DANA MARINE PRODUCTS

Fuel Pressure Regulator

[Late Model 496 H.O. ONLY]

Pictured at the bottom is the stock fuel pressure regulator (top), and the new adjustable regulator (bottom). This modification is only necessary on late model 496 HO engines. 496 Mag engines DO NOT apply to this change. To determine if your 496 HO requires a regulator upgrade, you will need to look at the starboard side of your engine. If the fuel pump and fuel cooler assembly are mounted on the lower starboard side, the regulator change is strongly suggested.

Our testing was performed at 1200 feet above sea level. After the Dana Flow Torque exhaust install we noticed that the exhaust gas temperature readings showed a potentially damaging lean condition in the mid range of running. This lean condition was found in our dyno testing and in our testing that was performed on the water. We found that a 3-4psi increase in the fuel pressure solved this lean condition. Higher altitude applications may require a lower fuel pressure increase.

Preparation and Installation:

1. Locate the fuel pressure gauge connection on the intake rail.
   - ***A.*** With the engine cowling off, the fuel pressure connection can be found behind the coolant reservoir tank on the fuel rail.
2. Remove the coolant overflow line from the coolant tank. (take caution, this line is often pressurized.)
3. Remove the plastic cap from the fuel connection and attach your fuel pressure gauge. (if you do not have this gauge, it can be purchased at most Napa Auto Parts, or directly from Dana Marine for roughly $60.00).
4. By turning the key to the "on" position, the fuel pump will cycle for roughly 3 seconds. This will confirm your baseline fuel pressure. Due to the short duration of the fuel pump cycle, you will most likely have to have a friend help in this operation. Once the fuel pump shuts off the pressure will drop slightly. This reading must be accurate, so be sure to get your baseline reading while the pump is cycling.
5. The stock fuel pressure should be set at roughly 43 psi. Once your baseline pressure is confirmed, bleed off excess pressure through the fuel pressure gauge blow-off.
6. Remove the vacuum line from the stock regulator. Using an 8mm socket, remove the two bolts that hold the stock regulator into place.
7. After applying the a small amount of oil to the o-rings of the new regulator, install the new regulator using the factory bolts.
8. With the fuel pressure gauge still attached to the fuel rail repeat step 4. You can now adjust your fuel pressure accordingly by adjusting the set screw, (clockwise) to increase pressure or (counter-clockwise) to decrease the fuel pressure.
9. Once a 3psi increase in fuel pressure is made (roughly 46psi), tighten the jam nut on the adjustment screw.
10. Re-install the vacuum line onto the new regulator, remove fuel pressure gauge, re-install fuel pressure connection cap, and re-connect the coolant over flow line.

Be sure to read the fuel pressure gauge properly. Adjusting the fuel pressure too lean can result in engine failure. This is a very simple operation, but if proper care is not taken during installation, it can be a very expensive mistake.

This completes the fuel pressure regulator installation and calibration.