

GENERAL MOTORS (Cont.)

CHEVROLET (Cont.)

dipstick. Remove upper radiator support and fan shroud attaching screws. Raise vehicle on hoist and drain crankcase.

2) Remove flywheel cover and disconnect exhaust crossover pipes. Remove oil cooler lines at filter base. Remove starter. Remove engine mounts from engine and jack up front of engine using engine support tool (BT-6501 or equivalent). Remove oil pan bolts and remove oil pan.

4.3L (262") Diesel, Celebrity — 1) Install engine support fixture (BT-6603 or J-22825-1, J-22825-45, J-22825-48 or equivalent), to right side of cylinder head as shown in Fig. 1. Raise vehicle on hoist but keep rear slightly lower than front. Install suitable support stands at forward lift points.

2) Drain crankcase. Remove left side steering gear-to-cradle bolt and loosen right side steering gear-to-cradle bolt. Remove front stabilizer bar. Drill through spot weld, located between rear holes at left hand front stabilizer bar mounting point, using a 1/2" drill bit. Remove nuts attaching engine and transaxle to cradle mounts.

3) Disconnect lower left ball joint from knuckle. Place a suitable jack under transaxle oil pan, with block of wood between pan and jack, and raise transaxle until mount studs clear cradle. Remove bolts attaching front crossmember to right side of cradle. Remove bolts from left side body mounts.

4) Remove left and front crossmember assembly. It will be necessary to lower the rear crossmember below the left for removal clearance. Remove flywheel cover and starter assembly. Remove engine mount bracket. Remove oil pan bolts and oil pan.

V8 MODELS

4.4L (267"), 5.0L (305") & 5.7L (350") Exc. Corvette — 1) Disconnect negative battery cable and remove air cleaner. Remove fan shroud. On all models except Camaro, remove cruise control servo bracket (if equipped). Raise vehicle on hoist and drain crankcase.

2) On Camaro models, remove A.I.R. pipe at converter and remove converter hanger bolts. On all other models, remove exhaust crossover pipe at manifold and converter. Remove starter and torque converter inspection cover.

3) Remove motor mount through bolts and raise engine. Remove oil pan bolts. Remove oil pan while turning crankshaft to provide necessary clearance for removal.

5.7L (350") Corvette — Disconnect negative battery cable. Raise vehicle on hoist and drain crankcase. Disconnect idler arm and lower steering linkage. Remove flywheel inspection cover. Remove oil pan bolt and remove oil pan.

5.7L (350") Diesel — 1) Remove oil pump drive and vacuum pump. Disconnect negative battery cables and remove dipstick. Remove upper radiator support and fan shroud attaching screws. Raise vehicle on hoist and drain crankcase. Remove flywheel inspection cover

2) Disconnect exhaust and crossover pipes. Remove oil cooler lines at filter base. Remove starter motor. Remove engine mounts from engine block and raise front of engine. Remove oil pan bolts and remove oil pan.

| CHEVROLET | |
|--|-----------------|
| TIGHTENING SPECIFICATIONS | |
| Application | INCH Lbs. (N•m) |
| Oil Pan | |
| 4-Cylinder | |
| 1.6L (98") | 53 (6) |
| 1.8L (111") Diesel | 60 (7) |
| 1.8L (112") & 2.0L (122") | |
| 6 mm Bolts | 72-108 (8-12) |
| 8 mm Bolts | 156-216 (18-24) |
| 2.5L (151") | |
| Oil Pan Bolts | 53 (6) |
| Timing Cover-to-Oil Pan Bolts | 90 (10) |
| V6 Engines | |
| 2.8L (173") | |
| 6 mm Bolts | 72-108 (8-12) |
| 8 mm Bolts | 168-264 (19-30) |
| 3.8L (229") | |
| 1/4" Bolts | 80 (9) |
| 5/16" Bolts | 165 (19) |
| 3.8L (231") | 168 (19) |
| 4.3L (262") Diesel | 120 (14) |
| V8 Engines | |
| 4.4L (267"), 5.0L (305") & 5.7L (350") | |
| 1/4" Bolts | 80 (9) |
| 5/16" Bolts | 165 (19) |
| 5.7L (350") Diesel | 120 (14) |

OLDSMOBILE

4-CYLINDER MODELS

1.8L (112") — Disconnect negative battery cable at battery. Raise vehicle on hoist and drain crankcase. Remove air conditioning bracket. Remove exhaust pipe and shield at manifold. Remove flywheel inspection cover. Remove oil pan bolts and remove oil pan.

2.5L (151") — 1) Raise vehicle on hoist, disconnect battery and drain crankcase. Remove cradle-to-front motor mount nuts. Disconnect exhaust pipe at manifold and at rear transaxle mount. Disconnect starter and remove flywheel housing inspection cover.

2) Remove upper alternator bracket. Install engine lifting tool (J-22825-40 or equivalent) and raise engine. Remove lower alternator bracket and engine support bracket. Remove oil pan bolts, wiring harness guide, and remove oil pan.

NOTE — Upon reinstallation of oil pan, timing gear cover bolts should be installed last. Cover bolts are installed at an angle and holes align after other pan bolts are snugged.

V6 MODELS

2.8L (173") — Disconnect negative battery cable, raise vehicle on hoist and drain crankcase. Remove flywheel inspection cover and starter. Support engine and remove engine mount-to-engine bolts. Remove oil pan bolts and raise engine. Remove oil pan.

3.0L (181") — Disconnect negative battery cable. Raise vehicle on hoist and drain crankcase. Remove flywheel inspection cover. Remove oil pan bolts and remove oil pan.

3.8L (231") & 4.1L (252") Exc. Toronado — Raise vehicle and support with safety stands. Drain crankcase and remove converter inspection cover. Disconnect exhaust crossover pipe at manifold. Raise engine, remove oil pan bolts and remove oil pan.

3.8L (231") & 4.1L (252") Toronado — 1) Disconnect negative battery cable and remove 1 final drive-to-transmission bolt. Install an engine support fixture and raise vehicle on hoist. Support vehicle with jack stands and lower hoist.