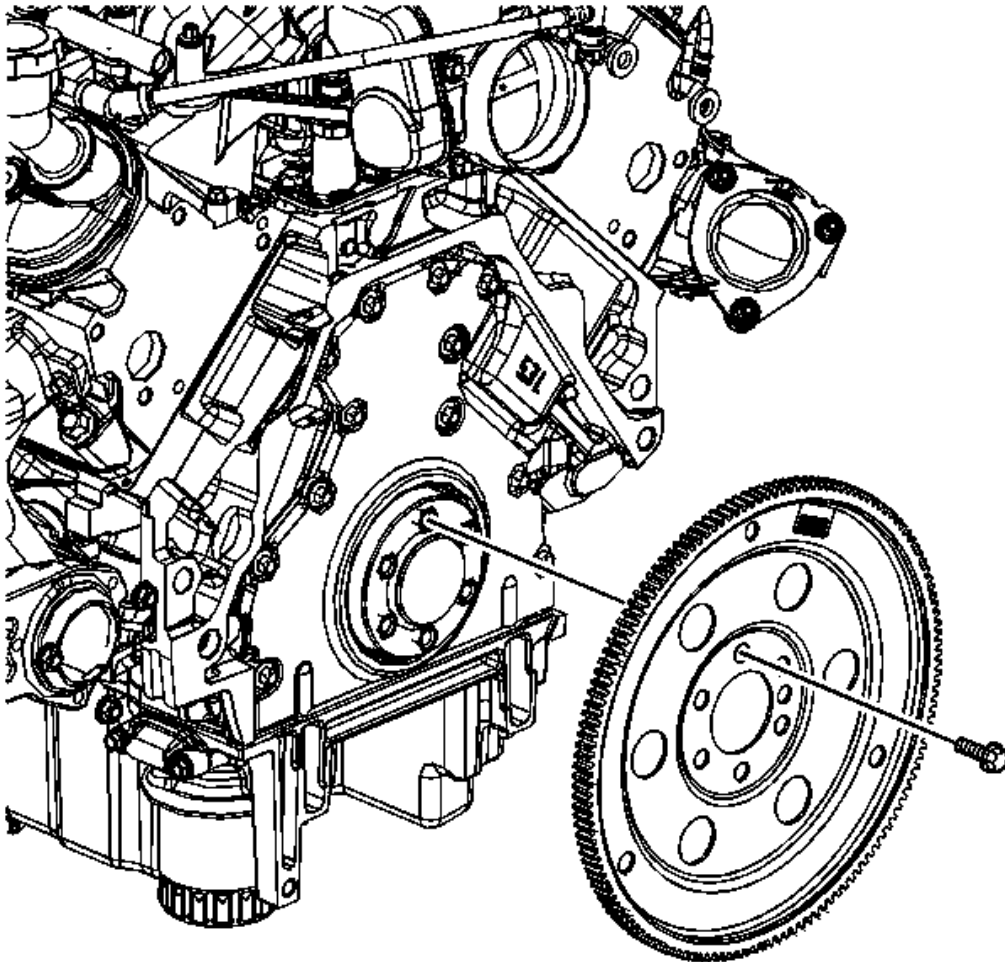


**Fig. 326: Removing/Installing Crankshaft Balancer**  
Courtesy of GENERAL MOTORS CORP.

5. Remove the crankshaft balancer (138).
6. Remove the EN 47699: tool, bolt, and spacer.

#### ENGINE FLYWHEEL REMOVAL

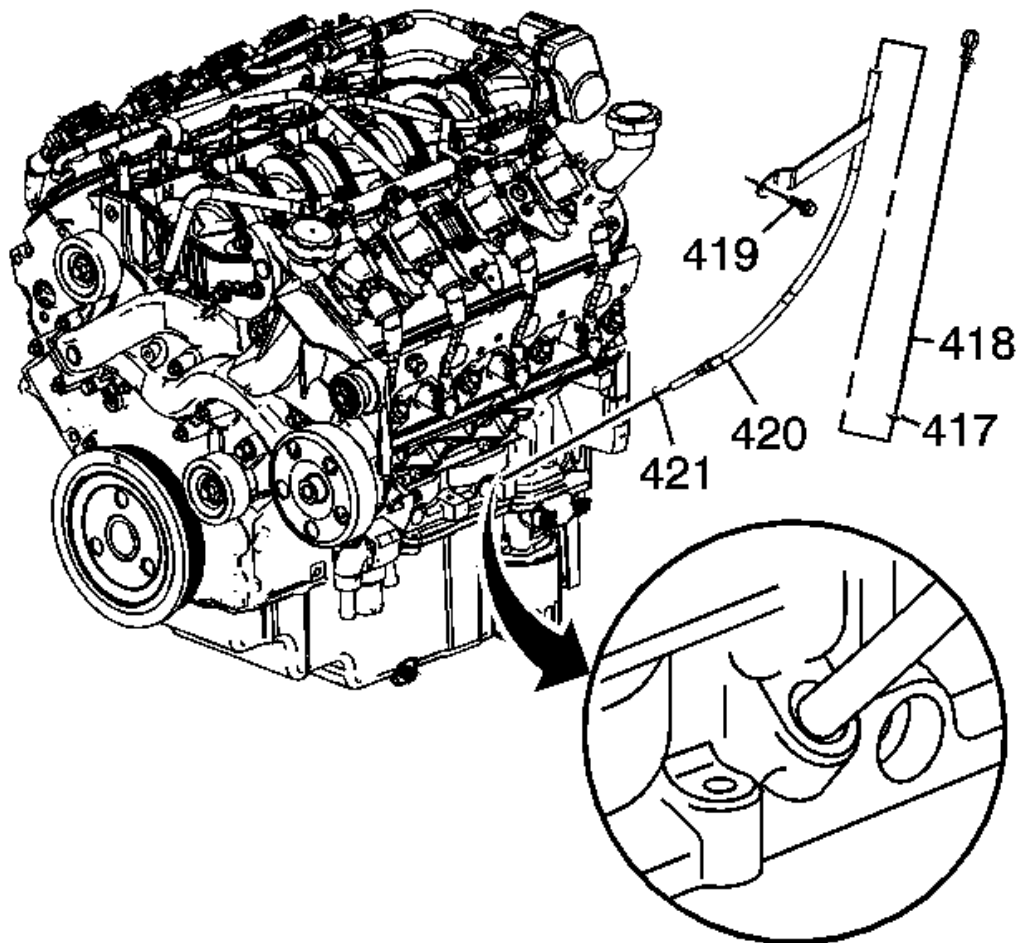


**Fig. 327: Identifying Flywheel**  
Courtesy of GENERAL MOTORS CORP.

**IMPORTANT:** The flex plate does not use a locating pin for alignment and will not initially seat against the crankshaft flange, but will be pulled onto the crankshaft by the engine flex plate bolts. This procedure requires a 3 stage tightening process.

1. Remove the engine flex plate bolts.
2. Remove the flex plate.

#### OIL LEVEL INDICATOR AND TUBE REMOVAL



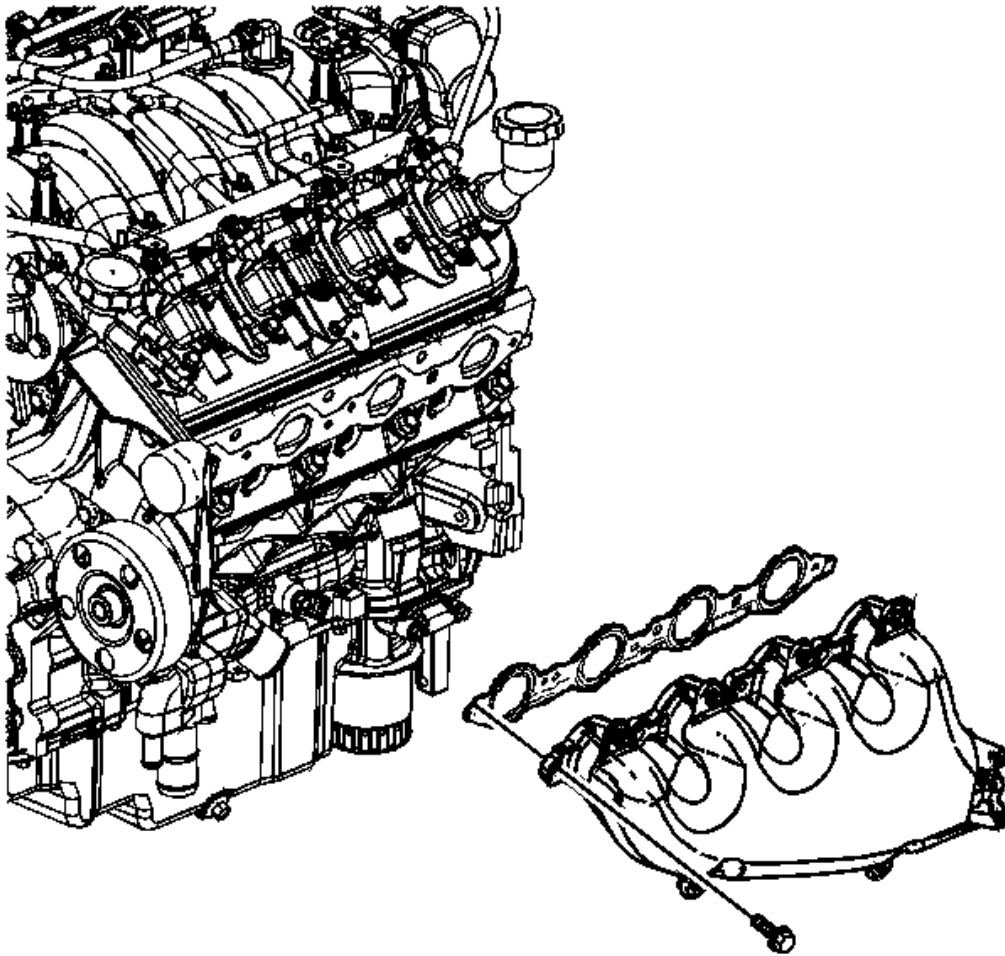
**Fig. 328: View Of Oil Level Indicator & Tube**  
Courtesy of GENERAL MOTORS CORP.

1. Remove the oil level indicator (418) from the tube.
2. Remove the oil level indicator tube bolt (419).
3. Remove the oil level indicator tube (420).

**IMPORTANT: Inspect the O-ring for cuts or damage. The O-ring may be used again if it is not cut or damaged.**

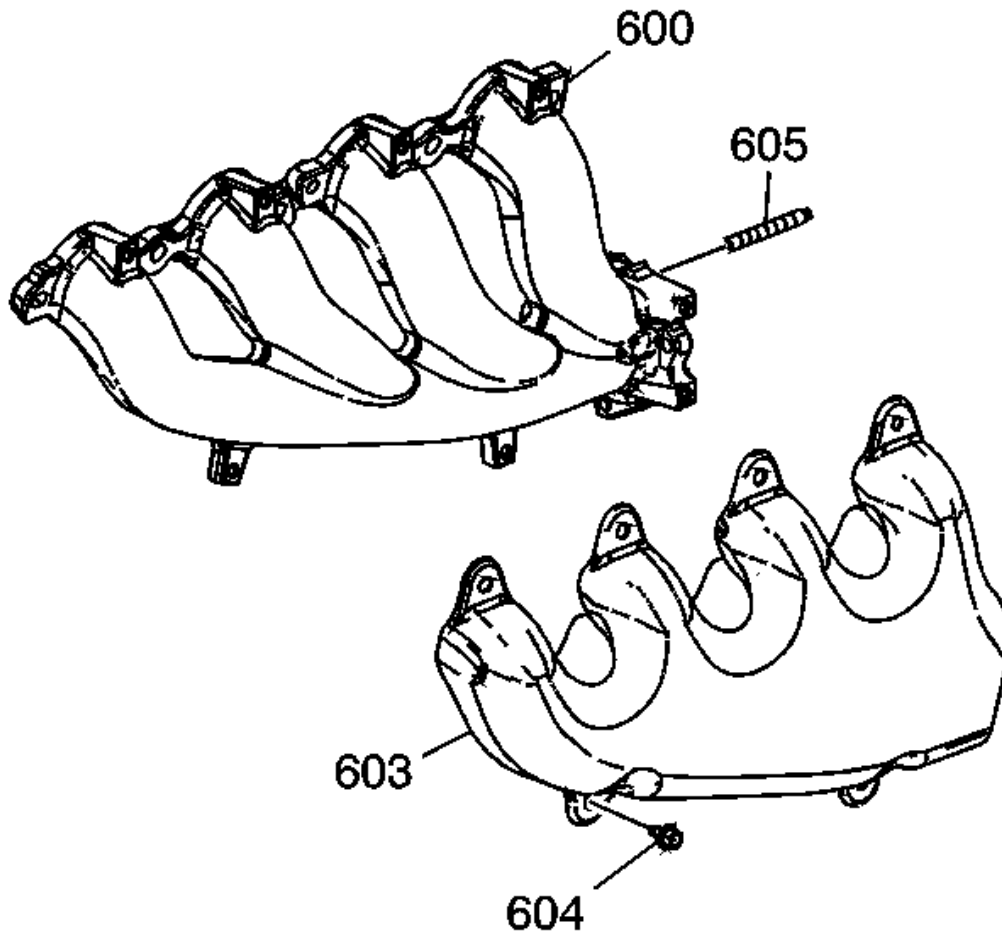
4. Remove the O-ring (421) from the tube, as required.

#### EXHAUST MANIFOLD REMOVAL - LEFT SIDE



**Fig. 329: Exhaust Manifold**  
Courtesy of GENERAL MOTORS CORP.

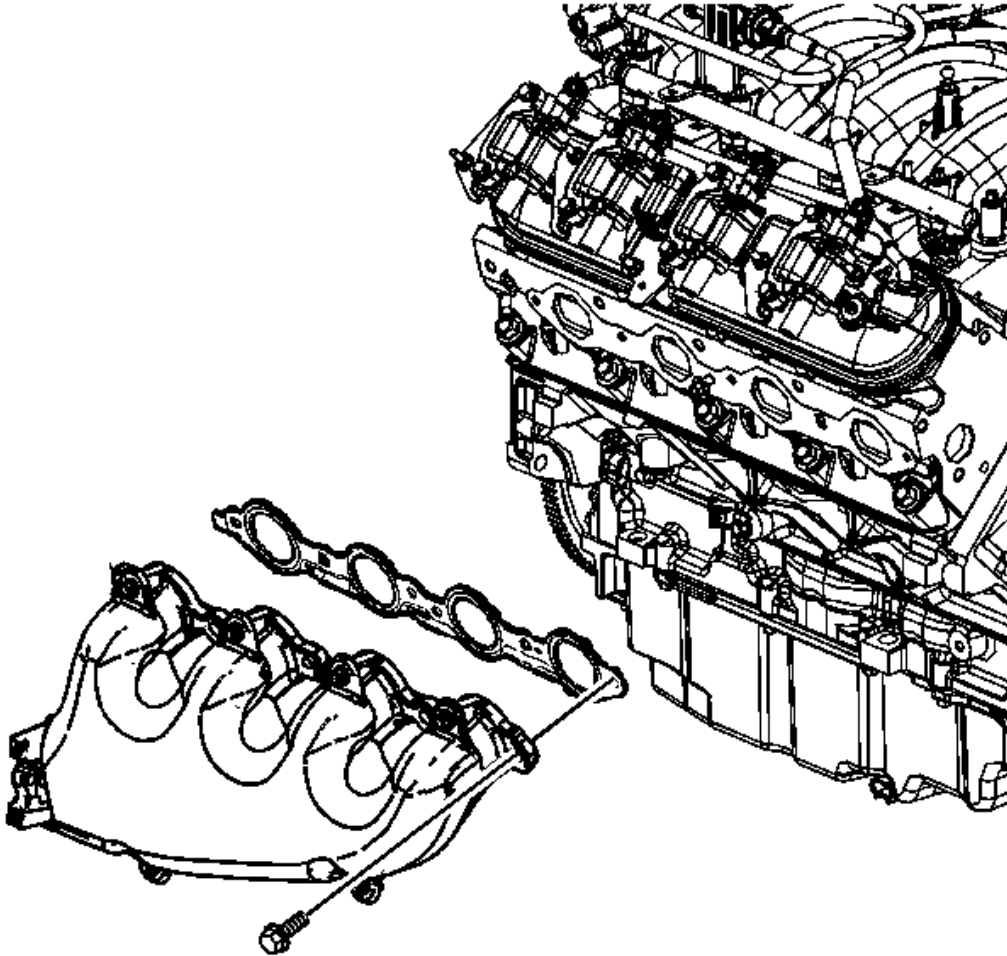
1. Remove the spark plug wires from the spark plugs.
2. Remove the exhaust manifold, bolts, and gasket.
3. Discard the gasket.



**Fig. 330: Heat Shield & Bolts**  
Courtesy of GENERAL MOTORS CORP.

4. Remove the heat shield (603) and bolts (604) from the manifold (600), as required.
5. Remove the studs (605), as required.

**EXHAUST MANIFOLD REMOVAL - RIGHT SIDE**



**Fig. 331: Exhaust Manifold**  
Courtesy of GENERAL MOTORS CORP.

1. Remove the spark plug wires from the spark plugs.
2. Remove the exhaust manifold, bolts, and gasket.
3. Discard the gasket.