

SUSPENSION AND AXLE

SERVICE DATA

SS000-06

| | | | |
|--------------------------------------|--|--|--|
| Cold tire inflation pressure | Europe [230 km/h (143 mph) or over] | | |
| | Tire size 225/55R17 97W | Front *1 | 260 kPa (2.7 kgf/cm ² , 38 psi) |
| | | Rear *1 | 290 kPa (3.0 kgf/cm ² , 42 psi) |
| | | Front *2 | 260 kPa (2.7 kgf/cm ² , 38 psi) |
| | | Rear *2 | 330 kPa (3.4 kgf/cm ² , 48 psi) |
| | Europe [Under 230 km/h (143 mph)] | | |
| | Tire size 225/55R17 97W | Front *1 | 240 kPa (2.4 kgf/cm ² , 35 psi) |
| | | Rear *1 | 240 kPa (2.4 kgf/cm ² , 35 psi) |
| | | Front *2 | 240 kPa (2.4 kgf/cm ² , 35 psi) |
| | | Rear *2 | 280 kPa (2.9 kgf/cm ² , 41 psi) |
| | Australia [190 km/h (118 mph) or over] | | |
| | Tire size 225/55R17 97W | Front *1 | 270 kPa (2.8 kgf/cm ² , 39 psi) |
| | Rear *1 | 290 kPa (3.0 kgf/cm ² , 42 psi) | |
| | Front *2 | 270 kPa (2.8 kgf/cm ² , 39 psi) | |
| | Rear *2 | 330 kPa (3.4 kgf/cm ² , 48 psi) | |
| Australia [Under 190 km/h (118 mph)] | | | |
| Tire size 225/55R17 97W | Front *1 | 240 kPa (2.4 kgf/cm ² , 35 psi) | |
| | Rear *1 | 240 kPa (2.4 kgf/cm ² , 35 psi) | |
| | Front *2 | 240 kPa (2.4 kgf/cm ² , 35 psi) | |
| | Rear *2 | 280 kPa (2.9 kgf/cm ² , 41 psi) | |
| Others [230 km/h (143 mph) or over] | | | |
| Tire size 225/55R17 97W | Front *1 | 260 kPa (2.7 kgf/cm ² , 38 psi) | |
| | Rear *1 | 290 kPa (3.0 kgf/cm ² , 42 psi) | |
| | Front *2 | 260 kPa (2.7 kgf/cm ² , 38 psi) | |
| | Rear *2 | 330 kPa (3.4 kgf/cm ² , 48 psi) | |
| Others [Under 230 km/h (143 mph)] | | | |
| Tire size 225/55R17 97W | Front *1 | 240 kPa (2.4 kgf/cm ² , 35 psi) | |
| | Rear *1 | 240 kPa (2.4 kgf/cm ² , 35 psi) | |
| | Front *2 | 240 kPa (2.4 kgf/cm ² , 35 psi) | |
| | Rear *2 | 280 kPa (2.9 kgf/cm ² , 41 psi) | |

*1: Up to 4 passengers

*2: more than 4 passengers

Europe only:

When towing, increase the pressure 20 kPa (0.2 kgf/cm², 3 psi).

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| Front wheel alignment | Vehicle height | | |
| | w/o Electronic modulated air suspension | Front *1 | 214 mm (8.43 in.) |
| | | Rear *2 | 233 mm (9.17 in.) |
| | w/ Electronic modulated air suspension | Front *1 | 206 ± 10 mm (8.11 ± 0.39 in.) |
| | | Left-right error | 10 mm (0.39 in.) or less |
| | | Rear *2 | 212 ± 10 mm (8.35 ± 0.39 in.) |
| | | Left-right error | 10 mm (0.39 in.) or less |
| | | H _f - F _r | 27.5 ± 15 mm (1.08 ± 0.59 in.) |
| Rear wheel alignment | Camber | | |
| | w/o Electronic modulated air suspension | | -0°05' ± 45' (-0.08° ± 0.75°) |
| | | Left-right error | 30' (0.5°) or less |
| | w/ Electronic modulated air suspension | | 0°15' ± 45' (0.25° ± 0.75°) |
| | | Left-right error | 30' (0.5°) or less |
| | Caster | | |
| | w/o Electronic modulated air suspension | | 6°45' ± 45' (6.75° ± 0.75°) |
| | | Left-right error | 30' (0.5°) or less |
| Front axle | w/ Electronic modulated air suspension | | 7°15' ± 45' (7.25° ± 0.75°) |
| | | Left-right error | 30' (0.5°) or less |
| | Steering axis inclination (Reference) | | |
| | w/o Electronic modulated air suspension | | 9°00' ± 45' (9° ± 0.75°) |
| | | Left-right error | 30' (0.5°) or less |
| | w/ Electronic modulated air suspension | | 9°15' ± 45' (9.25° ± 0.75°) |
| | | Left-right error | 30' (0.5°) or less |
| | Toe-in (total) | | 0°06' ± 12' (0.1° ± 0.2°, 1 ± 2 mm, 0.04 ± 0.08 in.) |
| Rack end length difference | | 1 mm (0.04 in.) or less | |
| Wheel angle | Inside wheel | | 43°30' (43.5°) |
| | Outside wheel (Reference) | | 37°20' (37.33°) |
| | | | |
| Rear axle | Camber | | |
| | w/o Electronic modulated air suspension | | -0°53' ± 45' (-0.88° ± 0.75°) |
| | | Left-right error | 30' (0.5°) or less |
| Front suspension | w/ Electronic modulated air suspension | | -1°33' ± 45' (-1.55° ± 0.75°) |
| | | Left-right error | 30' (0.5°) or less |
| | Toe-in (total) | | 0°18' ± 12' (0.3° ± 0.2°, 3 ± 2 mm, 0.12 ± 0.08 in.) |
| Front axle | Wheel bearing backlash | | 0.05 mm (0.0020 in.) or less |
| | Axle hub deviation | | 0.05 mm (0.0020 in.) or less |
| Front suspension | Upper ball joint turning torque | | 1.0 - 3.4 N·m (10 - 35 kgf·cm, 9 - 30 in.·lbf) |
| | Lower ball joint turning torque | | 0.5 - 3.5 N·m (5 - 36 kgf·cm, 4.5 - 31 in.·lbf) |
| | Stabilizer bar ball joint turning torque | | 0.05 - 1.5 N·m (0.5 - 15 kgf·cm, 0.4 - 13 in.·lbf) |

H_f: Measured value of the front vehicle height

F_r: Measured value of the rear vehicle height

*1: Front measure point

Measure from the ground to the center of the lower suspension arm mounting bolt.

*2: Rear measure point

Measure from the ground to the center of the lower suspension arm No. 2 mounting bolts.

SERVICE SPECIFICATIONS - SUSPENSION AND AXLE

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| Rear axle | Wheel bearing backlash | | 0.05 mm (0.0020 in.) or less | |
| | Axle hub deviation | | 0.07 mm (0.0028 in.) or less | |
| Rear drive shaft | Drive shaft length | RH | 623.5 mm (24.547 in.) | |
| | | LH | 577.5 mm (22.736 in.) | |
| Rear suspension | Upper ball joint turning torque | | 1.0 – 3.4 N·m (10 – 35 kgf·cm, 9 – 30 in.·lbf) | |
| | lower suspension arm ball joint turning torque | | 0.5 – 3.4 N·m (5.0 – 35 kgf·cm, 4.4 – 30 in.·lbf) | |
| | Toe control link ball joint turning torque | | 0.9 – 3.2 N·m (9.0 – 33 kgf·cm, 8.0 – 28 in.·lbf) | |
| | Stabilizer bar link ball joint turning torque | | 0.05 – 1.5 N·m (0.5 – 15 kgf·cm, 0.4 – 13 in.·lbf) | |
| Rear differential | Drive pinion shaft runout | Maximum | 0.08 mm (0.0031 in.) | |
| | Ring gear runout | Maximum | 0.05 mm (0.0020 in.) | |
| | Ring gear backlash | | 0.08 – 0.13 mm (0.0031 – 0.0051 in.) | |
| | Drive pinion bearing preload (at starting) | New bearing | | 1.5 – 1.8 N·m (15 – 18 kgf·cm, 13.0 – 15.6 in.·lbf) |
| | | Reused bearing | | 0.5 – 0.8 N·m (5 – 8 kgf·cm, 4.3 – 6.9 in.·lbf) |
| | Total preload (at starting) | | Drive pinion preload plus 0.5 – 0.8 N·m (5 – 8 kgf·cm, 4.3 – 6.9 in.·lbf) | |
| | Pinion gear backlash | Maximum | 0.15 mm (0.0059 in.) | |
| Pinion gear backlash adjusting thrust washer | | 1.50 mm (0.059 in.) 1.55 mm (0.061 in.) 1.60 mm (0.063 in.) 1.65 mm (0.065 in.) 1.70 mm (0.067 in.) 1.75 mm (0.069 in.) 1.80 mm (0.071 in.) 1.85 mm (0.073 in.) 1.90 mm (0.075 in.) | | |

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| Rear differential (cont'd) | Ring gear backlash adjusting washer | No. | |
| | | 02 | 2.02 mm (0.0795 in.) |
| | | 04 | 2.04 mm (0.0803 in.) |
| | | 06 | 2.06 mm (0.0811 in.) |
| | | 08 | 2.08 mm (0.0819 in.) |
| | | 10 | 2.10 mm (0.0827 in.) |
| | | 12 | 2.12 mm (0.0835 in.) |
| | | 14 | 2.14 mm (0.0843 in.) |
| | | 16 | 2.16 mm (0.0850 in.) |
| | | 18 | 2.18 mm (0.0858 in.) |
| | | 20 | 2.20 mm (0.0866 in.) |
| | | 22 | 2.22 mm (0.0874 in.) |
| | | 24 | 2.24 mm (0.0882 in.) |
| | | 26 | 2.26 mm (0.0890 in.) |
| | | 28 | 2.28 mm (0.0898 in.) |
| | | 30 | 2.30 mm (0.0906 in.) |
| | | 32 | 2.32 mm (0.0913 in.) |
| | | 34 | 2.34 mm (0.0921 in.) |
| | | 36 | 2.36 mm (0.0929 in.) |
| | | 38 | 2.38 mm (0.0937 in.) |
| | | 40 | 2.40 mm (0.0945 in.) |
| | | 42 | 2.42 mm (0.0953 in.) |
| | | 44 | 2.44 mm (0.0961 in.) |
| | | 46 | 2.46 mm (0.0969 in.) |
| | | 48 | 2.48 mm (0.0976 in.) |
| | | 50 | 2.50 mm (0.0984 in.) |
| | | 52 | 2.52 mm (0.0992 in.) |
| | | 54 | 2.54 mm (0.1000 in.) |
| | | 56 | 2.56 mm (0.1008 in.) |
| | | 58 | 2.58 mm (0.1016 in.) |
| | | 60 | 2.60 mm (0.1024 in.) |
| | | 62 | 2.62 mm (0.1031 in.) |
| | | 64 | 2.64 mm (0.1039 in.) |
| | | 66 | 2.66 mm (0.1047 in.) |
| | | 68 | 2.68 mm (0.1055 in.) |
| | | 70 | 2.70 mm (0.1063 in.) |
| | 72 | 2.72 mm (0.1071 in.) | |
| | 74 | 2.74 mm (0.1079 in.) | |
| | 76 | 2.76 mm (0.1087 in.) | |
| | 78 | 2.78 mm (0.1100 in.) | |
| | 80 | 2.80 mm (0.1102 in.) | |
| | 82 | 2.82 mm (0.1094 in.) | |
| | 84 | 2.84 mm (0.1118 in.) | |
| | 86 | 2.86 mm (0.1126 in.) | |

SERVICE SPECIFICATIONS - SUSPENSION AND AXLE

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|-------------------------------|--|----------------------|----------------------|
| Rear differential (cont'd) | Tooth contact pattern adjusting washer | No. | |
| | | 87 | 1.87 mm (0.0736 in.) |
| | | 88 | 1.88 mm (0.0740 in.) |
| | | 89 | 1.89 mm (0.0744 in.) |
| | | 90 | 1.90 mm (0.0748 in.) |
| | | 91 | 1.91 mm (0.0752 in.) |
| | | 92 | 1.92 mm (0.0756 in.) |
| | | 93 | 1.93 mm (0.0760 in.) |
| | | 94 | 1.94 mm (0.0764 in.) |
| | | 95 | 1.95 mm (0.0768 in.) |
| | | 96 | 1.96 mm (0.0772 in.) |
| | | 97 | 1.97 mm (0.0776 in.) |
| | | 98 | 1.98 mm (0.0780 in.) |
| | | 99 | 1.99 mm (0.0784 in.) |
| | | 00 | 2.00 mm (0.0787 in.) |
| | | 01 | 2.01 mm (0.0791 in.) |
| | | 02 | 2.02 mm (0.0795 in.) |
| | | 03 | 2.03 mm (0.0799 in.) |
| | | 04 | 2.04 mm (0.0803 in.) |
| | | 05 | 2.05 mm (0.0807 in.) |
| | | 06 | 2.06 mm (0.0811 in.) |
| | | 07 | 2.07 mm (0.0815 in.) |
| | | 08 | 2.08 mm (0.0819 in.) |
| | | 09 | 2.09 mm (0.0823 in.) |
| | | 10 | 2.10 mm (0.0827 in.) |
| | | 11 | 2.11 mm (0.0831 in.) |
| | | 12 | 2.12 mm (0.0835 in.) |
| | | 13 | 2.13 mm (0.0839 in.) |
| | 14 | 2.14 mm (0.0843 in.) | |
| | 15 | 2.15 mm (0.0846 in.) | |
| | 16 | 2.16 mm (0.0850 in.) | |
| | 17 | 2.17 mm (0.0854 in.) | |
| | 18 | 2.18 mm (0.0858 in.) | |
| | 19 | 2.19 mm (0.0862 in.) | |
| | 20 | 2.20 mm (0.0866 in.) | |
| | 21 | 2.21 mm (0.0870 in.) | |
| | 22 | 2.22 mm (0.0874 in.) | |
| | 23 | 2.23 mm (0.0878 in.) | |
| | 24 | 2.24 mm (0.0882 in.) | |
| | 25 | 2.25 mm (0.0886 in.) | |
| | 26 | 2.26 mm (0.0890 in.) | |
| | 27 | 2.27 mm (0.0894 in.) | |
| | 28 | 2.28 mm (0.0898 in.) | |