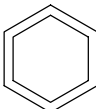
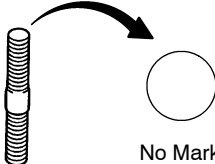
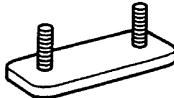
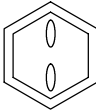
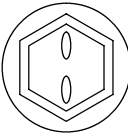
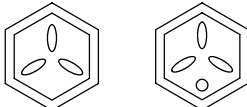
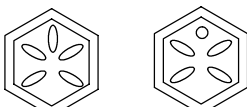
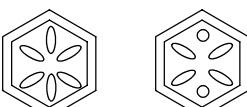


STANDARD BOLT

HOW TO DETERMINE BOLT STRENGTH

SS02S-01

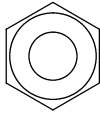
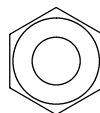
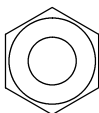
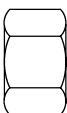
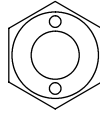
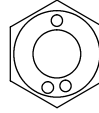
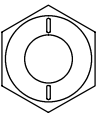
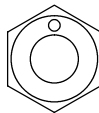
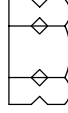
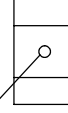
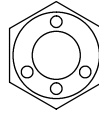
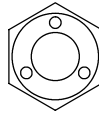
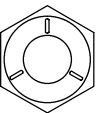
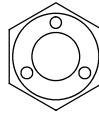
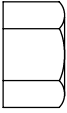
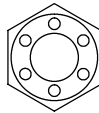
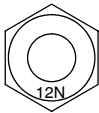
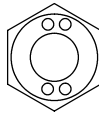
Bolt Type				Class
Hexagon Head Bolt		Stud Bolt	Weld Bolt	
Normal Recess Bolt	Deep Recess Bolt			
 No Mark	 No Mark	 No Mark		4T
 No Mark				5T
 w/ Washer	 w/ Washer			6T
 No Mark				7T
		 		8T
				9T
				10T
				11T

B06431

SPECIFIED TORQUE FOR STANDARD BOLTS

Class	Diameter mm	Pitch mm	Specified torque					
			Hexagon head bolt			Hexagon flange bolt		
			N·m	kgf·cm	ft·lbf	N·m	kgf·cm	ft·lbf
4T	6	1	5	55	48 in.·lbf	6	60	52 in.·lbf
	8	1.25	12.5	130	9	14	145	10
	10	1.25	26	260	19	29	290	21
	12	1.25	47	480	35	53	540	39
	14	1.5	74	760	55	84	850	61
	16	1.5	115	1,150	83	–	–	–
5T	6	1	6.5	65	56 in.·lbf	7.5	75	65 in.·lbf
	8	1.25	15.5	160	12	17.5	175	13
	10	1.25	32	330	24	36	360	26
	12	1.25	59	600	43	65	670	48
	14	1.5	91	930	67	100	1,050	76
	16	1.5	140	1,400	101	–	–	–
6T	6	1	8	80	69 in.·lbf	9	90	78 in.·lbf
	8	1.25	19	195	14	21	210	15
	10	1.25	39	400	29	44	440	32
	12	1.25	71	730	53	80	810	59
	14	1.5	110	1,100	80	125	1,250	90
	16	1.5	170	1,750	127	–	–	–
7T	6	1	10.5	110	8	12	120	9
	8	1.25	25	260	19	28	290	21
	10	1.25	52	530	38	58	590	43
	12	1.25	95	970	70	105	1,050	76
	14	1.5	145	1,500	108	165	1,700	123
	16	1.5	230	2,300	166	–	–	–
8T	8	1.25	29	300	22	33	330	24
	10	1.25	61	620	45	68	690	50
	12	1.25	110	1,100	80	120	1,250	90
9T	8	1.25	34	340	25	37	380	27
	10	1.25	70	710	51	78	790	57
	12	1.25	125	1,300	94	140	1,450	105
10T	8	1.25	38	390	28	42	430	31
	10	1.25	78	800	58	88	890	64
	12	1.25	140	1,450	105	155	1,600	116
11T	8	1.25	42	430	31	47	480	35
	10	1.25	87	890	64	97	990	72
	12	1.25	155	1,600	116	175	1,800	130

HOW TO DETERMINE NUT STRENGTH

Nut Type			Class
Present Standard Hexagon Nut	Old Standard Hexagon Nut		
	Cold Forging Nut	Cutting Processed Nut	
 No Mark			4N
 No Mark (w/ Washer)	 No Mark (w/ Washer)	 No Mark	5N (4T)
  			6N
	 	 	7N (5T)
 			8N
 	 	 No Mark	10N (7T)
 			11N
 			12N

*: Nut with 1 or more marks on one side surface of the nut.

HINT:

Use the nut with the same number of the nut strength classification or the greater than the bolt strength classification number when tightening parts with a bolt and nut.

Example: Bolt = 4T

Nut = 4N or more

LEXUS GS430/GS300 SUP (RM879E)

MAINTENANCE

SS01E-01

SERVICE DATA

Chassis	Front wheel alignment Side slip	3.0 mm/m (0.118 in./3.3 ft) or less
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EMISSION CONTROL (2JZ-GE)

TORQUE SPECIFICATION

SS1HX-01

Part tightened	N·m	kgf·cm	ft·lbf
Exhaust Manifold x Front Exhaust Pipe	44	440	32
Front Exhaust Pipe x Center Exhaust Pipe	44	440	32
Heated Oxygen Sensor x Exhaust Manifold	45	450	33

IGNITION (2JZ-GE)

SS01M-05

SERVICE DATA

Spark plug	Recommended spark plug	DENSO made	SK16R-P11
	Correct electrode gap for new plug		1.1 mm (0.043 in.)
	Maximum electrode gap for used plug		1.2 mm (0.047 in.)

TORQUE SPECIFICATION

Part tightened	N·m	kgf·cm	ft·lbf
Spark plug x Cylinder head	18	180	13

CHARGING (2JZ-GE)

SS0E6-13

SERVICE DATA

Battery	Voltage (Maintenance-free battery) at 20°C (68°F)	12.5 - 12.9 V
	Specific gravity (Except maintenance-free battery) at 20°C (68°F)	1.25 - 1.29
Alternator	Rated output	12 V 80 A
	Rotor coil resistance at 20°C (68°C)	2.2 - 2.4 Ω
	Slip ring diameter STD	14.2 - 14.4 mm (0.559 - 0.567 in.)
	Minimum	12.8 mm (0.504 in.)
	Brush exposed length STD	9.5 -11.5 mm (0.374 -0.453 in.)
	Minimum	1.5 mm (0.059 in.)
IC regulator	Regulating voltage	13.2 - 14.8 V

CHARGING (3UZ-FE)

SS0CL-05

SERVICE DATA

Battery	Specific gravity	at 20° C (68° F)	1.25 – 1.29
	Voltage	at 20° C (68° F)	12.5 – 12.9 V
Alternator	Rated output		12 V – 100 A
	Rotor coil resistance	at 20° C (68° F)	2.2 – 2.4 Ω
	Slip ring diameter	STD	14.2 – 14.4 mm (0.559 – 0.567 in.)
		Minimum	12.8 mm (0.504 in.)
	Brush exposed length	STD	9.5 – 11.5 mm (0.374 – 0.453 in.)
		Minimum	1.5 mm (0.059 in.)
Voltage regulator	Regulating voltage		13.2 – 14.8 V

AUTOMATIC TRANSMISSION

TORQUE SPECIFICATION

SS0F9-05

Part tightened	N·m	kgf·cm	ft·lbf
Shift lever assembly x Body	8.3	85	74 in·lbf
Control shaft x Control lever	19	194	14
Shift lock control unit assembly x Shift lever plate	2.0	20	17 in·lbf
Shift lever housing set bolt and nut	3.9	40	35 in·lbf
Heated oxygen sensor x Front exhaust pipe	44	450	33
Front TWC x Front exhaust pipe 3UZ-FE	44	450	33
Pipe support bracket x Transmission	44	450	33
Center exhaust pipe x Tail pipe	44	450	33
Front TWC x Exhaust manifold 3UZ-FE	62	630	46
Shift control rod x Shift lever assembly	13	130	9