

Last Modified: 12-04-2024	6.11:8.1.0	Doc ID: RM10000002BNI8
Model Year Start: 2023	Model: Prius Prime	Prod Date Range: [03/2023 -]
Title: M20A-FXS (ENGINE CONTROL): CAMSHAFT TIMING CONTROL MOTOR: INSTALLATION; 2023 - 2024 MY Prius Prius Prime [03/2023 -]		

INSTALLATION

CAUTION / NOTICE / HINT

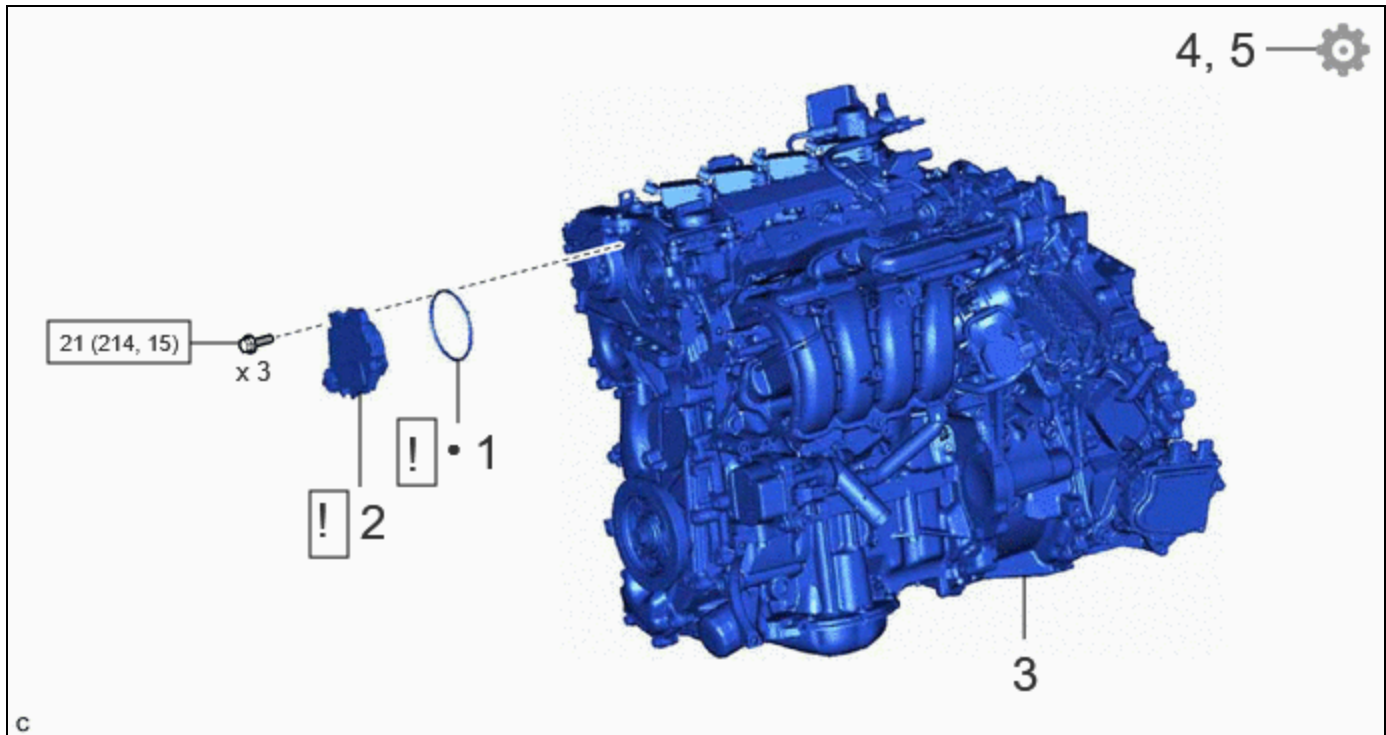
NOTICE:

This procedure includes the installation of small-head bolts. Refer to Small-Head Bolts of Basic Repair Hint to identify the small-head bolts.





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CAUTION / NOTICE / HINT

COMPONENTS (INSTALLATION)



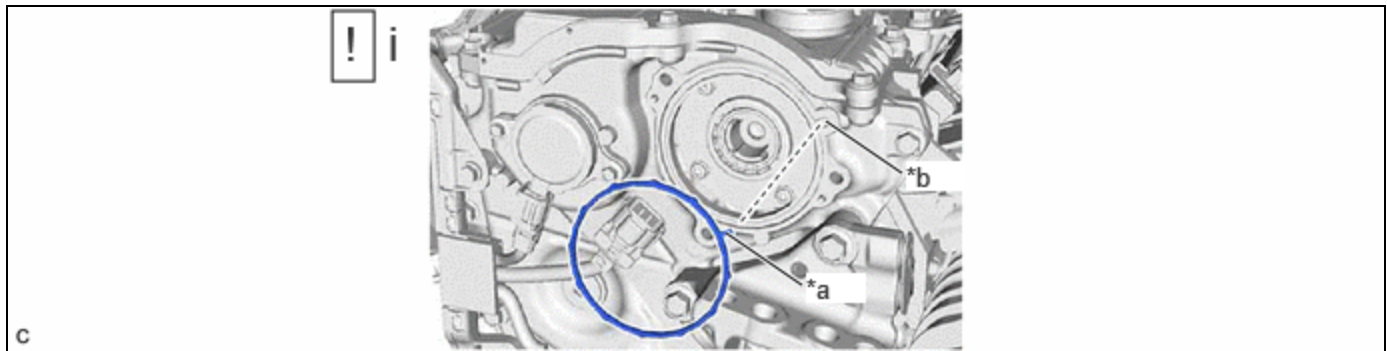
	PROCEDURE	PART NAME CODE			
1	CAM TIMING CONTROL MOTOR O-RING	13090E	INFO	-	-
2	CAM TIMING CONTROL MOTOR WITH EDU ASSEMBLY	13090D	INFO	-	-
3	ENGINE ASSEMBLY WITH TRANSAXLE	-	-	-	-
4	INSPECT FOR ENGINE OIL LEAK	-	-	-	INFO

PROCEDURE		PART NAME CODE			
5	PERFORM INITIALIZATION	-	-	-	

	N*m (kgf*cm, ft.*lbf): Specified torque	<ul style="list-style-type: none"> Non-reusable part
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PROCEDURE

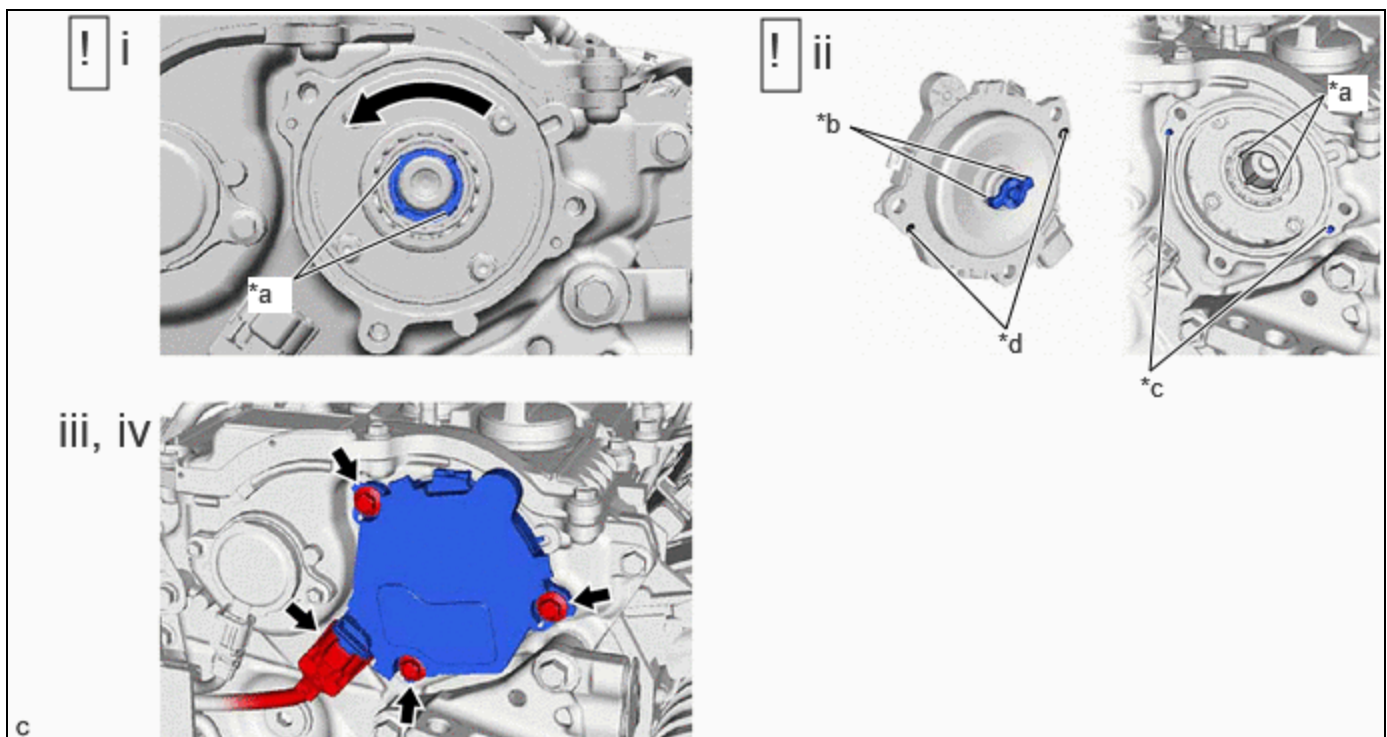
1. INSTALL CAM TIMING CONTROL MOTOR O-RING



*a	Protrusion	*b	Cutout
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(1) Install a new cam timing control motor O-ring to the No. 2 timing chain cover assembly with the protrusion of the cam timing control motor O-ring oriented as shown in the illustration.

2. INSTALL CAM TIMING CONTROL MOTOR WITH EDU ASSEMBLY



*a	Cutout	*b	Joint
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*c	Knock Pin	*d	Pin Hole
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- (1) Turn the cutout of the camshaft timing gear assembly eccentric shaft counterclockwise by hand, and set it to the maximum retard angle position.

HINT:

- If a camshaft lobe is opening a valve, the eccentric shaft will be difficult to turn.
- When the cutout of the camshaft timing gear assembly eccentric shaft cannot be turned any farther, it is set to the maximum retard angle.

- (2) Install the cam timing control motor with EDU assembly to the No. 2 timing chain cover assembly.

NOTICE:

- When installing, align the joints of the cam timing control motor with EDU assembly with the cutouts of the camshaft timing gear assembly eccentric shaft.
- Align the pin holes of the cam timing control motor with EDU assembly with the knock pins of the No. 2 timing chain cover assembly when installing the cam timing control motor with EDU assembly.
- Make sure the contact surface of the cam timing control motor with EDU assembly (the surface that contacts the No. 2 timing chain cover assembly) is free of foreign matter.
- When installing the cam timing control motor with EDU assembly, do not use excessive force.
- If the cam timing control motor with EDU assembly has been struck or dropped, replace it.
- Do not disassemble the cam timing control motor with EDU assembly. If disassembled, replace it.

- (3) Install the 3 bolts.

Torque:

21 N·m {214 kgf·cm, 15 ft·lbf}

- (4) Connect the cam timing control motor with EDU assembly connector.

3. INSTALL ENGINE ASSEMBLY WITH TRANSAXLE

- for HEV Model:

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- for PHEV Model:

Click here [INFO](#)

4. INSPECT FOR ENGINE OIL LEAK

Click here [INFO](#)

5. PERFORM INITIALIZATION

- (a) Perform "Inspection After Repair" after removing and installing, or replacing the cam timing control motor with EDU assembly.

Click here [INFO](#)

