

SERVICE SPECIFICATIONS

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SQRE4G16 ENGINE MANAGEMENT SYSTEM

Specifications

Torque Specifications

Description	Torque (N·m)
Coolant Temperature Sensor	14 ± 1
Intake Pressure/Temperature Sensor Fixing Bolt	6 ± 1
Knock Sensor Fixing Bolt	20 ± 5
Crankshaft Position Sensor Fixing Bolt	8 ± 2
Camshaft Position Sensor Fixing Bolt	8 ± 1
VVT Control Valve Fixing Bolt	8 ± 2
ECM Fixing Bolt	7 ± 1

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SQRE4G16 ENGINE MECHANICAL

Specifications

SQRE4G16 Engine Specifications

04

Item	Specifications	
Engine Type	Vertical, in-line 4-cylinder, 16 valves, water-cooled, 4-stroke, DOHC, electronic controlled sequential multiport fuel injection, Variable Valve Timing (VVT), Variable Intake System (VIS)	
Engine Model	SQRE4G16	
Valve Number Per Cylinder	4	
Cylinder Diameter (mm)	77	
Piston Stroke (mm)	85.8	
Displacement (L)	1.598	
Compression Ratio	11:1	
Fuel Supply Type	Electronic controlled sequential multiport fuel injection	
Ignition Type	Electrical control	
Ignition Sequence	1 - 3 - 4 - 2	
Rated Power (kW)	93	
Rated Power Speed (r/min)	6150	
Max. Torque (N·m)	160	
Max. Torque Speed (r/min)	3900	
Min. Fuel Consumption Rate (g/kW·h)	234	
Fuel Octane Number (Not Less Than)	Unleaded gasoline, octane number 93	
Oil Octane Number	In summer	SAE 10W-40 (SM grade or higher)
	In winter	SAE 5W-40 (SM grade or higher)
Oil Capacity (L)	4 ± 0.5	
Crankshaft Rotation Direction	Counterclockwise (viewed from end surface of engine flywheel)	
Starting Type	Electrical starting	
Cooling Type	Forced circulation type antifreeze cooling	
Lubrication Type	Compound type (pressure, splash lubrication)	
Fuel Pressure (bar)	4	
Cylinder Compression Pressure (bar) (180 - 250) r/min	9 - 13.5	
Oil Pressure (bar)	Low Idling Speed (700 ± 50 r/min)	1.0
	High Idling Speed (2000 r/min)	1.8
	High Speed (4000 r/min)	3.0

Item	Specifications	
Thermostat Operation Temperature (°C)	Open Temperature	82
	Full Open Temperature	97
Starting Performance	With atmospheric temperature at -25°C, engine can start smoothly within 30 seconds, without taking special measures. Starting test shows that starting can be performed 3 times consecutively. If it fails to start once, perform starting again after 2 minutes.	

Engine Mechanical Specifications

Item			Specifications
Camshaft	Cam Height (mm)	Intake Cam	37.18
		Exhaust Cam	37.05
	Camshaft Journal Diameter (mm)	Intake Cam	$\phi 24_{-0.053}^{-0.040}$
		Exhaust Cam	$\phi 24_{-0.053}^{-0.040}$
	Camshaft Axial Clearance (mm)	Intake Cam	0.15 - 0.20
		Exhaust Cam	0.15 - 0.20
Cylinder Head	Lower Surface Flatness (mm)		0.04
	Overall Height (mm)		139.4 ± 0.41
	Surface Grinding Limit (mm)		0.15
	Total Grinding Amount of Cylinder Block and Cylinder Head (mm)		0.20
Valve	Valve Head Margin Thickness (mm)	Intake Valve	0.3 ± 0.15
		Exhaust Valve	0.3 ± 0.15
	Valve Stem Diameter (mm)	Intake Valve	$\phi 5.98 \pm 0.008$
		Exhaust Valve	$\phi 5.96 \pm 0.008$
	Grommet Width (mm)	Intake Valve	1.158
		Exhaust Valve	1.306
	Clearance Between Valve Stem and Guide (mm)	Intake Valve	0.02
		Exhaust Valve	0.04
	Inclination Angle (°)	Intake Valve	65
		Exhaust Valve	68
	Height (mm)	Intake Valve	107.998
		Exhaust Valve	106.318
Valve Spring	Free Height (mm)		47.7
	Operating Preload/Operating Height		$585 \pm 25 \text{ N}/32 \text{ mm}$

Item			Specifications
Valve Guide	Valve Guide Length (mm)		38 ± 0.25
	Inner Diameter (mm)		φ6.0 + 0.015
	Outer Diameter (mm)		φ11 ^{+0.051} _{+0.040}
	Depression Depth (mm)		16 ± 0.3
	Valve Stem Protrusion Amount (mm)		47.5
Piston	Piston Skirt Diameter (mm)		φ76.950 ± 0.009
Piston Ring	Side Clearance (mm)	First Ring	0.035 - 0.080
		Second Ring	0.030 - 0.075
	End Gap (mm)	First Ring	0.2 - 0.4
		Second Ring	0.4 - 0.6
	Height (mm)	First Ring	1 ^{-0.01} _{-0.03}
		Second Ring	1.2 ^{-0.006} _{-0.050}
		Oil Ring	1.5 ^{-0.02} _{-0.13}
Piston Ring Groove	Height (mm)	First Ring	1.2 ^{+0.06} _{+0.05}
		Second Ring	1.5 ^{+0.04} _{+0.02}
		Oil Ring	1.5 ^{+0.03} _{+0.01}
Piston Pin	Diameter (mm)		φ18 ⁰ _{-0.005}
	Length (mm)		45 ⁰ _{-0.3}
	Piston Pin Hole Diameter (mm)		φ18 ^{+0.010} _{+0.004}
Crankshaft	Axial Clearance (mm)		0.070 - 0.265
	Radial Clearance (mm)		0.021 - 0.060
	Crankshaft Main Journal	Diameter (mm)	φ54 ⁰ _{-0.016}
		Coaxially (mm)	0.04
		Cylindricity (mm)	0.007
		Roundness (mm)	0.004
	Connecting Rod Journal	Diameter (mm)	φ46 ⁰ _{-0.016}
		Parallelism to Main Journal (mm)	0.008
Cylinder Block	Overall Height (mm)		274 ^{+0.1} ₀
	Bore Roundness (mm)		0.008
	Cylindricity (mm)		0.01
	Upper Surface Flatness (mm)		0.04
	Surface Grinding Limit (mm)		0.15
	Total Grinding Amount of Cylinder Block and Cylinder Head (mm)		0.20
Connecting Rod	Big End Hole Radial Clearance (mm)		0.016 - 0.061
	Big End Axial Clearance (mm)		0.15 - 0.40

Engine Torque Specifications

Description	Torque (N·m)
Ignition Coil Fixing Bolt	8 + 2
Accessory Drive Belt Tensioner Assembly Fixing Bolt	40 + 5
Idler Pulley Assembly Fixing Bolt	40 + 5
Cylinder Head Cover Fixing Bolt	1st step: 3 - 5 2nd step: 8 - 10
Crankshaft Pulley Fixing Bolt	1st step: 90 - 110 2nd step: 120° ± 10°
Clutch Pressure Plate Fixing Bolt	25 ± 2
Flywheel Fixing Bolt	1st step: 25 ± 5 2nd step: 30° ± 5°
Water Pump Pulley Fixing Bolt	20 + 5
Camshaft Timing Tool Installation Hole Bolt	40 + 5
Hydraulic Tensioner Fixing Bolt	9 - 12
Engine Timing Chain Fixing Guide Rail Fixing Bolt	9 - 12
Engine Timing Chain Movable Guide Rail Fixing Bolt	9 - 12
Timing Chain Upper Guide Rail Fixing Bolt	9 - 12
Exhaust Camshaft Phaser Assembly Fixing Bolt	105 + 5
Intake Camshaft Phaser Assembly Fixing Bolt	105 + 5
Engine Timing Chain Cover Fixing Bolt	Inner Hexagon Bolt: 20 - 25 Hexagon Flange Bolt: 40 - 45
Coupling Bolt Between Engine Timing Chain Cover and Oil Pan	20 + 5
Camshaft Bearing Cap Fixing Bolt	9 ± 1.5
Engine Wire Harness Ground Wire Fixing Bolt	7 ± 1
Intake Camshaft Variable Timing Control Valve Fixing Bolt	8 + 2
Exhaust Camshaft Variable Timing Control Valve Fixing Bolt	8 + 2
Intake Camshaft Position Sensor	8 ± 1
Exhaust Camshaft Position Sensor	8 ± 1
Cylinder Head Fixing Bolt	1st step: 40 ± 5 2nd step: 90° ± 5° 3rd step: 90° ± 5°
Locking Nut Between Rear Mounting Upper Body Assembly and Rear Mounting Lower Body Assembly	80 ± 5
Rear Mounting Upper Body Assembly Fixing Bolt (for MT Model)	45 ± 5
Rear Mounting Upper Body Assembly Fixing Bolt (for CVT Model)	45 ± 5

Description	Torque (N·m)
Coupling Bolt Between Rear Mounting Lower Body Assembly and Front Sub Frame Welding Assembly	105 ± 5
Coupling Nut Between Left Mounting Cushion Assembly and Left Mounting Bracket	60 ± 5
Coupling Bolt Between Left Mounting Cushion Assembly and Body	60 ± 5
Coupling Nut Between Left Mounting Bracket and Transmission Case (for MT Model)	80 ± 5
Coupling Nut Between Left Mounting Arm and Transmission Case (for CVT Model)	80 ± 5
Coupling Bolt Between Left Mounting Cushion Assembly and Body (for CVT Model)	60 ± 5
Expansion Tank Fixing Bolt	7 ± 1
Coupling Bolt Between Line Bracket and Engine Right Mounting	7 ± 1
Coupling Nut Between Engine Right Mounting Assembly and Engine Timing Chain Cover	70 ± 5
Coupling Bolt Between Engine Right Mounting Assembly and Body	60 ± 5
Coupling Nut Between Shift Cable and Shift Arm (for CVT Model)	18 ± 2
High Pressure Fluid Pipe Hollow Bolt (Equipped with Hydraulic Assist System)	45 ± 5
Transmission Ground Wire Fixing Bolt	15 ± 2
Coupling Nut Between Battery Wire Harness and Engine Compartment Fuse and Relay Box	7 ± 1
Engine Wire Harness Ground Wire Fixing Nut	15 ± 2
A/C High/Low Pressure Line Fixing Bolt	25 ± 4
Engine Trim Cover Bracket	8 ± 1
Intake Manifold Fixing Nut	20 + 5
Oil Dipstick Tube Fixing Bolt	7 ± 1
Knock Sensor Fixing Bolt	20 ± 5
Engine Discharge Pipe Fixing Bolt	7 ± 1
Coolant Pipe Assembly I Fixing Bolt	20 + 5
Oil Filter Module Fixing Bolt	40 + 5
Oil Pump Chain Movable Guide Rail Fixing Bolt	9 - 12
Oil Deflector Assembly	8 + 3
Crankshaft Main Bearing Cap Fixing Bolt	1st step: 45 ± 5 2nd step: 180° ± 10°
Crankshaft Frame Fixing Bolt	20 + 3
Connecting Rod Bearing Cap Fixing Bolt	1st step: 15 ± 3 2nd step: 60° ± 5°

Lubrication Areas during Engine Assembly

Lubrication Area	Note
Piston Pin	SM10W-40
Piston Ring	SM10W-40
Piston	SM10W-40
Cylinder Bore	SM10W-40
Main Bearing Shell and Crankshaft Main Journal	SM10W-40
Crankshaft Thrust Washer (Oil Groove Side)	SM10W-40
Connecting Rod Bearing Cap Bolt Head and Thread	SM10W-40
Connecting Rod Bearing Shell and Crankshaft Connecting Rod Journal	SM10W-40
Main Bearing Cap Bolt Head	SM10W-40
Crankshaft Front Oil Seal Lip and Crankshaft Oil Seal Journal	SM10W-40
Crankshaft Rear Oil Seal Lip and Crankshaft Oil Seal Journal	SM10W-40
Valve Guide Hole	SM10W-40
Valve Stem	SM10W-40
Camshaft Cam and Journal	SM10W-40
Hydraulic Lifter	SM10W-40
Hydraulic Lifter Hole and Valve Rocker Arm Head	SM10W-40
Valve Seat Hole (Cylinder Head Assembly)	SM10W-40
Valve Guide or Guide Bottom Hole (Cylinder Head)	SM10W-40
Oil Filter Module Gasket Surface	SM10W-40

All engine lubricants should be 5W-40 (for winter)/10W-40 (for summer) SM grade or higher.

Areas with Seal Gum Applied during Engine Assembly

Area with Seal Gum Applied	Seal Gum Type
Cylinder Block Bowl Plug	Loctite 747
Cylinder Block Main Oil Passage Plug	Loctite 5910
Contact Surface Between Crankshaft Frame and Cylinder Block	Loctite 518
Crankshaft Frame and Oil Pan	Loctite 5910
Cylinder Head Bowl Plug	Loctite 11747
Cylinder Head Oil Passage Plug	Loctite 577
Coolant Temperature Sensor	Loctite 243
Oil Pressure Sensor	Loctite 577
Oil Deflector Bolt	Loctite 243



Area with Seal Gum Applied	Seal Gum Type
Engine Timing Chain Cover	Loctite 5910

SQRE4G16 FUEL SUPPLY SYSTEM

Specifications

Torque Specifications

Description	Torque (N·m)
Fuel Filter Bracket Fixing Screw	3.5 ± 0.5
Electric Fuel Pump Assembly Protective Cap Fixing Screw	5 ± 1
Fuel Pump Pressure Cap	75 ± 5
Filler Tube Assembly Fixing Nut	5 ± 1
Filler Tube Assembly Fixing Screw	7 ± 1
Fuel Tank Fixing Strap Fixing Bolt	23 ± 3
Fuel Rail Fixing Bolt	20 ± 5
Worm Clamp	3.5 ± 0.5

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Fuel Pressure Specifications

SQRE4G16	Pressure (kPa)
Fuel Rail Fuel Pressure - Key (ON)	400
Fuel Rail Fuel Pressure - Engine Idling	400
Fuel Rail Fuel Pressure - Key (LOCK)	400

SQRE4G16 EMISSION CONTROL SYSTEM

Specifications

Torque Specifications

Description	Torque (N·m)
Activated Charcoal Canister Solenoid Valve Bracket Fixing Bolt	8 ± 1
Coupling Bolt Between Activated Charcoal Canister Assembly and Body	5 ± 1
Exhaust Manifold Heat Insulator Fixing Bolt	$8 + 3$
Upstream Oxygen Sensor	40 - 60
Downstream Oxygen Sensor	40 - 60

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SQRE4G16 INTAKE SYSTEM

Specifications

Torque Specifications

Description	Torque (N·m)
Coupling Screw Between Air Filter Upper Housing and Lower Housing	1.3 ± 0.2
Air Filter Assembly Fixing Bolt	7 ± 1
Air Direct Pipe Assembly Fixing Bolt	7 ± 1
Air Filter Bracket Fixing Bolt	7 ± 1
Electronic Throttle Assembly Fixing Bolt	$8 + 3$
Engine Trim Cover Bracket	8 ± 1
Intake Manifold Assembly Fixing Nut	$20 + 5$
Vacuum Actuator Fixing Bolt	$8 + 3$
Rotary Valve Fixing Bolt	$8 + 3$
Variable Intake Air Solenoid Valve Fixing Bolt	$8 + 3$
Electronic Accelerator Pedal Fixing Bolt	10 ± 2
Worm Clamp	3 ± 0.5

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SQRE4G16 EXHAUST SYSTEM

Specifications

Torque Specifications

Description	Torque (N·m)
Exhaust Manifold Heat Insulator Fixing Bolt	8 + 3
Coupling Nut Between Exhaust Manifold Assembly and Main Catalytic Converter Assembly	45 ± 5
Coupling Bolt Between Exhaust Manifold Assembly and Exhaust Manifold Bracket	20 + 5
Exhaust Manifold Assembly Fixing Nut	20 + 5
Precatalytic Converter Heat Insulator Fixing Bolt	8 + 3
Coupling Nut Between Main Catalytic Converter Assembly and Front Muffler Assembly	45 ± 5
Coupling Nut Between Front Muffler Assembly and Rear Muffler Assembly	45 ± 5
Upstream Oxygen Sensor	40 - 60
Downstream Oxygen Sensor	40 - 60

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SQRE4G16 COOLING SYSTEM

Specifications

Torque Specifications

Description	Torque (N·m)
Hood Lock Assembly Fixing Bolt	9 ± 1
Tank Upper Crossmember Assembly Fixing Bolt	7 ± 1
Expansion Tank Fixing Bolt	7 ± 1
Thermostat Housing Fixing Bolt	$8 + 3$
Vacuum Booster Pipe Fixing Bolt	$8 + 3$
Thermostat Seat Fixing Bolt	$8 + 3$
Coolant Temperature Sensor	14 ± 1
Cooling Fan Relay Box Fixing Bolt	7 ± 1
Cooling Fan Assembly Fixing Bolt	7 ± 1
Transmission Cooling Pipe Fixing Bolt	7 ± 1
Coupling Bolt Between Radiator Assembly and Condenser	7 ± 1
Transmission Oil Pipe Hollow Bolt	32 ± 3
Water Pump Pulley Fixing Bolt	$20 + 5$
Water Pump Assembly Fixing Bolt	$8 + 3$

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Coolant Capacity

Item	Capacity (L)
Cooling System	8

Coolant Concentration

G11 Additive	Soft Water
50%	50%

Coolant Freezing Point

Item	Freezing Point Value (°C)
Coolant	-35

Cooling System Test Pressure

Item	Test Pressure (bar)
Cooling System (Test Pressure)	1.3 ± 0.2



SQRE4G16 LUBRICATION SYSTEM

Specifications

System Pressures

Condition	Pressure (bar)
Low Idling Speed (700 ± 50 r/min)	1.0
High Idling Speed (2000 r/min)	1.8
High Speed (4000 r/min)	3.0

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Oil Specifications

Engine Type	SQRE4G16
Oil Capacity (L)	4 ± 0.5
Oil Specifications	Summer: SAE 10W-40 (SM grade or higher) Winter: SAE 5W-40 (SM grade or higher)

Torque Specifications

Description	Torque (N·m)
Drain Plug	25 ± 3
Oil Filter Element Cap	20 + 5
Cooling Pipe Assembly I	20 + 5
Oil Filter Module	40 + 5
Coupling Bolt Between Oil Pan and Transmission Case	50 ± 5
Oil Pressure Switch	20 ± 2
Oil Pan Fixing Bolt	20 + 5
Oil Strainer Fixing Bolt	8 + 3
Oil Pump Fixing Bolt	20 + 5
Oil Pump Sprocket Fixing Bolt	20 + 5

SQRE4G16 IGNITION SYSTEM

Specifications

Torque Specifications

Description	Torque (N·m)
Spark Plug	20 ± 3
Ignition Coil Fixing Bolt	8 + 2

Spark Plug Specifications

Engine Type	SQRE4G16
Spark Plug Type	3707AAG
Spark Plug Gap (mm)	0.8 - 0.9

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SQRE4G16 STARTING SYSTEM

Specifications

Torque Specifications

Description	Torque (N·m)
Worm Clamp	3 ± 0.5
Starter Power Cable Nut	13 ± 1
Starter Fixing Bolt	35 ± 5
Ignition Starting Switch Fixing Screw	13 ± 2
Glove Box Assembly Fixing Screw	1.5 ± 0.5
PEPS Controller Bracket Fixing Bolt	7 ± 1

SQRE4G16 CHARGING SYSTEM

Specifications

Torque Specifications

Description	Torque (N·m)
Battery Pressure Plate Fixing Bolt	25 ± 2.5
Battery Tray Fixing Bolt in Engine Compartment Fuse and Relay Box	7 ± 1
Battery Tray Fixing Bolt	25 ± 2.5
Engine Control Module Fixing Bolt	7 ± 1
Accessory Drive Belt Tensioner Fixing Bolt	40 + 5
Idler Gear Fixing Bolt	40 + 5
Alternator Output Cable Fixing Nut	20 ± 2
Alternator Fixing Bolt	20 + 5
Alternator Bracket Fixing Bolt	40 + 5

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Battery Specification

Engine Type	Battery Model	Specification
SQRE4G16	L2 400	12 V, 60 Ah, 480 A



QR525MHE TRANSMISSION

Specifications

Torque Specifications

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Description	Torque (N·m)
Coupling Bolt Between Clutch Case and Transmission Case	25 ± 2
Reverse Idler Gear Shaft Locating Bolt	40 ± 4
Coupling Bolt Between Gear Shift Mechanism and Transmission Case	25 ± 2
Back-up Light Switch Assembly	20 ± 2
Gear Shift Control Mechanism Fixing Bolt	23 ± 2
Drain/Retaining Plug	40 ± 6
Reverse Gear Lock Mechanism Fixing Bolt	18 ± 2
Reverse Gear Fork Fixing Bolt	25 ± 2
Transmission Lower Coupling Bolt	50 ± 5
Transmission Upper Coupling Bolt	60 ± 5
Engine Side Coupling Bolt	60 ± 5

Transmission Gear Ratio Table

Gear Ratio Gear	Type	QR525MHE
1st		3.583
2nd		2.053
3rd		1.379
4th		1.03
5th		0.821
Reverse		3.417
Final Drive		4.313
Speedometer		0.806

QR019CHB CVT

Specifications

Torque Specifications

Description	Torque (N·m)
Transmission Drain Plug	29 - 34
Primary Shaft Speed Sensor Fixing Bolt	10 - 12
Secondary Shaft Speed Sensor Fixing Bolt	10 - 12
Turbine Speed Sensor Fixing Bolt	10 - 12
Primary Shaft Pressure Sensor	15 - 22
Secondary Shaft Pressure Sensor	15 - 22
Gear Shift Cable to Arm Nut	16 - 20
Valve Body Case Fixing Bolt	10 - 12
Gear Range SW Fixing Bolt	10 - 12
Gear Shift Arm Fixing Nut	18 - 25
Gear Shift Control Mechanism Fixing Bolt	18 - 22
Gear Shift Cable Dust Boot Fixing Bolt	8 - 10
TCU Fixing Bolt	6 - 8
Transmission Ground Wire Harness Fixing Bolt	18 - 22
Engine to Upper Part of Transmission Bolt	75 - 85
Dust Deflector Fixing Bolt	45 - 55
Flywheel to Torque Converter Bolt	50 - 60
Transmission to Engine Front Bolt	75 - 85
Transmission to Engine Bolt	75 - 85
Valve Body Fixing Bolt	8 - 10
Transmission Fluid Cooler Fixing Bolt	22 - 28
Auxiliary Fascia Console Front Right Extension Panel Assembly	1.5 ± 0.5

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General Specifications

Item	Parameter
Model	QR019CHB
Type	CVT
Central Distance (mm)	204
Maximum Input Torque (N·m)	190
Final Drive Ratio	5.141
Pulley Speed Ratio Scope	0.44 - 2.39
Solenoid Quantity	4
Gear Shift Positions	P, R, N, D, L, M (manual mode)



04 - SERVICE SPECIFICATIONS

Item	Parameter
Fluid Type	SP - III
Transmission Fluid Capacity (L)	8.0 ± 0.2



CLUTCH

Specifications

Torque Specifications

Description	Torque (N·m)
Clutch Pedal Fixing Nut	23 ± 2
Clutch Pressure Plate	25 ± 2
Release Bearing Fixing Bolt	24.7 - 30.9
Clutch Master Cylinder Fixing Nut	10 ± 1.5

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Clutch Driven Disc Specifications

Measurement Item	Specification (mm)
Clutch Driven Disc Standard Thickness	7.6 ± 0.2
Minimum Rivet Depth	1.2

DRIVE SHAFT

Specifications

Torque Specifications

Description	Torque (N·m)
Drive Shaft Fixing Nut	300 ± 20
Coupling Nut Between Steering Knuckle and Control Arm Ball Pin	180 ± 10
Coupling Bolt Between Front Left Wheel Speed Sensor and Front Left Steering Knuckle Assembly	10 ± 1

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DIFFERENTIAL

Specifications

Torque Specification

Description	Torque (N·m)
Final Drive Driven Gear Bolt	111 - 118

Clearance Specification

Description	Acceptable Range (mm)
Clearance Between Differential Case and Planetary Gear	0.025 - 0.150

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AXLE

Specifications

Torque Specifications

04

Description	Torque (N·m)
Wheel Mounting Bolt	110 ± 10
Front Drive Shaft Assembly Locking Nut	330 ± 20
Fixing Bolt Between Front Dust Guard and Front Steering Knuckle Assembly	9 - 11
Coupling Bolt Between Front Wheel Speed Sensor and Front Steering Knuckle Assembly	10 ± 1
Self-locking Nut Between Steering Tie Rod Ball Pin Assembly and Front Steering Knuckle Assembly	35 ± 3
Coupling Nut Between Front Control Arm Ball Pin Assembly and Front Steering Knuckle Assembly	100 ± 10
Coupling Bolt Between Front Shock Absorber Assembly and Front Steering Knuckle Assembly	110 ± 10
Coupling Nut Between Front Shock Absorber Assembly and Front Steering Knuckle Assembly	110 ± 10
Coupling Bolt Between Front Stabilizer Bar Assembly and Front Sub Frame Welding Assembly	20 ± 2
Coupling Bolt Between Front Sub Frame Welding Assembly and Steering Gear Assembly	100 ± 10
Coupling Bolt Between Upper Part of Front Sub Frame Welding Assembly and Body	180 ± 10
Coupling Bolt Between Rear Part of Front Sub Frame Welding Assembly and Body	180 ± 10
Coupling Bolt Between Rear Mounting Cushion Assembly Upper Body and Rear Mounting Cushion Assembly Lower Body	80 ± 5
Coupling Nut Between Rear Mounting Cushion Assembly Upper Body and Rear Mounting Cushion Assembly Lower Body	80 ± 5
Coupling Bolt Between Rear Mounting Cushion Assembly Lower Body and Front Sub Frame Welding Assembly	105 ± 5
Rear Shaft Assembly Locking Nut	300 - 330
Coupling Bolt Between Rear Wheel Speed Sensor and Rear Steering Knuckle Assembly	10 ± 1
Coupling Bolt Between Rear Brake Line Fixing Bracket and Rear Steering Knuckle Assembly	16 ± 1
Coupling Bolt Between Parking Brake Cable Assembly Fixing Bracket and Rear Steering Knuckle Assembly	16 ± 1

Description	Torque (N·m)
Coupling Bolt Between Lower Part of Rear Shock Absorber Assembly and Rear Steering Knuckle Assembly	160 ± 10
Coupling Bolt Between Rear Lower Control Arm Assembly and Rear Steering Knuckle Assembly	90 ± 5
Coupling Nut Between Rear Lower Control Arm Assembly and Rear Steering Knuckle Assembly	90 ± 5
Coupling Bolt Between Rear Upper Control Arm Assembly and Rear Steering Knuckle Assembly	160 ± 10
Coupling Nut Between Rear Upper Control Arm Assembly and Rear Steering Knuckle Assembly	160 ± 10
Coupling Bolt Between Rear Connecting Rod Assembly and Rear Steering Knuckle Assembly	160 ± 10
Coupling Nut Between Rear Connecting Rod Assembly and Rear Steering Knuckle Assembly	160 ± 10
Coupling Nut Between Rear Stabilizer Link Assembly and Rear Trailing Arm Assembly	50 ± 5
Coupling Bolt Between Rear Steering Knuckle Assembly and Rear Trailing Arm Assembly	90 ± 5
Coupling Bolt Between Rear Lower Control Arm Assembly and Rear Sub Frame Welding Assembly	90 ± 5
Coupling Nut Between Rear Lower Control Arm Assembly and Rear Sub Frame Welding Assembly	90 ± 5
Coupling Bolt Between Rear Upper Control Arm Assembly and Rear Sub Frame Welding Assembly	90 ± 5
Coupling Nut Between Rear Upper Control Arm Assembly and Rear Sub Frame Welding Assembly	90 ± 5
Coupling Bolt Between Rear Connecting Rod Assembly and Rear Sub Frame Welding Assembly	90 ± 5
Coupling Nut Between Rear Connecting Rod Assembly and Rear Sub Frame Welding Assembly	90 ± 5
Coupling Bolt Between Rear Stabilizer Bar Assembly and Rear Sub Frame Welding Assembly	20 ± 2
Coupling Bolt Between Rear Sub Frame Welding Assembly and Body	135 ± 10

Clearance Specifications

Description	Specified Condition (mm)
Front Hub Bearing Looseness	0.032 - 0.057
Front Hub Bearing Runout	0.02
Rear Hub Bearing Looseness	0.035 - 0.055
Rear Hub Bearing Runout	0.05

SUSPENSION

Specifications

Torque Specifications

04

Description	Torque (N·m)
Coupling Nut Between Front Stabilizer Link Assembly and Front Shock Absorber Assembly	50 ± 5
Coupling Bolt Between Front Shock Absorber Assembly and Front Steering Knuckle Assembly	110 ± 10
Coupling Nut Between Front Shock Absorber Assembly and Front Steering Knuckle Assembly	110 ± 10
Coupling Nut Between Front Shock Absorber Assembly and Body	50 ± 5
Front Shock Absorber Assembly Locking Nut	75 ± 5
Coupling Nut Between Front Control Arm Ball Pin Assembly and Front Steering Knuckle Assembly	100 ± 10
Coupling Bolt Between Front Part of Front Control Arm Assembly and Front Sub Frame Welding Assembly	135 ± 10
Coupling Nut Between Front Part of Front Control Arm Assembly and Front Sub Frame Welding Assembly	135 ± 10
Coupling Bolt Between Rear Part of Front Control Arm Assembly and Front Sub Frame Welding Assembly	135 ± 10
Coupling Nut Between Rear Part of Front Control Arm Assembly and Front Sub Frame Welding Assembly	135 ± 10
Coupling Nut Between Front Control Arm Ball Pin Assembly and Front Control Arm Assembly	50 ± 5
Coupling Bolt Between Front Control Arm Ball Pin Assembly and Front Control Arm Assembly	50 ± 5
Coupling Nut Between Front Stabilizer Bar Assembly and Front Stabilizer Link Assembly	50 ± 5
Coupling Bolt Between Front Sub Frame Welding Assembly and Steering Gear Assembly	100 ± 10
Coupling Bolt Between Upper Part of Front Sub Frame Welding Assembly and Body	180 ± 10
Coupling Bolt Between Rear Part of Front Sub Frame Welding Assembly and Body	180 ± 10
Coupling Bolt Between Rear Mounting Cushion Assembly Upper Body and Rear Mounting Cushion Assembly Lower Body	80 ± 5

Description	Torque (N·m)
Coupling Nut Between Rear Mounting Cushion Assembly Upper Body and Rear Mounting Cushion Assembly Lower Body	80 ± 5
Coupling Bolt Between Front Stabilizer Bar Assembly and Front Sub Frame Welding Assembly	20 ± 2
Coupling Bolt Between Lower Part of Rear Shock Absorber Assembly and Rear Steering Knuckle Assembly	160 ± 10
Coupling Bolt Between Upper Part of Rear Shock Absorber Assembly and Body	50 ± 5
Rear Shock Absorber Assembly Fixing Nut	33 ± 3
Coupling Bolt Between Rear Lower Control Arm Assembly and Rear Steering Knuckle Assembly	90 ± 5
Coupling Nut Between Rear Lower Control Arm Assembly and Rear Steering Knuckle Assembly	90 ± 5
Coupling Bolt Between Rear Upper Control Arm Assembly and Rear Steering Knuckle Assembly	160 ± 10
Coupling Nut Between Rear Upper Control Arm Assembly and Rear Steering Knuckle Assembly	160 ± 10
Coupling Bolt Between Rear Upper Control Arm Assembly and Rear Sub Frame Welding Assembly	90 ± 5
Coupling Nut Between Rear Upper Control Arm Assembly and Rear Sub Frame Welding Assembly	90 ± 5
Coupling Bolt Between Rear Lower Control Arm Assembly and Rear Sub Frame Welding Assembly	90 ± 5
Coupling Nut Between Rear Lower Control Arm Assembly and Rear Sub Frame Welding Assembly	90 ± 5
Coupling Plug Between Rear Brake Hose Assembly and Brake Pipe	16 ± 1
Coupling Bolt Between Parking Brake Rear Cable Assembly Fixing Bracket and Rear Trailing Arm Assembly	27 ± 3
Coupling Bolt Between Rear Steering Knuckle Assembly and Rear Trailing Arm Assembly	90 ± 5
Coupling Bolt Between Rear Trailing Arm Assembly Mounting Bracket and Body	50 ± 5
Coupling Bolt Between Rear Trailing Arm Assembly and Mounting Bracket	90 ± 5
Coupling Nut Between Rear Trailing Arm Assembly and Mounting Bracket	90 ± 5
Coupling Bolt Between Rear Connecting Rod Assembly and Rear Steering Knuckle Assembly	160 ± 10
Coupling Nut Between Rear Connecting Rod Assembly and Rear Steering Knuckle Assembly	160 ± 10

Description	Torque (N·m)
Coupling Bolt Between Rear Connecting Rod Assembly and Rear Sub Frame Welding Assembly	90 ± 5
Coupling Nut Between Rear Connecting Rod Assembly and Rear Sub Frame Welding Assembly	90 ± 5
Coupling Nut Between Rear Stabilizer Link Assembly and Rear Stabilizer Bar Assembly	50 ± 5
Coupling Bolt Between Rear Stabilizer Bar Assembly and Rear Sub Frame Welding Assembly	20 ± 2
Coupling Nut Between Rear Stabilizer Link Assembly and Rear Trailing Arm Assembly	50 ± 5
Steering Tie Rod Locking Nut	50 - 60
Steering Wheel Locking Nut	35 ± 3

TIRE AND WHEEL

Specifications

Torque Specification

Description	Torque (N·m)
Wheel Mounting Bolt	110 ± 10

Tire Type

04

Description	Parameter	
Tire Type	195/65 R15 91H	205/55 R16 91V

Rim Type

Description	Parameter	
Rim Type	15 × 6J	16 × 6 1/2J

Cold Tire Pressure Specifications

Description	Pressure (kPa)
Front Tire (Unloaded)	220
Rear Tire (Unloaded)	220
Spare Tire	250

BRAKE CONTROL SYSTEM

Specifications

Torque Specifications

Description	Torque (N·m)
Brake Pipe Coupling Plug	16 ± 2
Coupling Nut Between ABS/ESP Control Module Assembly and Mounting Bracket	8 ± 2
Coupling Bolt Between ABS/ESP Control Module Assembly Mounting Bracket and Body	25 ± 3
Front Wheel Speed Sensor Fixing Bolt	10 ± 1
Rear Wheel Speed Sensor Fixing Bolt	10 ± 1

04

BRAKE

Specifications

Torque Specifications

Description	Torque (N·m)
Wheel Mounting Bolt	110 ± 10
Coupling Plug Between Brake Master Cylinder Assembly and Brake Pipe	16 ± 1
Coupling Nut Between Brake Master Cylinder Assembly and Vacuum Booster Assembly	13.7 - 21.6
Coupling Nut Between Vacuum Booster Assembly and Brake Pedal Assembly	23 ± 2
Coupling Nut Between Brake Pedal Assembly and Body	23 ± 2
Coupling Plug Between Front Brake Caliper Assembly and Front Brake Hose Assembly	16 ± 1
Coupling Bolt Between Front Brake Caliper Assembly and Front Steering Knuckle Assembly	100 ± 10
Front Brake Disc Locating Screw	8 ± 1
Front Brake Caliper Bleeder Plug	9 - 11
Guide Bolt Between Front Brake Caliper Fixing Bracket and Front Brake Cylinder Assembly	22 - 32
Coupling Plug Between Front Brake Hose Assembly and Front Brake Pipe	16 ± 1
Coupling Bolt Between Rear Brake Caliper Assembly and Rear Brake Hose Assembly	16 ± 1
Coupling Bolt Between Rear Brake Caliper Assembly and Brake Caliper Mounting Board Assembly	100 ± 10
Rear Brake Disc Locating Screw	10 ± 1
Rear Brake Caliper Bleeder Plug	9 - 11
Guide Bolt Between Rear Brake Caliper Fixing Bracket and Rear Brake Cylinder Assembly	23 ± 2
Coupling Plug Between Rear Brake Hose Assembly and Brake Pipe	16 ± 1

04



Front Disc Brake

Description	Standard Thickness (mm)	Minimum Thickness (mm)	Maximum Runout (mm)
Front Brake Disc	25	23	0.02
Front Brake Lining	11.2	1.5	-

Rear DIH (Drum-in-hat)

Description	Standard Thickness (mm)	Minimum Thickness (mm)	Maximum Runout (mm)
Rear Brake Disc	10	8	0.025
Rear Brake Lining	11.2	1.5	-

PARKING BRAKE

Specifications

Torque Specifications

Description	Torque (N·m)
Wheel Mounting Bolt	110 ± 10
Parking Brake Control Mechanism Adjusting Nut	4.0 ± 0.5
Coupling Nut Between Parking Brake Control Mechanism Assembly and Body	27 ± 3
Coupling Bolt Between Parking Brake Rear Cable Assembly Fixing Bracket and Rear Trailing Arm Assembly	27 ± 3
Coupling Bolt Between Parking Brake Rear Cable Assembly Fixing Bracket and Rear Trailing Arm Assembly Fixing Bracket	50 ± 5
Coupling Nut Between Spring Hook and Body	10 ± 1
Coupling Nut Between Parking Brake Rear Cable Assembly Fixing Bracket and Body	10 ± 1
Coupling Bolt Between Parking Brake Rear Cable Pipe Joint and Body	10 ± 1
Coupling Bolt Between Parking Brake Assembly and Rear Steering Knuckle Assembly	55 - 60

04

Rear DIH (Drum-in-hat)

Description	Standard Thickness (mm)	Minimum Thickness (mm)
Rear Brake Shoe Lining	2.8	1

Description	Standard Inner Diameter (mm)	Maximum Inner Diameter (mm)
Rear Brake Disc	186	186.2



STEERING COLUMN

Specifications

Torque Specifications

04

Description	Tightening Torque (N·m)
Steering Wheel Assembly Fixing Nut	35 ± 3
Combination Switch Cover Fixing Screw	1.5 ± 0.5
Steering Column Assembly Upper Bracket Fixing Bolt	25 ± 3
Steering Column Assembly Lower Bracket Fixing Bolt	25 ± 3
Coupling Bolt Between Steering Column with Intermediate Shaft Assembly and Steering Gear Input Shaft	30 ± 3
Coupling Bolt Between Electronic Power Steering Column with Intermediate Shaft Assembly and Steering Gear Input Shaft	60 ± 5
Ignition Starting Switch Fixing Screw	13 ± 2
Coupling Bolt Between Electronic Power Steering Column and Intermediate Shaft Assembly	50

Data Specifications

Description	Standard Value
Steering Wheel Free Play (Rotation Angle)	$\leq 15^\circ$
Steering Wheel Centering/Returnability (Rotation Angle)	$> 70^\circ$

HYDRAULIC ASSIST STEERING

Specifications

Torque Specifications

Description	Torque (N·m)
Bracket Bolt 1 Between High Pressure Fluid Pipe and Fluid Return Pipe	10 ± 1
Clamping Bolt Between High Pressure Fluid Pipe and Steering Gear Assembly	30 ± 3
Clamping Bolt Between Fluid Return Pipe and Steering Gear Assembly	30 ± 3
Fluid Return Pipe Bracket Nut 1	7 ± 1
Fluid Return Pipe Bracket Nut 2	7 ± 1
High Pressure Fluid Pipe Joint Hollow Bolt	45 ± 3
Locking Nut Between Ball Pin Assembly and Steering Knuckle Assembly	35 ± 3
Coupling Bolt Between Front Sub Frame Assembly and Body	120 ± 10
Steering Tie Rod Adjustment Nut	$50 \sim 60$
Locking Nut of Through Bolt Between Rear Mounting Bracket and Rear Mounting Cushion Assembly	80 ± 5
Fixing Bolt Between Steering Gear Assembly and Front Sub Frame Welding Assembly	100 ± 10
Steering Pump Fixing Bolt	$20 + 5$

04



ELECTRONIC POWER STEERING

Specifications

Torque Specifications

Description	Torque (N·m)
Ball Pin Locking Nut	35 ± 3
Tie Rod Adjustment Nut	50 - 60
Coupling Bolt Between Steering Gear Input Shaft and Steering Column with Intermediate Shaft Assembly	60 ± 5
Locking Nut of Through Bolt Between Rear Mounting Bracket and Rear Mounting Cushion Assembly	80 ± 5
Coupling Bolt Between Front Sub Frame Welding Assembly and Body	120 ± 10
Steering Gear Fixing Bolt	100 ± 10

04

AIR CONDITIONING

Specifications

Torque Specifications

Description	Torque (N·m)
Center Control Integration Panel Assembly Fixing Screw	1.5 ± 0.5
Automatic A/C Control Module Assembly Fixing Screw	1.5 ± 0.5
A/C Inlet Guide Plate Fixing Screw	5 ± 1
A/C Inlet Guide Plate Fixing Nut	5 ± 1
A/C Inlet Waterproof Board Fixing Nut	5 ± 1
Blower Assembly Fixing Screw	$1.2 - 2$
Blower Speed Resistor Fixing Screw	$1.2 - 2$
Inner/Outer Circulation Damper Servo Motor Fixing Screw	$1.2 - 2$
Mix Damper Servo Motor Fixing Screw	$1.2 - 2$
Mode Damper Servo Motor Fixing Screw	$1.2 - 2$
Mode Damper Servo Motor Bracket Fixing Screw	$1.2 - 2$
Coupling Bolt Between A/C High/Low Pressure Line and Expansion Valve	9 ± 1.5
Fixing Nut Between HVAC Assembly and Body	5 ± 1
Fixing Bolt Between HVAC Assembly and Body	5 ± 1
A/C Wire Harness Assembly Ground Nut	7 ± 1.5
Air Inlet Assembly Front Fixing Screw	$1.2 - 2$
Air Inlet Assembly Rear Fixing Screw	$1.2 - 2$
Left Foot Fan Shield Fixing Screw	$1.2 - 2$
Right Foot Fan Shield Fixing Screw	$1.2 - 2$
Heater Core Line Pressure Plate Fixing Screw	$1.2 - 2$
Heater Core Line Cover Plate Fixing Screw	$1.2 - 2$
Room Temperature Sensor Fixing Screw	$1.2 - 2$
Coupling Bolt Between Expansion Valve and Expansion Valve Mounting Pressure Plate	7 ± 1
Evaporator Core Assembly Line Pressure Plate Fixing Screw	$1.2 - 2$
Upper Fixing Screw Between Distributor Housing Assembly and Evaporator Housing Assembly	$1.2 - 2$
Left Fixing Screw Between Distributor Housing Assembly and Evaporator Housing Assembly	$1.2 - 2$
Lower Fixing Screw Between Distributor Housing Assembly and Evaporator Housing Assembly	$1.2 - 2$



Description	Torque (N·m)
Mode Damper Adjustment Mechanism Set Fixing Screw	1.2 - 2
Evaporator Assembly Front Fixing Screw	1.2 - 2
Evaporator Assembly Rear Fixing Screw	1.2 - 2
Evaporator Assembly Lower Fixing Screw	1.2 - 2
Coupling Nut Between A/C High/Low Pressure Line Set Bracket and Body	9 ± 1.5
Coupling Bolt Between A/C High/Low Pressure Line Set Bracket and Body	9 ± 1.5
Fixing Bolt Between A/C Low Pressure Line and Compressor Assembly	25 ± 4
Fixing Bolt Between A/C High Pressure Line I and Condenser Assembly	9 ± 1.5
Fixing Bolt Between A/C High Pressure Line II and Condenser Assembly	9 ± 1.5
Fixing Bolt Between A/C High Pressure Line II and Compressor Assembly	25 ± 4
Fixing Bolt Between Compressor Mounting Bracket and Engine	$40 + 5$
Fixing Bolt Between Radiator Assembly and Condenser Assembly	7 ± 1

Refrigerant Charging Specification

Description	Charging Capacity (g)
R134a Refrigerant	530 ± 10

Refrigerant Oil Charging Specifications

Description	Charging Capacity (ml)
Compressor Assembly Replacement	It is necessary to pour out 50 ml of refrigerant oil from new compressor assembly
Condenser Replacement	30
Evaporator Replacement	30
A/C Line Replacement	10

SUPPLEMENTAL RESTRAINT SYSTEM

Specifications

Torque Specifications

Description	Torque (N·m)
Coupling Bolt Between Front Passenger Airbag Assembly and Instrument Panel Crossmember Assembly	10 ± 1
Coupling Bolt Between Curtain Shield Airbag Assembly and Body	10 ± 1
Coupling Bolt Between Side Collision Sensor and Body	10 ± 1
Coupling Bolt Between SRS Control Module Assembly and Body	10 ± 1

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SEAT BELT

Specifications

Torque Specifications

Description	Torque (N·m)
Front Seat Belt Assembly Fixing Bolt	50 ± 5
Front Seat Belt Assembly Fixing Screw	7 ± 1
Seat Belt Buckle Assembly Fixing Bolt	50 ± 5
Height Adjuster Assembly Fixing Bolt	50 ± 5
Rear Seat Belt Assembly Fixing Bolt	50 ± 5
Rear Seat Belt Assembly Fixing Screw	7 ± 1
Center Seat Belt Assembly Fixing Bolt	50 ± 5
Center Seat Belt Assembly Fixing Screw	7 ± 1
Rear Seat Belt Buckle Assembly Fixing Bolt	50 ± 5

04

CONSTANT SPEED CRUISE SYSTEM

Specifications

Torque Specifications

Description	Torque (N·m)
Ground Wire Harness Fixing Screw	0.7 ± 0.2
Steering Wheel Quick Button Trim Cover Fixing Screw	0.7 ± 0.2

04

LIGHTING SYSTEM

Specifications

Bulb Specifications

04

Bulb Name	Nominal Light Source (Model/Type)
Headlight (High Beam/Low Beam)	H7
Front Position Light	W5W
Front Turn Signal Light	PY21W
Brake Light	LED
Front Fog Light	H7
Rear Fog Light	W21W
License Plate Light	C5W
High Mounted Stop Light	LED
Rear Position Light	LED
Rear Turn Signal Light	WY21W
Back-up Light	W21W
Side Turn Signal Light	LED
Front Dome Light	W5W
Rear Dome Light	W5W
Luggage Compartment Light	C5W

Torque Specifications

Description	Torque (N·m)
Headlight Assembly Fixing Bolt	4.5 ± 0.5
Front Fog Light Assembly Fixing Screw	1.5 ± 0.5
Rear Combination Light Assembly (Fixed Part) Fixing Nut	4.0 ± 0.5
Rear Combination Light Assembly (Movable Part) Fixing Nut	4.0 ± 0.5
Front Dome Light Assembly Fixing Screw	2.5 ± 0.5
High Mounted Stop Light Fixing Nut	2.5 ± 0.5
Bumper Left Mounting Bracket Fixing Bolt	4.5 ± 1
License Plate Light Cover Fixing Screw	1.2 ± 0.2
Back-up Light Switch Assembly	20 ± 2

WIPER AND WASHER

Specifications

Torque Specifications

Description	Torque (N·m)
Front Wiper Arm Fixing Nut	15 ± 2.5
Wiper Motor and Link Rod Assembly Fixing Bolt	10 ± 1.5
Guide Pipe Assembly Fixing Bolt	7 ± 1.5
Washer Fluid Reservoir Assembly Upper Fixing Bolt	7 ± 1.5
Washer Fluid Reservoir Assembly Lower Fixing Bolt	5 ± 1.5
Fixing Bolt Between Washer Fluid Reservoir Bracket and Washer Fluid Reservoir Assembly	5 ± 1.5
Fixing Bolt Between Washer Fluid Reservoir Bracket and Body	7 ± 1.5

04



DOOR LOCK

Specifications

Torque Specifications

04

Description	Torque (N·m)
Engine Hood Lock Assembly Fixing Bolt	9 ± 1
Front Door Lock Assembly Fixing Screw	5 ± 1
Front Door Key Cylinder Assembly Fixing Screw	7 ± 1
Front Door Lock Striker Assembly Fixing Screw	23 ± 1
Rear Door Lock Assembly Fixing Screw	5 ± 1
Rear Door Lock Striker Assembly Fixing Screw	23 ± 1
Luggage Compartment Lock Assembly Fixing Screw	9 ± 1
Luggage Compartment Lock Striker Assembly Fixing Screw	23 ± 1
Front Door Outside Handle Fixing Screw	1.5

INSTRUMENT CLUSTER

Specifications

Torque Specifications

Description	Torque (N·m)
Instrument Cluster Fixing Screw	1.5 ± 0.5
Instrument Cluster Trim Cover Assembly Fixing Screw	2 ± 0.5

04

AUDIO/VISUAL SYSTEM

Specifications

Torque Specifications

Description	Torque (N·m)
Center Control Integration Panel Assembly Fixing Screw	1.5 ± 0.5
Center Right Outlet Panel Assembly Fixing Screw	1.5 ± 0.5
Center Left Outlet Panel Assembly Fixing Screw	1.5 ± 0.5
No Disc DVD Trim Cover Assembly Fixing Screw	1.5 ± 0.5
TFT Display Fixing Screw	1.5 ± 0.5
No Disc DVD Control Panel Fixing Screw	1.5 ± 0.5
No Disc DVD Fixing Screw	1.5 ± 0.5
Front Full-range Speaker Assembly Fixing Screw	2.0 ± 0.5
Rear Full-range Speaker Assembly Fixing Screw	2.0 ± 0.5
Amplifier Fixing Bolt	7 ± 1.5
Ground Wire Harness Fixing Screw	0.7 ± 0.2
Steering Wheel Quick Button Trim Cover Fixing Screw	0.7 ± 0.2

REVERSING RADAR SYSTEM

Specification

Torque Specification

Description	Torque (N·m)
Fixing Bolt Between Reversing Radar Control Module Assembly and Body	5 ± 1

04

HORN

Specification

Torque Specification

Description	Torque (N·m)
Horn Bracket Fixing Nut	15 ± 2



WINDSHIELD/WINDOW GLASS

Specifications

Description	Torque (N·m)
Front Door Cover Plate Fixing Screw	1.5 ± 0.5
Front Door Glass Rear Guide Rail Assembly Fixing Bolt	7 ± 1
Front Door Power Glass Regulator Fixing Bolt	7 ± 1
Front Door Power Glass Regulator Fixing Nut	7 ± 1
Rear Door C-pillar Cover Plate Assembly Fixing Screw	1.5 ± 0.5
Rear Door Cover Plate Fixing Screw	1.5 ± 0.5
Rear Door Glass Front Guide Rail Assembly Fixing Bolt	7 ± 1
Rear Door Glass Rear Guide Rail Assembly Fixing Bolt	7 ± 1
Rear Door Power Glass Regulator Fixing Bolt	7 ± 1
Rear Door Power Glass Regulator Fixing Nut	7 ± 1
Center Control Integration Panel Assembly	1.5 ± 0.5

04

REAR VIEW MIRROR

Specification

Torque Specification

Description	Torque (N·m)
Outside Rear View Mirror Assembly Fixing Bolt	6 ± 1



INSTRUMENT PANEL

Specifications

Torque Specifications

Description	Torque (N·m)
Auxiliary Fascia Console Front Right Extension Panel Assembly Fixing Screw	1.5 ± 0.5
Center Control Integration Panel Assembly Fixing Screw	1.5 ± 0.5
Auxiliary Fascia Console Assembly Fixing Screw	1.5 ± 0.5
Auxiliary Fascia Console Assembly Fixing Bolt	5 ± 1
Auxiliary Fascia Console Rear Bracket Assembly Fixing Bolt	7 ± 1
Cup Holder Assembly Fixing Screw	1.5 ± 0.5
Armrest Box Cover Assembly Fixing Screw	1.5 ± 0.5
Armrest Box Assembly Fixing Screw	1.5 ± 0.5
Rear Ashtray Assembly Fixing Screw	1.5 ± 0.5
Fuel Tank Cap Opener Assembly Fixing Screw	4 ± 1
Instrument Panel Lower Left Protector Assembly Fixing Screw	1.5 ± 0.5
Diagnostic Interface Fixing Screw	1.5 ± 0.5
Glove Box Rear Trim Cover Fixing Screw	1.5 ± 0.5
Front Passenger Airbag Assembly Fixing Bolt	10 ± 1
Instrument Panel Assembly Fixing Bolt	5 ± 1
GPS Antenna Assembly Fixing Screw	1.5 ± 0.5
Face Air Duct Assembly Fixing Screw	1.5 ± 0.5
Instrument Panel Outlet Assembly Fixing Screw	1.5 ± 0.5
Defroster Duct Assembly Fixing Screw	1.5 ± 0.5
Center Defroster Duct Assembly Fixing Screw	1.5 ± 0.5
Instrument Panel Fuse Box Fixing Screw	1.5 ± 0.5
Body Control Module (BCM) Fixing Bolt	6 ± 1
Passive Entry & Passive Start (PEPS) Controller Fixing Bolt	7 ± 1
Steering Column Assembly Fixing Bolt	25 ± 3
Ground Wire Harness Fixing Nut	7 ± 1
Instrument Panel Crossmember Assembly Lower Fixing Bolt	10 ± 1
Instrument Panel Crossmember Assembly Upper Fixing Bolt	20 ± 1

04



SEAT

Specifications

Torque Specifications

Description	Torque (N·m)
Front Seat Assembly Fixing Bolt	25 ± 3
Seat Track Unlock Handle Fixing Screw	3.5 ± 0.35
Seat Outer Shield Assembly Fixing Screw	3.5 ± 0.35
Seat Belt Buckle Assembly Fixing Bolt	50 ± 5
Seat Inner Shield Assembly Fixing Screw	3.5 ± 0.35
Rear Seatback Lock Bracket Cover Fixing Screw	3.5 ± 0.35
Rear Seat Center Connecting Bracket Assembly Fixing Bolt	25 ± 3
Power Switch Box Fixing Screw	3.5 ± 0.35
Coupling Bolt Between Seatback Sub-assembly and Seat Cushion Sub-assembly	48 ± 4.8
Rear Seat Protector Assembly Fixing Nut	3.5 ± 0.35

04

ENGINE HOOD/DOOR

Specifications

Torque Specifications

Description	Torque (N·m)
Fixing Bolt Between Hood Assembly and Hood Hinge Assembly	25 ± 2
Fixing Bolt Between Hood Hinge Assembly and Body	25 ± 2
Hood Lock Assembly Fixing Bolt	9 ± 1
Fixing Bolt Between Hood Hinge Assembly and Wing Assembly	10 ± 1
Front Door Inner Protector Assembly Fixing Screw	1.5 ± 0.5
Front Door Inside Handle Fixing Screw	1.5 ± 0.5
Front Door Metal Bracket Fixing Bolt	5 ± 1
Front Door Outside Handle Base Assembly Fixing Screw	7 ± 1
Fixing Bolt Between Front Door Hinge Assembly and Front Door Assembly	55 ± 5
Fixing Bolt Between Front Door Hinge Assembly and Body	55 ± 5
Front Door Lock Striker Fixing Screw	23 ± 1
Rear Door Inner Protector Assembly Fixing Screw	1.5 ± 0.5
Rear Door Inside Handle Fixing Screw	1.5 ± 0.5
Rear Door Metal Bracket Fixing Bolt	5 ± 1
Rear Door Outside Handle Cover Fixing Screw	7 ± 1
Rear Door Outside Handle Base Assembly Fixing Screw	7 ± 1
Fixing Bolt Between Rear Door Hinge Assembly and Rear Door Assembly	55 ± 5
Fixing Bolt Between Rear Door Hinge Assembly and Body	55 ± 5
Rear Door Lock Striker Fixing Screw	23 ± 1
Fixing Bolt Between Luggage Compartment Door Hinge Assembly and Luggage Compartment Door Assembly	25 ± 2
Fixing Bolt Between Luggage Compartment Door Hinge Assembly and Body	25 ± 2
Luggage Compartment Lock Striker Assembly Fixing Screw	23 ± 1

04



EXTERIOR

Specifications

Torque Specifications

04

Description	Torque (N·m)
Front Bumper Assembly Fixing Screw	1.5 ± 0.5
Front Bumper Assembly Fixing Bolt	5 ± 1
Name Plate "CAC" Bracket Fixing Screw	1.5 ± 0.5
Front Fog Light Assembly Fixing Screw	1.5 ± 0.5
Front Bumper Mounting Bracket Fixing Bolt	4.5 ± 1
Front Bumper Center Bracket Fixing Bolt	4.5 ± 1
Air Direct Pipe Assembly Fixing Bolt	7 ± 1
Front Bumper Crossmember Assembly Fixing Bolt	47 ± 3
Front Wheel House Wind Deflector Fixing Screw	3 ± 1
Front Wheel House Protector Fixing Screw	3 ± 1
Wing Cover Plate Fixing Screw	3 ± 1
Wing Assembly Fixing Bolt	10 ± 1
Front Bumper Lower Protector Fixing Screw	1.5 ± 0.5
Front Bumper Lower Protector Fixing Bolt	4.5 ± 1
Engine Lower Protector Assembly Fixing Screw	1.5 ± 0.5
Engine Lower Protector Assembly Fixing Bolt	4.5 ± 1
Rear Bumper Assembly Fixing Screw	1.5 ± 0.5
Rear Bumper Assembly Fixing Bolt	5 ± 1
Fixing Screw Between Rear Bumper Assembly and Rear Wheel House Protector	3 ± 1
Rear Bumper Mounting Bracket Fixing Screw	1.5 ± 0.5
Rear Bumper Center Left Bracket Fixing Screw	1.5 ± 0.5
Rear Bumper Center Bracket Fixing Screw	1.5 ± 0.5
Rear Bumper Crossmember Assembly Fixing Nut	25 ± 2
Rear Wheel House Protector Fixing Screw	3 ± 1
Front Windshield Lower Support Assembly Fixing Screw	3.0 ± 0.5
Fuel Filler Cap Assembly Fixing Bolt	10 ± 1

INTERIOR

Specifications

Torque Specifications

Description	Torque (N·m)
Rear Doorsill Pressure Plate Assembly Fixing Screw	1.5 ± 0.5
Luggage Compartment Doorsill Pressure Plate Assembly Fixing Screw	1.5 ± 0.5
A-pillar Upper Protector Assembly Fixing Screw	3 ± 0.5
Hood Grip Fixing Screw	1.5 ± 1
A-pillar Lower Protector Assembly Fixing Screw	1.5 ± 0.5
B-pillar Lower Protector Assembly Fixing Screw	1.5 ± 0.5
Front Seat Belt Assembly Lower Fixing Bolt	50 ± 5
B-pillar Upper Protector Assembly Fixing Screw	1.5 ± 0.5
C-pillar Upper Protector Assembly Upper Fixing Screw	3 ± 0.5
C-pillar Upper Protector Assembly Lower Fixing Screw	1.5 ± 0.5
Sun Visor Assembly Fixing Screw	9 ± 1
Sun Visor Holder B Fixing Screw	5 ± 1
Passenger Grip Assembly Fixing Screw	4 ± 1
Interior Front Dome Light Assembly Fixing Screw	2.5 ± 0.5
C-pillar Roof Bracket Fixing Screw	1.5 ± 0.5
Front Floor Carpet Assembly Fixing Nut	5 ± 1
Parking Brake Adjustment Nut	4 ± 0.5
Driver Side Foot Rest Bracket Fixing Nut	5 ± 1
Tonneau Cover Assembly Fixing Screw	5 ± 1
High Mounted Stop Light Assembly Fixing Screw	1.5 ± 0.5
Fuel Tank Cap Opener Assembly Fixing Screw	4 ± 1

04



SLIDING ROOF

Specifications

Torque Specifications

Description	Torque (N·m)
Sunroof Switch Assembly Fixing Screw	1.5 ± 0.5
Sunroof Glass Fixing Bolt	5 ± 1
Sliding Roof Bracket Fixing Bolt	14 ± 0.5

04



