

 mm (in.)	A	138.5 to 148.5 (5.46 to 5.84)	144.2 to 154.2 (5.68 to 6.07)
	B	1.0 to 6.0 (0.0394 to 0.236)	
	C*1	96.0 (3.78)	99.0 (3.90)
		SAE J1703 or FMVSS No. 116 DOT3	
		7 to 10	
 mm (in.)	A	1.0 (0.0394)	
	B	25.0 (0.984)	8.5 (0.335)
		1.0 (0.0394)	
		171.0 (6.73)	
		ASV	GSV
 liters (US qts, Imp. qts)		6.5 (6.9, 5.7)	
 Toyota Genuine ATF WS			
N-m (kgf-cm, ft-lbf)		A	
		40 (408, 29)	

		ASV, GSV			
		103 (1049, 76)			
N-m (kgf-cm, ft-lbf)					
		ASV, GSV			
		30 (1.18)			
		For Russia		For Russia	
 mm (in.)	A	-0°30'±/45' (-0.50°±/0.75°)*2	-0°35'±/45' (-0.58°±/0.75°)	-1°09'±/45' (-1.15°±/0.75°)*2	-1°09'±/45' (-1.15°±/0.75°)*2
		-0°35'±/45' (-0.58°±/0.75°)*3		-1°14'±/45' (-1.23°±/0.75°)*3	-1°13'±/45' (-1.22°±/0.75°)*3
	B	11°55' (11.92°)*2	12°00' (12.00°)*2	-	
		12°00' (12.00°)*3	12°05' (12.08°)*3	-	
C	2°55'±/45' (2.92°±/0.75°)	2°50'±/45' (2.83°±/0.75°)*2	-		
	2°55'±/45' (2.92°±/0.75°)*3		-		
D	39°00' ±/2° (39.00°±/2°)*2	38°56' ±/2° (38.93°±/2°)*2	-		
	38°52' ±/2° (38.87°±/2°)*3	38°50' ±/2° (38.83°±/2°)*3	-		
 mm (in.)	E+F	0°00'±/11' (0.00°±/0.18°)		0°22'±/11' (0.37°±/0.18°)	
	G-H	0.0±/2.0 (0.0000±/0.0787)		4.0±/2.0 (0.157±/0.0787)	
 kPa (kgf/cm ² , psi)	215/60R16 95V		230 (2.3, 33)		230 (2.3, 33)*4 240 (2.4, 35)*5 270 (2.7, 39)*6
	215/55R17 93V		230 (2.3, 33)*4*5 240 (2.4, 35)*6	230 (2.3, 33)	230 (2.3, 33)*4 260 (2.6, 38)*5 290 (2.9, 42)*6

*1: When the brake pedal is depressed with force of 500 N (51 kgf, 112 lbf) while engine is running.


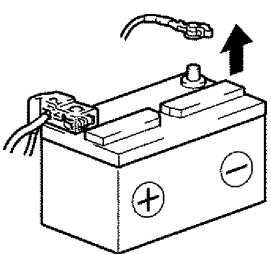
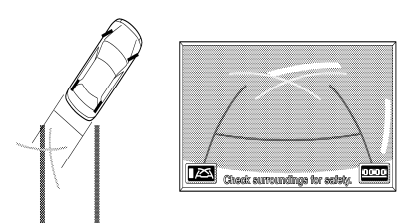
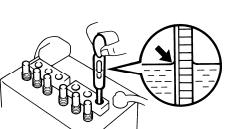
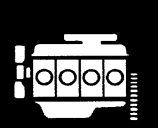
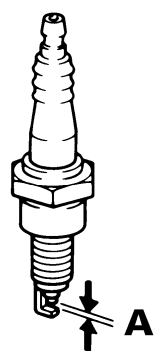

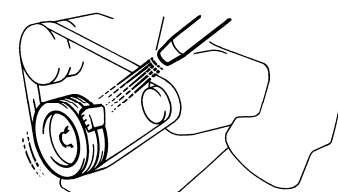


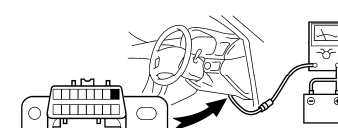
*2: Tire size: 215/60R16 95V *3: Tire size: 215/55R17 93V *4: For driving under 160 km/h (100 mph)

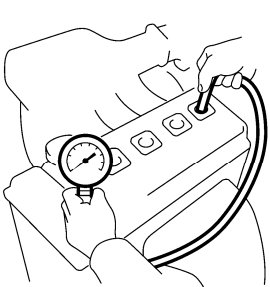



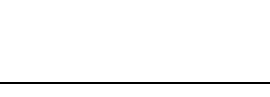

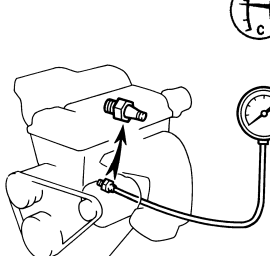




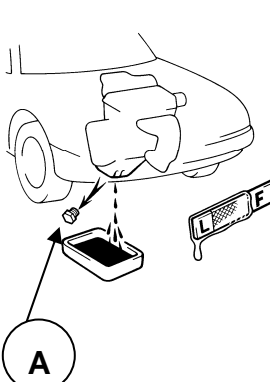



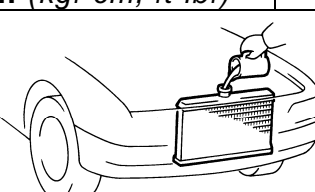
*5: For driving at 160 km/h (100 mph) to 180 km/h (112 mph) *6: For driving at 180 km/h (112 mph) to 210 km/h (131 mph)

CAMRY

ASV50, GSV50

2011/08 - 2012/07

		ASV, GSV	
*1		*2	
		1.25 to 1.29	
20°C (68°F)			
		2AR-FE	2GR-FE
cm³ or cc (cu.in.)		2494 (152.2)	3456 (210.9)
	DENSO	SK16HR11	FK20HR11
A mm (in.)	1.0 to 1.1 (0.0394 to 0.0433)		
	8 to 12° (DLC3 Terminals 13 (TC) – 4 (CG) Connected)		
			
BTDC			
		610 to 710 (DLC3 Terminal 9 (TAC) Connected)	600 to 700 (DLC3 Terminal 9 (TAC) Connected)
			
rpm			

		1450 (14.8, 210)	1300 (13.0, 189)
		980 (10.0, 142)	
		100 (1.0, 15)	
		30 (0.3, 4.4)	
		4000 rpm	3000 rpm
kPa (kgf/cm ² , psi)		260 (2.7, 38)	200 (2.0, 29)
		2AR-FE	2GR-FE
		4.0 (4.2, 3.5)	5.7 (6.0, 5.0)
		4.4 (4.6, 3.9)	6.1 (6.4, 5.4)
A			
liters (US qts, Imp. qts)		20W-50 15W-40	API grade SL or SM multigrade engine oil
		10W-30 5W-30 5W-20 0W-20	API grade SL “Energy-Conserving”. SM “Energy-Conserving” or ILSAC* multigrade engine oil
A		40 (408, 30)	
N·m (kgf-cm, ft-lbf)			
		6.9 (7.3, 6.1)*3 7.0 (7.4, 6.2)*4	8.8 (9.3, 7.7)*5 8.9 (9.4, 7.8)*6
liters (US qts, Imp. qts)			

*ILSAC: International Lubricant Standardization and Approval Committee

*1: Initialization required. Refer to the repair manual for the initialization procedures. *2: Parking Assist Monitor System

*3: Code Mark M *4: Code Mark G *5: Code Mark K *6: Code Mark J

	A	138.5 to 148.5 (5.46 to 5.84)	144.2 to 154.2 (5.68 to 6.07)
	B	1.0 to 6.0 (0.0394 to 0.236)	
	C*1	96.0 (3.78)	99.0 (3.90)
mm (in.)		SAE J1703 or FMVSS No. 116 DOT3	
		7 to 10	
300 N (31 kgf, 67.5 lbf)			
	A	1.0 (0.0394)	
	B	25.0 (0.984)	8.5 (0.335)
mm (in.)		1.0 (0.0394)	
		171.0 (6.73)	
mm (in.)			
		ACV	ASV GSV
7.8 (8.2, 6.8)		6.5 (6.9, 5.7)	
liters (US qts, Imp. qts)		Toyota Genuine ATF WS	
49 (500, 36)		40 (408, 29)	
N·m (kgf-cm, ft-lbf)			

		ACV, ASV, GSV			
		103 (1049, 76)			
N·m (kgf-cm, ft-lbf)					
		ACV, ASV, GSV			
		30 (1.18)			
mm (in.)					
		For Russia		For Russia	
	A	-0°30'±45' (-0.50°±0.75°)*2	-0°30'±45' (-0.50°±0.75°)*4	-1°09'±45' (-1.15°±0.75°)*2	-1°07'±45' (-1.12°±0.75°)*2*4
		-0°35'±45' (-0.58°±0.75°)*3	-0°35'±45' (-0.58°±0.75°)*3	-1°14'±45' (-1.23°±0.75°)*3	-1°09'±45' (-1.15°±0.75°)*2*5
	B	11°55' (11.92°)*2	12°00' (12.00°)*2		-
		12°00' (12.00°)*3	12°05' (12.08°)*3		-
C	2°55'±45' (2.92°±0.75°)*2	2°50'±45' (2.83°±0.75°)*2		-	
	2°55'±45' (2.92°±0.75°)*3	2°55'±45' (2.92°±0.75°)*3		-	
D	39°00' ±2° (39.00°±2°)*2	39°02' ±2° (39.03°±2°)*2*4		-	
	38°52' ±2° (38.87°±2°)*3	38°56' ±2° (38.93°±2°)*2*5		-	
	38°50' ±2° (38.83°±2°)*3	38°50' ±2° (38.83°±2°)*3		-	
	E+F	0°00'±11' (0.00°±0.18°)		0°22'±11' (0.37°±0.18°)	
	G-H	0.0±2.0 (0.0000±0.0787)		4.0±2.0 (0.157±0.0787)	
mm (in.)					
	215/60R16 95V	230 (2.3, 33)		230 (2.3, 33)*6 240 (2.4, 35)*7 270 (2.7, 39)*8	
	215/55R17 93V	230 (2.3, 33)*6*7	240 (2.4, 35)*8	230 (2.3, 33)	230 (2.3, 33)*6 260 (2.6, 38)*7 290 (2.9, 42)*8
kPa (kgf/cm ² , psi)					

*1: When the brake pedal is depressed with force of 500 N (51 kgf, 112 lbf) while engine is running.


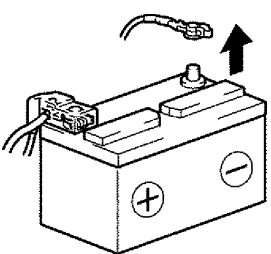
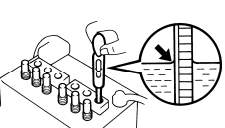
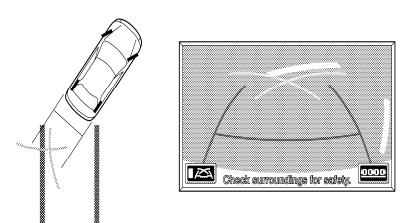

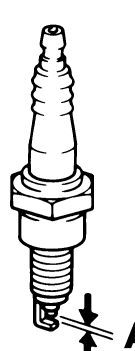
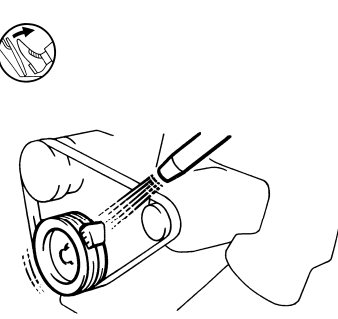
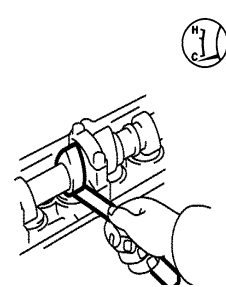


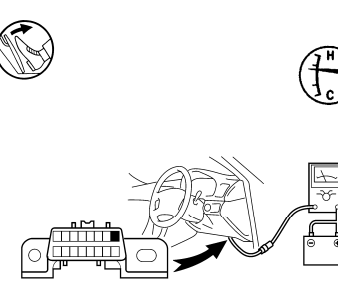
*2: Tire size: 215/60R16 95V *3: Tire size: 215/55R17 93V *4: For 1AZ-FE *5: For 2AR-FE *6: For driving under 160 km/h (100 mph)

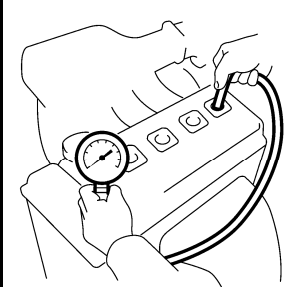



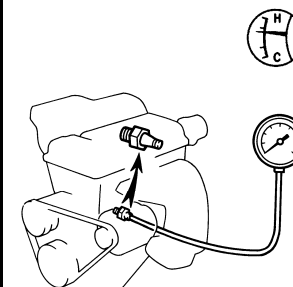




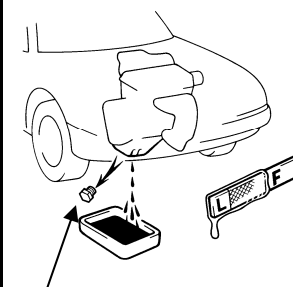


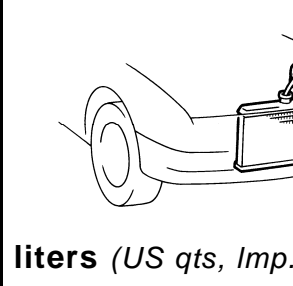



*7: For driving at 160 km/h (100 mph) to 180 km/h (112 mph) *8: For driving at 180 km/h (112 mph) to 210 km/h (131 mph)

CAMRY

ACV51, ASV50, GSV50

2012/07 - 2012/09

		ACV, ASV, GSV		
*1		*2		
				
				
20°C (68°F)		1.25 to 1.29		
		1AZ-FE	2AR-FE	2GR-FE
cm ³ or cc (cu.in.)		1998 (121.9)	2494 (152.2)	3456 (210.9)
	DENSO	SK16R11	SK16HR11	FK20HR11
	NGK	IRF5A11	-	-
A mm (in.)		1.0 to 1.1 (0.0394 to 0.0433)		
		8 to 12° (DLC3 Terminals 13 (TC) – 4 (CG) Connected)		
BTDC				
		0.19 to 0.29 (0.00748 to 0.0114)	-	-
		0.38 to 0.48 (0.0150 to 0.0189)	-	-
mm (in.)				
		610 to 710 (DLC3 Terminal 9 (TAC) Connected)		600 to 700 (DLC3 Terminal 9 (TAC) Connected)
rpm				

		1360 (13.9, 197)	1450 (14.8, 210)	1300 (13.0, 189)
		980 (10.0, 142)		
		100 (1.0, 15)		
		29 (0.3, 4.2)	30 (0.3, 4.4)	
		3000 rpm 170 to 300 (1.7 to 3.1, 25 to 44)	4000 rpm 260 (2.7, 38)	3000 rpm 200 (2.0, 29)
				
		1AZ-FE	2AR-FE	2GR-FE
		4.1 (4.3, 3.6)	4.0 (4.2, 3.5)	5.7 (6.0, 5.0)
		4.3 (4.5, 3.8)	4.4 (4.6, 3.9)	6.1 (6.4, 5.4)
	A	15W-40 and 20W-50: API grade SL, SM or SN multigrade engine oil		
liters (US qts, Imp. qts)		5W-30 and 10W-30: API grade SL "Energy-Conserving", SM "Energy-Conserving", SN "Resource-Conserving" or ILSAC* multigrade engine oil		
		0W-20, 5W-20, 5W-30 and 10W-30: API grade SL "Energy-Conserving", SM "Energy-Conserving", SN "Resource-Conserving" or ILSAC* multigrade engine oil		
A		40 (408, 30)		
N·m (kgf-cm, ft-lbf)				
		6.6 (7.0, 5.8)	6.9 (7.3, 6.1)*3	8.8 (9.3, 7.7)*5
			7.0 (7.4, 6.2)*4	8.9 (9.4, 7.8)*6
				
liters (US qts, Imp. qts)				

*ILSAC: International Lubricant Standardization and Approval Committee

*1: Initialization required. Refer to the repair manual for the initialization procedures. *2: Parking Assist Monitor System

*3: Code Mark M *4: Code Mark G *5: Code Mark K *6: Code Mark J

	A	138.5 to 148.5 (5.46 to 5.84)	144.2 to 154.2 (5.68 to 6.07)
	B	1.0 to 6.0 (0.0394 to 0.236)	
	C*1	96.0 (3.78)	99.0 (3.90)
mm (in.)		SAE J1703 or FMVSS No. 116 DOT3	
		7 to 10	
		300 N (31 kgf, 67.5 lbf)	
	A		
	B	25.0 (0.984)	8.5 (0.335)
mm (in.)		1.0 (0.0394)	
		171.0 (6.73)	
		mm (in.)	
		mm (in.)	
		ACV	ASV GSV
		7.8 (8.2, 6.8)	6.5 (6.9, 5.7)
liters (US qts, Imp. qts)		Toyota Genuine ATF WS	
A		49 (500, 36)	40 (408, 29)
N-m (kgf-cm, ft-lbf)			


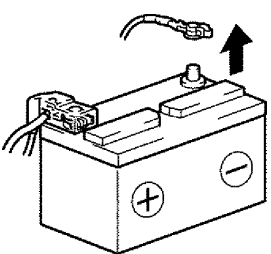
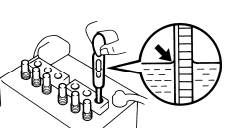
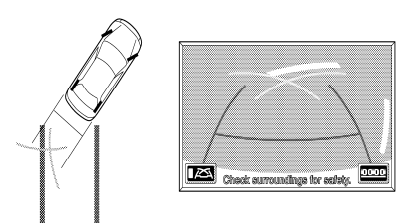

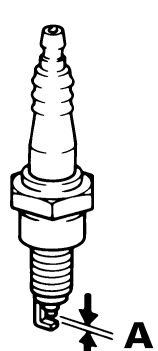
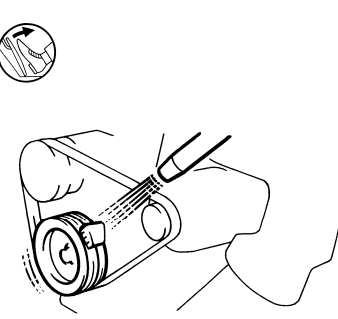
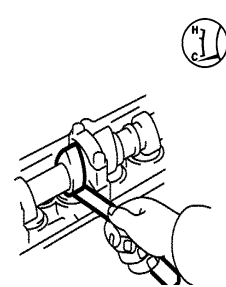
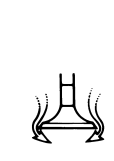

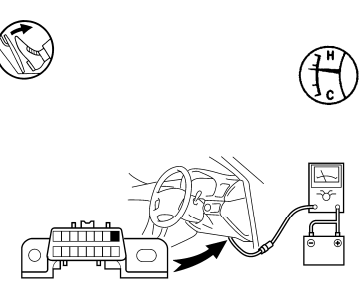
		ACV, ASV, GSV			
		103 (1049, 76)			
N-m (kgf-cm, ft-lbf)					
		ACV, ASV, GSV			
		30 (1.18)			
mm (in.)					
		For Russia	For Russia		
	A	-0°35' +/-45' (-0.58° +/-0.75°) ²	-0°30' +/-45' (-0.50° +/-0.75°) ² *4	-1°08' +/-45' (-1.13° +/-0.75°) ²	-1°07' +/-45' (-1.12° +/-0.75°) ² *4 -1°09' +/-45' (-1.15° +/-0.75°) ² *5
	B	11°55' (11.92°) ² 12°05' (12.08°) ³	12°05' (12.08°) ² 12°00' (12.00°) ³ *5 12°05' (12.08°) ³ *6		-
	C	2°45' +/-45' (2.75° +/-0.75°) ² 2°50' +/-45' (2.83° +/-0.75°) ³	2°50' +/-45' (2.83° +/-0.75°) ²		-
	D	39°58' +/-2° (39.97° +/-2°) ² 38°50' +/-2° (38.83° +/-2°) ³	39°02' +/-2° (39.03° +/-2°) ² *4 38°57' +/-2° (38.95° +/-2°) ² *5 38°55' +/-2° (38.92° +/-2°) ³ *5 38°49' +/-2° (38.82° +/-2°) ³ *6		-
	E+F	0°00' +/-11' (0.00° +/-0.18°)		0°22' +/-11' (0.37° +/-0.18°)	
	G-H	0.0 +/-2.0 (0.0000 +/-0.0787)		4.0 +/-2.0 (0.157 +/-0.0787)	
		mm (in.)			
	215/60R16 95V		230 (2.3, 33) ⁷ 240 (2.4, 35) ⁸ 270 (2.7, 39) ⁹		
	215/55R17 93V		230 (2.3, 33) ⁷ 230 (2.3, 33) 260 (2.6, 38) ⁸ 290 (2.9, 42) ⁹		
kPa (kgf/cm ² , psi)					

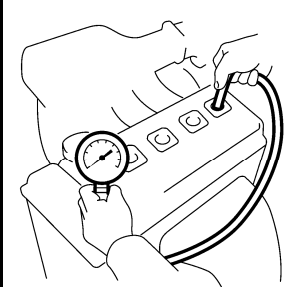



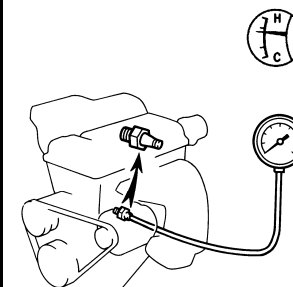




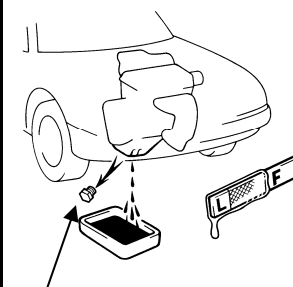


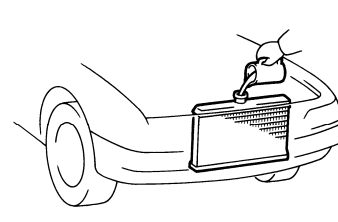

*1: When the brake pedal is depressed with force of 500 N (51 kgf, 112 lbf) while engine is running. *2: Tire size: 215/60R16 95V
 *3: Tire size: 215/55R17 93V *4: For 1AZ-FE *5: For 2AR-FE *6: For 2GR-FE *7: For driving under 160 km/h (100 mph)
 *8: For driving at 160 km/h (100 mph) to 180 km/h (112 mph) *9: For driving at 180 km/h (112 mph) to 210 km/h (131 mph)

CAMRY

ACV51, ASV50, GSV50

2012/09 -

		ACV, ASV, GSV		
*1		*2		
				
				
20°C (68°F)		1.25 to 1.29		
		1AZ-FE	2AR-FE	2GR-FE
cm ³ or cc (cu.in.)		1998 (121.9)	2494 (152.2)	3456 (210.9)
	DENSO	SK16R11	SK16HR11	FK20HR11
	NGK	IRF5A11	-	-
A mm (in.)		1.0 to 1.1 (0.0394 to 0.0433)		
		8 to 12° (DLC3 Terminals 13 (TC) – 4 (CG) Connected)		
BTDC				
		0.19 to 0.29 (0.00748 to 0.0114)	-	-
		0.38 to 0.48 (0.0150 to 0.0189)	-	-
mm (in.)				
		610 to 710 (DLC3 Terminal 9 (TAC) Connected)		600 to 700 (DLC3 Terminal 9 (TAC) Connected)
rpm				

		1360 (13.9, 197)	1450 (14.8, 210)	1300 (13.0, 189)
		980 (10.0, 142)		
		100 (1.0, 15)		
		29 (0.3, 4.2)	30 (0.3, 4.4)	
		3000 rpm 170 to 300 (1.7 to 3.1, 25 to 44)	4000 rpm 260 (2.7, 38)	3000 rpm 200 (2.0, 29)
				
		1AZ-FE	2AR-FE	2GR-FE
		4.1 (4.3, 3.6)	4.0 (4.2, 3.5)	5.7 (6.0, 5.0)
		4.3 (4.5, 3.8)	4.4 (4.6, 3.9)	6.1 (6.4, 5.4)
	A	15W-40 and 20W-50: API grade SL, SM or SN multigrade engine oil		
liters (US qts, Imp. qts)		5W-30 and 10W-30: API grade SL "Energy-Conserving", SM "Energy-Conserving", SN "Resource-Conserving" or ILSAC* multigrade engine oil		
		0W-20, 5W-20, 5W-30 and 10W-30: API grade SL "Energy-Conserving", SM "Energy-Conserving", SN "Resource-Conserving" or ILSAC* multigrade engine oil		
A		40 (408, 30)		
N·m (kgf-cm, ft-lbf)				
		6.6 (7.0, 5.8)	6.9 (7.3, 6.1)*3	8.8 (9.3, 7.7)*5
			7.0 (7.4, 6.2)*4	8.9 (9.4, 7.8)*6
		liters (US qts, Imp. qts)		

*ILSAC: International Lubricant Standardization and Approval Committee

*1: Initialization required. Refer to the repair manual for the initialization procedures. *2: Parking Assist Monitor System

*3: Code Mark M *4: Code Mark G *5: Code Mark K *6: Code Mark J