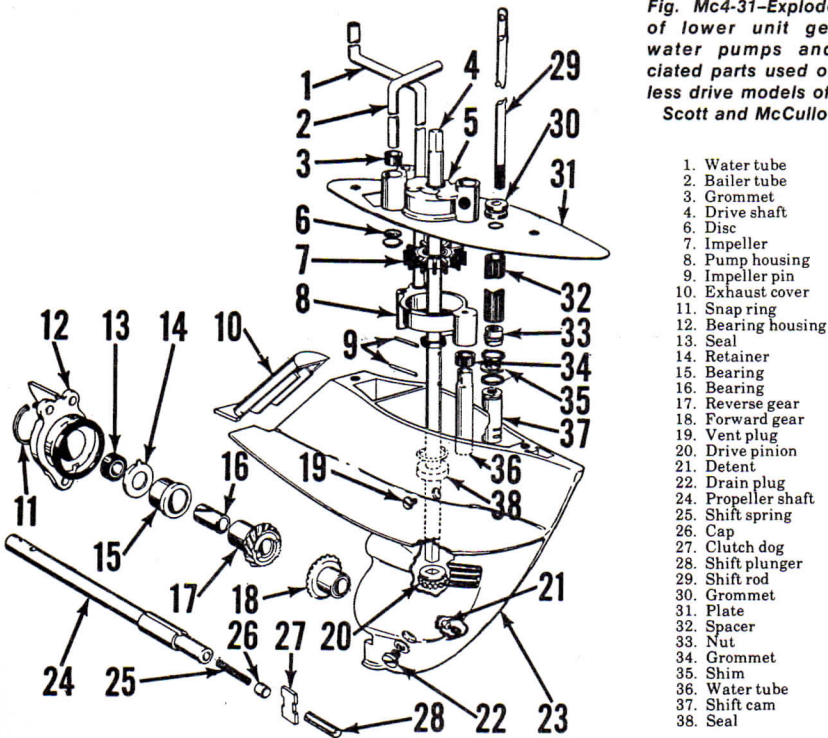


Fig. Mc4-31—Exploded view of lower unit gearcase, water pumps and associated parts used on weedless drive models of Fishing Scott and McCulloch 7.5.



1. Water tube
2. Bailer tube
3. Grommet
4. Drive shaft
5. Disc
6. Impeller
7. Pump housing
8. Impeller pin
9. Exhaust cover
10. Snap ring
11. Seal
12. Retainer
13. Seal
14. Retainer
15. Bearing
16. Bearing
17. Reverse gear
18. Forward gear
19. Vent plug
20. Drive pinion
21. Detent
22. Drain plug
23. Propeller shaft
24. Shift spring
25. Shift rod
26. Cap
27. Clutch dog
28. Shift plunger
29. Shift rod
30. Grommet
31. Plate
32. Spacer
33. Nut
34. Grommet
35. Shim
36. Water tube
37. Shift cam
38. Seal

original clutch dog was 0.500 in width (measured horizontally when clutch dog is in operating position). This dimension was increased to 0.550 to obtain a greater engaging area. The two styles are interchangeable and the new style should be used whenever the unit is disassembled. Part number of the new clutch dog is 70417.

To detach the gearcase housing from the lower unit, first remove the motor

shroud and power head, then detach the lower swivel bracket (21—Fig. Mc4-32) from exhaust housing (4). Disconnect the lower shift rod (29—Fig. Mc4-31) from the actuator (13—Fig. Mc4-32). Remove the two cap screws securing the gearcase housing (23—Fig. Mc4-31) to the exhaust housing and withdraw the unit straight down out of exhaust housing. Cooling system and bailer pumps, and the driveshaft,

pinion and forward gear can be removed and serviced. Refer to WATER PUMP paragraph for details. If shift rod or shift mechanism is removed, pay particular attention to the position of the shift rod (29) with relation to the selector cam (37). When assembling, turn the shift rod into selector cam until it bottoms, then back off until the offset upper end of rod is aligned with cam surfaces of selector as shown at (A—Fig. Mc4-33). Make sure seals (S) are in place. Lock the assembly in position by tightening the locknut (33—Fig. Mc4-31). Detent plunger (21) is retained in housing by selector cam (37) and will be released when cam is removed. Use care not to lose the plunger and spring, and make sure they are correctly installed when reassembling. When the lower unit is assembled, adjust the shift mechanism as outlined in the ADJUSTMENT paragraph.

All McCulloch 9 and McCulloch 7.5 with Standard Drive. Refer to Fig. Mc4-34. To detach the gearcase housing from lower motor casing, remove the two retaining cap screws and withdraw the gearcase and associated parts. Remove the drain and vent plugs and allow lower unit gearcase to drain.

Remove the retaining cap screws and lift off bailer pump housing (37) and impeller (35); remove the upper drive pin (42), then lift off anti-cavitation plate (36) and water pump impeller (35). Remove lower drive pin (42) and lift off water pump housing (34).

Mark the position of actuating notch in shift pin (44) and withdraw the pin and "O" ring seals (43). Inlet water line (45) may also be withdrawn at this time.

Remove the propeller, propeller drive pin and the cap screws retaining bearing cap (1) to gearcase. Twist the

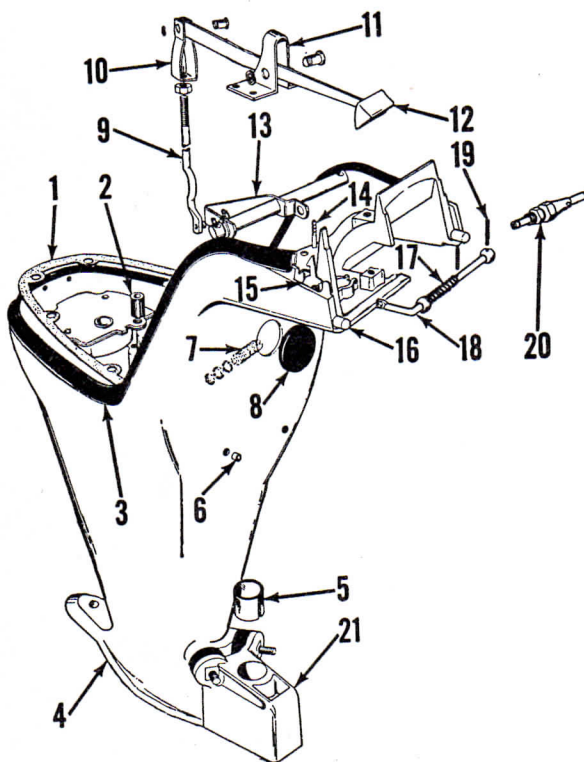


Fig. Mc4-32—Exploded view of lower motor housing used on Fishing Scott and McCulloch 7.5 with weedless drive. Standard drive models are similar except for shift mechanism.

1. Gasket
2. Seal
3. Molding
4. Housing
5. Bushing
6. Drain eyelet
7. Bailer fitting
8. Grommet
9. Shift rod
10. Shift yoke
11. Bracket
12. Shift lever
13. Shift arm
14. Fitting
15. Hood latch
16. Latch release
17. Spring
18. Throttle arm
19. Pin
20. Connector
21. Swivel bracket

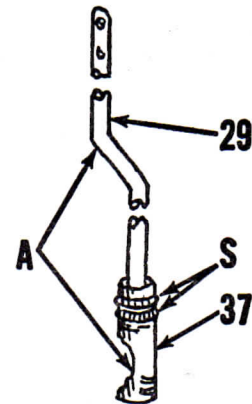


Fig. Mc4-33—Schematic view of shift rod and shift cam used on models with weedless drive. When assembling, offset portion of shift rod (29) must be aligned with flat of cam (37) as shown at (A). Be sure seals (S) are installed.