



## TROUBLESHOOTING FUEL SYSTEM ISSUES

- **NO PRESSURE AT REGULATOR.** (possible causes)
  1. Pump is not running.
  2. Fuel filter clogged.
  3. Fuel tank vent hose plugged.
  4. Pinched fuel line.
  5. Plugged fuel line.
  6. Bypass in pump stuck open
  7. Regular union style fitting in the regulator ( requires a super flow dry sump style fitting)
  8. Regulator pressure gauge bad.
  9. Needle and seat in carburetor not closing.
  10. Our pump requires you use an Aerospace regulator or Aeromotive (only two regulators known to date that will handle the delivery our pumps provide.)
  11. Pressure set to high at pump ( pump should be set between 14 – 24 P.S.I)
  12. Low fuel level in tank.
  13. Pump mounted too high above fuel level.
  
- **NO PRESSURE AT FUEL PUMP.** (possible causes)
  1. Pump is not running.
  2. Fuel level too low.
  3. Fuel pump mounted too high above fuel level.
  4. Fuel filter clogged or undersize.
  5. Pump Feed line too small ( must be a #10 A.N. or larger)
  6. Pump By-pass stuck open.
  7. Pump was ran dry or with dirty fuel and damaged the impeller housing.
  8. Pump vanes are stuck in the impeller.
  9. Pump is running backwards.
  10. No resistance on outlet side of the pump.
  11. Fuel line plugged or kinked.
  12. Fuel tank vent hose plugged, or roll over vent stuck shut
  
- **CANNOT REGULATE FUEL PRESSURE.**
  1. Line pressure from pump too high (must be between 14-24 P.S.I)
  2. Soft seat seal in regulator damaged.
  3. Regular union style fitting is being used. ( Must use a super flow dry sump style fitting.)
  4. Regulator diaphragm pin stuck.

5. Needle and seat in carburetor sticking.
6. Trash in fuel system.
7. Regulator check ball sticking.
8. Regulator mounted too close to a heat source (headers exhaust i.e. )
9. Bad fuel pressure gauge.
10. Pump pressure is varying.

- **PRESSURE DROPS WHILE MAKING A PASS.**

1. Fuel filter plugged.
2. Fuel lines incorrect size. (#10A.N. from Tank to filter-filter to pump-pump to regulator #6A.N. from regulator to carburetor.)
3. Fuel filter flow rate too low.(Only filters known to work is Aerospace, Aeromotive and Barry Grant)
4. Fuel pump undersized for system.
5. Fuel pump vanes or impeller housing damaged.
6. Fuel pump motor getting week.
7. Power wires to pump undersized. (minimum #12awg if under 3 foot long #10awg if over 3 foot long. Must also use a 30 amp relay to run pump)
8. By-pass pressure set to low.
9. Tank vent line clogged.
10. Fuel sump facing opposite way of G-Forces.

- **PROPER FUEL SYSTEM HOOKUP.**

1. #10 A.N. minimum line from fuel tank to fuel filter.
2. Fuel filter must flow a minimum of 600GPH.
3. #10 A.N. minimum line from filter to pump.
4. #8 A.N. line from By-pass port back to the fuel tank (best if returned to top of tank)
5. Under 550 H.P. #8 A.N. line from pump to regulator.
6. Over 550 H.P. #10 A.N. line from pump to regulator.
7. Regulator requirement ( Aerospace 2 port or 4 port regulator or Aeromotive dead head style regulator.)
8. #6 A.N. or #8 A.N. line from regulator to carburetor.
9. 0-30 psi fuel pressure gauge in the fuel pump.
10. 0-15 psi fuel pressure gauge in the regulator.

- **FUEL SYSTEM ACCEPTABLE ALTERATIONS.**

1. #12 A.N. lines from tank to filter and filter to pump.
2. Block off pump by-pass if a by-pass style regulator with a #8 A.N. return line is used.
3. Run a 4 port regulator with a 2 port regulator run off the back side to operate a nitrous system providing total H.P.(N.O.S.+ base engine H.P.) is kept under 1200 .

- **HELPFUL HINTS.**

1. Always mount the pump vertical with the motor pointed upward.
2. Mount the regulator as close to the carburetor as possible and away from heat sources (headers i.e.).
3. **ALWAYS** use a minimum of #10A.N. line from tank all the way to the pump never use any fittings in between Tank and pump with a hole size under ½ inch diameter.
4. **ALWAYS** flush a minimum of 15 gallons through a new fuel system , with first unhooking the fitting at (before)the regulator and pump the system to a jug, after that hook line back up at regulator and remove lines from carburetor and flush system into a jug once again.