

## FORD MOTOR CO.

### TIGHTENING SPECIFICATIONS

Oil Pan Attaching Bolts	Ft. Lbs.
220" Diesel	
1965-66 .....	15-17
242" & 254" Diesel	
1967-71 .....	22-24
170" & 200"	
1965-72 .....	7-9
240", 300" & 352"	
1965-68 .....	10-12
1969 .....	7-9
1970-74 .....	10-12
289" & 302"	
1966-74	
1/4-20 Bolts .....	7-9
5/16-18 Bolts .....	9-11
360" & 390"	
1968-72 .....	10-12
1973-74 .....	8-10
460"	
1973-74	
1/4-20 Bolts .....	7-9
5/16-18 Bolts .....	9-11

NOTE — Torque specifications for components other than oil pan attaching bolts may be found in Engine Removal Section.

### 4 CYLINDER DIESEL ENGINES

#### 1965-71 220", 242" & 254" "P" MODELS

Raise front of vehicle and position safety stands under chassis. Lower vehicle onto stands, allowing axle and wheels to hang free. Drain crankcase and disconnect exhaust pipe and dipstick tube bracket at exhaust manifold. Remove oil pan attaching bolts, then lower oil pan and exhaust pipe to front axle. Remove dipstick and tube from oil pan. Remove oil pan and gaskets from vehicle.

### 6 CYLINDER ENGINES

#### 1965-72 170" & 200" "E" & "U" MODELS

#### 1965-74 240" & 300" ALL MODELS

1) Drain crankcase and cooling system. Disconnect radiator hoses, transmission oil cooler lines (if equipped) and remove radiator (F-100 and F-350 only). On all other models, remove oil level dipstick, fan, water pump pulley and air deflector shield form below radiator. Disconnect starter cable and remove starter. Remove front support insulator-to-bracket nuts and washers on both sides of engine.

2) Use a suitable jack to raise front of engine and position 2" wood blocks between insulators and brackets (1965-67 "E" and "U" models), or special brackets (T68-E6038-A) between insulators and side rails (1968-72 "E" and "U" models), or 1" wood blocks between insulators and brackets (1965-74 F-100 and F-250 models). Remove crossmember from beneath oil pan if equipped.

3) Lower engine and remove jack. Remove oil pan attaching bolts. Remove inlet tube and screen assembly from pump and lay in bottom of oil pan. Remove oil pan and gaskets.

#### 1965-68 170" "P" MODELS

Drain the crankcase Remove oil level dipstick and transmission housing inspection cover. Remove oil pan attaching bolts. Remove oil pan and gasket.

### V8 ENGINES

#### 1966-74 289" & 302" "U" MODELS

Remove air cleaner, air cleaner duct, oil level dipstick and tube. Drain the crankcase and remove oil pan attaching bolts. Remove oil pan, seals, and gasket from vehicle.

#### 1969-74 302" "E" MODELS

1) Remove bolts securing oil dipstick tube to exhaust manifold and oil pan, then position to one side. Drain crankcase and remove oil filter. Disconnect steering rod end at idler arm. Remove engine front support-to-crossmember nuts and washers on both sides.

2) Position a suitable jack under damper and raise engine. Remove support crossmember to side rail nuts and remove crossmember. Position suitable support tools (T68E-6038-A) to side rails and front engine supports. Secure support tools to side rails and lower jack. Remove oil pan attaching bolts, oil pan and inlet tube.

#### 1965-67 352" "F" & "P" MODELS

1) Raise vehicle and drain crankcase. Disconnect stabilizer bar at connecting links and pull ends down. On F-100 and F-250 models, remove front support insulator to bracket nuts and washers, raise engine using a suitable jack and position a 1" block of wood between insulators and frame crossmember. Remove floor jack.

2) Remove oil pan attaching bolts and lower pan to crossmember. Crank engine to obtain clearance between crankshaft counterweight and rear of oil pan. Remove upper bolt and loosen lower bolt on inlet tube. Position tube and screen to one side and remove oil pan.

#### 1968-74 360" & 390" "F" MODELS

Remove oil level dipstick and tube, then drain crankcase. Remove oil pan attaching bolts and lower oil pan to axle. Position crankcase so counterweight will clear the oil pan. Remove oil pump and inlet tube attaching bolts. Place oil pump, inlet tube screen and intermediate drive shaft in oil pan. Remove oil pan from vehicle.

#### 1970-74 302" "F" MODELS

1) Remove oil level dipstick and bolts attaching fan shroud to radiator. Position shroud over fan. Remove front engine

# Oil Pan Removal

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## FORD MOTOR CO. (Cont.)

support-to-chassis bracket nuts and washers. Disconnect transmission oil cooler lines (if equipped) at radiator.

2) Raise engine using suitable jack and position wood blocks under engine supports. Drain crankcase and remove oil pan attaching bolts. Lower oil pan onto crossmember. Remove bolts attaching oil pump pick up tube, then lower tube and screen assembly into oil pan. Remove oil pan from vehicle.

### 1973-74 460" "F" MODELS

Disconnect battery ground cable. Disconnect radiator shroud and position over fan. Raise vehicle on a hoist and drain crankcase. Remove front motor mount through bolt on both sides of engine and use a suitable floor jack to raise engine enough to insert 1¼" wood blocks between mounts and brackets. Remove oil filter, oil pan attaching bolts and oil pan from vehicle. *NOTE — It may be necessary to rotate crankshaft to provide clearance between pan and crankshaft counterweights.*