

Removal and Installation of Engine

Type 220

Operation No.
M 1

Note: The engine is removed with transmission flanged on. Before this is done, remove radiator with grille.

Procedure:

1. Place protective covers on fenders and remove upper part of hood.
2. Drain cooling water. Watch out for additives (antifreeze)!
3. Remove side parts of hood after loosening front fastening at radiator grille and rear fastening at fire wall.
4. Take out right and left rubber hose of heating system.
5. Unscrew radiator stay and unhook cable for hood latch.
6. Take off water hoses at manifold bottom, thermostat and cooling water outlet. Disconnect return line from heat exchangers.
7. Remove radiator core with grille by loosening lower fastening screw and side screws at fenders.
8. Disconnect these electric cables:
Positive cable at battery
Battery cable at starter
Ground cable at starter flange
Cable at ignition coil
Cable at generator
9. Loosen fuel line at fuel pump.
10. Screw out remote-reading thermometer at cylinder head.
11. Loosen Bowden cable for octane value selector at distributor support.
12. Unscrew line for oil pressure gauge from oil filter.
13. Unscrew vent line at cylinder head cover. Remove intake silencer.
14. Unhook accelerator pedal linkage and starter cable at carburetor.
15. Take out front seats and remove transmission tunnel.
16. Unhook selector and shifter linkage at bearing body for steering column gear shift and at transmission cover.
17. Disconnect clutch linkage from throwout lever after return spring has been unhooked. Disconnect intermediate hose of central lubricating system between throwout bearing and oil distributor. Remove longitudinal engine strut.
18. Disconnect propeller shaft from transmission. Loosen speedometer shaft and unscrew exhaust strut.
19. Pass a rope around the engine and tension it.
20. Loosen right and left front engine suspension and rear suspension at transmission. Lift out engine to the front.
21. For installing the engine, reverse the removal procedure giving the following points your attention:
 - a) Before installing the longitudinal engine strut, make sure that engine and exhaust system can vibrate easily and freely.
 - b) Check adjustment of clutch pedal (free travel) and correct, if necessary.
 - c) Check adjustment of steering column gear shift and correct, if necessary.
 - d) Fill in cooling water, and vent right and left heat exchanger.
22. Let engine run and check all connections for correct seat, tightness and proper functioning.