

mm *(in.)*



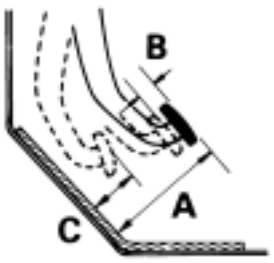
A	*1 **135.5 to 145.5** *(5.335 to 5.728)* *2 **143.6 to 153.6** *(5.654 to 6.047)*	*1 **153.4 to 163.4** *(6.039 to 6.433)* *2,*3 **162.3 to 172.3** *(6.390 to 6.784)*
B	**5 to 15** *(0.197 to 0.591)*	
C	**25** *(0.98)*	

SAE J1703 or FMVSS No. 116 DOT3









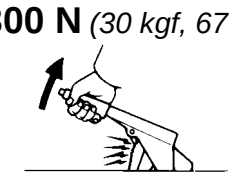
mm *(in.)*



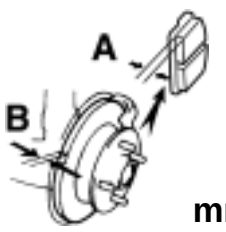
A	**145.8 to 155.8** *(5.740 to 6.134)*	*4 **128.1 to 138.1** *(5.043 to 5.437)* *5,*6 **127.2 to 137.2** *(5.008 to 5.402)*
B	**1 to 6** *(0.039 to 0.236)*	
C	*7 **85** *(3.35)* *8 **90** *(3.54)* *10 **85** *(3.35)*	*7 **64** *(2.52)* *8 **69** *(2.72)* *10 **65** *(2.56)*

*9 **SAE J1703 or FMVSS No. 116 DOT3**
*10 **SAE J1704 or FMVSS No. 116 DOT4**

300 N *(30 kgf, 67 lbf)*



*11 **9 to 12**
*12 **8 to 11**
*10 **7 to 10**



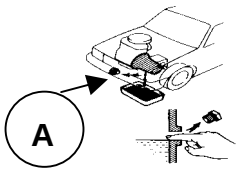
mm *(in.)*

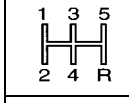


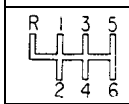
A	**1.0** *(0.039)*	
B	*4 **19.0** *(0.748)* *5 **23.0** *(0.906)*	*4 **7.5** *(0.295)* *5 **8.0** *(0.315)*



ZZE, ZRE



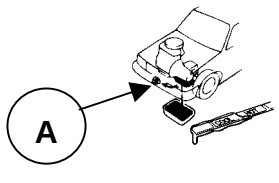




1 3 5 / 2 4 R	**1.9** *(2.0, 1.7)*	**API GL-4** SAE 75W
R 1 3 5 / 2 4 6	**2.3** *(2.4, 2.0)*	

liter *(US qts, Imp.qts)*
N·m *(kgf·cm, ft.·lbf)*

A	**39** *(400, 29)*



6.48 *(6.86, 5.70)*

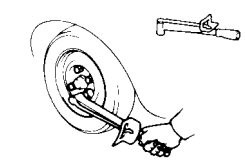
Toyota Genuine ATF WS

liter *(US qts, Imp.qts)*
N·m *(kgf·cm, ft.·lbf)*

A	**49** *(500, 36)*



ZZE, ZRE

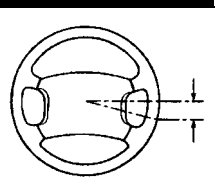


N·m *(kgf·cm, ft.·lbf)*

103 *(1050, 76)*

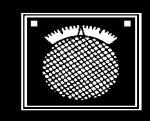


ZZE, ZRE



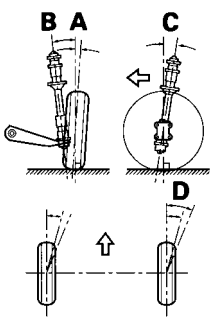
mm *(in.)*

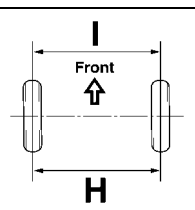
30 *(1.18)*





	Normal package	Rough road package	Normal package	Rough road package
A	**-0°12' +/- 45'** *(-0.20° +/- 0.75°)*	*13 **-0°04' +/- 45'** *(-0.07° +/- 0.75°)* *14 **-0°05' +/- 45'** *(-0.08° +/- 0.75°)*	*1,*2 **-1°26' +/- 30'** *(-1.43° +/- 0.5°)* *3 **-1°25' +/- 45'** *(-1.42° +/- 0.75°)*	**-1°23' +/- 30'** *(-1.38° +/- 0.5°)*
B	**12°10'** *(12.17°)*	**11°43'** *(11.72°)*	-	-
C	*1,*2 **5°50' +/- 45'** *(5.83° +/- 0.75°)* *3 **5°37' +/- 45'** *(5.62° +/- 0.75°)*	**5°32' +/- 45'** *(5.53° +/- 0.75°)*	-	-
D	*13 **39°15' +/- 2°** *(39.25° +/- 2°)* *14 **39°16' +/- 2°** *(39.27° +/- 2°)*	*13 **39°43' +/- 2°** *(39.72° +/- 2°)* *14 **39°44' +/- 2°** *(39.73° +/- 2°)*	-	-

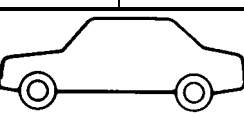


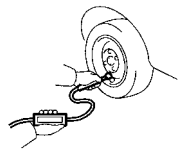


H-I **mm** (in.)	**2 +/- 2** *(0.08 +/- 0.08)*		*1,*2 **2.4 +/- 3** *(0.09 +/- 0.11)* *3 **1.7 +/- 3** *(0.07 +/- 0.11)*	**1.1 +/- 3** *(0.04 +/- 0.11)*



km/h (m*ph*)





kPa *(kgf/cm²* *or bar, psi)*

195/65R15 91H	160 *(100)*	**250** *(2.5, 36)*
195/65R15 91H	160 *(100)*	**220** *(2.2, 32)*
205/55R16 91V	160 *(100)*	**250** *(2.5, 36)*
205/55R16 91V	160 *(100)*	**220** *(2.2, 32)*

*1 : 4ZZ-FE *2 : 1ZR-FE *3 : 2ZR-FE *4 : for MT *5 : for AT *6 : for MMT *7 : for TMC made without VSC *8 : for TMC made with VSC
*9 : for TMC made *10 : for TMUK, TMMT made *11 : for TMC made Sedan *12 : for TMC made Hatchback *13 : Tire size: 195/65R15 14 : Tire size: 205/55R16

COROLLA / AURIS

ZZE150
ZRE151,152

TOYOTA QUALITY SERVICE

		ZZE, ZRE		
20°C *(68°F)*		**1.25 to 1.29**		
		4ZZ-FE	**1ZR-FE**	**2ZR-FE**
	cm³ or cc *(cu. in.)*	**1398** *(85.3)*	**1598** *(97.5)*	**1797** *(109.7)*
*	**mm** *(in.)* **N** *(kgf)*	-	**8.0 to 10.0** *(0.32 to 0.39)* ***402 to 598** *(41 to 61)*	
A	**BOSCH**	**FR8KCU**	-	
A	**mm** *(in.)*	**0.9 to 1.0** *(0.035 to 0.039)*	-	
A	**DENSO**	**K16R-U11**	**SC20HR11**	
A	**mm** *(in.)*	**1.0 to 1.1** *(0.039 to 0.043)*		
	BTDC	**8 to 12°** (DLC3 Terminals 13 (TC) and 4 (CG) Connected)		
		0.15 to 0.25 *(0.0059 to 0.0098)*	-	
	mm *(in.)*	**0.25 to 0.35** *(0.0098 to 0.0138)*	-	

	rpm	**600 to 700**	
		1300 *(13.3, 189)*	**1373** *(14.0, 199)*
		⬆ **1000** *(10.2, 145)*	⬆ **1079** *(11, 157)*
	kPa *(kgf/cm², psi)*	⬇ **100** *(1.0, 14)*	⬇ **98** *(1.0, 14)*
		⬆ **29** *(0.3, 4.3)*	⬆ **25** *(0.3, 3.6)*
	kPa *(kgf/cm², psi)*	**3000 rpm** ⬆ **294 to 539** *(3.0 to 5.5, 43 to 78)*	⬆ **150 to 550** *(1.5 to 5.6, 22 to 80)*

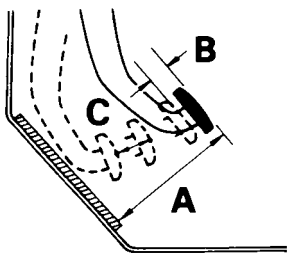
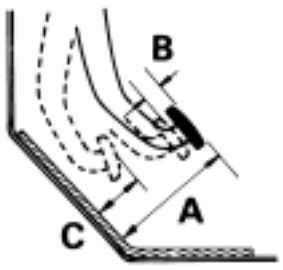
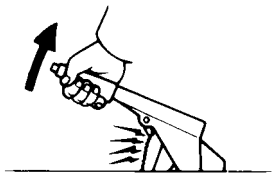
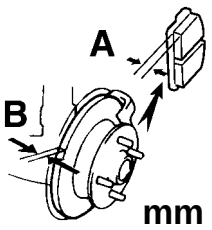
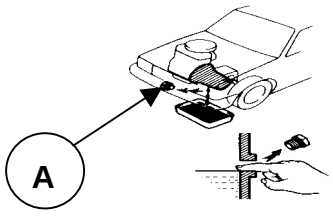
		4ZZ-FE	**1ZR-FE** **2ZR-FE**
		3.5 *(3.7, 3.1)*	**3.9** *(4.1, 3.4)*
		3.7 *(3.9, 3.3)*	**4.2** *(4.4, 3.7)*
A	**liter** *(US qts, Imp.qts)*	**5W-30 and 10W-30 (5W-30 is best): ILSAC*1 multigrade engine oil**	**20W-50 and 15W-40: API grade SL or SM multigrade engine oil 0W-20, 5W-20, 10W-30 and 5W-30: API grade SL Energy-conserving, SM Energy-conserving or ILSAC*1 multigrade engine oil.**
A	**N·m** *(kgf·cm, ft.·lbf)*	**37** *(377, 27)*	
	liter *(US qts, Imp.qts)*	**6.0** *(6.3, 5.3)*	**5.6** *(5.9, 4.9)* ***2 5.6** *(5.9, 4.9)* ***3 5.5** *(5.8, 4.8)*

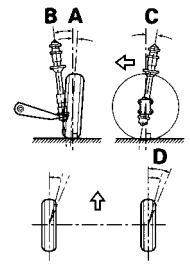
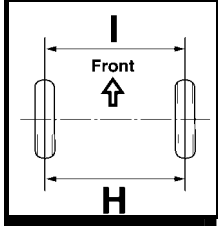
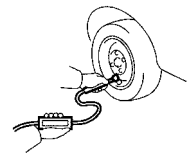
*1 ILASAC :International Lubricant Standardization and Approval Committee *2 : for MT *3 : for AT

TOYOTA MOTOR CORPORATION Technical Service Division

SDS TOYOTA COROLLA / AURIS Diesel

NDE150
ADE150,157 **Oct.'06**

 mm *(in.)* 	A	**151.8 to 161.8** *(5.976 to 6.370)*	**171.5 to 181.5** *(6.752 to 7.146)*
	B	**5 to 15** *(0.197 to 0.591)*	
	C	⇧ **25** *(0.98)*	
		SAE J1703, FMVSS No. 116 DOT3 or SAE J1704, FMVSS No. 116 DOT4	
 mm *(in.)* 	A	**145.8 to 155.8** *(5.740 to 6.134)*	*1 **128.1 to 138.1** *(5.043 to 5.437)* *2 **127.2 to 137.2** *(5.008 to 5.402)*
	B	**1 to 6** *(0.04 to 0.24)*	
	C	⇧ **85** *(3.35)*	⇧ **65** *(2.56)*
		SAE J1703, FMVSS No. 116 DOT3 or SAE J1704, FMVSS No. 116 DOT4	
300 N *(30 kgf, 67 lbf)* 		*3 **9 to 12** *4 **8 to 11** *5 **7 to 10**	
 mm *(in.)*	A	⇧ **1.0** *(0.039)*	
	B	⇧ **23.0** *(0.906)*	⇧ **8.0** *(0.315)*
		1 3 5 / 2 4 R	R 1 3 5 / 2 4 6
 liter *(US qts, Imp.qts)*		**1.9** *(2.0, 1.7)*	**2.3** *(2.4, 2.0)*
		API GL-4 SAE 75W	
N·m *(kgf·cm, ft.·lbf)*	A	**39** *(400, 29)*	

		NDE, ADE		
N·m *(kgf·cm, ft.·lbf)*		**103** *(1050, 76)*		
		NDE, ADE		
mm *(in.)*		⇩ **30** *(1.18)*		
		Normal package	Rough road package	Normal package	Rough road package
	A	*6 **-0°12'+/- 45'** *(-0.20°+/- 0.75°)* *7 **-0°13' +/- 45'** *(-0.22°+/- 0.75°)* *8 **-0°14' +/- 45'** *(-0.23°+/- 0.75°)	*12 **-0°04' +/- 45'** *(-0.07°+/- 0.75°)* *13 **-0°05' +/- 45'** *(-0.08°+/- 0.75°)	*14 **-1°26' +/- 30'** *(-1.43°+/- 0. 5°)* *15 **-1°06' +/- 45'** *(-1.10°+/- 0.75°)	**-1°23' +/- 30'** *(-1.38°+/- 0. 5°)*
	B	*6 **12°10'** *(12.17)* *7 **12°11'** *(12.18)* *8 **12°22'** *(12.37)*	*6 **11°43'** *(11.72)* *7 **11°45'** *(11.75)*	-	-
	C	*6 **5°50' +/- 45'** *(5.83°+/- 0.75°)* *7 **5°47' +/- 45'** *(5.78°+/- 0.75°)* *8 **5°47' +/- 45'** *(5.78°+/- 0.75°)	*6 **5°32' +/- 45'** *(5.53°+/- 0.75°)* *7 **5°28' +/- 45'** *(5.47°+/- 0.75°)	-	-
	D	*10 **39°15' +/- 2°** *(39.25°+/- 2°)* *11 **39°16' +/- 2°** *(39.27°+/- 2°)* *7 **39°15' +/- 2°** *(39.25°+/- 2°)* *8 **37°16' +/- 2°** *(37.27°+/- 2°)	*10 **39°43' +/- 2°** *(39.72°+/- 2°)* *11 **39°44' +/- 2°** *(39.73°+/- 2°)* *7 **39°43' +/- 2°** *(39.72°+/- 2°)	-	-
	H-I mm *(in.)*	**2 +/- 2** *(0.08°+/- 0.08°)*		*14 **2.4 +/- 3** *(-0.09 +/- 0.11)* *15 **2 +/- 2** *(-0.08 +/- 0.08)	**1.1 +/- 3** *(0.04 +/- 0.11)*
 kPa *(kgf/cm²* or bar, psi)	km/h *(mph)*				
195/65R15 91H	⇧160 *(100)*	**250** *(2.5, 36)*			
	⇩160 *(100)*	**220** *(2.2, 32)*			
205/55R16 91V	⇧160 *(100)*	*6 **250***(2.5, 36)* *7 **270***(2.7, 40)* *8 **290***(2.9, 43)*		*6,*7 **250***(2.5, 36)* *8 **260***(2.6, 38)*	
	⇩160 *(100)*	*6 **220***(2.2, 32)* *7 **240***(2.4, 35)* *8 **250***(2.5, 36)*		**220** *(2.2, 32)*	
225/45R17 91W	⇧160 *(100)*	**290** *(2.9, 43)*		**260** *(2.6, 38)*	
	⇩160 *(100)*	**250** *(2.5, 36)*		**220** *(2.2, 32)*	

*1 : for MT *2 : for MMT *3 : for TMC made Sedan *4 : for TMC made Hatchback *5 : for TMUK, TMMT made *6 : 1ND-TV *7 : 1AD-FTV *8 : 2AD-FHV
*10 : 1ND-TV Tire size: 195/65R15 *11 : 1ND-TV Tire size: 205/55R16 *12 : Tire size: 195/65R15 *13 : Tire size: 205/55R16
*14 : for Torsion Beam Type Suspension *15 : for Double Wishbone Type Suspension

COROLLA / AURIS

Diesel

NDE150
ADE150,157

TOYOTA QUALITY SERVICE

	NDE, ADE		
20°C *(68°F)*	**1.25 to 1.29**		
	1ND-TV	**1AD-FTV**	**2AD-FHV**
cm³ or cc *(cu. in.)*	**1364** *(83.2)*	**1998** *(121.9)*	**2231** *(136.1)*
mm *(in.)* **N** *(kgf)*	**7.0 to 8.5** *(0.276 to 0.335)* ***490 to 686** *(50 to 70)*	-	
20°C *(68°F)* **ohm**	**0.55 to 0.68**	*1 **0.95** *2 **0.96**	**0.95**
secs	**0.5** *(20°C (68°F))*	*1 **0.45 to 1.0** *(35°C (95°F))* *2 **0.46** *(32°C (89.6°F))*	**0.45 to 1.0** *(35°C (95°F))*
mm *(in.)*	**0.11 to 0.17** *(0.004 to 0.007)*	-	
	0.14 to 0.20 *(0.006 to 0.008)*	-	
rpm	**720 to 820**	**750 to 850**	
	5100 to 5250		

kPa *(kgf/cm², psi)*		**2700** *(27.5, 391)*	**2500** *(25.5, 362)*	**2700** *(27.5, 391)*
		2200 *(22.5, 320)*		
		500 *(5.0, 71)*		
kPa *(kgf/cm², psi)*		**29** *(0.3, 4.3)*		
		3000 rpm	**4500 rpm**	
		150 to 550 *(1.5 to 5.6, 22 to 80)*	**245** *(2.5, 36)*	
		1ND-TV	**1AD-FTV**	**2AD-FHV**
liter *(US qts, lmp.qts)*		**3.8** *(4.0, 3.3)*	**5.9** *(6.2, 5.2)*	**5.5** *(5.8, 4.8)*
		4.3 *(4.5, 3.8)*	**6.3** *(6.7, 5.5)*	**5.9** *(6.2, 5.2)*
		5W-30, 10W-30, 15W-40 and 20W-50: ACEA B1, API CF-4 or API CF (API CE or CD may also be used)	**5W-30: ACEA C2 (ACEA B1 may also be used)**	**5W-30: ACEA B1**
N·m *(kgf·cm, ft.·lbf)*	A	**38** *(387, 28)*		
liter *(US qts, lmp.qts)*	w/o power heater	**5.4** *(5.7, 4.8)*	**7.4** *(7.8, 6.5)*	
	w/ power heater	**5.8** *(6.1, 5.1)*	**7.8** *(8.2, 6.8)*	

*1: for DPF *2: for CCo

TOYOTA MOTOR CORPORATION Technical Service Division