

Troubleshooting Fuel System		
Symptom	Diagnosis	Solution
Pump output pressure is too low	Incorrect bypass valve setting (on adjustable pumps), or low voltage to the pump, or a dirty filter	Adjust bypass valve per pump instructions (adjustable pumps); check voltage level/charge batteries - pressure is directly related to voltage; clean filter (on filtered pumps)
Pump output pressure is too high	Incorrect bypass valve setting (on adjustable pumps), or bypass valve re-installed incorrectly, or pressure change due to increased voltage (change from 12 to 16 volt system)	Adjust bypass valve per pump instructions (adjustable pumps); re-install bypass valve properly (call tech for directions); re-adjust pressure to compensate for different voltage.
No pump pressure	No fuel in tank/cell, or pump motor incorrectly wired, or blockage in fuel lines, or inaccurate gauges	Check fuel level - always keep tank/cell full when racing; check pump wiring against wiring diagram in tech section of this site; disconnect fuel line at regulator to check for blockage; check accuracy of gauges
Pump won't run at all	Pump motor incorrectly wired, or batteries discharged, or electric fuse blown.	Check electrical system for proper connections and operation
Pump seems excessively hot	Insufficient voltage, or excessive aeration	Check voltage - pump motor works overtime when voltage is low; check fuel level - when level is low, pump can suck air from the tank instead of fuel, causing aeration & overheating
Pump seems excessively noisy	Excessive aeration of fuel causing cavitation	Make sure fuel tank/cell is full before racing - high volume pumps can actually pull a "vortex" of air through standing liquid if the liquid is shallow enough
Pump seems to pound or pulsate against regulator	Aeration of fuel caused by: a dirty filter, or a failing pump seal, or a malfunctioning carburetor needle/seat assembly	Clean filter; replace needle/seat assemblies in carburetor; replace pump seal or send to factory for service
Pump leaks at vent hole	Damaged seal	Replace seal or send to factory for service. Seal should be replaced every two years. If a fuel system has remained unused for a long period of time (3 months or more) the seal can dry out and become unserviceable. Circulate fuel through system periodically to 'lubricate' seal
Fuel pressure spikes noticeable on gauges mounted at the regulator(s)	Normal operation without regulator bypass system; expect between 1 to 1-1/2 lb. pressure fluctuation	Install optional regulator bypass system to reduce pressure spike to within 1/2 lb

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Pressure seems to decrease throughout the day	Possible voltage drop, or gauge readings are inaccurate	Ensure that batteries are well-charged between rounds of racing; heat can effect readings on liquid filled gauges - use gauges as tuning tools only - remove from engine after adjustments are made
Fuel pressure fluctuates between rounds of racing	Gauge readings are inaccurate	Heat affects liquid filled gauges. Remove from engine after initial pressure adjustments are made
Car "lays down" at half track	Not enough fuel volume for engine's needs, or not enough pressure to overcome G-force of launch	Re-evaluate fuel needs of engine/vehicle combination. Call Tech for recommendations; adjust pressure (on adjustable pumps) to overcome effects of G-force
Regulators won't regulate; they go "wide open" or "creep"	Dirt particles or other contaminant causing regulator's needle/seat assembly to malfunction	Needs factory repair. The function of all regulators necessitate the use of clean, filtered fuel. Make sure to flush fuel lines before using a newly installed fuel system
Regulator(s) "chatter"	Excessive air in fuel system; seal may be damaged and allowing air to enter through motor, or fuel lines on suction side of pump are not air tight, or pump is pulling air from under-filled fuel tank/cell	Check fuel level. Always completely fill tank/cell before each round of racing. Tighten all hose ends on the suction side of the fuel pump. Air can actually "leak in" through improperly sealed joints. If all else fails, replace the fuel pump seal or send to the factory for service
Regulators leak from vent hole	Ruptured regulator diaphragm	Replace diaphragm
Fuel spills over into carburetor(s)	Incorrect carburetor needle/seat adjustment, or damaged needle/seat assembly	Adjust or replace needle/seat assembly in carburetor