

FORD MOTOR CO.

4 CYLINDER MODELS

Drain crankcase, remove dipstick and flywheel inspection cover. Disconnect steering shaft flex coupling from rack and pinion, then disconnect rack and pinion from crossmember and move it forward. Remove oil pan bolts and remove oil pan.

6 CYLINDER MODELS

Drain crankcase and remove dipstick. Remove flywheel inspection cover. Remove oil pan bolts, oil pan and gasket.

V6 MODELS

Drain crankcase and cooling system. Remove dipstick and disconnect upper and lower radiator hoses at radiator. Remove fan shroud bolts and slide shroud back over fan. Disconnect battery cable at battery. Raise vehicle and disconnect automatic transmission cooler lines at radiator (if equipped). Disconnect steering gear (and power steering hoses, if equipped) and position out of way. Disconnect stabilizer bar at ends and rotate to provide clearance. Remove splash shield and starter. Remove front engine support nuts. Raise engine and position wood blocks between engine support and frame. Remove oil pan. When installing oil pan, tighten oil pan screws in sequence as shown in Fig. 1.

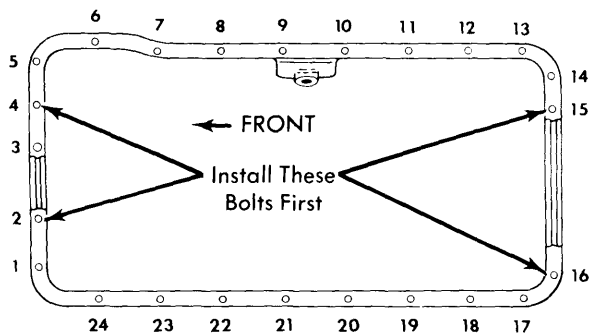


Fig. 1 V6 Oil Pan Tightening Sequence

V8 MODELS

Comet, Maverick, Granada & Monarch W/302" & 351" W — Raise vehicle and position on safety stands. Drain crankcase and remove stabilizer bar. Remove front engine support through bolts and remove support. If equipped with power steering, remove bolt and nut attaching power steering lines to rear side of lower arm. Remove idler arm bracket bolts and pull steering linkage down out of way. Remove oil pan retaining bolts and remove oil pan.

Mustang II W/302" — Disconnect battery cable, remove fan shroud bolts and slide shroud back over fan. Raise vehicle and support on safety stands. Drain crankcase and remove attaching bolts and number 2a crossmember. Remove attaching screw from flex joint to release steering pinion shaft and

remove steering gear from crossmember. Remove bolts securing stabilizer bar to frame and move bar down. Remove starter cable and starter. Remove oil pan.

All Remaining Models W/302" & 351" W — Drain crankcase and remove dipstick. Remove fan shroud bolts and slide shroud back over fan. Raise vehicle and position on safety stands. Remove stabilizer bar and remove front engine support through bolts. Raise engine and place wood blocks between engine support and brackets on frame. If equipped with automatic transmission, disconnect transmission cooler lines at radiator. Remove oil pan bolts and lower oil pan down to crossmember. Remove oil pump pickup tube. Rotate crankshaft for clearance and remove oil pan.

All Models W/351" M & 400" — Drain crankcase and remove dipstick. Remove fan shroud bolts and slide back over fan. Raise vehicle and position on safety stands. Disconnect starter cable and remove starter. Remove stabilizer bolts and lower stabilizer down out of way. Remove front engine support through bolts. Raise engine and place wood blocks between engine support and brackets on frame. If equipped with automatic transmission, position cooler lines out of way. Remove oil pan bolts and remove oil pan.

Mark V W/460" — 1) Disconnect battery, drain crankcase and remove oil filter. Remove shroud bolts and slide shroud back over fan. Disconnect transmission cooler lines at radiator. Raise vehicle and position on safety stands. Remove stabilizer bar end connectors and rotate bar until center is raised. Support engine with a jack and remove front motor mount bolts. Remove bolt attaching oil cooler line bracket to engine.

2) Remove starter motor. Raise engine high enough to remove right motor mount, remove bolts and mount with heat shield. Position 3" wood block between each engine mount and exhaust manifold. Lower engine until it rests on blocks. Remove converter housing to engine support bolts and remove brackets. Remove oil pan bolts and lower pan to number 2 crossmember. Push oil cooler lines upward and remove oil pan.

Continental W/460" — 1) Drain crankcase and disconnect battery. Remove radiator shroud from radiator. Disconnect starter cable and remove starter. Raise vehicle and position on safety stands. Position a floor jack under front of oil pan with a wood block between pan and jack. Raise jack enough to take weight off front motor mounts. Remove both front motor mount through bolts. Remove two front bolts on right mount and loosen rear bolt. Pivot mount up to gain access to converter support bracket bolts.

2) Remove converter support brackets from each side of oil pan. Install a 1" thick wood block under each motor mount support bracket and lower jack. Remove stabilizer bar end connectors and rotate bar until center is raised. Remove oil filter. Remove oil pan screws and remove oil pan.

Oil Pan Removal

FORD MOTOR CO. (Cont.)

All Remaining Models W/460" - 1) Drain crankcase and disconnect battery cable. Remove radiator shroud bolts and slide shroud back over fan. Raise vehicle and position on safety stands. Remove stabilizer bar connecting bolts. Remove two bolts and bushings connecting stabilizer to lower arms and push stabilizer bar forward on struts. Remove both motor mount through bolts. Position a jack and wood block under front edge of oil pan. Raise engine and position 1 1/4" thick wood blocks between motor mounts and brackets. Lower and remove jack.

2) Remove oil filter. Remove oil pan retaining bolts and remove oil pan. It may be necessary to rotate crankshaft to gain clearance between oil pan and crankshaft counterweights.

| FORD MOTOR CO. TIGHTENING SPECIFICATIONS | |
|---|----------|
| Application | Ft. Lbs. |
| Oil Pan Bolts | |
| 4 Cyl Models | |
| 6 mm Bolts | 6-8 |
| 8 mm Bolts | 8-10 |
| 6 Cyl. Models | 7-9 |
| V6 Models | 5-7 |
| V8 Models | |
| 1/4" Bolts | 7-9 |
| 5/16" Bolts | 9-11 |

GENERAL MOTORS

BUICK

V6 MODELS

Raise vehicle and drain crankcase. Remove flywheel inspection cover and exhaust crossover pipe. Remove oil pan retaining screws and remove oil pan.

V8 MODELS

301"

NOTE - The 301" has no inner baffle in the oil pan.

1) Disconnect battery and remove fan and distributor cap. If necessary, remove A/C compressor for clearance. Raise vehicle, drain crankcase, and disconnect exhaust pipes from manifolds. Remove starter and flywheel inspection cover. Position number one cylinder at bottom dead center.

NOTE - Loosen fuel pump to timing cover bolts to permit clearance for lifting tool (J-23515-2).

2) Attach a suitable lifting tool (J-23515) and adapters to engine and crossmember. Raise engine and remove both motor mount through bolts. Remove oil pan bolts, allowing tool to swing freely. Raise engine until oil pan can be removed.

305" & 350" (VIN L)

Raise vehicle and drain crankcase. Remove dipstick and tube. Remove exhaust crossover pipe. Remove converter housing under pan (if equipped). Remove starter brace and inboard bolt. Position starter aside. Remove oil pan bolts and pan.

350" (VIN H & J Exc. Skylark)

1) Disconnect battery. Remove radiator tie bar screws. Remove air cleaner and disconnect accelerator linkage. Raise vehicle and drain crankcase. Disconnect exhaust crossover pipe. Remove lower flywheel housing cover.

2) Remove shift linkage attaching bolt and swing out of way. Remove front engine mounting bolts. Raise engine slowly and remove oil pan bolts and pan.

NOTE - On A/C equipped vehicles, place a support under right side of transmission prior to raising engine. This prevents engine/transmission assembly from cocking to the right.

350" (VIN H & J Skylark Only)

1) Disconnect battery. Remove radiator tie bar screws. Remove air cleaner and disconnect accelerator linkage at intake manifold. Raise vehicle and drain crankcase. Remove lower flywheel housing cover and shift linkage bolt.

2) Disconnect exhaust crossover pipe. Remove motor mount through bolts. Disconnect idler arm at frame and swing assembly downward. Raise engine and remove oil pan bolts and pan.

350" (VIN R) & 403"

1) Align rotor to number one firing position. Disconnect battery cable and remove dipstick. Remove upper radiator support and fan shroud screws. Raise vehicle and drain crankcase. Remove flywheel cover.

2) Disconnect exhaust and crossover pipes. Remove starter and engine mounts from block. Raise engine as far up as possible using a suitable support tool (J-23515) and adapter (J-23515-20). Remove oil pan bolts and pan.

| BUICK TIGHTENING SPECIFICATIONS | |
|------------------------------------|----------|
| Application | Ft. Lbs. |
| Oil Pan Bolts | |
| 301" | 12 |
| 305" & 350" (VIN L) | 6 |
| 350" (VIN R) & 403" | 10 |
| 350" (VIN H & J) | 14 |