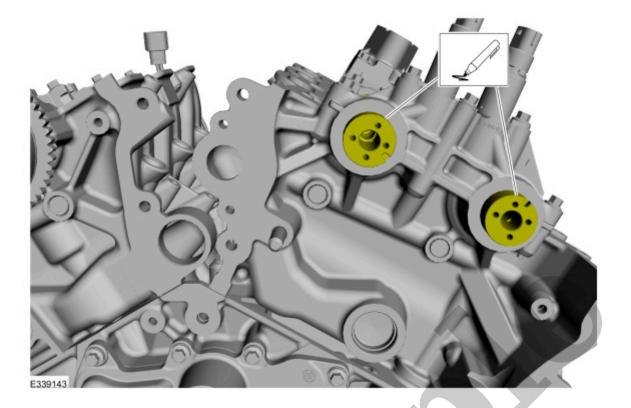


# Your Ultimate Source for OEM Repair Manuals

FactoryManuals.net is a great resource for anyone who wants to save money on repairs by doing their own work. The manuals provide detailed instructions and diagrams that make it easy to understand how to fix a vehicle.

2013 Ford Transit Connect Service and Repair Manual

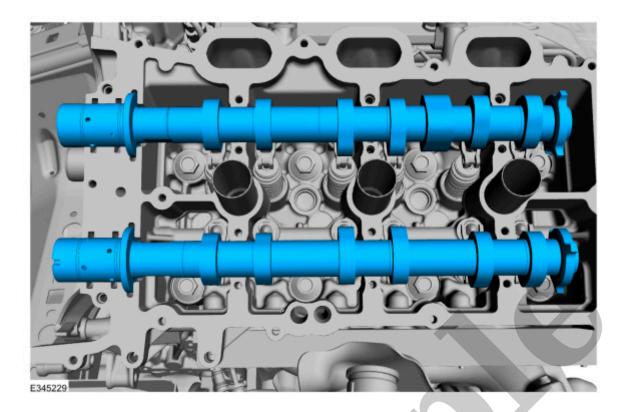
Go to manual page



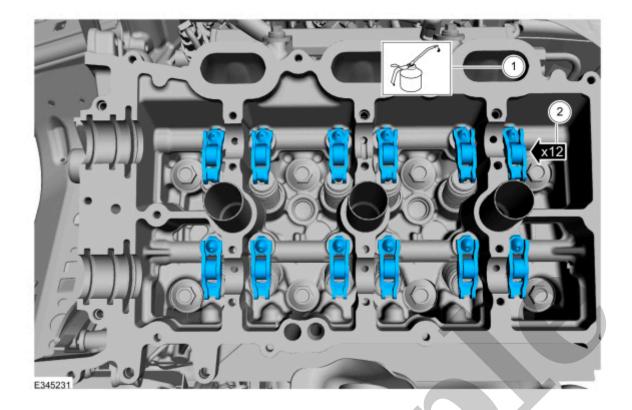
## 7. **NOTICE**

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.



- 10. 1. Mark the location of the clipped roller finger followers and hydraulic lash adjuster assemblies before removal.
  - 2. Remove the clipped roller finger followers and hydraulic lash adjuster assemblies.
  - 3. Inspect the clipped roller finger followers and hydraulic lash adjuster assemblies for damage. If any damage is found, inspect the camshaft lobes and valves for damage. Replace damaged components as necessary.

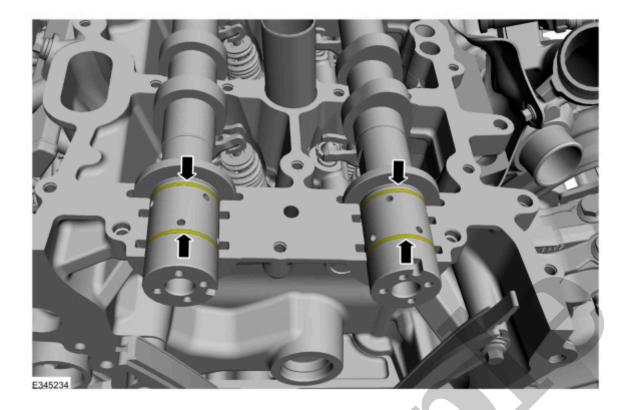


# 2. **NOTE**

Lubricate the camshafts with clean engine oil prior to installation.

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

Refer to: Specifications(303-01C Engine - 3.5L EcoBoost (BM), Specifications).



## 4. NOTE

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

- Install camshaft bearing caps by the markings on the caps and hand install the bolts.
- Install camshaft bearing mega caps and the bolts.

#### Torque:

Stage 1: 1 thru 3: 71 lb.in (8 Nm)

Stage 2: 1 thru 3: 45°

Stage 3: 4: 97 lb.in (11 Nm)

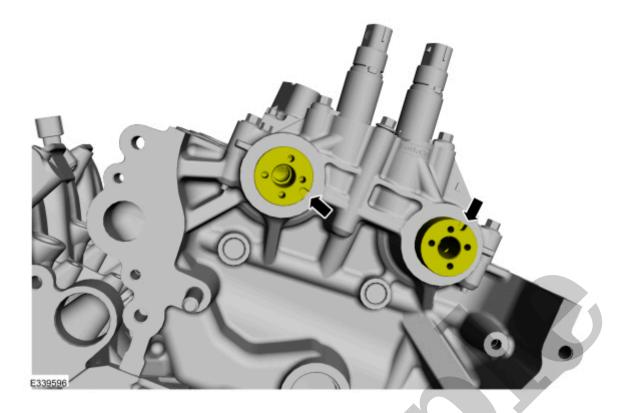
Stage 4: 4: 45°

Stage 5: 5 thru 16: 71 lb.in (8 Nm)

Stage 6: 5 thru 16: 11°

Stage 7: Loosen 12 and 11: Loosen: turn(s)

Stage 8: 12 and 11: 71 lb.in (8 Nm)



# 6. NOTE

The Camshaft Holding Tool will hold the camshafts in the TDC (top dead center) position.

Install Special Service Tool: 303-1655 Tool, Camshaft Holding

## **Camshaft RH**

303-01D Engine - 3.5L V6 PowerBoost (CN)	2022 F-150
Removal and Installation	Procedure revision date: 10/14/2020

#### **Camshaft RH**

#### 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 components are to be reinstalled, they must be installed in their original locations.

1. With the vehicle in NEUTRAL, position it on a hoist.

Refer to: Jacking and Lifting - Overview(100-02 Jacking and Lifting, Description and Operation).

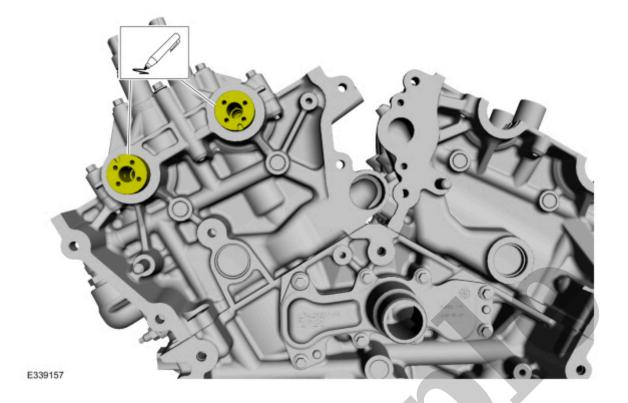
2. Release the fuel system pressure.

Refer to: Fuel System Pressure Release(310-00C Fuel System - General Information - 3.5L EcoBoost (BM), General Procedures).

3. Disconnect the battery ground cable.

Refer to: Battery Disconnect and Connect(414-01 Battery, Mounting and Cables, General Procedures).

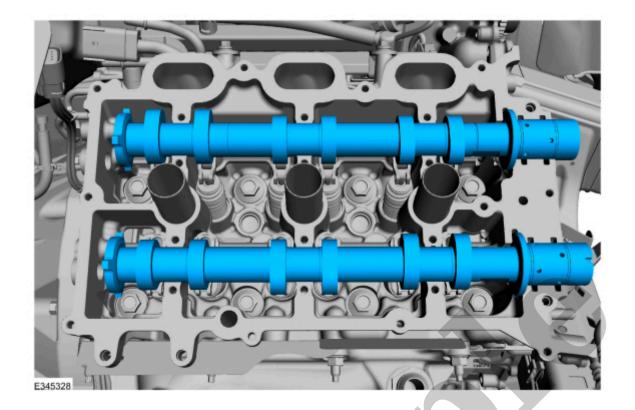
Refer to: Battery Cables - 3.5L V6 PowerBoost (CN)(414-01 Battery, Mounting and Cables, Removal and Installation).



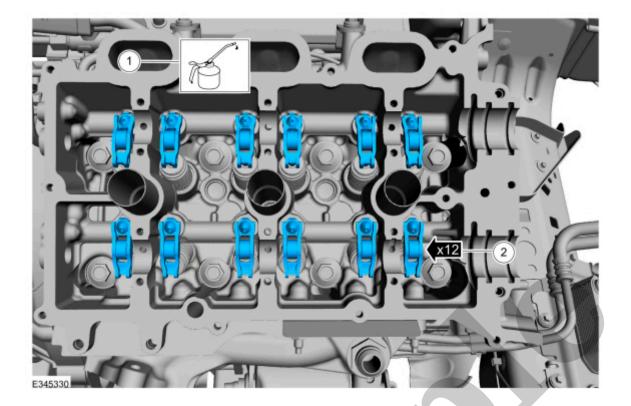
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# 2. **NOTE**

Lubricate the camshafts with clean engine oil prior to installation.

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

Refer to: Specifications(303-01C Engine - 3.5L EcoBoost (BM), Specifications).