

Standards and Service Limits

Cylinder Head/Valve Train — Section 6 D14A2, D16Y3 Engines

| | MEASUREMENT | | STANDARD (NEW) | SERVICE LIMIT |
|---------------|--|---|--|-----------------|
| Compression | 250 rpm (min ⁻¹) and wide open throttle kPa (kgf/cm ² , psi) | Nominal Minimum Maximum variation | 1,300 (13.0, 184) 950 (9.5, 135) 200 (2.0, 28) | |
| Cylinder head | Warpage Height | | 94.95 – 95.05 (3.738 – 3.742) | 0.05 (0.002) |
| Camshaft | End play | | 0.05 – 0.15 (0.002 – 0.006) | 0.5 (0.02) |
| | Camshaft-to-holder oil clearance | | 0.050 – 0.089 (0.002 – 0.004) | 0.15 (0.006) |
| | Total runout | | 0.03 (0.001) max. | 0.04 (0.002) |
| | Cam lobe height | D14A2 IN | 34.545 (1.3600) | |
| | | EX | 35.175 (1.3848) | |
| | | D16Y3 IN | 36.782 (1.4481) | |
| | | EX | 36.947 (1.4546) | |
| Valve | Valve clearance | IN | 0.18 – 0.22 (0.007 – 0.009) | |
| | | EX | 0.23 – 0.27 (0.009 – 0.011) | |
| | Valve stem O.D. | IN | 5.48 – 5.49 (0.2157 – 0.2161) | 5.45 (0.2146) |
| | | EX | 5.45 – 5.46 (0.2146 – 0.2150) | 5.42 (0.2134) |
| | Stem-to-guide clearance | IN | 0.02 – 0.05 (0.001 – 0.002) | 0.08 (0.003) |
| | | EX | 0.05 – 0.08 (0.002 – 0.003) | 0.11 (0.004) |
| Valve seat | Width | IN | 0.85 – 1.15 (0.033 – 0.045) | 1.6 (0.063) |
| | | EX | 1.25 – 1.55 (0.049 – 0.061) | 2.0 (0.079) |
| | Stem installed height | IN | 46.985 – 47.455 (1.8498 – 1.8683) | 47.705 (1.8781) |
| | | EX | 48.965 – 49.435 (1.9278 – 1.9463) | 49.685 (1.9561) |
| Valve spring | Free length | IN | 48.58 (1.913) | |
| | | EX | 49.19 (1.937) | |
| Valve guide | I.D. | IN | 5.51 – 5.53 (0.217 – 0.218) | 5.55 (0.219) |
| | | EX | 5.51 – 5.53 (0.217 – 0.218) | 5.55 (0.219) |
| | Installed height | IN | 15.95 – 16.45 (0.628 – 0.648) | |
| | | EX | 15.95 – 16.45 (0.628 – 0.648) | |
| Rocker arm | Arm-to-shaft clearance | IN | 0.017 – 0.050 (0.0007 – 0.0020) | 0.08 (0.003) |
| | | EX | 0.018 – 0.054 (0.0007 – 0.0021) | 0.08 (0.003) |

Cylinder Head/Valve Train — Section 6
D15Z3, D16Y2 Engines

| | MEASUREMENT | | | STANDARD (NEW) | SERVICE LIMIT |
|---------------|---|---|--------------|---|-----------------|
| Compression | 250 rpm (min ⁻¹) and wide open throttle kPa (kgf/cm ² , psi) | Nominal Minimum Maximum variation | | 1,300 (13.0, 184) 1,150 (11.5, 166) 200 (2.0, 28) | |
| Cylinder head | Warpage Height | | | 92.95 – 93.05 (3.659 – 3.663) | 0.05 (0.002) |
| Camshaft | End play | | | 0.05 – 0.15 (0.002 – 0.006) | 0.5 (0.02) |
| | Camshaft-to-holder oil clearance | | | 0.050 – 0.089 (0.002 – 0.004) | 0.15 (0.006) |
| | Total runout | | | 0.03 (0.001) max. | 0.04 (0.002) |
| | Cam lobe height | D15Z3 | IN Primary | 38.427 (1.5129) | — |
| | | | EX Secondary | 32.292 (1.2713) | — |
| | | | EX | 37.997 (1.4959) | — |
| | | D16Y2 | IN Primary | 35.900 (1.4134) | — |
| | | | EX Mid | 38.274 (1.5068) | — |
| Valve | Valve clearance | | IN | 0.18 – 0.22 (0.007 – 0.009) | — |
| | | | EX | 0.23 – 0.27 (0.009 – 0.011) | — |
| | Valve stem O.D. | | IN | 5.48 – 5.49 (0.2157 – 0.2161) | 5.45 (0.2146) |
| | | | EX | 5.45 – 5.46 (0.2146 – 0.2150) | 5.42 (0.2134) |
| | Stem-to-guide clearance | | IN | 0.02 – 0.05 (0.001 – 0.002) | 0.08 (0.003) |
| | | | EX | 0.05 – 0.08 (0.002 – 0.003) | 0.12 (0.005) |
| Valve seat | Width | | IN | 0.85 – 1.15 (0.033 – 0.045) | 1.6 (0.063) |
| | | | EX | 1.25 – 1.55 (0.049 – 0.061) | 2.0 (0.079) |
| | Stem installed height | | IN | 53.165 – 53.635 (2.0931 – 2.1116) | 53.885 (2.1215) |
| | | | EX | 53.165 – 53.635 (2.0931 – 2.1116) | 53.885 (2.1215) |
| Valve spring | Free length | D15Z3 | IN | 54.78 (2.157) | — |
| | | | EX | 58.23 (2.293)*1 | — |
| | | | | 58.26 (2.294)*2 | — |
| | | D16Y2 | IN | 57.97 (2.282) | — |
| Valve guide | I.D. | | IN | 5.51 – 5.53 (0.217 – 0.218) | 5.60 (0.220) |
| | | | EX | 5.51 – 5.53 (0.217 – 0.218) | 5.60 (0.220) |
| | Installed height | | IN | 17.85 – 18.35 (0.703 – 0.722) | — |
| | | | EX | 18.65 – 19.15 (0.734 – 0.754) | — |
| Rocker arm | Arm-to-shaft clearance | | IN | 0.017 – 0.050 (0.0007 – 0.0020) | 0.08 (0.003) |
| | | | EX | 0.018 – 0.054 (0.0007 – 0.0021) | 0.08 (0.003) |

*1: NIHON HATSUJO manufactured valve spring. *2: CHUO HATSUJO manufactured valve spring.

Standards and Service Limits

Engine Block — Section 7

| | MEASUREMENT | STANDARD (NEW) | SERVICE LIMIT |
|----------------|---|---|--|
| Cylinder block | Wapage of deck surface Bore diameter Bore taper Reboring limit | 0.07 (0.003) max. 75.00 – 75.02 (2.953 – 2.954) _____ _____ | 0.10 (0.004) 75.07 (2.956) 0.05 (0.002) 0.5 (0.02) |
| Piston | Skirt O.D. At 15 mm (0.6 in) from bottom of skirt Clearance in cylinder Groove width (for ring) Top D15Z1 Except D15Z1 Second D15Z1 Except D15Z1 Oil D15Z3, D16Y2 D14A2, D16Y3 | 74.980 – 74.990 (2.9520 – 2.9524) 0.010 – 0.040 (0.0004 – 0.0016) 1.020 – 1.030 (0.0402 – 0.0406) 1.220 – 1.230 (0.0480 – 0.0484) 1.220 – 1.230 (0.0480 – 0.0484) 1.520 – 1.530 (0.0598 – 0.0602) 2.805 – 2.820 (0.1104 – 0.1110) 2.805 – 2.825 (0.1104 – 0.1112) | 74.970 (2.9516) 0.05 (0.002) 1.05 (0.041) 1.25 (0.049) 1.25 (0.049) 1.55 (0.061) 2.85 (0.112) 2.85 (0.112) |
| Piston ring | Ring-to-groove clearance Top D15Z3 Except D15Z3 Second D15Z3 Except D15Z3 Ring end gap Top Second Oil D15Z3 D16Y2 D14A2, D16Y3 | 0.035 – 0.060 (0.0014 – 0.0024) 0.030 – 0.055 (0.0012 – 0.0022)* ¹ 0.030 – 0.060 (0.0012 – 0.0024)* ² 0.035 – 0.060 (0.0014 – 0.0024)* ¹ 0.030 – 0.055 (0.0012 – 0.0022)* ² 0.030 – 0.055 (0.0012 – 0.0022) 0.15 – 0.30 (0.006 – 0.012) 0.30 – 0.45 (0.012 – 0.018) 0.20 – 0.50 (0.008 – 0.020)* ¹ 0.20 – 0.70 (0.008 – 0.028)* ² 0.20 – 0.50 (0.008 – 0.020)* ¹ 0.20 – 0.80 (0.008 – 0.031)* ² 0.20 – 0.80 (0.008 – 0.031) | 0.13 (0.005) 0.13 (0.005) 0.13 (0.005) 0.13 (0.005) 0.13 (0.005) 0.13 (0.005) 0.60 (0.024) 0.70 (0.028) 0.70 (0.028) 0.80 (0.031) 0.70 (0.028) 0.90 (0.035) 0.90 (0.035) |
| Piston Pin | O.D. Pin-to-piston clearance | 18.994 – 19.000 (0.7478 – 0.7480) 0.010 – 0.022 (0.0004 – 0.0009) | _____ _____ |
| Connecting rod | Pin-to-rod interference Small end bore diameter Large end bore diameter Nominal D14A2 D15Z3 D16Y2, D16Y3 End play installed on crankshaft | 0.014 – 0.040 (0.0006 – 0.0016) 18.96 – 18.98 (0.746 – 0.747) 43.0 (1.69) 45.0 (1.77) 48.0 (1.89) 0.15 – 0.30 (0.006 – 0.012) | _____ _____ _____ _____ _____ 0.40 (0.016) |
| Crankshaft | Main journal diameter D14A2, D15Z3 D16Y2, D16Y3 Rod journal diameter D14A2 D15Z3 D16Y2, D16Y3 Taper Out-of round End play Total runout | 44.976 – 45.000 (1.7707 – 1.7717) 54.976 – 55.000 (2.1644 – 2.1654) 39.976 – 40.000 (1.5739 – 1.5748) 41.976 – 42.000 (1.6256 – 1.6535) 44.976 – 45.000 (1.7707 – 1.7717) 0.0025 (0.00010) max. 0.0025 (0.00010) max. 0.10 – 0.35 (0.004 – 0.014) 0.03 (0.001) max. | _____ _____ _____ _____ _____ 0.005 (0.0002) 0.005 (0.0002) 0.45 (0.018) 0.04 (0.002) |
| Bearings | Main bearing-to-journal oil clearance No. 1 and 5 journals No. 2, 3 and 4 journals Rod bearing-to-journal oil clearance | 0.018 – 0.036 (0.0007 – 0.0014) 0.024 – 0.042 (0.0009 – 0.0017) 0.020 – 0.038 (0.0008 – 0.0015) | 0.05 (0.002) 0.05 (0.002) 0.05 (0.002) |

*1: TEIKOKU PISTON RING manufactured piston ring.

*2: RIKEN manufactured piston ring.

Engine Lubrication — Section 8

| | MEASUREMENT | STANDARD (NEW) | SERVICE LIMIT |
|--------------|--|--|--|
| Engine oil | Capacity ℓ (US qt, Imp qt) D14A2, D16Y3 D15Z3, D16Y2 | 4.0 (4.2, 3.5) for engine overhaul 4.2 (4.4, 3.7) for engine overhaul 3.3 (3.5, 2.9) for oil change, including filter 3.0 (3.2, 2.6) for oil change, without filter | |
| Oil pump | Inner-to-outer rotor radial clearance Pump body-to-outer rotor radial clearance Pump body-to-rotor axial clearance | 0.02 – 0.14 (0.001 – 0.006) 0.10 – 0.18 (0.004 – 0.007) 0.03 – 0.08 (0.001 – 0.003) | 0.20 (0.008) 0.20 (0.008) 0.15 (0.006) |
| Relief valve | Pressure setting 80°C (176°F) kPa (kgf/cm², psi) at idle at 3,000 rpm (min⁻¹) | 70 (0.7, 10) min. 340 (3.5, 50) min. | |

Cooling — Section 10

| | MEASUREMENT | STANDARD (NEW) |
|--------------|---|--|
| Radiator | Coolant capacity ℓ (US qt, Imp qt) including engine, heater, cooling line and reservoir Reservoir capacity: 0.4 ℓ (0.42 US qt, 0.35 Imp qt) | M/T A/T 4.5 (4.8, 4.0) for overhaul 3.6 (3.8, 3.2) for coolant change 4.4 (4.6, 3.9) for overhaul 3.5 (3.7, 3.1) for coolant change |
| Radiator cap | Opening pressure kPa (kgf/cm², psi) | 93 – 123 (0.95 – 1.25, 14 – 18) |
| Thermostat | Start to opening °C (°F) Fully open °C (°F) Valve lift at fully open | 76 – 80 (169 – 176) 90 (194) 8.0 (0.31) min. |
| Cooling fan | Thermoswitch "ON" temperature °C (°F) Thermoswitch "OFF" temperature °C (°F) | 91.0 – 95.0 (196 – 203) Subtract 3 – 8 (5 – 15) from actual "ON" temperature. |

Fuel and Emissions — Section 11

| | MEASUREMENT | STANDARD (NEW) |
|--------------------|---|--|
| Pressure regulator | Pressure with regulator vacuum hose disconnected kPa (kgf/cm², psi) | 280 – 330 (2.8 – 3.3, 40 – 47) |
| Fuel tank | Capacity ℓ (US gal, Imp gal) | 55 (14.5, 12.1) |
| Engine | Idle speed with headlight and cooling fan off rpm (min⁻¹) Idle CO | M/T: Neutral 750 ± 50 0.1 % max. A/T: N or P position 750 ± 50 |

Clutch — Section 12

| | MEASUREMENT | STANDARD (NEW) | SERVICE LIMIT |
|----------------|---|--|----------------------------|
| Clutch pedal | Pedal height to floor Stroke Total free play Pedal play Disengagement height to floor LHD RHD | 161 (6.34) 130 – 140 (5.12 – 5.51) 12 – 21 (0.47 – 0.83) 1.0 – 10.0 (0.04 – 0.37) 81 (3.19) min. 79 (3.11) min. | — — — — — — |
| Flywheel | Clutch surface runout | 0.05 (0.002) max. | 0.15 (0.006) |
| Clutch disc | Rivet depth Thickness | 1.3 (0.051) min. 8.4 – 9.1 (0.33 – 0.36) | 0.2 (0.008) 6.0 (0.24) |
| Pressure plate | Warpage Diaphragm spring finger alignment | 0.03 (0.001) max. 0.8 (0.03) max. | 0.15 (0.006) 1.0 (0.04) |

Standards and Service Limits

Manual Transmission — Section 13

| | MEASUREMENT | STANDARD (NEW) | SERVICE LIMIT |
|--|---|--|--|
| Transmission oil | Capacity ℓ (US qt, Imp qt) | 1.9 (2.0, 1.7) for overhaul 1.8 (1.9, 1.6) for oil change | |
| Mainshaft | End play Diameter of ball bearing contact area (Transmission housing side) Diameter of 4th, 5th gear contact area Diameter of 3rd gear contact area Diameter of ball bearing contact area (Clutch housing side) Runout | 0.11 – 0.18 (0.004 – 0.007) 21.987 – 22.000 (0.8656 – 0.8661) 26.980 – 26.993 (1.0622 – 1.0627) 33.984 – 34.000 (1.3380 – 1.3386) 25.977 – 25.990 (1.0227 – 1.0232) 0.02 (0.001) max. | Adjust 21.930 (0.8634) 26.930 (1.0602) 33.930 (1.3358) 25.920 (1.0205) 0.05 (0.002) |
| Mainshaft 3rd and 4th gears | I.D. End play Thickness | 39.009 – 39.025 (1.5358 – 1.5364) 0.06 – 0.21 (0.002 – 0.008) 0.06 – 0.19 (0.002 – 0.007) 30.22 – 30.27 (1.190 – 1.192) 30.12 – 30.17 (1.186 – 1.188) | 39.07 (1.538) 0.33 (0.013) 0.31 (0.012) 30.15 (1.187) 30.05 (1.183) |
| Mainshaft 5th gear | I.D. End play Thickness | 37.009 – 37.025 (1.4570 – 1.4577) 0.06 – 0.19 (0.002 – 0.007) 28.42 – 28.47 (1.119 – 1.121) | 37.07 (1.459) 0.31 (0.012) 28.35 (1.116) |
| Countershaft | Diameter of needle bearing contact area Diameter of 1st gear contact area Diameter of ball bearing contact area Runout | 30.000 – 30.015 (1.1811 – 1.1817) 35.984 – 36.000 (1.4167 – 1.4173) 24.980 – 24.993 (0.9835 – 0.9840) 0.02 (0.0008) max. | 29.950 (1.1791) 35.930 (1.4146) 24.930 (0.9815) 0.05 (0.002) |
| Countershaft 1st gear | I.D. End play (When tightened by the specified torque) Thickness | 41.009 – 41.025 (1.6145 – 1.6152) 0.03 – 0.10 (0.001 – 0.004) 30.41 – 30.44 (1.197 – 1.198) | 41.07 (1.617) 0.22 (0.009) 30.36 (1.195) |
| Countershaft 2nd gear | I.D. End play (When tightened by the specified torque) Thickness | 44.009 – 44.025 (1.7326 – 1.7333) 0.03 – 0.11 (0.001 – 0.004) 31.92 – 31.97 (1.257 – 1.259) | 44.07 (1.735) 0.23 (0.009) 31.85 (1.254) |
| Spacer collar (Countershaft 2nd gear) | I.D. O.D. Length | 33.000 – 33.010 (1.2992 – 1.2996) 38.989 – 39.000 (1.5350 – 1.5354) 32.03 – 32.06 (1.261 – 1.262) | 33.05 (1.301) 38.93 (1.533) 32.01 (1.260) |
| Spacer collar (Mainshaft 4th and 5th gear) | I.D. O.D. Length | 27.002 – 27.012 (1.0631 – 1.0635) 33.989 – 34.000 (1.3381 – 1.3386) 31.984 – 32.000 (1.2592 – 1.2598) 22.83 – 22.86 (0.899 – 0.900) 23.53 – 23.56 (0.926 – 0.928) | 27.06 (1.065) 33.93 (1.336) 31.93 (1.257) 22.81 (0.898) 23.51 (0.926) |
| Reverse idler gear | I.D. Gear-to-reverse gear shaft clearance | 15.016 – 15.043 (0.5912 – 0.5922) 0.032 – 0.077 (0.0013 – 0.0030) | 15.08 (0.594) 0.14 (0.006) |
| Synchro ring | Ring-to-gear clearance (Ring pushed against gear) | 0.85 – 1.10 (0.033 – 0.043) | 0.4 (0.02) |
| Shift fork | Fork finger thickness Fork-to-synchro sleeve clearance | 6.4 – 6.5 (0.252 – 0.255) 0.25 – 0.45 (0.010 – 0.018) | — 0.8 (0.032) |
| Reverse shift fork | Fork pawl groove width Fork-to-reverse idler gear clearance Groove width Fork-to-5th/reverse shift piece pin clearance | 12.7 – 13.0 (0.50 – 0.51) 0.5 – 1.1 (0.020 – 0.043) 7.05 – 7.25 (0.278 – 0.285) 7.4 – 7.7 (0.29 – 0.30) 0.05 – 0.35 (0.002 – 0.014) 0.4 – 0.8 (0.02 – 0.03) | — 1.8 (0.071) — — 0.5 (0.02) 1.0 (0.04) |
| Shift arm A | Inner diameter of shift arm C contact point Shift arm A-to-shift arm C clearance | 13.05 – 13.13 (0.514 – 0.517) 0.05 – 0.23 (0.002 – 0.009) | — 0.35 (0.014) |
| Shift arm B | Inner diameter of shift arm B shaft contact point Shift arm B-to-shaft clearance Shift arm B-to-shift piece clearance Diameter of shift piece contact point | 13.973 – 14.000 (0.5501 – 0.5512) 0.013 – 0.070 (0.0005 – 0.0028) 0.2 – 0.5 (0.008 – 0.020) 12.9 – 13.0 (0.508 – 0.512) | — 0.16 (0.006) 0.62 (0.0244) 12.78 (0.5031) |

Automatic Transmission — Section 14

| Automatic Transmission — Section 14 | | | | |
|--|---|--|---|---|
| | MEASUREMENT | | STANDARD (NEW) | SERVICE LIMIT |
| Transmission fluid | Capacity ℓ (US qt, Imp qt) | | 5.9 (6.2, 5.2) for overhaul 2.7 (2.8, 2.4) for fluid change | |
| Hydraulic pressure kPa (kgf/cm², psi) D16Y3 engine | Line pressure at 2,000 rpm (min⁻¹) N or P position | | 830 – 880 (8.5 – 9.0, 120 – 130) | 780 (8.0, 110) |
| | 2nd clutch pressure at 2,000 rpm (min⁻¹) D₄ position | | 390 (4.0, 57) throttle fully closed | 340 (3.5, 50) throttle fully closed |
| | 3rd clutch pressure at 2,000 rpm (min⁻¹) D₄ position | | 830 – 880 (8.5 – 9.0, 120 – 130) throttle more than 1/8 opened | 780 (8.0, 110) throttle more than 1/8 opened |
| | 4th clutch pressure at 2,000 rpm (min⁻¹) D₄ position | | | |
| | 2nd clutch pressure at 2,000 rpm (min⁻¹) 2 position | | 830 – 880 (8.5 – 9.0, 120 – 130) | 780 (8.0, 110) |
| | 1st clutch pressure at 2,000 rpm (min⁻¹) D₄ or 1 position | | | |
| | Governor pressure at 60 km/h (38 mph) | | 179 – 189 (1.83 – 1.93, 26.0 – 27.4) | 175 (1.78, 25.3) |
| | Throttle B pressure | Throttle fully closed Throttle fully open | 0 – 15 (0 – 0.15, 0 – 2.1) 830 – 880 (8.5 – 9.0, 120 – 130) | — 780 (8.0, 110) |
| | Throttle A pressure | Throttle fully closed Throttle fully open | 0 – 15 (0 – 0.15, 0 – 2.1) 476 – 490 (4.85 – 5.0, 69.0 – 70) | — 470 (4.8, 68) |
| Hydraulic pressure kPa (kgf/cm², psi) D14A2 engine | Line pressure at 2,000 rpm (min⁻¹) N or P position | | 780 – 830 (8.0 – 8.5, 110 – 120) | 740 (7.5, 110) |
| | 2nd clutch pressure at 2,000 rpm (min⁻¹) D₄ position | | 390 (4.0, 57) throttle fully closed | 340 (3.5, 50) throttle fully closed |
| | 3rd clutch pressure at 2,000 rpm (min⁻¹) D₄ position | | 780 – 830 (8.0 – 8.5, 110 – 120) throttle more than 1/8 opened | 740 (7.5, 110) throttle more than 1/8 opened |
| | 4th clutch pressure at 2,000 rpm (min⁻¹) D₄ position | | | |
| | 2nd clutch pressure at 2,000 rpm (min⁻¹) 2 position | | 780 – 830 (8.0 – 8.5, 110 – 120) | 740 (7.5, 110) |
| | 1st clutch pressure at 2,000 rpm (min⁻¹) D₄ or 1 position | | | |
| | Governor pressure at 60 km/h (38 mph) | | 180 – 190 (1.84 – 1.94, 26.2 – 27.6) | 176 (1.79, 25.5) |
| | Throttle B pressure | Throttle fully closed Throttle fully open | 0 – 15 (0 – 0.15, 0 – 2.1) 780 – 830 (8.0 – 8.5, 110 – 120) | — 740 (7.5, 110) |
| | Throttle A pressure | Throttle fully closed Throttle fully open | 0 – 15 (0 – 0.15, 0 – 2.1) 456 – 470 (4.65 – 4.8, 66.1 – 68) | — 450 (4.6, 65) |
| Stall speed rpm (min⁻¹) (check with car on level ground) | | | | |
| Clutch | Clutch initial clearance | 1st, 2nd | 0.65 – 0.85 (0.026 – 0.033) | — |
| | | 3rd, 4th | 0.40 – 0.60 (0.016 – 0.024) | — |
| | | 1st-hold | 0.5 – 0.8 (0.02 – 0.03) | — |
| | Clutch return spring free length | 1st | 31.0 (1.22) | 29.0 (1.14) |
| | | 2nd, 3rd, 4th | 30.5 (1.20) | 28.5 (1.12) |
| | | 1st-hold | 34.6 (1.36) | 32.6 (1.28) |
| | Clutch disc thickness | | 1.88 – 2.00 (0.074 – 0.079) | Until grooves worn out |
| | Clutch plate thickness | 1st | 1.55 – 1.65 (0.061 – 0.065) | Discoloration |
| | | Except 1st | 1.95 – 2.05 (0.077 – 0.081) | Discoloration |
| | Clutch end plate thickness (except 1st-hold) | MARK 1 | 2.3 – 2.4 (0.091 – 0.094) | Discoloration ↑ ↓ |
| | | MARK 2 | 2.4 – 2.5 (0.094 – 0.098) | |
| | | MARK 3 | 2.5 – 2.6 (0.098 – 0.102) | |
| | | MARK 4 | 2.6 – 2.7 (0.102 – 0.106) | |
| | | MARK 5 | 2.7 – 2.8 (0.106 – 0.110) | |
| | | MARK 6 | 2.8 – 2.9 (0.110 – 0.114) | |
| | | MARK 7 | 2.9 – 3.0 (0.114 – 0.118) | |
| | | MARK 8 | 3.0 – 3.1 (0.118 – 0.122) | |
| | | MARK 9 | 3.1 – 3.2 (0.122 – 0.126) | |
| | | MARK 10 | 3.2 – 3.3 (0.126 – 0.130) | |
| | | MARK 11 | 2.0 – 2.1 (0.079 – 0.083) | |
| | | MARK 12 | 2.1 – 2.2 (0.083 – 0.087) | |
| | | MARK 13 | 2.2 – 2.3 (0.087 – 0.091) | |
| | Clutch end plate thickness (1st-hold) | MARK 1 | 2.05 – 2.10 (0.081 – 0.083) | Discoloration ↑ ↓ |
| | | MARK 2 | 2.15 – 2.20 (0.085 – 0.087) | |
| | | MARK 3 | 2.25 – 2.30 (0.089 – 0.091) | |
| | | MARK 4 | 2.35 – 2.40 (0.093 – 0.094) | |
| | | NO MARK | 2.45 – 2.50 (0.096 – 0.098) | |
| | | MARK 6 | 2.55 – 2.60 (0.100 – 0.102) | |
| | | MARK 7 | 2.65 – 2.70 (0.104 – 0.106) | |

(cont'd)

Standards and Service Limits

Automatic Transmission (cont'd) — Section 14

| | MEASUREMENT | STANDARD (NEW) | SERVICE LIMIT |
|--------------|---|-----------------------------------|----------------|
| Transmission | Diameter of needle bearing contact area | | |
| | On mainshaft stator shaft bearing | 22.980 – 22.993 (0.9047 – 0.9052) | Wear or damage |
| | On mainshaft 2nd gear | 35.975 – 35.991 (1.4163 – 1.4169) | |
| | On mainshaft 4th gear collar | 31.975 – 31.991 (1.2589 – 1.2595) | ↑ |
| | On mainshaft 1st gear collar | 30.975 – 30.991 (1.2195 – 1.2201) | |
| | On countershaft (L. side) | 36.004 – 36.017 (1.4175 – 1.4180) | ↑ |
| | On countershaft 3rd gear | 31.980 – 31.996 (1.2590 – 1.2600) | |
| | On countershaft 4th gear | 27.980 – 27.993 (1.1016 – 1.1021) | ↑ |
| | On countershaft reverse gear collar | 31.975 – 31.991 (1.2589 – 1.2595) | |
| | On countershaft 1st gear collar | 31.975 – 31.991 (1.2589 – 1.2595) | ↑ |
| | On sub-shaft (L. side) | 25.991 – 26.000 (1.0233 – 1.0236) | |
| | On sub-shaft 4th gear collar | 27.980 – 27.993 (1.1016 – 1.1021) | ↑ |
| | On reverse idler gear shaft | 13.990 – 14.000 (0.5508 – 0.5512) | |
| | On mainshaft 1st gear | 35.000 – 35.016 (1.3780 – 1.3786) | ↑ |
| | On mainshaft 2nd gear | 41.000 – 41.016 (1.6142 – 1.6148) | |
| | On mainshaft 4th gear | 38.000 – 38.016 (1.4961 – 1.4967) | ↑ |
| | On countershaft 1st gear | 38.000 – 38.016 (1.4961 – 1.4967) | |
| | Inside diameter of needle bearing contact area | | |
| | On countershaft 3rd gear | 38.000 – 38.016 (1.4961 – 1.4967) | Wear or damage |
| | On countershaft 4th gear | 33.000 – 33.016 (1.2992 – 1.2998) | |
| | On countershaft reverse gear | 38.000 – 38.016 (1.4961 – 1.4967) | ↑ |
| | On sub-shaft 4th gear | 32.000 – 32.016 (1.2598 – 1.2605) | |
| | On reverse idler gear | 18.007 – 18.020 (0.7089 – 0.7094) | ↑ |
| | On stator shaft (R. side) | 29.000 – 29.013 (1.1417 – 1.1422) | |
| | On stator shaft (stator side) | 27.000 – 27.021 (1.0630 – 1.0638) | ↑ |
| | On reverse idler gear shaft holder | 14.416 – 14.434 (0.5676 – 0.5683) | |
| | End play | | |
| | Mainshaft 1st gear | 0.08 – 0.24 (0.003 – 0.009) | — |
| | Mainshaft 2nd gear | 0.05 – 0.13 (0.002 – 0.0051) | — |
| | Mainshaft 4th gear | 0.05 – 0.135 (0.002 – 0.0053) | — |
| | Countershaft 1st gear | 0.1 – 0.5 (0.004 – 0.020) | — |
| | Countershaft 3rd gear | 0.05 – 0.13 (0.002 – 0.0051) | — |
| | Countershaft 4th gear | 0.05 – 0.13 (0.002 – 0.0051) | — |
| | Sub-shaft 4th gear | 0.05 – 0.17 (0.002 – 0.007) | — |
| | Reverse idler gear | 0.05 – 0.18 (0.002 – 0.007) | — |
| | Countershaft reverse gear | 0.10 – 0.25 (0.004 – 0.010) | — |
| | Selector hub O.D. | 51.87 – 51.90 (2.042 – 2.043) | Wear or damage |
| | Mainshaft 4th gear collar length | 45.00 – 45.03 (1.772 – 1.773) | — |
| | Mainshaft 1st gear collar length | 27.00 – 27.15 (1.063 – 1.069) | — |
| | Mainshaft 1st gear collar flange thickness | 2.5 – 2.6 (2.098 – 2.102) | Wear or damage |
| | Countershaft distance collar length (28 mm) | | |
| | | 38.97 – 39.00 (1.534 – 1.535) | — |
| | | 39.02 – 39.05 (1.536 – 1.537) | — |
| | | 39.07 – 39.10 (1.538 – 1.539) | — |
| | | 39.12 – 39.15 (1.540 – 1.541) | — |
| | | 39.17 – 39.20 (1.542 – 1.543) | — |
| | | 39.22 – 39.25 (1.544 – 1.545) | — |
| | | 39.27 – 39.30 (1.546 – 1.547) | — |
| | | 38.87 – 38.90 (1.530 – 1.531) | — |
| | | 38.92 – 38.95 (1.532 – 1.533) | — |
| | Countershaft reverse gear collar length | 14.5 – 14.6 (0.571 – 0.575) | — |
| | Countershaft reverse gear collar flange thickness | 2.4 – 2.6 (0.094 – 0.102) | Wear or damage |
| | Countershaft 1st gear collar length | 14.5 – 14.6 (0.571 – 0.575) | — |
| | Countershaft 1st gear collar flange thickness | 2.4 – 2.6 (0.094 – 0.102) | Wear or damage |
| | Sub-shaft 4th gear collar length | 24.0 – 24.1 (0.945 – 0.949) | Wear or damage |
| | Sub-shaft 4th gear collar flange thickness | 3.00 – 3.15 (0.118 – 0.124) | Wear or damage |

Automatic Transmission — Section 14

| | MEASUREMENT | STANDARD (NEW) | SERVICE LIMIT |
|---|---|--|--|
| Transmission (cont'd) | Mainshaft 2nd gear thrust washer thickness | 3.47 – 3.50 (0.137 – 0.138) 3.52 – 3.55 (0.139 – 0.140) 3.57 – 3.60 (0.141 – 0.142) 3.62 – 3.65 (0.143 – 0.144) 3.67 – 3.70 (0.145 – 0.146) 3.72 – 3.75 (0.147 – 0.148) 3.77 – 3.80 (0.148 – 0.150) 3.82 – 3.85 (0.151 – 0.152) 3.87 – 3.90 (0.153 – 0.154) | Wear or damage ↑ ↓ Wear or damage |
| | Thrust washer thickness Mainshaft 4th gear Mainshaft ball bearing L. side Mainshaft 1st gear L. side Mainshaft 1st gear R. side | 4.45 – 4.55 (0.175 – 0.179) 3.45 – 3.55 (0.136 – 0.140) 1.45 – 1.50 (0.057 – 0.059) 3.43 – 3.50 (0.135 – 0.138) | Wear or damage ↑ ↓ Wear or damage |
| | Countershaft 3rd gear splined washer thickness (35 x 52 mm) | 2.97 – 3.00 (0.117 – 0.118) 3.02 – 3.05 (0.119 – 0.120) 3.07 – 3.10 (0.121 – 0.122) 3.12 – 3.15 (0.123 – 0.124) 3.17 – 3.20 (0.125 – 0.126) 3.22 – 3.25 (0.127 – 0.128) 3.27 – 3.30 (0.129 – 0.130) 3.32 – 3.35 (0.131 – 0.132) 3.37 – 3.40 (0.133 – 0.134) 3.42 – 3.45 (0.135 – 0.136) 3.47 – 3.50 (0.137 – 0.138) 3.52 – 3.55 (0.139 – 0.140) 3.57 – 3.60 (0.141 – 0.142) | Wear or damage ↑ ↓ Wear or damage |
| | Sub-shaft 4th gear thrust washer thickness One-way clutch contact area I.D. Countershaft 1st gear Parking gear Mainshaft feed pipe A, O.D. Mainshaft feed pipe B, O.D. Countershaft feed pipe O.D. Sub-shaft feed pipe O.D. Mainshaft sealing ring thickness (29 mm and 35 mm) Mainshaft bushing I.D. Mainshaft bushing I.D. Countershaft bushing I.D. Sub-shaft bushing I.D. Mainshaft sealing ring groove width | 2.93 – 3.00 (0.115 – 0.118) 83.339 – 83.365 (3.2810 – 3.2821) 66.685 – 66.698 (2.6254 – 2.6259) 8.97 – 8.98 (0.353 – 0.354) 5.97 – 5.98 (0.2350 – 0.2354) 7.97 – 7.98 (0.3138 – 0.3142) 7.97 – 7.98 (0.3138 – 0.3142) 1.980 – 1.995 (0.0780 – 0.0785) 6.018 – 6.030 (0.2369 – 0.2374) 9.000 – 9.015 (0.3543 – 0.3549) 8.000 – 8.015 (0.3150 – 0.3156) 8.000 – 8.015 (0.3150 – 0.3156) 8.000 – 8.015 (0.3150 – 0.3156) 2.025 – 2.060 (0.080 – 0.081) | Wear or damage ↑ ↓ Wear or damage 8.95 (0.352) 5.95 (0.234) 7.95 (0.313) 7.95 (0.313) 1.80 (0.071) 6.045 (0.2380) 9.030 (0.355) 8.030 (0.3161) 8.030 (0.3161) 2.080 (0.082) |
| | Regulator valve body Sealing ring contact I.D. | 35.000 – 35.025 (1.3780 – 1.3782) | 35.050 (1.3799) |
| Shifting device and parking brake control | Reverse shift fork finger thickness Parking brake ratchet pawl Parking brake gear Throttle cam stopper height | 5.90 – 6.00 (0.232 – 0.236) _____ _____ 27.0 – 27.1 (1.063 – 1.067) | 5.40 (0.213) Wear or other defect _____ |
| Servo body | Shift fork shaft bore I.D. Shift fork shaft valve bore I.D. | 14.000 – 14.010 (0.5512 – 0.5516) 37.000 – 37.039 (1.4567 – 1.4582) | _____ 37.045 (1.4585) |
| Oil pump | Oil pump gear side clearance | Drive 0.03 – 0.05 (0.001 – 0.002) Driven 0.04 – 0.06 (0.0016 – 0.0024) | 0.07 (0.003) 0.07 (0.003) |
| | Oil pump gear-to-body clearance | Drive 0.210 – 0.265 (0.0083 – 0.0104) Driven 0.070 – 0.125 (0.0028 – 0.0049) | _____ _____ |
| | Oil pump driven gear I.D. | 14.016 – 14.034 (0.5518 – 0.5525) | Wear or damage |
| | Oil pump driven gear shaft O.D. | 13.980 – 13.990 (0.5504 – 0.5508) | Wear or damage |

(cont'd)

Standards and Service Limits

Automatic Transmission (cont'd) — Section 14

| | MEASUREMENT | STANDARD (NEW) | | | |
|---------|--------------------------------------|----------------|--------------|--------------|--------------|
| | | Wire Dia. | O.D. | Free Length | No. of Coils |
| Springs | Regulator valve spring A | | | | |
| | D16Y3 engine | 1.8 (0.07) | 14.7 (0.58) | 87.8 (3.46) | 16.5 |
| | D14A2 engine | 1.8 (0.07) | 14.7 (0.58) | 85.4 (3.36) | 16.5 |
| | Regulator valve spring B | 1.8 (0.07) | 9.6 (0.38) | 44.0 (1.73) | 7.5 |
| | Stator reaction spring | 5.5 (0.22) | *26.4 (1.04) | 30.3 (1.19) | 2.1 |
| | Torque converter check valve spring | 1.0 (0.04) | 8.4 (0.33) | 33.8 (1.33) | 8.2 |
| | Modulator valve spring | 1.2 (0.047) | *7.0 (0.276) | 27.2 (1.071) | 8.0 |
| | | 1.2 (0.047) | *7.0 (0.276) | 26.3 (1.035) | 8.0 |
| | Relief valve spring | 1.1 (0.04) | 8.6 (0.34) | 37.1 (1.46) | 13.4 |
| | Cooler check valve spring | 1.0 (0.04) | 8.4 (0.33) | 33.8 (1.33) | 8.2 |
| | Governor spring A | 1.0 (0.04) | 18.8 (0.74) | 32.9 (1.30) | 4.1 |
| | Governor spring B | 0.9 (0.04) | 11.8 (0.47) | 27.8 (1.09) | 6.0 |
| | | 0.9 (0.04) | 11.8 (0.47) | 29.1 (1.15) | 6.0 |
| | 2 – 3 orifice control valve spring | 0.9 (0.04) | 6.6 (0.26) | 33.2 (1.31) | 14.9 |
| | 4 – 3 kick down valve spring | 1.0 (0.04) | 6.6 (0.26) | 29.9 (1.18) | 14.7 |
| | 2/3 – 4 orifice control valve spring | 1.0 (0.04) | 8.6 (0.34) | 51.9 (2.04) | 19.8 |
| | 2nd ON orifice control valve spring | 0.9 (0.04) | 8.0 (0.31) | 24.1 (0.95) | 9.6 |
| | Throttle valve A spring | 1.0 (0.04) | 8.5 (0.33) | 22.2 (0.87) | 6.0 |
| | | 1.0 (0.04) | 8.5 (0.33) | 22.1 (0.87) | 5.5 |
| | | 1.1 (0.04) | 8.5 (0.33) | 22.3 (0.87) | 8.1 |
| | | 1.1 (0.04) | 8.5 (0.33) | 22.3 (0.87) | 7.6 |
| | Throttle valve B adjusting spring | 0.8 (0.03) | 6.2 (0.24) | 30 (1.18) | 8 |
| | Throttle valve A adjusting spring | 0.8 (0.03) | 6.2 (0.24) | 27 (1.06) | 8.5 |
| | Throttle valve B spring | 1.4 (0.06) | 8.5 (0.33) | 41.5 (1.63) | 10.5 |
| | | 1.4 (0.06) | 8.5 (0.33) | 41.5 (1.63) | 11.2 |
| | | 1.4 (0.06) | 8.5 (0.33) | 41.6 (1.64) | 12.4 |
| | 1 – 2 shift valve spring | 0.45 (0.018) | 5.1 (0.20) | 52.8 (2.08) | 29 |
| | 1 – 2 shift valve ball spring | 0.45 (0.018) | 4.5 (0.18) | 10.7 (0.42) | 12.7 |
| | 2 – 3 shift valve spring | 0.9 (0.04) | 7.1 (0.28) | 65.3 (2.57) | 32.1 |
| | 2 – 3 shift valve ball spring | 0.45 (0.018) | 4.5 (0.18) | 13.3 (0.52) | 8.0 |
| | 3 – 4 shift valve spring | 0.9 (0.04) | 9.6 (0.38) | 32.5 (1.28) | 10.3 |
| | 3 – 4 shift valve ball spring | 0.5 (0.02) | 4.5 (0.18) | 11.3 (0.44) | 7.4 |
| | 1st-hold accumulator spring | 4.0 (0.16) | 21.5 (0.85) | 71.7 (2.82) | 8.3 |
| | 1st accumulator spring A | 2.6 (0.10) | 24.3 (0.96) | 101.9 (4.01) | 11.6 |
| | 1st accumulator spring B | 2.3 (0.09) | *9.9 (0.39) | 49.0 (1.93) | 4.6 |
| | 2nd accumulator spring | 3.5 (0.14) | 22 (0.87) | 77.0 (3.03) | 9.5 |
| | 3rd accumulator spring | 2.6 (0.10) | 17.5 (0.69) | 91.8 (3.61) | 15.8 |
| | 4th accumulator spring | 2.6 (0.10) | 16 (0.63) | 90.1 (3.55) | 15.6 |
| | Lock-up shift valve spring | 0.9 (0.04) | 7.6 (0.30) | 73.7 (2.90) | 32 |
| | Lock-up timing valve spring | 0.8 (0.03) | 6.6 (0.26) | 61.5 (2.42) | 27.6 |
| | Lock-up control valve spring | 0.9 (0.04) | 6.6 (0.26) | 38.4 (1.51) | 23.3 |
| | Governor cut valve spring | 0.8 (0.03) | 7.6 (0.30) | 44.5 (1.75) | 17 |
| | CPC valve spring | 0.9 (0.04) | 8.4 (0.33) | 24.9 (0.98) | 9.8 |
| | Reverse control valve spring | 0.7 (0.03) | 7.1 (0.28) | 40 (1.57) | 20.8 |
| | 3 – 2 timing valve spring | 1.2 (0.05) | 8.6 (0.34) | 45.6 (1.80) | 14.7 |
| | Servo control valve spring | 0.9 (0.04) | 6.4 (0.25) | 34.1 (1.34) | 17.5 |
| | 2 – 1 timing valve spring | 0.7 (0.03) | 5.6 (0.22) | 33 (1.30) | 21.7 |
| | 4th exhaust valve spring | 0.9 (0.04) | 6.6 (0.26) | 43.3 (1.70) | 22 |

*: Inside Diameter

Differential M/T — Section 15

| | MEASUREMENT | STANDARD (NEW) | SERVICE LIMIT |
|--------------------------------|---------------------------------------|-----------------------------------|------------------|
| Differential carrier | Pinion shaft bore diameter | 18.000 – 18.018 (0.7087 – 0.7094) | — |
| | Carrier-to-pinion shaft clearance | 0.013 – 0.047 (0.0005 – 0.0019) | 0.095 (0.004) |
| | Driveshaft bore diameter | 26.025 – 26.045 (1.0246 – 1.0254) | — |
| | Carrier-to-driveshaft clearance | 0.045 – 0.086 (0.0018 – 0.0034) | 0.14 (0.006) |
| Differential pinion gear | Backlash | 0.05 – 0.15 (0.002 – 0.006) | — |
| | Pinion gear bore diameter | 18.042 – 18.066 (0.7103 – 0.7113) | — |
| | Pinion gear-to-pinion shaft clearance | 0.055 – 0.095 (0.0021 – 0.0037) | 0.15 (0.006) |
| Set ring-to-bearing outer race | | 0 – 0.1 (0 – 0.004) | Adjust with shim |

Differential A/T — Section 15

| | MEASUREMENT | STANDARD (NEW) | SERVICE LIMIT |
|--------------------------------|---------------------------------------|-------------------------------------|---------------|
| Differential carrier | Pinion shaft contact area I.D. | 18.000 – 18.018 (15.8382 – 15.8540) | — |
| | Carrier-to-pinion clearance | 0.013 – 0.047 (0.0005 – 0.0019) | 0.10 (0.004) |
| | Driveshaft contact area I.D. | 26.005 – 26.025 (1.0238 – 1.0246) | — |
| | Carrier-to-driveshaft clearance | 0.025 – 0.066 (0.0010 – 0.0026) | 0.12 (0.005) |
| | Ball bearing contact area O.D. | 40.002 – 40.018 (1.5749 – 1.5755) | — |
| Differential pinion gear | Backlash | 0.08 – 0.15 (0.003 – 0.006) | — |
| | I.D. | 18.041 – 18.061 (0.7103 – 0.7111) | — |
| | Pinion gear-to-pinion shaft clearance | 0.054 – 0.090 (0.0021 – 0.0035) | 0.15 (0.006) |
| Set ring-to-bearing outer race | | 0 – 0.15 (0 – 0.006) | Adjust |

Power Steering — Section 17

| | MEASUREMENT | STANDARD (NEW) |
|----------------------|--|--|
| Steering wheel | Play at steering wheel circumference | 0 – 10 (0 – 0.4) |
| | Starting load at steering wheel circumference N (kgf, lbf) Engine running | 30 (3.1, 6.8) |
| Pump | Pump pressure with valve 1.6 l model closed (oil temp./speed: 40°C Except 1.6 l model (105°F) min./idle. Do not run for more than 5 seconds). kPa (kgf/cm², psi) | 6,400 – 7,400 (65 – 75, 924 – 1,067) 5,400 – 6,400 (55 – 65, 782 – 924) |
| Power steering fluid | Recommended power steering fluid | HONDA Power Steering Fluid-V |
| | Fluid capacity System LHD model | 1.0 (1.06, 0.88) |
| | l (US qt, Imp qt) Reservoir RHD model | 0.9 (0.95, 0.85) 0.4 (0.42, 0.35) |
| Power steering belt* | Deflection with 98 N (10 kgf, 22 lbf) between pulleys | 8.0 – 12.0 (0.31 – 0.47) with used belt 5.5 – 8.5 (0.22 – 0.33) with new belt |
| | Tension measured with belt tension gauge N (kgf, lbf) | 340 – 490 (35 – 50, 77 – 110) with used belt 590 – 785 (60 – 80, 132 – 176) with new belt |

*: When using a new belt, adjust deflection or tension to new values. Run the engine for 5 minutes then turn it off.
Readjust the deflection or tension to used belt values.

Standards and Service Limits

Suspension — Section 18

| Suspension — Section 18 | | | | | |
|-------------------------|---------------------------|---------------------------|--------------------------------|----------------------|------------|
| | MEASUREMENT | | STANDARD (NEW) | SERVICE LIMIT | |
| Wheel alignment | Camber | Front 1.6i SR VTEC | $0^{\circ} \pm 1^{\circ}$ | _____ | |
| | | Except 1.6i SR VTEC | $-0^{\circ}07' \pm 1^{\circ}$ | _____ | |
| | Caster | Rear | $-0^{\circ}50' \pm 45'$ | _____ | |
| | | Front | $1^{\circ}10' \pm 1^{\circ}$ | _____ | |
| | Total toe | Front | $0 \pm 2.0 (0 \pm 0.08)$ | _____ | |
| | | Rear | $1n 2.3 \pm 2 (0.09 \pm 0.08)$ | _____ | |
| | Front wheel turning angle | Inward wheel | | | |
| | | 1.6i SR VTEC | $36^{\circ} \pm 2^{\circ}$ | _____ | |
| | | Except 1.6i SR VTEC | $40^{\circ} \pm 2^{\circ}$ | _____ | |
| | | Outward wheel (Reference) | | | |
| | 1.6i SR VTEC | 30° | _____ | | |
| | Except 1.6i SR VTEC | 33° | _____ | | |
| Wheel | Rim runout | Aluminum wheel | Axial | $0 - 0.3 (0 - 0.01)$ | 1.6 (0.06) |
| | | | Radial | $0 - 0.3 (0 - 0.01)$ | 1.0 (0.04) |
| | | Steel wheel | Axial | $0 - 0.7 (0 - 0.03)$ | 1.7 (0.07) |
| | | | Radial | $0 - 0.5 (0 - 0.02)$ | 1.0 (0.04) |
| Wheel bearing | End play | Front | $0 - 0.05 (0 - 0.002)$ | _____ | |
| | | Rear | $0 - 0.05 (0 - 0.002)$ | _____ | |

Brakes — Section 19

| | MEASUREMENT | | STANDARD (NEW) | SERVICE LIMIT |
|---------------------|--|--------------------|---|--|
| Parking brake lever | Play in stroke at 196 N (20 kgf, 44 lbf) lever force | | To be locked when pulled 6 – 10 notches | _____ |
| Foot brake pedal | Pedal height (with floor mat removed) | LHD model M/T | 157 (6.18) | _____ |
| | | A/T | 162 (6.38) | _____ |
| | | RHD model M/T | 154 (6.06) | _____ |
| | | A/T | 159 (6.30) | _____ |
| Master cylinder | Piston-to-pushrod clearance | | $1 - 5 (1/16 - 13/64)$ | _____ |
| | | | | |
| Disc brake | Disc thickness | Front | $20.9 - 21.1 (0.82 - 0.83)$ | $19.0 (0.75)$ |
| | | Rear | $9.9 - 10.1 (0.39 - 0.40)$ | $8.0 (0.31)$ |
| | Disc runout | | | $0.10 (0.004)$ |
| | | | | $0.015 (0.0006)$ |
| Disc brake | Disc parallelism | | | |
| | | | | |
| Pad thickness | | Front | $11.0 - 11.7 (0.43 - 0.46)$ | $1.6 (0.06)$ |
| | | Rear | $7.3 - 8 (0.29 - 0.31)$ | $1.6 (0.06)$ |
| Rear brake drum | I.D. | | $203.20 - 203.33 (8.000 - 8.005)$ | $204 (8.03)$ |
| | | | $5.0 (0.20)$ | $2.0 (0.08)$ |
| Brake booster | Characteristics at 196 N (20 kgf, 44 lbf) pedal force. | Vacuum mmHg (inHg) | | Line pressure kPa (kg/cm ² , psi) |
| | | Cars without ABS | 0 (0) | 1,280 (13.1, 185) |
| | | | 300 (11.8) | 5,390 (55.0, 782) |
| | | | 500 (19.7) | 8,130 (82.9, 1,175) |
| | | Cars with ABS | 0 (0) | 950 (9.7, 134) |
| | | | 300 (11.8) | 5,520 (56.3, 800) |
| | | | 500 (19.7) | 8,570 (87.4, 1,240) |

Air Conditioning — Section 22

| | MEASUREMENT | | STANDARD (NEW) |
|-------------------------|--|--------------|--|
| Air Conditioning system | Lubricant type: SP-10 (P/N 38899 – P13 – 003) (For refrigerant: HFC-134a (R-134a)) | | |
| | Lubricant capacity ml (fl oz, Imp oz) | Condenser | 15 (1/2, 0.5) |
| | | Evaporator | 25 (5/6, 0.9) |
| | | Line or hose | 10 (1/3, 0.4) |
| | | Receiver | 10 (1/3, 0.4) |
| Compressor | Lubricant type: SP-10 (P/N 38899 – P13 – 003) (For refrigerant: HFC-134a (R-134a)) | | |
| | Lubricant capacity ml (fl oz, Imp oz) | | $120 - 140 (4 - 4 \frac{2}{3}, 4.2 - 4.9)$ |
| | Coil resistance at 68°F (20°C) Ω | | $2.95 - 3.35$ |
| | Pulley-to-pressure plate clearance | | $0.5 \pm 0.15 (0.02 \pm 0.006)$ |
| Compressor belt* | Deflection with 98 N (10 kgf, 22 lbf) between pulleys | | $6.5 - 10.5 (0.26 - 0.41)$ with used belt $5.0 - 7.0 (0.20 - 0.28)$ with new belt |
| | Belt tension N (kgf, lbf) | | $340 - 490 (35 - 50, 77 - 110)$ with used belt $590 - 780 (60 - 80, 132 - 176)$ with new belt |
| | Measured with belt tension gauge | | |

*: When using a new belt, adjust deflection or tension to new values. Run the engine for 5 minutes then turn it off.
Readjust deflection or tension to used belt values.

Electrical — Section 23

| | MEASUREMENT | STANDARD (NEW) | |
|------------------------------|---|--|--------------|
| Ignition coil | Rated voltage V | 12 | |
| | Primary winding resistance at 20°C (68°F) Ω | 0.6 – 0.8 | |
| | Secondary winding resistance at 20°C (68°F) kΩ | 13 – 19 | |
| Spark plug | Type Electrode gap | Refer to Section 23 1.1 $\frac{0}{-0.1}$ (0.043 $\frac{0}{-0.004}$) | |
| Ignition timing | At idle | 16° ± 2° (Red) BTDC | |
| Alternator belt* | Deflection with 98 N (10 kgf, 22 lbf) between pulleys | 7.0 – 10.5 (0.28 – 0.41) with used belt 5.0 – 7.0 (0.19 – 0.28) with new belt | |
| | Tension measured with belt tension gauge N (kgf, lbf) | 340 – 490 (35 – 50, 77 – 110) with used belt 640 – 785 (65 – 80, 143 – 176) with new belt | |
| Alternator (BOSCH) | Output 13.5 V at hot A | 75 | |
| | Coil resistance (rotor) Ω | 2.3 | |
| | Slip ring O.D. | 14.4 (0.567) | 14.0 (0.551) |
| | Brush length | 12.5 (0.49) | 2.5 (0.10) |
| | Brush spring tension g (oz) | 330 (11.6) | |
| Starter motor (VALEO 1.0 kW) | Type | Gear reduction | |
| | Mica depth | 0.4 – 0.5 (0.016 – 0.020) | 0.15 (0.006) |
| | Commutator runout | 0 – 0.02 (0 – 0.001) | 0.05 (0.002) |
| | Commutator O.D. | 28.0 – 28.1 (1.102 – 1.106) | 27.5 (1.083) |
| | Brush length | 14.3 – 14.7 (0.56 – 0.58) | 9.5 (0.37) |
| | Brush spring tension (new) N (kgf, lbf) | 18.5 – 23.5 (1.85 – 2.35, 4.1 – 5.2) | |

*: When using a new belt, adjust deflection or tension to new belt values. Run the engine for 5 minutes then turn it off.
Readjust deflection or tension to used belt values.