

Oil Pan Removal

CHRYSLER CORP.

6-CYLINDER ENGINES

3.7L ENGINE

1) Disconnect battery ground cable. Remove engine oil dipstick. Raise vehicle and drain engine oil.

2) Remove engine-to-transmission strut. Remove torque converter inspection cover plate (if equipped with automatic transmission). Remove oil pan attaching bolts and oil pan.

3) When installing, apply a drop of sealer on 4 corners of rubber seal and cork gasket. California engines require a high temperature left side oil pan gasket.

V8 ENGINES

5.2L & 5.9L ENGINES

1) Disconnect battery ground cable. Remove engine oil dipstick. Raise vehicle and drain engine oil.

2) Remove exhaust crossover pipe. Remove left engine-to-transmission support strut. Remove torque converter inspection cover plate (if equipped with automatic transmission). Remove oil pan attaching bolts and oil pan.

3) When installing, apply a drop of sealer to corners of rubber seal and cork gasket. On 5.9L engines, ensure notches in side gaskets align with corresponding notches in engine block.

NOTE: Torque specifications for components may be found in Engine Removal Section.

FORD

6-CYLINDER ENGINES

"E" MODELS WITH 4.9L ENGINE

1) Remove engine cover, air cleaner and carburetor. If equipped with air conditioning, discharge refrigerant and remove compressor. Remove EGR valve and upper radiator hose. On E-350 models, remove thermactor check valve.

2) Remove fan shroud. If equipped with automatic transmission, remove filler tube. Remove exhaust pipe-to-manifold bolts. Raise vehicle. Disconnect and plug fuel pump inlet line.

3) Remove alternator, splash shield and front engine mount nuts. Disconnect lower radiator hose and transmission cooler lines. Remove power steering return line clip located in front of crossmember.

4) Remove starter and dipstick tube. Raise engine and place 3" blocks under engine mounts. Lower engine and remove jack. Remove oil pan bolts and pickup tube with screen from oil pump. Remove oil pan.

5) When installing, use sealer on pan gaskets. Tighten 3 oil pan-to-front cover bolts last.

"F" MODELS & BRONCO WITH 4.9L ENGINE

1) Drain crankcase and cooling system. Remove radiator. On California vehicles, disconnect hoses to combination air by-pass/air control valve and remove valve.

2) On all vehicles, raise vehicle on hoist and remove starter. Remove front engine mount nuts. Raise front of engine with transmission jack. Place 1" block of wood under engine mounts. Lower engine on blocks and remove jack.

3) Remove oil pan bolts and lower pan to crossmember. Remove oil pump inlet tube bolts and lay tube in bottom of pan. Remove oil pan.

V6 ENGINES

"F" MODELS WITH 3.8L ENGINE

1) Disconnect negative battery cable. Remove air cleaner, fan shroud and engine oil dipstick. Raise vehicle on a hoist. Drain engine oil and remove oil filter.

2) Remove exhaust crossover pipe. Disconnect transmission shift linkage at transmission. Disconnect transmission cooler lines at radiator. Remove engine support nuts.

3) Using a jack, raise engine as high as possible. Place blocks between engine supports and brackets. Lower engine and remove jack. Remove oil pan attaching bolts and oil pan.

4) When installing, apply a 1/8" (3 mm) bead of sealer to front cover-to-block seam, each end of seal at rear main-to-block seam and oil pan rails. As sealer is applied on oil pan rail across front cover area, increase bead width to 1/4" (6 mm).

V8 ENGINES

"E" MODELS WITH 4.2L, 5.0L & 5.8L W ENGINES

1) Disconnect battery and remove engine cover. Remove air cleaner and drain cooling system. If equipped with air conditioning or power steering, remove compressor or power steering pump and position out of way. Disconnect upper radiator hose. Remove fan shroud bolts and oil filler tube. Remove oil dipstick-to-exhaust manifold bolt. Raise vehicle on hoist.

2) Remove splash shield under alternator. Disconnect lower radiator hose and if equipped, disconnect transmission cooler lines at radiator. Remove engine mount nuts. Disconnect fuel line at fuel pump. Drain engine oil and remove dipstick tube from oil pan. Disconnect exhaust pipe from exhaust manifolds.

FORD (Cont.)

3) If equipped, remove automatic transmission dipstick and tube. Disconnect manual linkage at transmission. Remove center drive shaft support and remove drive shaft at transmission. Place transmission jack under oil pan and raise engine 4", measured from front engine mounts. Insert wooden blocks between engine and mounts to support engine.

NOTE: Engine and transmission assembly will pivot around rear engine mount. Engine must remain centered in engine compartment to obtain the required lift.

4) Remove oil pan attaching bolts and lower oil pan. Unbolt oil pump and pickup tube and lay in pan (except on E-100 and E-250 models with 5.8L engine). Remove nut attaching pickup tube to No. 3 bearing cap stud. Remove oil pan.

"F" MODELS & BRONCO WITH 4.2L, 5.0L & 5.8L W ENGINES

1) Remove oil dipstick (on pan entry models only). Remove fan shroud and position over fan. Disconnect engine mounts. On automatic transmission models, disconnect oil cooler line at left side of radiator. Raise engine and place wooden blocks under engine supports.

2) Drain engine oil. Remove oil pan attaching bolts and lower oil pan onto engine crossmember. Remove 2 bolts holding oil pump pickup tube to oil pump. Remove nut attaching oil pickup tube to No. 3 main bearing cap stud. Lower pickup tube and screen assembly into oil pan. Remove oil pan.

"E" MODELS WITH 6.6L ENGINE

1) Disconnect battery and remove engine cover. Remove air cleaner and drain cooling system. Disconnect upper radiator hose and remove fan shroud bolts. Remove oil filler tube and dipstick-to-manifold mounting bolt. Raise vehicle on hoist.

2) Remove splash shield under alternator. If equipped with automatic transmission, remove cooler lines at radiator. Disconnect lower radiator hoses. Disconnect fuel line at pump. Remove engine mount nuts. Drain engine oil and remove oil dipstick tube from oil pan. Disconnect exhaust crossover pipe from exhaust manifolds.

3) If equipped, remove automatic transmission dipstick and filler tube. Disconnect manual linkage at transmission. Remove center drive shaft support and remove driveshaft from transmission.

4) Place a transmission jack and wood block under oil pan. Raise engine 2", measured from front engine mounts. Insert wooden blocks between engine and mounts to support engine.

NOTE: Engine and transmission assembly will pivot around rear engine mount. Engine must remain centered in engine compartment to

achieve required lift. DO NOT raise engine more than 2" or damage to air conditioning main and auxiliary suction lines may result.

5) Remove oil pan attaching bolts and lower oil pan onto crossmember. Unbolt oil pump and pickup tube and lay in oil pan. Remove oil pan.

"F" MODELS WITH 6.6L ENGINES

1) Remove oil dipstick. Remove fan shroud attaching bolts and position shroud over fan. Raise vehicle and drain engine oil. Disconnect starter cable and remove starter.

2) Place a jack under engine and remove engine front support. Place wooden blocks between engine supports and brackets. Remove jack. If vehicle is equipped with automatic transmission, remove oil cooler lines and position out of way. Remove oil pan attaching bolts and remove oil pan.

3) When installing, coat oil pan gasket and block surface with sealer. Oil pan gasket is a 2-piece type.

"E" MODELS WITH 7.5L ENGINE

1) Remove engine cover and air cleaner assembly. Disconnect battery and drain cooling system. Disconnect throttle and transmission linkage at carburetor. Disconnect power brake vacuum line. Disconnect fuel line, choke lines, and air cleaner adapter from carburetor.

2) Disconnect radiator hoses and transmission oil cooler lines. Remove fan assembly, shroud and radiator. Remove power steering pump and position to one side with hoses connected. Remove oil dipstick tube and engine mount attaching bolts. Remove oil filler tube and bracket.

3) If equipped, remove air conditioning lines or rotate them downward at rear of compressor to clear dashboard. Raise vehicle on a hoist. Drain crankcase and remove oil filter. Remove exhaust crossover pipe from exhaust manifolds. Disconnect manual and kickdown linkage from transmission. Remove drive shaft and coupling shaft assembly. Remove transmission tube assembly.

4) Remove dipstick and tube from oil pan. Position a jack under oil pan and raise engine about 4" or until transmission touches floor board. Insert wooden blocks between engine and mounts to support engine.

NOTE: Engine and transmission will pivot around rear engine mount. Engine must remain centered in engine compartment to achieve required lift.

5) Remove oil pan attaching bolts and lower oil pan onto crossmember. Remove oil pump and pickup tube assembly and lay in oil pan. Remove oil pan.

NOTE: Torque specifications for components may be found in Engine Removal Section.

GENERAL MOTORS

4-CYLINDER ENGINES

1) Remove engine. Remove oil pan attaching hardware. Remove oil level gauge guide tube from intake manifold and oil pan. Remove oil pan.

2) When installing, apply a thin coat of sealer to each end of gasket and at seams of rear main and front cover. Align holes of gasket on block and install oil pan.