



Filling Gear Housing with Lubricant

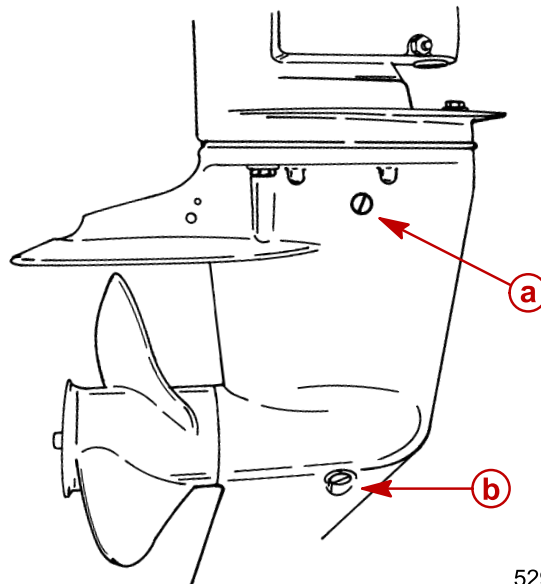
NOTE: Gear housing lubricant capacity – 6.8 oz. (200 ml).

IMPORTANT: DO NOT use automotive grease in the gear housing. Use only Quicksilver Gear Lubricant (92-19007A24)

1. Remove any gasket material from “FILL” and “VENT” screws and housing.
2. Install new gaskets on “FILL” and “VENT” screws.

IMPORTANT: Never apply lubricant to gear housing without first removing “VENT” screw or gear housing cannot be filled because of trapped air. Fill gear housing ONLY when housing is in a vertical position.

3. Slowly fill housing through “FILL” hole until lubricant flows out of “VENT” hole and no air bubbles are present.
4. Reinstall “VENT” screw.
5. Remove grease tube from “FILL” hole and quickly install “FILL” screw.



- a** - Vent Screw
b - Fill Screw

Installation

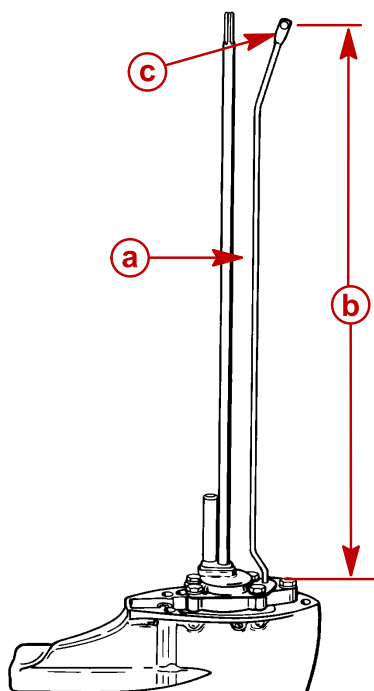
⚠ WARNING

To prevent accidental engine starting, remove (and isolate) spark plug leads from spark plugs. **BEFORE** installing gear housing.

1. Remove (and isolate) spark plug leads from spark plugs.
2. Place shift linkage on engine in FORWARD gear position.
3. Tilt engine to full “up” position.
4. Place gear housing in NEUTRAL. Propeller will rotate freely in either direction when gear housing is in NEUTRAL.



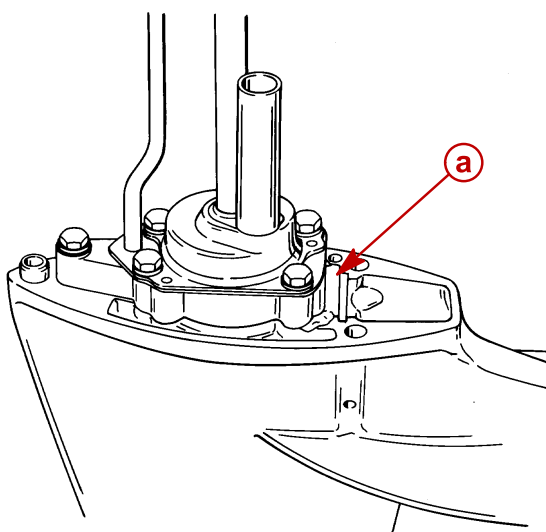
5. Position shift shaft (a) as shown when measuring distance in Step 6.
6. Distance (b) between top of water pump base and center of hole (c) must be as specified below. Turn shift shaft clockwise to decrease distance (b) or counter clockwise to increase distance (b).



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Drive Shaft Length	Distance
Short	16-1/2 in. (419mm)
Long	22 in. (559mm)
Extra Long	27-1/2 in. (698mm)

7. Place gear housing in FORWARD gear. Gear housing will ratchet when propeller shaft is turned clockwise.
8. Apply a 1/4 in. (6.4mm) diameter bead of RTV Sealer on water pump base.

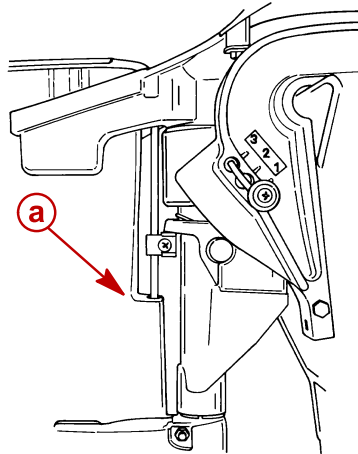


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a - RTV Sealer



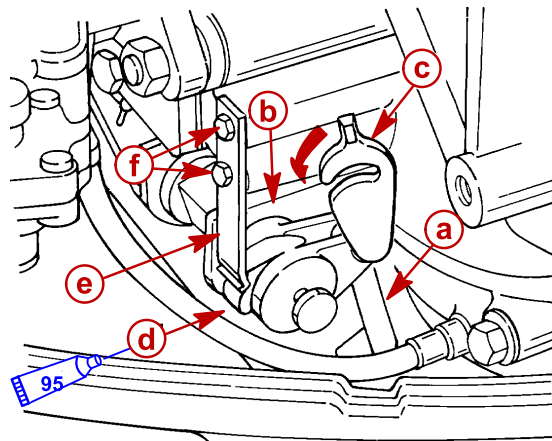
9. Install gear housing as follows:
 - a. Position gear housing so that drive shaft and shift shaft extend into drive shaft housing.
 - b. Move gear housing toward drive shaft housing while keeping mating surfaces parallel.
 - c. Guide shift shaft through hole in mid-section.
 - d. Guide water tube into water tube guide.
 - e. Rotate propeller counterclockwise while pushing upward on gear housing to align drive shaft splines with crankshaft splines.
 - f. Guide end of shift shaft into shift coupling yoke under cowl.



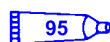
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a - Shift Shaft Hole

10. Secure detent spring to block with 2 bolts. Spring may have slotted holes. Install spring so that it is raised UP and at end of slot travel. Torque bolts to 25 lb. in. (2.8 N·m).
11. Secure end of shift shaft to yoke of horizontal shift shaft with coupler. Rotate coupler until it locks in place.



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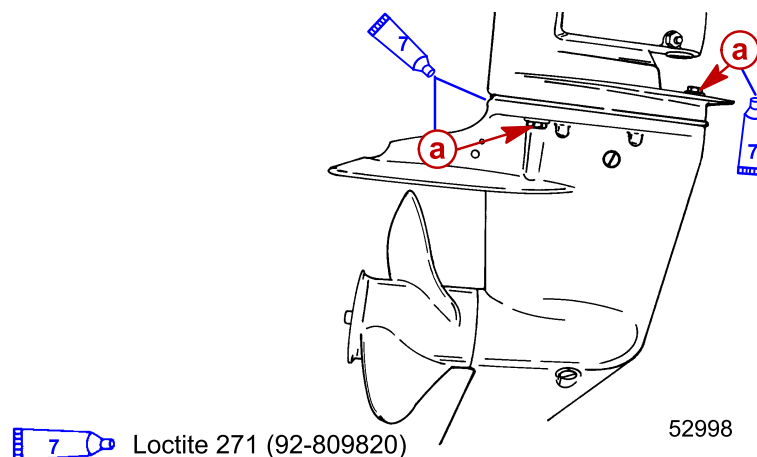


2-4-C With Teflon (92-825407A12)

- a** - Shift Shaft
b - Yoke
c - Coupler
d - Apply 2-4-C w/Teflon
e - Detent Spring
f - Bolts [Torque to 25 lb. in. (2.8 N·m)]



12. Apply Loctite 271 to 3 bolts and torque to 15.0 lb. ft. (20.3 N·m).



Loctite 271 (92-809820)

a - Bolts [Torque to 15.0 lb. ft. (20.3 N·m)]

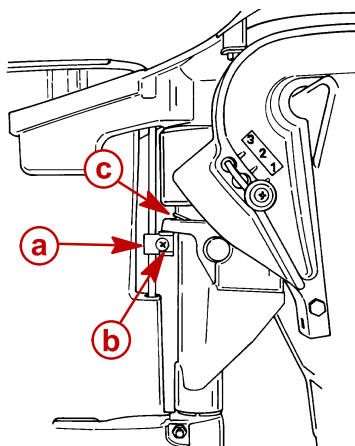
13. Check shift operation as follows:

- Place shift lever in FORWARD. Gear housing should ratchet when propeller shaft is turned clockwise and resistance should be felt when propeller is turned counter-clockwise.
- Place shift lever in NEUTRAL. Resistance should NOT be felt when propeller shaft is rotated in either direction.
- Place shift lever in REVERSE. Resistance should be felt when propeller shaft is rotated in either direction.
- If shift operation is not as described, remove gear housing and recheck distance measurement in Step 6.

14. Place shift lever in NEUTRAL.

15. Install reverse lock actuator loosely on shift shaft.

16. Position reverse lock actuator so that it just contacts reverse lock hook; secure in this position. Torque actuator screw to 45 lb. in. (5.1 N·m). The outboard will now ONLY TILT UP IN FORWARD GEAR. If the operator wishes the outboard to tilt up in FORWARD and NEUTRAL, place shift lever in REVERSE. Install reverse lock actuator loosely on shift shaft. Position actuator so that 0.25 in. (6.4mm) clearance exists between reverse lock hook and actuator. Secure actuator in this position. Torque actuator screw to 45 lb. in. (5.1 N·m).



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a - Reverse Lock Actuator

b - Screw and Locknut [Torque to 45 lb. in. (5.1 N·m)]

c - Reverse Lock Hook