TECHNICAL DATA

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ENGINE

Displacement	573 cc (35.0 cu-in) x 2 rotors
Compression ratio	9.4 : 1
Compression pressure	
Limit	6.0 kg/cm² (85 lb/in²) at 250 rpm
Max. permissible difference between chambers	1.5 kg/cm² (21 lb/in²)
Port timing	
Intake opens	32° ATDC
Intake closes	40° ABDC
Exhaust opens	75° BBDC
Exhaust closes	38° ATDC
Side housings (Front, intermediate and rear housings)	
Width standard	
Front	40 mm (1.575 in)
Intermediate	50 mm (1.969 in)
Rear	60 mm (2.362 in)
Limit of distortion	0.04 mm (0.0016 in)
Limit of wear	
Sliding surface	0.10 mm (0.0039 in)
Rotor housing	
Width	70 mm (2.756 in)
Max. permissible difference in width	0.06 mm (0.0024 in)
Rotor	
Width	69.85 mm (2.750 in)
Clearance of side housing and rotor (△R)	
Standard	0.12 ~ 0.18 mm (0.0047 ~ 0.0071 in)
Limit	0.10 mm (0.004 in)
Apex seal	
Length	69.85 mm (2.750 in)
Width	3.0 mm (0.118 in)
Height	
Standard	8.5 mm (0.335 in)
Limit	7.0 mm (0.276 in)
Clearance of apex seal and side housing (△S)	
Standard	0.13 ~ 0.17 mm (0.0051 ~ 0.0067 in)
Clearance of apex seal and rotor groove (△G)	
Standard	0.05 ~ 0.09 mm (0.0020 ~ 0.0035 in)
Limit	0.15 mm (0.0060 in)
Apex seal spring	
Free height	
Standard	6.9 mm (0.272 in) or more
Limit	5.5 mm (0.22 in)
Side seal	
Thickness	1.0 mm (0.039 in)
Height	3.5 mm (0.138 in)
Clearance of side seal and rotor groove (△W)	
Standard	0.03 ~ 0.07 mm (0.0012 ~ 0.0028 in)
Limit	0.10 mm (0.0039 in)
Clearance of side seal and corner seal (△E)	
Standard	0.05 ~ 0.15 mm (0.0020 ~ 0.0060 in)
Limit	0.40 mm (0.016 in)
Side seal protrusion	More than 0.5 mm (0.0197 in)
Oil seal	
Height	5.6 mm (0.220 in)
Contact width of oil seal lip	Less than 0.5 mm (0.020 in)
Oil seal protrusion	More than 0.5 mm (0.020 in)
Corner seal	
Outer diameter	11.0 mm (0.433 in)
Height	7.0 mm (0.276 in)
Corner seal protrusion	More than 0.5 mm (0.020 in)
Main bearing clearance	
Standard	0.04 ~ 0.07 mm (0.0016 ~ 0.0028 in)
Wear limit	0.10 mm (0.0039 in)
Rotor bearing clearance	
Standard	0.04 ~ 0.08 mm (0.0016 ~ 0.0031 in)
Wear limit	0.10 mm (0.0039 in)
Eccentric shaft	
Eccentricity of rotor journal	15.0 mm (0.591 in)
Main journal diameter	43 mm (1.693 in)
Rotor journal diameter	74 mm (2.913 in)
Max. permissible run-out	0.06 mm (0.0024 in)
End play	
Standard	0.04 ~ 0.07 mm (0.0016 ~ 0.0028 in)
Limit	0.09 mm (0.0035 in)
Alternator belt tension (slack)	
(Between alternator and eccentric shaft pulleys)	
Belt deflection	15 ± 2 mm (0.59 ± 0.08 in)
Air pump belt tension (slack)	
(Between air pump and water pump pullys)	
Belt deflection	12 ± 1 mm (0.47 ± 0.04 in)

LUBRICATING SYSTEM

Oil pump	
Type	Rotor
Feeding capacity at 1,000 rpm of engine	5.0 liters/min. (5.3 U.S. quarts/min. 4.4 Imp. quarts/min.)
Oil pump driven by	Chain and sprockets
Limit of chain slack	12 mm (0.47 in)
Outer rotor and body clearance	
Standard	0.20 ~ 0.25 mm (0.008 ~ 0.010 in)
Wear limit	0.30 mm (0.0118 in)
Clearance between rotor lobes	
Standard	0.01 ~ 0.09 mm (0.0004 ~ 0.0035 in)
Wear limit	0.15 mm (0.0059 in)
Rotor end float	
Standard	0.03 ~ 0.13 mm (0.0012 ~ 0.0051 in)
Wear limit	0.15 mm (0.0059 in)
Oil pressure at 3,000 rpm of engine	4.5 ~ 5.5 kg/cm² (64 ~ 79 lb/in²)

Oil pressure at idle speed of engine	1.0 ~ 3.8 kg/cm² (14 ~ 54 lb/in²)
Pressure regulator valve (Rear housing)	
Operating pressure	5.0 kg/cm² (71.1 lb/in²) at 3,000 rpm of engine
Free length of spring	46.4 mm (1.830 in)
Pressure control valve (Front cover)	
Operating pressure	11.0 kg/cm² (156 lb/in²)
Free length of spring	73.0 mm (2.874 in)
By-pass valve (Oil cooler)	
Starts to close	50 ~ 55°C (122 ~ 131°F)
Fully closes	60 ~ 65°C (140 ~ 149°F)
Opening pressure	3.56 kg/cm² at 60°C (50.6 lb/in² at 140°F)
Oil filter	
Type	Full flow, cartridge
Relief valve opens at	0.8 ~ 1.2 kg/cm² (11 ~ 17 lb/in²)
Oil metering pump	
Feeding capacity of 2,000 rpm of engine	2.0 ~ 2.5 cc/6 min. (0.068 ~ 0.085 U.S. oz/6 min.)
Lubricant	
Classification	A.P.I. Service SD or SE
−10°C ~ 40°C (15°F ~ 100°F)	SAE 20W-40
−10°C ~ 50°C (15°F ~ 120°F)	SAE 20W-50
−18°C ~ 30°C (0°F ~ 85°F)	SAE 10W-30
−18°C ~ 40°C (0°F ~ 100°F)	SAE 10W-40
−18°C ~ 50°C (0°F ~ 120°F)	SAE 10W-50
Below −18°C (0°F)	SAE 5W-20 or 5W-30
Oil capacity	
Full capacity	5.2 liters (5.5 U.S. quarts / 4.6 Imp. quarts)
Oil pan capacity	4.2 liters (4.4 U.S. quarts / 3.7 Imp. quarts)

COOLING SYSTEM

Water pump	
Type	Centrifugal impeller
Feeding capacity at 6,500 rpm of engine	150 ~ 160 liters/min. (39.6 ~ 42.3 U.S. gal/min. / 33.0 ~ 35.2 Imp. gal/min.)
Pump driven by	"V" belt
Pulley ratio of eccentric shaft and pump	1 : 1.18
Fan	
Fan diameter	410 mm (16.1 in)
Number of fan blades	7
Fan drive	
Standard revolution of fan	1,400 ± 200 rpm at 4,200 rpm of engine
Thermostat	
Type	Wax pellet
Starts to open	82 ± 1.5°C (180 ± 2.7°F)
Fully opens at	95°C (203°F)
Lift	8 ~ 10 mm (0.3 ~ 0.4 in)
Radiator	
Type	Corrugated fin, with expansion tank
Pressure cap opens at	0.9 ± 0.1 kg/cm² (13.0 ± 1 lb/in²)
Cooling capacity	
With heater	9.5 liters (10 U.S. quarts / 8.4 Imp. quarts)
Without heater	8.5 liters (9.0 U.S. quarts / 7.5 Imp. quarts)

FUEL SYSTEM

Fuel tank capacity	55 liters (14.5 U.S. gal / 12.1 Imp. gal)
Fuel pump	
Type	Electrical, plunger
Fuel pressure	0.26 ~ 0.33 kg/cm² (3.70 ~ 4.70 lb/in²)
Feeding capacity	More than 1,100 cc/min. (1.16 U.S. quarts/min. / 0.97 Imp. quart/min.)
Fuel filter	Cartridge, paper element
Carburetor	
Type	Down draft, 2 stage 4 barrel
Throat diameter	
Primary	28 mm (1.10 in)
Secondary	34 mm (1.34 in)
Venturi diameter	
Primary	20 X 13 X 6.5 mm (0.79 X 0.51 X 0.26 in)
Secondary	28 X 10 mm (1.10 X 0.39 in)

		Manual transmission	Automatic transmission
Main jet			
Primary	Calif.	#93	#94
	Except Calif.	#93	#93
Secondary		#160	#160
Main air bleed			
Primary		#90	#90
Secondary		#140	#140
Slow jet			
Primary		#46	#46
Secondary		#120	#120
Slow air bleed			
Primary	No. 1	#70	#70
	No. 2	#150	#150
Secondary	No. 1	#160	#160
	No. 2	#60	#60
Richer jet		#40	—
Richer air bleed		#140	—
Power jet			
California		#50	#50
Except for California		—	#50
Vacuum jet			
Primary		1.8 mm (0.0709 in)	1.8 mm (0.0709 in)
Secondary		1.0 mm (0.0394 in)	1.0 mm (0.0394 in)

Fast idle adjustment (Clearance between primary throttle valve and bore when choke knob is fully pulled)	California 1.30 ~ 1.50 mm (0.051 ~ 0.059 in) Except for California 0.90 ~ 1.10 mm (0.035 ~ 0.04 in)
Float level (from surface of gasket)	16.0 ± 0.5 mm (0.63 ± 0.020 in)
Float drop (from surface of gasket)	51 ± 0.5 mm (2.0 ± 0.02 in)
Idle speed	
Manual transmission	750 ± 25 rpm
Automatic transmission ("D" range)	750 ± 25 rpm
CO. concentration at idle	Less than 0.1%
Sub-zero starting assist fluid	Anti-freeze 90% Water 10%

ELECTRICAL SYSTEM

Battery	
Type	
California	G60-5, Y60-5, N50-S, K60-5
Except for California	
Manual transmission	G60-5, Y60-5, N50-S, K60-5
Automatic transmission	NS70S
Capacity (20hour rate)	55 amp. NS70S 45 amp. G60-5, Y60-5, N50-S, K60-5
Voltage	12 Volt
Terminal ground	Negative
Specific gravity at 20°C (68°F)	G60-5, Y60-5, N50-S, K60-5 / NS70S
Fully charged	1.260 / 1.280
Recharged at	1.200 / 1.220
Distributor	
Breaker point	
Number	2
Dwell angle	Leading, Trailing 58 ± 3°
Point gap	0.45 ± 0.05 mm (0.018 ± 0.002 in)
Arm spring tension	0.5 ~ 0.65 kg (1.10 ~ 1.4 lb)
Centrifugal advance	
Leading	Starts: 0° at 500 rpm Maximum: 10° at 1,500 rpm
Trailing	Starts: 0° at 500 rpm Maximum: 10° at 1,500 rpm
Vacuum advance	
Leading	Starts: 0° at −100 mm-Hg Maximum: 7.5° at −400 mm-Hg
Trailing	Starts: 0° at −200 mm-Hg Maximum: 15° at −400 mm-Hg
Condenser capacity	0.24 ~ 0.30μF
Firing order	1−2
Ignition timing	
Leading	0 ± 1° ATDC
Trailing	20 ± 2°ATDC
Timing mark location	Eccentric shaft pulley
Spark plug	
Type	NGK: B6ET, B7ET, B8ET, BR6ET, BR7ET, BR8ET NIPPON DENSO: W20EB, W20EBR, W22EB, W22EBR, W25EB, W25EBR CHAMPION: N-278B, RN-278B, N-280B, RN-280B, N-282B, RN-282B
Initial gap	1.05 ± 0.05 mm (0.041 ± 0.002 in)
Alternator	
Ground	Negative
Rated output	12V 55A
Number of poles	12
No load test	
Voltage	14V
Current	0 amp.
Revolution	Less than 1,100 rpm
Load test	
Voltage	14V
Current	40amp.
Revolution	Less than 2,500 rpm
Number of brushes	2
Brush length	16 mm (0.63 in)
Wear limit	6mm (0.24 in)
Brush spring pressure	370 gr (13 oz) ± 15%
Pulley ratio of eccentric shaft and alternator	1 : 1.82
Regulator	
Constant voltage relay	
Air gap	0.7 ~ 1.3 mm (0.028 ~ 0.051 in)
Point gap	0.3 ~ 0.45 mm (0.012 ~ 0.018 in)
Back gap	0.7 ~ 1.5 mm (0.028 ~ 0.059 in)
Regulated voltage without load at 4,000 rpm of alternator	14.5 ± 0.5V
Pilot lamp relay	
Air gap	0.9 ~ 1.4 mm (0.035 ~ 0.055 in)
Point gap	0.7 ~ 1.1 mm (0.028 ~ 0.043 in)
Back gap	0.7 ~ 1.5 mm (0.028 ~ 0.059 in)
Pilot lamp lights on	0.5 ~ 3.0V
Pilot lamp lights out	4.5 ~ 5.5V
Ignition coil (Leading)	
Type	HPS-13J
Primary resistance	1.4 Ω at 20°C (68°F)
External resistance	0.7 Ω × 2 at 20°C (68°F)

Ignition coil (Trailing)		
Type	HP5-13J	
Primary resistance	1.5 Ω at 20°C (68°F)	
External resistance	1.6 Ω × 2 at 20°C (68°F)	
	Manual transmission	Automatic transmission
Starting motor		
Capacity	1.2KW	2.0KW
Lock test		
Voltage	5.0 volt	5.0 volt
Current	Less than 600 amp.	Less than 1,050 amp.
Torque	0.96 m-kg (6.9 ft-lb)	2.2 m-kg (15.9 ft-lb)
Free running test		
Voltage	11.5 volt	11.5 volt
Current	Less than 50 amp.	Less than 100 amp.
Speed	More than 5,600 rpm	More than 6,600 rpm
Number of brushes	4	4
Brush length	18.5 mm (0.73 in)	18.5 mm (0.73 in)
Wear limit	11.5 mm (0.45 in)	11.5 mm (0.45 in)
Brush spring pressure	1.4 ~ 1.8 kg (49 ~ 63 oz)	1.4 ~ 1.8 kg (49 ~ 63 oz)
Control switch	Solenoid	Solenoid
Voltage required to close solenoid contacts	Less than 8 volt	Less than 8 volt
Undercutting mica	0.5 ~ 0.8mm (0.020 ~ 0.031 in)	0.5 ~ 0.8mm (0.020 ~ 0.031 in)
Clearance between armature shaft and bush	Less than 0.2 mm (0.008 in)	Less than 0.2 mm (0.008 in)
Armature shaft end play	0.1 ~ 0.4mm (0.004 ~ 0.016 in)	0.1 ~ 0.4mm (0.004 ~ 0.016 in)
Clearance between pinion and stop collar	0.5 ~ 2.0mm (0.020 ~ 0.079 in)	0.5 ~ 2.0mm (0.020 ~ 0.079 in)

CLUTCH

Clutch pedal	
Free play (at pedal pad)	0.6 ~ 3.1 mm (0.024 ~ 0.122 in)
Engagement height (from floor)	More than 75 mm (2.95 in)
Master cylinder	
Bore	15.87 mm (0.625 in)
Clearance between piston and bore	
Standard	0.032 ~ 0.102 mm (0.0013 ~ 0.0040 in)
Limit	0.15 mm (0.006 in)
Release cylinder	
Bore	19.05 mm (0.750 in)
Clearance between piston and bore	
Standard	0.040 ~ 0.125 mm (0.0016 ~ 0.0049 in)
Limit	0.15 mm (0.006 in)
Clutch disc	
Thickness limit	7.0 mm (0.276 in)
Rivet depth limit	0.3 mm (0.012 in)
Lateral run-out limit	1.0 mm (0.039 in)
Diaphragm	
Finger out of alignment Limit	1.0 mm (0.039 in)
Finger groove wear dipth Limit	1.0 mm (0.039 in)

MANUAL TRANSMISSION

Gear ratio	4-Speed	5-Speed
First	3.674	3.674
Second	2.217	2.217
Third	1.432	1.432
Fourth	1.000	1.000
Reverse	3.542	3.542
Fifth		0.825
Oil capacity	1.7 liters (1.8 U.S. quarts / 1.5 Imp quarts)	
Main shaft		
Max. permissible run-out	0.03 mm (0.0012 in)	
Clearance between main shaft and gear (or bush) Wear limit	0.15 mm (0.006 in)	
Reverse idle gear		
Clearance between reverse idle gear bush and shaft Wear limit	0.15 mm (0.006 in)	
Shift fork and rod		
Clearance between shift fork and clutch sleeve Wear limit	0.5 mm (0.020 in)	
Clearance between shift rod gate and control lever Wear limit	0.8 mm (0.031 in)	
Synchronizer ring		
Clearance between synchronizer ring and side of gear when fitted		
Standard	1.5 mm (0.059 in)	
Wear limit	0.8 mm (0.031 in)	
Lubricant		
Above −18°C (0°F)	A.P.I. Service GL-4 or GL-5 SAE90	
Below −18°C (0°F)	A.P.I. Service GL-4 or GL-5 SAE80	

AUTOMATIC TRANSMISSION

Gear ratio	
Low	2.458
Second	1.458
Top	1.000
Reverse	2.181
Fluid type	M2C33F (Type F)
Fluid capacity	6.2 liters (6.6 U.S. quarts / 5.5 Imp. quarts)
Drive plate run-out	
Limit	0.5 mm (0.020 in)
Oil pump	
Side play of inner gear and outer gear	
Limit	0.08 mm (0.003 in)

Clearance between outer gear and crescent	
Limit	0.25 mm (0.010 in)
Clearance between outer gear and housing	
Limit	0.25 mm (0.010 in)
Side clearance between oil seal ring and groove on oil pump cover	0.04 ~ 0.16 mm (0.002 ~ 0.006 in)
Front clutch	
Thickness of drive plate	
Limit	1.4 mm (0.055 in)
Total clearance measured between retaining plate and snap ring	1.6 ~ 1.8 mm (0.063 ~ 0.071 in)
End play of front clutch drum	0.5 ~ 0.8 mm (0.020 ~ 0.031 in)
Rear clutch	
Thickness of drive plate	
Limit	1.4 mm (0.055 in)
Total clearance measured between retaining plate and snap ring	0.8 ~ 1.5 mm (0.031 ~ 0.059 in)
Low and reverse brake	
Thickness of friction plate	
Limit	1.8 mm (0.071 in)
Total clearance measured between retaining plate and snap ring	0.8 ~ 1.05 mm (0.031 ~ 0.041 in)
Gear assembly	
Total end play	0.25 ~ 0.50 mm (0.010 ~ 0.020 in)
Planetary gear side play	
Limit	0.8 mm (0.031 in)
Engine stall speed	
In break-in period	2,250 ~ 2,500 rpm
After break-in period	2,300 ~ 2,550 rpm

	Wire diameter	Free length
Valve body spring		
Pressure regulator valve	1.20 ± 0.03 mm (0.047 ± 0.001 in)	43.0 ± 1.0 mm (1.69 ± 0.039 in)
1st–2nd shift valve	0.55 ± 0.015 mm (0.022 ± 0.0006 in)	32.0 ± 2.0 mm (1.260 ± 0.079 in)
2nd–3rd shift valve	0.70 ± 0.015 mm (0.028 ± 0.0006 in)	41.0 ± 1.0 mm (1.61 ± 0.039 in)
Pressure modifier valve	0.40 ± 0.01 mm (0.016 ± 0.0004 in)	18.5 ± 1.0 mm (0.73 ± 0.039 in)
Throttle back-up valve	0.80 ± 0.015 mm (0.031 ± 0.0006 in)	36.0 ± 1.0 mm (1.42 ± 0.039 in)
Solenoid down shift valve	0.55 ± 0.015 mm (0.022 ± 0.0006 in)	21.9 ± 1.0 mm (0.86 ± 0.039 in)
2nd lock valve	0.55 ± 0.015 mm (0.022 ± 0.0006 in)	33.5 ± 1.0 mm (1.32 ± 0.039 in)
Throttle relief valve	0.90 ± 0.03 mm (0.035 ± 0.001 in)	26.8 ± 1.0 mm (1.06 ± 0.039 in)
Orifice check valve	0.23 ± 0.01 mm (0.009 ± 0.0004 in)	15.5 ± 2.0 mm (0.61 ± 0.079 in)

Shift speed

Throttle condition (Manifold vacuum)		mph
Kick-down (0 ~ 100 mm-Hg / 0 ~ 3.94 in-Hg)	D1 → D2	32 ~ 45
	D2 → D3	59 ~ 77
	D3 → D2	51 ~ 65
	D2 → D1	14 ~ 30
Half throttle (200 ± 10 mm-Hg / 7.87 ± 0.39 in-Hg)	D1 → D2	9 ~ 21
	D2 → D3	18 ~ 40
Fully closed throttle	D3 → D1	6 ~ 12
Manual 1	12 → 11	24 ~ 33

Governor pressure

Driving speed	Output shaft speed	Governor pressure	
mph	rpm	kg/cm²	lb/in²
20	1,070 ~ 1,170	0.8 ~ 1.3	11 ~ 18
35	1,900 ~ 2,030	1.6 ~ 2.3	23 ~ 33
55	3,000 ~ 3,170	3.1 ~ 4.2	44 ~ 60

Line pressure

Manual range	Engine idling condition		Engine stall condition	
	kg/cm²	lb/in²	kg/cm²	lb/in²
R	4.0 ~ 7.0	57 ~ 100	16.0 ~ 19.0	228 ~ 270
D	3.0 ~ 4.0	43 ~ 57	9.0 ~ 11.0	128 ~ 156
2	8.0 ~ 12.0	114 ~ 171	8.0 ~ 12.0	114 ~ 171
1	3.0 ~ 4.0	43 ~ 57	9.0 ~ 11.0	128 ~ 156

PROPELLER SHAFT

Max. permissible run-out	0.4 mm (0.016 in)
Max. permissible unbalance at 4,000 rpm	
At front	15 cm-gr (0.21 in-oz)
At rear	15 cm-gr (0.21 in-oz)
Universal joint	
Spider diameter	$25^{+0.021}_{+0.008}$ mm ($0.9843^{+0.0008}_{+0.0003}$ in)
Wear limit	24.908 mm (0.9806 in)
Journal swinging torque	3 ~ 8 cm-kg (2.6 ~ 6.9 in-lb)

REAR AXLE

Reduction ratio	3.909
Backlash of ring gear and pinion	0.09 ~ 0.11 mm (0.0035 ~ 0.0043 in)
Max. allowable variation of backlash	0.05 ~ 0.07 mm (0.0020 ~ 0.0028 in)
Pinion bearing preload (Without pinion oil seal)	9 ~ 14 cm-kg (7.8 ~ 12.2 in-lb)
Differential side bearing preload (Without pinion)	6 ~ 16 cm-kg (5.2 ~ 13.9 in-lb)
Backlash of side gear and pinion gear	0 ~ 0.1 mm (0 ~ 0.004 in)
Rear wheel bearing end play	0 ~ 0.1 mm (0 ~ 0.004 in)
Lubricant	
Above −18°C (0°F)	A.P.I. Service GL-5 SAE 90
Below −18°C (0°F)	A.P.I. Service GL-5 SAE 80
Oil capacity	1.2 liters (1.3 U.S. quarts / 1.1 Imp. quarts)
"L" (Case spread)	185.428 ~ 185.500 mm (7.3004 ~ 7.3033 in)

STEERING

Reduction ratio	17.0 ~ 20.0 : 1
Free play of steering wheel (Turning direction)	
Limit	40 mm (1.57 in)
Backlash between rack and sector gear	Adjust to 0 mm
Worm bearing preload	
Without sector shaft and column bush	2 ~ 5 cm-kg (1.7 ~ 4.3 in-lb)
With sector shaft and column bush	6 ~ 12 cm-kg (5.2 ~ 10.4 in-lb)
Clearance between sector shaft and housing bush	
Wear limit	0.1 mm (0.004 in)
End clearance of adjusting screw and sector shaft	0 ~ 0.1 mm (0 ~ 0.004 in)
Lubricant	A.P.I. Service GL-4 SAE 90
Oil capacity	290 cc (0.31 U.S. quarts / 0.26 Imp. quarts)
Max. Wheel angle on full lock	
Wheel on inside of curve	39°40′ ± 2°
Wheel on outside of curve	32°14′ ± 2°
Idler arm revolving torque	2 ~ 6 kg/135 mm (4.4 ~ 13.2 lb/5.315 in)
Knuckle arm ball stud revolving torque	5 ~ 12 cm-kg (4.3 ~ 10.4 in-lb)
Steering geometry	
King pin inclination	10°44′
Camber	1° 10′ ± 30′
Max. permissible difference in camber between sides	± 30′
Camber offset	38 mm (1.50 in)
Caster	4° 00′ ± 45′
Max. permissible difference in caster between sides	± 45′
Caster trail	20 mm (0.80 in)
Toe-in	0 ~ 6 mm (0 ~ 0.24 in)

BRAKES

Brake pedal free travel	
Before power brake piston operates	7 ~ 9 mm (0.28 ~ 0.35 in)
Brake pedal height (from floor)	190^{+5}_{-0} mm ($7.48^{+0.20}_{-0}$ in)
Master cylinder	
Bore	20.64 mm (0.813 in)
Clearance between piston and bore	
Standard	0.040 ~ 0.125 mm (0.0016 ~ 0.0049 in)
Wear limit	0.15 mm (0.006 in)
Power brake unit	
Clearance between piston and push rod	0.1 ~ 0.5 mm (0.004 ~ 0.020 in)
Front disc brake	
Thickness of brake disc	
Standard	18 mm (0.7087 in)
Limit	17 mm (0.6693 in)
Max. allowable lateral run-out of brake disc	0.1 mm (0.004 in)
Thickness of lining	
Standard	14 mm (0.551 in)
Wear limit	6 mm (0.236 in)
Wheel cylinder bore	50.80 mm (2.0 in)
Rear drum brake	
Drum diameter	
Standard	200 mm (7.874 in)
Limit	201 mm (7.914 in)
Thickness of lining	
Standard	4.0 mm (0.16 in)
Wear limit	1.0 mm (0.04 in)
Wheel cylinder bore	19.05 mm (0.750 in)
Clearance between piston and bore	
Standard	0.040 ~ 0.125 mm (0.0016 ~ 0.0049 in)
Limit	0.15 mm (0.006 in)
Remaining pressure	0.5 ~ 1.0 kg/cm² (7.1 ~ 14.2 lb/in²)
Clearance between drum and lining	0.1 ~ 0.15 mm (0.004 ~ 0.006 in)
Parking brake	
Drum diameter	
Standard	200 mm (7.874 in)
Limit	201 mm (7.914 in)
Thickness of lining	
Standard	4.0 mm (0.16 in)
Limit	1.0 mm (0.04 in)
Lever travel	3 ~ 7 notches at 10kg (22lb)

WHEELS AND TIRES

Wheel disc	
Front	5–J x 13WDC 5½–JJ x 13WDC (Aluminum)
Rear	5–J x 13WDC 5½–JJ x 13WDC (Aluminum)
Run-out limit	
Radial	1.0 mm (0.04 in) 0.5 mm (0.020 in) Aluminum
Lateral	1.0 mm (0.04 in) 0.5 mm (0.020 in) Aluminum
Tire	
Front	185/70 HR 13 165 HR 13
Rear	185/70 HR 13 165 HR 13
Inflation pressure	
Front	1.8 kg/cm² (26 psi)
Rear	1.8 kg/cm² (26 psi)
Run-out limit (with wheel disc)	
Radial	2.5 mm (0.098 in)
Lateral	3.0 mm (0.118 in)
Front wheel bearing preload (at wheel set bolt)	0.45 ~ 0.65 kg (0.99 ~ 1.43 lb)

SUSPENSION

Front coil spring	
Spring constant	2.16 ± 0.15 kg/mm
Free length	
Standard Left	334.5 mm (13.17 in)
Right	325 mm (12.80 in)
Front shock absorber	
Fluid capacity	$225\ ^{+5}_{-0}$ cc ($0.23\ ^{+0.05}_{-0}$ U.S. quarts)
Rear coil spring	
Spring constant	1.8 ± 0.13 kg/mm
Free length	
Standard	323.5 mm (12.74 in)

DIMENSION

Overall length	4,285 mm (169 in)
Overall width	
(Without side protector)	1,650 mm (65 in)
(With side protector)	1,675 mm (66 in)
Overall height	1,260 mm (50 in)
Distance between wheel center and fender line	
Front	364 ± 20 mm (14.3 ± 0.8 in)
Rear	358 ± 20 mm (14.0 ± 0.8 in)
Wheel base	2,420 mm (95 in)
Tread	
Front	1,420 mm (56 in)
Rear	1,400 mm (55 in)
Minimum road clearance	160 mm (6 in)
Minimum turning radius	4.8 m (15ft 9 in)
Seating capacity	2

TIGHTENING TORQUE

	m-kg	ft-lb
Engine		
Oil pump sprocket	3.0 ~ 3.5	22 ~ 25
Oil pan	0.7 ~ 1.0	5 ~ 7
Inlet manifold	1.9 ~ 2.6	14 ~ 19
Thermal reactor	4.5 ~ 5.5	33 ~ 40
Spark plugs	1.3 ~ 1.8	9 ~ 13
Eccentric shaft pulley	10 ~ 12	72 ~ 87
Temperature gauge unit	0.7 ~ 0.8	5 ~ 6
Tension bolts	3.2 ~ 3.8	23 ~ 27
Water temperature switch	1.0 ~ 1.8	7 ~ 13
Clutch		
Flywheel	40.0 ~ 50.0	289 ~ 362
Clutch cover	1.8 ~ 2.7	13 ~ 20
Transmission		
Plug for interlock pin hole	1.0 ~ 1.5	7 ~ 11
Control lever to control rod end	0.8 ~ 1.2	6 ~ 9
Shift fork set bolts	0.8 ~ 1.2	6 ~ 9
Shift rod end	0.8 ~ 1.2	6 ~ 9
Main shaft lock nut	13.0 ~ 21.0	94 ~ 152
Top switch	2.5 ~ 3.5	18 ~ 25
Overdrive switch	2.5 ~ 3.5	18 ~ 25
Back-up light switch	2.5 ~ 3.5	18 ~ 25
Speedometer driven gear	0.8 ~ 1.1	6 ~ 8
Automatic transmission		
Drive plate to converter weight	4.2 ~ 6.3	30 ~ 46
Drive plate to torque converter	3.5 ~ 5.0	25 ~ 36
Converter housing to engine	3.2 ~ 4.7	23 ~ 34
Converter housing to transmission case	4.5 ~ 5.5	33 ~ 40
Extension housing to transmission case	2.0 ~ 2.5	14 ~ 18
Oil pan	0.5 ~ 0.7	3.6 ~ 5.1
Piston stem (when adjusting band brake)	1.2 ~ 1.5	9 ~ 11
Piston stem lock nut	1.5 ~ 4.0	11 ~ 29
Servo piston retainer	1.0 ~ 1.5	7 ~ 11
Servo cover	0.5 ~ 0.7	3.6 ~ 5.1
One-way clutch inner race	1.3 ~ 1.8	9 ~ 13
Control valve body to transmission case	0.55 ~ 0.75	4.0 ~ 5.4
Lower valve body to upper valve body	0.25 ~ 0.35	1.8 ~ 2.5
Side plate to control valve body	0.25 ~ 0.35	1.8 ~ 2.5
Reamer bolt of control valve body	0.5 ~ 0.7	3.6 ~ 5.1
Oil strainer	0.3 ~ 0.4	2.2 ~ 2.9
Governor valve body to oil distributor	0.5 ~ 0.7	3.6 ~ 5.1
Oil pump cover	0.6 ~ 0.8	4.3 ~ 5.8
Inhibitor switch	0.5 ~ 0.7	3.6 ~ 5.1
Manual shaft lock nut	3.0 ~ 4.0	22 ~ 29
Oil cooler pipe set bolt	1.6 ~ 2.4	12 ~ 17
Oil pressure test plug	0.5 ~ 1.0	3.6 ~ 7.2
Actuator for parking rod to extension housing	0.8 ~ 1.1	5.8 ~ 8.0

TIGHTENING TORQUE

	m-kg	ft-lb
Propeller shaft		
Yoke to rear axle companion flange	3.5 ~ 3.8	25 ~ 27
Rear axle		
Ring gear	6.5 ~ 7.5	47 ~ 54
Differential side bearing caps	3.8 ~ 5.3	27 ~ 38
Companion flange to pinion	13 ~ 18	94 ~ 130
Steering		
Steering wheel nut	3.0 ~ 4.0	22 ~ 29
Steering gear housing to frame	4.4 ~ 5.5	32 ~ 40
Pitman arm to sector shaft	13 ~ 17	94 ~ 123
Idler arm bracket to frame	4.4 ~ 5.5	32 ~ 40
Idler arm to center link	2.5 ~ 3.5	18 ~ 25
Pitman arm to center link	3.0 ~ 4.5	22 ~ 33
Tie rod to center link	3.0 ~ 4.5	22 ~ 33
Tie rod to knuckle arm	3.0 ~ 4.5	22 ~ 33
Tie rod lock nut	7.0 ~ 8.0	51 ~ 58
Steering gear box end cover lock nut	23 ~ 26	166 ~ 188
Brake		
Master cylinder union bolt	1 ~ 1.6	7 ~ 12
Master cylinder outlet plug	6 ~ 7	43 ~ 50
Brake tube union nut	1.3 ~ 2.2	9 ~ 16
Flexible hose union	2.2 ~ 2.7	16 ~ 20
Wheel cylinder union bolt	0.7 ~ 1.0	5 ~ 7
Wheels		
Wheel bolts	9 ~ 11	65 ~ 80
Suspension		
Suspension arm to cross member	4.0 ~ 5.5	29 ~ 40
Knuckle arm to shock absorber	6.4 ~ 9.5	46 ~ 69
Suspension arm ball joint to knuckle arm	6 ~ 8	43 ~ 58
Front shock absorber		
Piston rod to mounting block	6.5 ~ 8.2	47 ~ 59
Seal cap nut	5 ~ 6	36 ~ 43
Piston rod nut	1.35 ~ 1.65	9.8 ~ 11.9
Tension rod to lower suspenison arm	5.5 ~ 6.9	40 ~ 50
Tension rod to bracket	11 ~ 15	80 ~ 108
Tension rod bracket to frame	7.6 ~ 9.5	55 ~ 69
Stabilizer bar to suspension lower arm	2.4 ~ 3.5	17 ~ 25
Front stabilizer support plate	3.8 ~ 4.7	27 ~ 34
Shock absorber to axle housing	6.5 ~ 8.2	47 ~ 59
Upper link to axle housing	7.7 ~ 10.5	56 ~ 76
Upper link to frame	7.7 ~ 10.5	56 ~ 76
Lower link to axle housing	7.7 ~ 10.5	56 ~ 76
Lower link to frame	7.7 ~ 10.5	56 ~ 76
Shock absorber upper	1.3 ~ 2.5	9 ~ 18
Watt link bracket	7.7 ~ 10.5	56 ~ 76
Watt link to axle housing	6.5 ~ 8.2	47 ~ 59
Watt link to bracket	6.5 ~ 8.2	47 ~ 59
Rear stabilizer support plate	3.2 ~ 4.7	23 ~ 34
Stabilizer lock nut	1.0 ~ 1.6	7 ~ 12
Unless otherwise specified		
6T		
6 mm bolt/nut	0.7 ~ 1.0	5 ~ 7
8 mm bolt/nut	1.6 ~ 2.3	12 ~ 17
10 mm bolt/nut	3.2 ~ 4.7	23 ~ 34
12 mm bolt/nut	5.6 ~ 8.2	41 ~ 59
14 mm bolt/nut	7.7 ~ 10.5	56 ~ 76
8T		
6 mm bolt/nut	0.8 ~ 1.2	6 ~ 9
8 mm bolt/nut	1.8 ~ 2.7	13 ~ 20
10 mm bolt/nut	3.7 ~ 5.5	27 ~ 40
12 mm bolt/nut	6.4 ~ 9.5	46 ~ 69
14 mm bolt/nut	10.4 ~ 14.0	75 ~ 101