

CAMSHAFTS – ENGINE SET (G2344455)

REMOVAL AND INSTALLATION

12.13.01	CAMSHAFTS – ENGINE SET – RENEW	2000 CC, INGENIUM DIESEL	5.90	USED WITHINS	
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PART(S)

STEP	PART NAME	QUANTITY
Installation Step 1	Camshaft bearing cap nuts	28

REMOVAL



NOTE:

- This procedure contains some variation in the illustrations depending on the vehicle specification, but the essential information is always correct.
- This procedure contains illustrations showing certain components removed to provide extra clarity.

1.

Raise and support the vehicle on a suitable 2 post lift.

Refer to: [Jacking and Lifting](#) (100-02 Jacking and Lifting, Description and Operation).

2.

Disconnect the startup battery ground cable.

Refer to: [Startup Battery Disconnect and Connect](#) (414-00 Battery and Charging System - General Information, General Procedures).

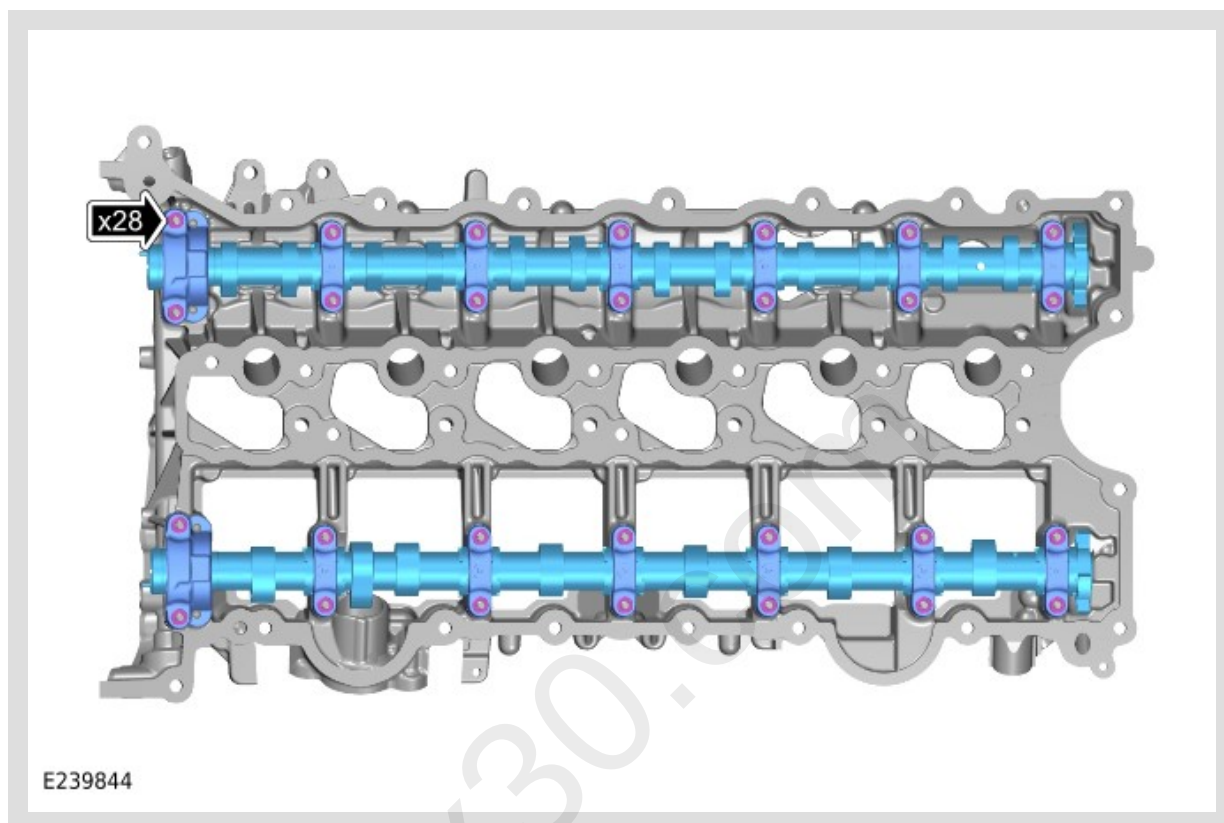
3.

Remove the camshaft carrier.

Refer to: [Camshaft Carrier](#) (303-01C Engine - INGENIUM I6 3.0L Petrol, Removal and Installation).

 NOTE:

- Remove the camshaft bearing caps. Note: their position, orientation and markings. Each is marked with its position (number) and an orientation (arrow).
- Note the installed position of the 2 camshafts.



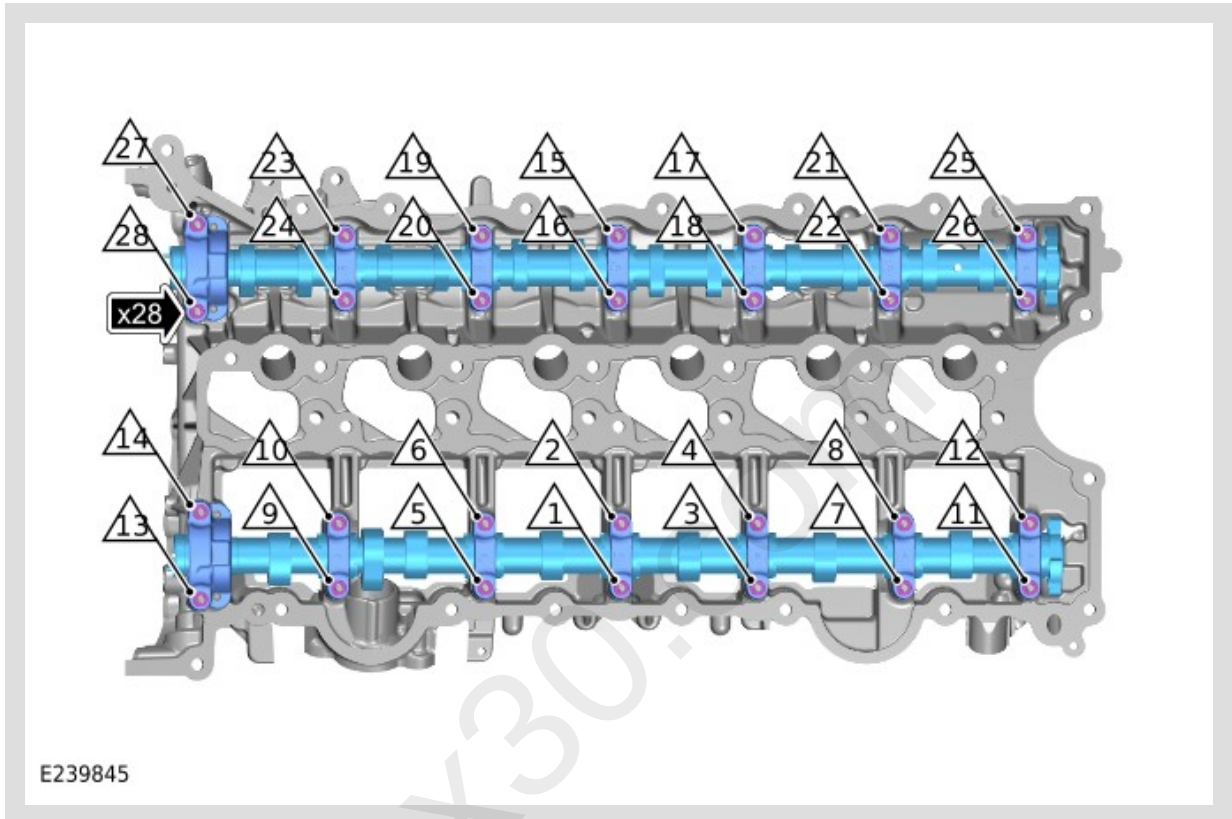
- Remove and discard the 28 nuts.
- Remove the 14 camshaft bearing caps.
- Remove the 2 camshafts.

INSTALLATION

1.

⚠ CAUTION:

Make sure that the mating surfaces are clean and free from debris and foreign material.



- Lubricate the components with clean engine oil.
- Install the 2 camshafts, to their noted removal position.
- Install the 14 camshaft bearing caps to their noted removal position.
- Install and tighten 28 new nuts in the sequence illustrated.

Renew Part: **Camshaft bearing cap nuts** *Quantity:* 28.

Torque: 11Nm

2. Install the camshaft carrier.

Refer to: [Camshaft Carrier](#) (303-01C Engine - INGENIUM I6 3.0L Petrol, Removal and Installation).

3. Connect the startup battery ground cable.

Refer to: [Startup Battery Disconnect and Connect](#) (414-00 Battery and Charging System - General Information, General Procedures).

