



**EVINRUDE<sup>®</sup>**  
**Johnson<sup>®</sup>**




**Ficht<sup>®</sup> Fuel Injection Fuel Pump  
and Filter Bracket Kit 60° V4**

**SAFETY**

For safety reasons, this kit must be installed by an authorized *Evinrude* or *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.

 **WARNING**

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.

**IMPORTANT:** Identifies information that will help prevent damage to machinery and appears next to information that controls correct assembly and operation of the product.

**TO THE OWNER**

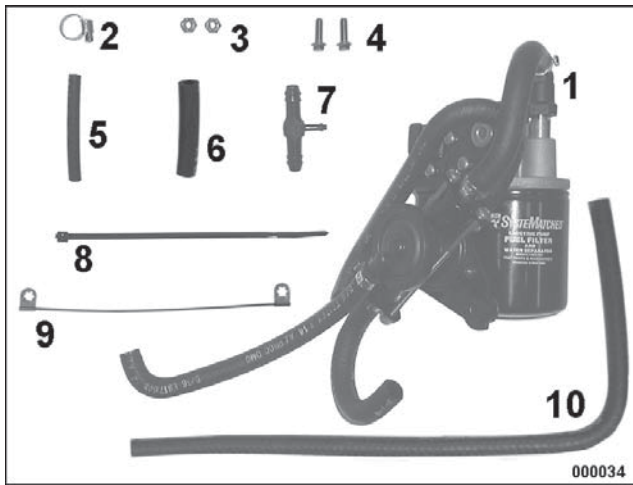
The assembly procedures outlined in this sheet should be performed by a skilled technician. If you have questions, see your DEALER. Save these instructions in your owner's kit. This sheet contains information important to the future use and maintenance of your engine.

**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.

**APPLICATION**

This kit replaces the fuel pump and filter bracket assembly on 1998 - 2001 60° V4 models with Ficht Fuel Injection.



Ref	P/N	Name of Part	Qty
	5004454	Fuel Pump & Filter Bracket Kit	
1		*Fuel Pump & Filter Bracket Assembly	1
2	343765	*Clamp	1
3	313022	*Lock Nut	2
4	332026	*Screw	2
5	772571	*Oil Hose, (Bulk) 5/32 in. - use 3 in. (76.2mm) length	1
6	772565	*Fuel Hose, (Bulk) 3/8 in. - use 3 in. (76.2mm) length	1
7	345701	*Fuel Tee Fitting	1
8	320107	*Tie Strap	7
9	582499	*Ground Lead	1
10	348790	*Fuel Hose, preformed	1

Installation of this kit involves procedures described in the *Service Manual*. Before servicing, review the **Safety** section in the *Service Manual*.



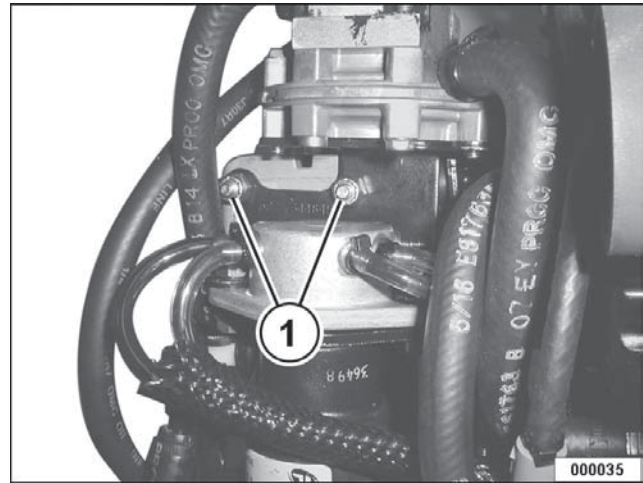
### WARNING

**Disconnect engine battery cables at battery. Before starting any fuel system disassembly, carefully relieve fuel system pressure. Protect against hazardous fuel spray by attaching a suitable device to the fuel manifold test point and slowly release pressure. Have a container available to catch residual fuel.**

**IMPORTANT:** Note position of all hoses and wiring prior to disassembly.

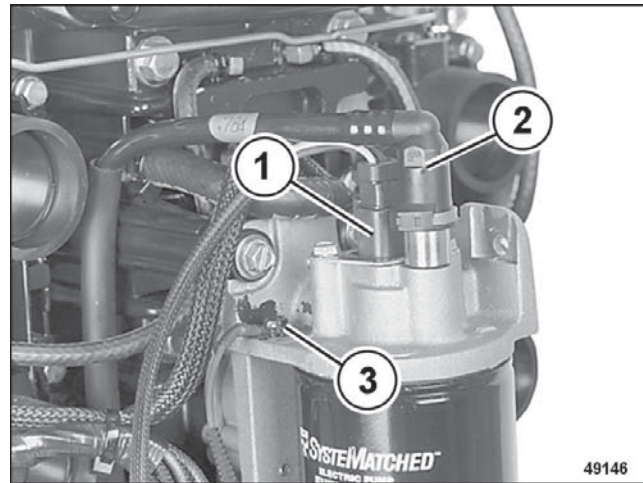
Remove engine covers and air silencer.

Remove and discard screws and lock nuts that fasten oil pump bracket to fuel filter housing. Carefully allow oil pump assembly to hang in place. Do not remove any oil hoses. Oil pump pulse hoses and oil pressure switch lead may be disconnected to ease in disassembly.



1. Mounting screws and lock nuts

Disconnect water-in-fuel sensor connector and fuel filter to vapor separator fuel line connector. Disconnect ground lead on applicable models.

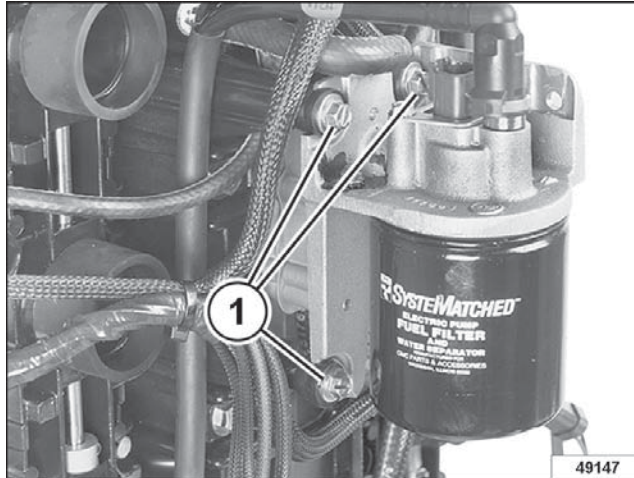


TYPICAL - OIL PUMP ASSEMBLY REMOVED FOR CLARITY

1. Water-in-fuel sensor
2. Fuel line connector
3. Ground lead

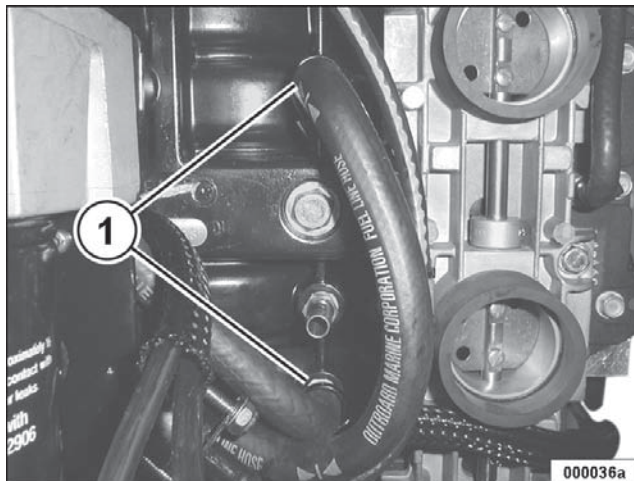
Remove three mounting screws that fasten fuel pump and filter bracket to crankcase. Remove the isolator mount assemblies.

The mounting screws and two isolators will be used with the new fuel pump and filter bracket assembly.



**TYPICAL - OIL PUMP ASSEMBLY REMOVED FOR CLARITY**  
1. Mounting screws and isolators

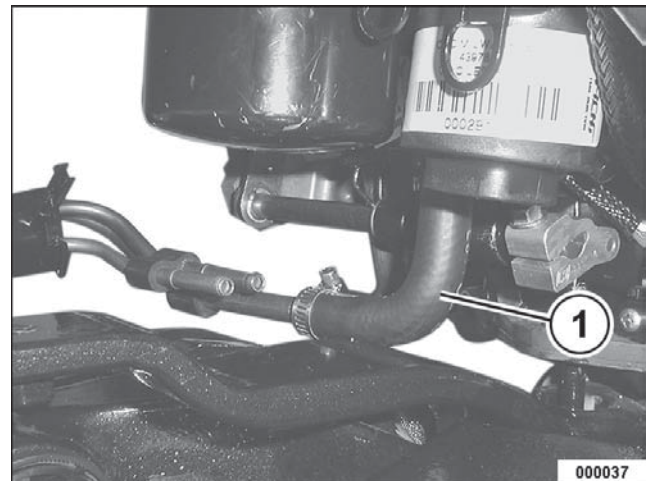
Disconnect fuel pump pulse hoses at crankcase fittings.



**TYPICAL - OIL PUMP ASSEMBLY REMOVED FOR CLARITY**  
1. Upper and lower pulse hose fittings

### 1998-2000 Models

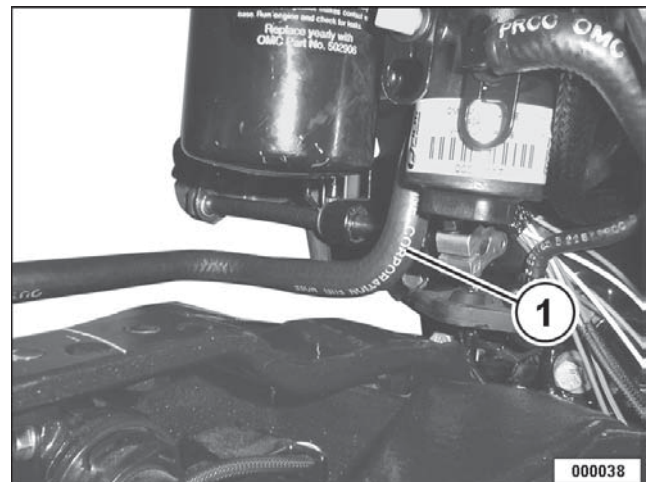
Disconnect fuel pump inlet hose at metal fuel tubing.



**TYPICAL - OIL HOSES REMOVED FOR CLARITY**  
1. Fuel inlet hose

### 2001 Models

Disconnect fuel pump inlet hose from in-line fitting immediately outside lower engine cover.

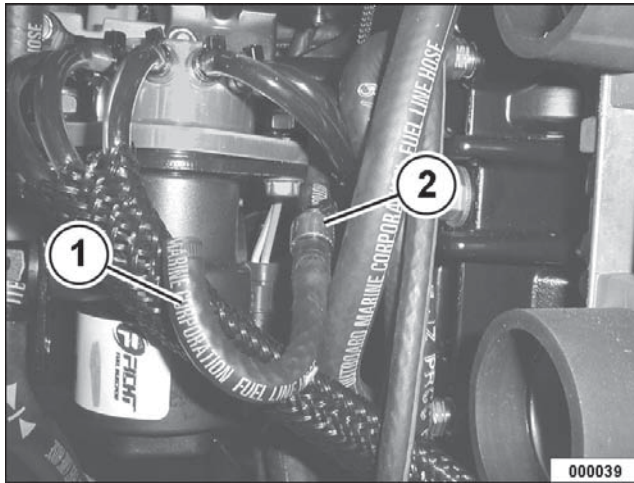


**TYPICAL - OIL HOSES REMOVED FOR CLARITY**  
1. Fuel inlet hose



## All Models

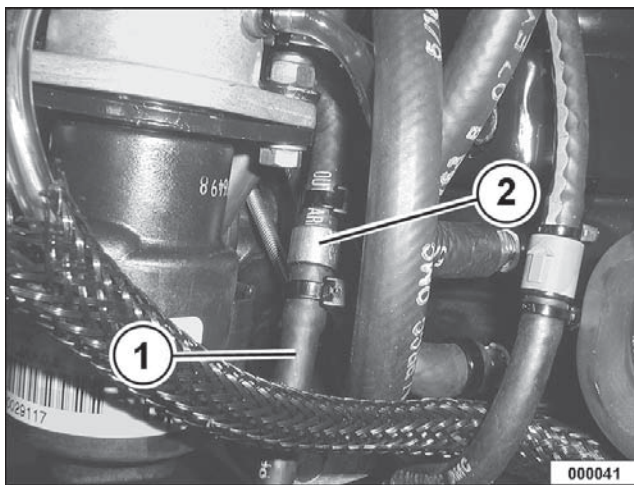
Remove and discard oil hose that connects fuel pump to oil pump check valve.



1. Oil hose
2. Oil pump check valve

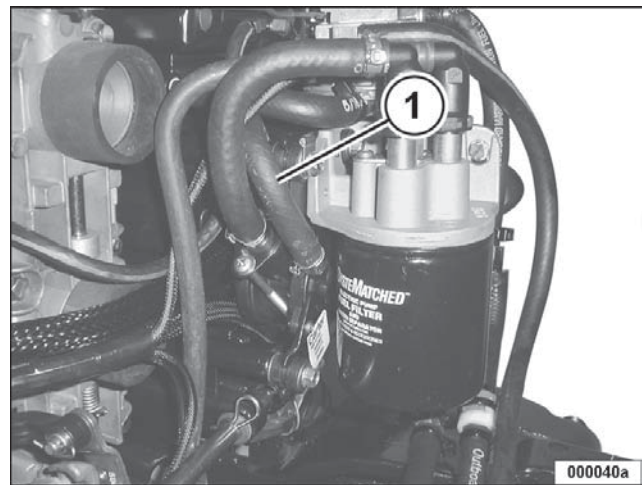
Discard fuel pump and filter bracket assembly.

Connect oil hose **no. 5** to oil check valve outlet and secure with tie strap **no. 8**.

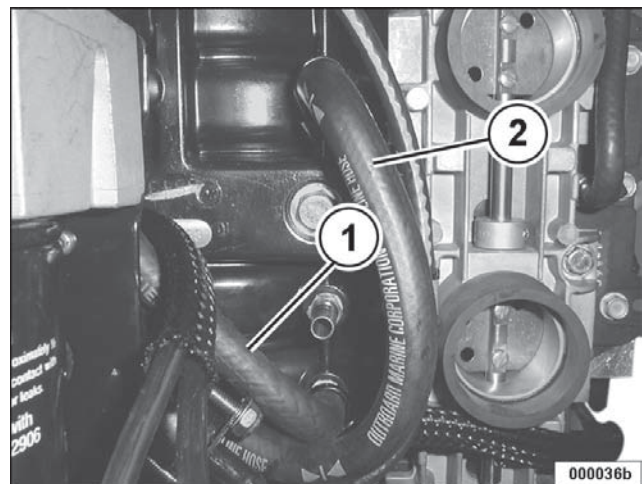


1. Oil hose **no. 5**
2. Oil pump check valve

Images 000040a and 000036b indicate hose routing and connection of new fuel pump **no. 1** pulse hoses. The upper fuel pump pulse hose connects to the lower crankcase pulse fitting. The lower fuel pump pulse hose connects to the upper crankcase pulse fitting. Connect the fuel pump pulse hoses and secure with tie straps **no. 8**.



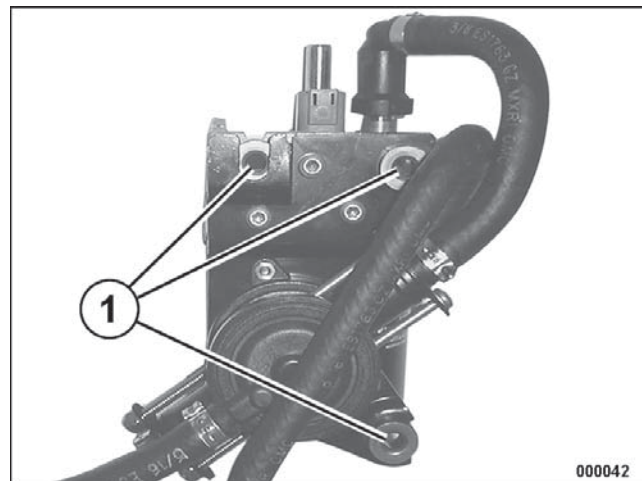
1. Upper pump pulse hose



**TYPICAL - OIL PUMP ASSEMBLY REMOVED FOR CLARITY**

1. Upper pump pulse hose, to cylinder fitting # 4
2. Lower pump pulse hose, to cylinder fitting # 2

Position the two original isolator mount assemblies on the new fuel pump and filter bracket assembly. The new pump and filter bracket assembly includes one new isolator clamped between the brackets.

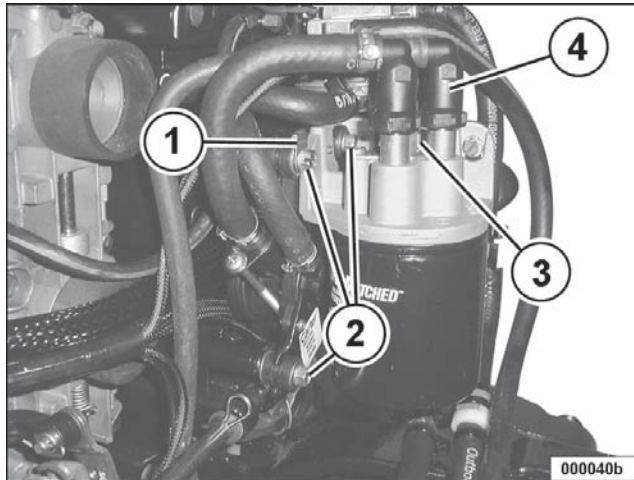


1. Isolator mount assemblies, spacer flanges facing crankcase

Install terminal of ground lead **no. 9** between mounting screw head and washer. Route the unattached terminal of the ground lead behind the top of the fuel filter housing.

Fasten new fuel pump and filter bracket assembly **no. 1** to crankcase using original screws and washers. Clean screw threads using *Cleaning Solvent* and a wire brush. Apply *Locquic Primer* and *Nut Lock™* to threads of mounting screws. Tighten screws to 60-80 in. lbs. (7-9 N•m ).

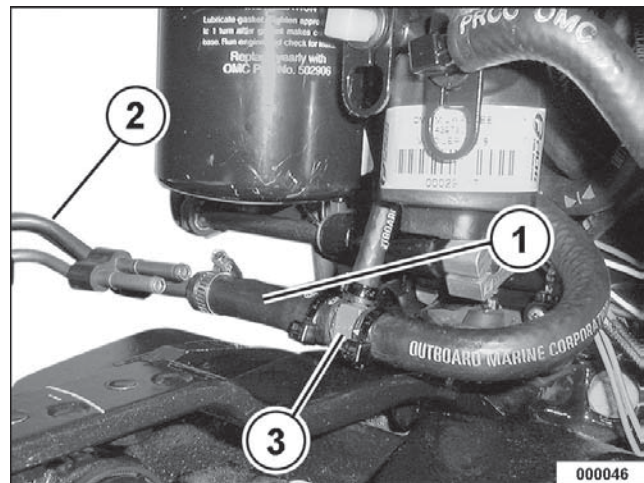
Install water-in-fuel sensor connector and fuel filter to vapor separator fuel line connector.



1. Ground lead **no.9**
2. Mounting screws and washers
3. Water-in-fuel sensor
4. Fuel line connector

### 1998-2000 Models

Connect fuel tee fitting **no.7** between hose **no. 6** and fuel pump inlet hose. Secure hoses with tie straps **no. 8**. Connect oil hose **no. 5** to small barb on fuel tee fitting and secure with tie strap. Use clamp **no. 2** to secure hose **no. 6** to metal fuel inlet tubing.

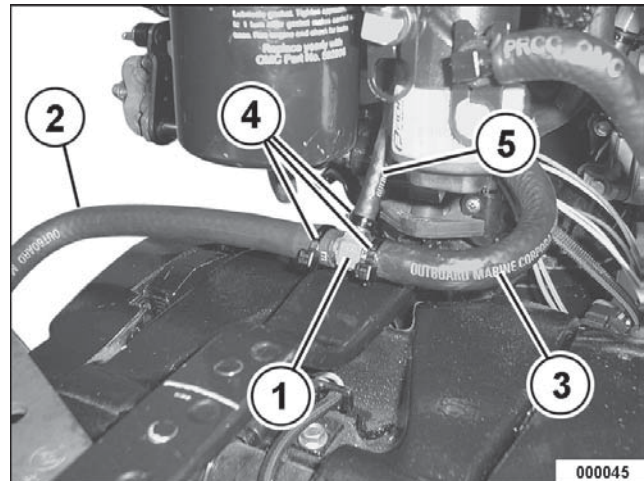


TYPICAL - OIL HOSES REMOVED FOR CLARITY

1. Fuel hose **no.6**
2. Metal fuel tubing
3. Fuel tee fitting **no.7**

### 2001 Models

Connect fuel tee fitting **no. 7** between hose **no. 10** and fuel pump inlet hose. Secure hoses with tie straps **no. 8**. Connect oil hose **no. 5** to small barb on fuel tee fitting and secure with tie strap. Connect fuel hose **no. 10** to fuel supply hose fitting immediately outside lower engine cover, securing with tie strap.



TYPICAL - OIL HOSES REMOVED FOR CLARITY

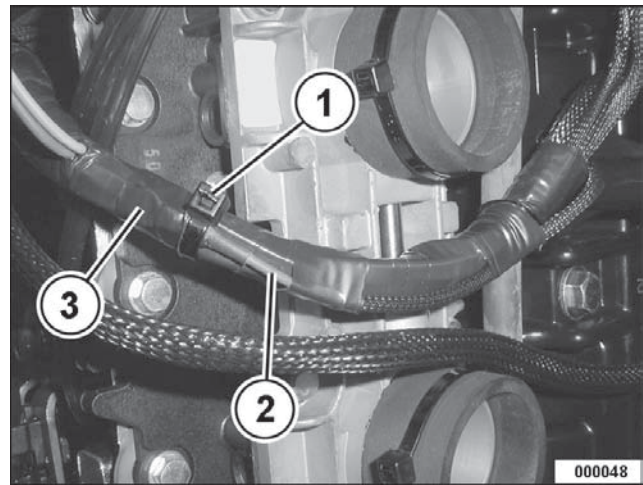
1. Fuel tee fitting **no.7**
2. Fuel supply hose **no.10**
3. Fuel inlet hose
4. Tie straps **no.8**
5. Oil hose **no.5**



## All Models

**IMPORTANT:** Observe proper hose routing to avoid restricting any oil or fuel hose.

Connect oil pump pulse hoses to crankcase fitting if removed during disassembly. Fasten oil pump bracket assembly to fuel pump and filter bracket assembly using two mounting screws **no. 4** and lock nuts **no. 3**. Position unattached terminal of ground lead **no. 9** on mounting screw between lock nut and oil pump assembly bracket. Torque nuts to screws 60-80 in. lbs. (7-9 N•m). Coat lead **no. 9** terminals and screws with *Black Neoprene Dip*.



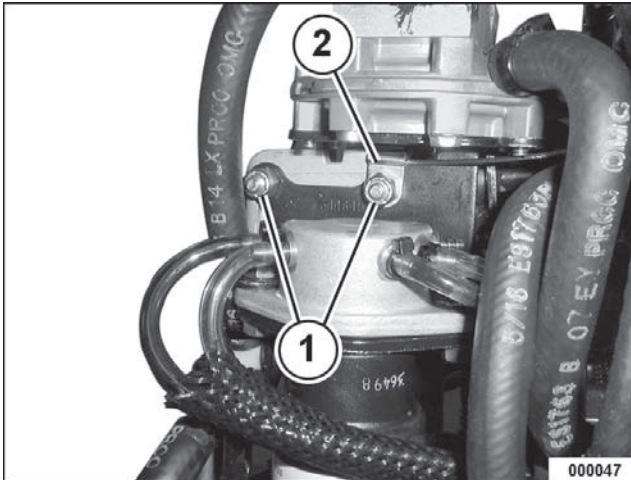
1. Tie strap **no. 8**
2. Ground lead
3. Ground lead terminal end covered by electrical tape

Check all wiring and hoses for proper routing and attachment

Connect battery cables.

Start and operate engine to check for fuel leakage. Repair any leaks.

Install engine covers and air silencer.



1. Screws and lock nuts **no. 3, no. 4**
2. Ground lead **no. 9**

Connect oil pressure switch lead if disconnected during disassembly. Coat terminal end with *Black Neoprene Dip*.

On applicable models use tie strap **no. 8** to secure ground lead disconnected from fuel filter housing. Electrical tape may be used to fasten lead to engine harness. Tape terminal end of lead to prevent corrosion.