

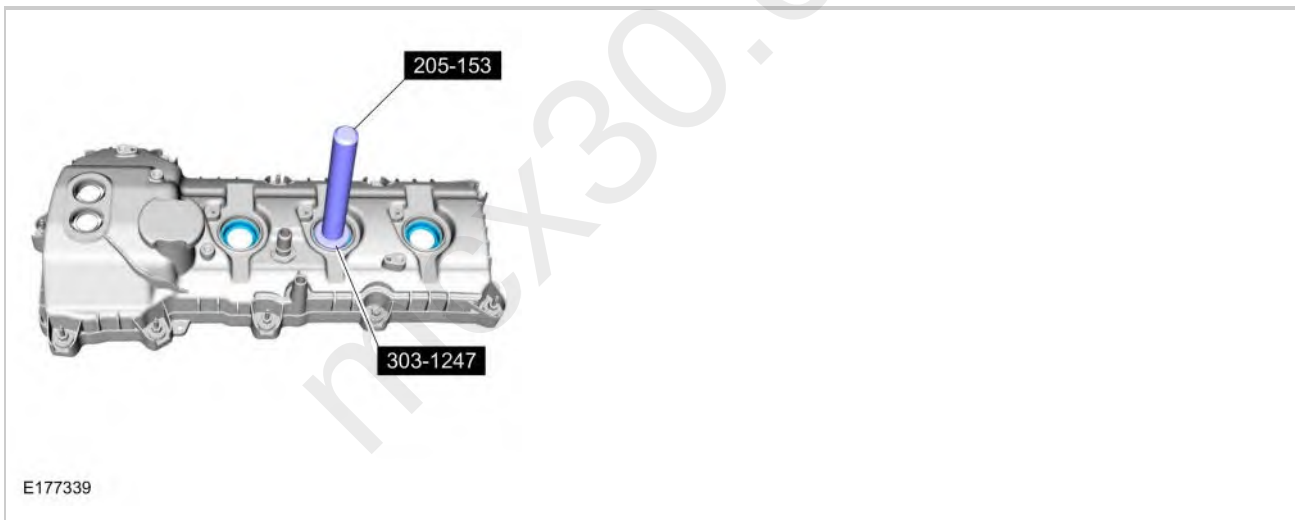


19.



NOTE: *Inspect the spark plug tube seals. Remove any damaged seals.*

If necessary, using the special tools, remove the spark plug tube seals. Use Special Service Tool: 303-1247 VCT Spark Plug Tube Seal Remover and Installer., 205-153 (T80T-4000-W) Handle.



20.

Clean the valve cover, cylinder head and engine front cover sealing surfaces with metal surface prep.

Material

: Motorcraft ® Metal Surface Prep / ZC-31-B

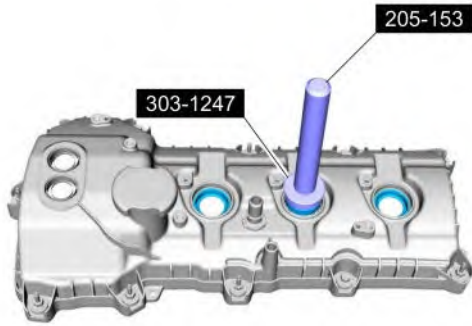
REMOVAL AND INSTALLATION > VALVE COVER LH > INSTALLATION

1.



NOTE: Installation of new seals is only required if damaged seals were removed.

If removed, using the special tools, install the spark plug tube seals. Use Special Service Tool: 303-1247 VCT Spark Plug Tube Seal Remover and Installer., 205-153 (T80T-4000-W) Handle.



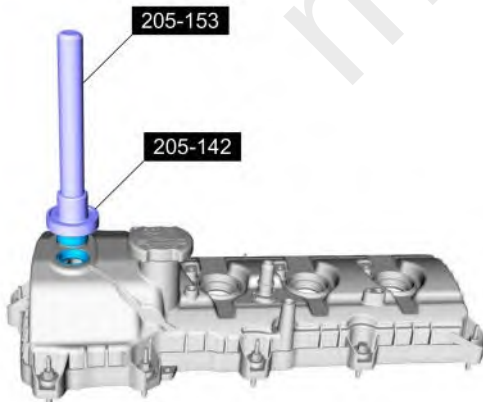
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2.



NOTE: Installation of new seals is only required if damaged seals were removed.

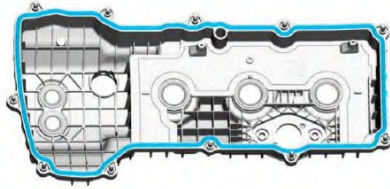
If removed, using the special tools, install the VCT oil control solenoid seals. Use Special Service Tool: 205-142 (T80T-4000-J) Installer, Differential Bearing Cone., 205-153 (T80T-4000-W) Handle.



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3.

Install a new valve cover gasket.



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4.



NOTE: If the valve cover is not installed and the fasteners tightened within 4 minutes, the sealant must be removed and the sealing area cleaned. To clean the sealing area, use silicone gasket remover and metal surface prep. Failure to follow this procedure can cause future oil leakage.

Apply an 8 mm (0.31 in) bead of Motorcraft ® High Performance Engine RTV Silicone to the engine front cover-to-cylinder head joints.

Material

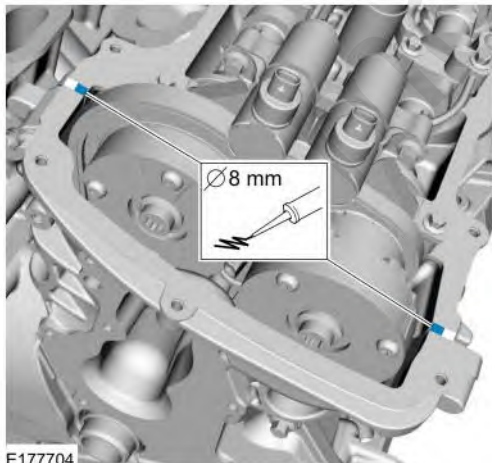
: Motorcraft ® Metal Surface Prep / ZC-31-B

Material

: Motorcraft ® Silicone Gasket Remover / ZC-30-A

Material

: Motorcraft ® High Performance Engine RTV Silicone / TA-357 (WSE-M4G323-A6)



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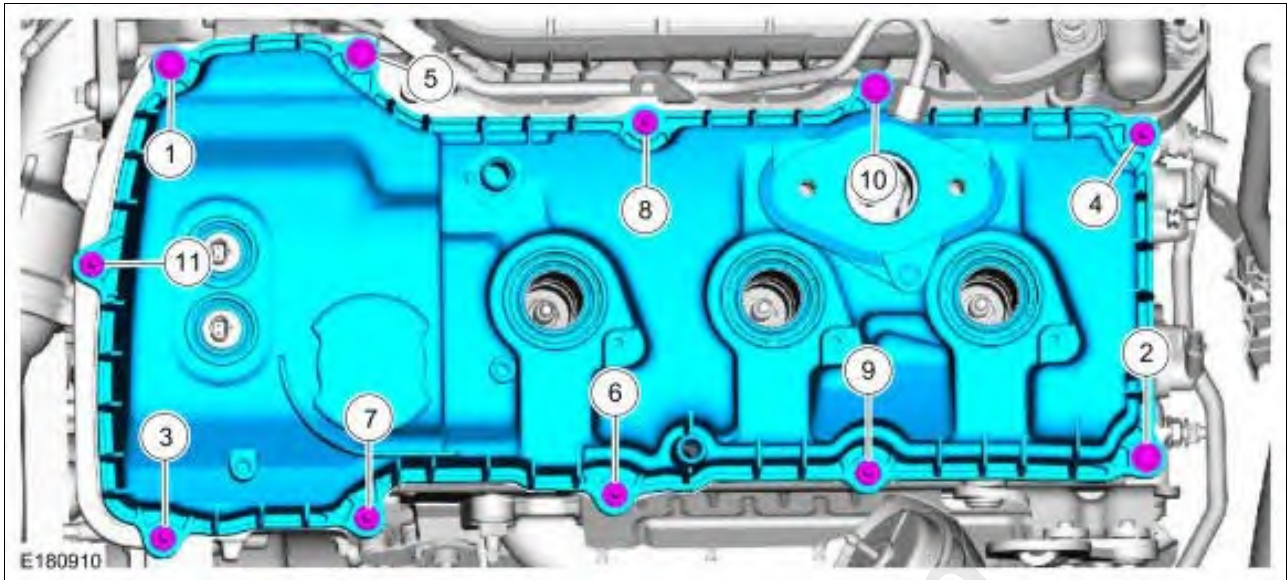
5.

Install the valve cover and tighten the fasteners.

Torque

: 89 lb.in (10 Nm)

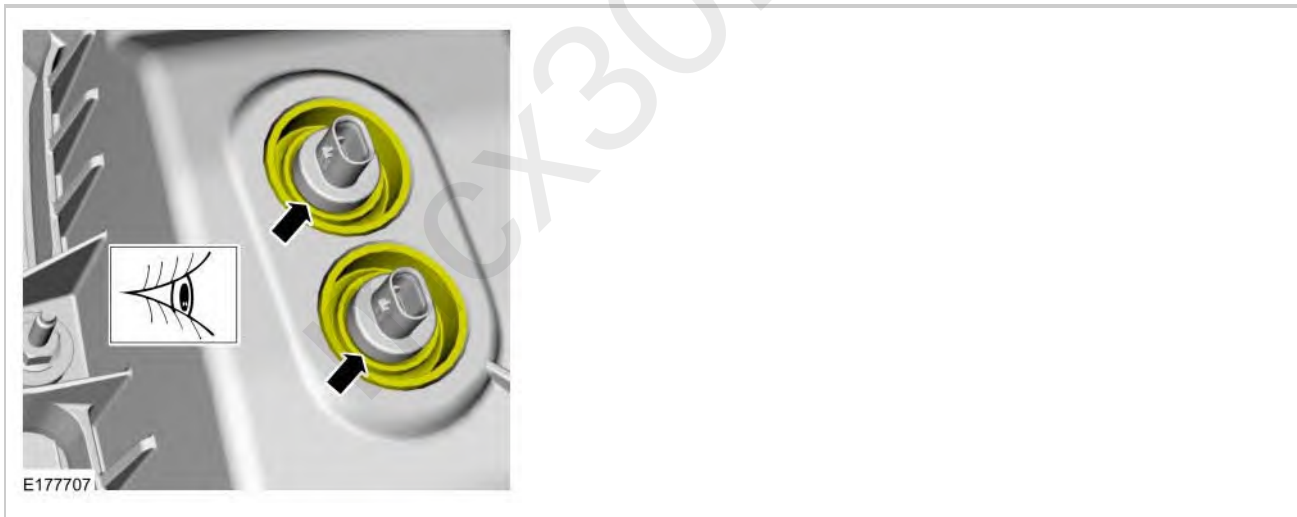
Fig 1: LH Valve Cover Fasteners Tightening Sequence



Courtesy of FORD MOTOR CO.

6.

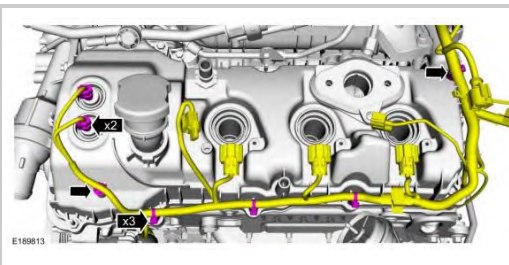
Make sure the VCT seals in the valve cover are below the top of the VCT oil control solenoid electrical connector or the VCT seal may leak oil.



7.

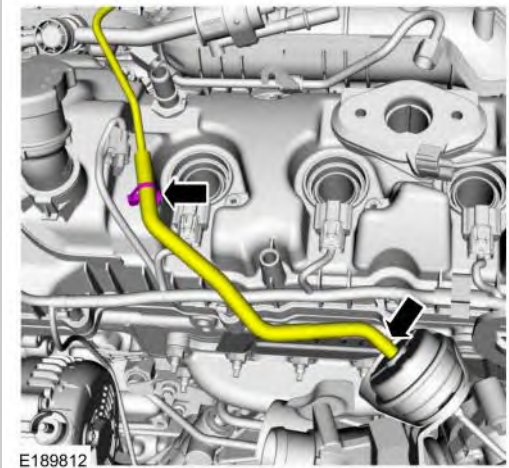
Position the wiring harness and attach the wiring harness retainers.

Connect the VCT sensor electrical connectors.



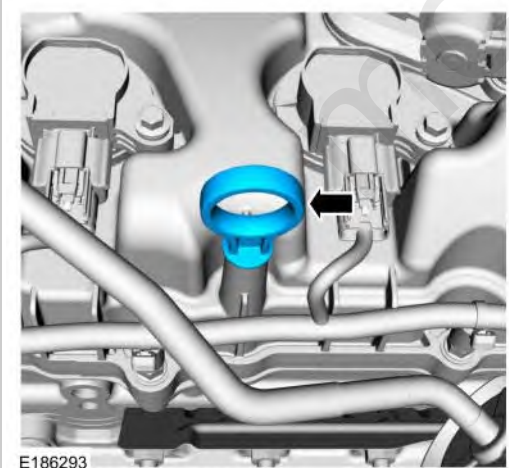
8.

Connect the vacuum hose to the LH turbocharger and attach the hose retainer.



9.

Install the oil level indicator.



10.

Install the LH ignition coil-on-plugs. Refer to: IGNITION COIL-ON-PLUG

11.

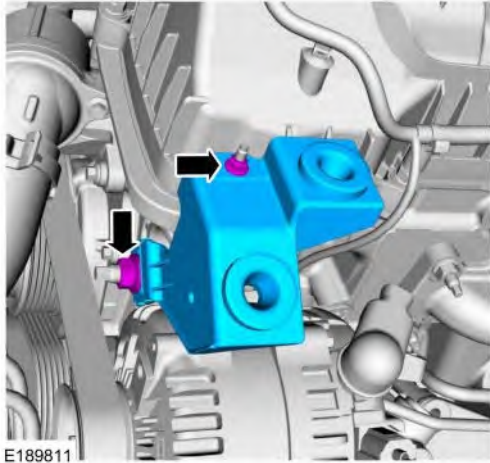
Install the high-pressure fuel pump. Refer to: HIGH-PRESSURE FUEL PUMP .

12.

Install the CAC tube bracket and nuts.

Torque

: M6 nut : 53 lb.in (6 Nm) M10 nut: 133 lb.in (15 Nm)

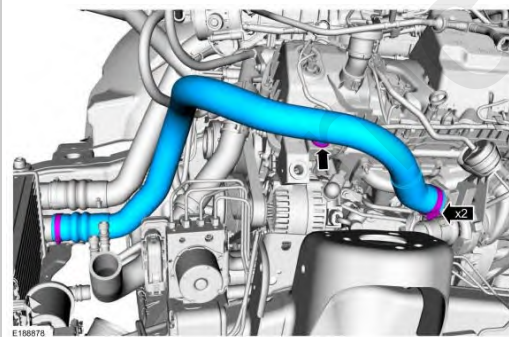


13.

Install the turbocharger outlet tube and connect turbocharger outlet tube into the grommet. Tighten the clamps.

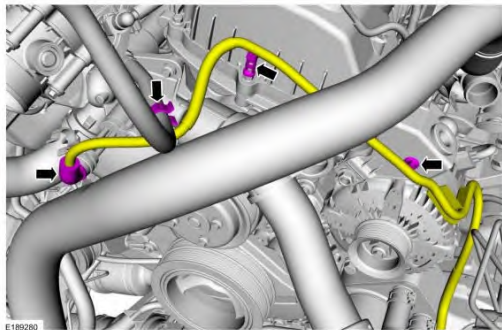
Torque

: 44 lb.in (5 Nm)



14.

If equipped, connect the block heater electrical connector and the wire retainers.

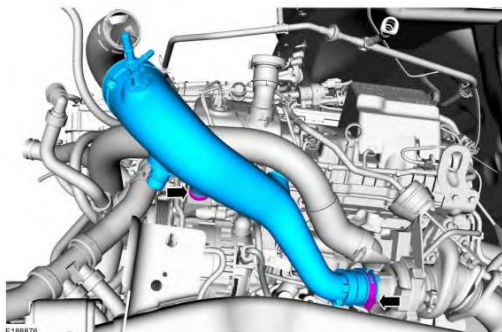


15.

Install the turbocharger inlet tube and connect the turbocharger inlet tube into the grommet. Tighten the clamp at the turbocharger.

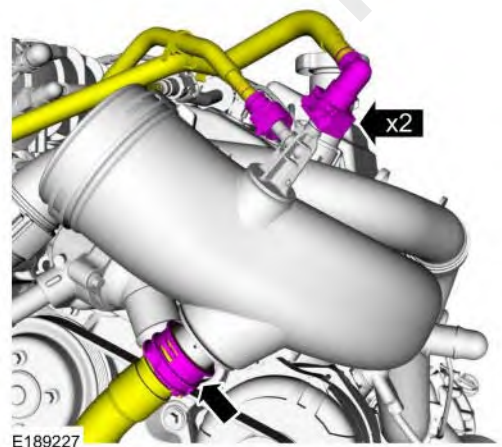
Torque

: 44 lb.in (5 Nm)



16.

Connect the quick connect couplings and the turbocharger bypass tube. Refer to: QUICK RELEASE COUPLING .



17.