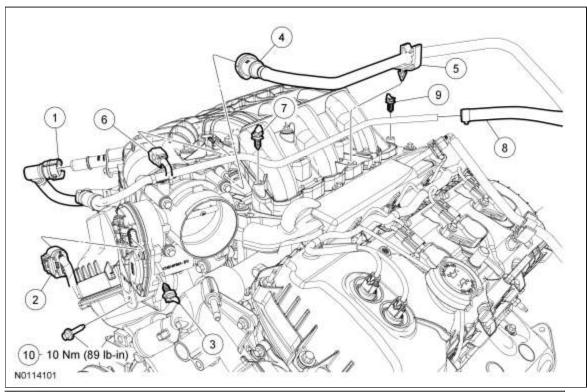
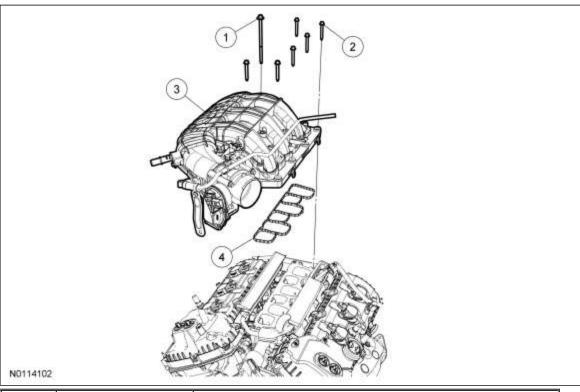
## **Upper Intake Manifold**

## **Upper Intake Manifold (View 1 of 2)**



Item	Part Number	Description	
1	6A664	PCV tube quick connect coupling	
2	_	Throttle Body (TB) electrical connector (part of 12C508)	
3	_	<u>TB</u> electrical connector wiring harness pin-type retainer (part of 12C508)	
4	9J280	Evaporative Emission (EVAP) tube	
5	_	EVAP hose retainer (part of 9J280)	
6	_	EVAP canister purge valve electrical connector (part of 12C508)	
7	_	EVAP canister purge valve electrical connector wiring harness pin-type retainer (part of 12C508)	
8	_	Brake booster vacuum hose (part of 9C482)	
9	_	Wiring harness pin-type retainer (part of 12C508)	
10	W503275	Upper intake manifold support bracket bolt	

Upper Intake Manifold (View 2 of 2)

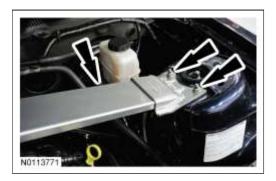


Item	Part Number	Description
1	W715096	Upper intake manifold bolt
2	9Y450	Upper intake manifold bolt (6 required)
3	9424	Upper intake manifold
4	9H486	Upper intake manifold gasket

## Removal

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

If equipped, remove the 4 nuts (2 shown) and the strut tower cross brace.



2. If equipped, detach the 2 retainers and remove the engine appearance cover.



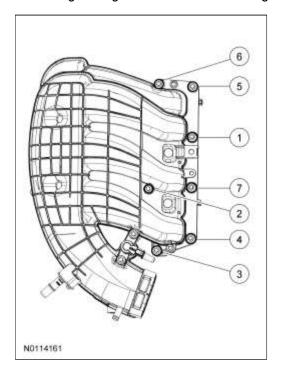
- 3. Remove the Air Cleaner (ACL) outlet tube. For additional information, refer to Intake Air System Components Exploded View, 3.7L in Section 303-12.
- 4. Disconnect the PCV tube quick connect coupling from the intake manifold. For additional information, refer to Section 310-00.
- 5. Disconnect the Throttle Body (TB) electrical connector.
  - Detach the <u>TB</u> electrical connector wiring harness pin-type retainer from the <u>TB</u>.
- 6. Disconnect Evaporative Emission (EVAP) tube from the <u>EVAP</u> canister purge valve. For additional information, refer to <u>Section</u> 310-00.
  - Detach the EVAP hose retainer from the intake manifold.
- 7. Disconnect the EVAP canister purge valve electrical connector.
  - Detach the EVAP canister purge valve electrical connector wiring harness pin-type retainer.
- 8. Disconnect the brake booster vacuum hose from the upper intake manifold vacuum tube.
- 9. Detach the wiring harness pin-type retainer from the rear of the upper intake manifold.
- 10. Remove the upper intake manifold support bracket bolt from the front of the RH cylinder head.
- 11. Loosen the 7 bolts and remove the upper intake manifold.
  - · Remove and discard the gaskets.
  - · Clean and inspect all of the sealing surfaces of the upper and lower intake manifold.

## Installation

1. NOTICE: If the engine is repaired or replaced because of upper engine failure, typically including valve or piston damage, check the intake manifold for metal debris. If metal debris is found, install a new intake manifold. Failure to follow these instructions can result in engine damage.

Using new gaskets, install the upper intake manifold and tighten the 7 bolts in the sequence shown in 2 stages.

- Stage 1: Tighten to 10 Nm (89 lb-in).
- Stage 2: Tighten an additional 45 degrees.



- 2. Install the upper intake manifold support bracket bolt to the RH cylinder head.
  - Tighten to 10 Nm (89 lb-in).
- 3. Attach the wiring harness pin-type retainer to the rear of the upper intake manifold.
- 4. Connect the brake booster vacuum hose to the upper intake manifold vacuum tube.
- 5. Connect the EVAP canister purge valve electrical connector.
  - Attach the EVAP canister purge valve electrical connector wiring harness pin-type retainer.

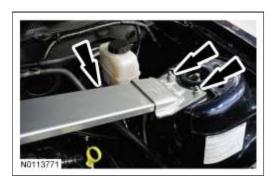
- 6. Connect EVAP tube to the EVAP canister purge valve. For additional information, refer to Section 310-00.
  - Attach the EVAP hose retainer to the intake manifold.
- 7. Connect the TB electrical connector.
  - Attach the TB electrical connector wiring harness pin-type retainer to the TB.
- 8. Connect the PCV tube quick connect coupling to the intake manifold. For additional information, refer to Section 310-00.
- 9. Install the <u>ACL</u> outlet tube. For additional information, refer to Intake Air System Components Exploded View, 3.7L in <u>Section</u> 303-12.
- 10. If equipped, install the engine appearance cover.



11. NOTE: LH shown, RH similar.

If equipped, install the strut tower cross brace and the 4 nuts (2 shown).

Tighten to 35 Nm (26 lb-ft).



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