



# TECH EXCHANGE

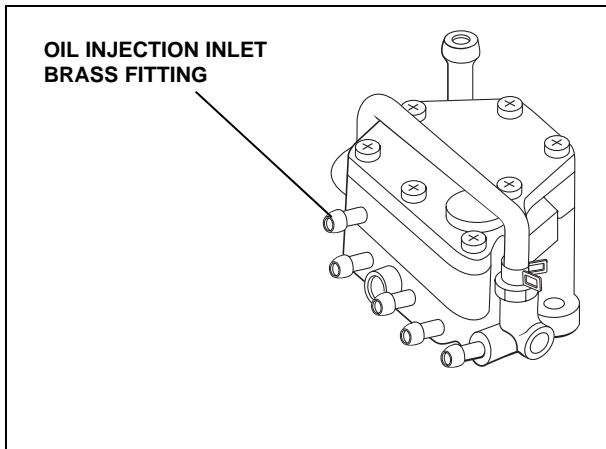
- SUBJECTS:** 1. Oil Injection Line Disengages - 2002 Liquid-Cooled Models  
2. Fuel Pump Freezing Due to the Diaphragm Vent - 2002 SXViper Models

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## Oil Injection Line Disengages - 2002 Liquid-Cooled Models

There have been some reports of the oil injection line coming off between the oil pump and fuel pump during Predelivery (PDI) or within one to two miles of use. The symptom is oil leakage into the engine and belly pan area.

In most cases, a blocked oil inlet fitting on the fuel pump is the reason (see illustration below). A blocked fuel pump oil inlet forces the injection line off the fuel pump brass oil inlet fitting or the oil pump outlet, resulting in oil pumped into the engine and belly pan area.



**NOTE:** The problem can be misdiagnosed as a loose or incorrectly installed injection line. If the line is just reinstalled, it will come off again in a short time.

If this oil leakage is noticed on a unit, inspect the fuel pump for blockage by attaching a hose to the brass oil inlet fitting and blowing through it. If the fitting is blocked, do not replace the fuel pump. Remove and disassemble the fuel pump, and repair the blocked fitting by drilling through it using a 2mm (5/64 in) drill bit. Clean the removed material out of the fuel pump before reassembling and installing it.

### CAUTION:

**Make sure every machine is delivered with the first tank of fuel premixed at a 50:1 fuel/oil ratio as outlined in the Assembly Manual and on the Set-up and Predelivery Checklist for all models.**

**NOTE:** In addition to helping promote proper engine break-in, the use of premix fuel, in this situation, would mean the difference between a simple oil leak and major engine damage from lack of oil.

If you have technical tips you think other dealers could use, let us know. You'll receive credit in the Tech Exchange for the ideas we use, and we'll send you an exclusive Yamaha Tech Exchange hat as our thanks. Send your tips to: Yamaha Motor Corporation, U.S.A., Attn: Tech Exchange, P.O. Box 6555, Cypress, CA 90630

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## Fuel Pump Freezing Due to Moisture in the Diaphragm Vent - 2002 SXViper Models

There have been some reports of a problem with snow or water entering the fuel pump diaphragm vent hole, freezing, and then preventing the diaphragm from pumping fuel. When this occurs, the engine may not start or run properly.

If you have a machine with these symptoms, remove the fuel pump, find the diaphragm vent

hole at the bottom of the pump (see illustration below) and seal the hole using silicone or epoxy. The fuel pump will function normally with the vent hole sealed.

**NOTE:** Recess the sealant so it does not contact the rivet mounted in the frame, below the pump, when reinstalling.

