

REMOVAL AND INSTALLATION > CAMSHAFTS > REMOVAL

 **NOTE:** During engine repair procedures, cleanliness is extremely important. Any foreign material, including any material created while cleaning gasket surfaces that enters the oil passages, coolant passages or the oil pan, may cause engine failure.

All camshafts

1.

Remove the LH or RH VCT unit. Refer to: Variable Camshaft Timing (VCT) Unit .

LH camshafts

2.

 **NOTE:** The VCT oil control solenoids are removed for clarity.

Remove Special Service Tool: 303-1530 Tool, Chain Tensioner Hold Down.



3.

Remove Special Service Tool: 303-1248 Camshaft holding tools.

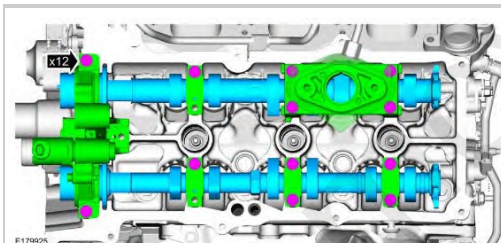


4.

 **NOTE:** Cylinder head camshaft bearing caps are numbered to verify that they are assembled in their original positions.

 **NOTE:** Mark the exhaust and intake camshafts for installation into their original locations.

Remove the bolts, camshaft caps and the camshafts.



RH camshafts

5.

Remove the brake vacuum pump. Refer to: Brake Vacuum Pump - 3.5L EcoBoost (272kW/370PS)

6.

 **NOTE:** The VCT oil control solenoids are removed for clarity.

Remove Special Service Tool: 303-1530 Tool, Chain Tensioner Hold Down.



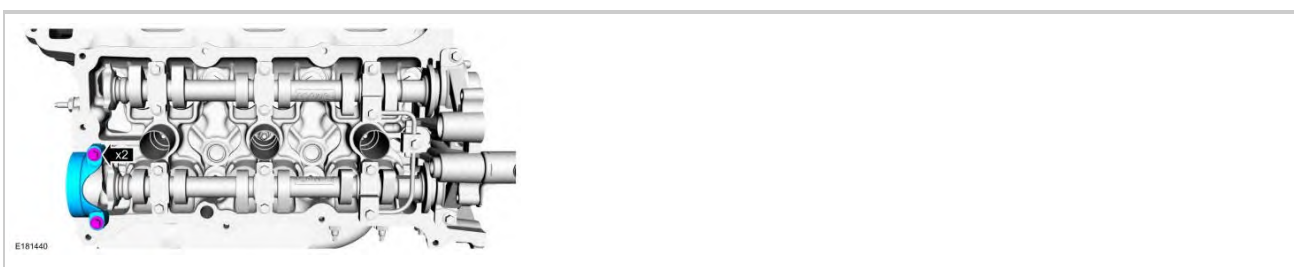
7.

Remove Special Service Tool: 303-1248 Camshaft holding tools.



8.

Remove the bolts and the camshaft bearing cap.



9.

 **NOTE:** Cylinder head camshaft bearing caps are numbered to verify that they are assembled in their original positions.