

OFF-VEHICLE REPAIR INSTRUCTIONS

Draining Fluids and Oil Filter Removal

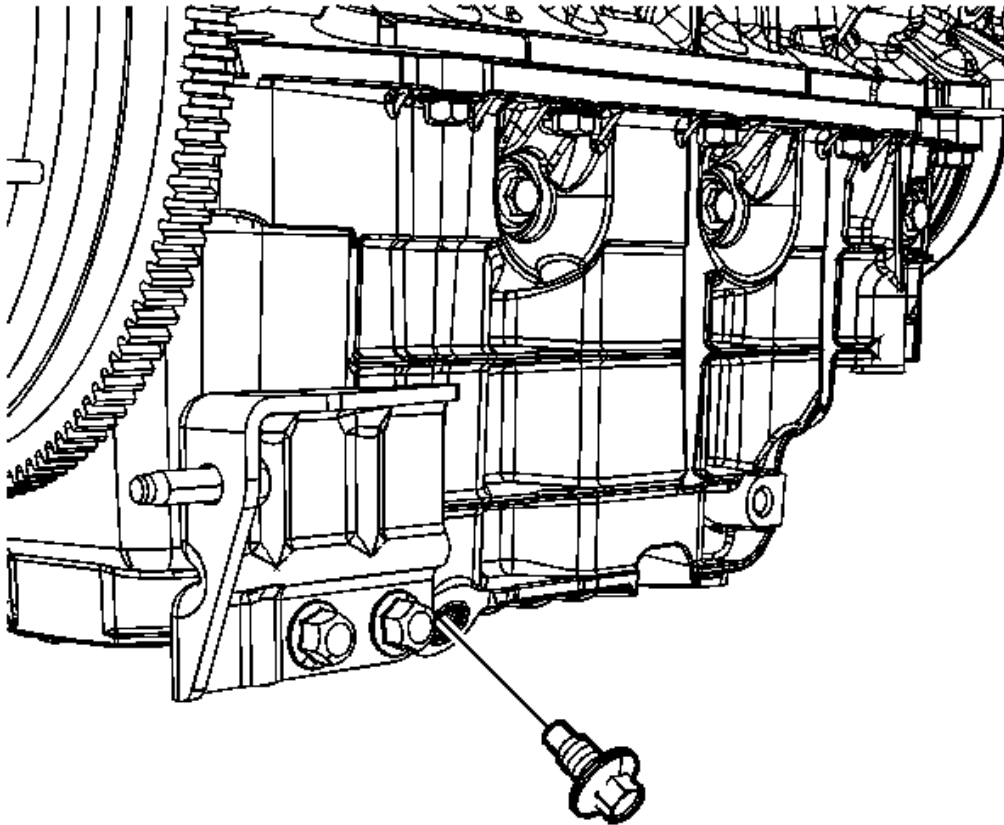


Fig. 378: View Of Oil Drain Plug
Courtesy of GENERAL MOTORS CORP.

1. Remove the oil pan drain plug.
2. Drain the engine oil.

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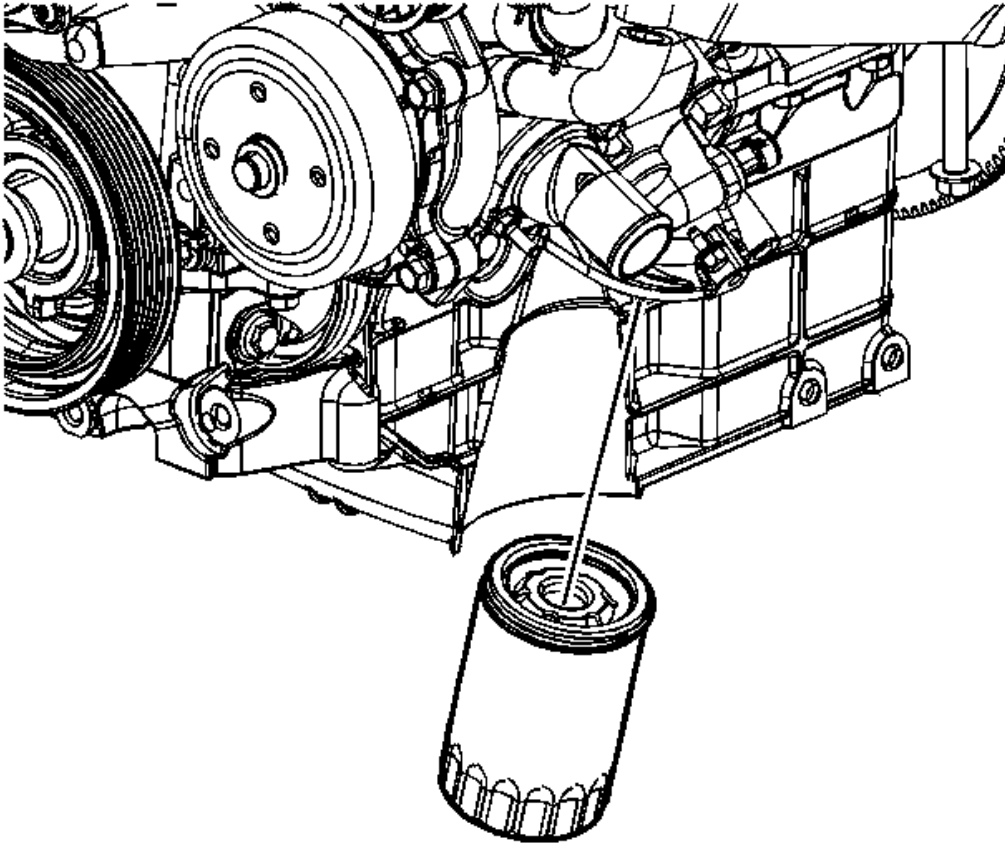


Fig. 379: View Of Oil Filter
Courtesy of GENERAL MOTORS CORP.

3. Remove the oil filter.

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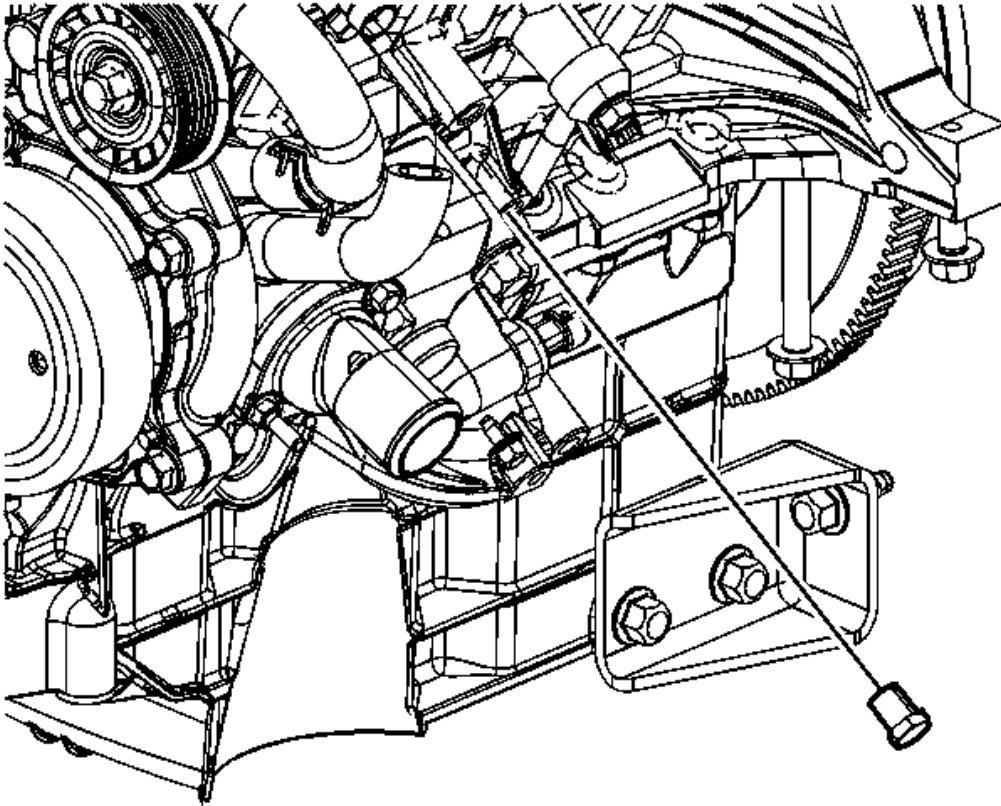


Fig. 380: Identifying Left Side Coolant Drain Plug
Courtesy of GENERAL MOTORS CORP.

4. Remove the coolant drain plug from the left side.

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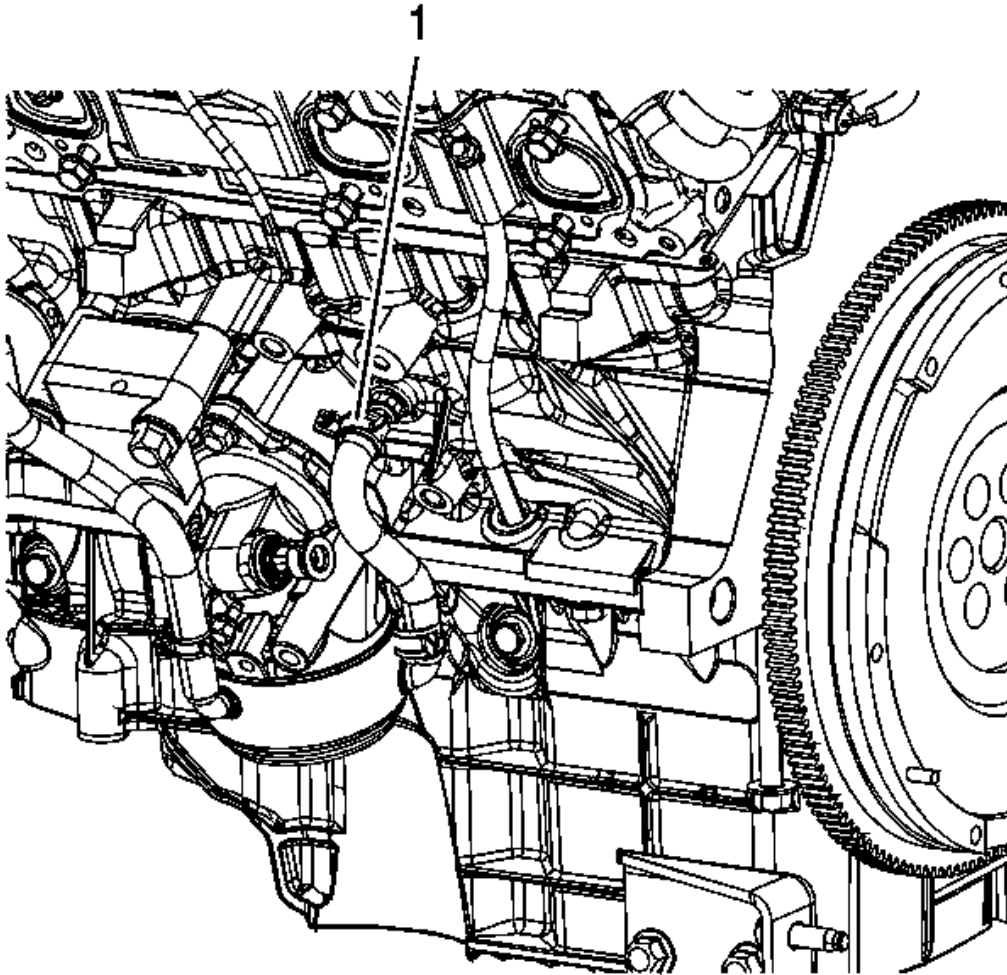


Fig. 381: Locating Upper Inlet Hose Clamp
Courtesy of GENERAL MOTORS CORP.

5. If equipped with an oil cooler (RPO-KC4), reposition the upper inlet hose clamp (1).
6. Remove the oil cooler inlet hose from the block outlet.

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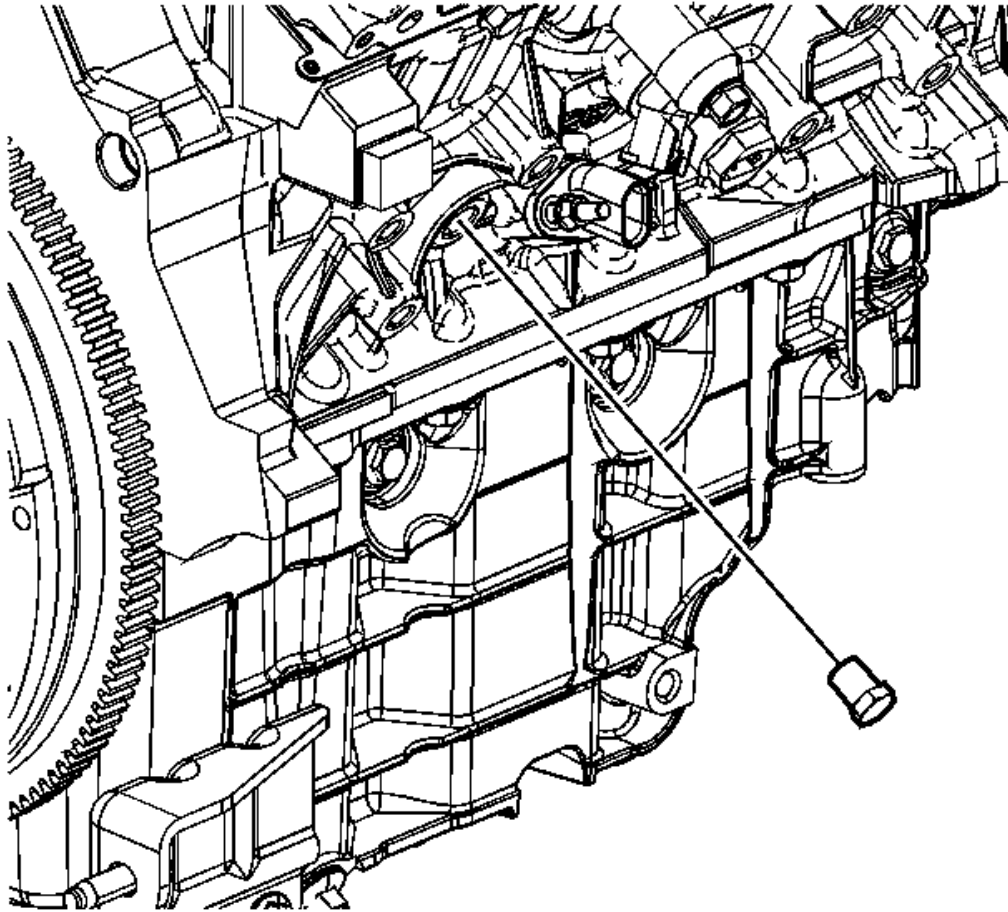


Fig. 382: Identifying Right Side Coolant Drain Plug
Courtesy of GENERAL MOTORS CORP.

7. If not equipped with an oil cooler (RPO-KC4), remove the coolant drain plug from the right side.
8. Drain the coolant.

Crankshaft Balancer Removal

Tools Required

- **J 41816** Crankshaft Balancer Remover. See **Special Tools**.
- **EN 46359** Puller End Protector. See **Special Tools**.

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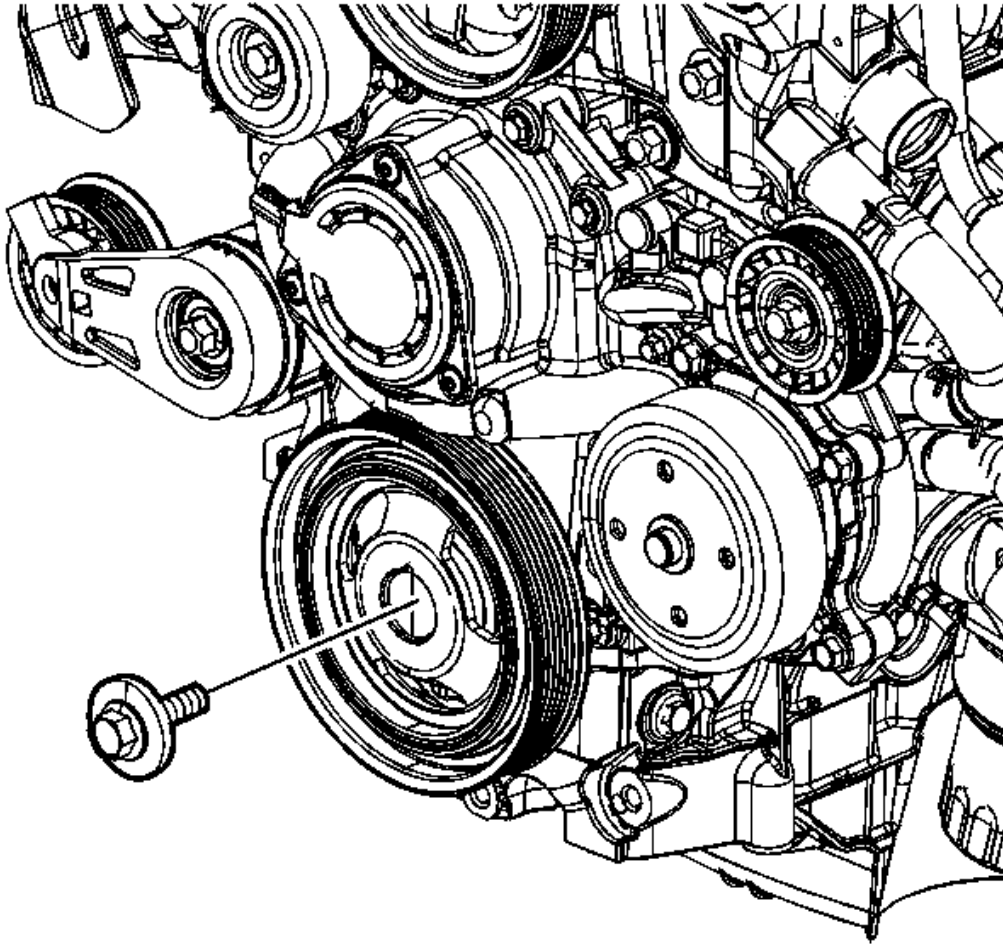


Fig. 383: Identifying Crankshaft Balancer Bolt & Washer
Courtesy of GENERAL MOTORS CORP.

1. Remove the crankshaft balancer bolt and washer.

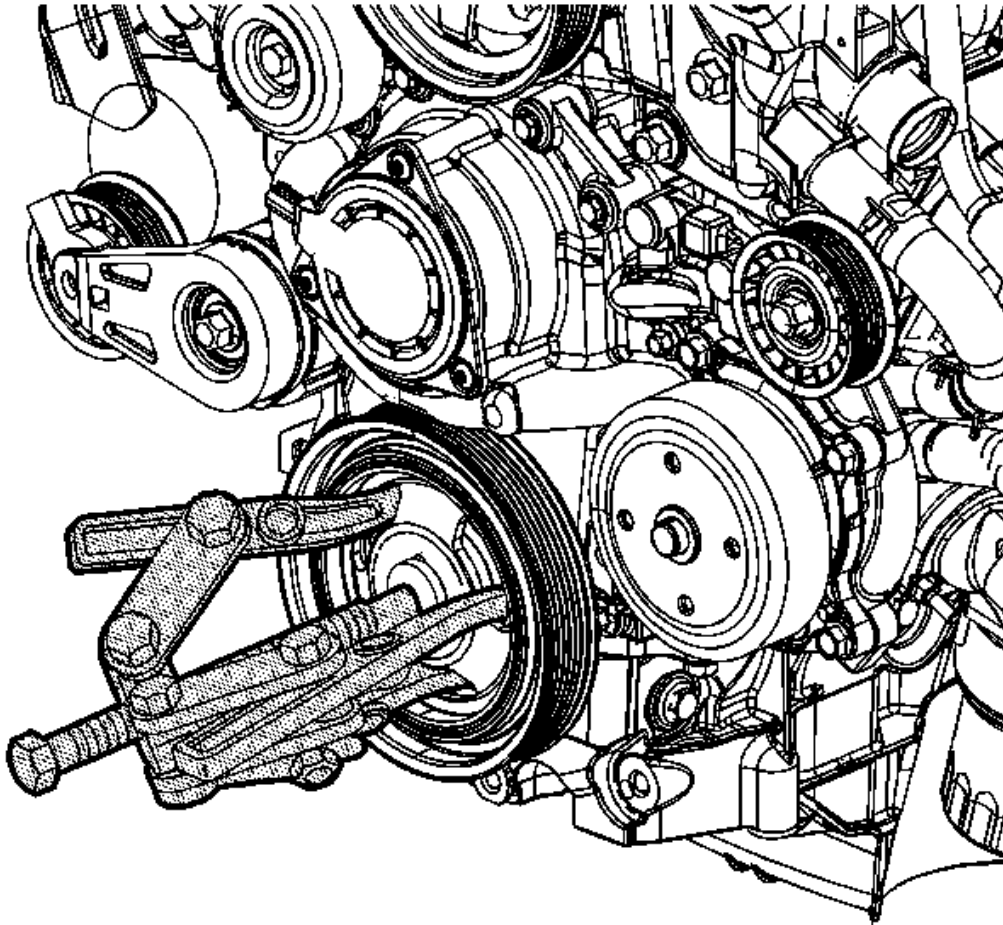


Fig. 384: Removing Crankshaft Balancer
Courtesy of GENERAL MOTORS CORP.

NOTE: Do NOT use a power-assisted tool with the special tool in order to remove or install this component. You cannot properly control the alignment of this component using a power-assisted tool, and this can damage the component.

2. Remove the crankshaft balancer using the **J 41816** along with **EN 46359** . See **Special Tools**.

Engine Flywheel Removal (Automatic Transmission)

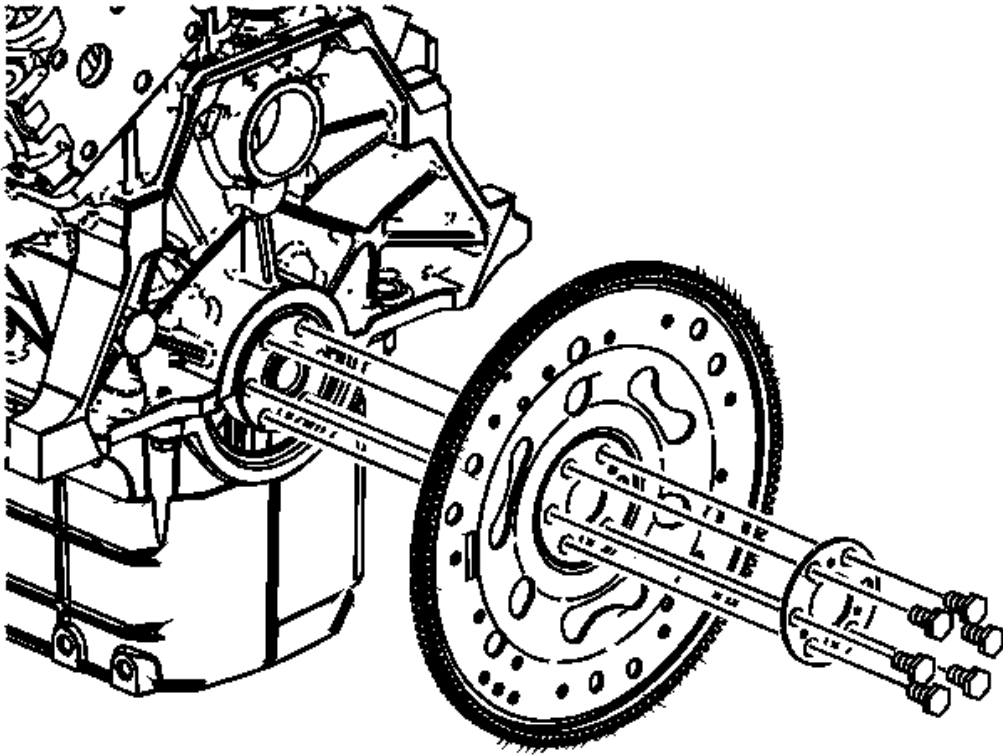


Fig. 385: Identifying Flywheel & Bolts (Automatic Transmission)
Courtesy of GENERAL MOTORS CORP.

1. Remove the flywheel bolts.
2. Remove the flywheel.

Drive Belt Tensioner Removal

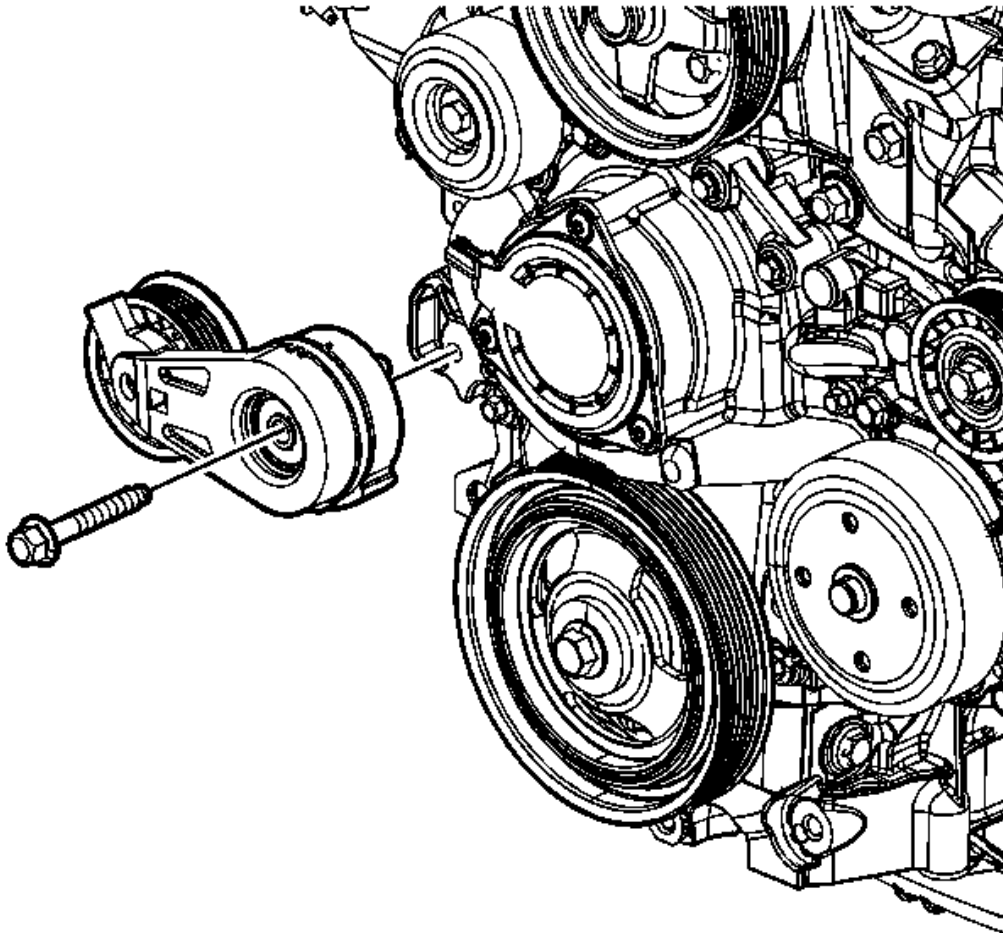


Fig. 386: Identifying Drive Belt Tensioner & Bolt
Courtesy of GENERAL MOTORS CORP.

1. Remove the drive belt tensioner bolt.
2. Remove the drive belt tensioner.

Engine Mount Strut and Engine Lift Bracket Removal