

Camshaft LH

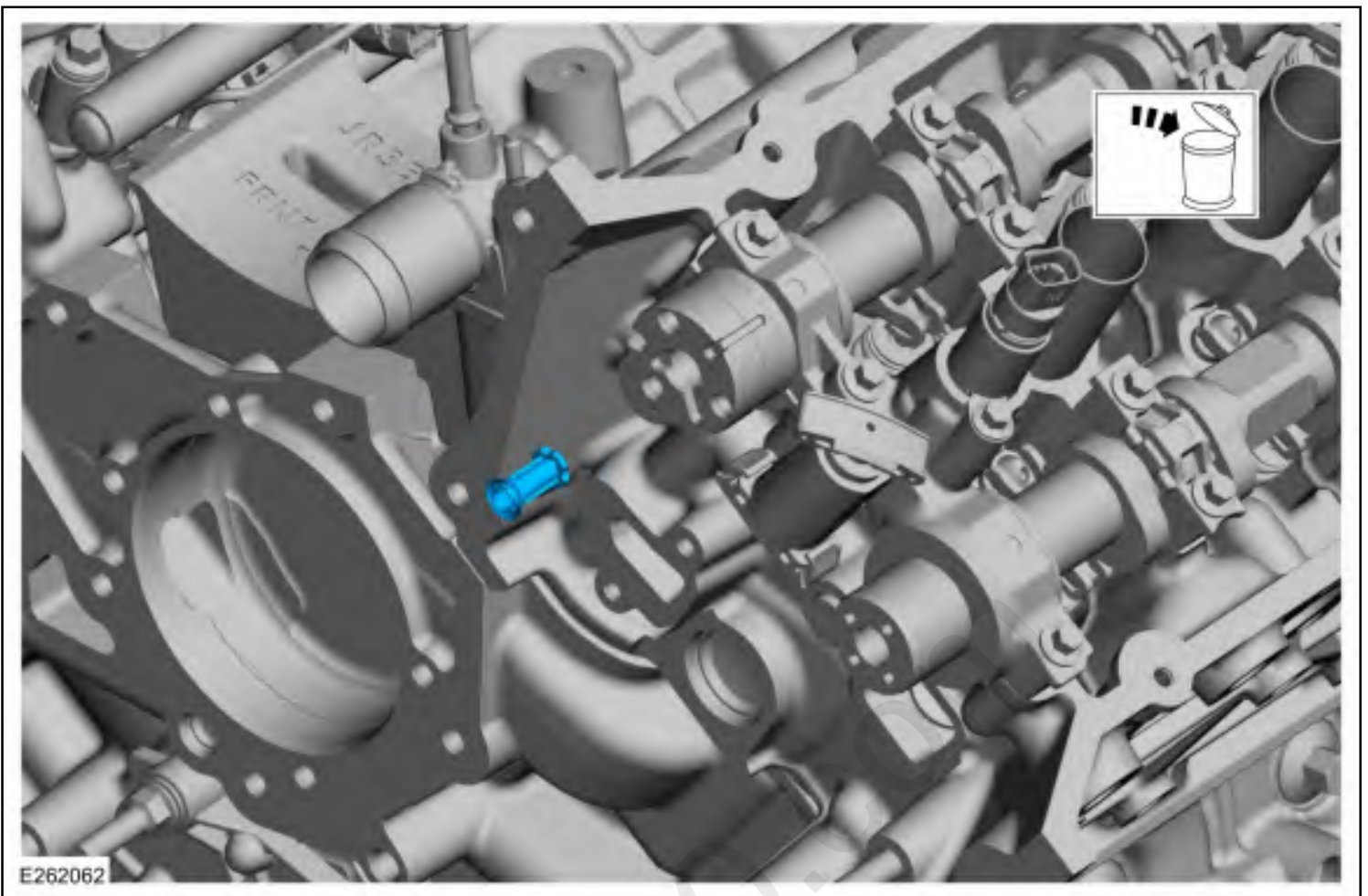
Removal

NOTICE: 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, can cause engine failure.

NOTE: If the RH camshafts are being serviced at the same time as the LH camshafts, remove the RH camshafts first. Refer to the procedure in this section.

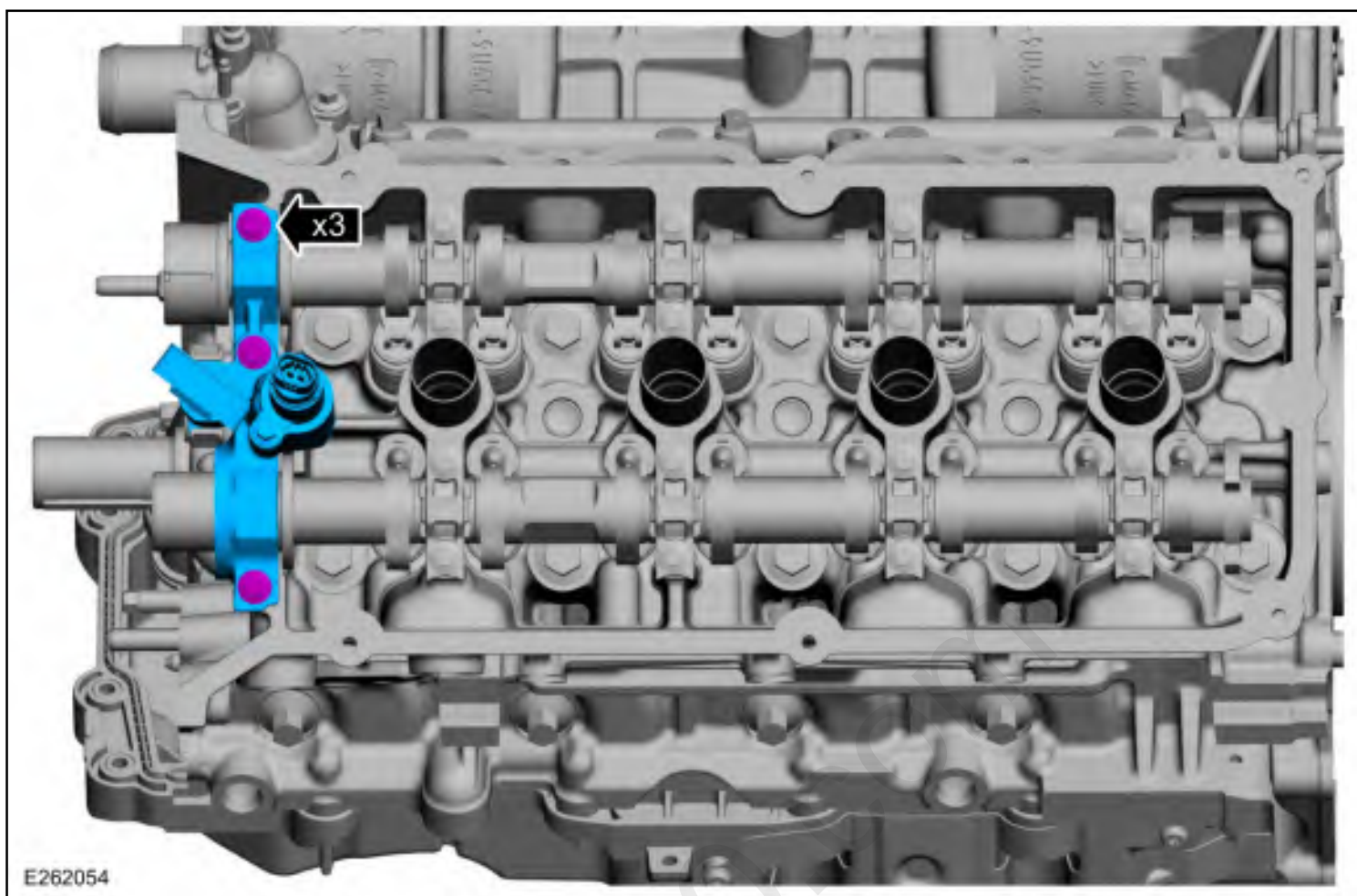
NOTE: If the components are to be reinstalled, they must be installed in their original locations.

1. Remove the LH VCT units.
Refer to: Variable Camshaft Timing (VCT) Unit (303-01 Engine - 5.0L 32V Ti-VCT) .
2. Remove and discard the VCT system oil filter.

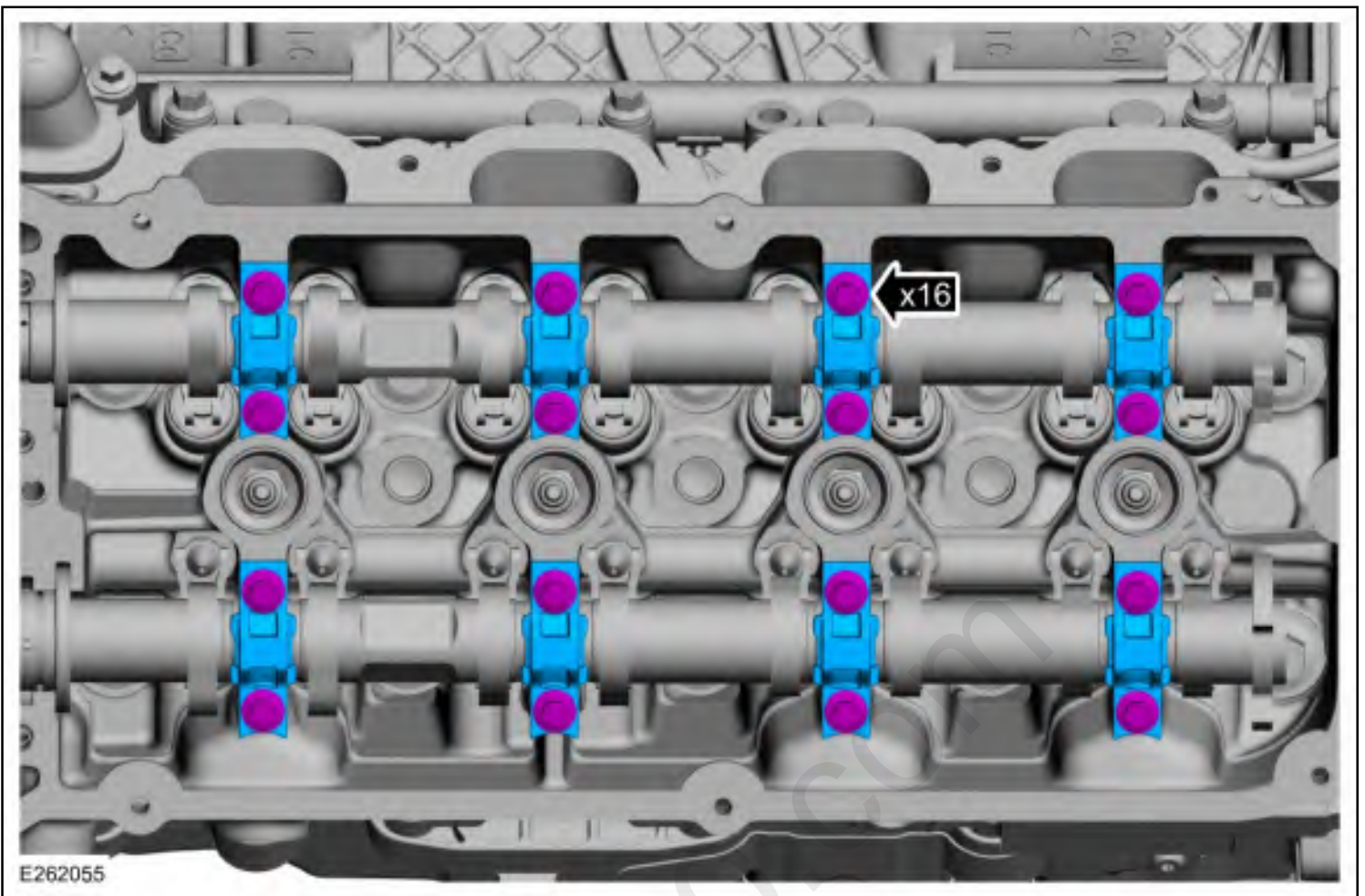


3. **NOTICE:** The front camshaft bearing mega cap must be removed first and then the remaining camshaft bearing caps. Failure to follow this direction may result in damage to the engine.

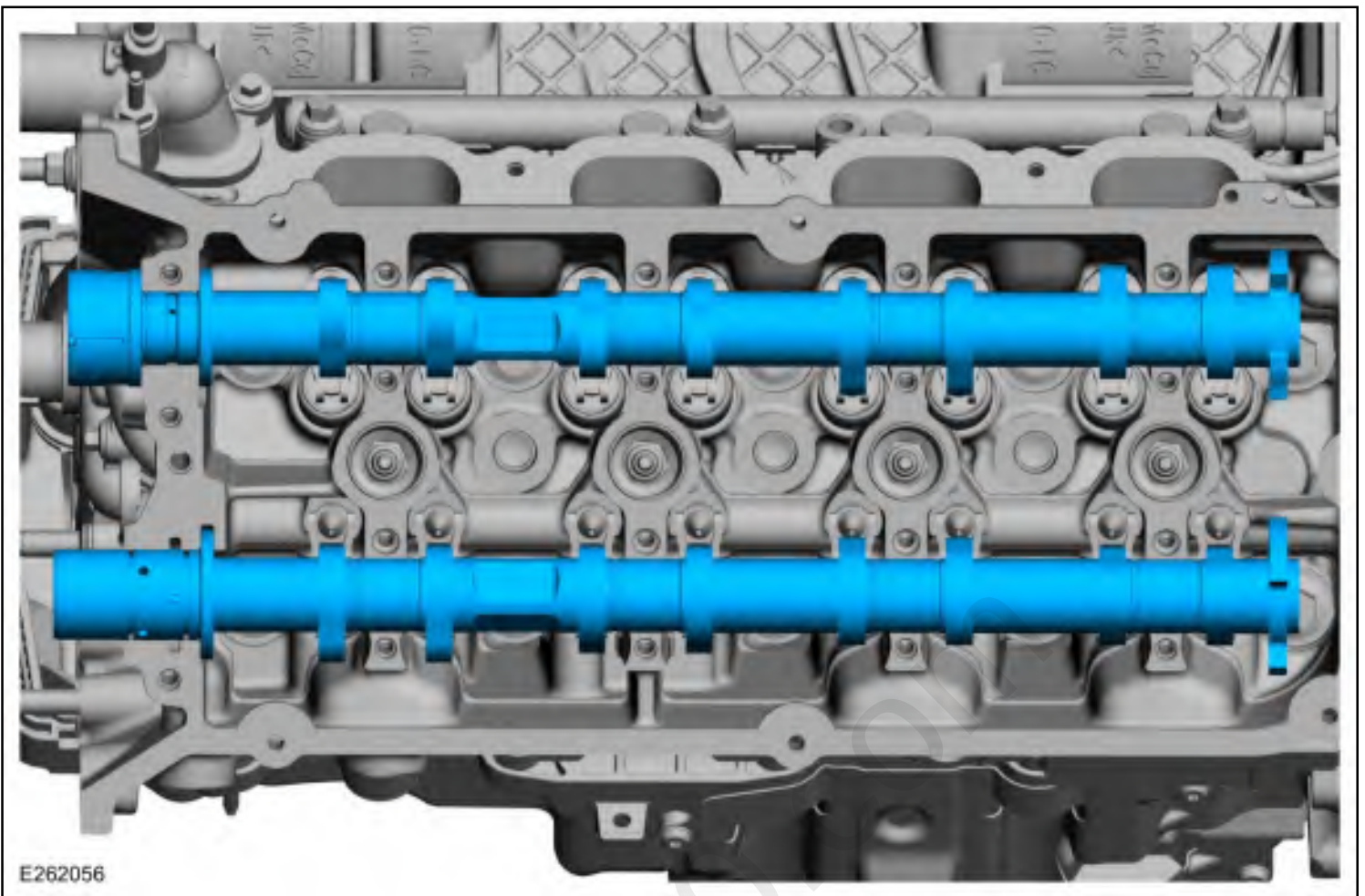
Remove the bolts and the front camshaft bearing mega cap.



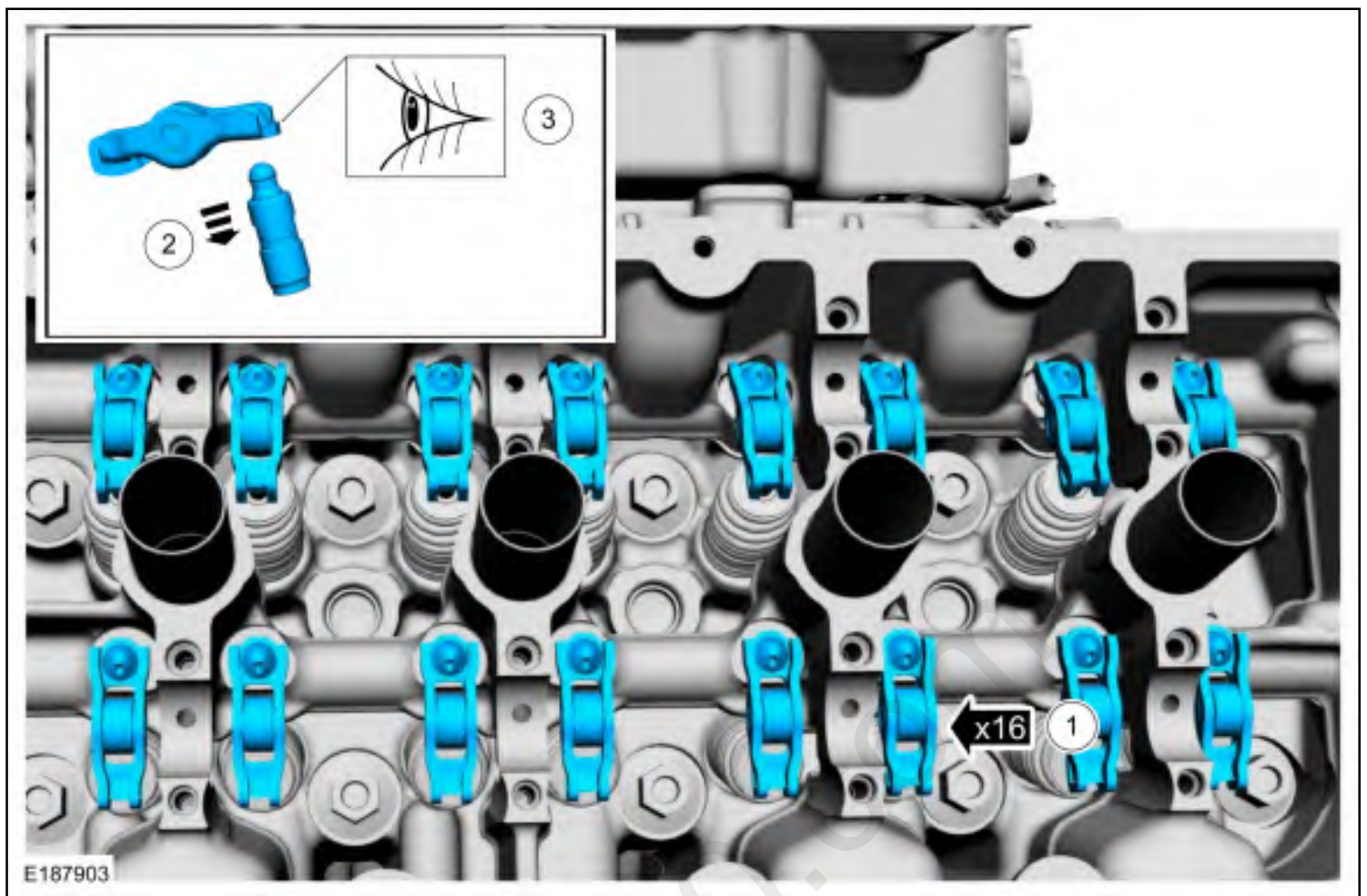
4. Remove the bolts and the camshaft bearing caps.



5. Remove the intake and exhaust camshafts.

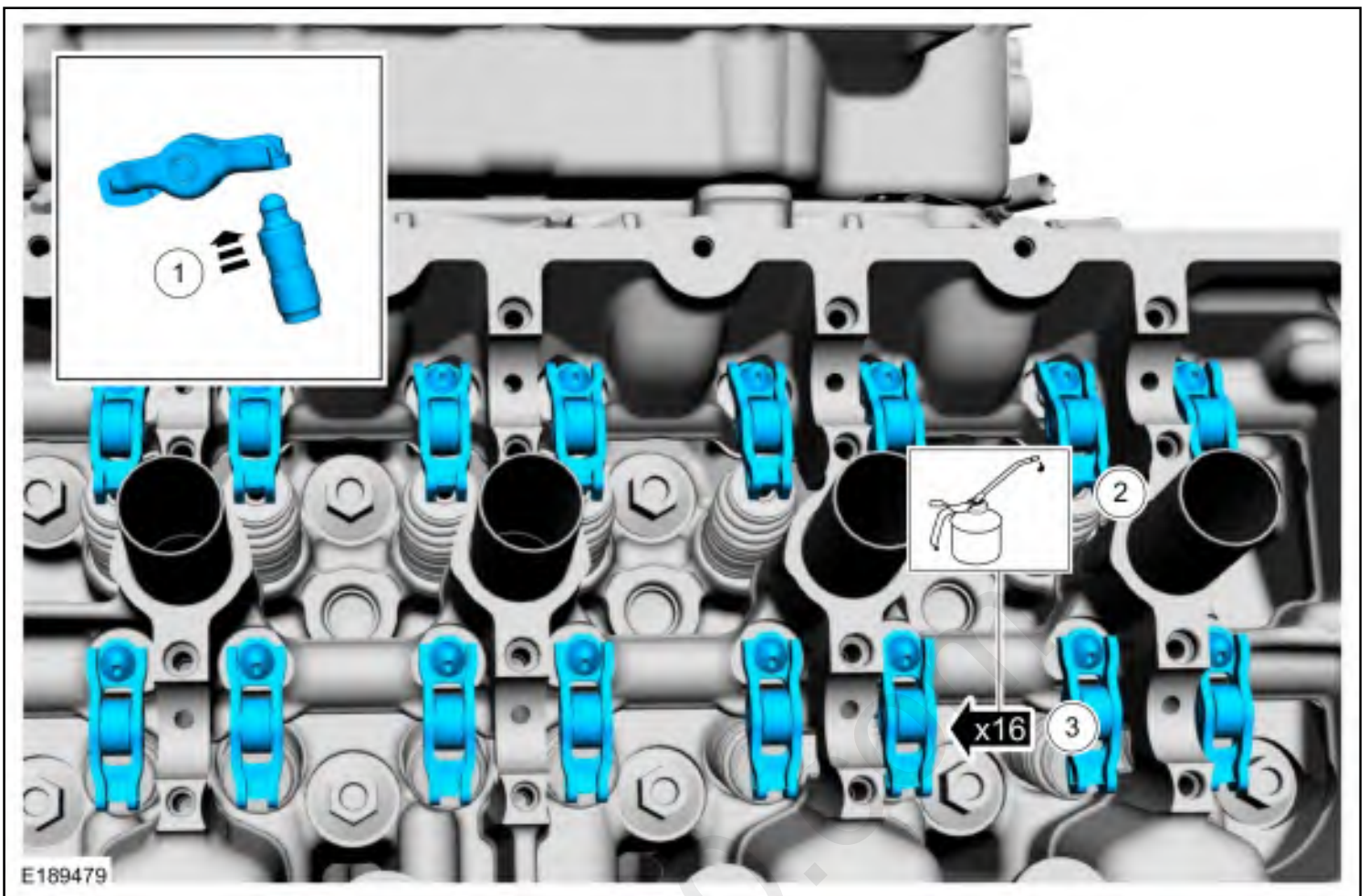


1. Remove the camshaft roller follower and hydraulic lash adjuster assemblies.
2. Separate the hydraulic lash adjusters from the spring clips on the camshaft roller followers.
3. Inspect the hydraulic lash adjuster and roller follower for damage. If any damage is found, inspect the camshaft lobes and valves for damage. Replace damaged components as necessary.



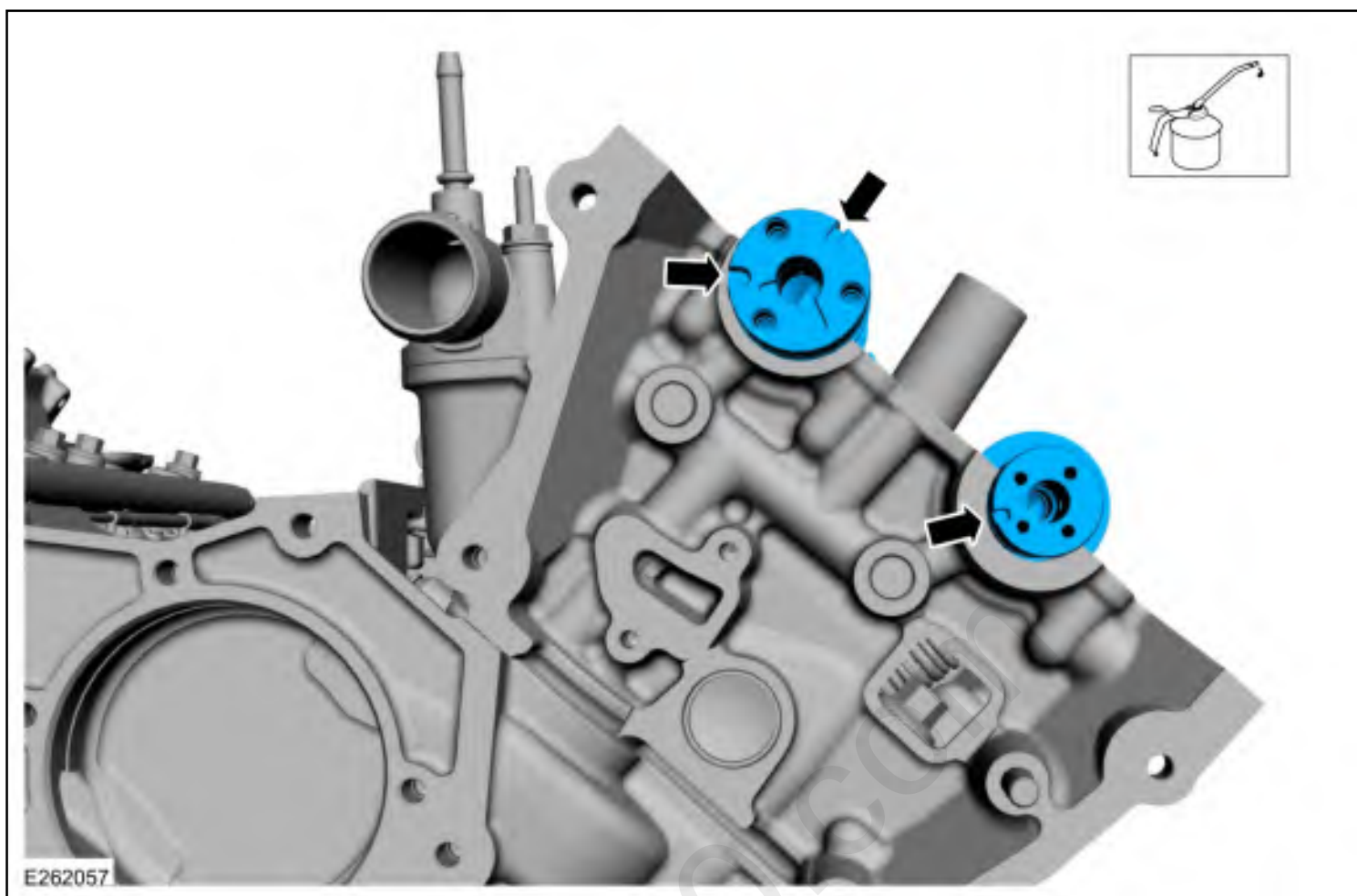
Installation

1. **NOTE:** *If the components are to be reinstalled, they must be installed in their original locations.*
1. Assemble the hydraulic lash adjusters onto the spring clips on the camshaft roller followers.
2. Lubricate the camshaft roller follower and hydraulic lash adjuster assemblies with clean engine oil.
3. Install the camshaft roller follower and hydraulic lash adjuster assemblies.

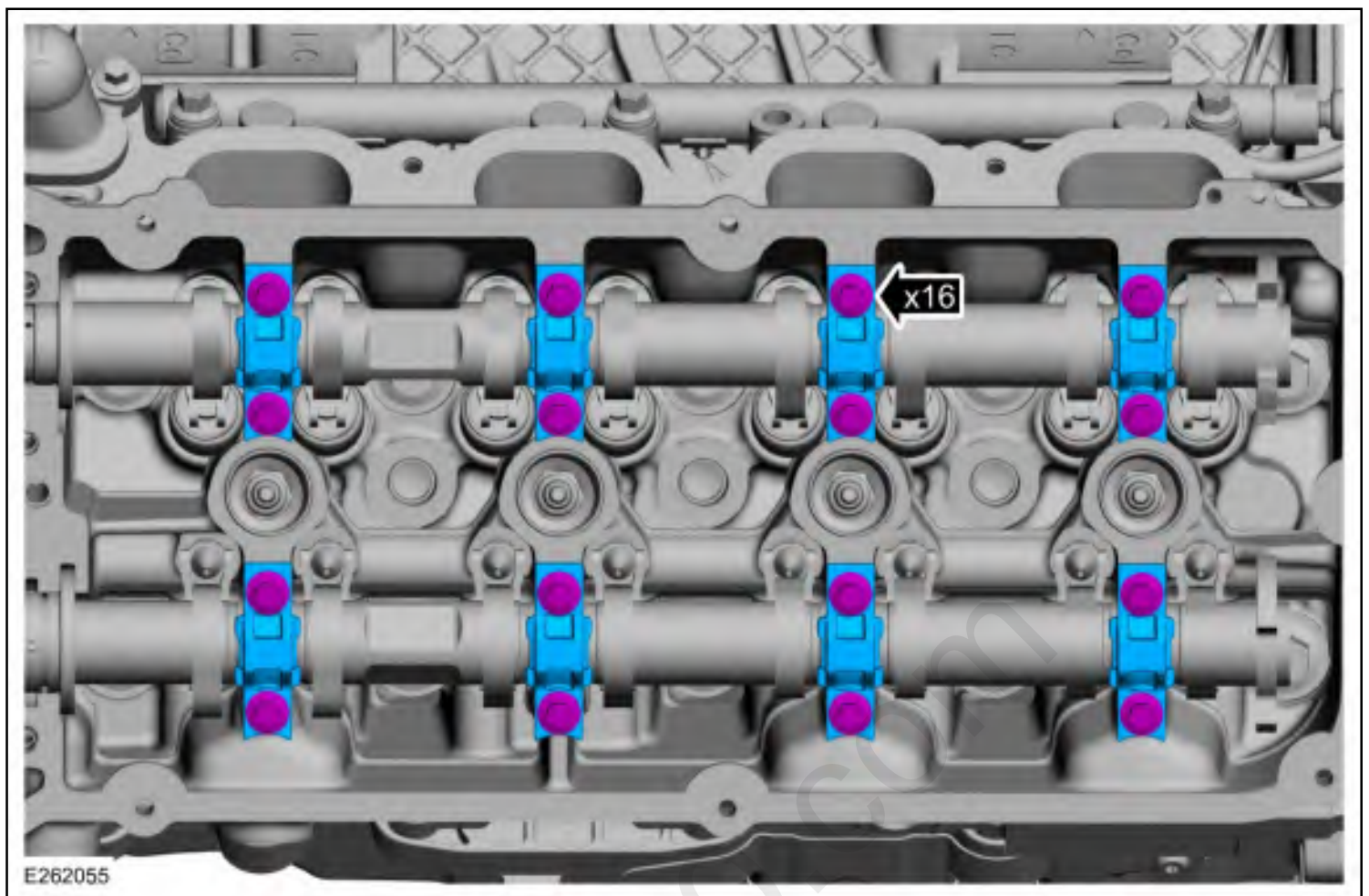


2. **NOTE:** *Lubricate the camshafts with clean engine oil prior to installation.*

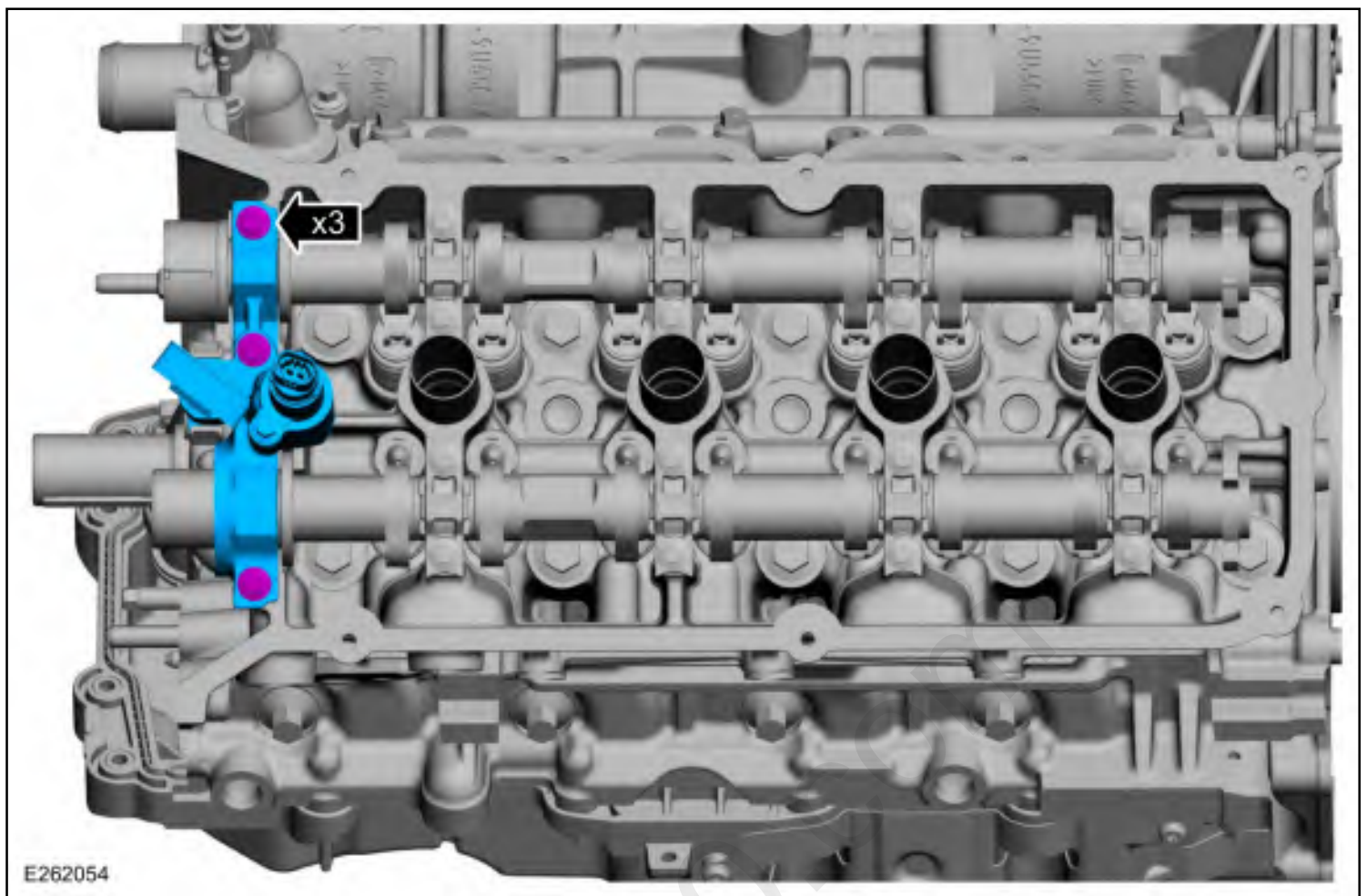
Install the intake and exhaust camshafts in the neutral position. Align the D-slots as shown in the illustration.



3. Install the camshaft bearing caps and the bolts. Do not tighten at this time.



4. Install the front camshaft bearing mega cap and the bolts. Do not tighten at this time.

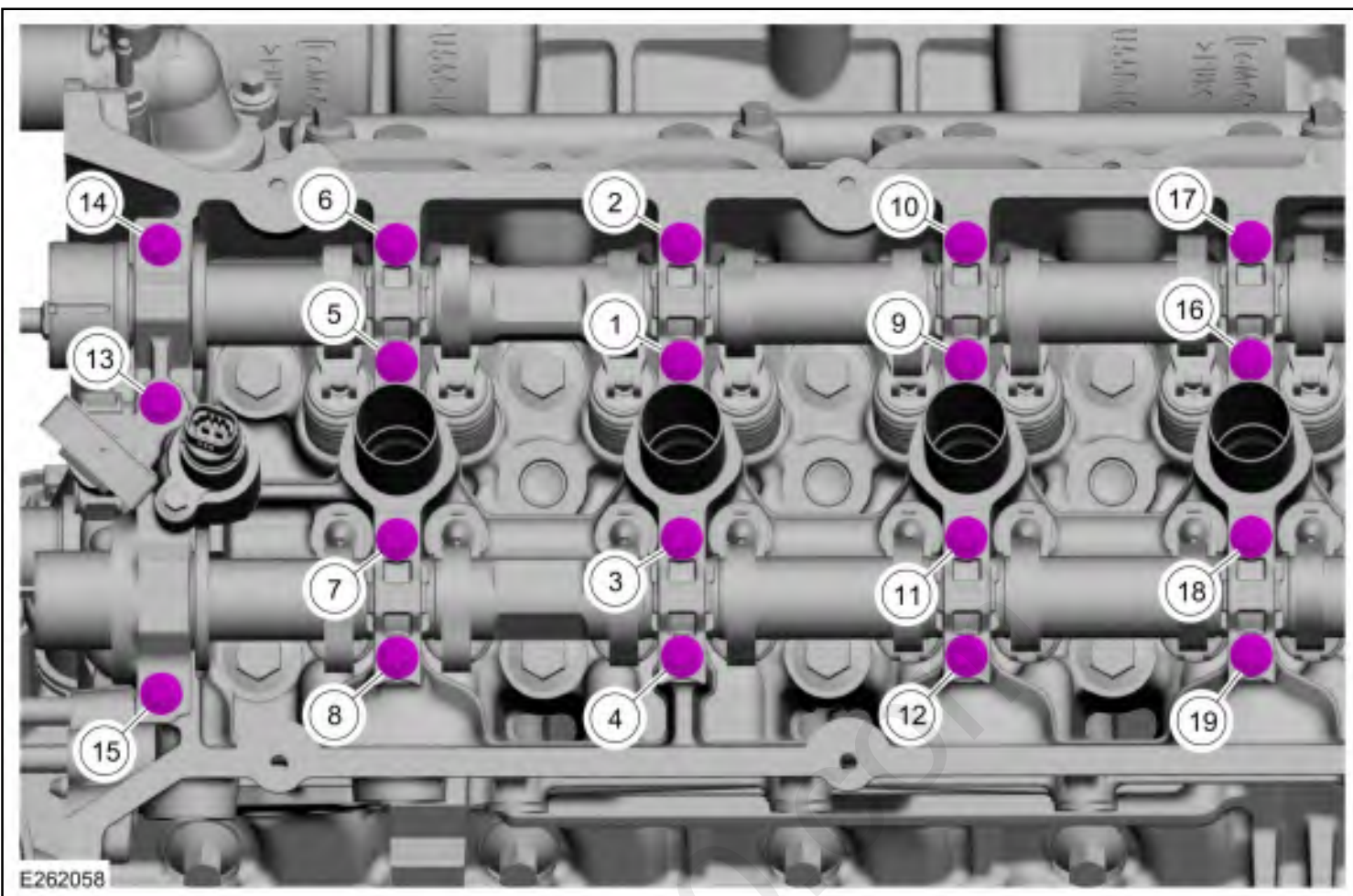


5. Tighten the bolts.

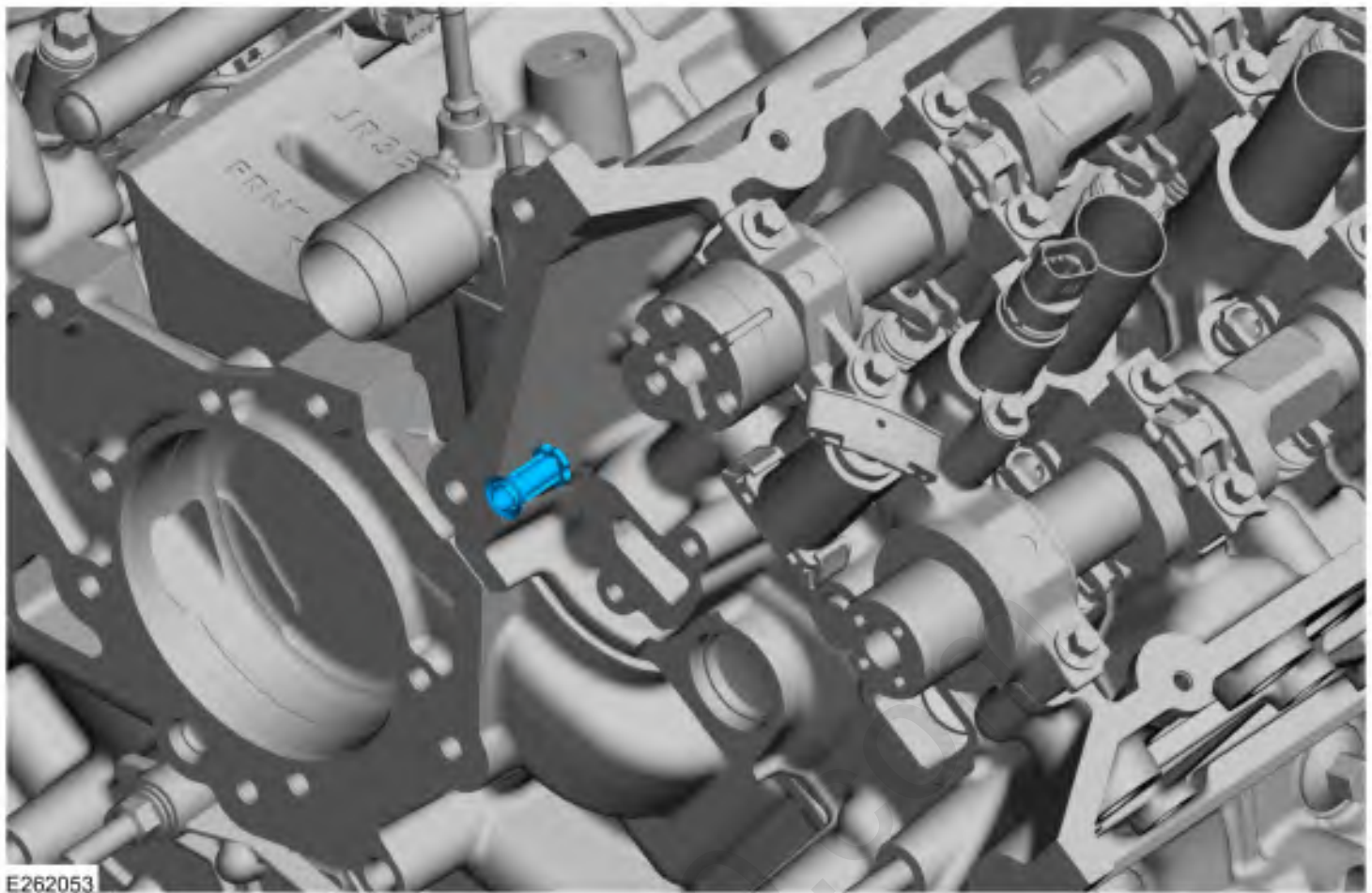
Torque:

Stage 1: 53 lb.in (6 Nm)

Stage 2: 45°



6. Install new VCT system oil filter into the camshaft.



7. Install the LH VCT units.

Refer to: Variable Camshaft Timing (VCT) Unit (303-01 Engine - 5.0L 32V Ti-VCT) .