



FUEL PUMP REPAIR KIT P/N 5004618 INSTALLATION INSTRUCTIONS

For installation of Fuel Pump Repair Kit used on *Johnson*® 2002 (SN) and newer 55 HP Military outboard models.

For safety reasons, this kit must be installed by an authorized *Evinrude/Johnson* dealer. These installation instructions contain information that can help prevent personal injury and damage to equipment. Understand the following symbols before proceeding:

DANGER

Indicates an imminently hazardous situation which, if not avoided, WILL result in death or serious injury.

Indicates a potentially hazardous situation which, if not avoided, CAN result in severe injury or death.

⚠ CAUTION ⚠

Indicates a potentially hazardous situation which, if not avoided, MAY result in minor or moderate personal injury or property damage. It also may be used to alert against unsafe practices.

TO THE OWNER

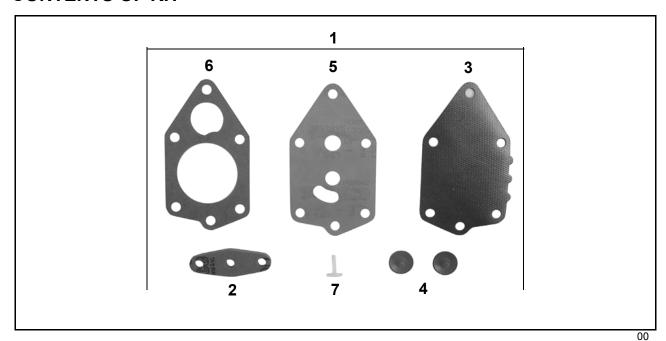
The assembly procedures outlined in this sheet should be performed by a skilled technician. If you have questions, see your dealer. Save these instructions in your owner's kit. This sheet contains information important to the future use and maintenance of your engine.

TO THE INSTALLER

Give this sheet to the owner. Advise the owner of any special operation or maintenance information contained in the instructions. This kit is designed for specific applicable models only. It is not recommended for units other than those for which it was sold.



CONTENTS OF KIT



Ref	P/N	Name of Part	Qty	Ref	P/N	Name of Part	Qty
1	5004618	FUEL PUMP REPAIR KIT	1	5	N/A	*GASKET, Front cover	1
2	303615	*GASKET, Fuel pump to bypass cover	1	6	N/A	*GASKET, Rear cover	1
3	332678	*DIAPHRAGM	1	7	N/A	*SUPPORT, Air dome spring	1
4	335334	*CHECK VALVE	2				

SAFETY INFORMATION

Before working on any part of the outboard, first read WARNING section below.

<u>MARNING</u> <u>M</u>

Gasoline is extremely flammable and highly explosive under certain conditions. Use caution when working on any part of the fuel system.

Always work in a well ventilated area and wipe off any fuel spillage.

DO NOT smoke and make certain no open flames or ignition sources exist.

After servicing the fuel system, momentarily pressure the fuel system and check for leaks. Failure to check for fuel leakage could allow a leak to go undetected, resulting in fire or explosion.

To prevent accidental starting while servicing, twist and remove all spark plug leads.

Wear safety glasses to avoid personal injury, and set compressed air to less than 25 psi (172 kPa).

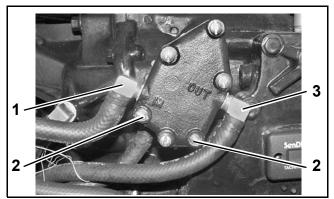
Always disconnect the battery cables at the battery before servicing the fuel system unless instructed to do otherwise.

Do not attempt to run engine with any fuel system component disconnected or removed except as directed. Fuel leakage could contribute to a fire or explosion.

Always check fuel system components for signs of deterioration, cuts, cracking, or abrasion. Replace with specified parts

Removal

Avoiding damage to hoses, remove hose clamps from inlet, outlet and pulse hoses. Remove hoses from fuel pump fittings. Remove two pump mounting screws. Remove and discard filter mounting gasket from behind pump.



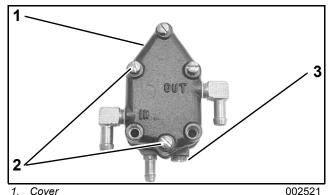
Fuel Inlet

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- 2. Pump mounting screws
- 3. Fuel outlet

Disassembly

Remove remaining four fuel pump housing screws. Separate covers and intermediate housing to allow access to all internal components.



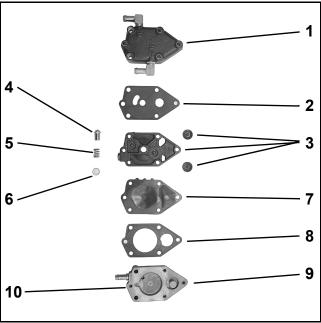
- 2. Housing screws
- Housing plug and O-ring

Cleaning

Clean all housing components with mild aerosol solvent and blow dry. **Do not** dry parts with a cloth as lint could stick to the parts and clog the passages or prevent pump valves from seating. Dissolve hard fuel deposits with *Cleaning Solvent* TM .

Assembly

Identify all components for proper assembly.



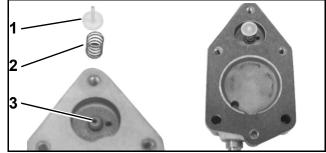
1. Front cover

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- 2. Front cover gasket
- Intermediate housing and check valves
- 4. Diaphragm spring support
- Diaphragm spring
- 6. Diaphragm spring seat
- 7. Diaphragm
- 8. Rear cover gasket
- 9. Air dome spring support and spring
- 10. Rear cover

Assemble fuel pump with new components as follows.

Install air dome spring on rear cover seat. Install air dome spring support with stem in hole in housing. Place gasket on rear cover.



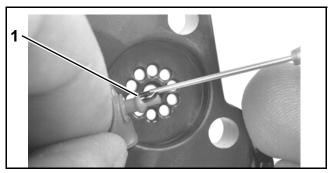
1. Air dome spring support

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- 2. Air dome spring
- 3. Spring seat / stem guide hole

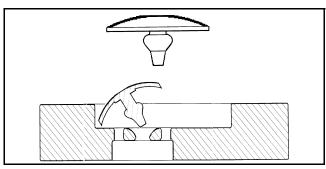
IMPORTANT: Do not use sharp tools to install check valves. Install check valves with care to avoid damage.

Place a drop of outboard engine oil on the stem of each new check valve. Carefully install check valves by pushing valve stem through center hole and pulling stem through on opposite side until barb holds valve secure.



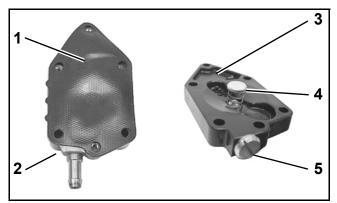
1. Check valve stem (Oiling)

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Using new O-ring, securely tighten intermediate plug to housing. Place diaphragm over rear cover and gasket. Install spring support into intermediate housing aligning hex. Install spring and seat facing diaphragm.



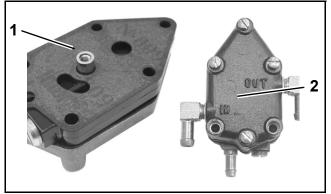
Diaphragm

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- Rear cover
- 3. Intermediate housing
- 4. Diaphragm spring, seat and support assembly
- 5. Cover plug and O-ring

Place front cover gasket and pump front cover on assembly aligning mount holes. Apply Nut $Lock^{TM}$ to threads of screws.

Install four screws and torque 24 to 36 in. lbs. $(2.8 \text{ to } 4.0 \text{ N} \cdot \text{m}).$



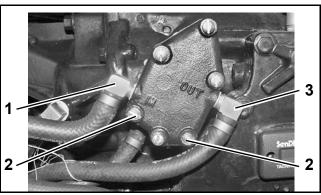
1. Front cover gasket

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2. Front cover

Install pump assembly to crankcase using new mounting gasket and apply *Nut Lock* to threads of both screws. Torque screws 24 to 36 in. lbs. (2.8 to 4.0 N·m).

Secure fuel pump hoses with hose clamps. Use clamp P/N 346786 for fuel inlet and outlet hoses. Use clamp P/N 346931 for crankcase pulse hose to fuel pump hose.



1. Fuel Inlea

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- 2. Pump mounting screws
- 3. Fuel outlet

WARNING



After servicing the fuel system, momentarily pressure the fuel system and check for leaks, repairing as needed. Failure to check for fuel leakage could allow a leak to go undetected, resulting in fire or explosion.

Water test outboard under normal operating conditions to verify proper fuel pump and engine operation.