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Model Year Start: 2023	Model: Prius Prime	Prod Date Range: [12/2022 -]
Title: SPECIFICATIONS: M20A-FXS ENGINE CONTROL: SERVICE DATA; 2023 - 2024 MY Prius Prius Prime [12/2022 -]		

SERVICE DATA

IGNITION SYSTEM

Standard Insulation Resistance	Spark plug (terminal part) - Body ground	10 M Ω or higher
Spark Plug Type	DENSO made	FC16HR-Q8
Maximum Electrode Gap	for Used Spark Plug	1.2 mm (0.0472 in.)
Standard Electrode Gap	for New Spark Plug	0.7 to 0.8 mm (0.0276 to 0.0315 in.)

CAMSHAFT OIL CONTROL VALVE

Standard Stroke	2.2 mm (0.0866 in.) or higher
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CAMSHAFT OIL CONTROL SOLENOID

Standard Resistance	0°C (32°F)	6.3 to 7.3 Ω
	20°C (68°F)	6.9 to 7.9 Ω
	40°C (104°F)	7.4 to 8.6 Ω
Stroke Amount	Standard	4.3 mm (0.169 in.) or higher

CAMSHAFT TIMING CONTROL MOTOR

Camshaft Timing Gear Assembly Eccentric Shaft	Width (A) of the Cutout	Standard Width	5.98 to 6.05 mm (0.235 to 0.238 in.)
Cam Timing Control Motor with EDU Assembly	Width (B) of the Joint	Standard Width	5.90 to 5.95 mm (0.232 to 0.234 in.)
Joint Clearance	Standard	0.03 to 0.15 mm (0.00118 to 0.00591 in.)	
	Maximum	0.7 mm (0.0276 in.)	

THROTTLE BODY

Standard Resistance	5 (M-) - 6 (M+)	20°C (68°F)	0.3 to 100 Ω
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ENGINE COOLANT TEMPERATURE SENSOR

Standard Resistance	20°C (68°F)	2.32 to 2.59 k Ω
	80°C (176°F)	0.310 to 0.326 k Ω

NO. 2 ENGINE COOLANT TEMPERATURE SENSOR

Standard Resistance	20°C (68°F)	2.32 to 2.59 k Ω
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80°C (176°F)

0.310 to 0.326 kΩ

KNOCK SENSOR

Standard Resistance

25°C (77°F)

120 to 280 kΩ

AIR FUEL RATIO SENSOR (for Sensor 1)

Standard Resistance

1 (HA1A) - 2 (+B)

20°C (68°F)

1.4 to 3.0 Ω

1 (HA1A) - 4 (A1A-)

Always

10 kΩ or higher

AIR FUEL RATIO SENSOR (for Sensor 2)

Standard Resistance

1 (HA1B) - 2 (+B)

20°C (68°F)

2 to 6 Ω

1 (HA1B) - 4 (A1B-)

Always

10 kΩ or higher

RELAYStandard Resistance
(No. 1 Electronic Fuel Injection Main Relay
(EFI-MAIN NO.1))3 -
5Auxiliary battery voltage is not applied between
terminals 1 and 210 kΩ or
higherAuxiliary battery voltage is applied between
terminals 1 and 2

Below 1 Ω

Standard Resistance
(No. 2 Electronic Fuel Injection Main Relay
(EFI-MAIN NO.2))3 -
5Auxiliary battery voltage is not applied between
terminals 1 and 210 kΩ or
higherAuxiliary battery voltage is applied between
terminals 1 and 2

Below 1 Ω

Standard Resistance
(No. 3 Electronic Fuel Injection Main Relay
(EFI-MAIN NO.3))3 -
5Auxiliary battery voltage is not applied between
terminals 1 and 210 kΩ or
higherAuxiliary battery voltage is applied between
terminals 1 and 2

Below 1 Ω

Standard Resistance
(Injector Relay (D INJ))3 -
5Auxiliary battery voltage is not applied between
terminals 1 and 210 kΩ or
higherAuxiliary battery voltage is applied between
terminals 1 and 2

Below 1 Ω

Standard Resistance
(VVT Relay (VVT))3 -
5Auxiliary battery voltage is not applied between
terminals 1 and 210 kΩ or
higherAuxiliary battery voltage is applied between
terminals 1 and 2

Below 1 Ω

Standard Resistance
(IGP Relay (IGP))3 -
5Auxiliary battery voltage is not applied between
terminals 1 and 210 kΩ or
higherAuxiliary battery voltage is applied between
terminals 1 and 2

Below 1 Ω

