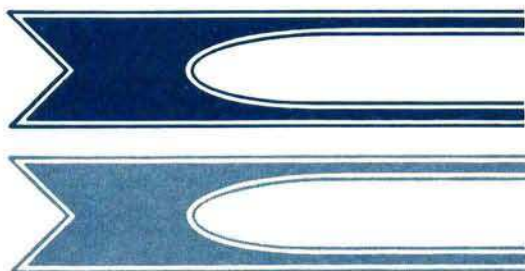


# 1969 EVINRUDE SERVICE MANUAL

**BIG TWIN  
BIG TWIN ELECTRIC  
LARK  
40 HP**



## MODELS

40902 40903  
40952 40953  
40972 40973

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## EVINRUDE OUTBOARD OIL

We recommend using EVINRUDE OUTBOARD OIL.

EVINRUDE OUTBOARD OIL is designed specifically for Evinrude outboard motor use at a 50 to 1 gasoline to oil ratio for engine break in and after break in, new and older models. This improved lubrication is formulated to provide additional benefits such as: exceptional lubrication, less varnish and combustion chamber deposits, better spark plug life, good mixability with gasoline even in cold weather, and reduction of pre-ignition.

### CAUTION

If Evinrude Outboard Motor Oil should not be available, see Oil Instructions Section 2.

USE ONLY THE RECOMMENDED OIL TO GASOLINE MIXTURE, REGARDLESS OF THE CLAIMS MADE FOR SOME LUBRICANTS.



## SPURIOUS PARTS

It is recommended that only genuine factory approved replacement parts be used. Replacement parts not manufactured nor approved by Evinrude Motors, should not be used.

Failure resulting from use of parts inferior to those manufactured or approved by Evinrude Motors, will not be covered under warranty.

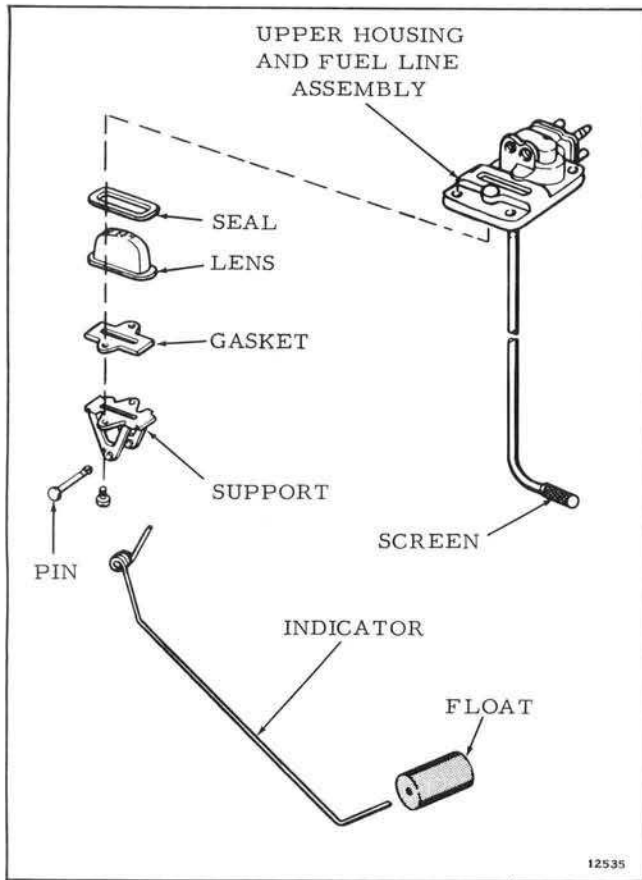


Figure 3-25. Fuel Tank Level

Lift the assembly from the tank carefully to avoid damaging the indicator float or the screen at the end of the fuel line. See Figure 3-25.

Check for free movement of the indicator on the indicator pin. Remove the pin from the indicator support by compressing the free end and pulling it out. Inspect the indicator to make sure that the float arm is not bent and that the float is not damaged or oil-soaked.

Remove the two screws attaching the indicator support to the upper housing. Lift the indicator lens out of the upper housing, and clean it with grease solvent or lacquer thinner to remove any foreign matter which may be clouding the lens. Inspect the lens seal for cracks or shrinkage which may allow leakage. The release valves must seat tightly to prevent gasoline or fumes from leaking out, but must open a clear passage for air to enter the tank and for fuel to be drawn out when the fuel hose is connected. Dirt may keep the release valves from seating properly. The release valves are best cleaned by removing the core plugs and disassembling. Replace valve seats ("O" rings) to assure a tight seal. See Figure 3-26.

The air inlet disc valve must seat tightly to prevent fumes from escaping the tank when the fuel hose is connected, but must allow air to enter the tank. The disc valve spring retainer is staked to the upper housing and may be removed by filing off the burrs if replacement is necessary. Restake with a small punch.

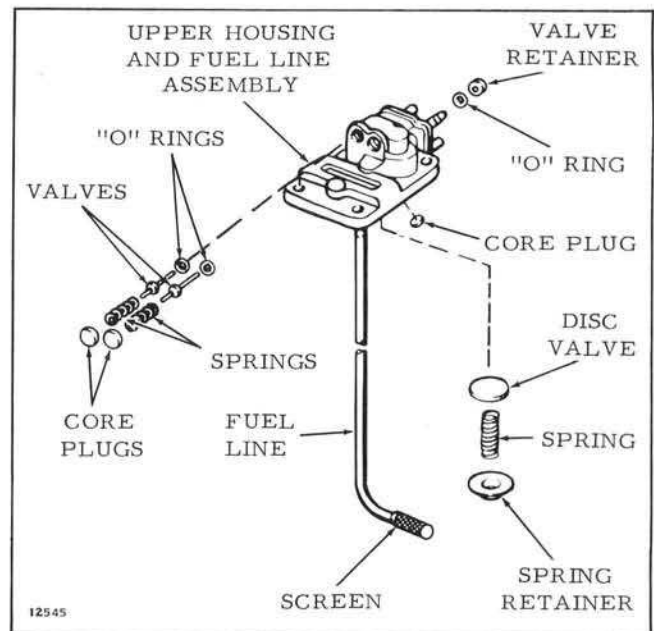


Figure 3-26. Fuel Tank Upper Housing and Valves

#### HOSE AND PRIMER BULB ASSEMBLY

##### CLAMPS

To disassemble hose clamps, grip clamp with pliers. Bend overlapping hook backward (in direction of arrow) to release clamp. See Figure 3-27.

To assemble hose clamps, grip clamp firmly with pliers. Apply slight pressure to hook on top side with screwdriver. Squeeze clamp with pliers until hooks interlock. See Figure 3-28.

##### CONNECTOR HOUSINGS

###### NOTE

If "O" ring is damaged air will enter fuel line and carburetor. Motor will run out of fuel.

Installation of the "O" ring in the fuel hose connectors requires the use of two instruments, one to hold the plunger down and one to remove the "O" ring. Both instruments are illustrated and can be made

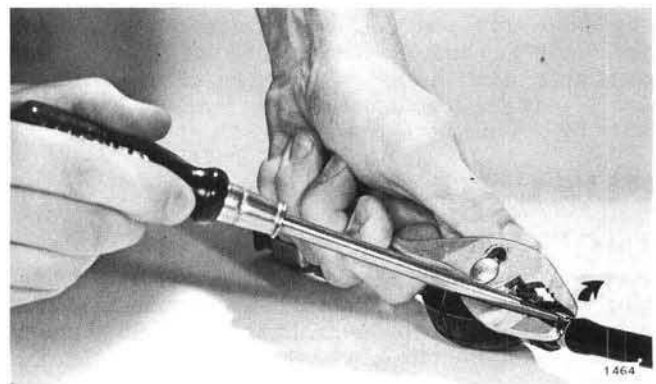


Figure 3-27. Removing Hose Clamp