

# Oil Pan Removal

## GENERAL MOTORS

### BUICK

#### 4-CYLINDER MODELS

**1.8L (112") & 2.0L (122")** — 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 and drain crankcase. Remove cradle-to-front motor mount nuts. Disconnect exhaust pipe at manifold and at rear transaxle mount. Disconnect starter and remove transaxle 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 and oil pan.

#### V6 MODELS

**2.8L (173") & 3.0L (181")** — **1)** Disconnect negative battery cable at battery. Raise vehicle on hoist and drain crankcase. Remove transaxle housing inspection cover. Remove starter motor.

**2)** On manual transaxle, remove motor mount nuts and raise engine  $\frac{3}{4}$ ". On all models, remove front cover-to-oil pan and oil pan bolts. Remove oil pan.

**3.8L (231") & 4.1L (252")** — **1)** Disconnect negative battery cable at battery. Remove 1 final drive-to-transmission bolt. Raise vehicle and support with safety stands. Disconnect both frame braces. Disconnect idler arm at frame.

**2)** Disconnect drive axles at output shaft support. Disconnect output shaft support at engine block. Remove remaining final drive-to-transmission bolts. Remove final drive using transmission jack. Remove splash shield and starter motor. Drain crankcase, remove oil pan bolts and oil pan.

**4.3L (262") Diesel, Exc. Century & Skylark** — **1)** Remove oil pump drive and vacuum pump. Disconnect battery cables at battery and remove 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 oil pan.

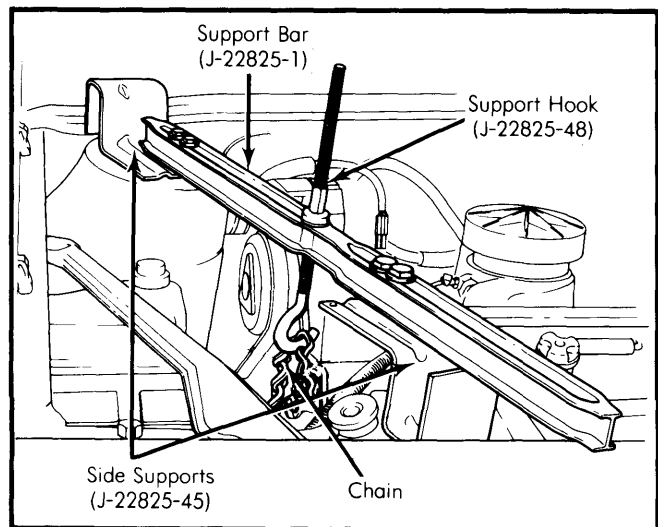
**4.3L (262") Diesel, Century & Skylark** — **1)** Install engine support fixture (BT-6603 or J-22825-1, J-22825-45 and J-22825-48 or equivalent), to right front side of cylinder head as shown in Fig. 1. Raise vehicle on hoist but keep rear slightly lower than front. Install suitable support stands at 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  $\frac{1}{2}$ " 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 crossmember for removal clearance. Remove flywheel cover and starter assembly. Remove engine mount bracket. Remove oil pan bolts and oil pan.



**Fig. 1 General Motors Front Wheel Drive Engine Support Fixture**

#### V8 MODELS

**5.0L (307") Electra & LeSabre** — **1)** Remove distributor cap and align rotor to No. 1 firing position. Disconnect negative battery cable at battery and remove engine oil dipstick. Remove upper radiator support and fan shroud screws. Raise vehicle on hoist and drain crankcase.

**2)** Remove converter housing inspection cover. Disconnect exhaust and crossover pipes at manifolds. Remove starter motor. Install engine lifting tool (J-23515 or equivalent) to engine with adapter tool (J-23515-20 or equivalent) bolted to lifting tool.

**3)** Remove motor mount through bolts and raise front of engine as far as possible. Remove motor mounts from engine block. Remove oil pan bolts and remove oil pan.

**5.0L (307") Riviera** — **1)** Disconnect negative battery cable at battery. Remove 3 final drive-to-transmission bolts. Raise and support vehicle on safety stands. Disconnect both frame braces. Disconnect idler and pitman arm at relay rod.