

# Drop-In E85 Injectors:

### **REVISION: PRELIM**

## Model Fiat 500 Abarth Turbo 1.4L Multi-Air

### Parts Checklist:

- GT or GTX Turbo assembly
  - with built-in wastegate
  - Polished compressor housing (optional)

#### Tools:

- 10mm socket and drive
- T27 Torx Driver

#### **Application Notes:**

- Calibration:

The ATP Turbo "drop-in" E85 injectors for the Fiat Abarth 1.4L Multi-Air are calibrated for any ECU tune (piggybacks included) running on stock injectors; and require upon installation, the gasoline within the fuel tank is REPLACED 100% and COMPLETELY with E85 fuel. Additionally, after installation of the injectors and going forward, E85 is the ONLY fuel pumped into the vehicle.

- Cold Start:

E85 commonly causes a minor ("cold") starting issue in the morning of areas with extremely cold climates. The engine may shut-off once during the first crank; and subsequently start and run normally afterwards. Recommended, to warm up the car for a few minutes during cold starts and prior to "hard" driving.



## Instructions:

• Step 1: Identify where the fuel rail is located within the engine bay. With the air-box removed, the fuel rail is located within the "red" circle.



Description: Fuel rail is about 12 inches long, 1 inch wide, and 0.5 inch thick. Upon close examination, you will see 4 injectors attached to the fuel rail; and connected to each injector is an electrical plug. The fuel rail is held onto the intake manifold via 2 black screws with torx (6 point female) heads.



• Step 2: Let's take off and remove a few components before removal of the fuel rail.

Notice the fuel feed line is connected in the middle of the fuel rail:



DO NOT DISCONNECT the fuel feed line, yet.

Step 2a: Squeeze the green tab quick release portion of the circled hose & slide the hose out:





 Step 2b: Using 10mm socket and driver, remove the three circled fasteners holding the silver bracket:



• Step 2c: Unsnap the two circled connectors:





• Step 2d: Free the bracket, set aside, and out of the way as pictured:

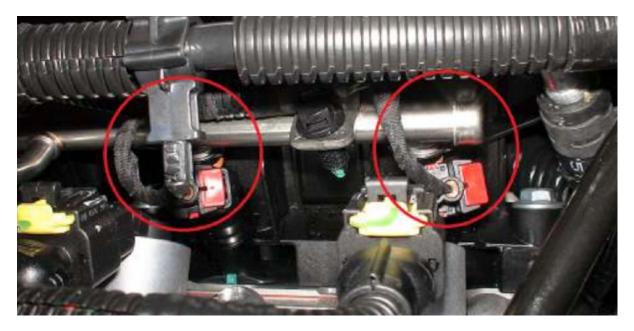


 Step 2e: Return to the fuel feed hose and disconnect the hose from the fuel rail. Note, first slide BLUE retaining clip, then squeeze the grey / white tab to release the quick disconnect fitting. Finally side the hose out of the fuel rail as pictured. Slight amount of fuel will drip from the hose and rail.





• Step 2f: Look closely at the fuel rail and you will see the 4 injectors and electrical connectors (two circled for reference).



Disconnect the electrical connector from each injector. First, slide/pull the red tab towards you to expose the squeeze tab (underneath). Then squeeze the tab and pull the connector from the injector as pictured.





 Step 2g: After disconnecting the 4 electrical connectors, pop the two slide in barbs (tiedowns) from the fuel rail.



• Step 2h: Pull the injector loom up and out of the way.





• Step 2i: Locate the two screws holding the fuel rail to the intake manifold, as pictured.



Remove the left screw with T27 Torx driver.





Remove the right screw with T27 Torx driver.



• Step 2j: The rail is free and gently pull the rail out.







NOTE: Tilt the injector rail into a catch pan and drain excess fuel from the rail.

 Step 3: Place fuel rail on a table and individually swap out each injector; and replace each injector clip into the proper position.







• <u>Step 4: Install the fuel rail onto the engine in reverse order.</u>

Confirm all components properly reinstalled and start up the car.

NOTE: A few cranks maybe required to pressurize the fuel system after an injector replacement.

Check for leaks. If you observe any fuel leaks, shut down the engine immediately and fix the leak.

• Step 5: Let the engine idle and warm up properly.