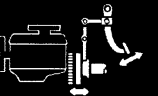


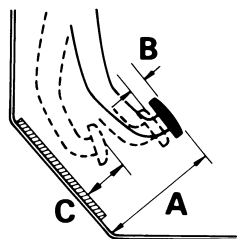

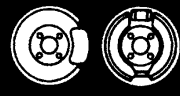

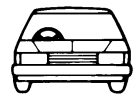
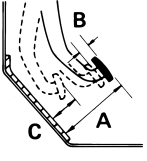


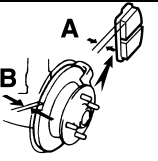
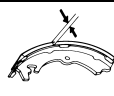
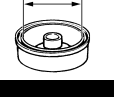

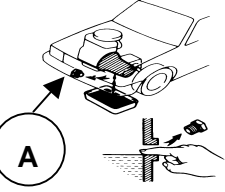
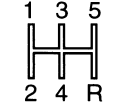
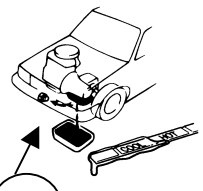
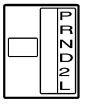



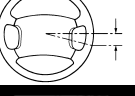
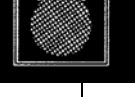
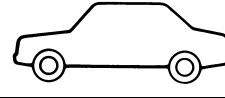
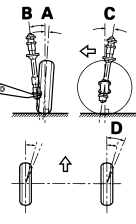
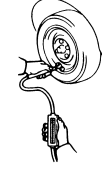


| | | | | |
|---|---|---|---|-------------------|
|  | |  |  | |
|  | A | 118.1 to 128.1 (4.650 to 5.043) | 1KR-FE/2NZ-FE 144.4 to 154.4 (5.685 to 6.079) 1NZ-FE 159.2 to 169.2 (6.268 to 6.661) | |
| | B | Pedal Free Play 5 to 15 (0.197 to 0.591) | | |
| | C | Push Rod Play 1 to 5 (0.039 to 0.197) | | |
| C | | ±25 (0.98) | | |
| mm (in.) |  | SAE J1703 or FMVSS No. 116 DOT3 SAE J1704 or FMVSS No. 116 DOT4 | | |
|  | |  |  | |
|  | A | 107.3 to 117.3 (4.224 to 4.618) | | |
| | B | 1 to 6 (0.039 to 0.236) | | |
| | C | w/o VSC | Rear Drum ±73 (2.87) | ±71 (2.80) |
| | | w/ VSC | Rear Disc ±80 (3.15) | |
| mm (in.) |  | SAE J1703 or FMVSS No. 116 DOT3 SAE J1704 or FMVSS No. 116 DOT4 | | |
|  | 196N (20 kgf, 44 lbf) | Rear Drum | 6 to 9 | |
| | | Rear Disc | 4 to 7 | |
|  | mm (in.) | A | ±1.0 (0.039) | |
| | | B | ±19.0 (0.748) ±7.5 (0.295) | |
|  | mm (in.) | - | ±1.0 (0.039) | |
|  | mm (in.) | - | ±201 (7.913) | |
|  | | KSP | NCP | |
|  |  | 1.75 (1.8, 1.5) | 1.9 (2.0, 1.7) | |
| liter (US qts, Imp. qts) | | API GL-4 SAE 75W | | |
|  |  | - | 1NZ-FE 2.5 (2.6, 2.2) 2NZ-FE 2.0 (2.1, 1.7) | |
| liter (US qts, Imp. qts) | | - | 1NZ-FE "Toyota Genuine ATF TYPE WS " or equivalent 2NZ-FE "Toyota Genuine ATF TYPE T-IV" or equivalent | |
| N·m (kgf-cm, ft-lbf) | A | 39 (400, 29) | | |
| | B | - | 49 (500, 36) | |

| | | | | | |
|---|---------------------------------------|---|---|---|---|
|  | | KSP, NCP | | | |
|  | N·m (kgf-cm, ft-lbf) | 103 (1050, 76) | | | |
|  | | KSP, NCP | | | |
|  | mm (in.) | ±30 (1.18) | | | |
|  | |  | | | |
|  | A | Europe G.C.C. Countries General | -0°08' ± 45' (-0.13° ± 0.75°) | -0°56' ± 45' (-0.93° ± 0.75°) | |
| | | Europe, General (Rough Road Package) | 0°08' ± 45' (0.13° ± 0.75°) | -0°54' ± 45' (-0.90° ± 0.75°) | |
| | | Australia | -0°10' ± 45' (-0.17° ± 0.75°) | -0°56' ± 45' (-0.93° ± 0.75°) | |
| | B | Europe G.C.C. Countries General | 11°14' (11.23°) | - | |
| | | Europe, General (Rough Road Package) | 10°44' (10.73°) | - | |
| | | Australia | 11°18' (11.30°) | - | |
| | C | Europe G.C.C. Countries General | 4°44' ± 45' (4.73° ± 0.75°) | - | |
| | | Europe, General (Rough Road Package) | 4°25' ± 45' (4.42° ± 0.75°) | - | |
| | | Australia | 4°32' ± 45' (4.53° ± 0.75°) | - | |
| | D | Europe General G.C.C. Countries | 165/70R14 | 45°23' ± 2' (45.38° ± 2°) | - |
| | | | 175/65R14 185/60R15 | 41°00' ± 2' (41.00° ± 2°) | - |
| | | Europe, General (Rough Road Package) | 175/65R14 185/60R15 | 41°23' ± 2' (41.38° ± 2°) | - |
| Australia | | 175/65R14 185/60R15 | 40°57' ± 2' (40.95° ± 2°) | - | |
| E+F | | Europe General G.C.C. Countries | 165/70R14 185/60R15 175/65R14 | 0°17' ± 0°20' (0.28° ± 0.33°) | 0°17' ± 0°20' (0.28° ± 0.33°) |
| | | Europe, General (Rough Road Package) | 175/65R14 185/60R15 | 0°12' ± 2° (0.20° ± 0.2°) | 0°13' ± 0°20' (0.22° ± 0.33°) |
| G-H mm (in.) | Europe General G.C.C. Countries | 165/70R14 185/60R15 | 2.9 ± 3.0 (0.11 ± 0.12) | 2.8 ± 3.0 (0.11 ± 0.12) | |
| | | 175/65R14 | 2.0 ± 2.0 (0.08 ± 0.08) | 2.2 ± 3.0 (0.09 ± 0.12) | |
| | Australia | 175/65R14 | 2.6 ± 3.0 (0.10 ± 0.12) | 2.7 ± 3.0 (0.11 ± 0.12) | |
| | | 185/60R15 | 2.7 ± 3.0 (0.11 ± 0.12) | 2.7 ± 3.0 (0.11 ± 0.12) | |
|  | Europe | 165/70R14 81S | ±160 | 220 (2.2, 32) | 220 (2.2, 32) |
| | | | ±160 | 230 (2.3, 33) | 230 (2.3, 33) |
| | Europe (Rough Road Package) | 185/60R15 84H | ±160 | 240 (2.4, 35) | 220 (2.2, 32) |
| | | | ±160 | 250 (2.5, 36) | 230 (2.3, 33) |
| | Europe (Rough Road Package) | 175/65R14 82T 185/60R15 84H | ±160 | 220 (2.2, 32) | 220 (2.2, 32) |
| | | | ±160 | 230 (2.3, 33) | 230 (2.3, 33) |
| | General | 175/65R14 82T 185/60R15 84H | ±160 | 220 (2.2, 32) | 220 (2.2, 32) |
| | | | ±160 | 230 (2.3, 33) | 230 (2.3, 33) |
| | Australia | 175/65R14 82T 185/60R15 84H | ±140 | 220 (2.2, 32) | 220 (2.2, 32) |
| | | | ±140 | 260 (2.7, 38) | 260 (2.7, 38) |
| | G.C.C. Countries | 175/65R14 82T 185/60R15 84H | ±160 | 220 (2.2, 32) | 220 (2.2, 32) |
| | | | ±160 | 230 (2.3, 33) | 230 (2.3, 33) |

*1 When brake pedal is depressed with the force of 300 N (31 kgf, 67.4 lbf) while the engine is running.

YARIS (TMC Made Hatchback) KSP90, NCP90, 91



| | | KSP, NCP | | |
|---|--|---|---|------------------------------------|
| <p>20°C (68°F)</p> | | 1.25 to 1.29 | | |
| <p>cm³ or cc (cu. in.)</p> | | 998 (60.9) | 1299 (79.3) | 1496 (91.3) |
| <p>mm (in.) N (kgf)</p> | <p>9 to 11 (0.35 to 0.43)</p> | <p>11 to 13 (0.43 to 0.51) ※245 to 392 (25 to 40)</p> | | |
| <p>A</p> | DENSO | K20HR-U11 | K16R-U 11 | K16R-U |
| | NGK | - | BKR5EYA 11 | BKR5EYA |
| | A | 1.0 to 1.1 (0.039 to 0.043) | | 0.7 to 0.8 (0.028 to 0.031) |
| <p>BTDC</p> | | 8 to 12° | | |
| | | (DLC3 Terminals 13 (TC) - 4 (CG) Connected) | | |
| <p>mm (in.)</p> | | 0.145 to 0.235 (0.00571 to 0.00925) | 0.15 to 0.25 (0.006 to 0.010) | |
| | | 0.275 to 0.365 (0.01083 to 0.01437) | 0.25 to 0.35 (0.010 to 0.014) | |
| <p>(DLC3 Terminal 9 (TAC) Connected)</p> <p>rpm</p> | | 730 to 830 | 600 to 700 | |
| | | - | 650 to 750 | |

| | | 1KR-FE | 2NZ-FE | 1NZ-FE |
|--|---|--|---|-----------------------|
| <p>kPa (kgf/cm², psi)</p> | | 1422 (14.5, 206) | 1471 (15, 213) | |
| | | ↑1079 (11.0, 156) | ↑1079 (11.0, 156) | |
| | | ↓147 (1.5, 21) | ↓98 (1.0, 14) | |
| <p>kPa (kgf/cm², psi)</p> | | ↑30 (0.3, 4.3) | ↑29 (0.3, 4.3) | |
| | | 3000 rpm | 150 to 550 (1.5 to 5.6, 22 to 80) | |
| | | ↑200 (2.0, 28.4) | | |
| | | 1KR-FE | 2NZ-FE | 1NZ-FE |
| <p>A</p> <p>liter (US qts, Imp. qts)</p> | | 2.9 (3.1, 2.6) | 3.4 (3.6, 3.1) | |
| | | 3.1 (3.3, 2.7) | 3.7 (3.9, 3.4) | |
| | | 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* multigrade engine oil | | |
| <p>N·m (kgf-cm, ft-lbf)</p> | A | 30 (306, 22) | 37.5 (382, 27.6) | |
| | | 4.5 (4.8, 4.2) | Except G.C.C. 4.9 (5.2, 4.6) | 4.8 (5.1, 4.5) |
| <p>liter (US qts, Imp. qts)</p> | | - | Except G.C.C. 4.8 (5.1, 4.5) | 4.7 (5.0, 4.4) |
| | | - | G.C.C. 5.1 (5.4, 4.7) | |
| | | Except G.C.C. 4.8 (5.1, 4.5) | | |
| | | G.C.C. 5.0 (5.3, 4.6) | | |

* ILSAC: International Lubricant Standardization and Approval Committee

| | | | | |
|--------------------------|---------------------------------|--|--|-------------------|
| | | | | |
| | A | 122.4 to 132.4 (4.819 to 5.213) | 149.4 to 159.2 (5.874 to 6.268) | |
| | B | Pedal Free Play 8 to 15 (0.315 to 0.591) | Pedal Free Play 7 to 14 (0.276 to 0.551) | |
| | | Push Rod Play 1.2 to 7.8 (0.047 to 0.307) | Push Rod Play 0.2 to 6.8 (0.008 to 0.268) | |
| C | ±25 (0.98) | | | |
| | | SAE J1703 or FMVSS No. 116 DOT3 SAE J1704 or FMVSS No. 116 DOT4 | | |
| mm (in.) | | | | |
| | | | | |
| | A | 107.3 to 117.3 (4.224 to 4.618) | | |
| | B | 1 to 6 (0.039 to 0.236) | | |
| | C | w/o VSC | Rear Dram ±75 (2.95) | ±72 (2.83) |
| | | Rear Disc | ±75 (2.95) | |
| | w/ VSC | ±75 (2.95) | | |
| | | SAE J1704 or FMVSS No. 116 DOT4 | | |
| mm (in.) | | | | |
| | 196N (20 kgf, 44 lbf) | Rear Dram | 5 to 8 | |
| | | Rear Disc | 4 to 7 | |
| | | | | |
| mm (in.) | A | ±1.5 (0.059) | ±2.0 (0.079) | |
| | B | ±20.0 (0.787) | ±7.0 (0.276) | |
| | mm (in.) | - | ±1.0 (0.039) | |
| | mm (in.) | - | ±204 (8.032) | |
| | | KSP | SCP | |
| | | MT 1.75 (1.8, 1.5) | MT 1.75 (1.8, 1.5) | |
| | | MMT 1.7 (1.8, 1.5) | MMT 1.7 (1.8, 1.5) | |
| liter (US qts, Imp. qts) | | API GL-4 SAE 75W | | |
| N-m (kgf-cm, ft-lbf) | A | 39 (400, 29) | | |

| | | | | |
|---|--------------------------------------|---|---|---------------------------|
| | | KSP, SCP | | |
| | | N-m (kgf-cm, ft-lbf) | | |
| | | 103 (1050, 76) | | |
| | | KSP, SCP | | |
| | | ±30 (1.18) | | |
| mm (in.) | | | | |
| | | | | |
| | | Except Rough Road Package | | |
| | A | -0°09' ± 45' (-0.15° ± 0.75°) | -0°56' ± 45' (-0.93° ± 0.75°) | |
| | B | 11°15' (11.25°) | - | |
| | C | 4°44' ± 45' (4.73° ± 0.75°) | - | |
| | D | 1KR-FE | 165/70R14 45°23' ± 2' (45.38° ± 2°) | - |
| | | 185/60R15 41°00' ± 2' (41.00° ± 2°) | - | |
| 2SZ-FE | 41°00' ± 2' (41.00° ± 2°) | - | | |
| E+F | 0°00' ± 0°13' (0° ± 0.22°) | 0°17' ± 0°20' (0.28° ± 0.33°) | | |
| G-H mm (in.) | 0 ± 2.0 (0 ± 0.08) | 2.9 ± 3.0 (0.11 ± 0.12) | | |
| | | | | |
| | | Rough Road Package | | |
| | A | -0°06' ± 45' (-0.10° ± 0.75°) | -0°54' ± 45' (-0.90° ± 0.75°) | |
| | B | 10°45' (10.75°) | - | |
| | C | 175/65R14 4°26' ± 45' (4.43° ± 0.75°) | - | |
| | | 185/60R15 4°25' ± 45' (4.42° ± 0.75°) | - | |
| | D | 175/65R14 41°24' ± 2' (41.40° ± 2°) | - | |
| 185/60R15 41°25' ± 2' (41.42° ± 2°) | | - | | |
| E+F | 0°00' ± 0°13' (0° ± 0.22°) | 0°13' ± 0°20' (0.22° ± 0.33°) | | |
| G-H mm (in.) | 0 ± 2.0 (0 ± 0.08) | 2.2 ± 3.0 (0.09 ± 0.12) | | |
| | | | | |
| | | 160 km/h = 100 mph | | |
| | 1KR-FE | 165/70R14 81S | ↓160 220 (2.2, 32) | ↓160 220 (2.2, 32) |
| | | ↑160 230 (2.3, 33) | ↑160 230 (2.3, 33) | |
| | 185/60R15 84H | ↓160 240 (2.4, 35) | ↓160 220 (2.2, 32) | |
| | | ↑160 250 (2.5, 36) | ↑160 230 (2.3, 33) | |
| | 2SZ-FE | 185/60R15 84H | ↑160 230 (2.3, 33) | ↑160 220 (2.2, 32) |
| | | ↑160 250 (2.5, 36) | ↑160 240 (2.4, 35) | |
| | | | | |
| | | Rough Road Package | | |
| 1KR-FE | 175/65R14 82T | ↓160 220 (2.2, 32) | ↓160 220 (2.2, 32) | |
| | 185/60R15 84H | ↑160 230 (2.3, 33) | ↑160 230 (2.3, 33) | |
| 2SZ-FE | 185/60R15 84H | ↓160 220 (2.2, 32) | ↓160 220 (2.2, 32) | |
| | ↑160 240 (2.4, 35) | ↑160 240 (2.4, 35) | | |

*1 When brake pedal is depressed with the force of 300 N (31 kgf, 67.4 lbf) while the engine is running.

YARIS (TMMF Made) KSP90, SCP90



| | | KSP, SCP | |
|--|--|---|--|
| <p>20°C (68°F)</p> | | 1.25 to 1.29 | |
| <p>cm³ or cc (cu. in.)</p> | | 1KR-FE | 2SZ-FE |
| | | 998 (60.9) | 1298 (79.2) |
| <p>mm (in.) N (kgf)</p> | | 9 to 11 (0.35 to 0.43) | 9.0 to 9.5 (0.35 to 0.37) ※ 539 to 637 (55 to 65) |
| | | 9 to 11 (0.35 to 0.43) | 6.0 to 6.5 (0.24 to 0.26) ※ 539 to 637 (55 to 65) |
| | DENSO | K20HR-U11 | K16R-U |
| <p>A mm (in.)</p> | | 1.0 to 1.1 (0.039 to 0.043) | 0.7 to 0.8 (0.028 to 0.031) |
| <p>BTDC</p> | 8 to 12° (DLC3 Terminals 13 (TC) - 4 (CG) Connected) | | |
| <p>mm (in.)</p> | | 0.145 to 0.235 (0.00571 to 0.00925) | 0.15 to 0.24 (0.006 to 0.009) |
| | | 0.275 to 0.365 (0.01083 to 0.01437) | 0.22 to 0.31 (0.009 to 0.012) |
| <p>(DLC3 Terminal 9 (TAC) Connected)</p> | | 730 to 830 | MT 550 to 650 |
| <p>rpm</p> | | | MMT 550 to 650 |

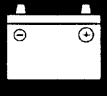
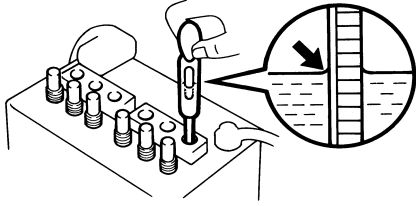
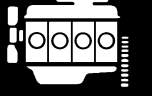
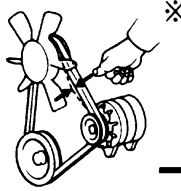
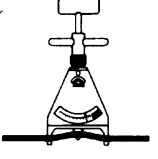
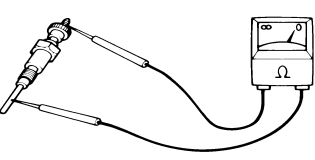
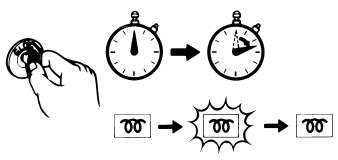
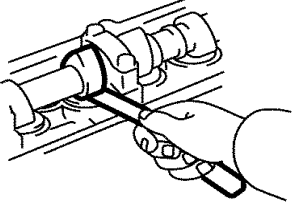
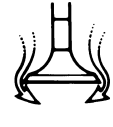
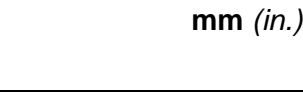

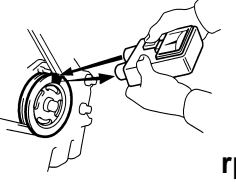




| | | 1KR-FE | 2SZ-FE |
|--|--|---|--|
| | | 1422 (14.5, 206) | 1176 (12, 171) |
| | | 1079 (11.0, 156) | 931 (9.5, 134) |
| | | 147 (1.5, 21) | 98 (1.0, 14) |
| | | 30 (0.3, 4.3) | 1000 rpm 130 (1.3, 18.5) |
| | | 200 (2.0, 28.4) | 4000rpm 350 (3.5, 49.8) |
| | | 1KR-FE | 2SZ-FE |
| | | 2.9 (3.1, 2.6) | 2.9 (3.1, 2.6) |
| | | 3.1 (3.3, 2.7) | 3.2 (3.3, 2.7) |
| | | 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* multigrade engine oil | |
| | | 30 (306, 22) | 30 (306, 22) |
| | | 4.5 (4.8, 4.2) | 5.1 (5.4, 4.5) |

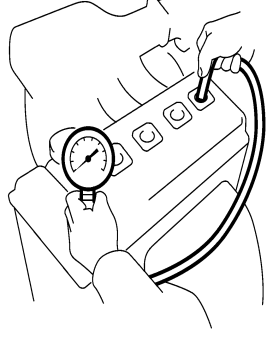
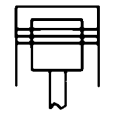

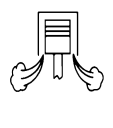
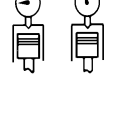
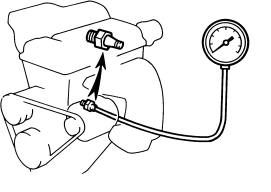
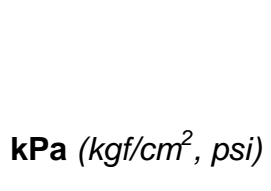
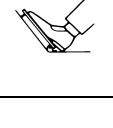

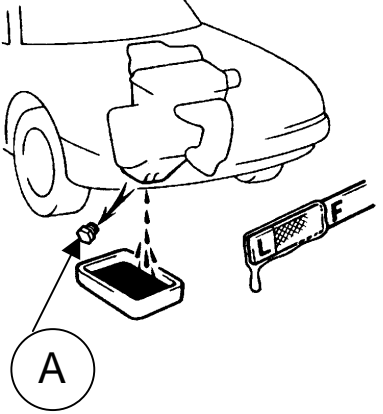
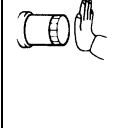
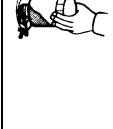
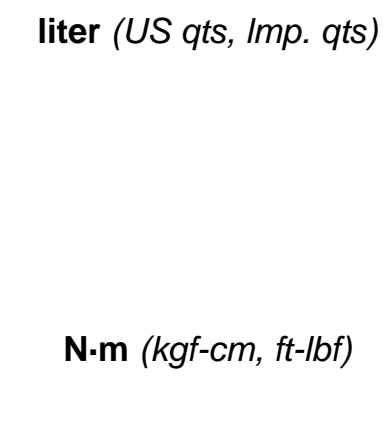
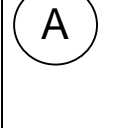
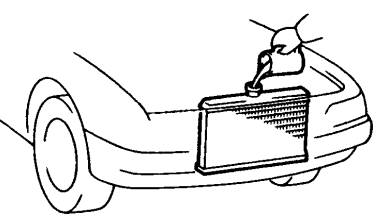
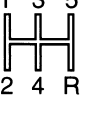
* ILSAC: International Lubricant Standardization and Approval Committee

| | | | | |
|--------------------------|--------------------------|---|---|--------------------------------|
| | | | | |
| | A | 122.4 to 132.4 (4.819 to 5.213) | 149.4 to 159.2 (5.874 to 6.268) | |
| | B | Pedal Free Play 8 to 15 (0.315 to 0.591) Push Rod Play 1.2 to 7.8 (0.047 to 0.307) | Pedal Free Play 7 to 14 (0.276 to 0.551) Push Rod Play 0.2 to 6.8 (0.008 to 0.268) | |
| | C | ±25 (0.98) | | |
| mm (in.) | | SAE J1703 or FMVSS No. 116 DOT3 SAE J1704 or FMVSS No. 116 DOT4 | | |
| | | | | |
| | A | 107.3 to 117.3 (4.224 to 4.618) | | |
| | B | 1 to 6 (0.039 to 0.236) | | |
| | C | w/o VSC | Rear Drum ↑75 (2.95) | Rear Disc ↑72 (2.83) |
| | | w/ VSC | ↑75 (2.95) | |
| mm (in.) | | SAE J1704 or FMVSS No. 116 DOT4 | | |
| | 196N (20 kgf, 44 lbf) | Rear Drum | 5 to 8 | |
| | | Rear Disc | 4 to 7 | |
| mm (in.) | | | | |
| | A | ↑1.5 (0.059) | ↑2.0 (0.079) | |
| | B | ↑20.0 (0.787) | ↑7.0 (0.276) | |
| | mm (in.) | - | ↑1.0 (0.039) | |
| | mm (in.) | - | ↓204 (8.032) | |
| | | NLP | | |
| | 1 3 5 2 4 R | MT | 1.75 (1.8, 1.5) | |
| | | MMT | 1.7 (1.8, 1.5) | |
| liter (US qts, Imp. qts) | | API GL-4 SAE 75W | | |
| N·m (kgf-cm, ft-lbf) | | A | 39 (400, 29) | |

| | | | |
|-------------------------------------|------------------------|---|---|
| | | NLP | |
| | N·m f-cm, ft-lbf | 103 (1050, 76) | |
| | | NLP | |
| | mm (in.) | | |
| | ↓30 (1.18) | | |
| | | | |
| | A | -0°10' ± 45' (-0.17° ± 0.75°) | -0°56' ± 45' (-0.93° ± 0.75°) |
| | B | 11°16' (11.27°) | - |
| | C | 4°40' ± 45' (4.67° ± 0.75°) | - |
| | D | 40°58' ± 2' (40.97° ± 2°) | - |
| | E+F | 0°00' ± 0°13' (0° ± 0.22°) | 0°17' ± 0°20' (0.28° ± 0.33°) |
| | G-H mm (in.) | 0 ± 2.0 (0 ± 0.08) | 2.9 ± 3.0 (0.11 ± 0.12) |
| | | | |
| 160 km/h = 100 mph | | | |
| | 160 km/h | 240 (2.4, 35) | 220 (2.2, 32) |
| | 160 km/h | 260 (2.7, 38) | 240 (2.4, 35) |
| kPa (kgf/cm ² or psi) | | | |

*1 When brake pedal is depressed with the force of 300 N (31 kgf, 67.4 lbf) while the engine is running.

| | | |
|---|---|--|
|  | | NLP |
|  | | 1.25 to 1.29 |
| 20°C (68°F) | | |
|  | | 1ND-TV |
| cm ³ or cc (cu. in.) | | 1364 (83.2) |
|  |  | 7.0 to 8.5 (0.276 to 0.335) ※490 to 686 (50 to 70) |
| mm (in.) | N (kgf) | |
|  | | 0.6 |
| 20°C (68°F) | | |
|  | | 1 |
| 40°C (104°F) | | |
| sec. | | |
|  |  | 0.11 to 0.17 (0.004 to 0.007) |
|  |  | 0.14 to 0.20 (0.006 to 0.008) |
| mm (in.) | | |
|  |  | 720 to 820 |
| rpm |  | |
|  |  | 5100 to 5250 |

| | | |
|---|---|--|
|  |  | 2700 (27.5, 391) |
|  |  | 2200 (22.5, 320) |
| kPa (kgf/cm ² , psi) |  | 500 (5.0, 71) |
|  | 770 rpm | 29 (0.3, 4.3) |
|  |  | |
| kPa (kgf/cm², psi) | 4000 rpm | 150 to 550 (1.5 to 5.6, 22 to 80) |
|  | 1ND-TV | |
|  |  | 3.8 (4.0, 3.3) |
| liter (US qts, Imp. qts) |  | 4.3 (4.5, 3.8) |
|  | Use ACEA B1, API grade DF-4, CF or G-DLD-1 | |
| N-m (kgf-cm, ft-lbf) |  | 38 (387, 28) |
|  |  | 4.7 (5.0, 4.1) |
| liter (US qts, Imp. qts) | | |

| | | | | |
|--------------------------|--|--|--|------------|
| | | | | |
| | A | 2NZ-FE 118.1 to 128.1 (4.650 to 5.043) | 2NZ-FE 144.4 to 154.4 (5.685 to 6.079) | |
| | | 1NZ-FE 133.0 to 143.0 (5.236 to 5.630) | 1NZ-FE 159.2 to 169.2 (6.268 to 6.661) | |
| | B | Pedal Free Play 5 to 15 (0.197 to 0.591) | | |
| C | Push Rod Play 1 to 5 (0.039 to 0.197) | | | |
| | ±25 (0.98) | | | |
| mm (in.) | | SAE J1703 or FMVSS No. 116 DOT3 SAE J1704 or FMVSS No. 116 DOT4 | | |
| | | | | |
| | A | 107.3 to 117.3 (4.224 to 4.618) | | |
| | B | 1 to 6 (0.039 to 0.236) | | |
| | *1 C | w/ABS | ↑73 (2.87) | ↑71 (2.80) |
| | | w/o ABS | ↑70 (2.75) | - |
| mm (in.) | | SAE J1703 or FMVSS No. 116 DOT3 SAE J1704 or FMVSS No. 116 DOT4 | | |
| | | 200N (20 kgf, 45 lbf) | | |
| | | | | |
| mm (in.) | | A | ↑1.0 (0.039) | |
| | | B | ↑19.0 (0.748) | |
| | | mm (in.) | - | |
| | | mm (in.) | ↓201 (7.913) | |
| | | NCP | | |
| | | 2NZ-FE | 1NZ-FE | |
| | | 1.9 (2.0, 1.7) | | |
| liter (US qts, Imp. qts) | | API GL-4 SAE 75W | | |
| | | 2.0 (2.1, 1.7) | 2.5 (2.6, 2.2) | |
| | | "Toyota Genuine ATF TYPE T-IV" or equivalent | "Toyota Genuine ATF TYPE WS" or equivalent | |
| N-m (kgf-cm, ft-lbf) | | 39 (400, 29) | | |
| | | 49 (500, 36) | | |

| | | | | | |
|--------------|------------------------------|---|-------------------------------|-------------------------------|---------------|
| | | NCP | | | |
| | | N-m (kgf-cm, ft-lbf) | | | |
| | | 103 (1050, 76) | | | |
| | | NCP | | | |
| | | mm (in.) | | | |
| | | ↓30 (1.18) | | | |
| | | | | | |
| | A | G.C.C. Countries General | -0°08' ± 45' (-0.13° ± 0.75°) | -0°56' ± 45' (-0.93° ± 0.75°) | |
| | | General (Rough Road Package) | 0°08' ± 45' (0.13° ± 0.75°) | -0°54' ± 45' (-0.90° ± 0.75°) | |
| | | Australia | -0°09' ± 45' (-0.15° ± 0.75°) | -0°55' ± 45' (-0.92° ± 0.75°) | |
| | B | G.C.C. Countries General | 11°14' (11.23°) | - | |
| | | General (Rough Road Package) | 10°44' (10.73°) | - | |
| | | Australia | 11°15' (11.25°) | - | |
| | C | G.C.C. Countries General | 4°37' ± 45' (4.62° ± 0.75°) | - | |
| | | General (Rough Road Package) | 4°21' ± 45' (4.35° ± 0.75°) | - | |
| | | Australia | 4°28' ± 45' (4.47° ± 0.75°) | - | |
| | D | General G.C.C. Countries | 41°00' ± 2' (41.00° ± 2°) | - | |
| | | General (Rough Road Package) | 41°23' ± 2' (41.38° ± 2°) | - | |
| | | Australia | 40°59' ± 2' (40.98° ± 2°) | - | |
| E+F | General G.C.C. Countries | | 0°16' ± 0°20' (0.27° ± 0.33°) | | |
| | General (Rough Road Package) | 0°12' ± 0°06' (0.20° ± 0.10°) | 0°12' ± 0°20' (0.20° ± 0.33°) | | |
| | Australia | | 0°15' ± 0°20' (0.25° ± 0.33°) | | |
| G-H mm (in.) | General G.C.C. Countries | 175/65R14 | 2.7 ± 3.0 (0.11 ± 0.12) | | |
| | | 185/60R15 | 2.8 ± 3.0 (0.11 ± 0.12) | | |
| | General (Rough Road Package) | 175/65R14 | 2.0 ± 2.0 (0.08 ± 0.08) | | |
| | | 185/60R15 | 2.1 ± 3.0 (0.08 ± 0.12) | | |
| | Australia | 175/65R14 | 2.5 ± 3.0 (0.10 ± 0.12) | | |
| | | 185/60R15 | 2.6 ± 3.0 (0.10 ± 0.12) | | |
| | | 140 km/h = 87 mph 160 km/h = 100 mph | | | |
| | General | 175/65R14 82T | ↓160 | 220 (2.2, 32) | 220 (2.2, 32) |
| | | 185/60R15 84H | ↑160 | 230 (2.3, 33) | 230 (2.3, 33) |
| | Australia | 175/65R14 82T | ↓140 | 220 (2.2, 32) | 220 (2.2, 32) |
| | | 185/60R15 84H | ↑140 | 260 (2.7, 38) | 260 (2.7, 38) |
| | G.C.C. Countries | 175/65R14 82T | ↓160 | 220 (2.2, 32) | 220 (2.2, 32) |
| | | 185/60R15 84H | ↑160 | 230 (2.3, 33) | 230 (2.3, 33) |

*1 When brake pedal is depressed with the force of 300 N (31 kgf, 67.4 lbf) while the engine is running.

YARIS (Sedan) NCP 92, 93

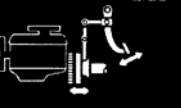


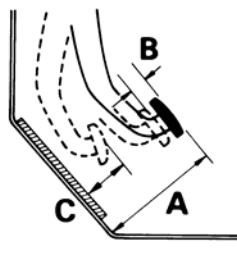



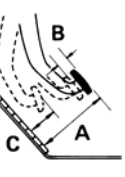

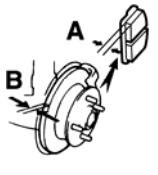

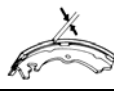



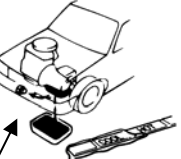






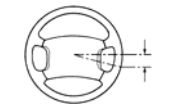
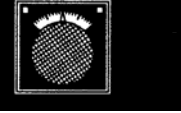

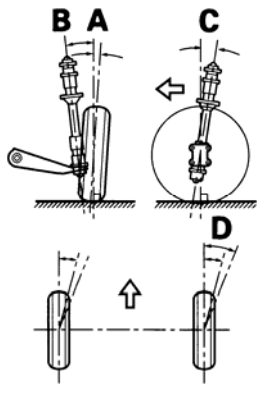
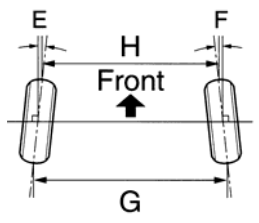



| | | NCP | |
|---|--|---|--|
| <p>20°C (68°F)</p> | | 1.25 to 1.29 | |
| <p>cm³ or cc (cu. in.)</p> | | 1299 (79.3) | 1496 (91.3) |
| <p>mm (in.) N (kgf)</p> | | 11 to 13 <i>(0.43 to 0.51)</i> *245 to 392 <i>(25 to 40)</i> | |
| <p>A</p> | DENSO | K16R-U 11 | K16R-U |
| | NGK | BKR5EYA 11 | BKR5EYA |
| | A | 1.0 to 1.1 <i>(0.039 to 0.043)</i> | 0.7 to 0.8 <i>(0.028 to 0.031)</i> |
| <p>BTDC</p> | 8 to 12° (DLC3 Terminals 13 (TC) - 4 (CG) Connected) | | |
| <p>mm (in.)</p> | | 0.15 to 0.25 <i>(0.006 to 0.010)</i> | |
| | | 0.25 to 0.35 <i>(0.010 to 0.014)</i> | |
| <p>(DLC3 Terminal 9 (TAC) Connected)</p> <p>rpm</p> | | 600 to 700 | |
| | | 650 to 750 | |

| | | 2NZ-FE | 1NZ-FE |
|---|-----------------|--|---|
| <p>kPa <i>(kgf/cm², psi)</i></p> | | 1471 <i>(15, 213)</i> | |
| | | ↑1079 <i>(11.0, 156)</i> | |
| | | ↓98 <i>(1.0, 14)</i> | |
| <p>kPa <i>(kgf/cm², psi)</i></p> | | ↑29 <i>(0.3, 4.3)</i> | |
| | <p>3000 rpm</p> | 150 to 550 <i>(1.5 to 5.6, 22 to 80)</i> | |
| | | 2NZ-FE | 1NZ-FE |
| <p>A</p> <p>liter (US qts, Imp. qts)</p> | | 3.4 (3.6, 3.1) | |
| | | 3.7 (3.9, 3.4) | |
| <p>A</p> <p>N·m (kgf-cm, ft-lbf)</p> | | 38 (382, 28) | |
| | | | w/o Fan Shroud Ventilation Duct 4.9 (5.2, 4.6) |
| <p>liter (US qts, Imp. qts)</p> | | w/ Fan Shroud Ventilation Duct 5.1 (5.4, 4.7) | |
| | | | w/o Fan Shroud Ventilation Duct 4.8 (5.1, 4.5) |
| | | w/ Fan Shroud Ventilation Duct 5.0 (5.3, 4.6) | |

* ILSAC: International Lubricant Standardization and Approval Committee

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| | | | | |
|---|---|---|--|--------------------------------|
|  | |  |  | |
|  | A | 1KR-FE/2NZ-FE 118.1 to 128.1 (4.650 to 5.043) | 1KR-FE/2NZ-FE 144.4 to 154.4 (5.685 to 6.079) | |
| | | 2ZR-FE 133 to 143 (5.236 to 5.630) | 1NZ-FE/2ZR-FE 159.2 to 169.2 (6.268 to 6.661) | |
| | B | Pedal Free Play 5 to 15 (0.197 to 0.591) | | |
| | C | Push Rod Play 1 to 5 (0.039 to 0.197) | | |
| | | mm (in.) | | |
| SAE J1703 or FMVSS No. 116 DOT3 SAE J1704 or FMVSS No. 116 DOT4 | | | | |
|  | |  |  | |
|  | A | w/ ABS w/ VSC | 107.3 to 117.3 (4.224 to 4.618) | |
| | | w/o ABS | 107.8 to 117.8 (4.244 to 4.638) | |
| | B | 1 to 6 (0.039 to 0.236) | | |
| | C | w/ ABS | Rear Drum ↑73 (2.87) | ↑71 (2.80) |
| | | Rear Disc | ↑80 (3.15) | |
| | | w/ VSC | ↑85 (3.35) | ↑75 (2.95) |
| | | w/o ABS | ↑70 (2.75) | - |
| mm (in.) | | | | |
| SAE J1703 or FMVSS No. 116 DOT3 SAE J1704 or FMVSS No. 116 DOT4 | | | | |
|  | 200N (20 kgf, 45 lbf) | Rear Drum | 6 to 9 | |
| | | Rear Disc | 4 to 7 | |
|  | |  | | |
| mm (in.) | A | ↑1.0 (0.039) | | |
| | B | ↑19.0 (0.748) | ↑19.0 (0.748) | |
| mm (in.) | | - | ↑1.0 (0.039) | |
| mm (in.) | | - | ↓201 (7.913) | |
|  | | | | |
|  | | | | |
|  | | KSP | NCP | ZSP |
| liter (US qts, Imp. qts) |  | 1.75 (1.8, 1.5) | 1.9 (2.0, 1.7) | 1.9 (2.0, 1.7) |
| | | API GL-4 SAE 75W | | API GL-4 or GL-5 SAE 75W |
| liter (US qts, Imp. qts) |  | - | 1NZ-FE 2.5 (2.6, 2.2) 2NZ-FE 2.0 (2.1, 1.7) | - |
| |  | - | 1NZ-FE "Toyota Genuine ATF TYPE WS" or equivalent 2NZ-FE "Toyota Genuine ATF TYPE T-IV" or equivalent | - |
| N-m (kgf-cm, ft-lbf) | A | 39 (400, 29) | | |
| | B | - | 49 (500, 36) | - |

| | | | | | |
|---|--------------------------------------|---|------------------|------------------|------------------|
|  | | KSP, NCP, ZSP | | | |
|  | | N-m (kgf-cm, ft-lbf) | | | |
| | | 103 (1050, 76) | | | |
|  | | KSP, NCP, ZSP | | | |
|  | | mm (in.) | | | |
| | | ↓30 (1.18) | | | |
|  | |  | | | |
|  | A | Please refer to the Service Specification | | | |
| | B | | | | |
| | C | | | | |
| | D | | | | |
| | E+F | | | | |
|  | G-H mm (in.) | | | | |
|  | |  | | | |
| | | 140 km/h = 87 mph 160 km/h = 100 mph | | | |
|  | Europe | 165/70R14 81S | ↓160 | 220 (2.2, 32) | 220 (2.2, 32) |
| | | | ↑160 | 230 (2.3, 33) | 230 (2.3, 33) |
| | | 185/60R15 84H | ↓160 | 240 (2.4, 35) | 220 (2.2, 32) |
| | | | ↑160 | 250 (2.5, 36) | 230 (2.3, 33) |
| | | 205/45R17 84W | ↓190 | 200 (2.0, 29) | 190 (1.9, 28) |
| | | | ↑190 | 220 (2.2, 32) | 210 (2.1, 30) |
| | Europe (Rough Road Package) | 175/65R14 82T 185/60R15 84H | ↑160 | 220 (2.2, 32) | 220 (2.2, 32) |
| | | | ↑160 | 230 (2.3, 33) | 230 (2.3, 33) |
| | General | 175/65R14 82T 185/60R15 84H | ↓160 | 220 (2.2, 32) | 220 (2.2, 32) |
| | | | ↑160 | 230 (2.3, 33) | 230 (2.3, 33) |
| | Australia | 175/65R14 82T 185/60R15 84H | ↓140 | 220 (2.2, 32) | 220 (2.2, 32) |
| | | | ↑140 | 260 (2.7, 38) | 260 (2.7, 38) |
| G.C.C. Countries | 175/65R14 82T 185/60R15 84H | ↓160 | 220 (2.2, 32) | 220 (2.2, 32) | |
| | | ↑160 | 230 (2.3, 33) | 230 (2.3, 33) | |

*1 When brake pedal is depressed with the force of 300 N (31 kgf, 67.4 lbf) while the engine is running.

YARIS (TMC Made Hatchback) KSP90, NCP90, 91, ZSP90



| | | KSP, NCP, ZSP | | | |
|---|--------------|---|--|--|---|
| <p>20°C (68°F)</p> | | 1.25 to 1.29 | | | |
| | | 1KR-FE | 2NZ-FE | 1NZ-FE | 2ZR-FE |
| <p>cm³ or cc (cu. in.)</p> | | 998 (60.9) | 1299 (79.3) | 1496 (91.3) | 1798 (109.7) |
| <p>mm (in.) N (kgf)</p> | | 9 to 11 (0.35 to 0.43) | 11 to 13 (0.43 to 0.51) * 245 to 392 (25 to 40) | | 8 to 10 (0.315 to 0.397) * 402 to 598 (40 to 61) |
| <p>A</p> | DENSO | K20HR-U11 | K16R-U 11 | K16R-U | SC20HR11 |
| | NGK | - | BKR5EYA 11 | BKR5EYA | - |
| | A | 1.0 to 1.1 (0.039 to 0.043) | | 0.7 to 0.8 (0.028 to 0.031) | 1.0 to 1.1 (0.039 to 0.043) |
| <p>BTDC</p> | | 8 to 12° | | | |
| | | (DLC3 Terminals 13 (TC) - 4 (CG) Connected) | | | |
| <p>mm (in.)</p> | | 0.145 to 0.235 (0.00571 to 0.00925) | 0.15 to 0.25 (0.006 to 0.010) | 0.06 to 0.155 (0.0024 to 0.0061) | |
| | | 0.275 to 0.365 (0.01083 to 0.01437) | 0.25 to 0.35 (0.010 to 0.014) | 0.06 to 0.155 (0.0024 to 0.0061) | |
| <p>(DLC3 Terminal 9 (TAC) Connected)</p> <p>rpm</p> | | 730 to 830 | 600 to 700 | | |
| | | - | 650 to 750 | - | |

| | | 1KR-FE | 2NZ-FE | 1NZ-FE | 2ZR-FE |
|--|--|-----------------------------|---|----------------------------|---|
| <p>kPa (kgf/cm², psi)</p> | | 1422 (14.5, 206) | 1471 (15, 213) | 1176 (12.0, 171) | |
| | | ↑1079 (11.0, 156) | ↑1079 (11.0, 156) | ↑931 (9.5, 134) | |
| | | ↓47 (1.5, 21) | ↓98 (1.0, 14) | | |
| <p>kPa (kgf/cm², psi)</p> | | ↑30 (0.3, 4.3) | ↑29 (0.3, 4.3) | ↑25 (0.3, 3.7) | |
| | | 3000 rpm | 150 to 550 (1.5 to 5.6, 22 to 80) | | 150 to 400 (1.6 to 4.1, 21.8 to 58) |
| | | ↑200 (2.0, 28.4) | | | |
| | | 1KR-FE | 2NZ-FE | 1NZ-FE | 2ZR-FE |
| <p>A</p> <p>liter (US qts, Imp. qts)</p> | | 2.9 (3.1, 2.6) | 3.4 (3.6, 3.1) | 3.9 (4.1, 3.4) | |
| | | 3.1 (3.3, 2.7) | 3.7 (3.9, 3.4) | 4.2 (4.4, 3.7) | |
| <small>0W-20, 5W-20, 5W-30, 10W-30, 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* multigrade engine oil</small> | | | | | |
| <p>A</p> <p>N·m (kgf-cm, ft-lbf)</p> | | 30 (306, 22) | 37.5 (382, 27.6) | 37 (377, 27) | |
| | | 4.5 (4.8, 4.2) | Except G.C.C. 4.9 (5.2, 4.6) G.C.C. 5.1 (5.4, 4.7) | 4.8 (5.1, 4.5) | 5.0 (5.3, 4.4) |
| <p>liter (US qts, Imp. qts)</p> | | - | Except G.C.C. 4.8 (5.1, 4.5) G.C.C. 5.0 (5.3, 4.6) | 4.7 (5.0, 4.4) | - |
| | | - | | | - |

* ILSAC: International Lubricant Standardization and Approval Committee