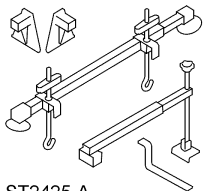
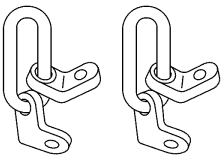


IN-VEHICLE REPAIR

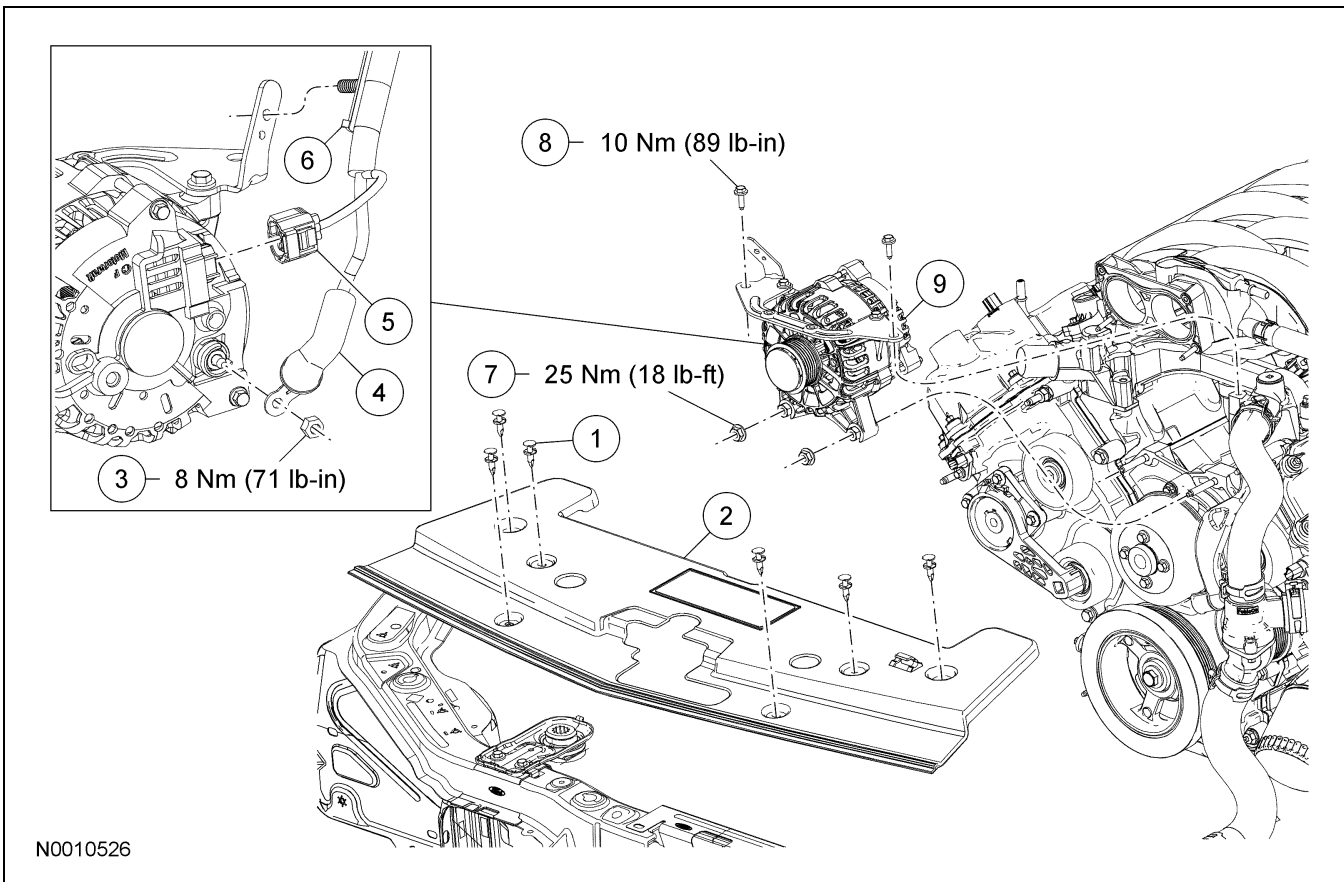
Exhaust Manifold — LH

Special Tool(s)

 <p>ST2425-A</p>	<p>3-Bar Engine Support Kit 303-F072</p>
 <p>ST1595-A</p>	<p>Lifting Brackets, Engine 303-050 (T70P-6000)</p>

Material

Item	Specification
Motorcraft Metal Surface Prep ZC-31	—

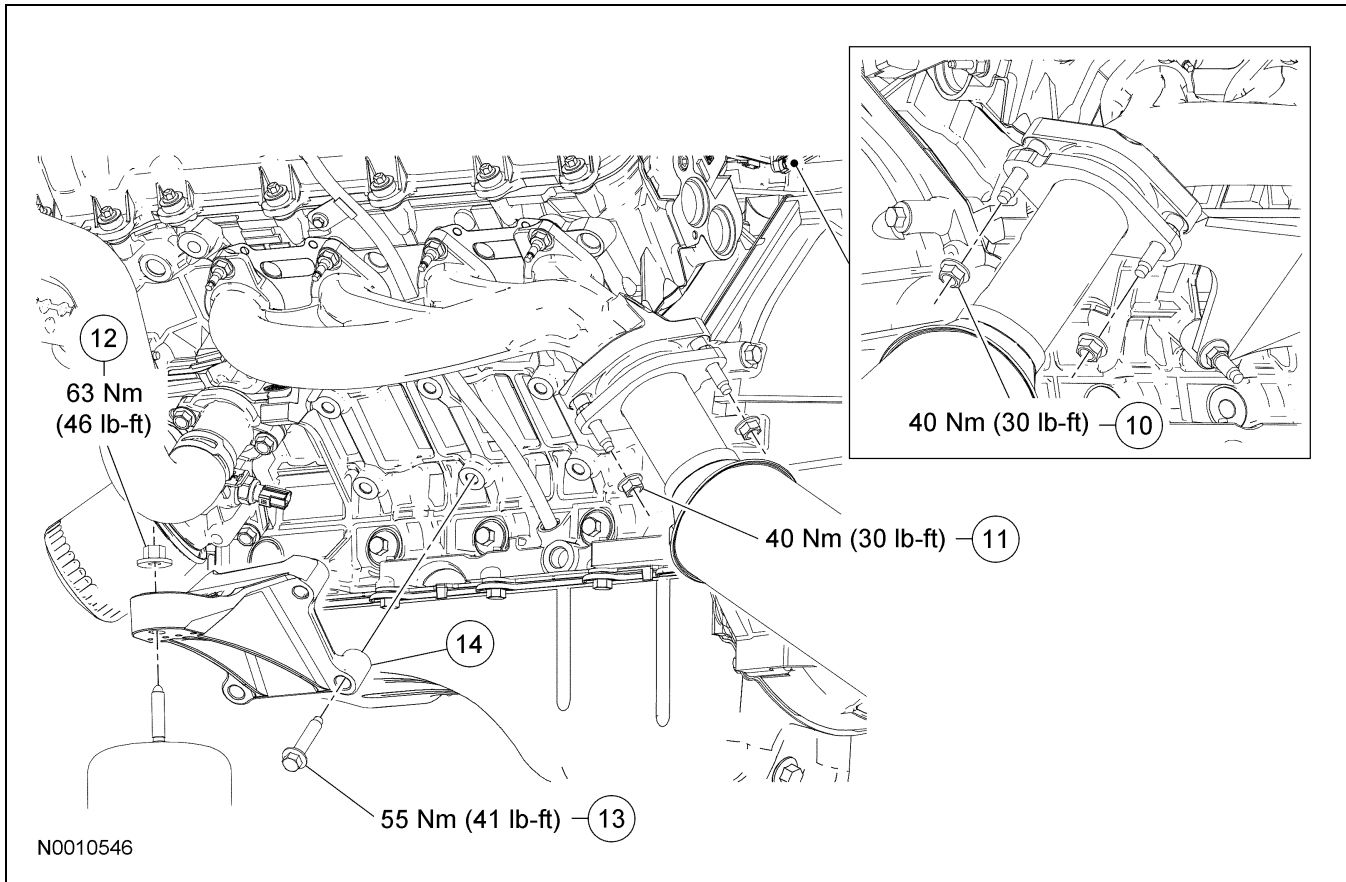


IN-VEHICLE REPAIR (Continued)

Item	Part Number	Description
1	—	Pin-type retainer
2	8C291	Radiator sight shield
3	W705790	B+ terminal nut
4	—	B+ terminal cover (part of 14305)
5	14A4644	Generator electrical connector (part of 14305)

(Continued)

Item	Part Number	Description
6	—	Wiring harness pin-type retainer (part of 14305)
7	N804758	Generator nut (2 required)
8	N807309	Generator bracket bolt (2 required)
9	10300	Generator

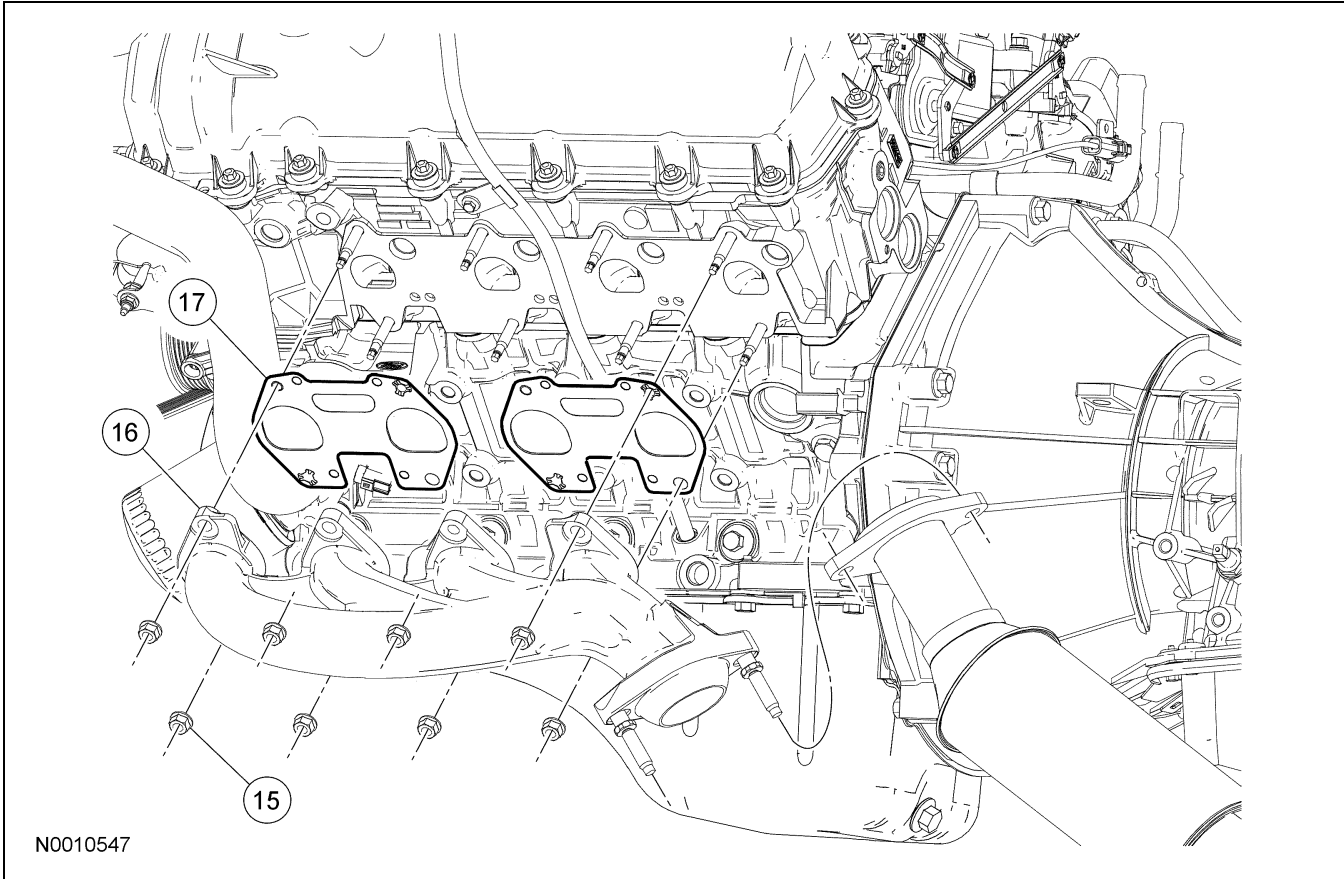


Item	Part Number	Description
10	W701706	RH catalytic converter-to-exhaust manifold nut (2 required)
11	W701706	LH catalytic converter-to-exhaust manifold nut (2 required)
12	N621943	LH engine support insulator nut

(Continued)

Item	Part Number	Description
13	W500721	LH engine support insulator bracket bolt (4 required)
14	6B033	LH engine support insulator bracket

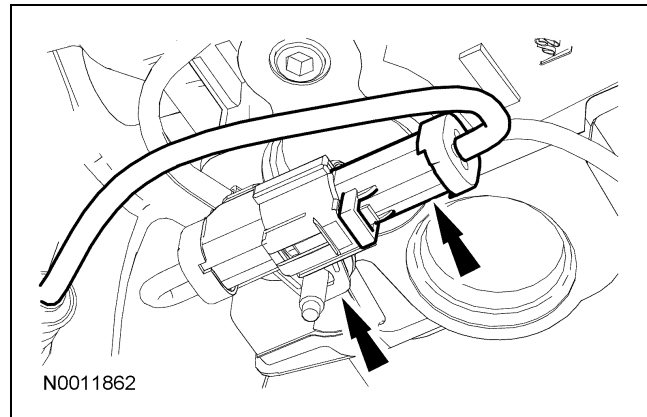
IN-VEHICLE REPAIR (Continued)



Item	Part Number	Description
15	W701706	LH exhaust manifold nut (8 required)
16	9431	LH exhaust manifold
17	9Y431	LH exhaust manifold gasket (2 required)

Removal

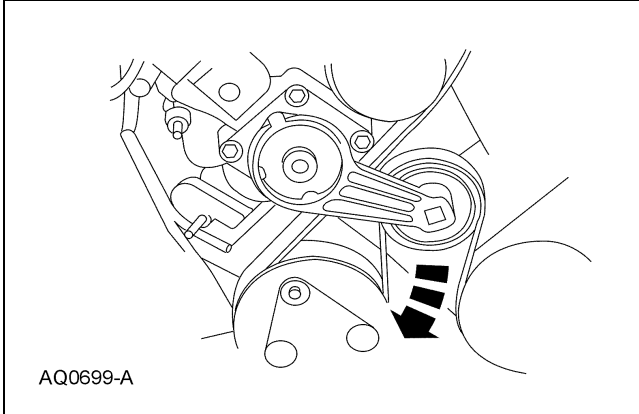
1. With the vehicle in NEUTRAL, position it on a hoist. For additional information, refer to Section 100-02.
2. Disconnect the battery ground cable. For additional information, refer to Section 414-01.
3. Remove the air cleaner assembly. For additional information, refer to Section 303-12.
4. Remove the throttle body. For additional information, refer to Section 303-04B.
5. Disconnect the LH heated oxygen sensor (HO2S) electrical connector and wiring retainer.



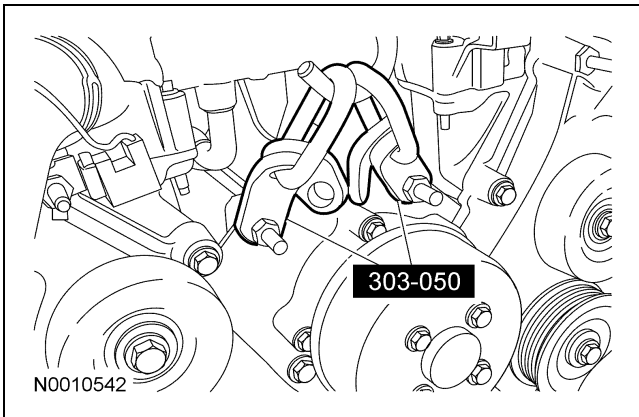
6. Remove the 2 RH catalytic converter-to-exhaust manifold nuts.
7. Remove the 2 LH catalytic converter-to-exhaust manifold nuts.
8. Remove the 6 pin-type retainers and the radiator sight shield.

IN-VEHICLE REPAIR (Continued)

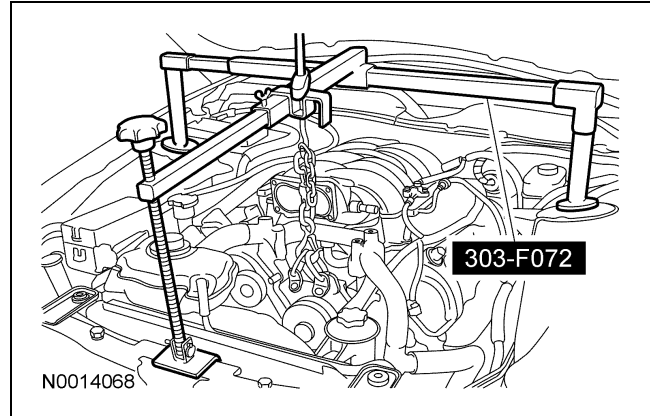
9. Using a suitable belt tensioner release tool, rotate the accessory drive belt tensioner clockwise and position the accessory drive belt aside from the generator pulley.



10. Remove the 2 outer generator bracket bolts.
11. Remove the 2 lower generator nuts.
12. Disconnect the generator electrical connector and pin-type retainer.
13. Position the B+ terminal cover aside and remove the B+ terminal nut.
- Remove the generator.
14. Install the special tools.



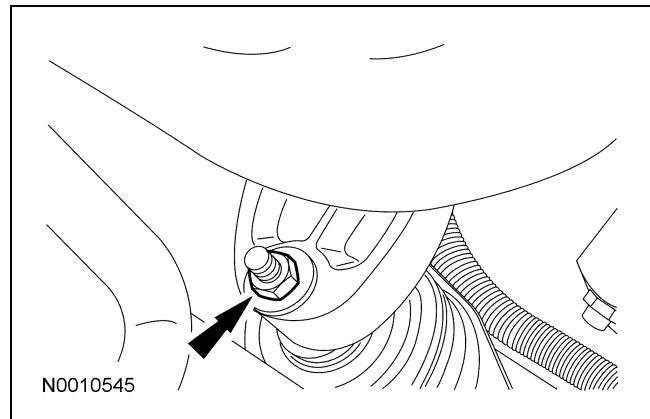
15. Install the special tool.



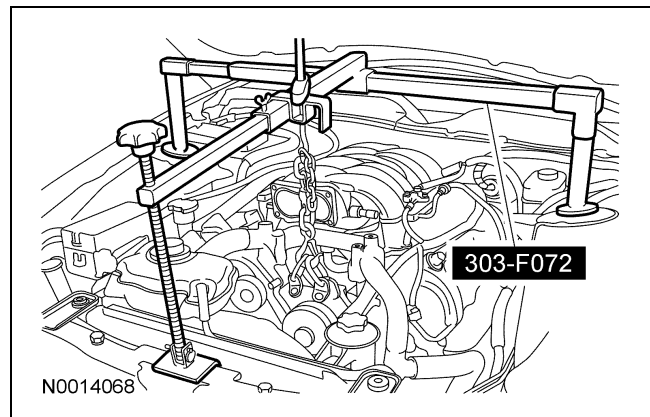
16. **NOTE:** Both the RH and LH engine support insulator nuts must be removed to allow the engine to be raised.

NOTE: RH shown, LH similar.


Remove the RH and LH engine support insulator nuts.



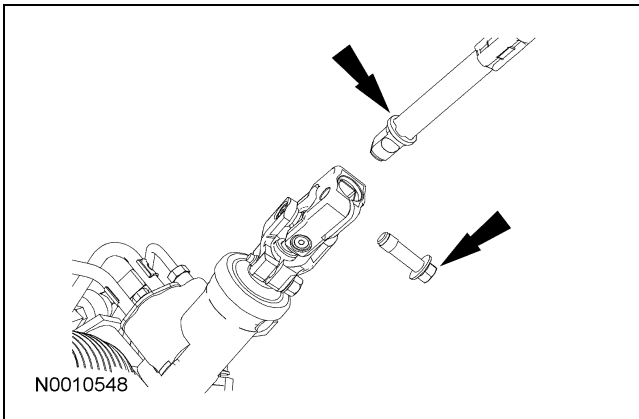
17. Using the special tool, raise the engine 40 mm (1.57 in).




IN-VEHICLE REPAIR (Continued)

18.  **CAUTION:** Do not allow the steering wheel to rotate while the steering column intermediate shaft is disconnected or damage to the clockspring can result. If there is evidence that the wheel has rotated, the clockspring must be removed and recentered. For additional information, refer to Section 501-20B.

Remove the bolt and disconnect the steering coupling.



19. Remove the 4 bolts and the LH engine support insulator bracket.
20. Remove the 8 nuts and the exhaust manifold.
21.  **CAUTION:** Do not use metal scrapers, wire brushes, power abrasive discs or other abrasive means to clean the sealing surfaces. These may cause scratches and gouges resulting in leak paths. Use a plastic scraper to clean the sealing surfaces.

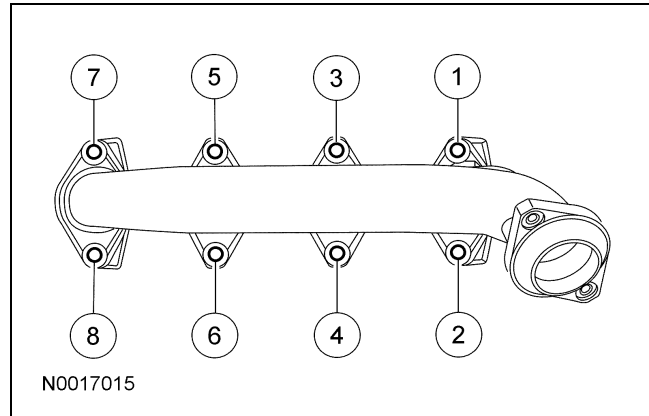
NOTE: Clean the sealing surfaces with metal surface prep. Follow the directions on the packaging.


Remove and discard the exhaust manifold gaskets.

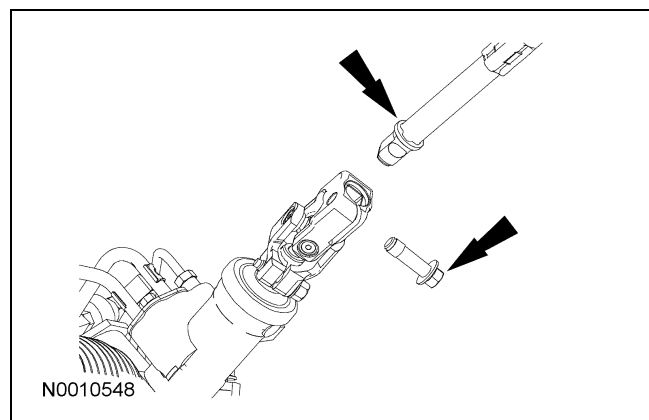
- Clean the sealing surfaces with metal surface prep.

Installation

1. Install new exhaust manifold gaskets.
2. Install the exhaust manifold and 8 nuts.
 - Tighten the nuts in the sequence shown to 25 Nm (18 lb-ft).

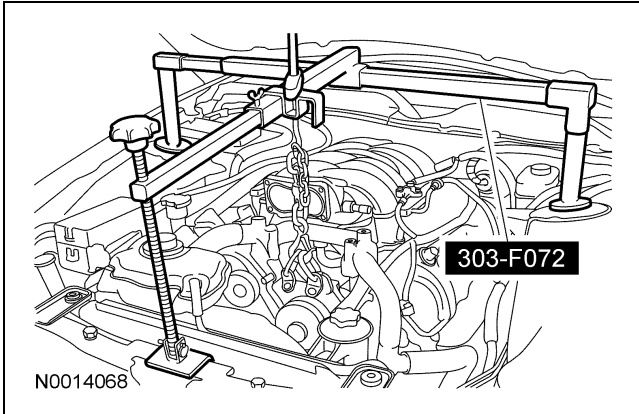


3. Install the LH engine support insulator bracket and the 4 bolts.
 - Tighten to 55 Nm (41 lb-ft).
 4.  **CAUTION:** Do not allow the steering wheel to rotate while the steering column intermediate shaft is disconnected or damage to the clockspring can result. If there is evidence that the wheel has rotated, the clockspring must be removed and recentered. For additional information, refer to Section 501-20B
- Connect the steering coupling and install the bolt.
- Tighten to 25 Nm (18 lb-ft).



IN-VEHICLE REPAIR (Continued)

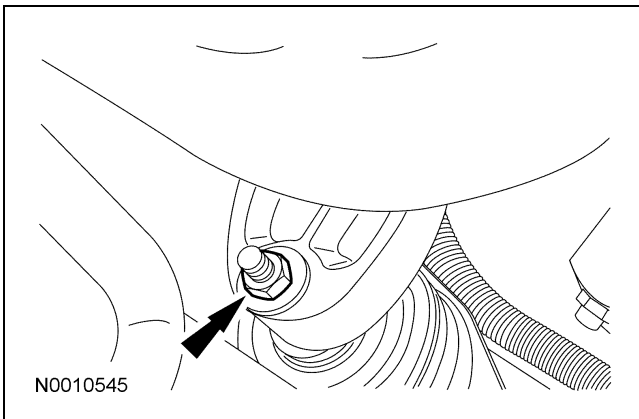
5. Using the special tool, lower the engine.



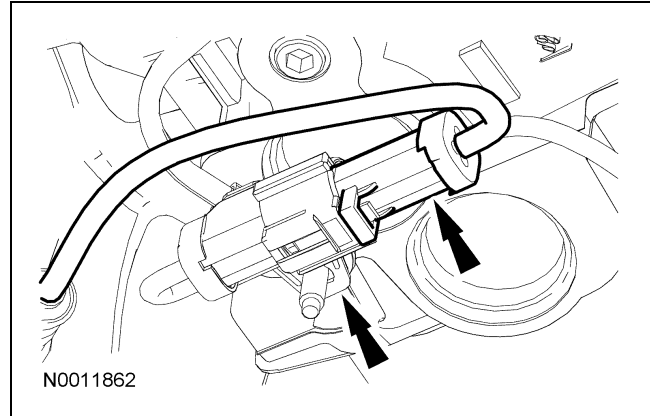
6. **NOTE:** RH shown, LH similar.

Install the RH and LH engine support insulator nuts.

- Tighten to 63 Nm (46 lb-ft).



7. Install the 2 LH catalytic converter-to-exhaust manifold nuts.
- Tighten to 40 Nm (30 lb-ft).
8. Install the 2 RH catalytic converter-to-exhaust manifold nuts.
- Tighten to 40 Nm (30 lb-ft).
9. Connect the LH HO2S electrical connector and wiring retainer.



10. **NOTE:** Make sure the B+ cable is positioned close to the generator when the nut is being tightened.

Position the generator and install the B+ terminal and nut.

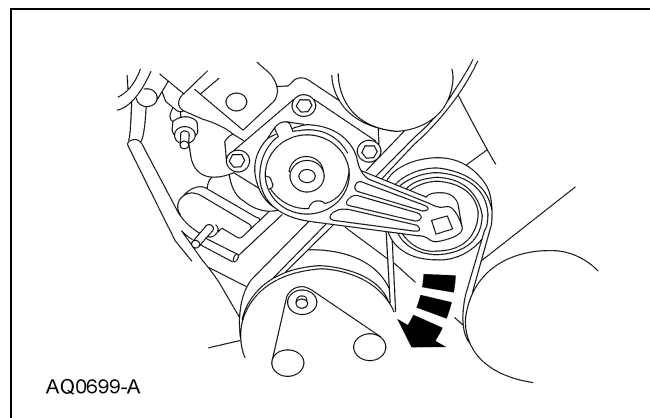
- Tighten to 8 Nm (71 lb-in).

11. Connect the generator electrical connector and pin-type retainer.

12. Install the 2 lower generator nuts.
- Tighten to 25 Nm (18 lb-ft).

13. Install the 2 outer generator bracket bolts.
- Tighten to 10 Nm (89 lb-in).

14. Using a suitable belt tensioner release tool, rotate the accessory drive belt tensioner clockwise and position the accessory drive belt onto the generator pulley.



15. Install the radiator sight shield and 6 pin-type retainers.

16. Install the throttle body. For additional information, refer to Section 303-04B.

IN-VEHICLE REPAIR (Continued)

17. Install the air cleaner assembly. For additional information, refer to Section 303-12.

18. Connect the battery ground cable. For additional information, refer to Section 414-01.
