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Model Year Start: 2023	Model: Prius Prime	Prod Date Range: [03/2023 - ]			
Title: SPECIFICATIONS: M20A-FXS ENGINE CONTROL: TORQUE SPECIFICATIONS; 2023 - 2024 MY Prius Prius					
Prime [03/2023 - ]					

# **TORQUE SPECIFICATIONS**

# **CAMSHAFT OIL CONTROL VALVE**

PART TIGHTENED	N*M	KGF*CM	FT.*LBF
Camshaft timing valve assembly x Camshaft timing exhaust gear assembly	19	194	14

# **CAMSHAFT OIL CONTROL SOLENOID**

PART TIGHTENED		N*M	KGF*CM	FT.*LBF	IN.*LBF
for HEV Model:  Cam timing oil control solenoid assembly x No. 2 timing chain cover assembly		10	102	7	
for PHEV Model:		5.0	51		44
Cam timing oil control solenoid assembly x No. 2 timing chain cover assembly	without an offset long wrench	10	102	7	
for PHEV Model:  No. 2 cooler bracket x Engine mounting insulator sub-assembly RH		9.8	100		87

#### **CAMSHAFT TIMING CONTROL MOTOR**

PART TIGHTENED	N*M	KGF*CM	FT.*LBF
Cam timing control motor with EDU assembly x No. 2 timing chain cover assembly	21	214	15

### **THROTTLE BODY**

PART TIGHTENED	N*M	KGF*CM	FT.*LBF	IN.*LBF
Throttle body with motor assembly x Intake manifold	10	102	7	
Hose clamp x Air cleaner hose	2.0	20		18

# **ECM**

PART TIGHTENED	N*M	KGF*CM	IN.*LBF
No. 1 ECM bracket x ECM	4.5	46	40
No. 2 ECM bracket x ECM	4.5	46	40
ECM x Engine mounting insulator LH	8.0	82	71

#### **CAMSHAFT POSITION SENSOR**

PART TIGHTENED	N*M	KGF*CM	IN.*LBF
Camshaft position sensor (for Exhaust Side) x Cylinder head cover sub-assembly	7.5	76	66
Camshaft position sensor (for Intake Side) x Cylinder head cover sub-assembly	7.5	76	66

#### **CRANKSHAFT POSITION SENSOR**

PART TIGHTENED	N*M	KGF*CM	FT.*LBF
Crankshaft position sensor x Cylinder block sub-assembly	10	102	7

# **IGNITION COIL AND SPARK PLUG**

PART TIGHTENED	N*M	KGF*CM	IN.*LBF
Ignition coil assembly x Cylinder head cover sub-assembly	7.5	76	66

#### **KNOCK SENSOR**

PART TIGHTENED	N*M	KGF*CM	FT.*LBF
Knock control sensor x Cylinder block sub-assembly	20	204	15

# AIR FUEL RATIO SENSOR (for Sensor 1)

PART TIGHTENED		N*M	KGF*CM	FT.*LBF	IN.*LBF
Air fuel ratio sensor x Exhaust manifold	with SST	37.7	384	28	
	without SST	44	449	32	
Wire harness clamp bracket x Camshaft housing sub-assembly		10	102	7	

PART TIGHTENED	N*M	KGF*CM	FT.*LBF	IN.*LBF
Dash panel heat insulator $x$ No. 4 dash panel insulator plate and No. 5 dash panel insulator plate	5.0	51		44

# **AIR FUEL RATIO SENSOR (for Sensor 2)**

PART TIGHTENED		N*M	KGF*CM	FT.*LBF
Air fuel ratio sensor x Front exhaust pipe assembly	with SST	37.7	384	28
	without SST	44	449	32



