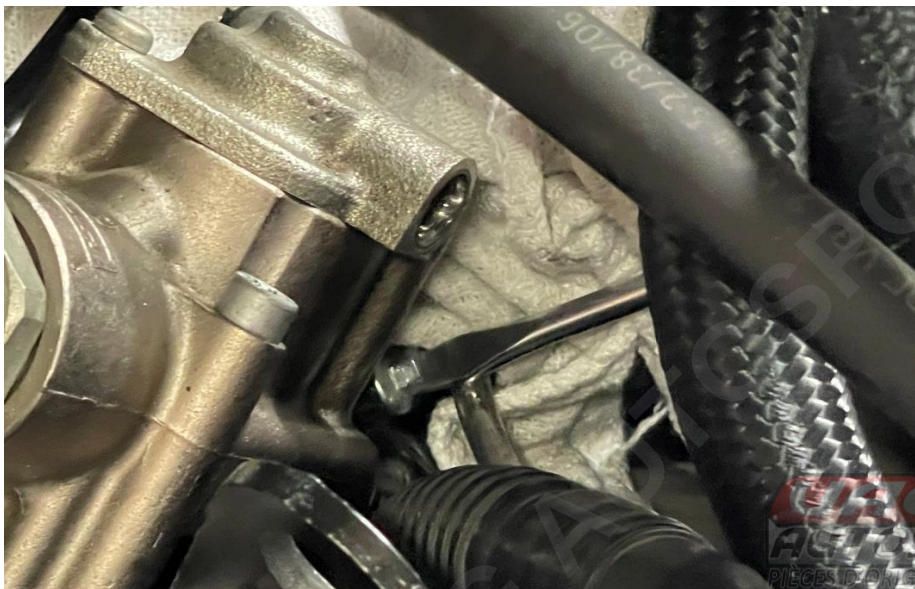
**Step 26**

To reinstall pump in car, tighten pump to body, evenly in a triangle pattern. Torque to **10Nm**.



Step 27

Attach low pressure line and use screw driver to tighten.

**Step 28**

Use a 17mm wrench to tighten HP line fitting.

**Step 29**

Use a 24mm wrench to install pressure sensor.

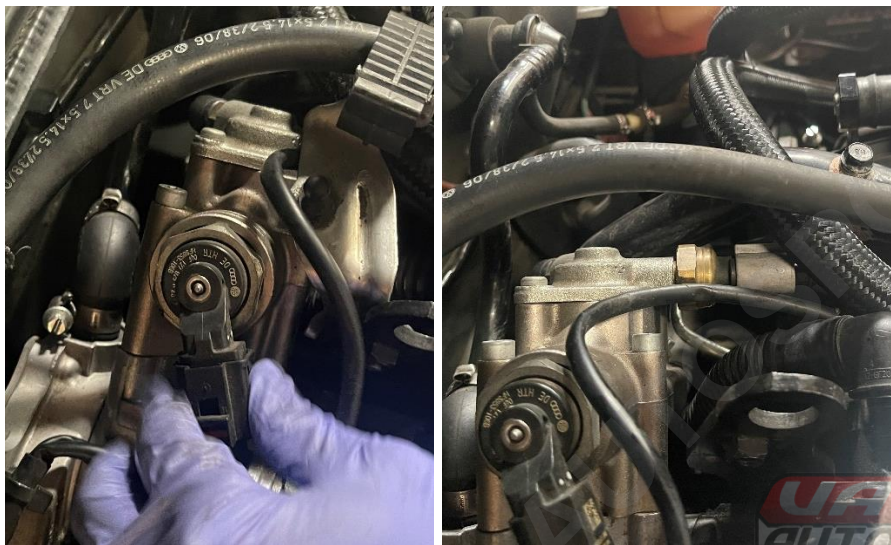
**Step 30**

Use a 13mm socket to install bleed screw.

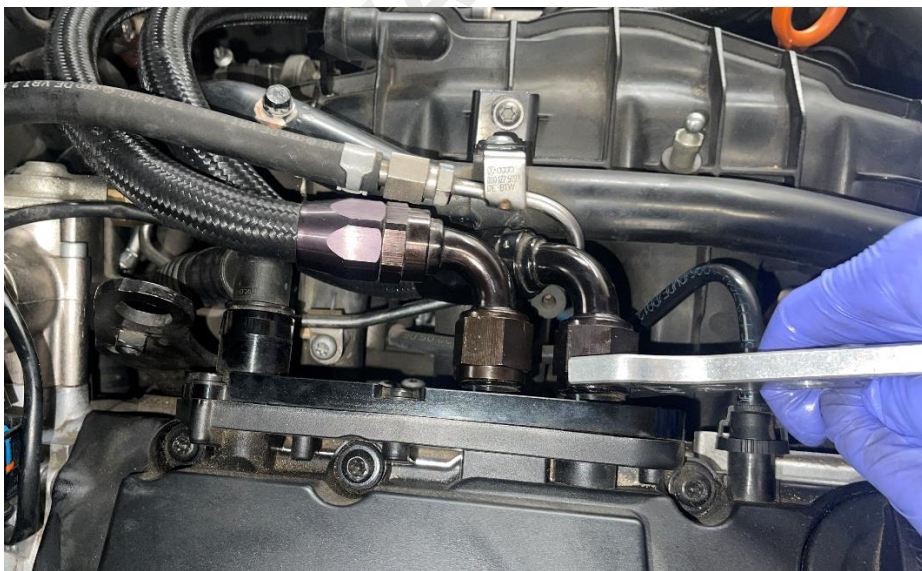


Step 31

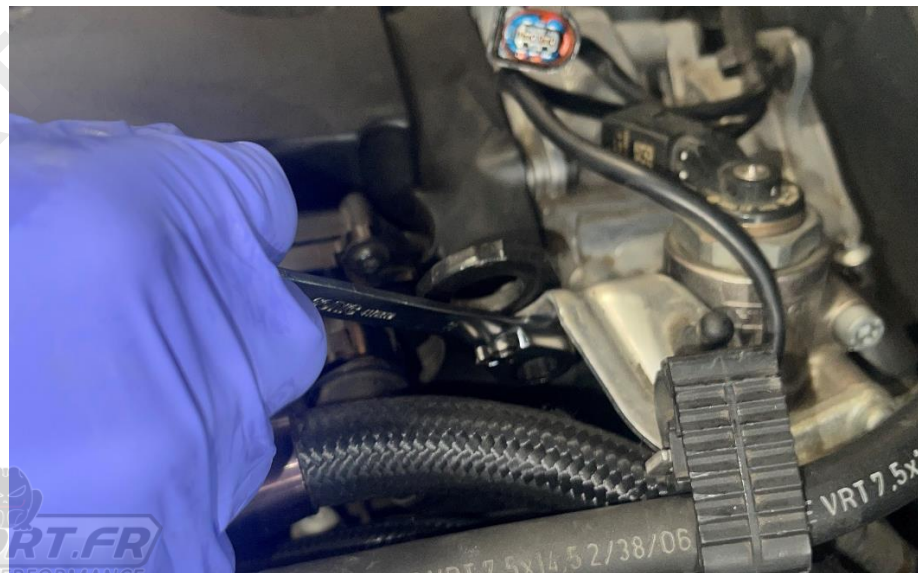
Reattach sensor clips.

**Step 32**

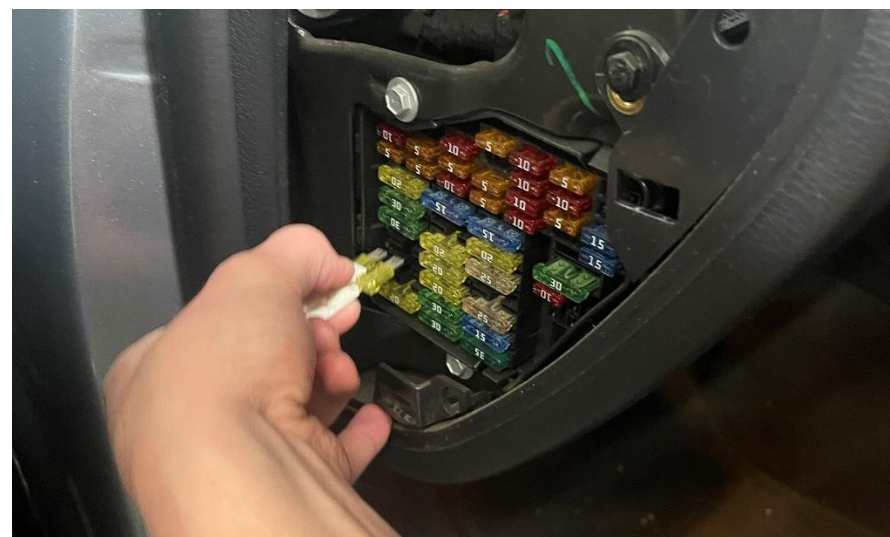
Reinstall/tighten catch can lines.

**Step 33**

Use a 10mm socket to reinstall bracket.

**Step 34**

Reinstall fuse into the fuse box.



Step 35

Reinstall the trim panel to cover the fuse box.

Step 37

Start your car and check for fuel leaks.

Step 38

Reinstall your engine cover.

**Step 39**

You're done!

