

FORD MOTOR CO. (Cont.)

FORD MOTOR CO. TIGHTENING SPECIFICATIONS (Cont.)

6 CYLINDER MODELS (Cont.)

Application	Ft. Lbs.
Rear Mount-to-Transmission	
3-Speed Floor Shift	①17-32
All Others	40-60
Rear Mount-to-Crossmember	30-50
Crossmember-to-Frame	20-30

① — Not applicable to 200" engine.

V6 MODELS

Application	Ft. Lbs.
Motor Mount-to-Engine	35-60
Motor Mount Through Bolt	①20-30
Motor Mount Bracket-to-Frame	②20-30
Rear Mount-to-Transmission	40-60
Rear Mount-to-Crossmember	
Pinto & Bobcat	30-45
Mustang II & Capri	20-30
Crossmember-to-Frame	20-30

① — Not applicable to Mustang II & Capri.

② — Left-hand only. Right-hand, 40-50 ft. lbs.

V8 MODELS

Application	Ft. Lbs.
302" & 351" W	
Motor Mount-to-Engine	
Thunderbird, Cougar, LTD II	35-50
All Others	35-60
Motor Mount Bracket-to-Frame	
Mercury & Ford	29-36
Granada, Monarch & Versailles	35-60
Thunderbird, Cougar & LTD II	35-60
Mustang, Capri, Fairmont & Zephyr	40-60
Motor Mount Through Bolt	
Mercury & Ford	29-36
Rear Mount-to-Transmission	40-60
Rear Mount-to-Crossmember	
Thunderbird, Cougar, & LTD II	20-35
Granada, Monarch & Versailles	30-50
Mustang II, Capri, Fairmont & Zephyr	30-50
Ford & Mercury	23-33
Crossmember-to-Frame	20-30
351" M & 400"	
Motor Mount-to-Engine	35-60
Motor Mount Bracket-to-Frame	
Thunderbird, Cougar & LTD II	35-50
Continental Mark V	35-50
Lincoln Continental	40-55
Rear Mount-to-Transmission	40-60
Rear Mount-to-Crossmember	
Thunderbird, Cougar & LTD II	20-35
Lincoln Continental & Mark V	20-35

GENERAL MOTORS

BUICK

V6 & V8 MODELS, EXCEPT RIVIERA

1) Mark hinges for reinstallation and remove hood. Disconnect battery, remove air cleaner and drain cooling system. Remove air conditioning and power steering pump (if equipped). Do not disconnect lines, just position out of way.

2) Remove fan, pulleys and drive belts. Disconnect radiator hoses and remove fan shroud. Disconnect all electrical and vacuum connections at engine. Disconnect fuel line, accelerator cable or linkage at carburetor.

NOTE — On vehicles equipped with 305", 350" or 403" (VIN G, H, K, L, R, & X) engines, remove radiator. On vehicles with 301" (VIN Y & W) engines, disconnect transmission filler tube bracket. DO NOT kink metal vacuum modulator line to transmission.

3) Raise vehicle and position on safety stands. Disconnect exhaust pipes at manifold and remove flywheel or converter housing cover.

Manual Transmissions — Remove manual transmission with engine. Disconnect propeller shaft, shift linkage and clutch equalizer shaft. Remove motor and transmission mount bolts. Lower vehicle and attach suitable hoist to remove engine.

Automatic Transmissions — Scribe mark aligning converter to flex plate for reassembly. Remove bolts holding converter to flywheel. Disconnect cooler, vacuum lines and starter. Remove bell housing and motor mount bolts.

All Models — Lower vehicle and support automatic transmission with jack and wood block. Raise engine until engine and transmission can be separated. Remove engine.

Engine Removal

GENERAL MOTORS (Cont.)

BUICK (Cont.)

V6 & V8 RIVIERA

1) Mark hinges and remove hood. Disconnect battery, drain cooling system, remove cooler lines and radiator. Remove air cleaner, all vacuum lines and electrical connections from engine.

2) Remove air conditioner and power steering pump. Do not disconnect lines, just position out of way. On turbocharged models, disconnect turbo output exhaust pipe from turbocharger assembly.

3) Raise vehicle and support on safety stands. Remove starter, converter cover and converter-to-flywheel bolts. Remove bolts from transmission, motor mounts, and output shaft. Install chain to support final drive, remove engine to final drive bracket, and remove engine.

BUICK

TIGHTENING SPECIFICATIONS

Application	Ft. Lbs.
305" & 350" (VIN G,H,L)	
Motor Mount to Block	30-40
Motor Mount to Frame	25-35
Through Bolt	65-80
All Other Engines	
Motor Mount to Block	60-70
Motor Mount to Frame	25-35
Through Bolt	45-50
Converter Housing to Engine	30-35
Clutch Housing to Engine	25
Rear Mount to Transmission	40-45
Rear Mount to Crossmember	60

CADILLAC

CAUTION — Do not loosen fittings on fuel injection system until pressure is first bled from system by opening Schrader fitting on fuel rail near pressure regulator. When opening fitting, place rags or container near fitting to catch any fuel spillage.

ALL MODELS, EXC. ELDORADO & SEVILLE

1) Remove hood and mark hinges for installation. Disconnect battery, remove air cleaner and inlet resonator assembly, and drain cooling system. Remove retaining screws for each wheel housing strut-to-radiator cover and position struts to side. Remove radiator hoses, radiator cover and fan.

2) Disconnect wiring harness and all electrical connections to engine. Disconnect Cruise Control servo from left cylinder head and brake hose from brake pipe. Disconnect throttle linkage and vapor canister hose. Detach power steering pump and air conditioning compressor without disconnecting hoses and position to one side.

3) Disconnect spark plug wires from right side of engine. Disconnect vacuum lines, heater hoses at right cylinder head. Loosen tie struts and swing to one side. Remove two upper transmission-to-engine bolts.

4) Raise vehicle and position on safety stands. Remove nuts securing front engine mounts to frame. Remove starter, converter inspection cover and bolts securing converter to flex plate. Remove remaining bolts securing engine to transmission. Disconnect exhaust pipes at exhaust manifolds.

5) Disconnect fuel line and vapor return line (if equipped with air conditioning) from fuel pump. Lower vehicle and support transmission with a jack. Move right side lifting bracket to a position so it straddles intake passage for number one cylinder. On engines with fuel injection, install suitable lifting bracket (J-25511). Attach suitable hoist to engine, pull engine forward to separate engine and transmission and remove engine.

ELDORADO

1) Mark hinges for installation and remove hood. Disconnect battery, remove air cleaner and drain cooling system. Remove heater hoses and vacuum lines from engine. Disconnect wiring harness, speedometer and throttle cables, other wiring and ground strap.

2) Raise vehicle and secure on safety stands. Remove exhaust pipe flange bolts and disconnect left exhaust pipe from "Y" pipe. Remove from car. Disconnect transmission shift linkage and fuel lines. Remove drive axle to output shaft bolts on both sides. Remove nuts from engine and transmission mounts. Lower vehicle.

3) Remove fan shroud and radiator hoses, transmission cooler lines, radiator, fan and A/C belt. Move compressor to fender well, disconnect and cap power steering lines. Install suitable lifting bracket (J-25511) and move engine forward and up to clear firewall. Remove engine, transmission, and final drive as a unit.