2010.0 XF (X250), 303-01

ENGINE - V8 S/C 5.0L PETROL

### CYLINDER HEAD RH (G1213989)

#### REMOVAL AND INSTALLATION

CYLINDER

HEAD LEFT HAND

12.29.03 GASKET - DRIVE, 5000
RIGHT CC, AJ V8,
HAND - SUPERCHARGED
RENEW

CYLINDER

USED
WITHINS

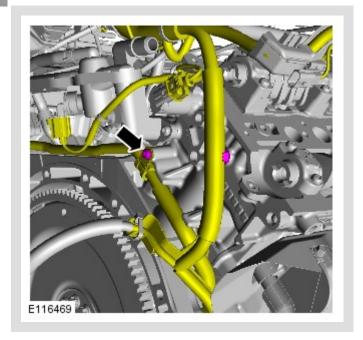
#### REMOVAL



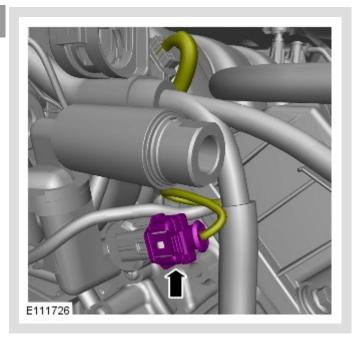
#### NOTE:

Removal steps in this procedure may contain installation details.

- Refer to: Battery Disconnect and Connect (414-01 Battery, Mounting and Cables, General Procedures).
- 2. Raise and support the vehicle.
- Refer to: Supercharger (303-12D Intake Air Distribution and Filtering V8 S/C 5.0L Petrol, Removal and Installation).
- Refer to: Camshaft RH (303-01D Engine V8 S/C 5.0L Petrol, Removal and Installation).
- Refer to: Exhaust Manifold LH (303-01D Engine V8 S/C 5.0L Petrol, Removal and Installation).



7.



8

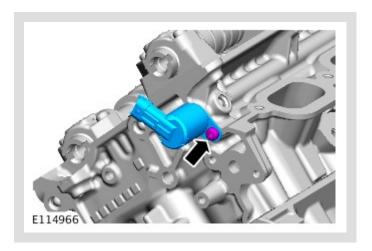
## ① CAUTIONS:

- Discard the seal.
- LH illustration shown, RH is similar.

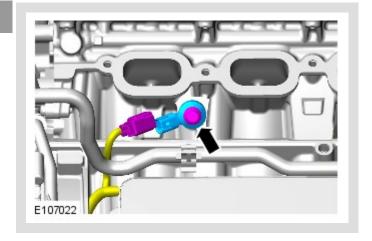
#### $\wedge$

## NOTE:

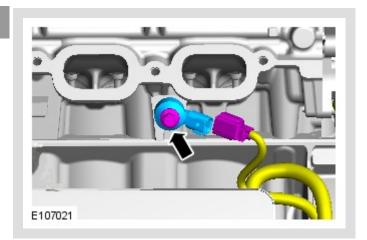
Engine shown removed for clarity.



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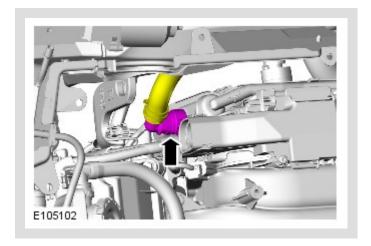
10.



#### $\wedge$

## NOTE:

Clamp the hose to minimize coolant loss.

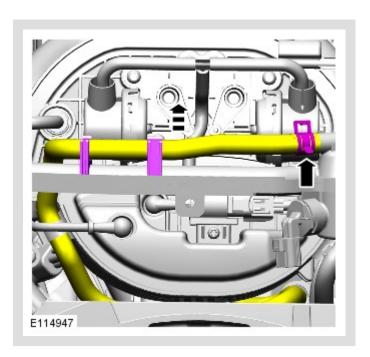


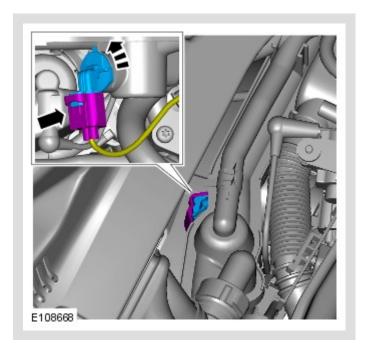
12

#### $\wedge$

## NOTE:

Clamp the hose to minimize coolant loss.

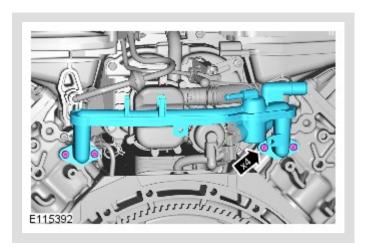


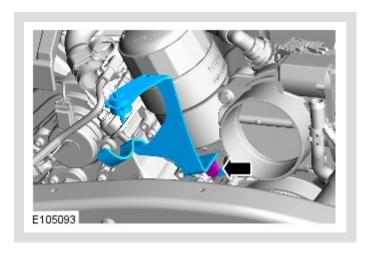


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# ① CAUTION:

Discard the seals.



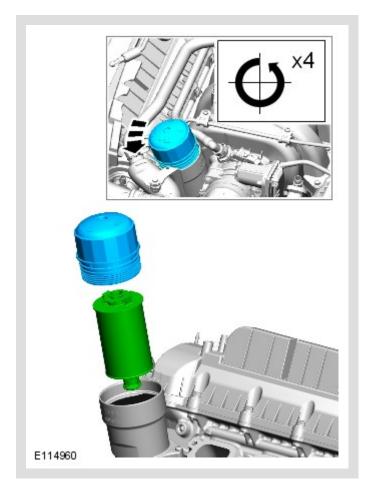


16.



## NOTE:

Remove and discard the O-ring seal.

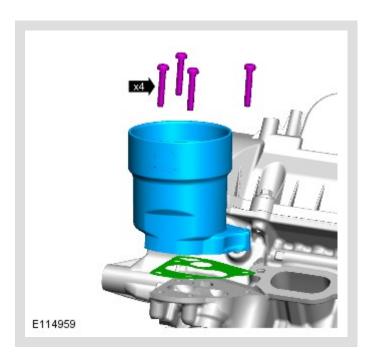


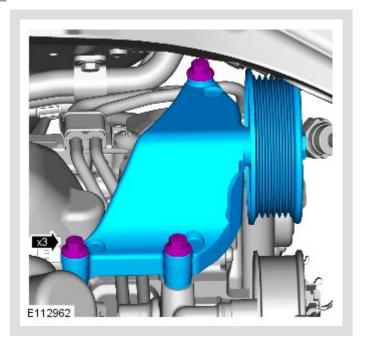
17

#### $\wedge$

## NOTE:

Discard the gasket.

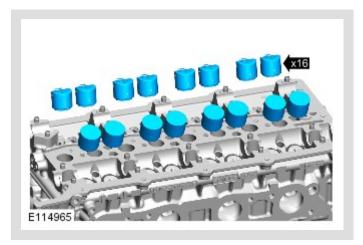




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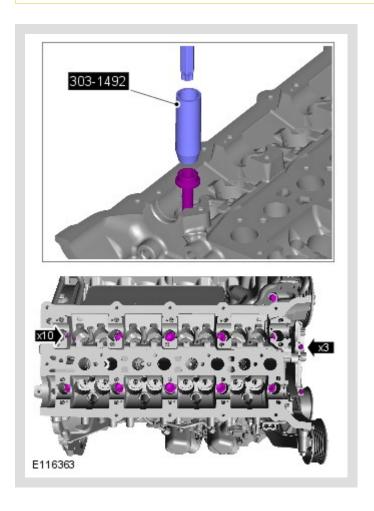
### ① CAUTIONS:

- If a new cylinder head has been installed then new tappets must be installed.
- If the cylinder head is being removed without a new component being installed, the tappets must be installed in their original positions.



## ① CAUTION:

Discard the bolts.

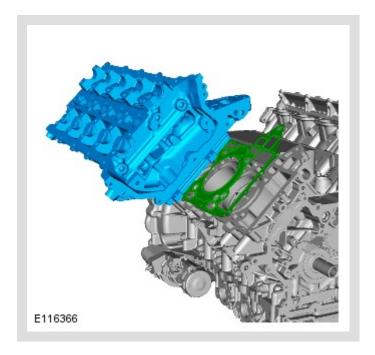


21.

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## NOTE:

Discard the gasket.



#### INSTALLATION

1.

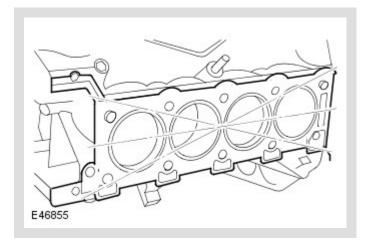
### ① CAUTION:

An acceptable flatness of the cylinder head is 0.1mm.

#### $\wedge$

### NOTE:

For cylinder head with distortion above the maximum allowance, the cylinder head material must be measured.



Check cylinder head face for distortion, across the center and from corner to corner.

2.

#### A

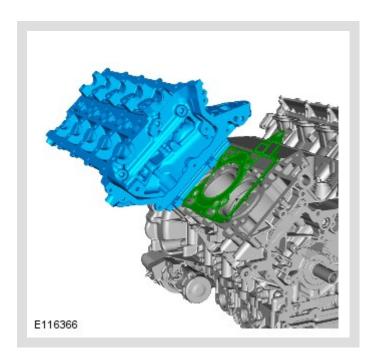
#### **WARNING:**

Make sure care is taken when handling the cylinder head gasket.

### $\wedge$

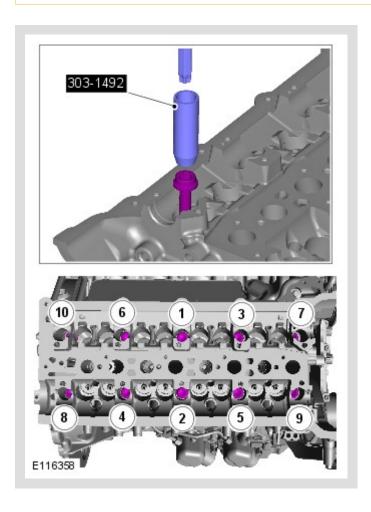
### NOTE:

Install a new gasket.

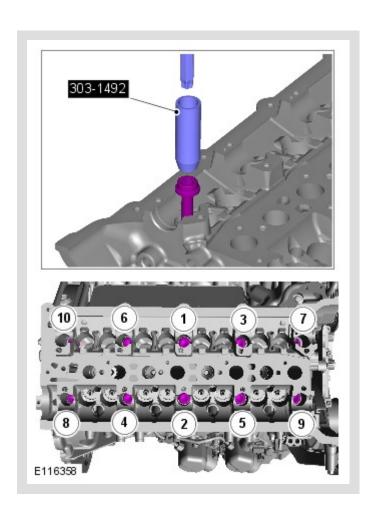


# ① CAUTION:

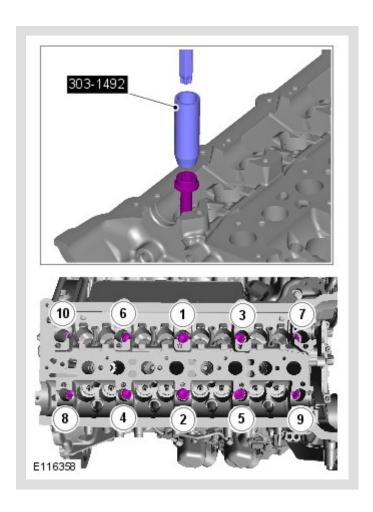
Make sure that new cylinder head bolts are installed.



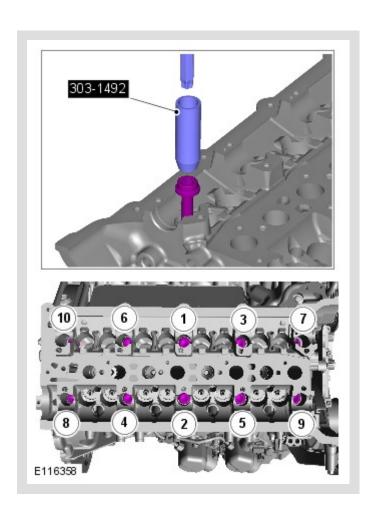
Torque: 20 Nm



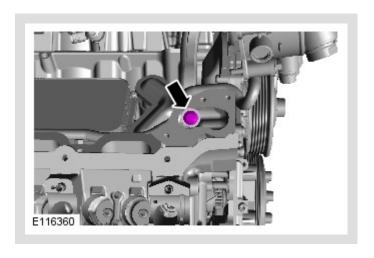
Torque: 35 Nm



Tighten the bolts 1 to 10, a further 90 degrees.



Tighten the bolts 1 to 10, a further 120 degrees.



Torque: 25 Nm

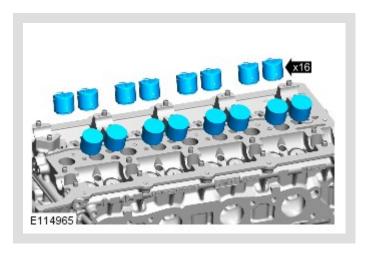
8.



Torque: 12 Nm

#### ① CAUTIONS:

- If a new cylinder head has been installed then new tappets must be installed.
- If the cylinder head is being removed without a new component being installed, the tappets must be installed in their original positions.



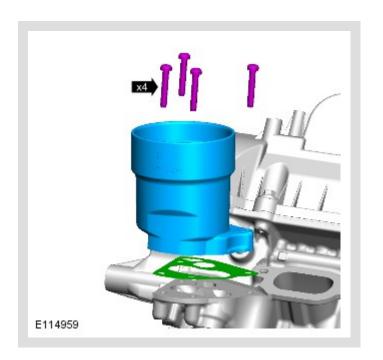
Lubricate the valve tappets with clean engine oil.

10.

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#### NOTE:

Install a new gasket.



11.

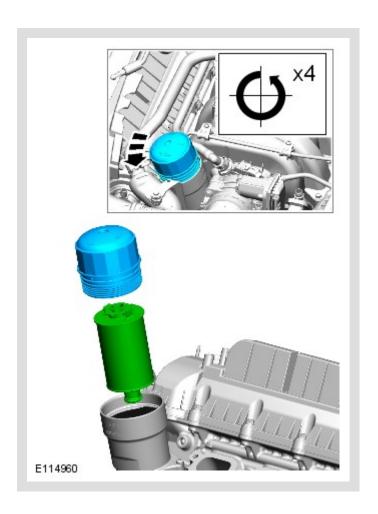
## ① CAUTION:

A new O-ring seal is to be installed.

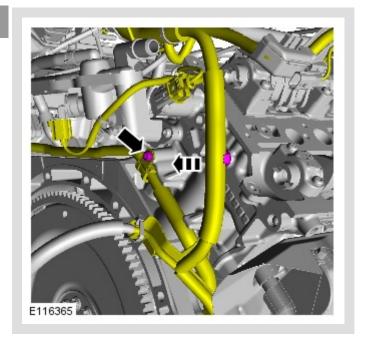


## NOTE:

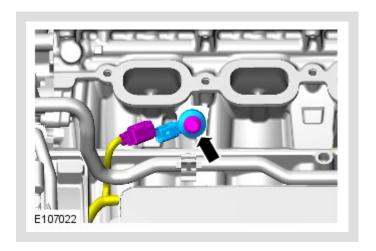
Install a new engine oil filter.



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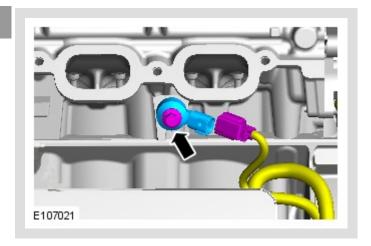


Torque: 12 Nm



Torque: 20 Nm

14.

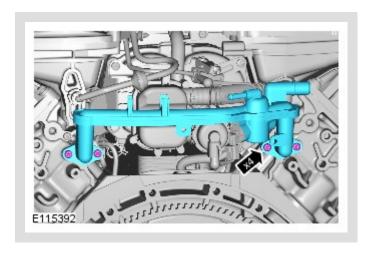


Torque: 20 Nm

15.

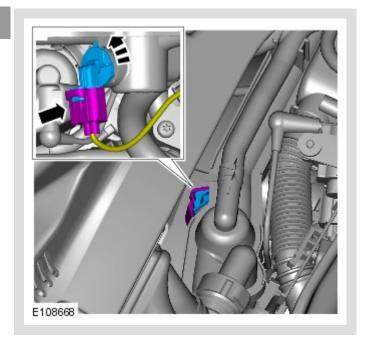
# ① CAUTION:

Install the new seals.



Torque: 10 Nm

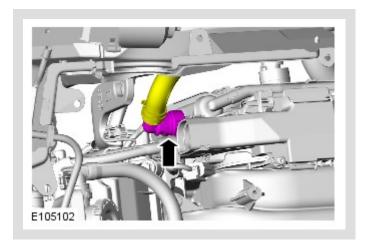
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#### $\wedge$

## NOTE:

Clamp the hose to minimize coolant loss.

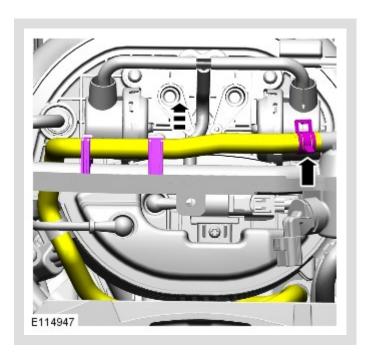


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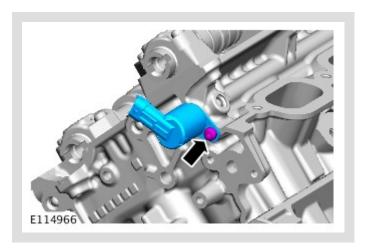
## NOTE:

Clamp the hose to minimize coolant loss.



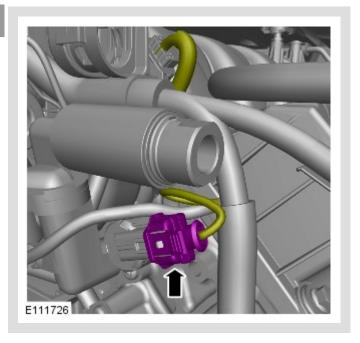
# ① CAUTION:

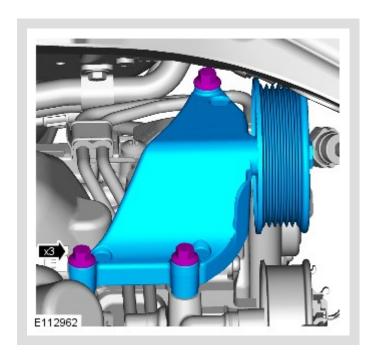
Install a new seal.



Torque: 12 Nm

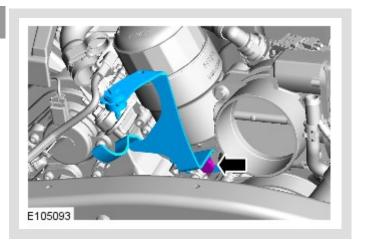
20.





Torque: 25 Nm





Torque: 25 Nm

Refer to: Exhaust Manifold LH (303-01D Engine - V8 S/C 5.0L Petrol, Removal and Installation).

- Refer to: Camshaft RH (303-01D Engine V8 S/C 5.0L Petrol, Removal and Installation).
- Refer to: Supercharger (303-12D Intake Air Distribution and Filtering V8 S/C 5.0L Petrol, Removal and Installation).
- Refer to: Battery Disconnect and Connect (414-01 Battery, Mounting and Cables, General Procedures).