

CHRYSLER CORP. (Cont.)

Disconnect all electrical wiring and vacuum hoses at engine. Disconnect fuel line at fuel pump and accelerator linkage at carburetor.

2) Attach lifting device to engine and raise vehicle. Support rear of engine on safety stands. Disconnect exhaust pipes at manifold flanges. If equipped with automatic transmission, drain fluid and remove filler tube and cooler lines. If equipped with manual transmission, disconnect clutch linkage and remove clutch shaft. On all vehicles, disconnect speedometer cable and drive shaft. Remove transmission-to-engine bolts, detach rear crossmember and remove transmission. Lower vehicle and remove front engine mounts. Lift engine from vehicle.

Engine Removal

5.2L (318") - 1) Mark hinges for reinstallation and remove hood. Disconnect battery, drain cooling system and remove air cleaner. Disconnect radiator and heater hoses, and remove radiator. If equipped, remove A/C compressor and power steering pump from mounting brackets and position aside, leaving refrigerant lines and/or hoses connected. Disconnect all electrical wiring and vacuum hoses. Disconnect accelerator linkage at carburetor. Remove carburetor.

2) Remove distributor cap and wiring. Remove starter, alternator, charcoal canister, and horns. Disconnect exhaust pipes at manifold flanges. Remove transmission-to-engine bolts and remove inspection cover. Remove flex plate-to-converter bolts

(Mark position of converter flex plate for reassembly). Use "C" clamp to hold torque converter in housing. Disconnect engine from torque converter drive plate. Attach suitable hoist to engine and remove front mount bolts. Lift out engine.

CHRYSLER CORP. TIGHTENING SPECIFICATIONS 4-CYLINDER MODELS

Application	Ft. Lbs.
Motor Mount-to-Engine	
Front	40
Right Side	20
Left Side	40
Motor Mount-to-Frame	
Front	40
Right Side	40
Left Side	40

6-CYLINDER & V8 MODELS

Application	Ft. Lbs.
Motor Mount-to-Engine	65
Motor Mount-to-Bracket Nut	75
Rear Mount-to-Extension	50
Rear Mount-to-Crossmember Nut	50
Rear Crossmember-to-Frame	①30

① - 75 ft. lbs. for V8 Models.

FORD MOTOR CO.

4-CYLINDER MODELS

1.6L (98") - 1) Mark hinges for reinstallation and remove hood. Remove air cleaner, hot air tube, and alternator air tube. Disconnect negative battery cable at battery. Drain cooling system.

2) Remove all fan belts. Disconnect alternator wiring and remove alternator. Disconnect thermactor pump hoses and remove pump. Disconnect upper and lower radiator hoses at engine. Disconnect transmission oil cooler lines at radiator.

3) Disconnect heater return hose at engine. Disconnect all electrical wiring, vacuum hoses and fuel line at engine. Remove fan motor and shroud assembly. Remove radiator. Disconnect heater hose at steel tube. If equipped, remove power steering pump filler tube and plug pump opening.

4) Disconnect throttle kickdown linkage, accelerator cable and bracket at engine. Disconnect fuel evaporation hose at metal tube on left fender. If equipped, disconnect power steering pump from mounting brackets. Remove thermactor pump top rear bracket bolt and install lifting eye.

5) If equipped, remove A/C compressor top bracket mounting bolts. Remove A/C compressor inlet line retaining clip from exhaust manifold. Raise vehicle on hoist. If equipped, secure power steering pump to dash panel. Remove heater tube clamps. Remove starter ground cable.

6) Remove engine ground strap. Remove knee brace at front of starter motor. On manual transaxle, remove roll restrictor. On all models, remove starter motor and knee brace rear section. Disconnect exhaust system at ball inlet connector. On automatic transaxle, remove converter cover and bracket. On manual transaxle, remove flywheel lower dust cover and brackets.

7) On all models, use puller tool (T81P-6312-A or equivalent) and remove crankshaft pulley. On manual transaxle, remove lower timing belt cover bolt. Remove lower clutch housing bolts. On automatic transaxle, remove converter-to-flywheel nuts. Remove lower converter housing bolts.

8) On all models, remove coolant by-pass hose at intake manifold. Remove lower right side engine mount bolt and nut under insulator. If equipped, remove lower A/C compressor mounting bolts. Lower vehicle. Attach suitable lifting sling to engine lifting brackets. Remove right side engine mount insulator through bolt and remove engine mount.

9) If equipped, remove A/C compressor bracket and position A/C compressor aside, leaving refrigerant lines connected. On manual transaxle, remove timing belt cover. Position floor jack under transaxle and support.

NOTE - Before removing engine, separate converter from flywheel, making sure that converter studs are free and clear of flywheel to prevent damage to studs.

10) Remove upper converter housing/clutch housing attaching bolts and remove engine from vehicle, making sure converter studs are free and clear of flywheel.

2.3L (140") - 1) Mark hinges for reinstallation and remove hood. Drain crankcase and cooling system. Remove air cleaner and exhaust manifold shroud. Disconnect all electrical wiring, vacuum hoses and coolant hoses. Remove radiator and fan. If equipped, remove A/C compressor from mounting bracket and position aside, leaving refrigerant lines connected.

2) Disconnect flexible fuel line from fuel tank line and remove starter. Raise vehicle and remove flywheel or converter hous-

Engine Removal

FORD MOTOR CO. (Cont.)

ing upper bolts. Disconnect exhaust pipe at manifold, then right and left engine mounts at underbody bracket. Remove flywheel or converter housing cover.

3) With manual transmission, remove flywheel housing lower bolts. With automatic transmission, disconnect converter from flywheel and remove converter housing lower bolts.

4) Lower vehicle and support transmission on a jack. Attach suitable hoisting tackle to engine lifting brackets and remove engine from vehicle.

6-CYLINDER MODELS

3.3L (200") - 1) Mark hinges for reinstallation and remove hood. Drain crankcase and cooling system. Disconnect battery and remove air cleaner. Disconnect all radiator and heater hoses. Disconnect transmission oil cooler lines and remove radiator. Remove fan, spacer, belt and pulley. Disconnect accelerator linkage, fuel line, all electrical connections and vacuum lines at engine.

NOTE - If engine is equipped with Thermactor system, remove or disconnect all components of system that will interfere with removal of engine.

2) On models equipped with power steering or air conditioning, remove unit from mount and lay aside with hoses attached. Remove starter.

3) On manual transmissions, disconnect the clutch retracting spring. Disconnect clutch equalizer shaft and arm bracket at underbody rail and remove.

4) Raise vehicle and remove flywheel or converter housing upper attaching bolts. Disconnect muffler inlet pipe at exhaust manifold. Disconnect right and left engine mounts at underbody bracket. Remove flywheel or converter housing cover and lower attaching bolts.

5) Lower vehicle and support transmission on a jack. Attach suitable hoisting tackle to engine lifting brackets and remove engine from vehicle.

V8 MODELS

1) Mark hinges for reinstallation and remove hood. Drain crankcase and cooling system. Disconnect battery and alternator ground cables from engine. Remove air cleaner and intake duct assembly. Disconnect all coolant and vacuum hoses, fuel lines and transmission oil cooler lines.

NOTE - If engine is equipped with Thermactor system, remove or disconnect all components of system that will interfere with removal of engine.

2) Remove radiator, fan, spacer, pulley and fan shroud. Position alternator and power steering pump out of way. Isolate A/C compressor and remove from vehicle.

3) Disconnect all wiring and transmission and carburetor linkage. Remove flywheel or converter housing upper bolts, engine-to-body ground straps, and raise vehicle. Remove starter and disconnect exhaust pipes from manifolds.

4) On manual transmission vehicles, remove clutch equalizer bar and any other clutch linkage. Remove lower flywheel housing-to-engine bolts. On vehicles with automatic transmission, remove converter housing cover and disconnect flywheel from converter. Secure converter assembly in housing, and remove lower converter housing-to-engine bolts. Remove engine front support bolts on all models.

5) Lower vehicle and support transmission with floor jack. Attach suitable lifting sling to engine lifting brackets. Lift engine slightly and pull forward and away from transmission. Lift engine out of vehicle.

FORD MOTOR CO. TIGHTENING SPECIFICATIONS

4-CYLINDER MODELS^①

Application	Ft. Lbs.
1.6L (98")	
Right Side	
Motor Mount-to-Engine Bolts	35-40
Motor Mount Bracket-to-Insulator Bolt	60-65
Insulator Through Bolt	65-70
Left Side Rear	
Motor Mount Bracket-to-Transaxle Bolt	30-35
Insulator-to-Bracket Nut	65-70
Insulator Through Bolt	65-70
Left Side Front	
Crossmember Bracket-to-Support Bolt	45-50
Front Support-to-Bracket Bolt	20-25
Roll Restrictor Bracket-to-Engine Nut	25-30
Motor Mount Bracket-to-Transaxle Bolt	30-35
Insulator-to-Bracket Nut	65-70
Insulator Through Bolt	65-70
2.3L (140")	
Motor Mount-to-Engine	35-60
Motor Mount Through Bolt	20-30
Motor Mount Bracket-to-Frame	20-30
Rear Mount-to-Transmission	40-60
Rear Mount-to-Crossmember	30-45
Crossmember-to-Frame	20-30

6-CYLINDER MODELS^①

Application	Ft. Lbs.
Motor Mount Bracket-to-Engine	17-32
Motor Mount Bracket-to-Frame	30-50
Motor Mount-to-Engine Bracket	20-32
Motor Mount-to-Frame Bracket	40-60
Rear Mount-to-Transmission	40-60
Crossmember-to-Frame	20-30

V8 MODELS^①

Application	Ft. Lbs.
Motor Mount-to-Engine	35-60
Motor Mount Through Bolt	
Ford, Mercury, Continental & Mark VI	29-36
Motor Mount-to-Crossmember	
Ford, Mercury, Continental & Mark VI	35-50
All Others	35-60
Rear Mount-to-Transmission	40-60
Rear Mount-to-Crossmember	20-30
Crossmember-to-Frame	20-30

^① - Whenever self-locking fasteners are removed, they must be replaced with new self-locking fasteners.