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Model Year Start: 2023	Model: Prius Prime	Prod Date Range: [03/2023 -]
Title: M20A-FXS (LUBRICATION): OIL PUMP (for PHEV Model): REMOVAL; 2023 - 2024 MY Prius Prime [03/2023 -]		

REMOVAL

CAUTION / NOTICE / HINT

The necessary procedures (adjustment, calibration, initialization or registration) that must be performed after parts are removed and installed, or replaced during oil pump removal/installation are shown below.

Necessary Procedures After Parts Removed/Installed/Replaced

REPLACED PART OR PERFORMED PROCEDURE	NECESSARY PROCEDURE	EFFECT/INOPERATIVE FUNCTION WHEN NECESSARY PROCEDURE NOT PERFORMED	LINK
Replacement of ECM	Perform Vehicle Identification Number (VIN) registration	DTC is output	INFO
	ECU configuration	-	INFO
	Update ECU security key	Vehicle Control History (RoB) are stored	INFO
<ul style="list-style-type: none"> Replacement of throttle body with motor assembly Cleaning the deposits from the throttle body with motor assembly Replacement of cam timing control motor with EDU assembly* Replacement of camshaft timing gear assembly* Replacement of camshaft (for 	Inspection after repair	<ul style="list-style-type: none"> Poor idle, etc. Engine start function, etc. 	INFO

*: Even when not replacing the part, it is necessary to perform the specified necessary procedures after installation.

*1: Also necessary after performing a tire rotation.

*2: It is not necessary to perform this procedure if the tire pressure warning valve and transmitters are installed to the same location.

*3: The vehicle height changes because of tire replacement.

*4: If matchmarks were not placed when removing parts related to steering operation, perform end position initial setting.

REPLACED PART OR PERFORMED PROCEDURE	NECESSARY PROCEDURE	EFFECT/INOPERATIVE FUNCTION WHEN NECESSARY PROCEDURE NOT PERFORMED	LINK
intake or exhaust camshaft) <ul style="list-style-type: none"> • Replacement of camshaft timing exhaust gear assembly • Replacement of fuel (engine room side) pump assembly (for high pressure side) • Replacement of ignition coil assembly • Replacement of engine assembly • Gas leak from exhaust system is repaired • Replacement of port fuel injector assembly • Replacement of direct fuel injector assembly • Replacement of EGR valve assembly • Replacement of air fuel ratio sensor (sensor 1) 			
Replacement of inverter with converter assembly	ECU configuration	-	INFO
	Resolver learning	<ul style="list-style-type: none"> • DTCs are stored • Slight vibration at a vehicle speed of 5 km/h (3 mph) or less 	INFO
<p>*: Even when not replacing the part, it is necessary to perform the specified necessary procedures after installation.</p> <p>*1: Also necessary after performing a tire rotation.</p> <p>*2: It is not necessary to perform this procedure if the tire pressure warning valve and transmitters are installed to the same location.</p> <p>*3: The vehicle height changes because of tire replacement.</p> <p>*4: If matchmarks were not placed when removing parts related to steering operation, perform end position initial setting.</p>			

REPLACED PART OR PERFORMED PROCEDURE	NECESSARY PROCEDURE	EFFECT/INOPERATIVE FUNCTION WHEN NECESSARY PROCEDURE NOT PERFORMED	LINK
		<ul style="list-style-type: none"> Shock or vibration during acceleration 	
for PHEV Model:			
Replacement of service plug grip	High voltage fuse accumulated load history reset	DTCs are stored	INFO
Replacement of hybrid vehicle transaxle assembly	<ul style="list-style-type: none"> Resolver learning Initialize resolver 	<ul style="list-style-type: none"> DTCs are stored Slight vibration at a vehicle speed of 5 km/h (3 mph) or less Shock or vibration during acceleration 	INFO
Suspension parts	Rear television camera assembly optical axis (Back camera position setting)	Parking Assist Monitor System	INFO
	Parking assist ECU initialization	Panoramic View Monitor System	INFO
		Advanced Park	INFO
Tires	<ul style="list-style-type: none"> Initialization*1*2 Tire Position Identification*1*2 	Tire Pressure Warning System	Refer to Procedures Necessary When Replacing Parts (for Tire Pressure Warning System) table below INFO
	Rear television camera assembly optical axis (Back camera position setting)	Parking Assist Monitor System	INFO

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*1: Also necessary after performing a tire rotation.

*2: It is not necessary to perform this procedure if the tire pressure warning valve and transmitters are installed to the same location.

*3: The vehicle height changes because of tire replacement.

*4: If matchmarks were not placed when removing parts related to steering operation, perform end position initial setting.

REPLACED PART OR PERFORMED PROCEDURE	NECESSARY PROCEDURE	EFFECT/INOPERATIVE FUNCTION WHEN NECESSARY PROCEDURE NOT PERFORMED	LINK
	Parking assist ECU initialization*3	Panoramic View Monitor System	INFO
		Advanced Park	INFO
No. 2 steering intermediate shaft assembly*4	End position initial setting	-	INFO
Replacement of front bumper assembly*	Front television camera view adjustment	Panoramic View Monitor System	INFO
		Advanced Park	INFO
Front wheel alignment adjustment	Perform "Calibration"	<ul style="list-style-type: none"> • DTCs are stored • ABS warning light illuminates • Brake system warning light (yellow indicator) illuminates • Slip indicator light illuminates • Electronically controlled brake system disabled or malfunctions 	INFO

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*1: Also necessary after performing a tire rotation.

*2: It is not necessary to perform this procedure if the tire pressure warning valve and transmitters are installed to the same location.

*3: The vehicle height changes because of tire replacement.

*4: If matchmarks were not placed when removing parts related to steering operation, perform end position initial setting.

NOTICE:

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

Click here [INFO](#)

HINT:

When the cable is disconnected / reconnected to the auxiliary battery terminal, systems temporarily stop operating. However, each system has a function that completes learning the first time the system is used.

Items for which learning is completed by driving the vehicle

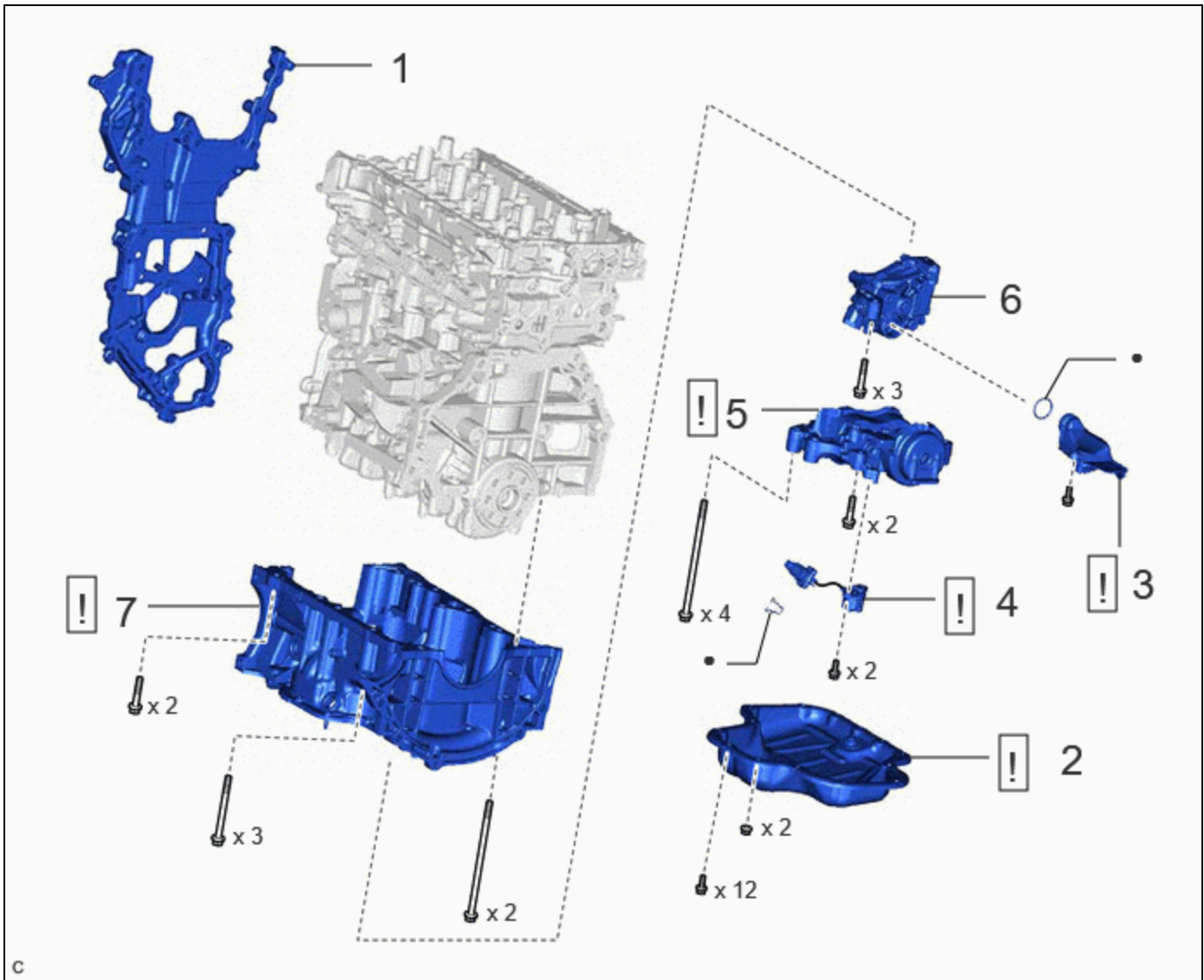
EFFECT/INOPERATIVE FUNCTION WHEN NECESSARY PROCEDURE NOT PERFORMED	NECESSARY PROCEDURES	LINK
Front Camera System	Drive the vehicle straight ahead at 35 km/h (22 mph) or more for 5 seconds or more.	INFO

Items for which learning is completed by operating the vehicle normally

EFFECT/INOPERATIVE FUNCTION WHEN NECESSARY PROCEDURE NOT PERFORMED	NECESSARY PROCEDURES	LINK
Power Door Lock Control System*1 • Back door opener	Perform door unlock operation with door control switch or electrical key transmitter sub-assembly switch.	INFO
Power Back Door System*2	Reset back door close position	INFO
Air Conditioning System	After the ignition switch is turned to ON, the servo motor and cooler expansion valve standard position is recognized.	-
<p>*1: w/o Power Back Door System</p> <p>*2: w/ Power Back Door System</p>		

CAUTION / NOTICE / HINT

COMPONENTS (REMOVAL)



Procedure	Part Name Code	!	📄	⚙️
1 TIMING CHAIN COVER ASSEMBLY	11310	-	-	-
2 OIL PAN SUB-ASSEMBLY	12101	INFO	-	-
3 OIL STRAINER SUB-ASSEMBLY	15104	INFO	-	-
4 ENGINE OIL LEVEL SENSOR	89491	INFO	-	-
5 ENGINE BALANCER ASSEMBLY	13620B	INFO	-	-
6 OIL PUMP ASSEMBLY	15100	-	-	-
7 STIFFENING CRANKCASE ASSEMBLY	11420	INFO	-	-

•	Non-reusable part	-	-
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PROCEDURE

1. REMOVE TIMING CHAIN COVER ASSEMBLY

Click here [INFO](#)


2. REMOVE OIL PAN SUB-ASSEMBLY

	Click here INFO
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3. REMOVE OIL STRAINER SUB-ASSEMBLY

	Click here INFO
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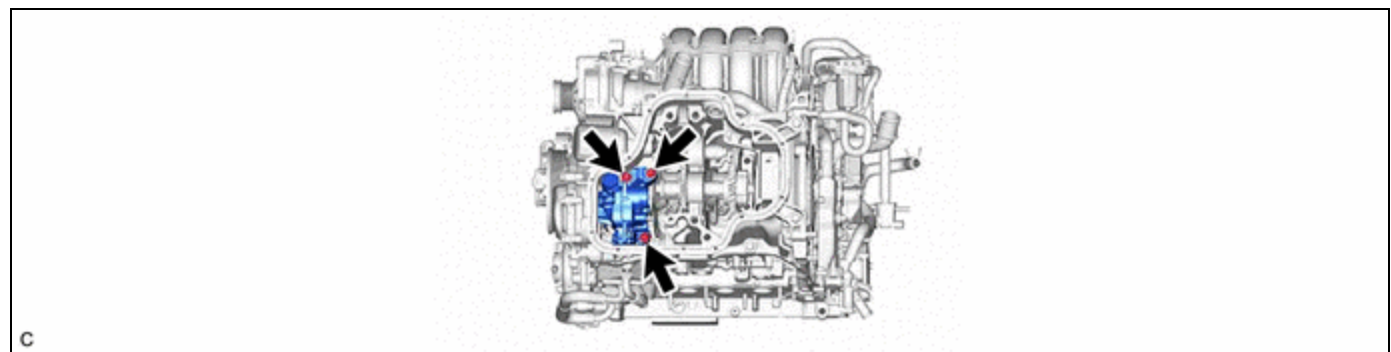
4. REMOVE ENGINE OIL LEVEL SENSOR

	Click here INFO
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5. REMOVE ENGINE BALANCER ASSEMBLY

	Click here INFO
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6. REMOVE OIL PUMP ASSEMBLY



7. REMOVE STIFFENING CRANKCASE ASSEMBLY

	Click here INFO
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