Product Name: FPR-800/1200/2000/3000
Product Description: Fuel pressure regulator
Product Number: TS-0401-1001, TS-0401-1003



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## IMPORTANT NOTES ON YOUR FUEL PRESSURE REGULATOR

- Turbosmart accepts no responsibility whatsoever for incorrect installation of this product which is potentially hazardous and can
  cause serious engine damage or personal injury. Ensure there are no leaks in your fuel system after installation and you have
  checked fuel suitability.
- · Use fuel line that is the correct size and chemical rating for your application when fitting your FPR
- Ensure that all fuel lines are secured with suitable clamps or the correct fittings are used

TS-0401-1005, TS-0401-1007

#### **RECOMMENDATIONS**

- · Turbosmart recommends that your FPR is fitted and adjusted by an appropriately qualified technician
- Turbosmart recommends that the Air Fuel ratio is checked once the fuel pressure is set

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# **HOW TO INSTALL YOUR FPR**

### **TOOLS REQUIRED**

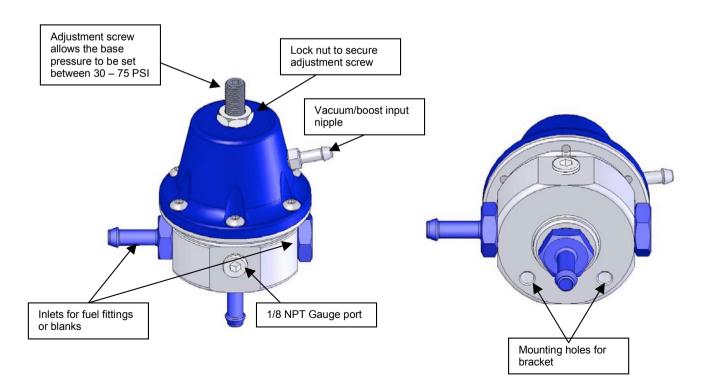
Hose cutters, spanners, pliers, 4mm and 5mm Allen keys

#### **FUEL RAIL ADAPTORS:**

Fuel rail adaptors are designed for connection of your FPR to your fuel system when your standard regulator is mounted on the fuel rail. With the standard regulator removed, install a fuel rail adaptor in place of the stock regulator and use EFI fuel hose to connect to your remotely mounted FPR.

| FG-FRA-001 | Fuel rail adaptor that suits engines: Mazda 13BREW (FD3S RX7 Series 6), Nissan SR20DET (S13, S14, S15 SILVIA), Nissan RB26DETT (BNR32, BNR33, BNR34 GTR), Nissan RB25DET (HCR32, ECR33, ER34 SKYLINE), Subaru EJ20 (GC8 - WRX before Bug Eye) |
|------------|---|
| FG-FRA-002 | Fuel rail adaptor that suits engines: Subaru EJ20 (GDA - WRX Bug Eye onwards), Toyota 2JZGTE (JZ80 SUPRA, JZS147 ARISTO), Toyota 4EFTE (EP STARLET), Toyota 4AGZE, Toyota 4AGE  |
| FG-FRA-003 | Fuel rail adaptor that suits engines: Mazda 13B (RX7 Series 4), Toyota 3SGTE (MR2, CELICA GT4), Toyota 1UZ-FE (Lexus/Soarer V8), Toyota 1JZGTE (SUPRA, CRESTA, CHASER, MARK II)   |
| FG-FRA-004 | Fuel rail adaptor that suits engines: Honda B16A (EG6 CIVIC SIR, EK4 CIVIC, CRX DEL SOL), Honda B16B (EK9 CIVIC TYPE R)   |
| FG-FRA-005 | Fuel rail adaptor that suits engines: Mitsubishi 4G63 (Evo 4, 5, 6, 7, 8)   |
| FG-FRA-006 | Fuel rail adaptor that suits engines: Ford XR6 turbo, Audi/VW 1.8L turbo  |

### **FPR ASSEMBLY VIEW:**



#### FITTING INSTRUCTIONS:

# 1. Determine your current Base fuel pressure.

Turbosmart recommends determining your current base fuel pressure with your existing regulator. This should be done prior to installation of the FPR to give a reference base pressure to initially tune the base pressure to. This base pressure measurement should be made with a suitable fuel pressure gauge at idle with the vacuum hose removed. Ensure the vacuum hose has been removed and is blocked when taking the reading and the reference nipple is left open to atmosphere.

# 3. Remove your existing regulator

With your engine cool and ignition off you can now carefully remove the fuel lines to and from you existing regulator. You should take care with these lines to ensure no debris enters your fuel system.

Disconnect the vacuum line and remove the existing regulator.

#### **IMPORTANT NOTE:**

If your standard fuel pressure regulator is mounted directly to your fuel rail then you may need to use an adaptor and some EFI fuel hose to connect the fuel rail to the FPR inlet port. Turbosmart supplies a range of adaptors to suit most popular makes and models (see accessory table for details).

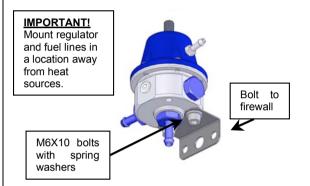
# 2. Prepare to remove your existing regulator

Your fuel system is under pressure. To relieve the pressure disconnect your fuel pump power or remove the fuel pump fuse. Crank the engine until it stops. Your fuel system should now have no stored pressure.

<u>WARNING!</u> Exercise extreme caution when loosening fuel fittings. Turbosmart recommends wearing safety glasses to protect against fuel spray and having an appropriate fire extinguisher on hand.

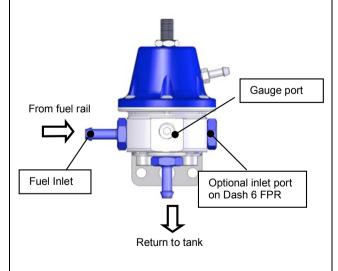
### 4. Mount the FPR

Mount the FPR using the mounting bracket supplied. Ensure it is firmly mounted and if necessary use the bracket as a template for marking out new mounting holes. Use the spring washers supplied when bolting the FPR to the bracket.



## 5. Connect Fuel Lines

Connect the fuel inlet and return lines in the orientation shown. If only one inlet is used block the second inlet with an blank



## 6. Start engine and check for fuel leaks

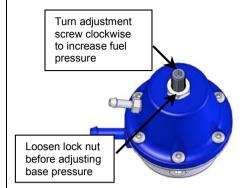
Replace the Fuel pump fuse or reconnect the fuel pump power. Start your engine and check for fuel leaks around the fittings.

CAUTION! If any leaks are evident turn the engine of immediately and tighten fittings and re-check until no leaks are present before proceeding.

WARNING! No Smoking or Naked flames in the vicinity of this installation.

## 7. Adjusting the base pressure

Before adjusting your base fuel pressure you must loosen the lock nut.



## 8. Adjusting the base pressure

Turning the screw clockwise will increase your base pressure and anti-clockwise will decrease base pressure. Ensure that when setting the base pressure the vacuum hose is disconnected and blocked and that the reference nipple is open to atmosphere.

WARNING! An incorrect setting of fuel pressure may cause your engine to run lean with the potential for detonation. Turbosmart recommends fitting by a qualified technician and that Air-Fuel ratios are checked.

### 9. Lock Base Pressure

With your fuel pressure correctly set correctly tighten the lock nut and re-check the base pressure. Ensure the o-ring and washer are installed under the lock nut and there are no air leaks around the adjusting screw.

### 10. Connect Vacuum Hose

With your fuel pressure correctly set connect the Vacuum/Boost hose to the vacuum nipple and secure with a spring clamp. Double check there are no leaks around the vacuum hose or fuel fittings and your installation is complete.



## **TURBOSMART** ONE YEAR LIMITED WARRANTY

Turbosmart is a company built on Customer Satisfaction and Service. That is why all of our products go through regimented test procedures before they are packaged and shipped. Turbosmart stands behind its products for one full year after purchase. Terms of Warranty. Service and Returns are as follows:

Limited Warranty: Turbosmart warrants its products to be free from defects in material and workmanship under normal use and if properly installed for a period of one year from date of purchase. If found to be defective, it will be replaced or repaired if returned prepaid along with proof of date of purchase. This shall constitute the sole remedy of the purchaser and the sole liability of Turbosmart to the extent permitted by law, the foregoing is exclusive and in lieu of all other warranties or representations whether expressed or implied, including any implied warranty of merchantability or fitness. In no event shall Turbosmart be liable for special or consequential damages. This warranty is only valid on products purchased from Turbosmart Authorized Dealers.

Service: After the warranty period has expired, repair service is charged based on a minimum and maximum charge rate. (Contact Customer Service for current rate),

Returns: When returning a Turbosmart product for repair, it must be accompanied by a completed Customer Warranty Form and RMA number. To access this form please go to our website www.turbosmartonline.com and you will find it on the Downloads page

### THE TURBOSMART PLEDGE

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Please call if you have any questions or do not understand this agreement. Refer to our brochure, website or catalogue for terms and conditions and further information regarding your product. Turbosmart appreciates your business and price ourselves on our customer service. We are always happy to offer you advice and will provide you with help in any way we can. The purpose of this agreement is to avoid any problems or hard feelings.

We sometimes make mistakes, as do our dealers, distributors and suppliers. Even customers can sometimes order the wrong parts. Do not use, modify, install, trial assemble, nick, drop, scratch or adjust any part until you first check for any damage. Damage must be reported immediately. NO EXCEPTIONS. If there are any components missing please contact your authorized reseller immediately upon receipt of your shipment. Missing components must be reported within five (5) business days of receipt. Parts returned for any reason MUST BE IN RESALABLE CONDITION. It is YOUR responsibility, "THE CUSTOMER" to carefully package any returns to avoid shipping damage. Insurance is highly recommended. Credit cannot be issued for damaged goods.

Turbosmart warranties the quality of the products it designs and manufactures to be free of defects in material and workmanship. This limited warranty is extended only to the original purchaser and may not be transferred or assigned. This limited warranty applies to any product, which after careful inspection by Turbosmart, after receipt of the product from our authorized reseller, is found to have a defect in either material or workmanship. Any modifications to the product will void any and all warranties and will not be exchanged. Before installation, check new car warranty. Turbosmart is not responsible for voiding any original manufactures warranty.

All warranty claims must be returned to the nearest Turbosmart Office, you must return the product and sales receipt, at your own expense, accompanied by the Customer Warranty Form stating the reason for the claim. Proof of purchase must be provided with any warranty claim and will be verified with the authorized reseller from which the product was purchased.

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IN THE EVENT THAT THE INDIVIDUAL PURCHASER DOES NOT AGREE WITH THIS AGREEMENT THE BUYER MAY PROMPTLY RETURN THIS PRODUCT, IN A NEW AND UN-USED CONDITION, WITH A DATED PROOF OF PURCHASE, TO THE PLACE OF PURCHASE WITHIN SEVEN (7) DAYS FROM THE DATE OF PURCHASE FOR A FULL REFUND. THE INSTALLATION OF THIS PRODUCT INDICATES THAT THE INDIVIDUAL PURCHASER HAS READ AND UNDERSTOOD THIS AGREEMENT AND ACCEPTS ITS TERMS AND CONDITIONS.

## Happy motoring! The Turbosmart Team.

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