

		<b>UZS190, GRS190</b>	
	<b>A</b>	120.5 to 130.5 (4.744 to 5.138)	
	<b>B</b>	1.0 to 2.0 (0.039 to 0.079)	
	<b>C*1</b>	↑ 73 (2.87)	
mm (in.)		SAE J1703 or FMVSS No. 116 DOT3	
300 N (30.6 kgf, 67 lbf)		7 to 9	
	<b>A</b>	↑ 1.0 (0.039)	
		<b>B</b>	↑ 30.0 (1.181)    ↑ 16.5 (0.650)
	mm (in.)	↑ 1.0 (0.039)	
	mm (in.)	↑ 1.0 (0.039)	
	mm (in.)	↓ 191 (7.52)	
		<b>UZS190, GRS190</b>	
	<b>GS300</b>	1.5 (1.6, 1.3)	
	<b>GS430</b>	1.7 (1.8, 1.5)	
liter (US qts, Imp. qts)		Toyota Genuine ATF WS	
	1.15 (1.2, 1.0)*2		
	1.35 (1.4, 1.2)*3		
liter (US qts, Imp. qts)		*2 Hypoid gear oil, API GL-5 ↑ -18°C (0°F) SAE 90 ↓ -18°C (0°F) SAE 80W or 80W-90	
		*3 Toyota Genuine Differential Synthetic gear oil API GL-5 SAE 75W-90 or its equivalent	
<b>N-m (kgf-cm, ft-lbf)</b>	<b>A</b>	20 (204, 15)	
	<b>B</b>	49 (500, 36)	

		<b>UZS190, GRS190</b>					
		103 (1050, 76)					
<b>N-m (kgf-cm, ft-lbf)</b>							
		<b>UZS190, GRS190</b>					
		↓ 30 (1.18)					
<b>mm (in.)</b>							
		<b>GS300</b>	<b>GS430</b>	<b>GS300</b>	<b>GS430</b>		
	<b>A</b>	-0°23'+-45' (-0.38°+-75°)	-0°26'+-45' (-0.43°+-75°)	-1°10'+-45' (-1.17°+-75°)	-1°19'+-45' (-1.32°+-75°)		
	<b>B</b>	9°23'+-45' (9.38°+-0.75°)	9°26'+-45' (9.43°+-0.75°)	—			
	<b>C</b>	7°23'+-45' (7.38°+-0.75°)	7°26'+-45' (7.43°+-0.75°)	—			
	<b>D</b>	41°49' (41.82°)	41°48' (41.80°)	—			
	<b>E-F</b>	0+-2 (0+-0.08)		3+-2 (0.12+-0.08)			
	<b>mm (in.)</b>						
		<b>km/h (mph)</b>					
	Europe	225/50 R17 94W	↑ 210 (131)	260 (2.6, 38)	270 (2.7, 39)	270 (2.7, 39)	320 (3.2, 46)
			↓ 210 (131)	240 (2.4, 35)	250 (2.5, 36)	240 (2.4, 35)	290 (2.9, 42)
			↓ 160 (100)	230 (2.3, 33)		230 (2.3, 33)	260 (2.6, 38)
		245/40 ZR18 93Y	↑ 210 (131)	260 (2.6, 38)	270 (2.7, 39)	270 (2.7, 39)	310 (3.1, 45)
			↓ 210 (131)	240 (2.4, 35)	250 (2.5, 36)	240 (2.4, 35)	270 (2.7, 39)
			↓ 160 (100)	230 (2.3, 33)		230 (2.3, 33)	260 (2.6, 38)
	*4	225/50 R17 94W	↑ 160 (100)	260 (2.6, 38)	270 (2.7, 39)	270 (2.7, 39)	320 (3.2, 46)
			↓ 160 (100)	230 (2.3, 33)		230 (2.3, 33)	260 (2.6, 38)
			↑ 160 (100)	260 (2.6, 38)	270 (2.7, 39)	270 (2.7, 39)	310 (3.1, 45)
		245/40 R18 93Y	↑ 160 (100)	260 (2.6, 38)	270 (2.7, 39)	270 (2.7, 39)	310 (3.1, 45)
			↓ 160 (100)	230 (2.3, 33)		230 (2.3, 33)	260 (2.6, 38)
			↑ 160 (100)	260 (2.6, 38)	270 (2.7, 39)	270 (2.7, 39)	310 (3.1, 45)
G.C.C.	225/50 R17 94W	↑ 210 (131)	260 (2.6, 38)	270 (2.7, 39)	270 (2.7, 39)	320 (3.2, 46)	
		↓ 210 (131)	240 (2.4, 35)	250 (2.5, 36)	240 (2.4, 35)	290 (2.9, 42)	
		↓ 160 (100)	230 (2.3, 33)		230 (2.3, 33)	260 (2.6, 38)	
	245/40 R18 93Y	↑ 210 (131)	260 (2.6, 38)	270 (2.7, 39)	270 (2.7, 39)	310 (3.1, 45)	
		↓ 210 (131)	240 (2.4, 35)	250 (2.5, 36)	240 (2.4, 35)	290 (2.9, 42)	
		↓ 160 (100)	230 (2.3, 33)		230 (2.3, 33)	260 (2.6, 38)	
General	225/50 R17 94W	↑ 210 (131)	260 (2.6, 38)	270 (2.7, 39)	270 (2.7, 39)	320 (3.2, 46)	
		↓ 210 (131)	240 (2.4, 35)	250 (2.5, 36)	240 (2.4, 35)	290 (2.9, 42)	
		↓ 160 (100)	230 (2.3, 33)		230 (2.3, 33)	260 (2.6, 38)	
	245/40 R18 94W	↑ 210 (131)	260 (2.6, 38)	270 (2.7, 39)	270 (2.7, 39)	320 (3.2, 46)	
		↓ 210 (131)	240 (2.4, 35)	250 (2.5, 36)	240 (2.4, 35)	290 (2.9, 42)	
		↓ 160 (100)	230 (2.3, 33)		230 (2.3, 33)	260 (2.6, 38)	
<b>kPa (kgf/cm<sup>2</sup> or bar, psi)</b>							

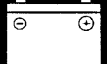
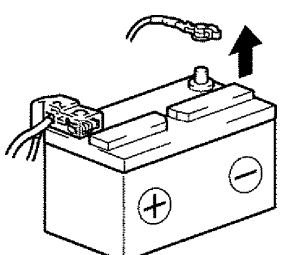


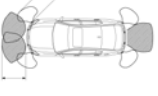
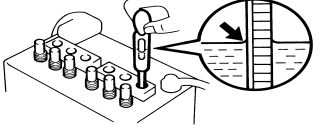
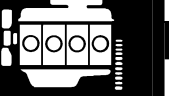
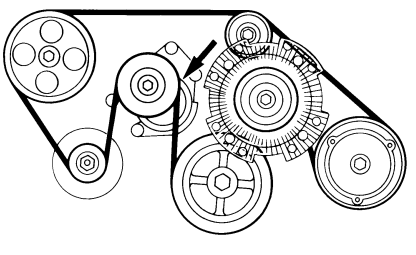
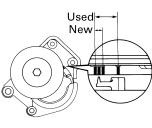
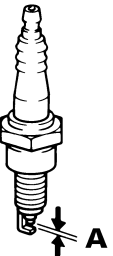
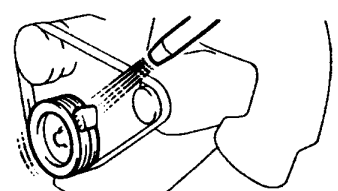
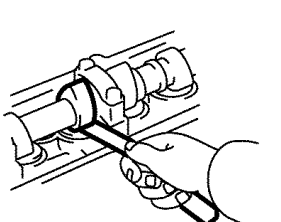


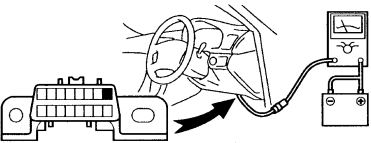


\*1 When brake pedal is depressed with force of 490 N (50 kgf, 110.1 lbf) while engine is running. \*2 Vehicles without synthetic oil information label






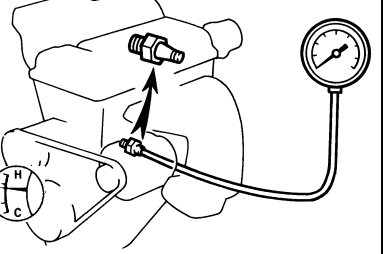



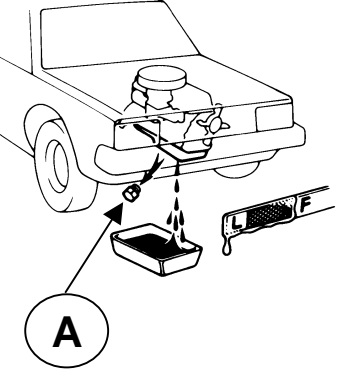


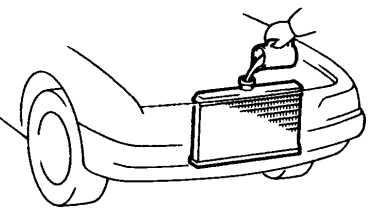
\*3 Vehicles with synthetic oil information label \*4 Australia, China, South Korea and Taiwan

# GS430/300

UZS190, GRS190

2005/01 - 2006/07

		<b>UZS190, GRS190</b>	
	*1	*2	*3
			
		*4	*5
			<b>VGRS</b>
		<b>1.25 to 1.29</b>	
20°C (68°F)			
		<b>3GR-FE</b>	<b>3GR-FSE</b>
<b>cm<sup>3</sup> or cc (cu. in.)</b>		2995 (182.75)	4293 (262.0)
			
	<b>DENSO</b>	<b>SK20R11</b>	
	<b>NGK</b>	<b>IFR6A11</b>	
	<b>A</b> mm (in.)	1.1 (0.043)	
	<b>8 to 12°</b> (Terminals TC and CG of DLC3 Connected)		
<b>BTDC</b>			
		0.15 to 0.25 (0.006 to 0.010)	
		0.25 to 0.35 (0.010 to 0.014)	
<b>mm (in.)</b>			
	<b>600 to 700</b>		<b>700 to 800</b>
(DLC3 Terminal 9 (TAC) Connected)			
<b>rpm</b>			

		<b>1400 (14, 199)</b>	<b>1226</b> (12.5, 174)
		<b>980 (10.0, 142)</b>	<b>981</b> (10.0, 142)
		<b>100 (1.0, 15)</b>	<b>98</b> (1.0, 14)
<b>kPa (kgf/cm<sup>2</sup>, psi)</b>			
		<b>80 (0.8, 11.6)</b>	<b>29</b> (0.3, 4.2)
		<b>6,000 rpm</b>	<b>294 to 588</b> (3.0 to 6.0, 43 to 85)
<b>kPa (kgf/cm<sup>2</sup>, psi)</b>		<b>380 (3.9, 55.5)</b>	
		<b>3GR-FE</b>	<b>3GR-FSE</b>
		<b>3GR-FE</b>	<b>3GR-FSE</b>
		<b>5.9 (6.2, 5.2)</b>	<b>4.5</b> (4.8, 4.0)
		<b>6.3 (6.7, 5.5)</b>	<b>5.2</b> (5.5, 4.6)
<b>liter (US qts, Imp. qts)</b>			
20W-50 15W-40		API grade SJ or SL multigrade engine oil	
10W-30 5W-30		API grade SJ "Energy-Conserving", SL "Energy-Conserving" or ILSAC <sup>6</sup> multigrade engine oil	
<b>A</b>		<b>40 (408, 32)</b>	<b>39</b> (400, 29)
<b>N-m (kgf-cm, ft-lbf)</b>			
		<b>9.1 (9.6, 8.0)</b>	<b>11</b> (11.7, 9.7)
<b>liter (US qts, Imp. qts)</b>			

\*1 Initialization required. Refer to the repair manual for the initialization procedures. \*2 Power Window Control System \*3 Sliding Roof System

\*4 Clearance Sonar System \*5 VGRS: Variable Gear Ratio Steering System \*6 ILSAC: International Lubricant Standardization and Approval Committee

		<b>UZS190, GRS190</b>		
	<b>A</b>	120.5 to 130.5 (4.744 to 5.138)		
	<b>B</b>	1.0 to 2.0 (0.039 to 0.079)		
	<b>C*1</b>	↑ 73 (2.87)		
mm (in.)		SAE J1703 or FMVSS No. 116 DOT3		
300 N (30.6 kgf, 67 lbf)		7 to 9		
	<b>A</b>	↑ 1.0 (0.039)		
	<b>B</b>	↑ 30.0 (1.181)	↑ 16.5 (0.650)	
mm (in.)		↑ 1.0 (0.039)		
		↓ 191 (7.52)		
mm (in.)				
		<b>UZS190, GRS190</b>		
	<b>GS300</b>	1.5 (1.6, 1.3)		
	<b>GS430</b>	1.7 (1.8, 1.5)		
liter (US qts, Imp. qts)		<b>Toyota Genuine ATF WS</b>		
	1.15 (1.2, 1.0) <sup>*2</sup> 1.35 (1.4, 1.2) <sup>*3</sup>			
	<sup>*2</sup>	Hypoid gear oil, API GL-5 ↑ -18°C (0°F) SAE 90 ↓ -18°C (0°F) SAE 80W or 80W-90		
liter (US qts, Imp. qts)	<sup>*3</sup>	Toyota Genuine Differential Synthetic gear oil API GL-5 SAE 75W-90 or its equivalent		
	<b>A</b>	20 (204, 15)		
<b>B</b>	49 (500, 36)			
N-m (kgf-cm, ft-lbf)				

		<b>UZS190, GRS190</b>						
		103 (1050, 76)						
N-m (kgf-cm, ft-lbf)								
		<b>UZS190, GRS190</b>						
		↓ 30 (1.18)						
mm (in.)								
		<b>GS300</b>	<b>GS430</b>	<b>GS300</b>	<b>GS430</b>			
	<b>A</b>	-0°23'+-45' (-0.38°+-0.75°)	-0°26'+-45' (-0.43°+-0.75°)	-1°10'+-45' (-1.17°+-0.75°)	-1°19'+-45' (-1.32°+-0.75°)			
	<b>B</b>	9°23'+-45' (9.38°+-0.75°)	9°26'+-45' (9.43°+-0.75°)	—				
	<b>C</b>	7°23'+-45' (7.38°+-0.75°)	7°26'+-45' (7.43°+-0.75°)	—				
	<b>D</b>	41°49' (41.82°)+2	41°48' (41.80°)+2	—				
	<b>E-F</b>	1+-2 (0.04+-0.08)		3+-2 (0.12+-0.08)				
	mm (in.)							
		<b>km/h (mph)</b>						
	Europe	225/50 R17 94W	↑ 210 (131)	260 (2.6, 38)	270 (2.7, 39)	270 (2.7, 39)	320 (3.2, 46)	
			↓ 210 (131)	240 (2.4, 35)	250 (2.5, 36)	240 (2.4, 35)	290 (2.9, 42)	
		245/40 ZR18 93Y	↑ 160 (100)	230 (2.3, 33)		230 (2.3, 33)	260 (2.6, 38)	
			↓ 160 (100)	260 (2.6, 38)	270 (2.7, 39)	270 (2.7, 39)	310 (3.1, 45)	
		*4	225/50 R17 94W	↑ 160 (100)	260 (2.6, 38)	270 (2.7, 39)	270 (2.7, 39)	320 (3.2, 46)
				↓ 160 (100)	230 (2.3, 33)		230 (2.3, 33)	260 (2.6, 38)
	G.C.C.	225/50 R17 94W	↑ 210 (131)	260 (2.6, 38)	270 (2.7, 39)	270 (2.7, 39)	320 (3.2, 46)	
			↓ 210 (131)	240 (2.4, 35)	250 (2.5, 36)	240 (2.4, 35)	290 (2.9, 42)	
		245/40 R18 93Y	↑ 160 (100)	230 (2.3, 33)		230 (2.3, 33)	260 (2.6, 38)	
			↓ 160 (100)	260 (2.6, 38)	270 (2.7, 39)	270 (2.7, 39)	310 (3.1, 45)	
		General	225/50 R17 94W	↑ 210 (131)	260 (2.6, 38)	270 (2.7, 39)	270 (2.7, 39)	320 (3.2, 46)
				↓ 210 (131)	240 (2.4, 35)	250 (2.5, 36)	240 (2.4, 35)	290 (2.9, 42)
kPa (kgf/cm <sup>2</sup> or bar, psi)								
		↑ 160 (100)		230 (2.3, 33)		230 (2.3, 33)		
		260 (2.6, 38)		270 (2.7, 39)		270 (2.7, 39)		
		240 (2.4, 35)		250 (2.5, 36)		240 (2.4, 35)		
		260 (2.6, 38)		270 (2.7, 39)		270 (2.7, 39)		
		240 (2.4, 35)		250 (2.5, 36)		240 (2.4, 35)		
		260 (2.6, 38)		270 (2.7, 39)		270 (2.7, 39)		
		240 (2.4, 35)		250 (2.5, 36)		240 (2.4, 35)		

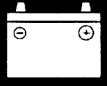
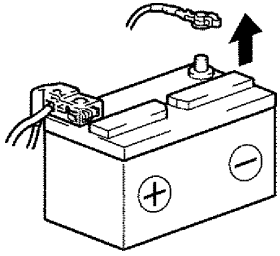


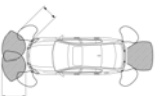
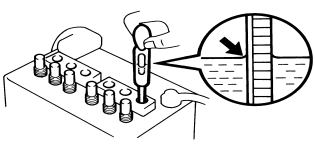
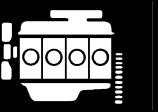
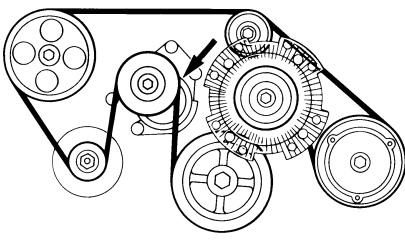
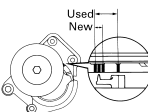
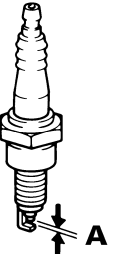
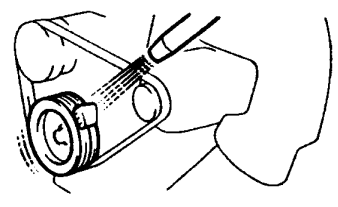
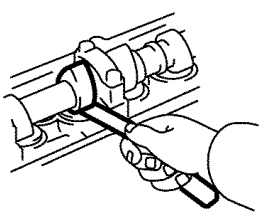
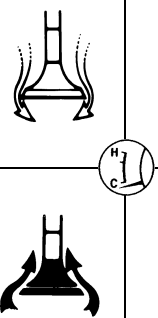
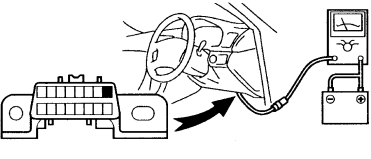
\*1 When brake pedal is depressed with force of 490 N (50 kgf, 110.1 lbf) while engine is running. \*2 Vehicles without synthetic oil information label


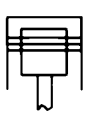
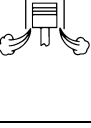
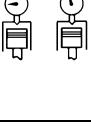
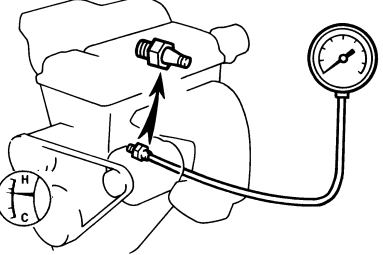




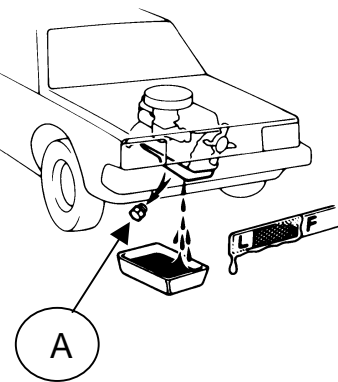


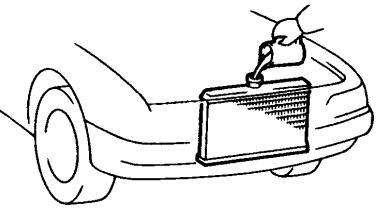
\*3 Vehicles with synthetic oil information label \*4 Australia, China, South Korea and Taiwan

# GS430/300

UZS190, GRS190

2006/07 - 2007/09

		<b>UZS190, GRS190</b>	
	*1	*2 	*3 
		*4 	*5 <b>VGRS</b>
		<b>1.25 to 1.29</b>	
20°C (68°F)			
		<b>3GR-FE</b>	<b>3GR-FSE</b>
<b>cm<sup>3</sup> or cc (cu. in.)</b>		2995 (182.75)	4293 (262.0)
			
	<b>DENSO</b>	<b>SK20R11</b>	
	<b>NGK</b>	<b>IFR6A11</b>	
	<b>A</b> mm (in.)	<b>1.1 (0.043)</b>	
	<b>8 to 12°</b> (Terminals TC and CG of DLC3 Connected)		
	<b>BTDC</b>		
		<b>0.15 to 0.25</b> (0.006 to 0.010)	
		<b>0.25 to 0.35</b> (0.010 to 0.014)	
<b>mm (in.)</b>			
	<b>600 to 700</b>		<b>700 to 800</b>
	<b>(DLC3 Terminal 9 (TAC) Connected)</b>		<b>rpm</b>

		<b>1400 (14, 199)</b>	<b>1226</b> (12.5, 174)
		<b>980 (10.0, 142)</b>	<b>981</b> (10.0, 142)
		<b>100 (1.0, 15)</b>	<b>98</b> (1.0, 14)
<b>kPa (kgf/cm<sup>2</sup>, psi)</b>			
		<b>80 (0.8, 11.6)</b>	<b>29</b> (0.3, 4.2)
		<b>6,000 rpm</b>	<b>3,000 rpm</b>
		<b>380 (3.9, 55.5)</b>	<b>294 to 588</b> (3.0 to 6.0, 43 to 85)
<b>kPa (kgf/cm<sup>2</sup>, psi)</b>			
		<b>3GR-FE</b>	<b>3GR-FSE</b>
		<b>5.9 (6.2, 5.2)</b>	<b>4.5</b> (4.8, 4.0)
		<b>6.3 (6.7, 5.5)</b>	<b>5.2</b> (5.5, 4.6)
	<b>20W-50</b> <b>15W-40</b>	<b>API grade SJ or SL multigrade engine oil</b>	
<b>liter (US qts, Imp. qts)</b>			
<b>10W-30</b> <b>5W-30</b>	<b>API grade SJ "Energy-Conserving", SL "Energy-Conserving" or ILSAC<sup>®</sup> multigrade engine oil</b>		
<b>A</b>	<b>40 (408, 32)</b>	<b>39</b> (400, 29)	
<b>N·m (kgf-cm, ft-lbf)</b>			
	<b>9.1 (9.6, 8.0)</b>		<b>11</b> (11.7, 9.7)
	<b>liter (US qts, Imp. qts)</b>		

\*1 Initialization required. Refer to the repair manual for the initialization procedures. \*2 Power Window Control System \*3 Sliding Roof System

\*4 Clearance Sonar System \*5 VGRS: Variable Gear Ratio Steering System \*6 ILSAC: International Lubricant Standardization and Approval Committee

	<b>A</b>	120.5 to 130.5 (4.744 to 5.138)	129.3 to 139.3 (5.091 to 5.484)
	<b>B</b>	1.0 to 2.0 (0.039 to 0.079)	
	<b>C</b>	*1*4  65 (2.56) *2*3*5  74 (2.91)	*1*4  75 (2.95) *2*3*5  86 (3.38)
mm (in.)	SAE J1703 or FMVSS No. 116 DOT3		
300 N (30.6 kgf, 67 lbf)	7 to 9		
	<b>A</b>		
mm (in.)	<b>B</b>	27.0 (1.063)	16.5 (0.650)
		1.0 (0.039)	
		1.0 (0.039)	
		191 (7.52)	
	UZS190, GRS190, URS190		
	*1 1.5 (1.6, 1.3) *2 1.7 (1.8, 1.5) *3 3.2 (3.38, 2.82)		
	Toyota Genuine ATF WS		
	*1 1.10 to 1.20 (1.17 to 1.27, 0.97 to 1.05) *2*3 1.30 to 1.40 (1.38 to 1.48, 1.15 to 1.23)		
	Toyota Genuine Differential gear oil LT75W-85 GL-5 or its equivalent		
N-m (kgf-cm, ft-lbf)	<b>A</b>	20 (204, 15)	
	<b>B</b>	49 (500, 36)	

	UZS190, GRS190, URS190						
	103 (1050, 76)						
	UZS190, GRS190, URS190						
	30 (1.18)						
	<b>A</b>	GS300	GS430 GS460	GS300	GS430 GS460		
	<b>B</b>	-0°23'+45' (-0.38°+0.75°)	-0°26'+45' (-0.43°+0.75°)	-1°10'+45' (-1.17°+0.75°)	-1°19'+45' (-1.32°+0.75°)		
	<b>C</b>	9°23'+45' (9.38°+0.75°)	9°26'+45' (9.43°+0.75°)	---			
	<b>D</b>	7°23'+45' (7.38°+0.75°)	7°26'+45' (7.43°+0.75°)	---			
	<b>E-F</b>	1+2 (0.04+0.08)		3+2 (0.12+0.08)			
		km/h (mph)					
	Europe	225/50 R17 94W	210 (131)	260 (2.6, 38)	270 (2.7, 39)	270 (2.7, 39)	320 (3.2, 46)
			160 (100)	240 (2.4, 35)	250 (2.5, 36)	240 (2.4, 35)	290 (2.9, 42)
		245/40 R18 93Y	210 (131)	260 (2.6, 38)	270 (2.7, 39)	270 (2.7, 39)	310 (3.1, 45)
			160 (100)	240 (2.4, 35)	250 (2.5, 36)	240 (2.4, 35)	270 (2.7, 39)
		245/40 ZR18	210 (131)	260 (2.6, 38)	270 (2.7, 39)	270 (2.7, 39)	310 (3.1, 45)
			160 (100)	240 (2.4, 35)	250 (2.5, 36)	240 (2.4, 35)	270 (2.7, 39)
	Australia	225/50 R17 94W	160 (100)	260 (2.6, 38)	270 (2.7, 39)	270 (2.7, 39)	320 (3.2, 46)
			160 (100)	230 (2.3, 33)	230 (2.3, 33)	260 (2.6, 38)	
		245/40 R18 93Y	160 (100)	260 (2.6, 38)	270 (2.7, 39)	270 (2.7, 39)	310 (3.1, 45)
			160 (100)	230 (2.3, 33)	230 (2.3, 33)	260 (2.6, 38)	
		245/40 ZR18	160 (100)	260 (2.6, 38)	270 (2.7, 39)	270 (2.7, 39)	310 (3.1, 45)
			160 (100)	240 (2.4, 35)	250 (2.5, 36)	240 (2.4, 35)	270 (2.7, 39)
G.C.C.	225/50 R17 94W	210 (131)	260 (2.6, 38)	270 (2.7, 39)	270 (2.7, 39)	320 (3.2, 46)	
		160 (100)	240 (2.4, 35)	250 (2.5, 36)	240 (2.4, 35)	290 (2.9, 42)	
	245/40 R18 93Y	210 (131)	260 (2.6, 38)	270 (2.7, 39)	270 (2.7, 39)	310 (3.1, 45)	
		160 (100)	240 (2.4, 35)	250 (2.5, 36)	240 (2.4, 35)	270 (2.7, 39)	
	245/40 ZR18	210 (131)	260 (2.6, 38)	270 (2.7, 39)	270 (2.7, 39)	310 (3.1, 45)	
		160 (100)	240 (2.4, 35)	250 (2.5, 36)	240 (2.4, 35)	270 (2.7, 39)	
China	225/50 R17 94W	160 (100)	260 (2.6, 38)	270 (2.7, 39)	260 (2.6, 38)	270 (2.7, 39)	
		160 (100)	230 (2.3, 33)				
	245/40 R18 93Y	160 (100)	280 (2.8, 41)				
		160 (100)	230 (2.3, 33)				
	245/40 ZR18	160 (100)	290 (2.9, 42)				
		160 (100)	230 (2.3, 33)				
Taiwan	225/50 R17 94W	210 (131)	260 (2.6, 38)	270 (2.7, 39)	270 (2.7, 39)	320 (3.2, 46)	
		160 (100)	240 (2.4, 35)	250 (2.5, 36)	240 (2.4, 35)	290 (2.9, 42)	
	245/40 R18 93Y	210 (131)	260 (2.6, 38)	270 (2.7, 39)	270 (2.7, 39)	310 (3.1, 45)	
		160 (100)	240 (2.4, 35)	250 (2.5, 36)	240 (2.4, 35)	270 (2.7, 39)	
	245/40 ZR18	210 (131)	260 (2.6, 38)	270 (2.7, 39)	270 (2.7, 39)	310 (3.1, 45)	
		160 (100)	240 (2.4, 35)	250 (2.5, 36)	240 (2.4, 35)	270 (2.7, 39)	
Other	225/50 R17 94W	210 (131)	260 (2.6, 38)	270 (2.7, 39)	270 (2.7, 39)	320 (3.2, 46)	
		160 (100)	240 (2.4, 35)	250 (2.5, 36)	240 (2.4, 35)	290 (2.9, 42)	
	245/40 R18 93Y	210 (131)	260 (2.6, 38)	270 (2.7, 39)	270 (2.7, 39)	310 (3.1, 45)	
		160 (100)	240 (2.4, 35)	250 (2.5, 36)	240 (2.4, 35)	270 (2.7, 39)	
	245/40 ZR18	210 (131)	260 (2.6, 38)	270 (2.7, 39)	270 (2.7, 39)	310 (3.1, 45)	
		160 (100)	240 (2.4, 35)	250 (2.5, 36)	240 (2.4, 35)	270 (2.7, 39)	

\*1 3GR-FE, 3GR-FSE \*2 3UZ-FE \*3 1UR-FSE \*4 When brake pedal is depressed with force of 500 N (51 kgf, 112 lbf) while engine is running.

\*5 When brake pedal is depressed with force of 200 N (20 kgf, 45 lbf) while engine is running.

# GS460/430/300

UZS190, GRS190, URS190

2007/09 -

		<b>UZS190, GRS190, URS190</b>			
 *1	 *2	 *3			
	<b>VGRS</b>		<b>THEFT DETERRENT SYSTEM</b>		
 20°C (68°F)		<b>1.25 to 1.29</b>			
 cm <sup>3</sup> or cc (cu. in.)		<b>3GR-FE 3GR-FSE</b>	<b>3UZ-FE</b>	<b>1UR-FSE</b>	
		2995 (182.75)	4293 (262.0)	4608 (281.2)	
		-		-	
 A	<b>DENSO</b>	*5 SK20 HR11	<b>SK20R11</b>	<b>FK20HB R11</b>	
		*6 FK20H BR11			
	<b>NGK</b>	*5 ILFR6 C11	<b>IFR6A11</b>	-	
		*6 ILFR6 D11T			
<b>A</b> mm (in.)		<b>1.0 to 1.1 (0.039 to 0.043)</b>			
 <b>BTDC</b>		<b>8 to 12°</b> (Terminals TC and CG of DLC3 Connected)			
 mm (in.)		—	<b>0.15 to 0.25</b> (0.006 to 0.010)	—	
		—	<b>0.25 to 0.35</b> (0.010 to 0.014)	—	
 (DLC3 Terminal 9 (TAC) Connected) rpm		<b>600 to 700</b>	<b>700 to 800</b>		

 kPa (kgf/cm <sup>2</sup> , psi)		<b>1400</b> (14, 199)	<b>1226</b> (12.5, 174)	<b>1400</b> (14, 199)
		<b>980</b> (10.0, 142)	<b>981</b> (10.0, 142)	<b>980</b> (10.0, 142)
		<b>100</b> (1.0, 15)	<b>98</b> (1.0, 14)	<b>100</b> (1.0, 15)
 kPa (kgf/cm <sup>2</sup> , psi)		<b>80</b> (0.8, 11.6)	<b>29</b> (0.3, 4.2)	<b>29</b> (0.3, 4.2)
		<b>6000 rpm</b> <b>380</b> (3.9, 55.5)	<b>3000 rpm</b> <b>294 to 588</b> (3.0 to 6.0, 43 to 85)	<b>2500 rpm</b> <b>220</b> (2.2, 31.9)
		<b>3GR-FE 3GR-FSE</b>	<b>3UZ-FE</b>	<b>1UR-FSE</b>
 A liter (US qts, Imp. qts)		<b>5.9</b> (6.2, 5.2)	<b>4.5</b> (4.8, 4.0)	<b>8.4</b> (8.9, 7.4)
		<b>6.3</b> (6.7, 5.5)	<b>5.2</b> (5.5, 4.6)	<b>8.6</b> (9.1, 7.6)
 N·m (kgf-cm, ft-lbf)	<b>5W-30</b>	<b>API grade SL ILSAC<sup>7</sup> multigrade engine oil</b>		—
	<b>0W-20 5W-20 5W-30 10W-30 15W-40 20W-50</b>			<b>API grade SL or SM multigrade engine oil</b>
<b>A</b>		<b>39</b> (398, 29)		
 liter (US qts, Imp. qts)		<b>9.1</b> (9.6, 8.0)	<b>11</b> (11.7, 9.7)	<b>10.8</b> (11.4, 9.5)

\*1 Initialization required. Refer to the repair manual for the initialization procedures. \*2 Power Window Control System \*3 Clearance Sonar System

\*4 VGRS: Variable Gear Ratio Steering System \*5 3GR-FE \*6 3GR-FSE \*7 ILSAC: International Lubricant Standardization and Approval Committee