### FORD:

2011-2012 Mustang 2011 Edge, Explorer, F-150

This article supersedes TSB **11-11-15** to update the vehicle model lines.

### **ISSUE**

Some 2011 Edge, MKX, Explorer, F-150 and 2011-2012 Mustang vehicles, equipped with a 3.5L or a 3.7L engine and built on or before 5/1/2011 may exhibit a cold startup ticking noise coming from the engine. The noise is present under the left hand (LH) valve cover and may last up to ten minutes.

## **ACTION**

Follow Service Procedure steps to correct the concern.

### **SERVICE PROCEDURE**

- 1. Check vehicle build date.
  - a. If vehicle build date is on or before 5/1/2011, proceed to Step 2.
  - b. If vehicle build date is on or after 5/2/2011, do not continue with this article. Perform normal diagnostics. Refer to Workshop Manual (WSM), Section 303-00.
- 2. Remove LH valve cover. Refer to WSM, Section 303-01.
- 3. Remove camshaft caps 2L and 6L. (Figure 1)

# LINCOLN: 2011 MKX

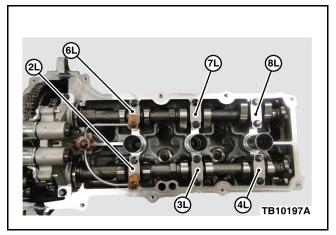


Figure 1 - Article 12-1-17

### **NOTE**

THE CAMSHAFT CAPS HAVE NUMBERS AND ARROWS STAMPED ON THE TOP SURFACE FOR IDENTIFICATION.

- 4. Rotate crankshaft so number 4 cylinder exhaust camshaft lobe is pointing up.
- Use the pin gage provided in the service kit, determine the correct color cup plug to be installed. (Figure 2)

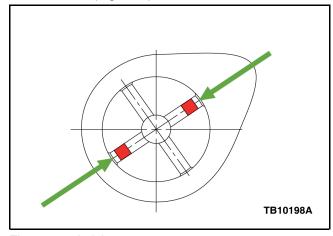


Figure 2 - Article 12-1-17

NOTE: The information in Technical Service Bulletins is intended for use by trained, professional technicians with the knowledge, tools, and equipment to do the job properly and safely. It informs these technicians of conditions that may occur on some vehicles, or provides information that could assist in proper vehicle service. The procedures should not be performed by "do-it-yourselfers". Do not assume that a condition described affects your car or truck. Contact a Ford or Lincoln dealership to determine whether the Bulletin applies to your vehicle. Warranty Policy and Extended Service Plan documentation determine Warranty and/or Extended Service Plan coverage unless stated otherwise in the TSB article. The information in this Technical Service Bulletin (TSB) was current at the time of printing. Ford Motor Company reserves the right to supercede this information with updates. The most recent information is available through Ford Motor Company's on-line technical resources.

## TSB 12-1-17 (Continued)

- a. If the gage pin will not fit into the hole, install the natural cup plug.
- b. If the gage pin fits into the hole, install the blue cup plug.
- 6. Using the tool provided in the service kit, install the appropriate color cup plug into the oil feed hole in camshaft journal 2L. A pen magnet may be used on the opposite side of the tool to hold the plug to the tool and position in the hole. (Figure 3)

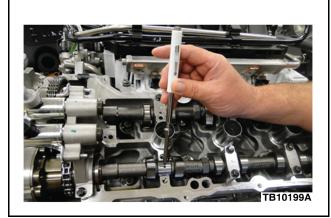


Figure 3 - Article 12-1-17

7. Gently tap the cup plug into the camshaft oil feed hole. The plug should be countersunk below the surface of the journal. (Figure 4)



Figure 4 - Article 12-1-17

- 8. Rotate crankshaft until number 4 cylinder exhaust camshaft lobe is pointing down.
- 9. Repeat Steps 5 7.
- 10. Using Motorcraft® Metal Brake Parts Cleaner, clean the camshaft caps.

- 11. Using fine sandpaper or crocus cloth, sand the top of the camshaft caps to remove any raised burrs and ensure flat surface.
- 12. Using tool 303-1597, cut deeper grooves into camshaft caps.
  - a. Install camshaft cap (top side down) into fixture.
  - b. Cut grooves into both sides of cap. About 15 saw strokes per side. The cut should go completely across the camshaft caps and be consistent in depth.
  - c. Rotate tool and repeat Step 12b.
  - d. Use compressed air to remove cutting debris.
- 13. Lubricate camshaft cap bearing surface with clean engine oil.
- Install camshaft caps 2L and 6L. Tighten bolts to 8 N•m (71 lb-in) then an additional 45 degrees.
- 15. Remove camshaft caps 3L and 7L.
- 16. Repeat steps 10-13 for camshaft caps 3L and 7L.
- Install camshaft caps 3L and 7L. Tighten bolts to 8 N•m (71 lb-in) then an additional 45 degrees.
- 18. Remove camshaft caps 4L and 8L.
- Repeat steps 10-13 for camshaft caps 4L and 8L.
- 20. Install camshaft caps 4L and 8L. Tighten bolts to 8 N•m (71 lb-in) then an additional 45 degrees.
- 21. Install LH Valve Cover. Refer to WSM, Section 303-01.

PART NUMBER	PART NAME
AT4Z-6A296-A BR3Z-6584-C PM-4-A	Kit Camshaft Oil Plug Gasket - Cam Cover - LH Motorcraft® Metal Brake Parts Cleaner

# **TSB 12-1-17 (Continued)**

WARRANTY STATUS: Eligible Under Provisions Of

New Vehicle Limited Warranty Coverage Warranty/ESP coverage limits/policies/prior approvals are not altered by a TSB. Warranty/ESP coverage limits are determined by the identified causal part and verified using the OASIS part coverage tool.

TIME

**DESCRIPTION OPERATION** 120117A

2011 Edge, MKX, And 1.8 Hrs.

Explorer: Install Cup Plugs And Adjust Groove Depth In The Camshaft Caps Following The Service Procedure (Do Not Use With Any Other Labor Operations)

120117A 2011 - 2012 Mustang 3.7L: 2.0 Hrs.

Install Cup Plugs And Adjust Groove Depth In The Camshaft Caps Following The Service Procedure (Do Not Use With Any Other Labor

Operations)

2011 F-150 3.7L: Install 120117A 1.9 Hrs.

Cup Plugs And Adjust Groove Depth In The Camshaft Caps Following The Service Procedure (Do Not Use With Any Other

Labor Operations)

**DEALER CODING** 

CONDITION BASIC PART NO. CODE 6050 42