

April 12, 2024

Version 5

Warranty Extension: 2017-18 CR-V: DTC P0300, P0301, P0302, P0303, P0304, or P0172; Whirling Noise from Engine

Supersedes 19-037, dated April 29, 2022, to revise the information.

WARRANTY CLAIM INFORMATION

Year	Model	Trim	VIN Range
2017-18	CR-V	EX, EX-L, Touring	Check the iN VIN status for eligibility.

REVISION SUMMARY

Under CAMSHAFT AND ROCKER ARM ASSEMBLIES REPLACEMENT PROCEDURE, an image in step 13 was revised.

BACKGROUND

Under certain circumstances, the vehicle may experience driveability issues, which may result in DTCs P0300 (random misfire detected), P0301 (No. 1 cylinder misfire detected), P0302 (No. 2 cylinder misfire detected), P0303 (No. 3 cylinder misfire detected), P0304 (No. 4 cylinder misfire detected), or P0172 (fuel system too rich) or a whirling noise coming from the engine compartment.

NOTE: Check the VIN of the vehicle to see if S/B 18-114, 18-124, or 19-025 apply. If one applies and the repair directed by that bulletin has not been completed, do the applicable repair before continuing.

To ensure customer confidence in our product, Honda is extending the powertrain warranty from the original 5 years/60,000 miles to 6 years with unlimited mileage from the original sale date. This warranty extension applies to any engine components, such as camshafts, rocker arm assemblies, and spark plugs, requiring repair due to damage resulting from those concerns identified in the first paragraph.

This warranty extension will not apply to any vehicle that has ever been declared a total loss or sold for salvage by a financial institution or insurer or has a branded or similar title under any state's law. This does not affect emission warranties.

POSSIBLE CAUSE

Based on certain driving patterns and environmental factors, the DTC's stated above may be set or a whirling noise may occur.

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.

CORRECTIVE ACTION

If S/B 18-114, 18-124, or 19-025 applies to this vehicle, complete the repairs under that bulletin first. If S/B 18-114, 18-124, or 19-025 applies, the applicable repair was completed, and misfire (P0300, P0301, P0302, P0303, P0304) or fuel system too rich (P0172) DTCs were set after the earlier repair was completed, do REPAIR PROCEDURE A. If there is a whirling noise coming from the engine compartment, do REPAIR PROCEDURE B.

PARTS INFORMATION

These parts are needed if replacing the **spark plugs**.

Part Name	Part Number	Quantity
Spark Plugs	12290-5PA-A01	4

These parts are needed if replacing the camshafts and rocker arm assemblies.

Part Name	Part Number	Quantity
Fuel Joint Pipe Set	16012-5PA-315	1
O-Ring	91311-5A2-A01	1
Throttle Body Gasket	17107-5AA-004	1
Intake Manifold Gasket	17105-5AA-004	4
Sealing Bolt (20 mm)	11105-RNA-A00	1
Sealing Washer	11106-RNA-A00	1
Camshaft Holder Cover	12513-59B-000	1
Rocker Arm Assembly	14625-59B-000	8
Camshaft Intake	14110-5PA-A00	1
Camshaft Exhaust	14120-5AA-A00	1
Chain Tensioner Filter	14560-5A2-A00	1
Chain Case Cover	11412-59B-000	1

WARRANTY CLAIM INFORMATION

DTC is required with claim submission.

NOTE: Use the following templates if the **spark plugs** were also replaced.

Operation Number	Description	Flat Rate Time	Defect Code	Symptom Code	Template ID	Failed Part Number
1175A3	Replace spark plugs. (Inspection or replacement) (Admin Included)	0.5 hr	6D700	X4A00	A19037A	12290-5PA-A01

NOTE: Use the following template if the **camshafts** were only inspected.

Operation Number	Description	Flat Rate Time	Defect Code	Symptom Code	Template ID	Failed Part Number
1105C1	Remove valve cover and inspect camshafts. (No replacement required.)	0.7 hr	6D700	X4A00	A19037B	37805-5PA-A85

NOTE: Use the following template if the **camshafts** and **rocker arm assembly** were also replaced.

Operation Number	Description	Flat Rate Time	Defect Code	Symptom Code	Template ID	Failed Part Number
1105C1	Remove valve cover and inspect camshafts.	0.7 hr	6D700	X4A00	A19037C	37805-5PA-A85
A	Replace camshafts and rocker arm assembly.	5.1 hr				

Skill Level: Repair Technician

REPAIR PROCEDURE A

1. In some cases, the misfire DTCs may return. If this happens, inspect the spark plugs.



- If the spark plugs are OK, the procedure is complete. Continue with normal system troubleshooting.
 - If the spark plugs are fouled, go to step 2.
2. Replace the spark plugs according to the service information, and check for stored DTCs.
NOTE: Make sure to write down the stored DTCs on the R.O.
 - If the applicable DTCs do not return, the procedure is complete.
 - If the applicable DTCs return, this bulletin does not apply. Continue with normal system troubleshooting.

REPAIR PROCEDURE B

If there is a whirling noise coming from the engine, follow the procedure below.

1. Warm up the engine by increasing the engine speed to **3,000 rpm** for two fan cycles.
2. After the warmup procedure is completed, let the engine return to idle for **10 seconds**.
3. After **10 seconds**, slowly increase the engine speed to **3,500 rpm** (this should take at least **20 seconds**).
4. Once the engine speed reaches **3,500 rpm**, release the accelerator pedal and let the engine speed return to idle.
5. With the hood closed and inside the cabin, compare the audio file [here](#) to the noise heard.
 - If the noise is similar, go to step 6.
 - If the noise is not similar, this bulletin does not apply. Continue with normal system troubleshooting.
6. Remove the cylinder head cover. See the service information for additional instructions.

7. Compare the appearance of the camshaft lobes to the photo below.

 GOOD



 NO GOOD



The cam surface has ridges and a "cloudy" appearance.

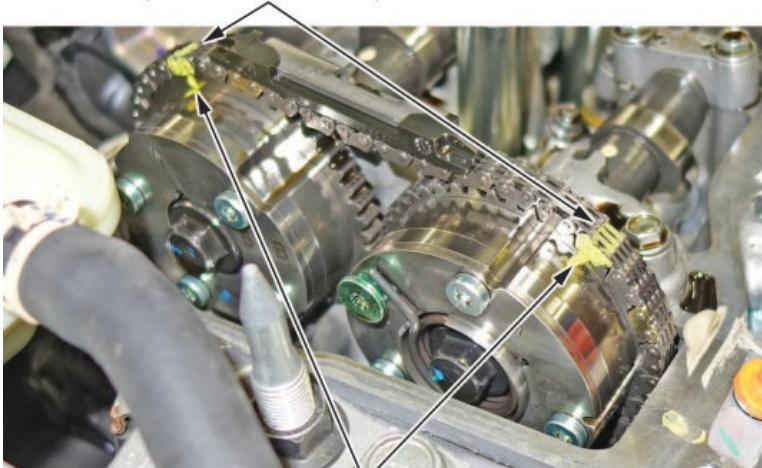
- If the camshafts appear similar to the no good photo, go to CAMSHAFT AND ROCKER ARM ASSEMBLIES REPLACEMENT PROCEDURE.
- If the camshafts appear similar to the good photo, this bulletin does not apply. Continue with normal system troubleshooting.

CAMSHAFT AND ROCKER ARM ASSEMBLIES REPLACEMENT PROCEDURE

The following instructions are for replacement of the intake and exhaust camshafts and all rocker arm assemblies.

1. Relieve the fuel pressure, and remove the high pressure fuel pump. Refer to the service information for additional instructions.
2. Set the crankshaft to top dead center (TDC) for No. 1 cylinder. Refer to step 4 of the Camshaft Timing Inspection procedure in the service information.
3. Mark the timing chain at the punch marks on the exhaust and intake camshaft sprocket and VTC actuator as shown below.

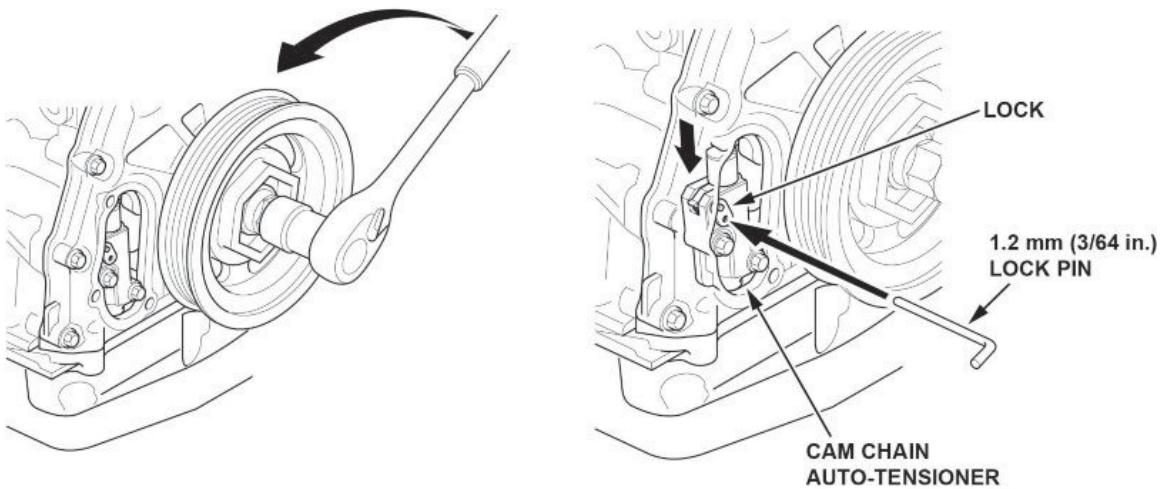
Mark the cam chain at the punch marks on the sprocket.



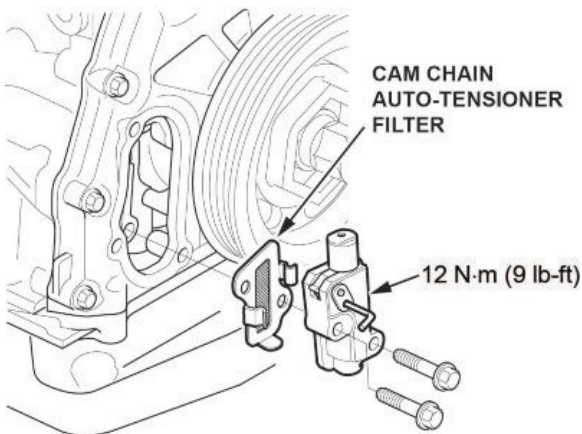
PUNCH MARKS

4. Raise the vehicle on a lift.

5. Remove the right front wheel and the engine undercover.
6. Remove the cam chain auto-tensioner (chain case) cover.
7. Slightly rotate the crankshaft counterclockwise to compress the auto-tensioner. Line up the hole in the lock and auto-tensioner, then insert a 1.2 mm-diameter lock pin.

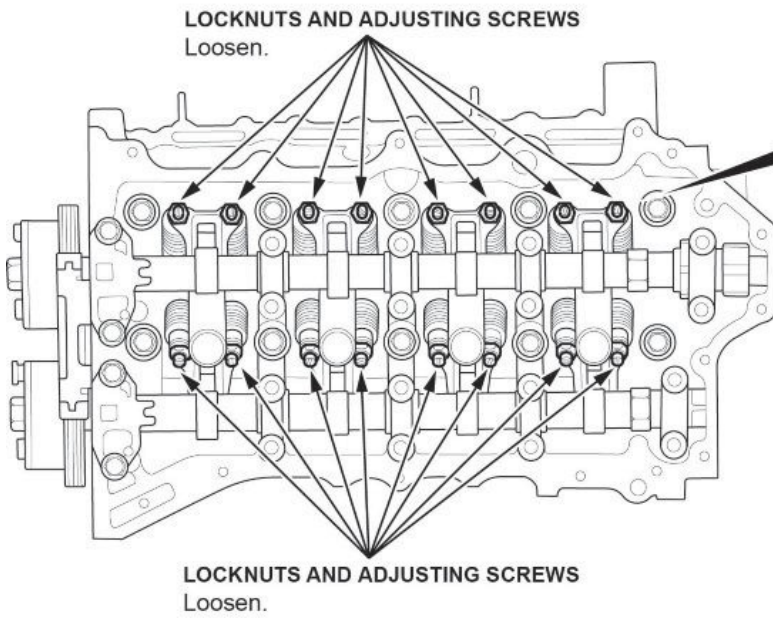


8. Rotate the crankshaft clockwise back to TDC on the No. 1 cylinder to secure the lock pin in place.
9. Remove the camshaft chain auto-tensioner with the lock pin inserted.

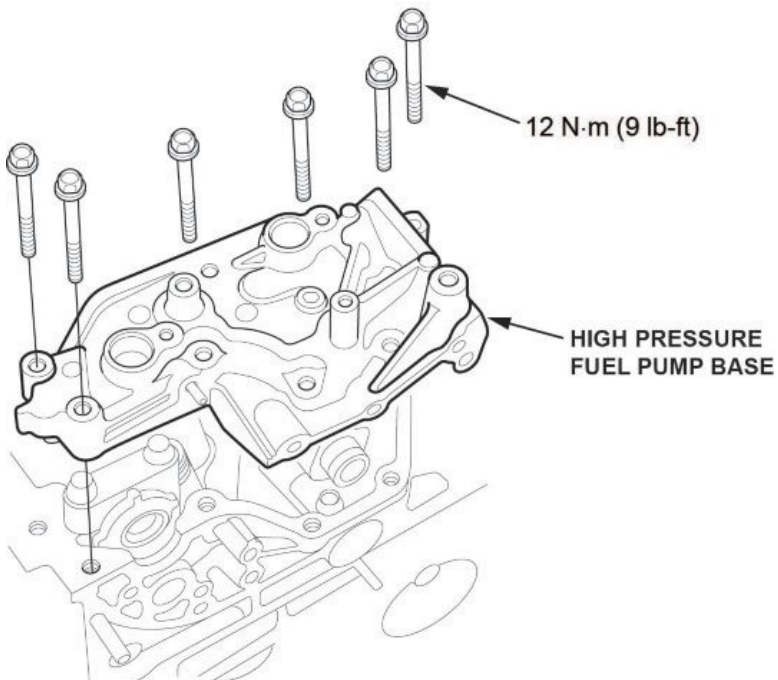


10. Lower the vehicle.

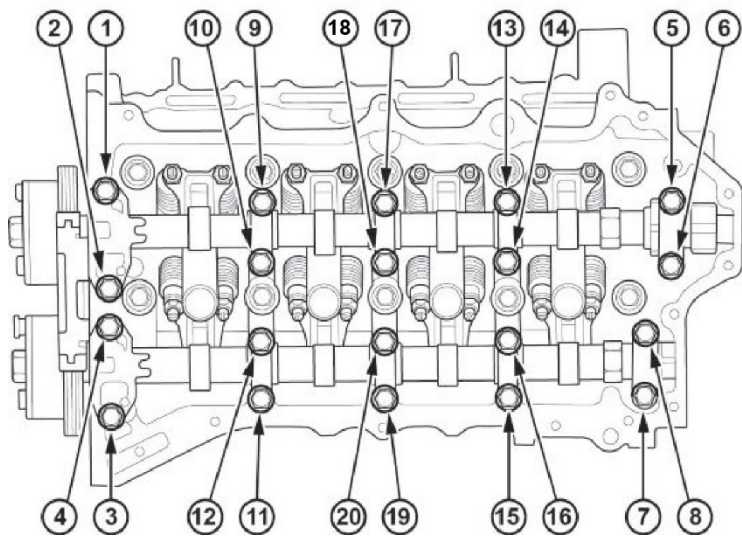
11. Loosen the locknuts and adjusting screws.



12. Remove the high pressure fuel pump base.

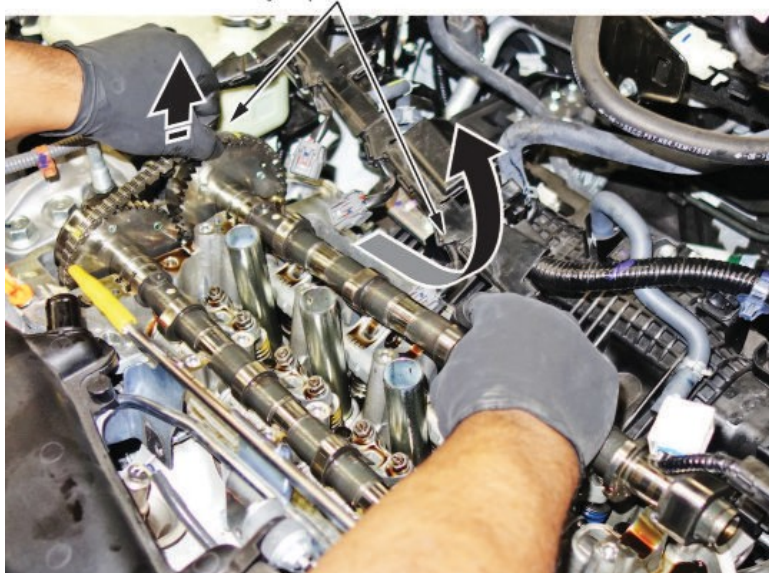


13. Remove the camshaft holder bolts, then remove the camshaft holders. To prevent damaging the camshafts, loosen the bolts as shown, two turns at a time.

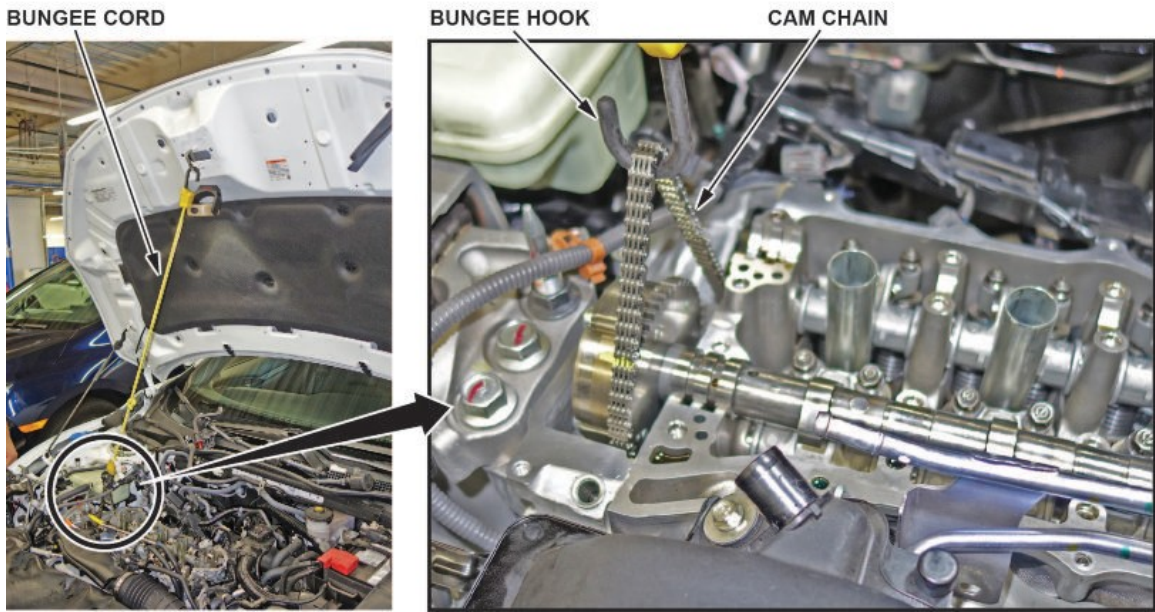


14. Lift up the cam chain, then carefully remove the intake camshaft followed by the exhaust camshaft. You must maintain tension on the cam chain while you do this.

Lift up the cam chain and carefully slip the camshaft out.

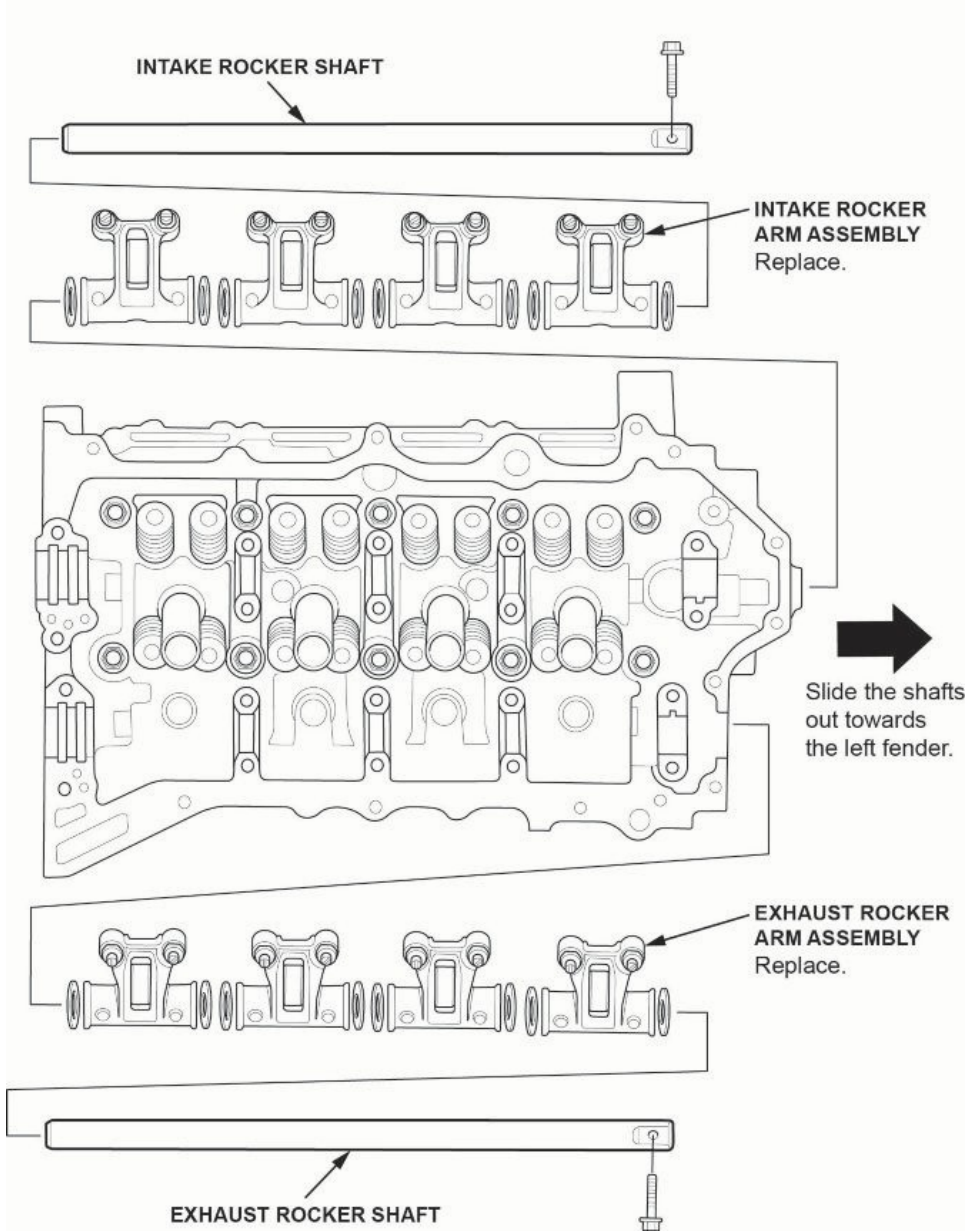


15. Use a bungee cord to hold tension on the cam chain while you are replacing the camshafts.



16. When removing the camshaft holders, cam chain guide, and intake and exhaust camshaft, make sure to place them in order of installation on a clean, padded workbench.

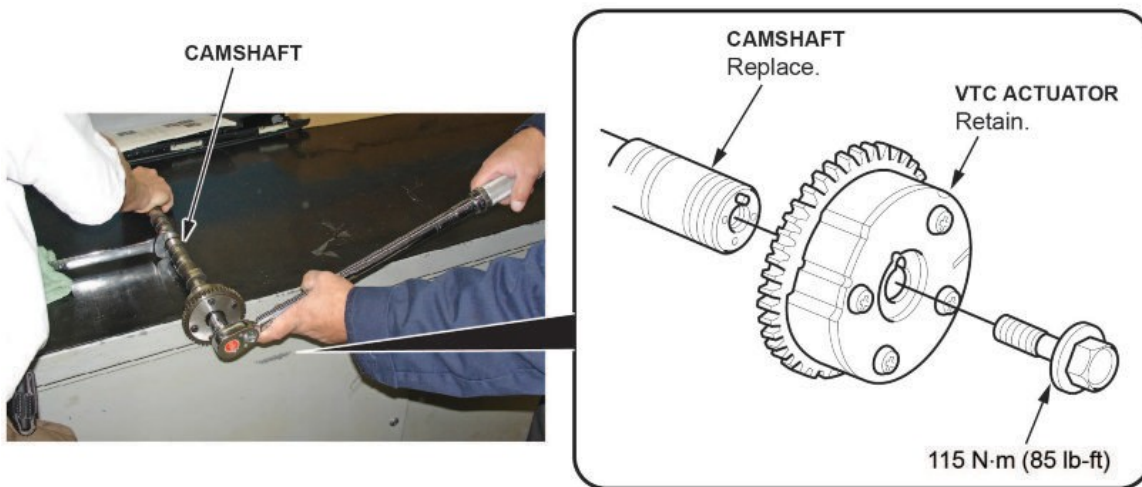
17. Remove the rocker arm assembly, and install the new set. Refer to the service information for additional instructions.



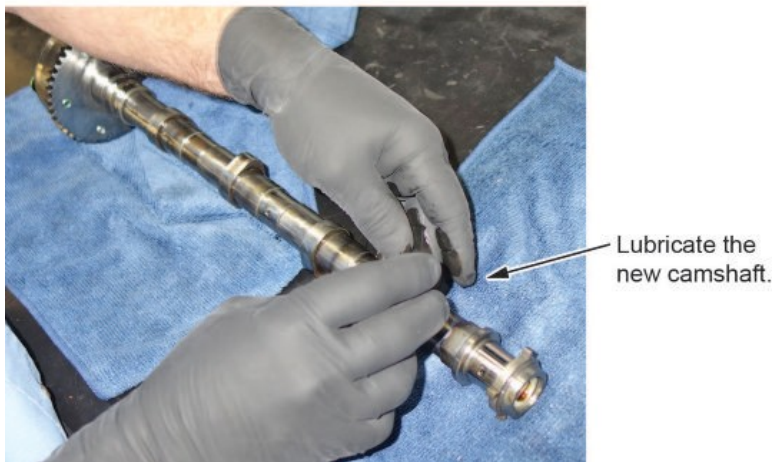
18. With the camshafts out of the engine, hold them with an open-end wrench and loosen the VTC actuator mounting bolts on both camshafts.

19. Install the VTC actuators on the new camshafts.

NOTE: You may need an assistant to help you with this procedure.



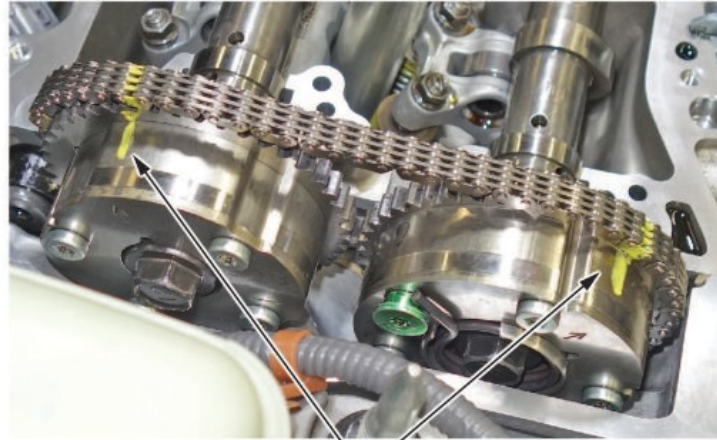
20. Apply fresh engine oil to the new camshafts, and install.



21. When installing the new camshafts, make sure the previously made marks on the VTC actuator and cam chain line up.

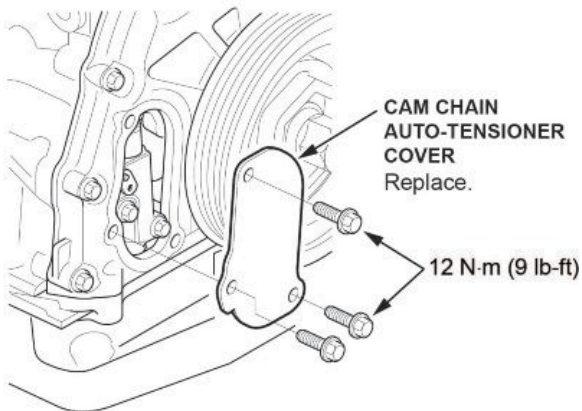


As the camshaft is installed, line up the marks made in step 3.



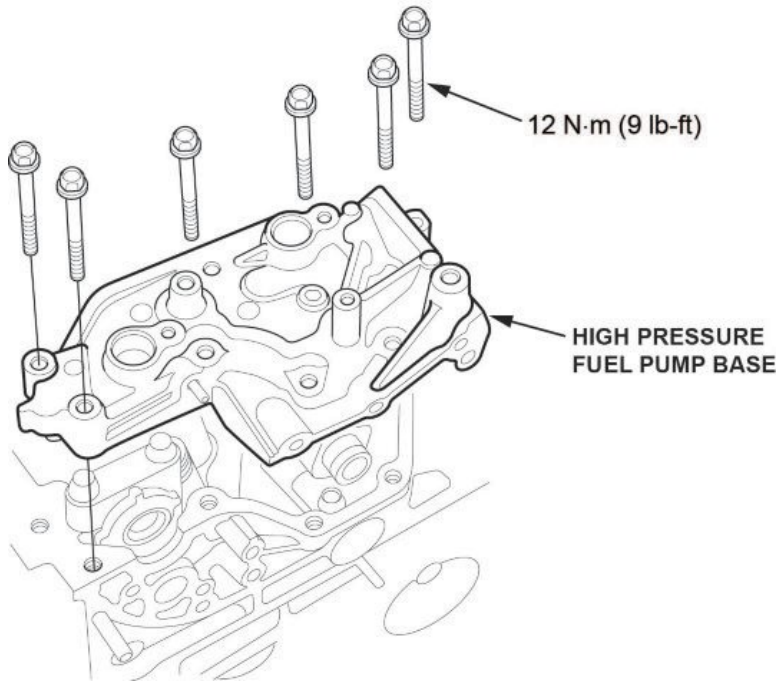
MARKS

22. Install the camshaft holders and the cam chain guide, then torque them to specification.
23. Install the camshaft chain tensioner, and release the lock pin.
24. Install the new cam chain auto-tensioner (chain case) cover.



25. To check the camshaft timing, rotate the crankshaft in the direction of engine rotation (clockwise) two full turns, then stop at the TDC mark. Refer to step 4 of the Camshaft Timing Inspection procedure in the service information.
26. Do a valve adjustment.

27. Install the high pressure fuel pump base and new camshaft holder cover. Refer to step 7 of the Installation section of the Cylinder Head Removal and Installation (1.5L Engine) procedure in the service information.



28. Install the cylinder head cover. Refer to the service information for additional instructions.
29. Install the high pressure fuel pump with the new O-ring and fuel joint pipe. Refer to the service information for additional information.
30. Install the engine undercover and any other remaining parts.
31. During the first startup, check for set DTCs or abnormal noises. Refer to the service information for additional instructions.
32. Reset the throttle position learned values by referencing the Throttle Body Removal and Installation procedure in the service information, then do the PCM idle learn procedure. Refer to the service information for additional instructions.

NOTE: For more information on the PCM idle learn procedure, see the *Tech2Tech*[®] video, "A Look at PCM Idle Learn."