

# Engine Removal

## GENERAL MOTORS

### 6 CYLINDER ENGINES

#### "C", "K", & "P" MODELS

1) Disconnect battery cables and drain cooling system, then remove air cleaner. Remove hood and engine compartment cover ("P" models only). Disconnect radiator hoses, transmission cooler lines (if equipped) and remove radiator and shroud from vehicle. Remove battery from vehicle on "P" models.

2) Disconnect wiring, lines, linkage and hoses from engine. Raise vehicle and remove starter, flywheel or converter splash shield and exhaust pipe from manifold. If equipped with automatic transmission, remove converter-to-flex plate bolts.

**NOTE** — On "K" models, remove strut rods at motor mounts.

3) Remove clutch housing to engine retaining bolts and support transmission with chain. Lower vehicle and attach lifting device. Remove engine.

#### "G" MODELS

1) Disconnect battery and drain cooling system. Remove engine cover and air cleaner. Disconnect accelerator linkage from carburetor and remove carburetor. Remove grille and crossbrace. Remove windshield washer jar and disconnect radiator hoses. If equipped with automatic transmission, remove oil cooler lines and remove radiator.

**NOTE** — If equipped with air conditioning, remove A/C compressor, vacuum reservoir and swing condenser out of way.

2) Remove all hoses, wiring, linkage and lines from engine. Raise vehicle, drain crankcase and remove propeller shaft. Remove exhaust pipe at manifold and linkage from transmission. Remove speedometer cable and engine mount bolts.

**NOTE** — If equipped with manual transmission, disconnect clutch linkage and remove clutch cross shaft.

3) Lower vehicle and attach lifting device. Raise engine slightly to remove right hand motor mount. Remove engine with transmission.

### V8 ENGINES

#### "C", "K", & "P" MODELS

1) Disconnect battery ground cable and drain cooling system. Remove hood, air cleaner and accessory drive belts and pulleys. Disconnect all hoses, lines, linkage and wiring from engine. If equipped with A/C, remove compressor and lay aside.

2) Disconnect transmission oil cooler lines (if equipped) and remove radiator with shroud. If equipped with power steering, remove pump and lay aside. Raise vehicle and drain crankcase.

**NOTE** — On "K" models with automatic transmission, remove strut rod at motor mounts.

3) Disconnect tail pipe from exhaust manifold. Remove flywheel or converter cover. Remove starter and wiring along right pan rail. Remove gas gauge wiring. If equipped with automatic transmission, remove converter-to-flex plate attaching bolts.

4) Support transmission and remove clutch housing-to-engine bolts. Remove lower engine mount bracket-to-frame bolts. Lower vehicle and attach lifting device. Remove engine.

#### "G" MODELS

1) Remove battery cable and drain cooling system. Remove grille, upper radiator support and lower grille valance. Disconnect transmission oil cooler lines (if equipped), and radiator hoses. Remove washer jar with bracket and remove radiator. Remove air cleaner, air stove pipe and accelerator cable from carburetor.

2) If equipped with power steering, remove pump and lay aside. Disconnect wiring from firewall connection and remove carburetor. Remove thermostat housing, oil fill pipe and disconnect heater hoses. If equipped with cruise control, remove servo, transducer and bracket.

3) Raise vehicle and drain crankcase. Disconnect tail pipe at manifold. Remove propeller shaft and shift linkage. Disconnect fuel line from pump and speedometer cable. Remove transmission mount bolts and engine mount bracket-to-frame bolts.

4) Remove engine mount through bolts. Raise engine slightly and remove engine mounts. Block up engine with wooden block between oil pan and crossmember. Lower vehicle and install lifting device. Remove engine.

### TIGHTENING SPECIFICATIONS

Application	Ft. Lbs.
Flywheel Housing-to-Engine .....	30
Rear Mount Crossmember-to-Frame .....	25
Rear Mount-to-Crossmember .....	35-45
Transmission Housing-to-Engine .....	30-35
Converter-to-Flywheel .....	30-35
Drive Axle Nut (Motor Home) .....	110
Final Drive-to-Support Bracket .....	105
Final Drive Bracket-to-Engine .....	50
Inner Constant Velocity Joint .....	65
Output Shaft Bracket-to-Engine .....	55
Support Bracket-to-Crossmember .....	50
Support Bracket-to-Transmission .....	35
Venturi Ring-to-Bracket .....	20