

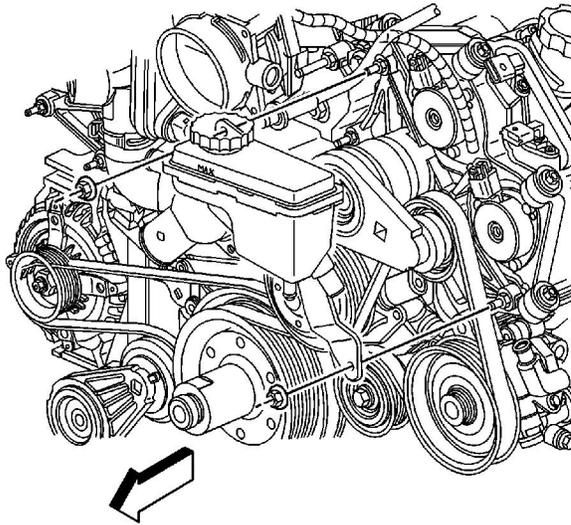
Exhaust Manifold Replacement - Right Side (LH2)

Removal Procedure

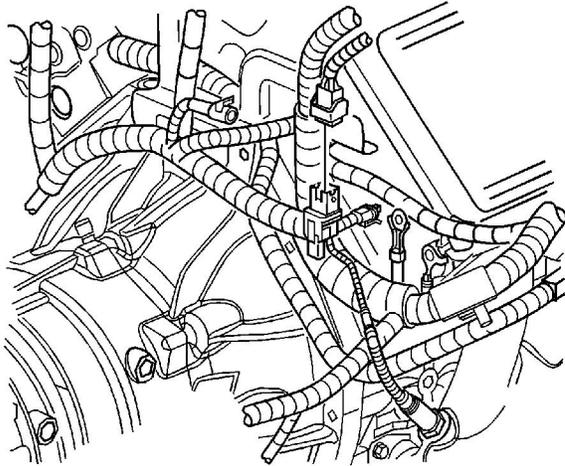
Caution: Refer to [Exhaust Service Caution](#) in the Preface section.

Caution: Refer to [Protective Goggles and Glove Caution](#) in the Preface section.

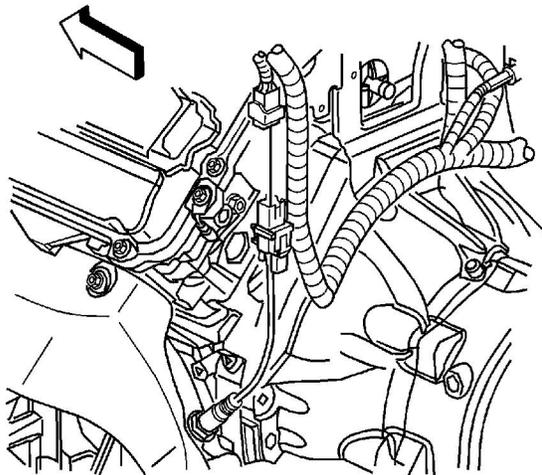
1. Remove the cross vehicle brace. Refer to [Cross Vehicle Brace Replacement](#) .
2. Remove the air cleaner outlet duct. Refer to [Air Cleaner Outlet Duct Replacement](#) .



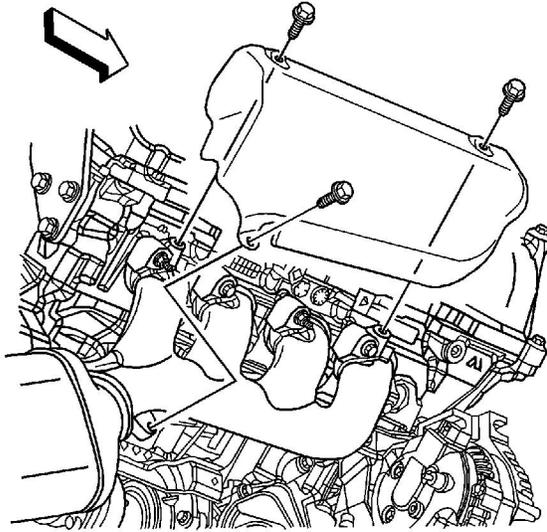
3. Remove the power steering pump reservoir nuts and position the reservoir aside.
4. Remove the accessory drive belts. Refer to [Generator Drive Belt Replacement](#) and [Water Pump and Air Conditioning Compressor and Power Steering Pump Belt Replacement](#) .
5. Remove the generator. Refer to [Generator Replacement](#) .
6. Remove the engine splash shield. Refer to [Engine Splash Shield Replacement](#) .
7. Remove the front wheelhouse liner. Refer to [Front Wheelhouse Liner Replacement](#) .
8. Remove the floor tunnel brace.
9. Remove the left and right catalytic converter to exhaust pipe nuts.
10. Apply lubricant to the exhaust system insulators.



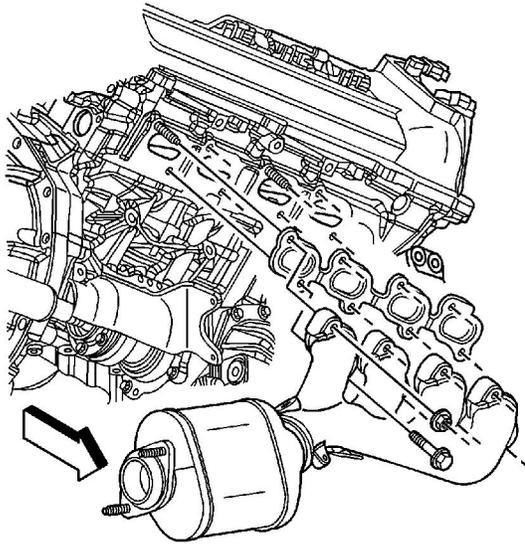
11. Disconnect the right heated oxygen sensor pigtail from the wiring harness connector.



12. Disconnect the left heated oxygen sensor pigtail from the wiring harness connector.
13. With an assistant, remove the exhaust system from the insulators and the vehicle.

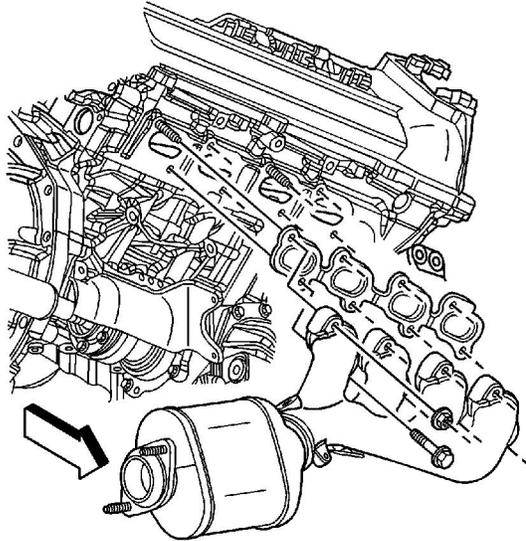


14. Remove the right exhaust manifold heat shield. Refer to [Exhaust Manifold Heat Shield Replacement - Right Side](#).
15. Disconnect the O2 sensor lead at the exhaust manifold.



16. Remove the right exhaust manifold bolts and nuts. Discard the exhaust manifold bolts.
17. Remove the exhaust manifold studs, if necessary.
18. Remove the right exhaust manifold and the gasket from the engine. Do not reuse the gasket.
19. Remove the heated oxygen sensor, if necessary. Refer to [Heated Oxygen Sensor Replacement - Bank 1 Sensor 1](#) for the 4.6L engine.
20. Clean and inspect the right exhaust manifold. Refer to [Exhaust Manifold Cleaning and Inspection - Right Side](#) for the 4.6L engine.

Installation Procedure



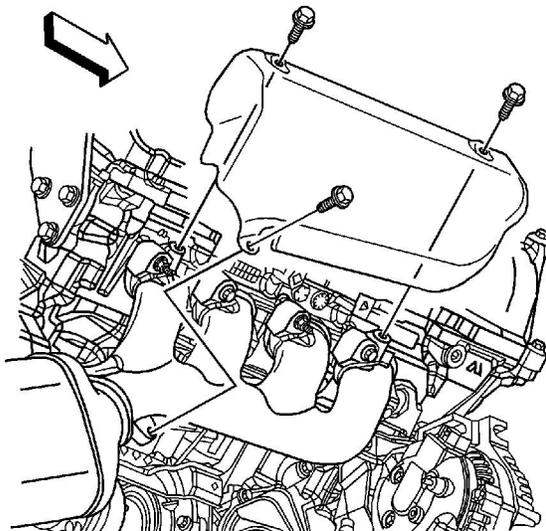
1. Install the heated oxygen sensor, if previously removed. Refer to [Heated Oxygen Sensor Replacement - Bank 1 Sensor 1](#) for the 4.6L engine.
2. Install a NEW exhaust manifold gasket over the cylinder head studs.
3. Position the right exhaust manifold and gasket to the right cylinder head.

Notice: Refer to [Fastener Notice](#) in the Preface section.

4. Install the right exhaust manifold studs, nuts and NEW bolts.

Tighten

- Tighten the exhaust manifold studs to 6 N·m (53 lb in).
- Tighten the exhaust manifold nuts to 25 N·m (18 lb ft).
- Tighten the exhaust manifold bolts to 25 N·m (18 lb ft).

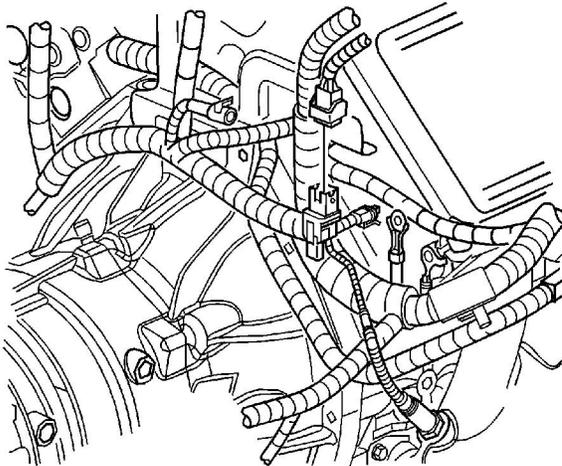




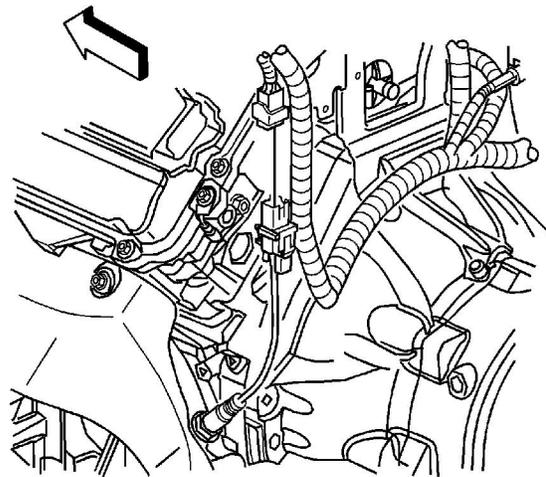
5. Install the exhaust manifold heat shield. Refer to [Exhaust Manifold Heat Shield Replacement - Right Side](#) .
6. Apply lubricant to the exhaust system insulators.
7. With an assistant, raise the exhaust into position and install onto the insulators.
8. Install the left and right catalytic converter to exhaust pipe nuts.

Tighten

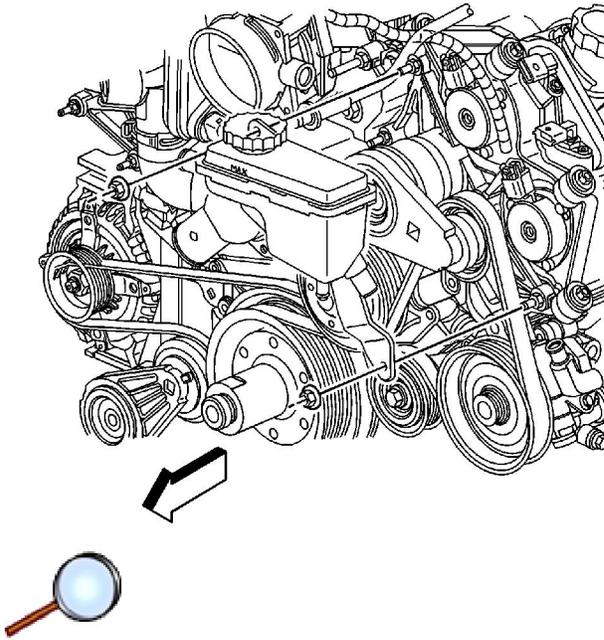
Tighten the nuts to 30 N·m (22 lb ft).



9. Connect the right heated oxygen sensor pigtail to the wiring harness connector.



10. Connect the left heated oxygen sensor pigtail to the wiring harness connector.
11. Install the floor tunnel brace.
12. Install the generator. Refer to [Generator Replacement](#) .



13. Install the power steering pump reservoir.

Tighten

Tighten the nuts to 9 N·m (80 lb in).

14. Install the accessory drive belts. Refer to [Generator Drive Belt Replacement](#) .
15. Install the front wheelhouse liner. Refer to [Front Wheelhouse Liner Replacement](#) .
16. Install the engine splash shield. Refer to [Engine Splash Shield Replacement](#) .
17. Install the air cleaner outlet duct. Refer to [Air Cleaner Outlet Duct Replacement](#) .
18. Install the cross vehicle brace. Refer to [Cross Vehicle Brace Replacement](#) .