

**TSB25-1001**

IMPORTANCE: MODERATE

V25 Bypass Orifice Seal O-ring

Technical Service Bulletin

CHEMICAL COMPATIBILITY WITH GASOLINE

SUBJECT

A recent change in the types and amounts of chemical additives used in gasoline blends by some marketers has resulted in material swelling of the bypass orifice seal o-ring in model V25 vane pumps. Diesel pumping applications are not affected.

SYMPTOM

In some instances, with gasoline pumping applications the bypass o-ring may swell and unseat from the poppet valve. This results in priming issues. This issue has been isolated to gasoline applications only and the effects vary dependent upon additives used in the gasoline blend.

Note: The o-ring is a UL recognized component that is listed by UL as compatible with gasoline and ethanol blends of gasoline.

MODELS AFFECTED

V25 series transfer pumps manufactured within the following date range may be affected.

V25: November 2020 – June 13, 2025

REMEDY

Replace the orifice seal o-ring on the bypass poppet using the new o-ring kit, Item# 171500-09. GPI has selected a replacement o-ring manufactured from an enhanced compound which is stable in a wider range of gasoline blends.

REPAIR OPTIONS

Repair on site:

Contact GPI and request a replacement bypass poppet seal kit for your pump.

Part No. - 171500-09 KIT, POPPET ASSEMBLY SEALS, V25-V20

GPI will provide the repair part to customers at no charge.

Estimated time to perform repair is 5 minutes.

Repair by Factory:

Contact GPI and request a Return Material Authorization (RMA) to return the pump to the factory for repair. GPI will provide shipping arrangements for return of the pump to the factory. GPI will repair and return the pump to the customer at no charge.

REPAIR GUIDE

RECOMMENDED TOOLS AND SUPPLIES

Safety Glasses
Nitrile Gloves
Absorbent Cloth
10mm Hex Wrench

Instructions on page 2

⚠ DANGER

Always disconnect power before repairing or servicing. Never apply electrical power to the system when any of the cover-plates are removed.

⚠ WARNING

Avoid prolonged skin contact with petroleum fuels use protective goggles, gloves and aprons in case of splashing or spills. Change saturated clothing and wash skin promptly with soap and water

⚠ WARNING

Smoking, open flames, fires, and open ignition sources are prohibited in the vicinity of this product.



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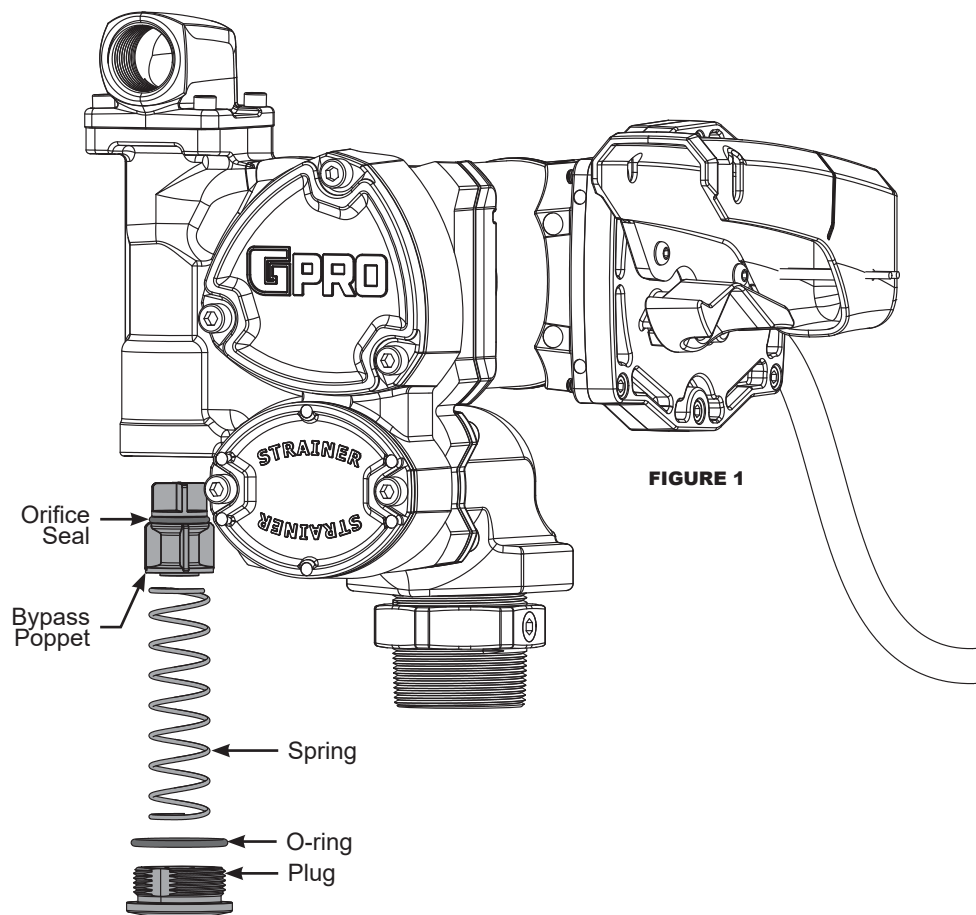
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REPLACE BYPASS POPPET

1. Turn the pump OFF and disconnect from power.
2. Place cloth or container below bypass plug to collect fuel from pump cavity. With a 10mm hex wrench, remove the bypass plug from the pump. Remove the bypass poppet spring, bypass poppet, and bypass orifice o-ring assembly. (see Figure 1).
3. Inspect the orifice o-ring and replace as necessary. NOTE: Replace o-ring if damaged, swollen or loose fitting.
4. Inspect pump cavity for any debris and using a clean cloth wipe clean. Wipe the poppet components clean.
5. Install new orifice o-ring on poppet. Insure that o-ring is seated in groove on poppet and that the o-ring is not twisted. Coat orifice o-ring and bypass plug o-ring with light grease.
6. Install poppet o-ring assembly, spring and bypass plug. Secure plug using 10mm hex wrench.



Maintenance Video:
GPRO V25 How to Service or
Replace Bypass Poppet

