HONDA **Service Bulletin** **13-102**

Applies To: **2014 Accord Plug-In** – Check the iN VIN status for eligibility **November 26, 2013**

Product Update: E-VTC Software Update

BACKGROUND

In rare instances, the PGM-FI software may allow conditions that cause damage to the E-VTC (electric variable timing control) actuator. This software update will prevent such damage from occurring.

CUSTOMER NOTIFICATION

All owners of affected vehicles will be sent a notification of this campaign.

Do an **iN VIN status inquiry** to make sure the vehicle is shown as eligible.

Some vehicles affected by this campaign may be in your new or used vehicle inventory. Repair these vehicles before they are sold.

CORRECTIVE ACTION

Update the PGM-FI software, and if necessary, replace the E-VTC actuator.

PARTS INFORMATION

NOTE: Very few vehicles will need parts; order parts only if DTC P0011 (VTC System Malfunction) is present.

E-VTC Actuator:
P/N 14310-5K0-A01

E-VTC Motor O-ring:
P/N 91306-5K0-A01

Valve Cover Gasket:
P/N 12341-5K0-A01

REQUIRED MATERIALS

Liquid Gasket (one tube will repair 50 vehicles):
P/N 08718-0003

TOOL INFORMATION

KTC Trim Tool Set: T/N TSOJATP2014

Camshaft Lock Pins: T/N 07AAB–RWCA120

WARRANTY CLAIM INFORMATION

Software Update Only:

OP#	Description	FRT	Template ID
1255C4	**Procedure B** E-VTC Software Update Only (includes DTC check)	0.3 hr.	13-102B

E-VTC Replacement and Software Update:

OP#	Description	FRT	Template ID
1101DK	**Procedure A** E-VTC Removal and Installation	2.0 hr.	13-102A
A	**Procedure B** E-VTC Software Update (includes DTC check)	0.3 hr.	

Failed Part: P/N 14310-5K0-A01

Defect Code: 5VK00

Symptom Code: JC600

Skill Level
R
REPAIR

CUSTOMER INFORMATION: The information in this bulletin is intended for use only by skilled technicians who have the proper tools, equipment, and training to correctly and safely maintain your vehicle. These procedures should not be attempted by "do-it-yourselfers," and you should not assume this bulletin applies to your vehicle, or that your vehicle has the condition described. To determine whether this information applies, contact an authorized Honda automobile dealer.

SOFTWARE INFORMATION

NOTE: Unnecessary or incorrect repairs resulting from a failure to update the HDS or MVCI are not covered under warranty.

MVCI Control Module (CM) Update:
Application Version V3.01.36 **or later**
Database update 23-OCT-2013 **or later**

HDS Software Version:
3.012.005 **or later**

Before beginning the repair, make sure that both the HDS and MVCI are updated as listed above.

Do only the update listed in this service bulletin.

Check that the MVCI indicates the applicable program ID listed below (or a later program ID) as the **Recommended Update** when the update begins.

If the MVCI displays **This vehicle does not need an update at this time** during the update, the software for this service bulletin is already installed.

For more information about updating the HDS, the MVCI, and vehicle systems, refer to Service Bulletin 01-023, *Updating Control Units/Modules*.

Year/Model	Program ID (or later)	Program P/N (or later)	System to Update
2014 Accord Plug-In	K0A090	37805-5L0-A11	PGM-FI+AT/ CVT/DCT

DIAGNOSIS

Connect the HDS and check if DTC P0011 is stored.

- If DTC P0011 is stored, **do REPAIR PROCEDURE A first to replace the E-VTC gear**. Then do REPAIR PROCEDURE B to update the PGM-FI software.
- If DTC P0011 is not stored, only do REPAIR PROCEDURE B to update the PGM-FI software.

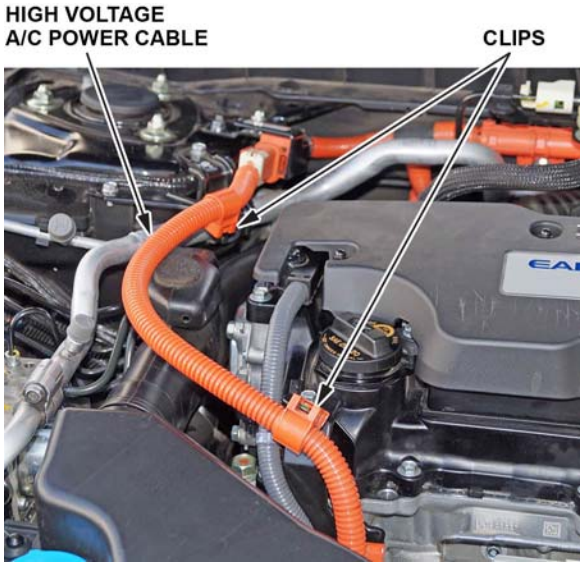
REPAIR PROCEDURE A

The following service manual procedures have been used in full or in part within this service bulletin. For more detail on these procedures, and torque specifications for some components, refer to the appropriate electronic service manual.

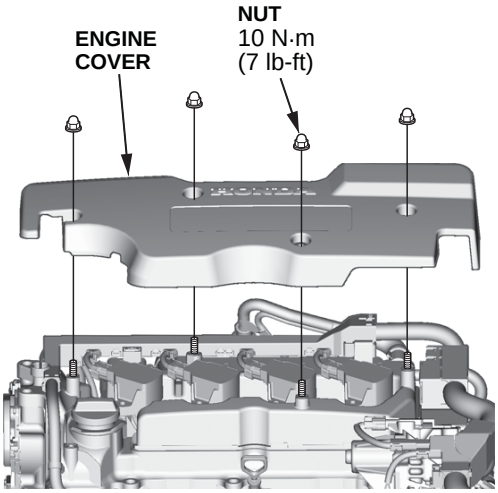
- Battery Terminal Disconnection and Reconnection
- Splash Shield Replacement
- Valve Cover Removal/Installation
- Cam Chain Removal/Installation
- Cam Chain Auto-Tensioner Removal/Installation
- E-VTC Position Learn

E-VTC Removal

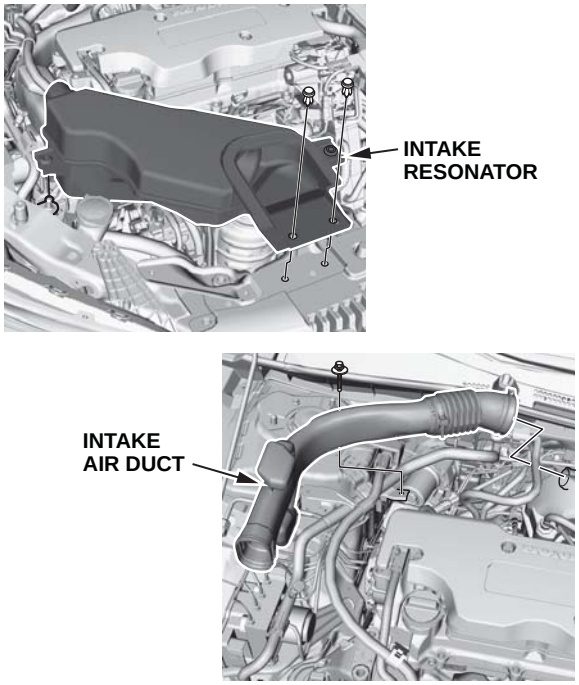
1. Remove the right front wheel and the splash guard.
2. Disconnect the negative battery cable.
3. Disconnect the high voltage A/C power cable clips.



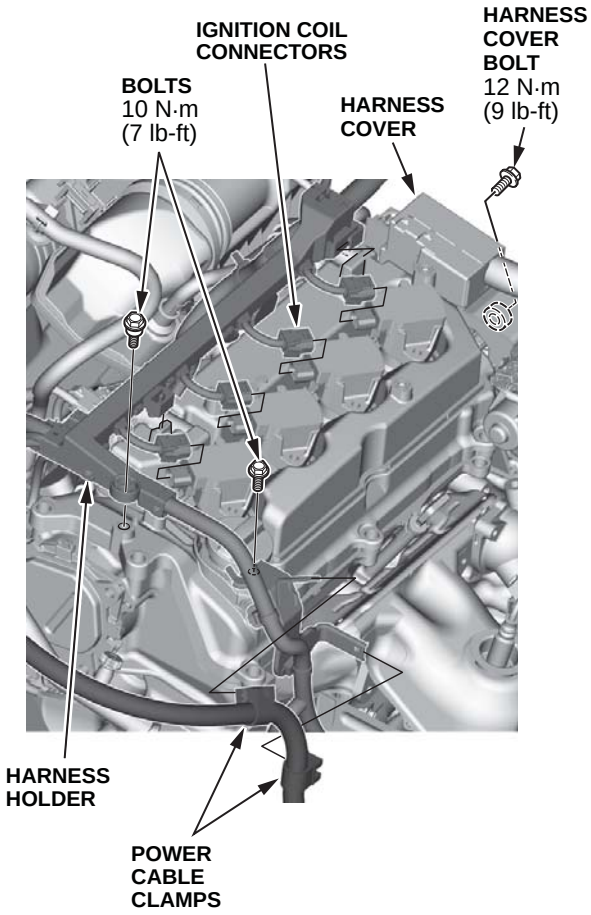
4. Remove the engine cover.



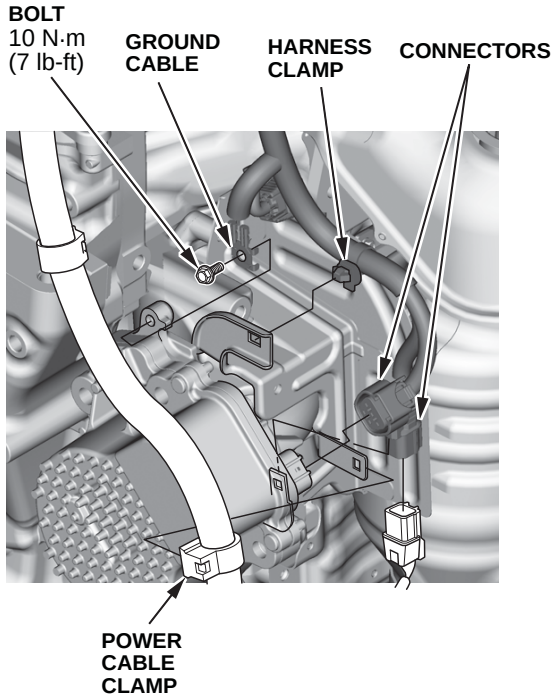
5. Remove the intake resonator and intake air duct.



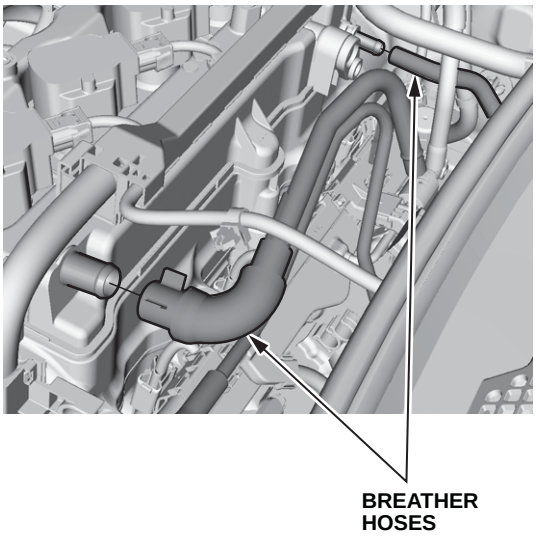
6. Disconnect the ignition coil connectors, then remove the harness holder, the power cable clamps, and the harness cover bolt. Move the harness away from the valve cover.



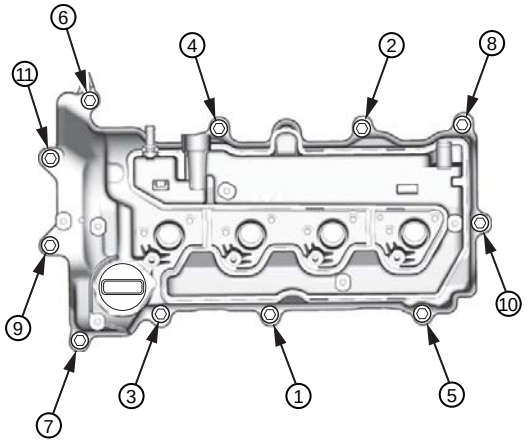
7. Remove the ignition coils.
8. Disconnect the electric coolant pump connector and the A/C compressor connectors, and disconnect the ground.



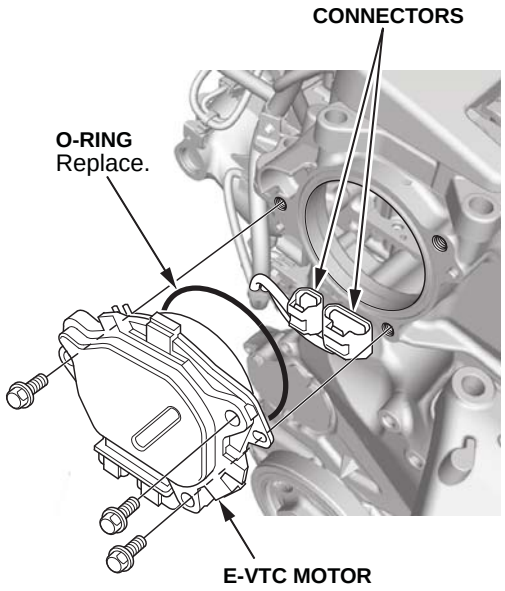
9. Disconnect the power cable clamp and the harness clamp.
10. Disconnect the breather hoses.



11. Remove the valve cover in the sequence shown, then remove the cover.

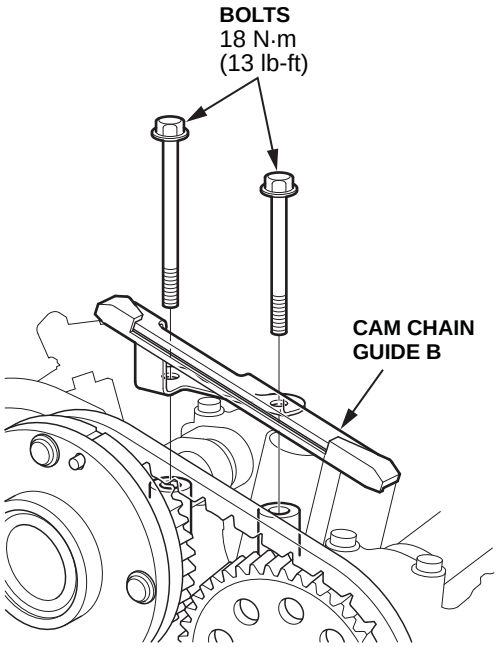


12. Disconnect the E-VTC motor connectors and remove the E-VTC motor.

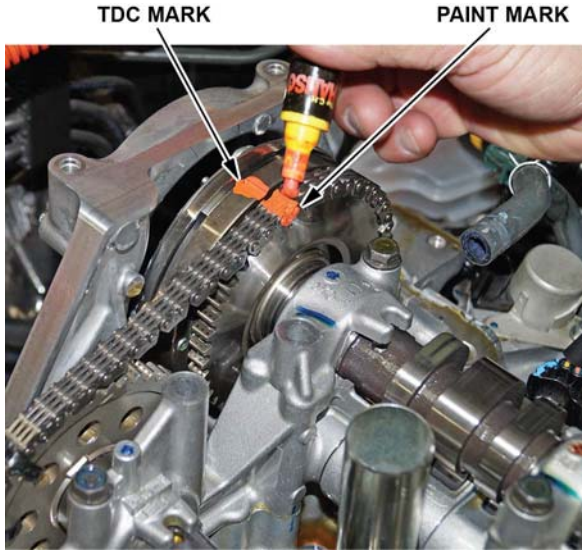


13. Rotate the crankshaft until the No. 1 cylinder is at TDC.

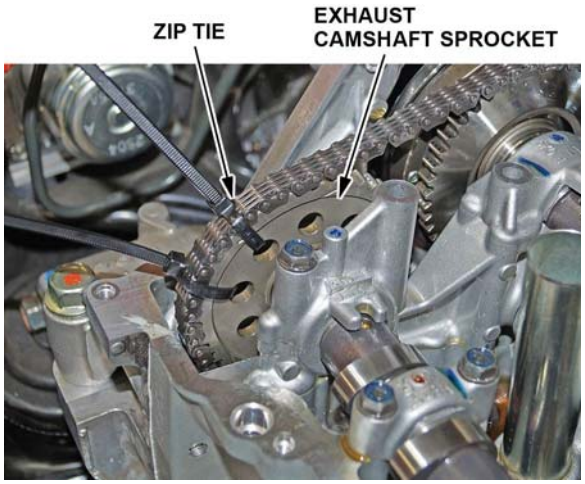
14. Remove cam chain guide B.



15. Mark the timing chain with a paint pen on the link that lines up with the TDC mark on the E-VTC actuator.



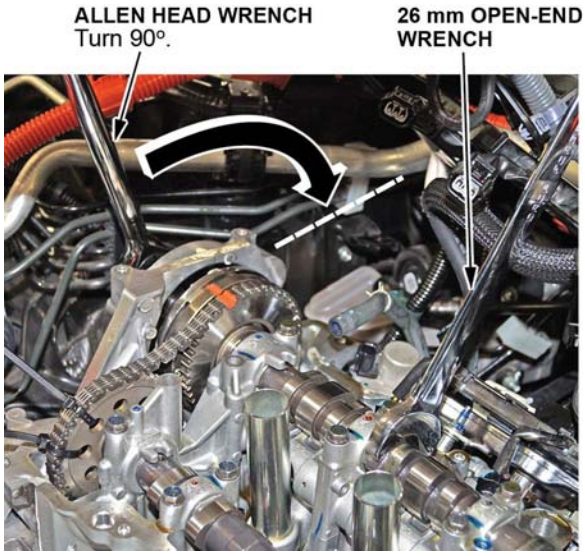
16. Use a zip tie to secure the timing chain to the exhaust camshaft sprocket so that the cam chain cannot move.



17. Loosen the E-VTC actuator mounting bolt by holding the intake camshaft with a 26 mm open-end wrench, then loosen the VTC actuator mounting bolt about a quarter turn.

    NOTE:

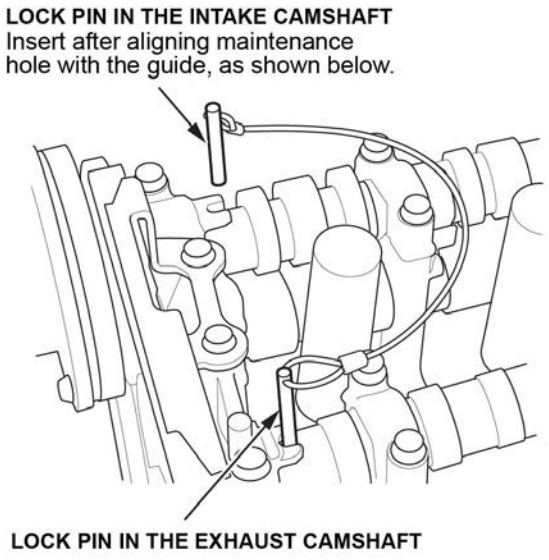
    - Do not remove the bolt.
    - If the camshafts or crankshaft moved when you loosened the bolt, move them back to TDC.

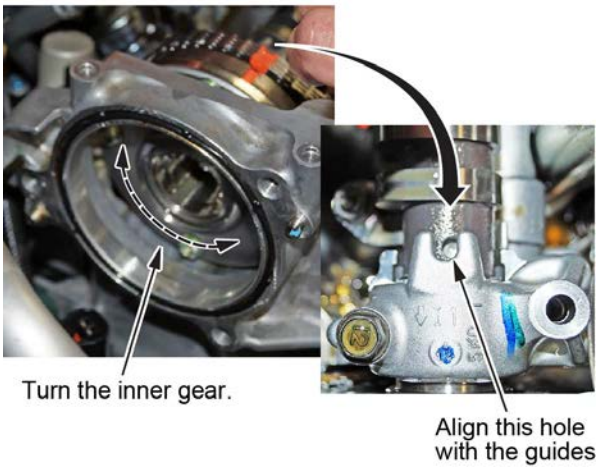


18. Remove the cam chain auto-tensioner cover plate.
19. Lock the cam chain auto-tensioner with a lock pin in the compressed position, but do not remove it.

    NOTE: If the camshafts or crankshaft move, move them back to TDC.

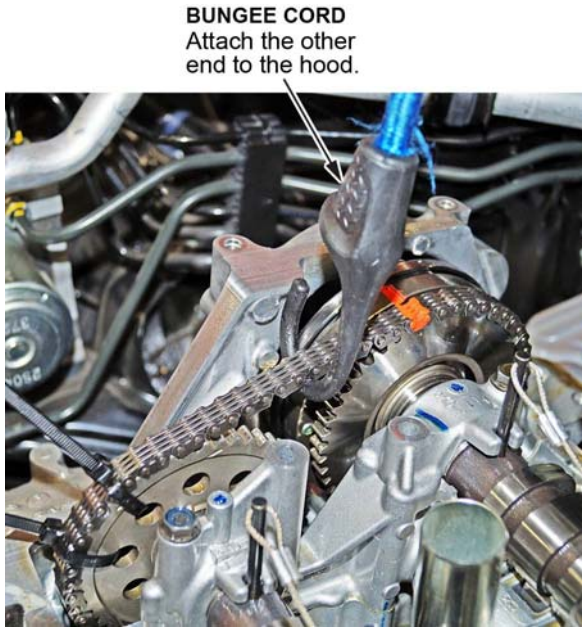
20. Hold the intake and exhaust camshafts in place by inserting a lock pin into the exhaust cam's maintenance hole, then use your index and middle fingers to manually turn the E-VTC actuator inner ring gear clockwise or counterclockwise until the intake cam aligns with the lock pin.





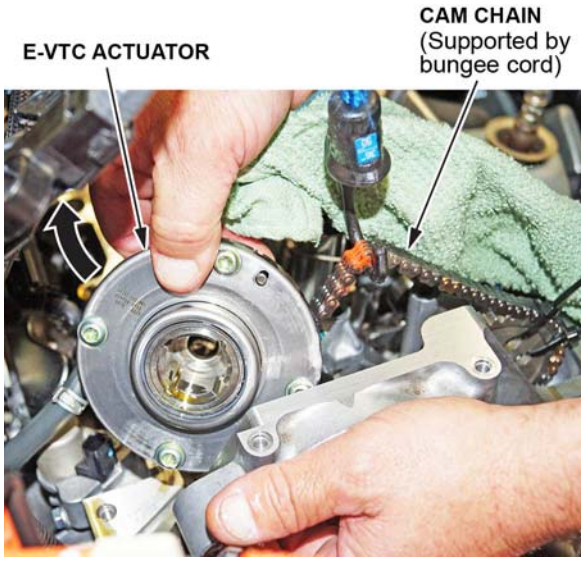
21. Remove the cam chain auto-tensioner.

22. Keep light tension on the cam chain by attaching a bungee cord to the chain and then suspending it from the hood to prevent the chain from coming off.



23. Remove the E-VTC actuator mounting bolt then remove the E-VTC actuator.

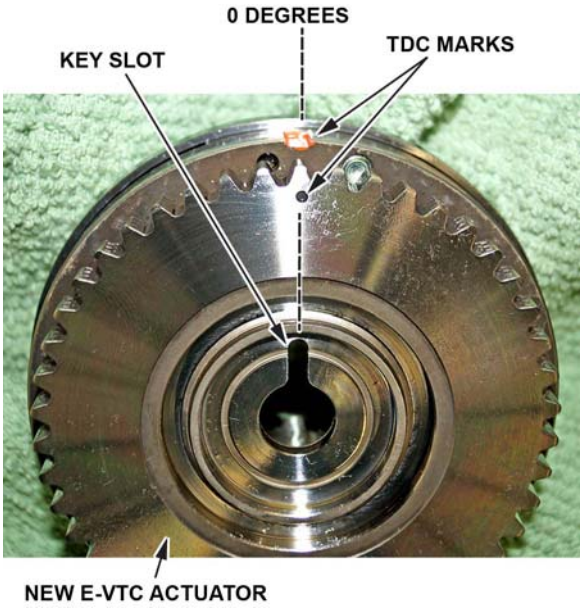
    NOTE: Make sure you keep tension on the cam chain at all times.



E-VTC Installation

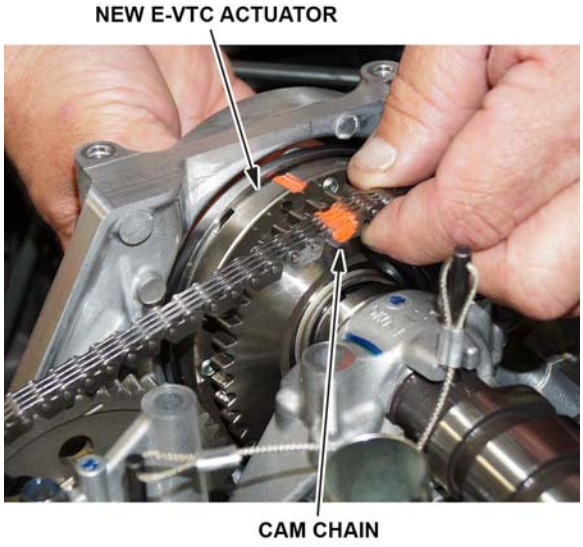
1. Set the new E-VTC actuator to zero degrees (12 o'clock position).

   NOTE: Make sure you add a paint mark to the upper TDC mark to help align the cam chain.



2. Remove the bungee cord and position the E-VTC actuator onto the cam chain.

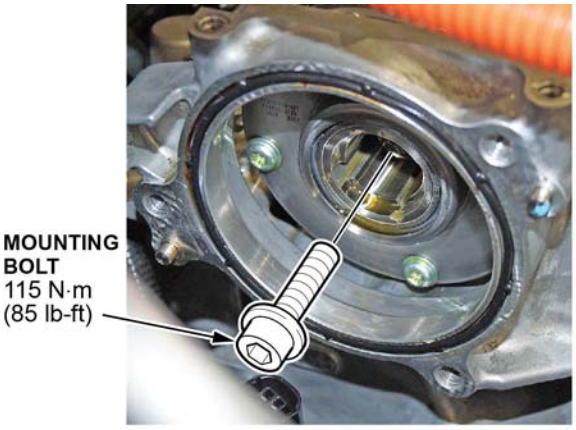
   NOTE: Make sure the cam chain TDC paint mark lines up with the TDC mark on the E-VTC actuator.

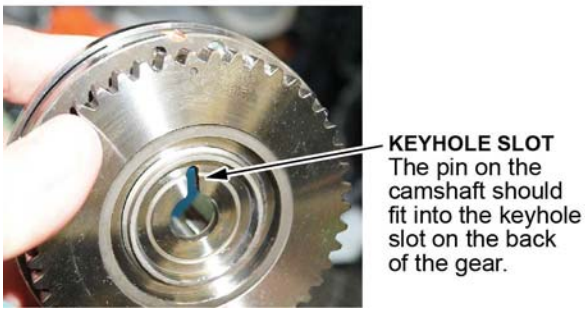


3. Remove both camshaft lock pins.

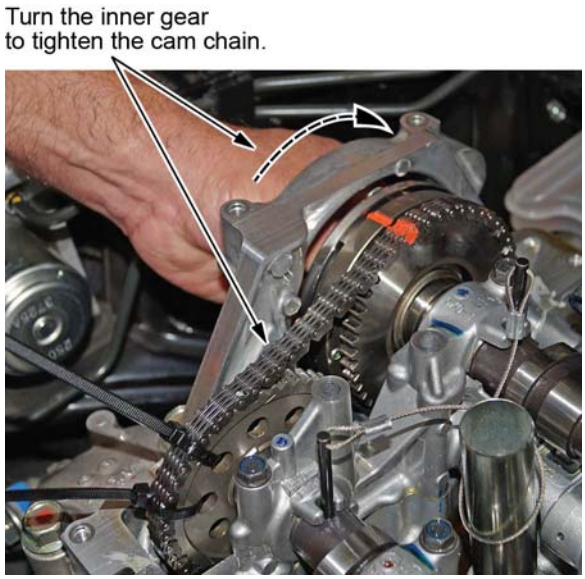
4. Slide the E-VTC actuator onto the camshaft. Verify with an inspection mirror that the camshaft alignment pin goes into the E-VTC actuator key slot, then torque the mounting bolt to **115 N•m (85 lb-ft)**.

   NOTE: Failure to confirm pin alignment could cause the E-VTC actuator to slip on the camshaft and damage it.

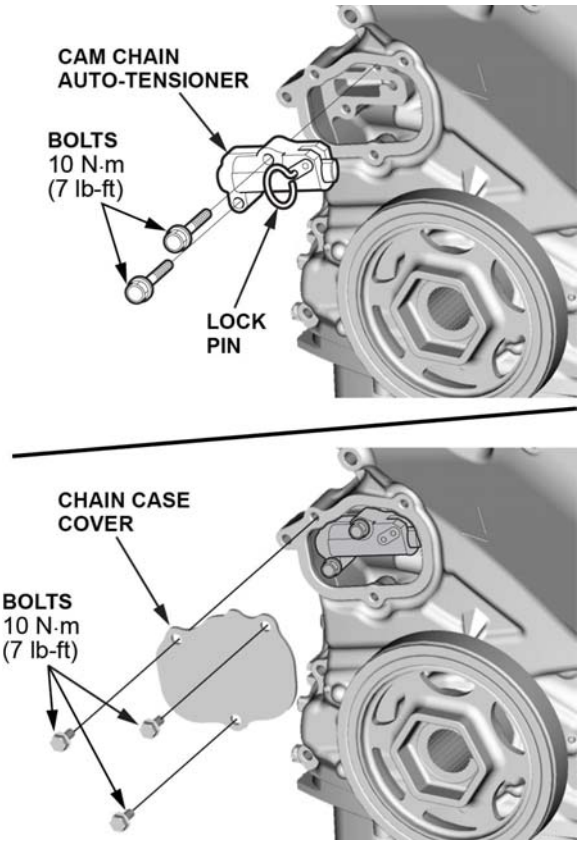




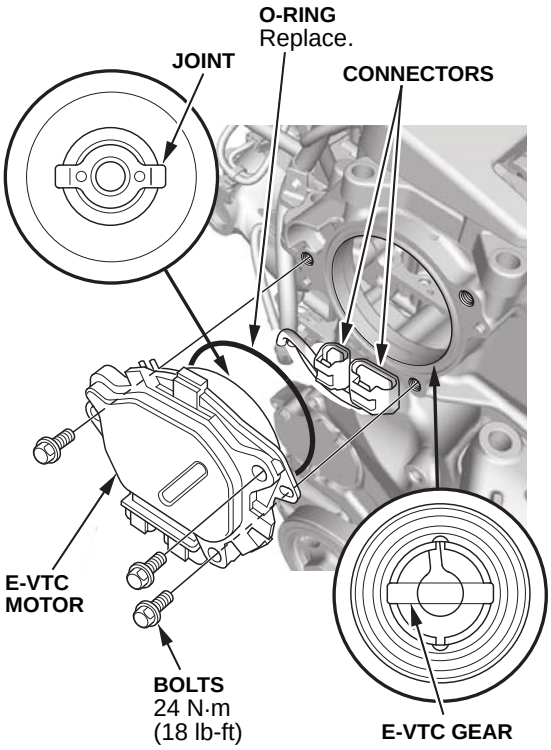
5. Use your index and middle fingers to rotate the inner ring gear of the E-VTC actuator to remove any slack from the cam chain between the intake and exhaust gears.



6. Reinstall the cam chain auto-tensioner, remove the auto-tensioner lock pin, then reinstall the auto-tensioner cover.



7. Reinstall the E-VTC motor with a new O-ring.



8. Reinstall the remaining components in the reverse order of removal.
9. Do the E-VTC position learn procedure.
   - Connect the HDS to the vehicle.
   - Go to **ADJUSTMENT MENU> E-VTC LEARNING**, then follow the screen prompts.
   - Turn the ignition to OFF.
   - Jump the SCS line with the HDS.
   - Wait 60 seconds and exit the SCS mode with the HDS.

REPAIR PROCEDURE B

1. Update the PGM-FI software. Refer to Service Bulletin 01-023, *Updating Control Units/Modules.*
2. After the software update with the MVCI is complete, connect the HDS and do DTC check. Clear any codes.
3. Do the CKP pattern clear and learn procedure.

   NOTE: The HDS will prompt you to warm up the engine in maintenance mode during the CKP pattern clear and learn process. To enter maintenance mode, do this:

   1. Without pressing the brake pedal, press the **POWER** button twice, then do steps 2–5 within 60 seconds.
   2. With the shift lever in P, press the accelerator pedal to the floor twice.
   3. Move the shift lever to N, press the accelerator pedal to the floor twice.
   4. Move the shift lever to P, press the accelerator pedal to the floor twice.
   5. Press and hold the brake pedal, then press the **POWER** button.

   In some cases, the learning may occur during the engine warm-up. If this happens, it is not a problem. The learning process is complete, and you can proceed as prompted by the HDS.