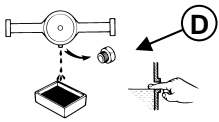




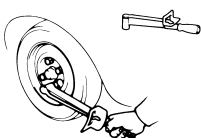

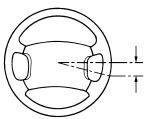


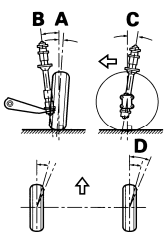
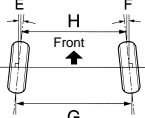

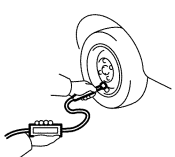


|   |     |   |                 |   |   |                                  |                 |  |
|---|-----|---|-----------------|---|---|----------------------------------|-----------------|--|
|   |     |   |                 |   |   |                                  |                 |  |
|   | A   | 162.9 to 172.9<br>(6.41 to 6.81)*2, *5  |                 | 195.5 to 205.5<br>(7.70 to 8.09)*2, *5  |   |                                  |                 |  |
|   |     | 175.7 to 185.7<br>(6.92 to 7.31)*3  |                 | 210.2 to 220.2<br>(8.28 to 8.67)*3  |   |                                  |                 |  |
|   | B   | 5 to 15 (0.197 to 0.591)  |                 |   |   |                                  |                 |  |
|   | C   | 📏 25 (0.984)  |                 |   |   |                                  |                 |  |
| mm (in.)<br>                                      |     | SAE J1703 or FMVSS No. 116 DOT 3  |                 |   |   |                                  |                 |  |
|   |     |   |                 |   |   |                                  |                 |  |
|   | A   | 184.2 to 194.2<br>(7.252 to 7.646)  |                 | 168.6 to 178.6<br>(6.638 to 7.031)  |   |                                  |                 |  |
|   |     | B   |                 | 1 to 6 (0.039 to 0.236)   |   |                                  |                 |  |
|   | C*1 | 📏 75 (2.95)*5, *6<br>📏 90 (3.54)*2, *6<br>📏 95 (3.74)*3, *6<br>📏 110 (4.33)*5, *7<br>📏 115 (4.53)*2, *7<br>📏 120 (4.72)*3, *7 |                 | 📏 70 (2.76)*5, *6<br>📏 80 (3.15)*2, *6<br>📏 85 (3.34)*3, *6<br>📏 100 (3.94)*5, *7<br>📏 105 (4.13)*2, *7<br>📏 110 (4.32)*3, *4, *7 |   |                                  |                 |  |
|   |     | mm (in.)<br>  |                 |   |   | SAE J1703 or FMVSS No. 116 DOT 3 |                 |  |
|   |     | 6 to 8  |                 |   |   |                                  |                 |  |
| 196 N (20 kgf, 44.1 lbf)                          |     |   |                 |   |   |                                  |                 |  |
|   | A   |   |                 |   |   |                                  |                 |  |
|   |     | B   |                 | 📏 1.0 (0.039)   |   |                                  |                 |  |
| mm (in.)  |     | 📏 22.0 (0.866)*8<br>📏 25.0 (0.984)*9  |                 | 📏 10.5 (0.413)  |   |                                  |                 |  |
|   |     | mm (in.)<br>📏 1.0 (0.039)   |                 |   |   |                                  |                 |  |
|   |     | mm (in.)<br>📏 173.0 (6.81)  |                 |   |   |                                  |                 |  |
|   |     | ACA   |                 | GSA   |   | ZSA                              |                 |  |
|   |     | 2.5<br>(2.6, 2.2)   |                 | -   |   | 2.4<br>(2.5, 2.1)                |                 |  |
|   |     | API GL-4<br>SAE 75W   |                 |   |   |                                  |                 |  |
| Liter (US qts, Imp. qts)<br>N*m (kgf*cm, ft.*lbf) |     | A   | 49<br>(500, 36) |   | - |                                  | 39<br>(400, 29) |  |
|   |     | *10   |                 | *11   |   |                                  |                 |  |
|   |     | AT: Toyota Genuine ATF WS<br>CVT: Toyota Genuine CVT Fluid TC   |                 |   |   |                                  |                 |  |
| Liter (US qts, Imp. qts)<br>N*m (kgf*cm, ft.*lbf) |     | B   | 47 (479, 35)    |   |   | 40 (408, 30)                     |                 |  |
|   |     | 0.45 (0.48, 0.40)   |                 |   |   |                                  |                 |  |
|   |     | API GL-5 SAE 85W-90   |                 |   |   |                                  |                 |  |
| Liter (US qts, Imp. qts)<br>N*m (kgf*cm, ft.*lbf) |     | C   | 39 (398, 28)    |   |   |                                  |                 |  |


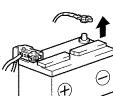
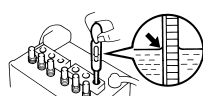
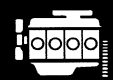
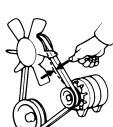

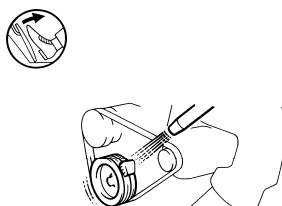
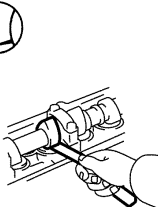


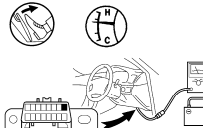


|   |   |   |  |   |                                  |
|---|---|---|--|---|----------------------------------|
|    |   |    |  |   |                                  |
| Liter (US qts, Imp. qts)  |    | -   | 0.45 to 0.55<br>(0.48 to 0.58, 0.40 to 0.48)                               |   |                                  |
|   |   | -   | Hypoid gear oil SX<br>API GL-5 SAE 85W-90                                  |   |                                  |
|   |   | -   | 39 (398, 29)   |   |                                  |
| N*m (kgf*cm, ft. *lbf)  |    |   |  |   |                                  |
|    |   | ACA, GSA, ZSA   |  |   |                                  |
|    |   | 103 (1050, 76)  |  |   |                                  |
| N*m (kgf*cm, ft. *lbf)  |   |   |  |   |                                  |
|    |   | ACA, GSA, ZSA   |  |   |                                  |
|  |   |  |  |   |                                  |
| mm (in.)  |   |   |  |   |                                  |
|  |   |   |  |   |                                  |
|  | A   | 215/70R16<br>*12  | -0°08' +/-45'<br>(-0.13° +/-0.75°)   | -0°58' +/-45'<br>(-0.97° +/-0.75°)<br>45' (0.75°) or less |                                  |
|   |   | 225/65R17<br>235/55R18  | -0°11' +/-45'<br>(-0.18 +/-0.75°)  | -1°07' +/-45'<br>(-1.12° +/-0.75°)<br>45' (0.75°) or less |                                  |
|   |   | Australia   | -0°07' +/-45'<br>(-0.12° +/-0.75°)   | -0°52' +/-45'<br>(-0.87° +/-0.75°)<br>45' (0.75°) or less |                                  |
|   | B   | 215/70R16<br>*12  | 11°16' +/-45'<br>(11.27° +/-0.75°)   | -   |                                  |
|   |   | 225/65R17<br>235/55R18  | 11°26' +/-45'<br>(11.44° +/-0.75°)   |   |                                  |
|   |   | Australia   | 11°14' +/-45'<br>(11.23° +/-0.75°)   |   |                                  |
|   | C   | 215/70R16<br>*12  | 5°46' +/-45'<br>(5.77° +/-0.75°)   |   |                                  |
|   |   | 225/65R17<br>235/55R18  | 5°51' +/-45'<br>(5.85° +/-0.75°)*12<br>5°50' +/-45'<br>(5.83° +/-0.75°)*13 |   |                                  |
|   |   | Australia   | 5°42' +/-45'<br>(5.70° +/-0.75°)   |   |                                  |
|   | D   | 215/70R16<br>*12  | 38°55' +/-2°<br>(38.9° +/-2°)  |   |                                  |
|   |   | 225/65R17   | 38°44' +/-2°<br>(38.7° +/-2°)  |   |                                  |
|   |   | 235/55R18   | 35°50' +/-2°<br>(35.8° +/-2°)  |   |                                  |
|   |   | Australia   | 38°58' +/-2°<br>(39.0° +/-2°)  |   |                                  |
|   |  | E+F   |  | 0°05' +/-10'<br>(0.08° +/-0.16°)                          | 0°11' +/-10'<br>(0.18° +/-0.17°) |
|   |   | G-H<br>mm (in.)   |  | 1.0 +/-2<br>(0.04 +/-0.08)                                | 2.3 +/-1<br>(0.09+/-0.04)        |
|   |  |   | ACA, GSA, ZSA  |   |                                  |
|  | 215/70R16 99H<br>225/65R17 101H<br>235/55R18 99H                                      |   | 220 (2.2, 32)  |   |                                  |
|   | for Eco Package<br>225/65R17 101H   |   | 230 (2.3, 33)  |   |                                  |
| kPa (kgf/cm², psi)  |   |   |  |   |                                  |







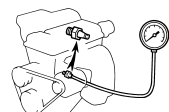




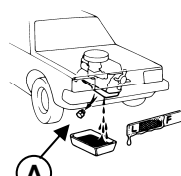


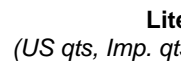
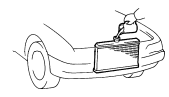


\*1: When the brake pedal is depressed with the force of 490 N (50 kgf, 110 lbf) while the engine is running. \*2: 1AZ-FE \*3: 2AZ-FE \*4: 2GR-FE  
\*5: 3ZR-FAE \*6: without VSC \*7: with VSC \*8: 10.83 inch disc \*9: 11.70 inch disc  
\*10: Please refer to Repair Manual (Preparation / Automatic Transaxle)  
\*11: Please refer to Repair Manual (CVT / Continuously Variable Transaxle Fluid) \*12: Europe Only \*13: Other

TOYOTA RAV4

ACA30, 33, 38  
GSA33, ZSA30, 35

2008/12 -

|  |   |   |                                 |              |  |
|--|---|---|---------------------------------|--------------|--|
|                               |   | ACA, GSA, ZSA   |                                 |              |  |
|                               |   | -   |                                 |              |  |
| <br>20°C (68°F)               |   | 1.25 to 1.29  |                                 |              |  |
|                               |   | 1AZ-FE  | 2AZ-FE                          | 2GR-FE       | 3ZR-FAE  |
|  | CC (cu. in.)  | 1998 (121.9)  | 2362 (144.1)                    | 3456 (210.9) | 1986 (121.2)   |
| <br>mm (in.)    N (kgf, lbf) | New Belt  | -   |                                 |              | 7.0 to 8.2 (0.276 to 0.323)<br>700 to 800 (70 to 80, 157.4 to 179.8)*  |
|  | Used Belt   |   |                                 |              | 7.6 to 10.0 (0.299 to 0.394)<br>550 to 750 (55 to 75, 123.6 to 168.6)* |
| <br>A                       | DENSO   | SK20R11   | FK20HR 11                       | SC20H R11    |  |
|  | NGK   | IFR6A11   | -                               |              |  |
|  | A mm (in.)  | 1.0 to 1.1 (0.0394 to 0.0433)                           |                                 |              |  |
| <br>BTDC                    |   | 8 to 12°<br>[DLC3 terminals 13 (TC) – 4 (CG) connected] |                                 |              |  |
| <br>mm (in.)                |  | 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) |              |  |
| <br>rpm                     |  | 650 to 750  | 600 to 700                      | -            | 580 to 680   |
|  |  | 610 to 710  |                                 | 600 to 700   |  |

|   |  |                                   |                                   |                  |                                   |
|---|--|-----------------------------------|-----------------------------------|------------------|-----------------------------------|
| <br><br><br><br>kPa (kgf/cm <sup>2</sup> , psi) |   | 1300 (13.3, 189)                  |                                   | 1400 (14.0, 199) | 1373 (14.0, 199)                  |
|   |   | 1000 (10.0, 145)                  |                                   | 980 (10.0, 142)  | 1079 (11.0, 156)                  |
|   |   | 100 (1.0, 15)                     |                                   |                  | 98 (1.0, 14.2)                    |
| <br><br><br><br>kPa (kgf/cm <sup>2</sup> , psi) |   | 29 (0.3, 4.3)                     |                                   | 80 (0.8, 11.6)   | 25 (0.3, 3.6)                     |
|   | 3000 rpm<br>   | 245 to 539 (2.5 to 5.5, 36 to 78) | 160 to 539 (1.6 to 5.5, 23 to 78) | -                | 150 to 400 (1.5 to 4.1, 22 to 58) |
|   | 6000 rpm<br>  | -                                 |                                   | 380 (3.9, 55.5)  | -                                 |
|    |  | 1AZ-FE                            | 2AZ-FE                            | 2GR-FE           | 3ZR-FAE                           |
| <br>A  |   | 4.0 (4.2, 3.5)                    | 4.1 (4.3, 3.6)                    | 5.7 (6.0, 5.0)   | 3.9 (4.1, 3.4)                    |
|   |   | 4.2 (4.4, 3.7)                    | 4.3 (4.5, 3.8)                    | 6.1 (6.4, 5.4)   | 4.2 (4.4, 3.7)                    |
| <br>Liter (US qts, Imp. qts)   | 20W-50 and 15W-40: API grade SL or SM multigrade engine oil<br><br>10W-30 and 5W-30: API grade SL “Energy-Conserving”, SM “Energy-Conserving”, or ILSAC*1 multigrade engine oil<br><br>20W-50 and 15W-40: API grade SL or SM multigrade engine oil<br><br>10W-30, 5W-30, 5W-20 and 0W-20: API grade SL “Energy-Conserving”, SM “Energy-Conserving”, or ILSAC*1 multigrade engine oil |                                   |                                   |                  |                                   |
|   | N*m (kgf*cm, ft.*lbf)  | 40 (408, 30)                      |                                   |                  | 37 (377, 27)                      |
| <br><br>Liter (US qts, Imp. qts)   |   | 6.3 (6.7, 5.5)                    | 6.6 (7.0, 5.9)                    | -                | 5.8 (6.1, 5.1)                    |
|   |   | 6.4 (6.8, 5.6)                    | 6.5 (6.9, 5.7)                    | 9.3 (9.8, 8.2)   | 6.0 (6.3, 5.3)                    |

\*1 ILSAC: International Lubricant Standardization and Approval Committee