

Gearbox

If attention to the gearbox is necessary, the assembly sequence shown in the illustration on pages 24 and 25, should be first considered. It will be noted that the gearbox is a separate unit bolted to the crankcase.

DISMANTLING GEARBOX. Commence by removing kickstart lever, gear pedal and indicator. The outer cover, which is secured by one $\frac{1}{2}$ " bolt at forward end and one $\frac{3}{8}$ " nut at top end, can now be taken off. Disconnect clutch cable from operating arm and adjuster. Drain oil into receptacle by means of oil plug, situated below foot change shaft, and remove dipstick. Take out 5 screws and clutch thrust roller; this will allow the removal of outer case (at this stage the kickstart spring is accessible). Withdraw gear pedal shaft (115) and centralizing spring (116) and take-off ratchet spring (117). Remove mainshaft nut (R.H.) and unscrew 5 nuts securing inner cover, remove gasket. Then the inner cover can be tapped gently off the studs (at this point the kickstart pawl and spring (87, 91) are accessible). Remove ratchet (118) and actuating plate (119).

Withdraw layshaft low gear (156) taking particular note of shims located between low gear and kickstart shaft bush. Unscrew selector shaft (122), thus facilitating the removal of the cam segment and spindle (120). Extract selector fork (123), noting angle of selector pin and withdraw layshaft (153) and two remaining gears.

Remove mainshaft. * (149), sliding gear (145), gear indexing plunger (124) and spring (125). Should it be required to remove the final drive sprocket, this can be done by straightening locking washer and unscrewing retaining nut (L.H.) and removing chain from sprocket (this will permit removal of sleeve gear).

* To facilitate the withdrawal of the mainshaft (149) the clutch assembly must be removed from the power unit.

RE-ASSEMBLY OF GEARBOX. Reverse the previously explained procedure, carefully noting the following points:—

1. Be absolutely certain that components are replaced in correct order and position.
2. Check that all joint faces are free from bruises and damage.
3. Gaskets should be renewed to ensure freedom from oil leaks.
4. Smear joint faces with sealing compound.

CARBURETTER COMPONENTS.

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|--|-------------------------------------|
| 1. Air control lever. | 22. Tickler spring. |
| 1a. Adjuster cable. | 23. Washer for jet block. |
| 2. Fixing screw for cap springs. | 24. Throttle stop screw spring. |
| 3. Cap spring for top with adjuster ferrule. | 25. Throttle stop screw. |
| 4. Mixing chamber top cap ring. | 26. Main jet holder washer. |
| 5. Mixing chamber top (std). | 27. Needle jet. |
| 6. Air valve guide. | 28. Main jet (specify size). |
| 7. Taper needle. | 29. Main jet cover nut. |
| 8. Air valve spring. | 30. Main jet complete. |
| 9. Throttle valve spring. | 31. Float spindle bush. |
| 10. Air valve. | 32. Float spindle cover joint. |
| 11. Needle clip. | 33. Float chamber cover. |
| 12. Throttle valve (specify cutaway). | 34. Float chamber cover screws. |
| 13. Banjo bolt. | 35. Float hinge spindle. |
| 14. Banjo bolt washer. | 36. Air adjusting screw spring. |
| 15. Banjo single. | 37. Locating peg for jet block. |
| 16. Filter gauze. | 38. Air adjusting screw. |
| 17. Banjo washer. | 39. Pilot jet. |
| 18. Needle seating. | 40. Pilot jet cover nut. |
| 19. Float needle. | 41. Pilot jet cover nut washer. |
| 20. Tickler body. | 42. Jet block $\frac{1}{8}$ " bore. |
| 21. Tickler. | 43. Jet block $\frac{1}{8}$ " bore. |
| | 44. Mixing chamber body, type 375. |

Carburettor

AMAL MONOBLOC TYPE 375/37

