



Return Fuel Line Kit for Mazda MX-5 NB 01-05

This return fuel line kit is designed to convert the standard returnless fuel system to a return style fuel system. Doing so enables an adjustable fuel pressure regulator to be used, unlocking massive horsepower potential for your 01-05 Mazda MX-5.

Kit contents

- 3 x 8mm OEM quick connects
- 3m Gates Barricade E10/E85 compatible fuel hose
- 6 x Screw fuel hose clamps
- 1 x Vented fuel cap
- 1 x Sytec 90 degree fuel rail adapter
- 1 x 6AN fuel rail adapter
- 1 x 6AN to 8mm hose barb

Additional parts

To complete the installation a fuel pressure regulator is required to be installed in the return line from the fuel rail to the tank. The new fuel pump is worth installing when the stock fuel pressure regulator is being removed from the tank.

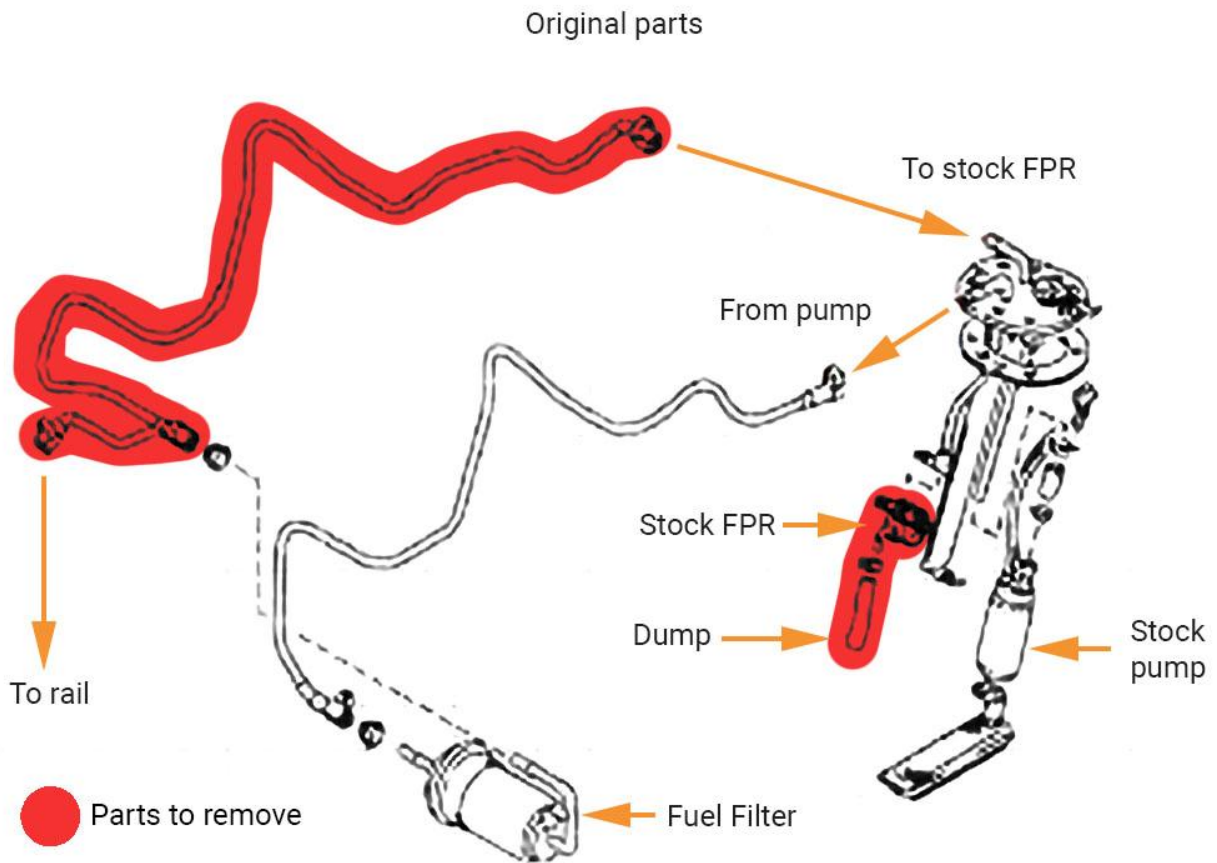
Under 300hp

- Radium non-adjustable fuel pressure regulator
- Walbro 190lph pump

Over 300hp

- Adjustable fuel pressure regulator
- Deatschwerks DW200 fuel pump or greater
- Walbro 255 fuel pump

Disassembly



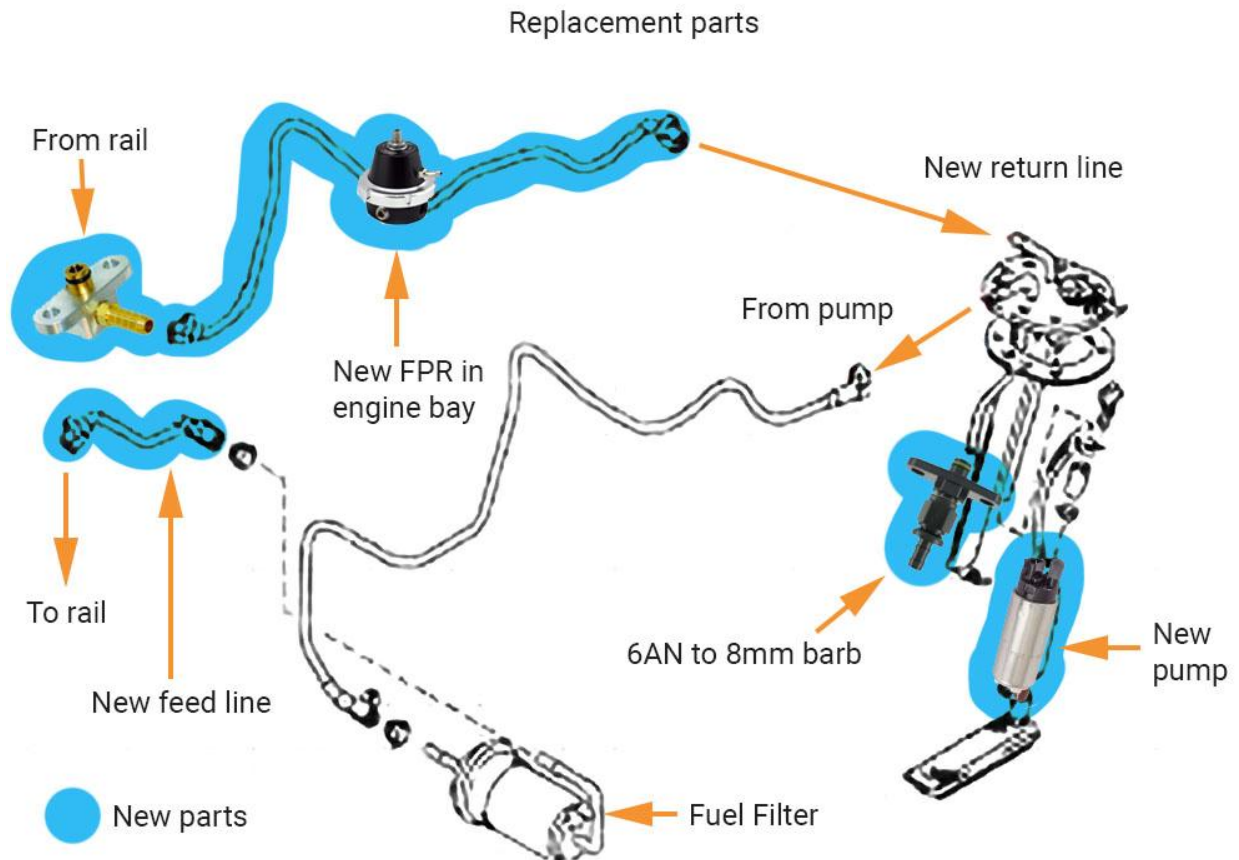
Step 1

- A. Inside the car, remove the connectors from the top of the fuel hat
- B. Remove the fuel hat from the tank
- C. Remove the stock FPR and dump hose from the fuel hat
- D. Replace the fuel pump at this time if you are doing so
- E. Replace the FPR with the 6AN fuel rail adapter, 6AN barb and a length of hose long enough to reach the bottom of the fuel pump
- F. Secure the bottom of the hose to the bottom of the fuel pump with a cable tie
- G. Replace the fuel hat and connect the fuel feed line and power connector, leaving the fuel return line connector disconnected

Step 2

- A. Under the car, remove the Y shaped fuel line from the fuel filter
- B. Remove the short line that connects to the hard line that feeds the fuel rail
- C. Remove the whole line can be removed from the car
- D. In the engine bay, remove the fuel damper from the end of the fuel rail

Reassembly



Step 1

- Replace the fuel damper on the rail with the 90 deg fuel rail adapter
- Connect the fuel hose to the rail adapter and secure it with a hose clamp
- Install your chosen Fuel Pressure Regulator in the engine bay
- Connect the fuel hose from the rail adapter to the inlet side of the regulator, securing it with a hose clamp

Step 2

- Install a quick-connect fitting on the return pipe on the fuel hat
- Connect the return fuel hose to the quick connect fitting and secure it with a hose clamp
- Run the fuel line from the top of the tank, under the car, to the engine bay
- Connect the return fuel hose to the outlet of the fuel pressure regulator, securing it with a hose clamp

Step 3

- Install one quick-connect fitting to the fuel filter and one to the fuel feed hard line
- Run a piece of fuel line between the two quick connect fittings and secure them with hose clamps