

Engine Removal

AMERICAN MOTORS

4-CYLINDER MODELS

NOTE — On Concord and Spirit models, engine and transmission are removed as an assembly. On Eagle models, engine is removed separately.

2.5L (151") — 1) On all models, mark hinges for reinstallation and remove hood. Disconnect negative battery cable. Drain cooling system, disconnect upper and lower radiator hoses at radiator. Remove fan shroud and fan. Disconnect transmission oil cooler lines and remove radiator.

2) Remove air cleaner. Remove power steering belt. If not equipped with A/C, disconnect alternator wiring harness. If equipped with A/C, discharge A/C system and disconnect hoses from compressor.

3) Disconnect all electrical wiring, vacuum lines, water hoses, cables and linkages from engine. Remove power steering hoses from gear. Remove engine oil dipstick tube assembly from block.

NOTE — Steps 4) through 8) apply only to Eagle models. For Concord and Spirit models, proceed to step 9).

4) On Eagle models, remove left front axle-to-engine mount bracket attaching bolts. Raise vehicle and support with safety stands. Remove splash shield. Disconnect both half-shafts from front axle. Press half-shafts inward (toward wheels) and secure to frame with wire.

5) Mark and disconnect front drive shaft. Support front axle with suitable jack. Disconnect axle at right tube support and at pinion end of axle. Disconnect vent hose and remove axle. Remove axle support bracket from block. Remove starter.

6) On manual transmission, remove slave cylinder from clutch housing. Position block of wood between transfer case and skid plate. Remove transmission-to-clutch housing bolts.

7) On automatic transmission models, disconnect transmission linkage pivot at converter housing. Remove flywheel/torque converter inspection cover. Remove bolts attaching converter to drive plate. Remove converter housing-to-engine bolts.

8) Disconnect exhaust pipe at manifold. Lower vehicle and remove engine mount bolts. Install lifting device to engine, raise engine slightly and remove left engine mount bracket. Remove engine from vehicle.

9) On Concord and Spirit models, raise vehicle and support with safety stands. Remove engine mount cushion nuts at crossmember and ground cable from left engine cushion bracket at block. Loosen crossmember, lowering slightly, and remove transmission oil cooler lines, speedometer cable, linkage, back-up light switch and (if equipped) neutral safety switch.

10) Remove transmission rear mount and rear crossmember. Remove exhaust pipe-to-manifold bolts and tie exhaust pipe to strut rod bushing with wire. Disconnect catalytic converter support brace at transmission. Mark drive shaft and remove. Lower vehicle.

NOTE — When installing engine, be sure that all reference marks made during removal are aligned. Torque converter-to-drive plate bolt threads must be cleaned and coated with Loctite 271, or equivalent, before installation.

11) Using engine sling connected to rear bracket (attached to cylinder head) and A/C compressor or alternator mounting bracket, raise and remove engine and transmission as an assembly.

6-CYLINDER MODELS

4.2L (258") — 1) Drain radiator. Mark hood hinge location for installation. If equipped, remove engine compartment lamp. Remove hood. Disconnect battery cables at battery. Remove battery from vehicle. Disconnect wires from distributor, ignition coil and alternator.

2) Disconnect oil pressure sender wire connector. Remove vacuum switch bracket from cylinder head cover. Disconnect fuel line at fuel pump. Insert plug in fuel line. Disconnect engine ground strap. Remove right front engine support cushion-to-bracket screw.

3) If equipped with air conditioning, discharge refrigerant from compressor and remove refrigerant hoses at compressor. Remove cable from starter motor. Remove air cleaner assembly. Disconnect all electrical wiring, vacuum lines, cables and linkages from engine.

4) Disconnect upper and lower radiator hoses at radiator. Disconnect heater hoses from rear of intake manifold and thermostat housing. Remove fan shroud screws. Disconnect automatic transmission cooler lines from radiator, if equipped.

5) Remove radiator attaching screws. Remove radiator and fan shroud. Remove fan and fan spacer or Tempatrol fan assembly. Install $\frac{5}{16}$ " x $\frac{1}{2}$ " SAE cap screw through fan pulley into water flange to maintain pulley and water pump alignment.

6) If equipped, remove power brake vacuum check valve from booster. If equipped, remove power steering hoses from steering gear. Remove automatic transmission filler tube bracket screw, if equipped. Raise vehicle on hoist.

7) Remove starter motor. If equipped with automatic transmission, remove converter housing access cover. Mark converter and drive plate for installation reference. Also, remove exhaust pipe support brace from converter housing.

8) If equipped with manual transmission, remove flywheel housing access cover. Remove clutch release bellcrank inner support screws. Disconnect springs and remove clutch release bellcrank. Remove outer bellcrank-to-throwout lever rod bracket retainer. Disconnect back-up light wire harness at dash panel. On all models, remove engine mount cushion-to-bracket screws.

NOTE — Steps 9) and 10) apply only to Eagle models.

9) Support axle assembly. Remove half shaft-to-axle flange bolts. Press half shafts inward (toward wheel). Secure shafts with wire attached to frame sill. Remove bolts from axle bracket at axle tube. Remove bolts from axle bracket at right engine support cushion. Remove axle bracket.

10) Remove bolts from axle bracket at pinion end of axle. Remove bolts at left engine support cushion-to-front axle bracket. Disconnect axle vent hose. Lower axle assembly and remove from vehicle for oil pan clearance.