

## AMERICAN MOTORS

### 6 CYLINDER MODELS (EXC. PACER)

Disconnect battery cable. Raise vehicle and support on safety stands. Support engine with a suitable hoist. Disconnect steering idler arm at side frame rails. Disconnect front motor mounts at engine brackets. If equipped with sway bar, loosen sway bar link bolt nuts to end of threads. Remove crossmember to frame bolts, pull down on crossmember and position wood blocks between crossmember and frame. Remove right front motor mount bracket from engine. Drain engine oil, remove oil pan bolts and remove oil pan.

### 6 CYLINDER MODELS (PACER)

Drain engine oil and support engine with a suitable hoist. Disconnect steering column flexible coupling and wire column out of way. Raise vehicle and support on safety stands. Remove front motor mount through bolts. Disconnect front brake lines at wheel cylinder and disconnect upper ball joints from spindles. **CAUTION** — Be sure shock absorbers are securely attached. Remove upper control arm and support crossmember with jack. Remove nuts from crossmember rear mounts and swing crossmember forward. Remove starter motor, oil pan bolts and oil pan.

### V8 MODELS

Disconnect battery cable. Raise vehicle and support on safety stands. Support engine with a suitable hoist. Disconnect steering idler arm and sway bar brackets at side frame rails. Disconnect strut rods at lower control arms and engine-to-body ground strap. Disconnect front motor mounts at crossmember and remove crossmember. Remove starter and drain crankcase. Remove oil pan bolts and remove oil pan.

AMERICAN MOTORS	
TIGHTENING SPECIFICATIONS	
Application	Ft. Lbs.
Oil Pan Bolts	
1/4 Bolts .....	7
5/16 Bolts .....	11

## CHRYSLER CORP.

### 6 CYLINDER MODELS

Drain cooling system and disconnect upper and lower radiator hoses. Remove dipstick and radiator shroud screws and place shroud back on engine. Raise vehicle and position on safety stands. Drain crankcase and remove center link from steering arm and idler arm ball joints. Position a jack stand under right front corner of engine oil pan to support engine. **CAUTION** — Do not support engine at crankshaft pulley or vibration damper. Remove front motor mount bolts and raise engine 1 1/2" to 2" with a suitable hoist. Remove oil pan retaining bolts, rotate crankshaft until counterweights clear oil pan and remove oil pan.

### V8 MODELS

Disconnect battery ground cable and remove dipstick. On 360" 4-Bbl. engines, disconnect radiator shroud and place shroud back on engine. Raise vehicle and position on safety stands. Drain crankcase. On 318" and 360" engines with 2-Bbl. carburetors, remove left torque converter housing strut. Remove center link from steering arm and idler arm ball joints. On all except 360" 4-Bbl. engines, disconnect exhaust pipe at manifold. On 400" and 440" engines, remove exhaust pipe and converter dust shield. On 318" and 360" engines, remove pan bolts and place jack under transmission. Remove rear engine mount bolts and raise transmission until rear of oil pan

clears transmission. On 360" 4-Bbl. engines, lower transmission and loosely install rear mount bolts. Loosen front engine mounts and raise front of engine about 1" with a jack under vibration damper. On Fury and Coronet models with 400" and 440" engines, front motor mounts must be disconnected and front of engine raised 1 1/2" to 2". **CAUTION** — Take care that fan doesn't hit shroud. Remove oil pan bolts and remove oil pan. On all other 400" and 440" engines, remove pan bolts and rotate engine as necessary to provide clearance. Lower pan and turn counterclockwise to clear oil screen and remove pan.

CHRYSLER CORP.	
TIGHTENING SPECIFICATIONS	
Application	In. Lbs.
Oil Pan Bolts .....	200

# Oil Pan Removal

## FORD MOTOR CO.

### 4 CYLINDER MODELS

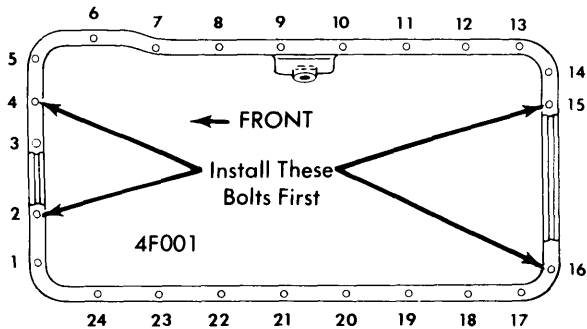
Drain crankcase, remove dipstick and flywheel inspection cover. Disconnect steering shaft flex coupling from rack and pinion, then disconnect rack and pinion from crossmember and move it forward. Remove oil pan bolts and remove oil pan.

### 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 shown in illustration.



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 IV 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