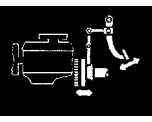
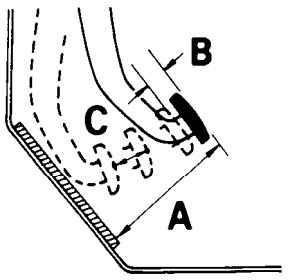
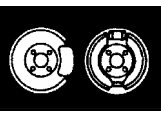
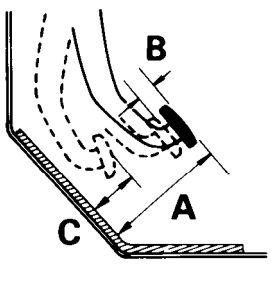
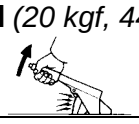
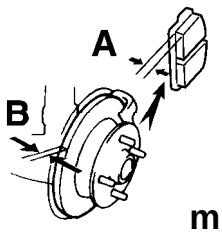
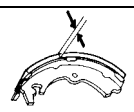
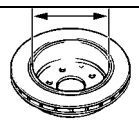
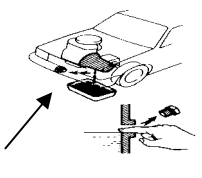
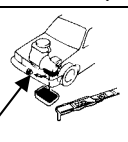
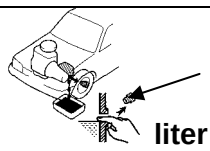
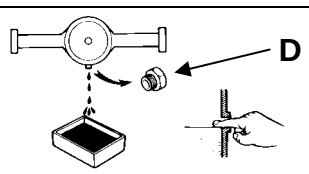
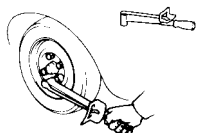
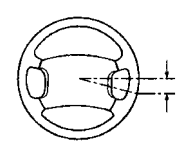
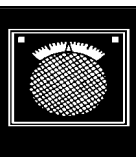
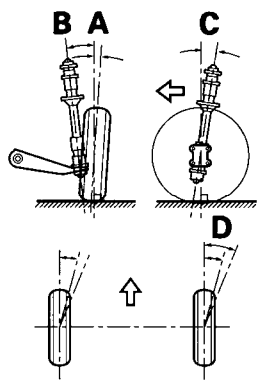
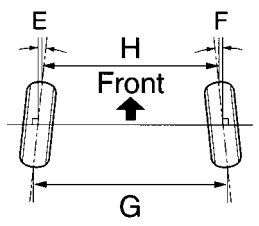
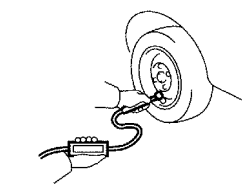
SDS TOYOTA RAV4

ACA30, 33, 38 — 2005/11 - 2007/1

			
 mm *(in.)* 	A	*1 **162.9 to 172.9** *(6.413 to 6.807)*	*1 **195.5 to 205.5** *(7.697 to 8.091)*
		*2 **173.9 to 183.9** *(6.846 to 7.240)*	*2 **207.4 to 217.4** *(8.165 to 8.559)*
	B	**1 to 5** *(0.039 to 0.197)*	
	C	⬆ **25** *(0.98)*	
		SAE J1703 or FMVSS No. 116 DOT3	
			
 mm *(in.)* 	A	**184.2 to 194.2** *(7.252 to 7.646)*	**168.6 to 178.6** *(6.638 to 7.031)*
	B	**1 to 6** *(0.039 to 0.236)*	
	C*3	*1*4 ⬆ **90** *(3.54)* *1*5 ⬆ **115** *(4.53)* *2*4 ⬆ **95** *(3.74)* *2*5 ⬆ **120** *(4.72)*	*1*4 ⬆ **80** *(3.15)* *1*5 ⬆ **105** *(4.13)* *2*4 ⬆ **85** *(3.34)* *2*5 ⬆ **110** *(4.32)*
		SAE J1703 or FMVSS No. 116 DOT3	
196 N *(20 kgf, 44.1 lbf)* 		**7 to 9**	
 mm *(in.)*			
	A	⬆ **1.0** *(0.039)*	
	B	*6 ⬆ **22.0** *(0.866)* *7 ⬆ **25.0** *(0.984)*	⬆ **10.5** *(0.413)*
 mm *(in.)*		⬆ **1.0** *(0.039)*	
 mm *(in.)*		⬆ **173.0** *(6.811)*	
		ACA	
 liter *(US qts, lmp.qts)*	1 3 5 / 2 4 R	**2WD**	**4WD**
		2.5 *(2.6, 2.2)*	
		API GL-4 or GL-5 **SAE 75W-90**	
 liter *(US qts, lmp.qts)*	FRONT	**3.5** *(3.7, 3.1)*	
		Toyota Genuine ATF WS	
 liter *(US qts, lmp.qts)*		**0.45** *(0.48, 0.40)*	
		Hypoid gear oil SX API GL-5, SAE 85W-90 or equivalent	
 liter *(US qts, lmp.qts)*		-	**0.45 to 0.55** *(0.48 to 0.58, 0.40 to 0.48)*
		Hypoid gear oil SX API GL-5, SAE 85W-90 or equivalent	
N·m *(kgf·cm, ft·lbf)*	A	-	**49** *(500, 36)*
	B	-	**47** *(479, 35)*
	C	-	**39** *(398, 29)*
	D	-	**39** *(398, 29)*

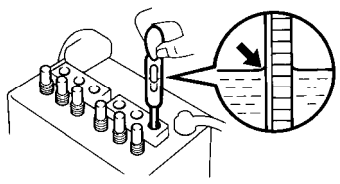
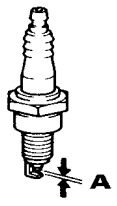
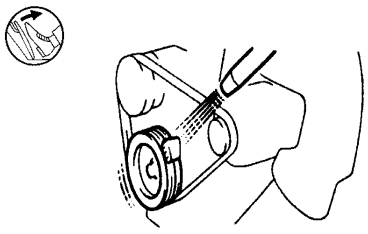
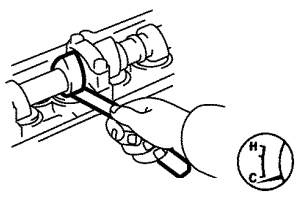
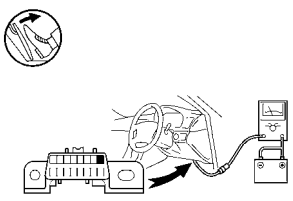
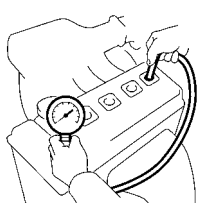
				**ACA**
 N·m *(kgf·cm, ft·lbf)*				**103** *(1050, 76)*
				**ACA**
 mm *(in.)*				⬇ 30 *(1.18)*
				
	A	Europe Only 215/70R16	**-0°08' ± 45'** *(-0.13° ± 0.75°)*	**-0°58' ± 45'** *(-0.97° ± 0.75°)* **45'** *(0.75°)* **or less**
		225/65R17 235/55R18	**-0°11' ± 45'** *(-0.18 ± 0.75°)*	**-1°07' ± 45'** *(-1.12° ± 0.75°)* **45'** *(0.75°)* **or less**
		Australia	**-0°07' ± 45'** *(-0.12° ± 0.75°)*	**-0°52' ± 45'** *(-0.87° ± 0.75°)* **45'** *(0.75°)* **or less**
	B	Europe Only 215/70R16	**11°16' ± 45'** *(11.27° ± 0.75°)*	-
		225/65R17 235/55R18	**11°26' ± 45'** *(11.44° ± 0.75°)*	-
		Australia	**11°14' ± 45'** *(11.23° ± 0.75°)*	-
	C	Europe Only 215/70R16	**5°41' ± 45'** *(5.68° ± 0.75°)*	-
		225/65R17 235/55R18	**5°47' ± 45'** *(5.78° ± 0.75°)*	-
		Australia	**5°42' ± 45'** *(5.70° ± 0.75°)*	-
	D	Europe Only 215/70R16	**38°55' ± 2°** *(38.9° ± 2°)*	-
		225/65R17	**38°44' ± 2°** *(38.7° ± 2°)*	-
		235/55R18	**35°50' ± 2°** *(35.8° ± 2°)*	-
		Australia	**38°58' ± 2°** *(39.0° ± 2°)*	-
	E+F		**0°05' ± 10'** *(0.08° ± 0.17°)*	**0°11' ± 10'** *(0.18° ± 0.17°)*
	G-H mm *(in.)*		**1.0 ± 2** *(0.04 ± 0.08)*	**2.3 ± 1** *(0.09 ± 0.04)*
				**ACA**
 kPa *(kgf/cm², psi)*				**220** *(2.2, 32)*

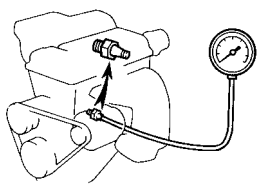
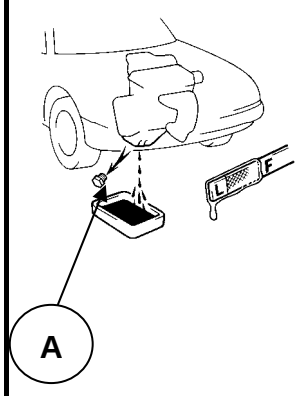
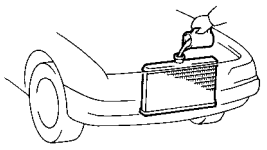
*1 1AZ-FE *2 2AZ-FE *3 When brake pedal is depressed with the force of 490 N (50 kgf, 110 lbf) while the engine is running. *4 without VSC
*5 with VSC *6 15-inch Disc *7 16-inch Disc

RAV4

ACA30, 33, 38

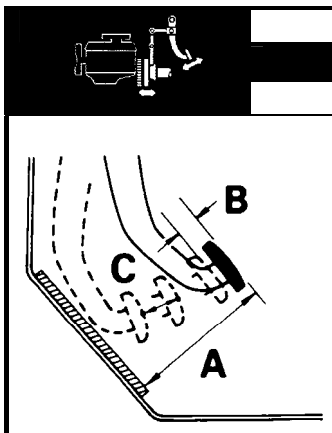
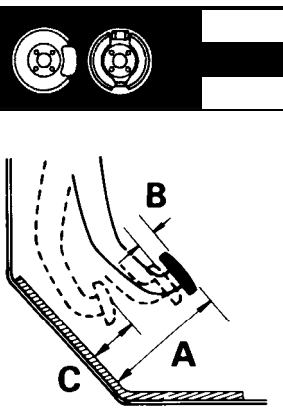
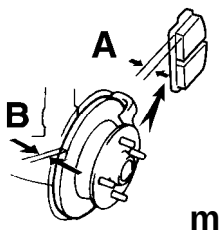
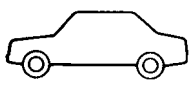
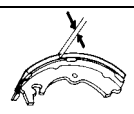
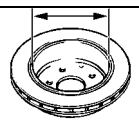
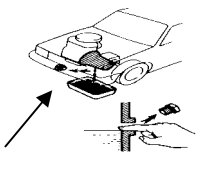
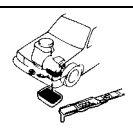
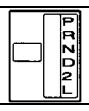
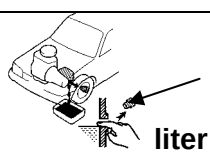
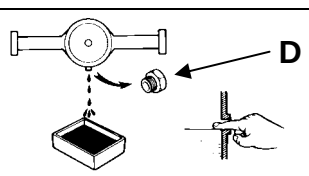
2005/11 - 2007/1

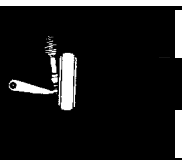
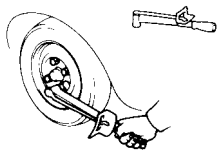
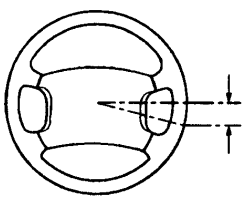
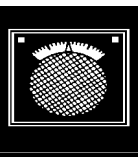
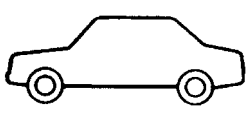
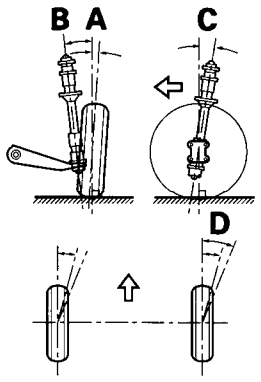
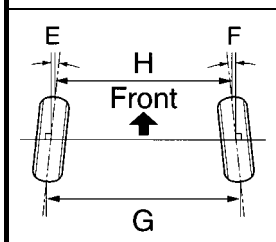
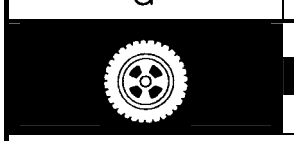
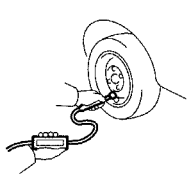
		ACA	
 20°C *(68°F)*		**1.25 to 1.29**	
		1AZ-FE	**2AZ-FE**
	cm³ or cc *(cu. in.)*	**1998** *(121.9)*	**2362** *(144.1)*
	**DENSO**	**SK20R11**	
	NGK	**IFR6A11**	
	A **mm** *(in.)*	**1.1** *(0.043)*	
 **BTDC**		**8 to 12°** (DLC3 Terminals 13 (TC) - 4 (CG) Connected)	
 **mm** *(in.)*		**0.21 to 0.27** *(0.0083 to 0.0106)*	**0.21 to 0.27** *(0.0083 to 0.0106)*
		0.30 to 0.40 *(0.0118 to 0.0157)*	**0.38 to 0.48** *(0.0150 to 0.0189)*
 **rpm**	1 3 5 / 2 4 R	**650 to 750**	**600 to 700**
	P R N D 2 L	**610 to 710**	
 **kPa** *(kgf/cm², psi)*		**1300** *(13.8, 196)*	
		1000 *(10, 142)*	
		100 *(1.0, 14)*	

 **kPa** *(kgf/cm², psi)*		**29** *(0.3, 4.3)*	
	3000 rpm	**245 to 539** *(2.5 to 5.5, 36 to 78)*	**160 to 539** *(1.6 to 5.5, 23 to 78)*
		1AZ-FE	**2AZ-FE**
 **liter** *(US qts, Imp.qts)*		**3.6** *(3.8, 3.2)*	**4.1** *(4.3, 3.6)*
		3.8 *(4.0, 3.3)*	**4.3** *(4.5, 3.8)*
		20W-50 and 15W-40: API grade SL or SM Multigrade engine oil 10W-30 and 5W-30: API grade SL "Energy-Conserving", SM "Energy-Conserving" or ILSAC*[1] multigrade engine oil	
N·m *(kgf·cm, ft·lbf)*	A	**40** *(408, 30)*	
 **liter** *(US qts, Imp.qts)*	1 3 5 / 2 4 R	**6.3** *(6.7, 5.5)*	**6.6** *(7.0, 5.9)*
	P R N D 2 L	**6.4** *(6.8, 5.6)*	**6.5** *(6.9, 5.7)*

*[1] ILASAC : International Lubricant Standardization and Approval Committee

TOYOTA MOTOR CORPORATION Technical Service Division

			
	A	*1 **162.9 to 172.9** *(6.413 to 6.807)*	*1 **195.5 to 205.5** *(7.697 to 8.091)*
		*2 **173.9 to 183.9** *(6.846 to 7.240)*	*2 **207.4 to 217.4** *(8.165 to 8.559)*
	B	**1 to 5** *(0.039 to 0.197)*	
	C	⇧ **25** *(0.98)*	
mm *(in.)*		**SAE J1703 or FMVSS No. 116 DOT3**	
			
	A	**184.2 to 194.2** *(7.252 to 7.646)*	**168.6 to 178.6** *(6.638 to 7.031)*
	B	**1 to 6** *(0.039 to 0.236)*	
	C*3	*1*4 ⇧ **90** *(3.54)* *1*5 ⇧ **115** *(4.53)* *2*4 ⇧ **95** *(3.74)* *2*5 ⇧ **120** *(4.72)*	*1*4 ⇧ **80** *(3.15)* *1*5 ⇧ **105** *(4.13)* *2*4 ⇧ **85** *(3.34)* *2*5 ⇧ **110** *(4.32)*
mm *(in.)*		**SAE J1703 or FMVSS No. 116 DOT3**	
196 N *(20 kgf, 44.1 lbf)*		**7 to 9**	
			
	A	⇧ **1.0** *(0.039)*	
	B	*6 ⇧ **22.0** *(0.866)* *7 ⇧ **25.0** *(0.984)*	⇧ **10.5** *(0.413)*
mm *(in.)*			
 **mm** *(in.)*		⇧ **1.0** *(0.039)*	
 **mm** *(in.)*		⇧ **173.0** *(6.811)*	
		ACA	
	1 3 5 / 2 4 R	**2WD**	**4WD**
		2.5 *(2.6, 2.2)*	
liter *(US qts, lmp.qts)*		**API GL-4 or GL-5 SAE 75W-90**	
		**3.5** *(3.7, 3.1)*	
liter *(US qts, lmp.qts)*		**Toyota Genuine ATF WS**	
 **liter** *(US qts, lmp.qts)*		**0.45** *(0.48, 0.40)*	
		Hypoid gear oil SX API GL-5, SAE 85W-90 or equivalent	
 **liter** *(US qts, lmp.qts)*		-	**0.45 to 0.55** *(0.48 to 0.58, 0.40 to 0.48)*
		Hypoid gear oil SX API GL-5, SAE 85W-90 or equivalent	
N·m *(kgf·cm, ft·lbf)*	A	-	**49** *(500, 36)*
	B	-	**47** *(479, 35)*
	C	-	**39** *(398, 29)*
	D	-	**39** *(398, 29)*

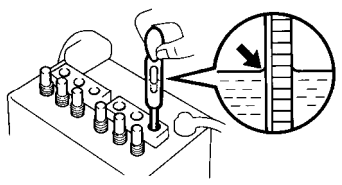
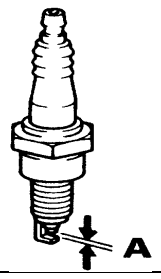
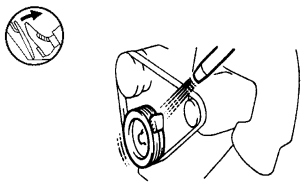
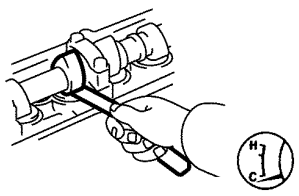
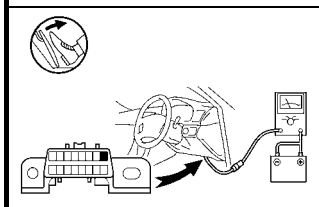
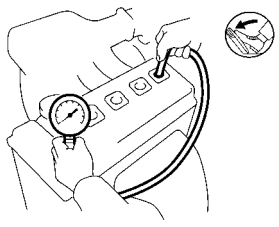
			**ACA**
 **N·m** *(kgf·cm, ft·lbf)*			**103** *(1050, 76)*
			**ACA**
 **mm** *(in.)*			⇩ **30** *(1.18)*
			
	**A**	Europe Only 215/70R16	**-0°08' ± 45'** *(-0.13° ± 0.75°)* / **-0°58' ± 45'** *(-0.97° ± 0.75°)* **45'** *(0.75°)* **or less**
		225/65R17 235/55R18	**-0°11' ± 45'** *(-0.18 ± 0.75°)* / **-1°07'±45'** *(-1.12° ± 0.75°)* **45'** *(0.75°)* **or less**
		Australia	**-0°07' ± 45'** *(-0.12° ± 0.75°)* / **-0°52' ± 45'** *(-0.87° ± 0.75°)* **45'** *(0.75°)* **or less**
	B	Europe Only 215/70R16	**11°16' ± 45'** *(11.27° ± 0.75°)* / -
		225/65R17 235/55R18	**11°26' ± 45'** *(11.44° ± 0.75°)* / -
		Australia	**11°14' ± 45'** *(11.23° ± 0.75°)* / -
	C	Europe Only 215/70R16	**5°41' ± 45'** *(5.68° ± 0.75°)* / -
		225/65R17 235/55R18	**5°47' ± 45'** *(5.78° ± 0.75°)* / -
		Australia	**5°42' ± 45'** *(5.70° ± 0.75°)* / -
	D	Europe Only 215/70R16	**38°55' ± 2°** *(38.9° ± 2°)* / -
		225/65R17	**38°44' ± 2°** *(38.7° ± 2°)* / -
		235/55R18	**35°50' ± 2°** *(35.8° ± 2°)* / -
		Australia	**38°58' ± 2°** *(39.0° ± 2°)* / -
	**E+F**		**0°05' ± 10'** *(0.08° ± 0.17°)* / **0°11' ± 10'** *(0.18° ± 0.17°)*
	G-H **mm** *(in.)*		**1.0 ± 2** *(0.04 ± 0.08)* / **2.3 ± 1** *(0.09 ± 0.04)*
			**ACA**
 **kPa** *(kgf/cm², psi)*			**220** *(2.2, 32)*

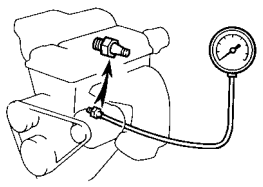
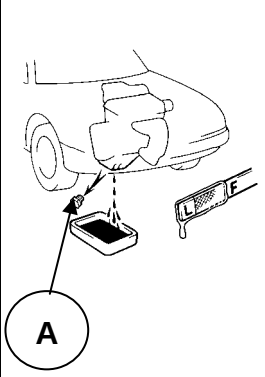
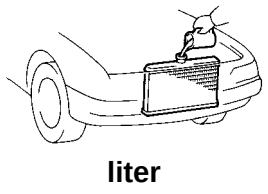
*1 1AZ-FE *2 2AZ-FE *3 When brake pedal is depressed with the force of 490 N (50 kgf, 110 lbf) while the engine is running. *4 without VSC
*5 with VSC *6 15-inch Disc *7 16-inch Disc

RAV4

ACA30, 31, 33, 38

2007/1 – 2007/8

		ACA	
	**20°C** *(68°F)*	**1.25 to 1.29**	
		1AZ-FE	**2AZ-FE**
	cm³ or cc *(cu. in.)*	**1998** *(121.9)*	**2362** *(144.1)*
	**DENSO**	**SK20R11**	
	NGK	**IFR6A11**	
	A **mm** *(in.)*	**1.1** *(0.043)*	
	**BTDC**	**8 to 12°** (DLC3 Terminals 13 (TC) - 4 (CG) Connected)	
 **mm** *(in.)*		**0.21 to 0.27** *(0.0083 to 0.0106)*	**0.21 to 0.27** *(0.0083 to 0.0106)*
		0.30 to 0.40 *(0.0118 to 0.0157)*	**0.38 to 0.48** *(0.0150 to 0.0189)*
 **rpm**	1 3 5 / 2 4 R	**650 to 750**	**600 to 700**
	P R N D 2 L	**610 to 710**	
 **kPa** *(kgf/cm², psi)*		**1300** *(13.8, 196)*	
		1000 *(10, 142)*	
		100 *(1.0, 14)*	

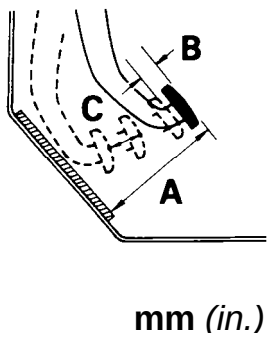
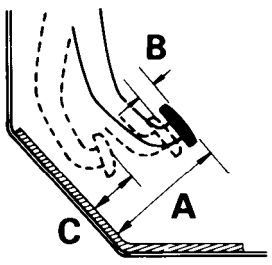
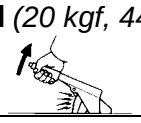
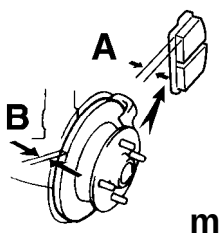
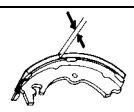
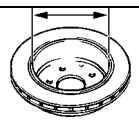
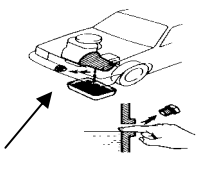
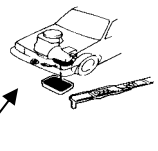
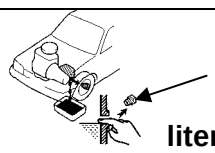
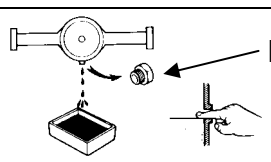
 **kPa** *(kgf/cm², psi)*		**29** *(0.3, 4.3)*	
	3000 rpm	**245 to 539** *(2.5 to 5.5, 36 to 78)*	**160 to 539** *(1.6 to 5.5, 23 to 78)*
		1AZ-FE	**2AZ-FE**
 **liter** *(US qts, Imp.qts)*		**3.6** *(3.8, 3.2)*	**4.1** *(4.3, 3.6)*
		3.8 *(4.0, 3.3)*	**4.3** *(4.5, 3.8)*
		20W-50 and 15W-40: API grade SL or SM Multigrade engine oil 10W-30 and 5W-30 API grade SL"Energy-Conserving", SM"Energy-Conserving" or ILSAC*1 multigrade engine oil	
N·m *(kgf·cm, ft·lbf)*	**A**	**40** *(408, 30)*	
 **liter** *(US qts, Imp.qts)*	1 3 5 / 2 4 R	**6.3** *(6.7, 5.5)*	**6.6** *(7.0, 5.9)*
	P R N D 2 L	**6.4** *(6.8, 5.6)*	**6.5** *(6.9, 5.7)*

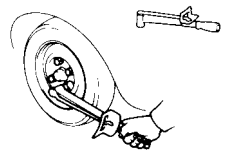
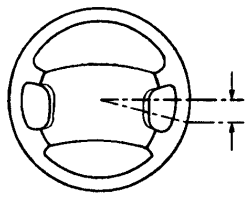
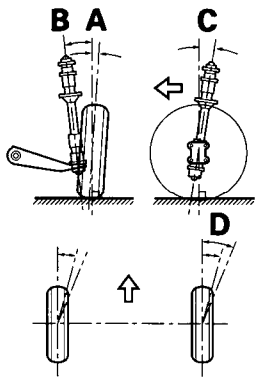
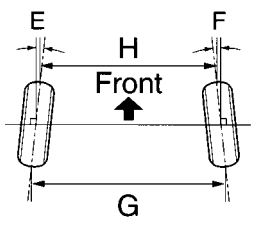
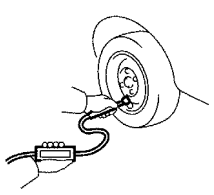
*1 ILASAC : International Lubricant Standardization and Approval Committee

SDS TOYOTA RAV4

ACA30, 31, 33, 38
GSA33

2007/8 -

 mm *(in.)*	A	*1 **162.9 to 172.9** *(6.413 to 6.807)*	*1 **195.5 to 205.5** *(7.697 to 8.091)*
		*2 **173.9 to 183.9** *(6.846 to 7.240)*	*2 **207.4 to 217.4** *(8.165 to 8.559)*
	B	**1 to 5** *(0.039 to 0.197)*	
	C	⇧ **25** *(0.98)*	
		SAE J1703 or FMVSS No. 116 DOT3	
 mm *(in.)*	A	**184.2 to 194.2** *(7.252 to 7.646)*	**168.6 to 178.6** *(6.638 to 7.031)*
	B	**1 to 6** *(0.039 to 0.236)*	
	C*3	*1*5 ⇧ **90** *(3.54)* *1*6 ⇧ **115** *(4.53)* *2*5 ⇧ **95** *(3.74)* *2*6 ⇧ **120** *(4.72)*	*1*5 ⇧ **80** *(3.15)* *1*6 ⇧ **105** *(4.13)* *2*5 ⇧ **85** *(3.34)* *2*6 ⇧ **110** *(4.32)* *3 ⇧ **110** *(4.32)*
		SAE J1703 or FMVSS No. 116 DOT3	
196 N *(20 kgf, 44.1 lbf)* 		**6 to 8**	
 mm *(in.)*	A	⇧ **1.0** *(0.039)*	
	B	*6 ⇧ **22.0** *(0.866)* *7 ⇧ **25.0** *(0.984)*	⇧ **10.5** *(0.413)*
 mm *(in.)*		⇧ **1.0** *(0.039)*	
 mm *(in.)*		⇧ **173.0** *(6.811)*	
		ACA, GSA	
 **liter** *(US qts, Imp.qts)*	1 3 5 / 2 4 R	**2WD**	**4WD**
		2.5 *(2.6, 2.2)*	
		API GL-4 or GL-5 **SAE 75W-90**	
 **liter** *(US qts, Imp.qts)*	P R N D 2 1	*1*2 **3.5** *(3.7, 3.1)* *3 **3.6** *(3.8, 3.2)*	
		Toyota Genuine ATF WS	
 **liter** *(US qts, Imp.qts)*		**0.45** *(0.48, 0.40)*	
		Hypoid gear oil SX API GL-5, SAE 85W-90 or equivalent	
 **liter** *(US qts, Imp.qts)*		-	**0.45 to 0.55** *(0.48 to 0.58, 0.40 to 0.48)*
		Hypoid gear oil SX API GL-5, SAE 85W-90 or equivalent	
N·m *(kgf·cm, ft·lbf)*	A	-	**49** *(500, 36)*
	B	-	**47** *(479, 35)*
	C	-	**39** *(398, 29)*
	D	-	**39** *(398, 29)*

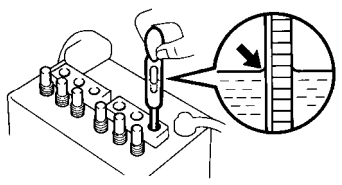
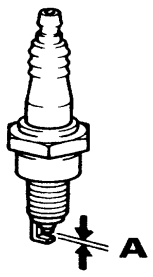
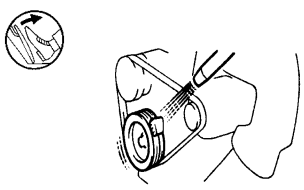
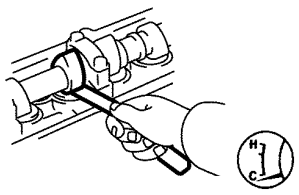
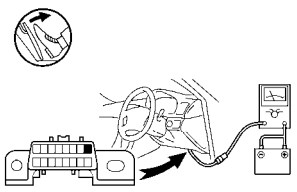
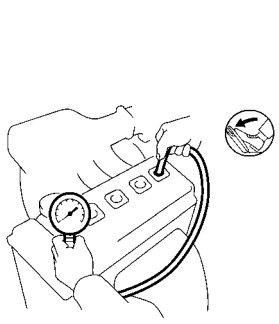
		ACA, GSA	
 **N·m** *(kgf·cm, ft·lbf)*		**103** *(1050, 76)*	
		ACA,GSA	
 **mm** *(in.)*		⇩ **30** *(1.18)*	
			
	A	Europe Only 215/70R16	**-0°08' ± 45'** *(-0.13° ± 0.75°)*	**-0°58' ± 45'** *(-0.97° ± 0.75°)* **45'** *(0.75°)* **or less**
		225/65R17 235/55R18	**-0°11' ± 45'** *(-0.18 ± 0.75°)*	**-1°07' ± 45'** *(-1.12° ± 0.75°)* **45'** *(0.75°)* **or less**
		Australia	**-0°07' ± 45'** *(-0.12° ± 0.75°)*	**-0°52' ± 45'** *(-0.87° ± 0.75°)* **45'** *(0.75°)* **or less**
	B	Europe Only 215/70R16	**11°16' ± 45'** *(11.27° ± 0.75°)*	-
		225/65R17 235/55R18	**11°26' ± 45'** *(11.44° ± 0.75°)*	-
		Australia	**11°14' ± 45'** *(11.23° ± 0.75°)*	-
	C	Europe Only 215/70R16	**5°41' ± 45'** *(5.68° ± 0.75°)*	-
		225/65R17 235/55R18	**5°47' ± 45'** *(5.78° ± 0.75°)*	-
		Australia	**5°42' ± 45'** *(5.70° ± 0.75°)*	-
	D	Europe Only 215/70R16	**38°55' ± 2°** *(38.9° ± 2°)*	-
		225/65R17	**38°44' ± 2°** *(38.7° ± 2°)*	-
		235/55R18	**35°50' ± 2°** *(35.8° ± 2°)*	-
		Australia	**38°58' ± 2°** *(39.0° ± 2°)*	-
	E+F		**0°05' ± 10'** *(0.08° ± 0.17°)*	**0°11' ± 10'** *(0.18° ± 0.17°)*
	G-H **mm** *(in.)*		**1.0 ± 2** *(0.04 ± 0.08)*	**2.3 ± 1** *(0.09 ± 0.04)*
			ACA,GSA	
 **kPa** *(kgf/cm², psi)*			**220** *(2.2, 32)*	

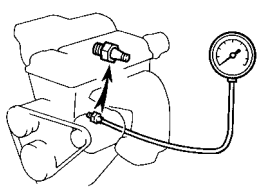
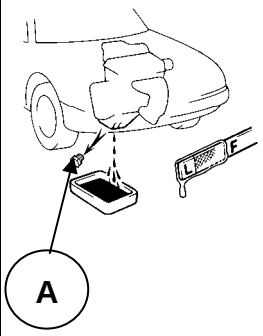
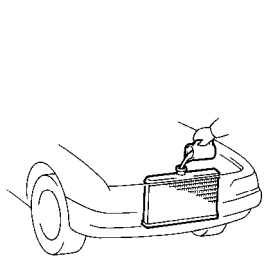
*1 1AZ-FE *2 2AZ-FE *3 2GR-FE *4 When brake pedal is depressed with the force of 490 N (50 kgf, 110 lbf) while the engine is running. *5 without VSC
*6 with VSC *7 15-inch Disc *8 16-inch Disc

RAV4

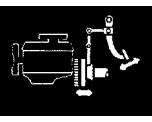
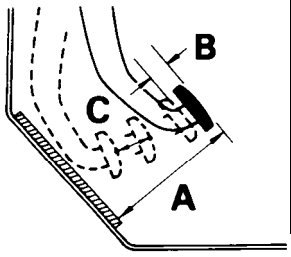
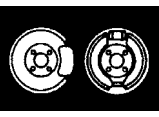
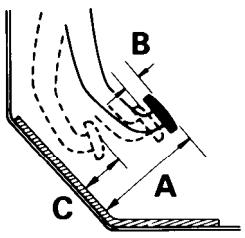
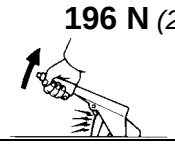
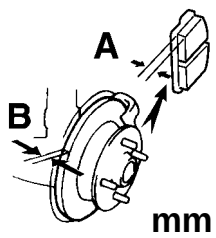
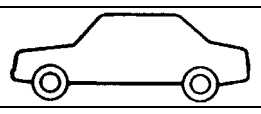
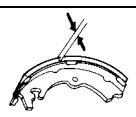
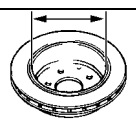
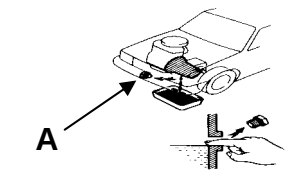
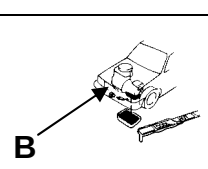
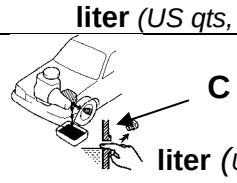
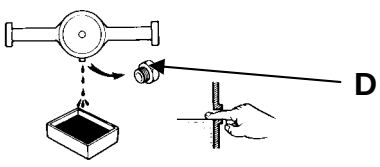
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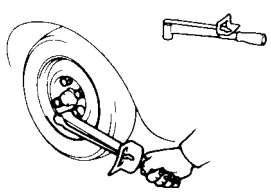
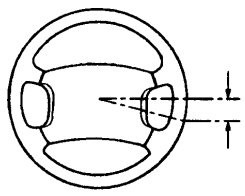
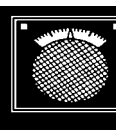
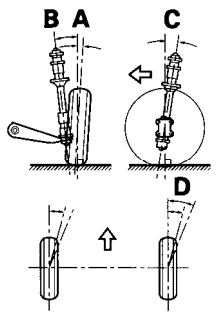
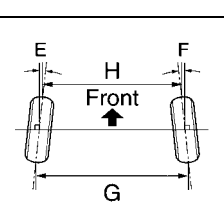
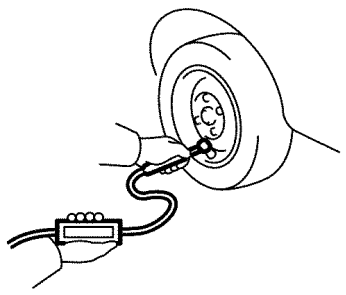
2007/8 -

		ACA, GSA		
	**20°C** *(68°F)*	**1.25 to 1.29**		
		1AZ-FE	**2AZ-FE**	**2GR-FE**
	cm³ or cc *(cu. in.)*	**1998** *(121.9)*	**2362** *(144.1)*	**3456** *(210.9)*
	**DENSO**	**SK20R11**		**FK20HR11**
	NGK	**IFR6A11**		**-**
	A **mm** *(in.)*	**1.1** *(0.043)*		**1.0 to 1.1** *(0.039 to 0.043)*
	**BTDC**	**8 to 12°** (DLC3 Terminals 13 (TC) - 4 (CG) Connected)		
		**0.21 to 0.27** *(0.0083 to 0.0106)*	**0.21 to 0.27** *(0.0083 to 0.0106)*	**-**
mm *(in.)*		**0.30 to 0.40** *(0.0118 to 0.0157)*	**0.38 to 0.48** *(0.0150 to 0.0189)*	**-**
	1 3 5 / 2 4 R	**650 to 750**	**600 to 700**	
rpm	P R N D 2 L	**610 to 710**		
		**1300** *(13.8, 196)*		**1400** *(14, 199)*
		1000 *(10, 142)*		**980** *(10, 142)*
kPa *(kgf/cm², psi)*		**100** *(1.0, 14)*		

		**29** *(0.3, 4.3)*		**80** *(0.8, 11.6)*
	3000 rpm	**245 to 539** *(2.5 to 5.5, 36 to 78)*	**160 to 539** *(1.6 to 5.5, 23 to 78)*	**-**
kPa *(kgf/cm², psi)*	**6000 rpm**	**-**	**-**	**380** *(3.9, 55.5)*
		1AZ-FE	**2AZ-FE**	**2GR-FE**
 **A**		**3.6** *(3.8, 3.2)*	**4.1** *(4.3, 3.6)*	**5.7** *(6.0, 5.0)*
		3.8 *(4.0, 3.3)*	**4.3** *(4.5, 3.8)*	**6.1** *(6.4, 5.4)*
liter *(US qts, Imp.qts)*		**20W-50 and 15W-40: API grade SL or SM Multigrade engine oil 10W-30 and 5W-30 API grade SL "Energy-Conserving", SM "Energy-Conserving" or ILSAC*[1] multigrade engine oil**		**10W-30: API grade SL and energy-conserving**
N·m *(kgf·cm, ft·lbf)*	**A**	**40** *(408, 30)*		
	1 3 5 / 2 4 R	**6.3** *(6.7, 5.5)*	**6.6** *(7.0, 5.9)*	**9.3** *(9.8, 8.2)*
liter *(US qts, Imp.qts)*	P R N D 2 L	**6.4** *(6.8, 5.6)*	**6.5** *(6.9, 5.7)*	

*[1] ILASAC : International Lubricant Standardization and Approval Committee

			
 mm *(in.)* 	A	**176.5 to 186.5** *(6.949 to 7.343)*	**211.1 to 221.1** *(8.311 to 8.705)*
	B	**1 to 5** *(0.039 to 0.197)*	
	C	⇧ **25** *(0.98)*	
		SAE J1703 or FMVSS No. 116 DOT3	
			
 mm *(in.)* 	A	**184.2 to 194.2** *(7.252 to 7.646)*	**168.6 to 178.6** *(6.638 to 7.031)*
	B	**1 to 6** *(0.04 to 0.24)*	
	C*1	*2 ⇧ **75** *(2.95)* *3 ⇧ **110** *(4.33)*	*2 ⇧ **70** *(2.75)* *3 ⇧ **100** *(3.93)*
		SAE J1703 or FMVSS No. 116 DOT3	
196 N *(20 kgf, 44.1 lbf)* 		**7 to 9**	
 mm *(in.)*			
	A	⇧ **1.0** *(0.039)*	
	B	⇧ **25.0** *(0.984)*	⇧ **10.5** *(0.413)*
 mm *(in.)*		⇧ **1.0** *(0.039)*	
 mm *(in.)*		⇧ **173.0** *(6.811)*	
		ALA	
	R 1 3 5 / 2 4 6	**2.1** *(2.2, 1.8)*	
liter *(US qts, lmp.qts)*		**API GL-5 SAE 75W**	
 **liter** *(US qts, lmp.qts)*		**0.45** *(0.48, 0.40)*	
		GL-5 SAE 80W-90	
 **liter** *(US qts, lmp.qts)*		**0.45** *(0.48, 0.40)*	
		Hypoid gear oil SX API GL-5, SAE 85W-90 or equivalent	
 **liter** *(US qts, lmp.qts)* **N·m** *(kgf·cm, ft·lbf)*		**0.45 to 0.55** *(0.48 to 0.58, 0.40 to 0.48)*	
		Hypoid gear oil SX API GL-5, SAE 85W-90 or equivalent	
	A	**39** *(398, 29)*	
	B		
	C		
	D		

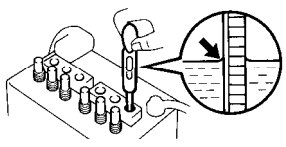
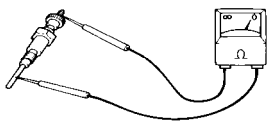
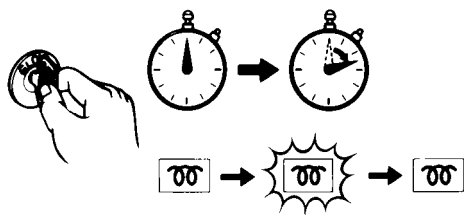
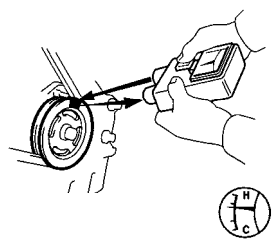
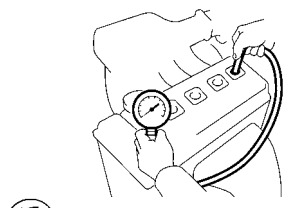
			**ALA**
 **N·m** *(kgf·cm, ft·lbf)*			**103** *(1050, 76)*
			**ALA**
 **mm** *(in.)*			⇩ **30** *(1.18)*
			
	A	Europe Only 215/70R16	**-0°08' ± 45'** *(-0.13° ± 0.75°)* **45'** *(0.75°)* **or less** / **-0°58' ± 45'** *(-0.97° ± 0.75°)* **45'** *(0.75°)* **or less**
		225/65R17 235/55R18	**-0°11' ± 45'** *(-0.18 ± 0.75°)* / **-1°07' ± 45'** *(-1.12° ± 0.75°)* **45'** *(0.75°)* **or less**
	B	Europe Only 215/70R16	**11°16' ± 45'** *(11.27° ± 0.75°)* / -
		225/65R17 235/55R18	**11°26' ± 45'** *(11.44° ± 0.75°)* / -
	C	Europe Only 215/70R16	**5°41' ± 45'** *(5.68° ± 0.75°)* / -
		225/65R17 235/55R18	**5°47' ± 45'** *(5.78° ± 0.75°)* / -
	D	Europe Only 215/70R16	**38°55' ± 2°** *(38.9° ± 2°)* / -
		225/65R17	**38°44' ± 2°** *(38.7° ± 2°)* / -
		235/55R18	**35°50' ± 2°** *(35.8° ± 2°)* / -
	**E+F**		**0°05' ± 10'** *(0.08° ± 0.17°)* / **0°11' ± 10'** *(0.18° ± 0.17°)*
	G-H **mm** *(in.)*		**1.0 ± 2** *(0.04 ± 0.08)* / **2.3 ± 1** *(0.09 ± 0.04)*
			**ALA**
 **kPa** *(kgf/cm², psi)*			**220** *(2.2, 32)*

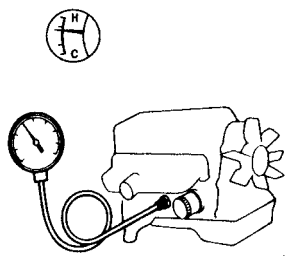
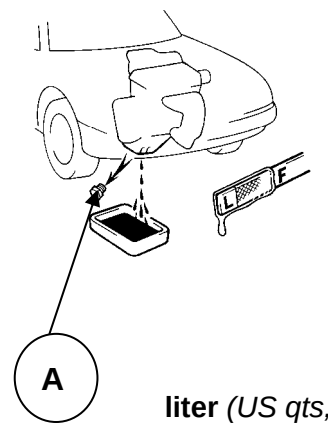
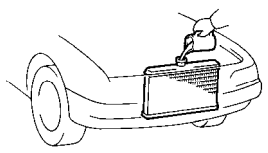
*1 When brake pedal is depressed with the force of 490 N(50 kgf, 110 lbf) while the engine is running. *2 without VSC *3 with VSC

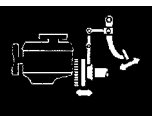
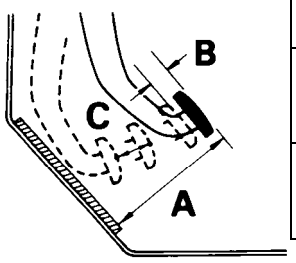
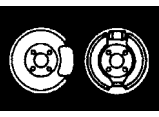
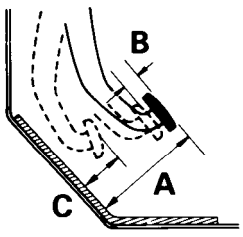
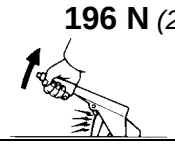
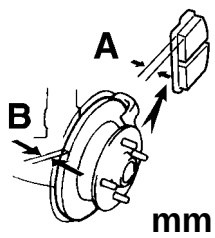
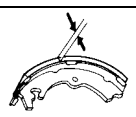
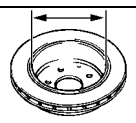
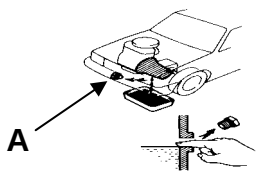
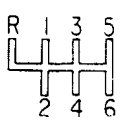
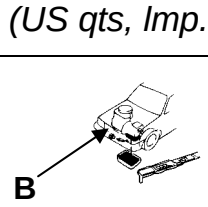
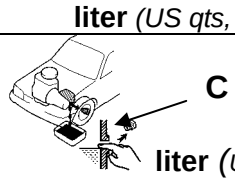
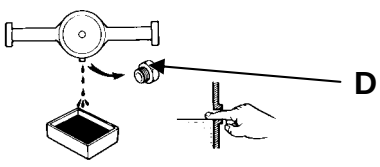
RAV4 Diesel

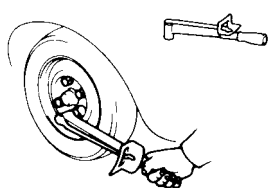
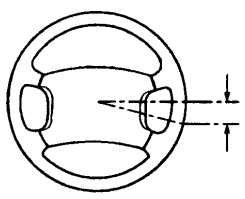
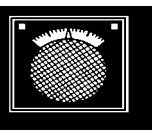
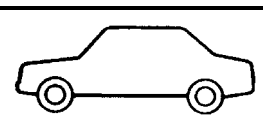
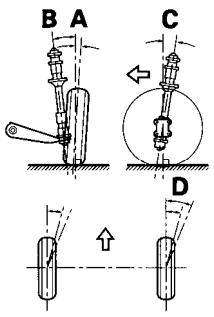
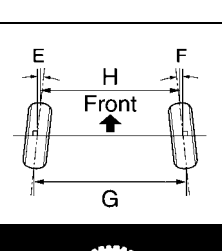
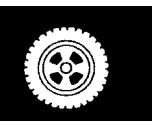
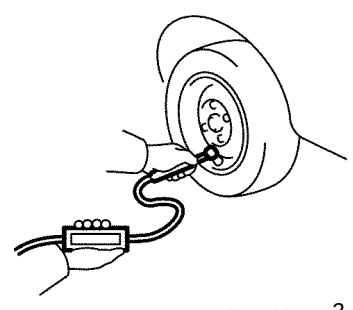
ALA30

2005/11 - 2007/1

		ALA	
 **20°C** *(68°F)*		**1.25 to 1.29**	
		2AD-FTV	**2AD-FHV**
	cm³ or cc *(cu. in.)*	**2231** *(136.1)*	
 **20°C** *(68°F)* **Ohm**		**0.96**	**0.95**
 **secs**	**-20°C** *(-4°F)*:	**10 to 12**	**10 to 12**
	-15°C *(5°F)*:	**6 to 7.2**	**5.0 to 6.0**
	15°C *(59°F)*:	**0.46 to 2.4**	**0.0°C** *(32°F)*: **3.0 to 4.0**
	32°C *(90°F)*:	**0.46**	**35°C** *(95°F)*: **0.4 to 1.0**
 **rpm**		**750 to 850**	
		5100 to 5250	
 **kPa** *(kgf/cm², psi)*		**2700** *(27.5, 391)*	
		⬆ **2200** *(22.5, 320)*	
		⬇ **500** *(5.0, 71)*	

 **kPa** *(kgf/cm², psi)*		⬆ **29** *(0.3, 4.3)*
	4500 rpm	⬆ **245** *(2.5, 36)*
		ALA
 **liter** *(US qts, Imp.qts)*		**5.5** *(5.8, 4.8)*
		5.9 *(6.2, 5.2)*
		G-DLD-1 or API grade CF-4, CF (API CE or API CD may also –use)
N·m *(kgf·cm, ft·lbf)*	**A**	**38** *(387, 28)*
 **liter** *(US qts, Imp.qts)*	Without power heater	**7.3** *(7.7, 6.4)*
	With power heater	**7.7** *(8.1, 6.8)*

			
 mm *(in.)* 	A	**176.5 to 186.5** *(6.949 to 7.343)*	**211.1 to 221.1** *(8.311 to 8.705)*
	B	**1 to 5** *(0.039 to 0.197)*	
	C	**25** *(0.98)*	
		SAE J1703 or FMVSS No. 116 DOT3	
			
 mm *(in.)* 	A	**184.2 to 194.2** *(7.252 to 7.646)*	**168.6 to 178.6** *(6.638 to 7.031)*
	B	**1 to 6** *(0.04 to 0.24)*	
	C*1	*2 **75** *(2.95)* *3 **110** *(4.33)*	*2 **70** *(2.75)* *3 **100** *(3.93)*
		SAE J1703 or FMVSS No. 116 DOT3	
196 N *(20 kgf, 44.1 lbf)* 		**7 to 9**	
 mm *(in.)*			
	A	**1.0** *(0.039)*	
	B	**25.0** *(0.984)*	**10.5** *(0.413)*
 mm *(in.)*		**1.0** *(0.039)*	
 mm *(in.)*		**173.0** *(6.811)*	
		**ALA**	
 **liter** *(US qts, Imp.qts)*		**2.1** *(2.2, 1.8)*	
		API GL-5 SAE 75W	
 **liter** *(US qts, Imp.qts)*		**0.45** *(0.48, 0.40)*	
		GL-5 SAE 80W-90	
 **liter** *(US qts, Imp.qts)*		**0.45** *(0.48, 0.40)*	
		Hypoid gear oil SX API GL-5, SAE 85W-90 or equivalent	
 **liter** *(US qts, Imp.qts)* **N·m** *(kgf·cm, ft·lbf)*		**0.45 to 0.55** *(0.48 to 0.58, 0.40 to 0.48)*	
		Hypoid gear oil SX API GL-5, SAE 85W-90 or equivalent	
	A	**39** *(398, 29)*	
	B		
	C		
	D		

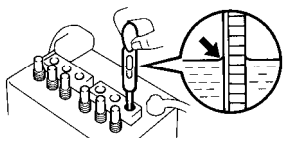
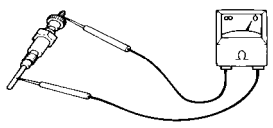
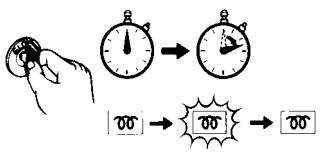
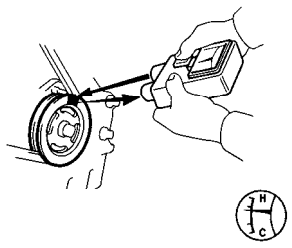
			**ALA**
 **N·m** *(kgf·cm, ft·lbf)*			**103** *(1050, 76)*
			**ALA**
 **mm** *(in.)*			**30** *(1.18)*
			
	A	Europe Only 215/70R16	**-0°08' ± 45'** *(-0.13° ± 0.75°)* **45'** *(0.75°)* **or less** / **-0°58' ± 45'** *(-0.97° ± 0.75°)* **45'** *(0.75°)* **or less**
		225/65R17 235/55R18	**-0°11' ± 45'** *(-0.18 ± 0.75°)* / **-1°07' ± 45'** *(-1.12° ± 0.75°)* **45'** *(0.75°)* **or less**
	B	Europe Only 215/70R16	**11°16' ± 45'** *(11.27° ± 0.75°)* / -
		225/65R17 235/55R18	**11°26' ± 45'** *(11.44° ± 0.75°)* / -
	C	Europe Only 215/70R16	**5°41' ± 45'** *(5.68° ± 0.75°)* / -
		225/65R17 235/55R18	**5°47' ± 45'** *(5.78° ± 0.75°)* / -
	D	Europe Only 215/70R16	**38°55' ± 2°** *(38.9° ± 2°)* / -
		225/65R17	**38°44' ± 2°** *(38.7° ± 2°)* / -
		235/55R18	**35°50' ± 2°** *(35.8° ± 2°)* / -
	E+F		**0°05' ± 10'** *(0.08° ± 0.17°)* / **0°11' ± 10'** *(0.18° ± 0.17°)*
	G-H mm *(in.)*		**1.0 ± 2** *(0.04 ± 0.08)* / **2.3 ± 1** *(0.09 ± 0.04)*
			**ALA**
 **kPa** *(kgf/cm², psi)*			**220** *(2.2, 32)*

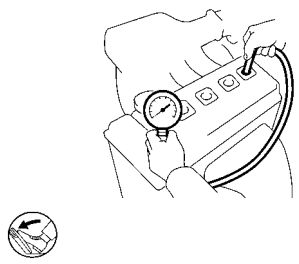
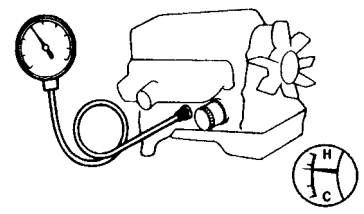
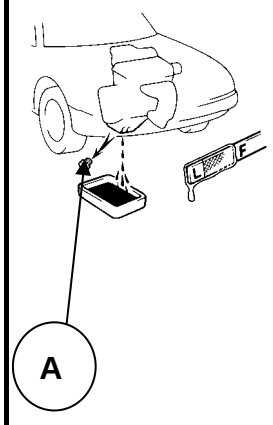
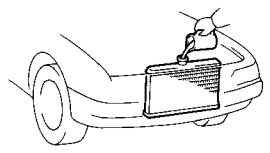
*1 When brake pedal is depressed with the force of 490 N (50 kgf, 110 lbf) while the engine is running. *2 without VSC *3 with VSC

RAV4 Diesel

ALA30

2007/1 – 2007/8

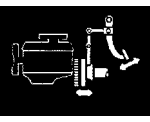
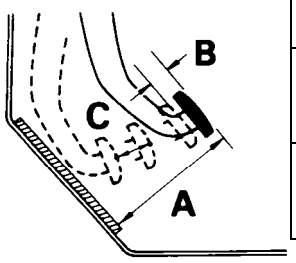
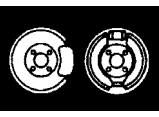
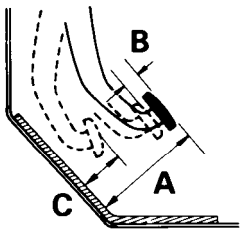
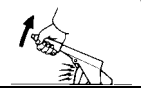
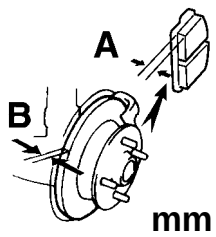
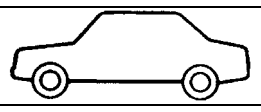
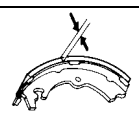
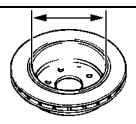
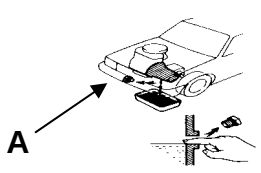
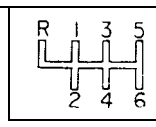
		ALA	
	**20°C** *(68°F)*	**1.25 to 1.29**	
		2AD-FTV	**2AD-FHV**
	cm³ or cc *(cu. in.)*	**2231** *(136.1)*	
	**20°C** *(68°F)* **ohm**	*1 **0.95** *2 **0.96**	**0.95**
 **secs**	**-20°C** *(-4°F)*	*1*2 **10 to 12**	**10 to 12**
	-15°C *(5°F)*	*1 **5.0 to 6.0** *2 **6.0 to 7.2**	**5.0 to 6.0**
	0°C *(32°F)*	*1 **3.0 to 4.0** *2 **0.46 to 2.4**	**3.0 to 4.0**
	35°C *(95°F)*	*1 **0.45 to 1.0** *2 **0.46**	**0.4 to 1.0**
 **rpm**		**750 to 850**	
		5100 to 5250	

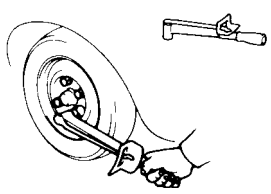
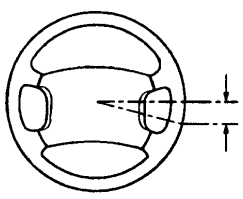
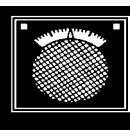
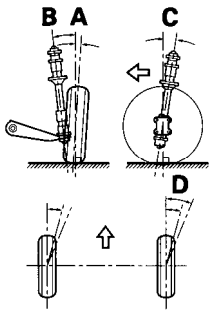
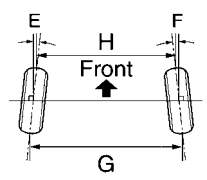
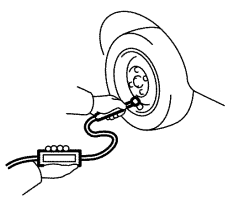
 **kPa** *(kgf/cm², psi)*		**2700** *(27.5, 391)*
		2200 *(22.5, 320)*
		500 *(5.0, 71)*
 **kPa** *(kgf/cm², psi)*		**29** *(0.3, 4.3)*
	4500 rpm	**245** *(2.5, 36)*
		ALA
 **liter** *(US qts, Imp.qts)*		**5.5** *(5.8, 4.2)*
		5.9 *(6.2, 5.2)*
		G-DLD-1 or API grade CF-4, CF (API CE or API CD may also –use)
N·m *(kgf·cm, ft·lbf)*	**A**	**38** *(387, 28)*
 **liter** *(US qts, Imp.qts)*	Without power heater	**7.3** *(7.7, 6.4)*
	With power heater	**7.7** *(8.1, 6.8)*

*1 for DPF *2 for CCO

SDS TOYOTA RAV4 Diesel

ALA30 2007/8-

			
 mm *(in.)* 	A	**176.5 to 186.5** *(6.949 to 7.343)*	**211.1 to 221.1** *(8.311 to 8.705)*
	B	**1 to 5** *(0.039 to 0.197)*	
	C	**25** *(0.98)*	
		SAE J1703 or FMVSS No. 116 DOT3	
			
 mm *(in.)* 	A	**184.2 to 194.2** *(7.252 to 7.646)*	**168.6 to 178.6** *(6.638 to 7.031)*
	B	**1 to 6** *(0.04 to 0.24)*	
	C*1	*2 **75** *(2.95)* *3 **110** *(4.33)*	*2 **70** *(2.75)* *3 **100** *(3.93)*
		SAE J1703 or FMVSS No. 116 DOT3	
196 N *(20 kgf, 44.1 lbf)* 		**6 to 8**	
 mm *(in.)*			
	A	**1.0** *(0.039)*	
	B	**25.0** *(0.984)*	**10.5** *(0.413)*
 mm *(in.)*		**1.0** *(0.039)*	
 mm *(in.)*		**173.0** *(6.811)*	
		**ALA**	
 		**2.1** *(2.2, 1.8)*	
liter *(US qts, Imp.qts)*		**API GL-5 SAE 75W**	
liter *(US qts, Imp.qts)*		**0.45** *(0.48, 0.40)*	**GL-5 SAE 80W-90**
liter *(US qts, Imp.qts)*		**0.45** *(0.48, 0.40)*	**Hypoid gear oil SX API GL-5, SAE 85W-90 or equivalent**
liter *(US qts, Imp.qts)* **N·m** *(kgf·cm, ft·lbf)*		**0.45 to 0.55** *(0.48 to 0.58, 0.40 to 0.48)*	**Hypoid gear oil SX API GL-5, SAE 85W-90 or equivalent**
	A	**39** *(398, 29)*	
	B		
	C		
	D		

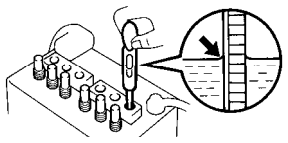
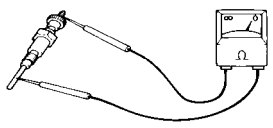
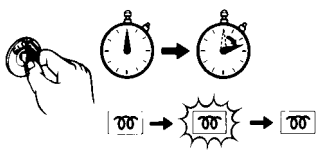
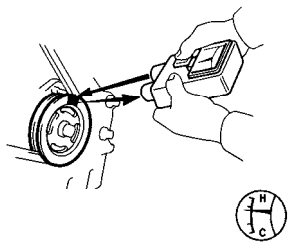
			**ALA**
 **N·m** *(kgf·cm, ft·lbf)*			**103** *(1050, 76)*
			**ALA**
 **mm** *(in.)*			**30** *(1.18)*
			
	A	Europe Only 215/70R16	**-0°08' ± 45'** *(-0.13° ± 0.75°)* **45'** *(0.75°)* **or less** / **-0°58' ± 45'** *(-0.97° ± 0.75°)* **45'** *(0.75°)* **or less**
		225/65R17 235/55R18	**-0°11' ± 45'** *(-0.18 ± 0.75°)* / **-1°07' ± 45'** *(-1.12° ± 0.75°)* **45'** *(0.75°)* **or less**
	B	Europe Only 215/70R16	**11°16' ± 45'** *(11.27° ± 0.75°)* / -
		225/65R17 235/55R18	**11°26' ± 45'** *(11.44° ± 0.75°)* / -
	C	Europe Only 215/70R16	**5°41' ± 45'** *(5.68° ± 0.75°)* / -
		225/65R17 235/55R18	**5°47' ± 45'** *(5.78° ± 0.75°)* / -
	D	Europe Only 215/70R16	**38°55' ± 2°** *(38.9° ± 2°)* / -
		225/65R17	**38°44' ± 2°** *(38.7° ± 2°)* / -
		235/55R18	**35°50' ± 2°** *(35.8° ± 2°)* / -
	**E+F**		**0°05' ± 10'** *(0.08° ± 0.17°)* / **0°11' ± 10'** *(0.18° ± 0.17°)*
	G-H **mm** *(in.)*		**1.0 ± 2** *(0.04 ± 0.08)* / **2.3 ± 1** *(0.09 ± 0.04)*
			**ALA**
 **kPa** *(kgf/cm², psi)*			**220** *(2.2, 32)*

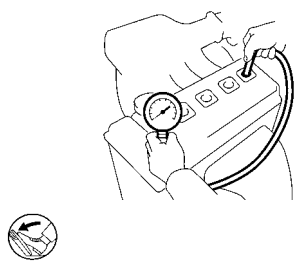
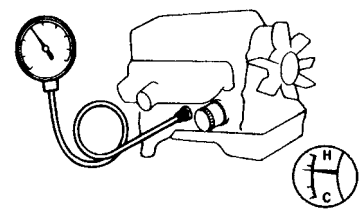
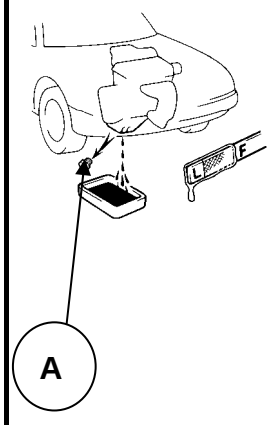
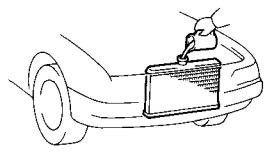
*1 When brake pedal is depressed with the force of 490 N (50 kgf, 110 lbf) while the engine is running. *2 without VSC *3 with VSC

RAV4 Diesel

ALA30

2007/8-

		ALA	
	**20°C** *(68°F)*	**1.25 to 1.29**	
		2AD-FTV	**2AD-FHV**
	cm³ or cc *(cu. in.)*	**2231** *(136.1)*	
	**20°C** *(68°F)* **ohm**	*1 **0.95** *2 **0.96**	**0.95**
 **secs**	**-20°C** *(-4°F)*	*1*2 **10 to 12**	**10 to 12**
	-15°C *(5°F)*	*1 **5.0 to 6.0** *2 **6.0 to 7.2**	**5.0 to 6.0**
	0°C *(32°F)*	*1 **3.0 to 4.0** *2 **0.46 to 2.4**	**3.0 to 4.0**
	35°C *(95°F)*	*1 **0.45 to 1.0** *2 **0.46**	**0.4 to 1.0**
 **rpm**		**750 to 850**	
		5100 to 5250	

 **kPa** *(kgf/cm², psi)*		**2700** *(27.5, 391)*
		2200 *(22.5, 320)*
		500 *(5.0, 71)*
 **kPa** *(kgf/cm², psi)*		**29** *(0.3, 4.3)*
	4500 rpm	**245** *(2.5, 36)*
		ALA
 **liter** *(US qts, Imp.qts)*		**5.5** *(5.8, 4.2)*
		5.9 *(6.2, 5.2)*
		G-DLD-1 or API grade CF-4, CF (API CE or API CD may also –use)
N·m *(kgf·cm, ft·lbf)*	**A**	**38** *(387, 28)*
 **liter** *(US qts, Imp.qts)*	Without power heater	**7.3** *(7.7, 6.4)*
	With power heater	**7.7** *(8.1, 6.8)*

*1 for DPF *2 for CCO