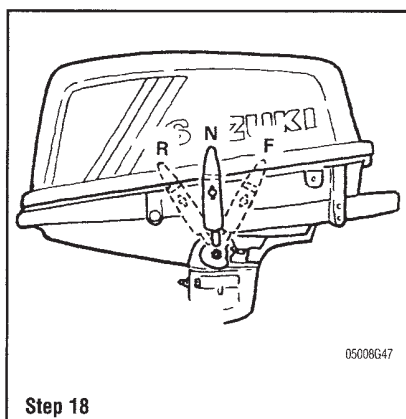
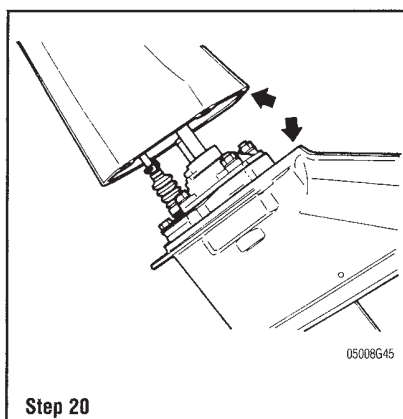
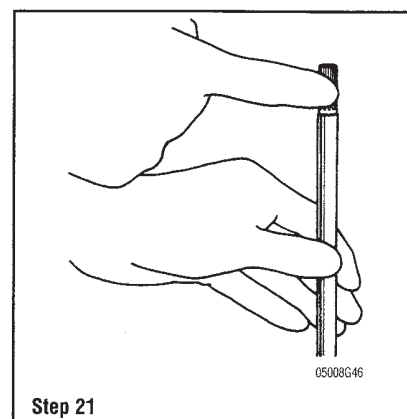




Step 18



Step 20



Step 21

DT9.9 to DT35 and DT40

The gearcase used on these models varies primarily in shape, size and component location. This is a basic procedure that covers all models listed. Your model may vary slightly from the one shown, but has the same basic components and all models listed are serviced in essentially the same way.

1. Remove the engine cover and disconnect the spark plug leads to prevent accidental starting of the engine during lower unit removal.
2. Shift the outboard into **FORWARD**.
3. Remove the propeller.
4. Loosen the clutch rod locknut.
5. Loosen the clutch rod turnbuckle and separate the clutch rod from the shift rod.
6. Remove the bolts and lockwashers securing the gearcase to the driveshaft housing.
7. Carefully separate the gearcase from the driveshaft housing.
8. Install the gearcase in an appropriate holding fixture.
9. Place a suitable container under the gearcase. Remove the vent and drain the lubricant from the unit.

❗ If the lubricant is creamy in color or metallic particles are found, the gearcase must be completely disassembled to determine and correct the cause of the problem.

10. Wipe a small amount of the drained lubricant on a finger and rub the finger and thumb together. Check for the presence of metallic particles in the lubricant. Note the color of the lubricant. A white or creamy color indicates water in the lubricant. Check the drain container for signs of water separation from the lubricant.

*** CAUTION

Do not grease the top of the driveshaft. This may excessively preload the driveshaft and crankshaft when the mounting fasteners are tightened and cause a premature failure of the power head or gearcase.

To install:

11. Pull the lower shift rod upward as far as possible to make sure it is in the **FORWARD** position and lightly lubricate the driveshaft splines with waterproof marine grease.
12. Apply a thin but uniform coat of a silicone sealer to the gearcase and driveshaft housing mating surfaces.
13. Make sure the locating dowels are in place.
14. Position the gearcase under the driveshaft housing.
15. Align the driveshaft splines with the crankshaft, insert the water tube into the water pump case and the water pump seal tube.

❗ On 1989-on models, make sure to connect the clutch rod to the shift shaft with chamfered side of the lower nut facing upward

16. Attach the shift rod into the clutch rod.

*** CAUTION

Do not rotate the flywheel counterclockwise. This can damage the water pump impeller.

17. Seat the gearcase in place, rotating the flywheel clockwise as required until the driveshaft and crankshaft engage.

18. Install the gearcase bolts and lockwashers and tighten to specification.

19. Make sure the engine shift lever is in **FORWARD** and tighten the shift rod connector or upper shift rod turnbuckle. Place the shift lever in **NEUTRAL** and make sure the propeller rotates freely, then shift back into **FORWARD** and make sure the propeller will only rotate clockwise. If the propeller does not rotate as indicated, loosen the shift rod connector or upper shift rod turnbuckle and readjust the position of the connector/turnbuckle or rods as required. When shift pattern is correct, tighten the shift rod connector locknut securely.

20. Install the propeller.

21. Reconnect the spark plug leads and refill the gearcase with proper type and quantity of lubricant.

22. Install the engine cover.

DT55 and DT65

1. Remove the engine cover and disconnect the spark plug leads to prevent accidental starting of the engine during lower unit removal.

2. Place a container under the gearcase. Remove the vent and drain plugs. Drain the lubricant from the unit.

❗ If the lubricant is creamy in color or metallic particles are found, the gearcase must be completely disassembled to determine and correct the cause of the problem.

3. Wipe a small amount of lubricant on a finger and rub the finger and thumb together. Check for the presence of metallic particles in the lubricant. Note the color of the lubricant. A white or creamy color indicates water in the lubricant. Check the drain container for signs of water separation from the lubricant.

4. Remove the propeller as described in this chapter.

5. Place the outboard in **NEUTRAL**.

6. Remove the nut from the clutch shaft.

7. Disconnect the clutch shaft from the clutch rod.

8. Remove the bolts and lockwashers securing the gearcase to the driveshaft housing.

9. Remove the gearcase from the driveshaft housing and mount it in a suitable holding fixture.

*** CAUTION

Do not grease the top of the driveshaft. This may excessively preload the driveshaft and crankshaft when the mounting bolts are tightened and cause a premature failure of the power head or gearcase.

To install:

10. Lightly lubricate the driveshaft splines and the O-ring seal around the driveshaft bearing with waterproof marine grease.

11. Apply a thin but uniform coat of a silicone sealer to the gearcase and driveshaft housing mating surfaces.

12. Make sure the locating dowels are in place.

13. Position the gearcase under the driveshaft housing.

14. Align the driveshaft splines with the crankshaft, insert the water tube into the water pump case and the water pump seal tube.

15. Guide the clutch rod into the clutch shaft.