Last Modified: 12-04-2024	6.11:8.1.0	Doc ID: RM10000002B3O1		
Model Year Start: 2023	Model: Prius Prime	Prod Date Range: [03/2023 -]		
Title: MAINTENANCE: REAR WHEEL ALIGNMENT: ADJUSTMENT; 2023 - 2024 MY Prius Prius Prime [03/2023 -]				

ADJUSTMENT

CAUTION / NOTICE / HINT

The necessary procedures (adjustment, calibration, initialization, or registration) that must be performed after completing the rear wheel alignment procedure 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
Rear wheel alignment adjustment	Perform "Calibration"	 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

PROCEDURE

1. INSPECT TIRES

(a) Inspect the tires for wear and proper inflation pressure.

Click here

(b) Check the runout of the tires.

Click here NFO

2. MEASURE VEHICLE HEIGHT

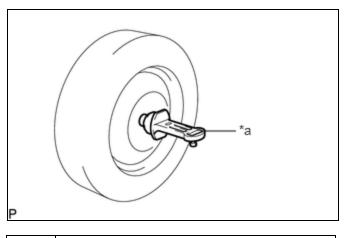
Click here NFO

3. INSPECT CAMBER

NOTICE:

Inspect while the vehicle is unloaded.

(a) Install a camber-caster-kingpin gauge.



*a Camber-caster-kingpin Gauge

(b) Inspect the camber.

Camber (Unloaded Vehicle):

ENGINE	DRIVE TYPE	CAMBER INCLINATION	RIGHT-LEFT DIFFERENCE	
M20A-FXS	2WD	-1°12' +/- 0°45' (-1.20° +/- 0.75°) -1°16' +/- 0°45' (-1.27° +/- 0.75°)*	0°45' (0.75°) or less	
	AWD	-1°14' +/- 0°45' (-1.23° +/- 0.75°)		
2ZR-FXE	2WD	-1°04' +/- 0°45' (-1.07° +/- 0.75°)		
*:for PHEV				

HINT:

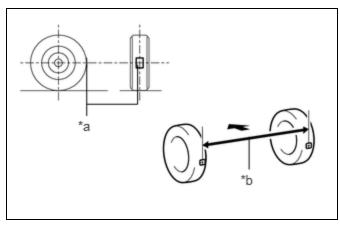
Camber is not adjustable. If the measurement is not within the specified range, inspect the suspension parts for damage and/or wear, and replace them if necessary.

4. INSPECT TOE-IN

NOTICE:

Inspect while the vehicle is unloaded.

- (a) Bounce the vehicle up and down at the corners to stabilize the suspension.
- (b) Release the parking brake and move the shift lever to N.
- (c) Push the vehicle straight ahead approximately 5 m (16.4 ft.). (Step A)
- (d) Put tread center marks on the rearmost points of the rear wheels and measure the distance between the marks (dimension B).



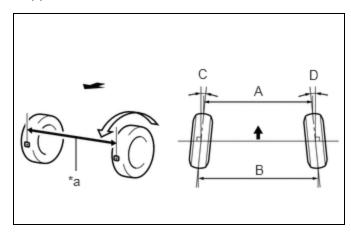
*a	Tread Center Mark		
*b	Dimension B		
→	Front of the Vehicle		

(e) Slowly push the vehicle straight ahead to cause the rear wheels to rotate 180°. Use the rear tire valve as a reference point.

HINT:

Do not allow the wheels to rotate more than 180°. If the wheels rotate more than 180°, perform the procedure from step A again.

(f) Measure the distance between the tread center marks on the front of the rear wheels (dimension A).



*a	Dimension A
→	Front of the Vehicle

Toe-in (Unloaded Vehicle):

ENGINE	DRIVE TYPE	TIRE SIZE	SPECIFIED CONDITION	RIGHT-LEFT DIFFERENCE
M20A-FXS	2WD	195/60R17	C + D: 0°16' +/- 0°10' (0.26° +/- 0.17°) C + D: 0°17' +/- 0°10' (0.28° +/- 0.17°)*	-
			B - A: 3.0 +/- 2.0 mm (0.118 +/- 0.0787 in.)	2.0 mm (0.0787 in.) or less
*:for PHEV				

2/9/24, 1.03) I IVI	Prius Prius Prime [03/2023 -]		
ENGI	NE DRIVE TYPE	TIRE SIZE	SPECIFIED CONDITION	RIGHT-LEFT DIFFERENCE
			B - A: 3.2 +/- 2.0 mm (0.126 +/- 0.0787 in.)*	
		195/50R19	C + D: 0°16' +/- 0°10' (0.26° +/- 0.17°) C + D: 0°17' +/- 0°10' (0.28° +/- 0.17°)*	-
		193/30119	B - A: 3.1 +/- 2.0 mm (0.122 +/- 0.0787 in.) B - A: 3.3 +/- 2.0 mm (0.13 +/- 0.0787 in.)*	2.0 mm (0.0787 in.) or less
		195/60R17 AWD 195/50R19	C + D: 0°16' +/- 0°10' (0.27° +/- 0.17°)	-
	AWD		B - A: 3.1 +/- 2.0 mm (0.122 +/- 0.0787 in.)	2.0 mm (0.0787 in.) or less
	AWD		C + D: 0°16' +/- 0°10' (0.27° +/- 0.17°)	-
		193/30K19	B - A: 3.2 +/- 2.0 mm (0.126 +/- 0.0787 in.)	2.0 mm (0.0787 in.) or less
27D_E	EVE 2WD	2WD 195/60R17	C + D: 0°16' +/- 0°10' (0.27° +/- 0.17°)	-
2ZR-FXE	AL ZWD		B - A: 3.1 +/- 2.0 mm (0.122 +/- 0.0787 in.)	2.0 mm (0.0787 in.) or less

HINT:

*:for PHEV

Measure "B - A" only when "C + D" cannot be measured.

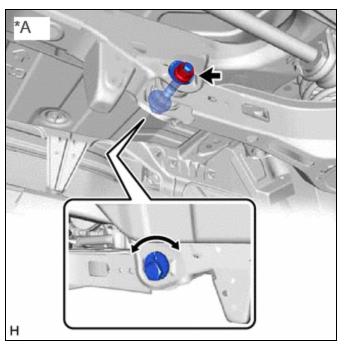
If the toe-in is not within the specified range, adjust it at the rear suspension toe adjust cam sub-assembly.

5. ADJUST TOE-IN

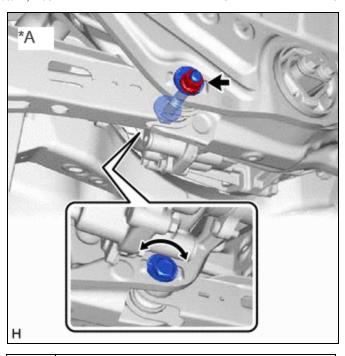
(a) Loosen the nut of the rear No. 2 suspension arm assembly (on the rear suspension member sub-assembly side).

NOTICE:

Hold the rear suspension toe adjust cam sub-assembly while rotating the nut.



*A for HEV Model 2WD



*A for HEV Model AWD, PHEV Model

(b) Rotate the rear suspension toe adjust cam sub-assembly to adjust the toe-in.

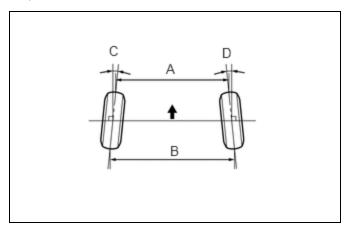
Toe-in (Unloaded Vehicle):

ENGINE	DRIVE TYPE	TIRE SIZE	SPECIFIED CONDITION	RIGHT-LEFT DIFFERENCE
M20A-FXS	2WD	195/60R17	C + D: 0°16' +/- 0°10' (0.26° +/- 0.17°) C + D: 0°17' +/- 0°10' (0.28° +/- 0.17°)*	-
			B - A: 3.0 +/- 2.0 mm (0.118 +/- 0.0787 in.) B - A: 3.2 +/- 2.0 mm (0.126 +/- 0.0787 in.)*	2.0 mm (0.0787 in.) or less
		195/50R19	C + D: 0°16' +/- 0°10' (0.26° +/- 0.17°) C + D: 0°17' +/- 0°10' (0.28° +/- 0.17°)*	-
			B - A: 3.1 +/- 2.0 mm (0.122 +/- 0.0787 in.) B - A: 3.3 +/- 2.0 mm (0.13 +/- 0.0787 in.)*	2.0 mm (0.0787 in.) or less
	AWD	195/60R17	C + D: 0°16' +/- 0°10' (0.27° +/- 0.17°)	-
			B - A: 3.1 +/- 2.0 mm (0.122 +/- 0.0787 in.)	2.0 mm (0.0787 in.) or less
		195/50R19	C + D: 0°16' +/- 0°10' (0.27° +/- 0.17°)	-
			B - A: 3.2 +/- 2.0 mm (0.126 +/- 0.0787 in.)	2.0 mm (0.0787 in.) or less
2ZR-FXE	2WD	195/60R17	C + D: 0°16' +/- 0°10' (0.27° +/- 0.17°)	-
			B - A: 3.1 +/- 2.0 mm (0.122 +/- 0.0787 in.)	2.0 mm (0.0787 in.) or less
*:for PHEV				

HINT:

- Rotating the rear suspension toe adjust cam sub-assembly by one notch changes the toe by approximately 2.6 mm (0.102 in.).
- Perform adjustments so that the value is as close as possible to the median of the specified range.







Front of the Vehicle

(c) Tighten the nut of the rear No. 2 suspension arm assembly (on the rear suspension member sub-assembly side).

Torque:

100 N·m {1020 kgf·cm, 74 ft·lbf}

NOTICE:

Hold the rear suspension toe adjust cam sub-assembly while rotating the nut.

6. ALIGN FRONT WHEELS FACING STRAIGHT AHEAD

7. PERFORM CALIBRATION



