

# Engine Removal

## AMERICAN MOTORS

### 4 CYLINDER MODELS

1) Mark hinges for reinstallation and remove hood. Drain cooling system and remove air cleaner. Remove battery negative cable and TAC flexible hose. Disconnect all lines, wires, hoses, cables and linkages from engine.

2) Raise car and support with safety stands. Remove starter motor. Remove exhaust pipe supporting bracket and disconnect exhaust pipe at manifold.

3) Remove clutch housing shield (torque converter screws on models with automatic transmission). Disconnect backup lamp switch wire from switch and remove clips. Disconnect alternator harness, lower radiator hose and heater hose from radiator. On automatic transmission models, disconnect oil cooler lines at flexible hose. Remove all clutch housing screws except top center.

4) Lower car. Remove screw attaching cold air induction manifold to radiator. Move A/C condenser away from radiator. Remove radiator and shroud assembly. Disconnect upper heater hose from heater and secure to engine.

5) Disconnect power steering hoses and transmission filler tube support screws, if so equipped. Attach suitable lifting device to engine and remove engine support cushion nuts on both sides. Lift engine clear of cushion studs. Support transmission and remove center screw from clutch housing. Remove engine.

### 6 CYLINDER MODELS

**NOTE** — On Pacer models, remove engine and transmission as an assembly. On others, remove engine only.

1) Mark hinges for reinstallation and remove hood. Remove air cleaner and battery. Drain cooling system and crankcase. Remove radiator assembly and engine fan. Disconnect all wires, cables, lines, hoses and linkage from engine and transmission.

2) On all models except Pacer, remove TCS switch bracket from block. Remove and plug flexible fuel line from pump. Disconnect engine ground strap and remove right front engine support cushion to bracket screw.

3) Disconnect and remove power steering pump hoses, bracket and pump, if so equipped. Discharge refrigerant from A/C compressor and remove condenser and receiver assembly.

4) Disconnect exhaust pipe at manifold. On Pacer, remove carburetor, valve cover, vibration damper, and oil filter.

5) Lift car and support with stands. Remove starter motor.

6) On Pacer models, support transmission and remove rear crossmember. Disconnect propeller shaft. Attach lifting device to engine and support engine. Remove motor mounts. Lower jack supporting transmission and raise vehicle with jack under front crossmember until front bumper is 3 feet from floor. Support car firmly. Partially remove engine by pulling upward until rear of cylinder head clears cowl. Remove stands and lower vehicle. Remove engine with transmission.

7) On all models except Pacer, remove clutch housing cover springs, and bellcrank (converter housing spacer cover and

converter drive screws with automatic transmission). Place support stands under transmission. Remove screws attaching converter or clutch housing to block. Remove engine carefully.

### V8 MODELS

**NOTE** — Removal procedure is similar for all models. On Pacers, remove engine and transmission as an assembly. On other models, remove engine only.

1) Mark hinges for reinstallation and remove hood, air cleaner and battery. Drain cooling system and crankcase.

2) Remove radiator upper air baffle, radiator assembly and engine fan. Disconnect power steering bracket and position pump to one side without disconnecting hoses.

3) Discharge refrigerant from A/C compressor and remove condenser and receiver assembly. Disconnect all wires, cables, lines, hoses and linkage from engine. Disconnect exhaust pipes at manifold flanges. Proceed to specific model, step 4):

**Pacer Only** — 4) Remove hood and grille assembly and heater housing. Install lifting device to engine and raise vehicle. Disconnect starter motor cable, propeller shaft and cap transmission output shaft.

5) Remove exhaust bracket at rear of transmission, installing lower screw to prevent oil leakage. Loosen engine rear support crossmember nuts, and disconnect support cushion and bracket assemblies from engine block and crossmember.

6) Disconnect steering shaft flexible coupling. Support transmission with floor jack. Remove crossmember nuts, previously loosened. Lift transmission and engine assembly from vehicle.

**All Other Models** — 4) Raise vehicle and remove starter motor. Remove clutch or converter housing cover, torque converter drive screws, and transmission linkage.

5) Remove exhaust support screws, and lower exhaust system. Remove front engine mount screws and upper torque converter or clutch housing screws. Break loose lower screws.

6) Lift car and move support stands to jack pad area. Install lifting device to engine. Raise engine off front supports. Place support stand under converter or clutch housing. Remove remaining converter and clutch housing screws. Lift out engine.

AMERICAN MOTORS	
TIGHTENING SPECIFICATIONS	
Application	Ft. Lbs.
Motor Mount Bracket-to-Engine .....	35
Motor Mount-to-Crossmember .....	37
Motor Mount-to-Bracket .....	33
Crossmember-to-Frame .....	65
Rear Mount Bracket-to-Transmission .....	33
Rear Support Bracket-to-Transmission(4 Cyl.) .....	48
Rear Support Bracket-to-Cushion(4 Cyl.) .....	48
Rear Cushion-to-Crossmember(4 Cyl.) .....	25
Rear Mount-to-Crossmember .....	18
Rear Mount-to-Bracket .....	48
Rear Crossmember-to-Frame .....	30