

# 5.0L WITH A/C COMPRESSOR DRIVE STRETCHY BELT CONFIGURATION—LIGHT LOWER-END ENGINE KNOCK

TSB 12-8-14

**FORD:**  
2011-2012 Mustang

This article supersedes TSB **12-8-3** to update Part List.

## **ISSUE**

Some 2011-2012 Mustang vehicles equipped with a 5.0L engine and air conditioning (A/C) compressor drive stretchy belt configuration may exhibit a light, lower-end engine knock most noticeable when engine temperature is warm and the vehicle is at idle.

## **ACTION**

Refer to the Service Procedure steps to correct the condition.

## **SERVICE PROCEDURE**

1. Remove A/C compressor drive stretchy belt. Refer to Workshop Manual (WSM), Section 303-05. Start engine and re-evaluate concern. Is light, lower-end engine knock still present?
  - a. Yes - This procedure does not apply. Refer to WSM, Section 303-00.
  - b. No - Obtain drive belt service kit. For vehicles with automatic transmission, also obtain transmission fluid cooler tubes and clamps. Proceed to Step 2.
2. For vehicles with automatic transmission, remove transmission fluid cooler tubes and discard. Refer to WSM, Section 307-02.
3. Determine engine build date. Refer to WSM, Section 303-01.
  - a. If engine build date is on or before 4/15/2011, proceed to Step 4.

b. If engine build date is after 4/15/2011, do not replace the engine front cover. Use an 8 X 1.25 mm tap to clean the mounting locations noted on the engine front cover. (Figure 1) Use compressed air to clean any remaining debris.

- (1) For vehicles equipped with an automatic transmission, proceed to Step 5.
- (2) For vehicles equipped with a manual transmission, proceed to Step 6.

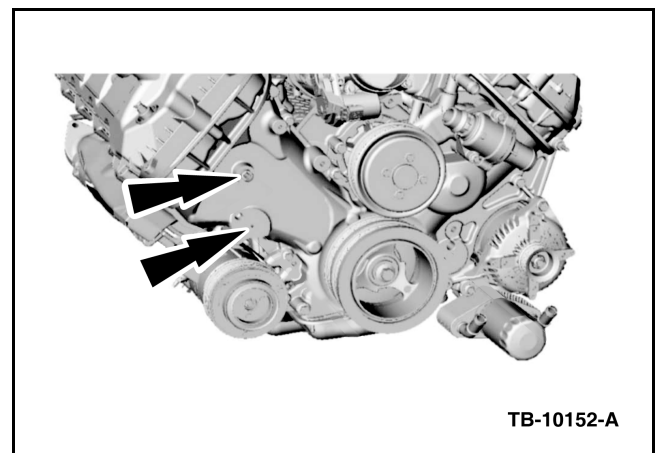


Figure 1 - Article 12-8-14

4. Replace the engine front cover. Refer to WSM, Section 303-01.
5. For vehicles with automatic transmission, install new transmission fluid cooler tubes. Refer to WSM, Section 307-02.
6. Install A/C compressor drive belt idler pulley and A/C compressor drive belt idler pulley bolt supplied in the service kit. Tighten to 25 N•m (18 lb-ft). (Figure 2)

**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 supersede this information with updates. The most recent information is available through Ford Motor Company's on-line technical resources.

## TSB 12-8-14 (Continued)

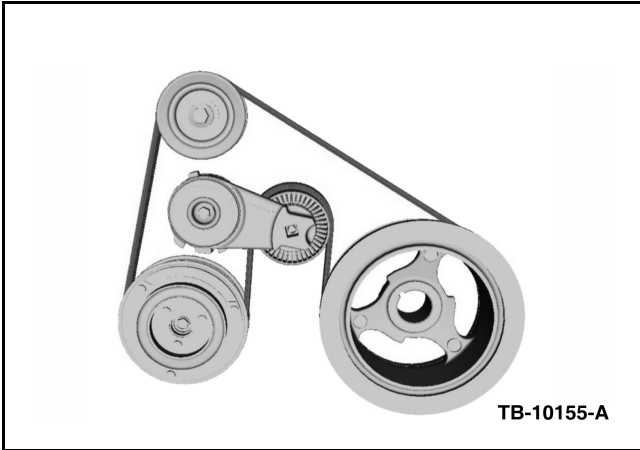


Figure 2 - Article 12-8-14

7. Install A/C compressor drive belt tensioner supplied in the service kit. Tighten to 25 N•m (18 lb-ft). (Figure 2)
8. Install A/C compressor drive belt supplied in the service kit. (Figure 2)
9. Install accessory drive belt. Refer to WSM, Section 303-05.
10. Install Integrated Diagnostic System (IDS) and identify the vehicle. Answer the IDS screen prompts according to the current vehicle A/C belt configuration.
11. Reprogram the Powertrain Control Module (PCM) using IDS release 79.03 or higher. This new calibration is not included in the VCM 2012.5 DVD. Calibration files may also be obtained at [www.motorcraft.com](http://www.motorcraft.com).
12. Perform Misfire Monitor Neutral Profile Correction. Select IDS Toolbox Icon, Powertrain, Service Functions, then Misfire Monitor Neutral Profile Correction.

PART NUMBER	PART NAME
CR3Z-8620-AA	Kit-Drive Belt - Boss
BR3Z-8620-DA	Kit-Drive Belt - GT
BR3Z-6019-G	Front Cover
XW4Z-6700-AA	Crankshaft Seal - Front
CR3Z-7R081-D	Tube Assembly Transmission Cooler
8C2Z-7C107-A	Clamp-Trans Oil Cooler
CR3Z-7R081-C	Tube Assembly Transmission Cooler

**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.

OPERATION	DESCRIPTION	TIME
120814A	2011-2012 Mustang 5.0L Manual Transmission: Diagnose, Install New A/C Compressor Drive Belt Idler Pulley, Tensioner, And Drive Belt Includes Time To Reprogram The PCM And Perform Misfire Monitor Neutral Profile Correction (Do Not Use With Any Other Labor Operations)	1.0 Hr.
120814A	2011-2012 Mustang 5.0L 6R80 Automatic Transmission: Diagnose, Install New A/C Compressor Drive Belt Idler Pulley, Tensioner, Drive Belt And Transmission Cooler Lines Includes Time To Reprogram The PCM And Perform Misfire Monitor Neutral Profile Correction (Do Not Use With Any Other Labor Operations)	3.1 Hrs.
120814B	2011-2012 Mustang 5.0L Manual Transmission: Diagnose, Install New Engine Front Cover, A/C Compressor Drive Belt Idler Pulley, Tensioner, And Drive Belt Includes Time To Reprogram The PCM And Perform Misfire Monitor Neutral Profile Correction (Do Not Use With Any Other Labor Operations)	5.4 Hrs.

120814B      2011-2012 Mustang 5.0L      7.4 Hrs.  
6R80 Automatic  
Transmission: Diagnose,  
Install New Engine Front  
Cover, A/C Compressor  
Drive Belt Idler Pulley,  
Tensioner, Drive Belt And  
Transmission Cooler Lines  
Includes Time To  
Reprogram The PCM And  
Perform Misfire Monitor  
Neutral Profile Correction  
(Do Not Use With Any  
Other Labor Operations)

**DEALER CODING**

BASIC PART NO.  
6006

CONDITION  
CODE  
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