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MEASUREMENTS			
Overall length	4,285 mm (169 in)	Apex seal	
Overall width (Without side protector)	1,650 mm (65 in)	Length	69.8 mm (2.7481 in)
(With side protector)	1,675 mm (66 in)	12A Engine	79.8 mm (3.1418 in)
Overall height	1,260 mm (50 in)	13B Engine	3.0 mm (0.1181 in)
Distance between wheel center and fender line		Width	
Front	364 ± 20 mm (14.3 ± 0.8 in)	Height	
Rear	358 ± 20 mm (14.0 ± 0.8 in)	Standard	8.5 mm (0.3347 in)
Wheel base	2,420 mm (95 in)	Limit	7.0 mm (0.2756 in)
Tread		Clearance of apex seal and rotor groove (ΔG)	
Front	1,420 mm (56 in)	Standard	0.05 ~ 0.09 mm (0.0020 ~ 0.0035 in)
Rear	1,400 mm (55 in)	Limit	0.15 mm (0.0059 in)
Minimum road clearance	160 mm (6 in)	Apex seal spring	
Minimum turning radius	4.8 m (15 ft 9 in)	Free height	
		Standard	6.9 mm (0.2717 in) or more
		12A Engine	5.7 mm (0.2244 in) or more
		13B Engine	
		Limit	5.5 mm (0.2165 in)
		12A Engine	3.8 mm (0.1496 in)
		13B Engine	
		Side seal	
		Thickness	1.0 mm (0.0394 in)
		Height	3.5 mm (0.1378 in)
		Clearance of side seal and rotor groove (ΔW)	
		Standard	0.03 ~ 0.08 mm (0.0012 ~ 0.0031 in)
		Limit	0.10 mm (0.0039 in)
		Clearance of side seal and corner seal (ΔE)	
		Standard	0.05 ~ 0.15 mm (0.0020 ~ 0.0059 in)
		Limit	0.40 mm (0.0157 in)
		Side seal protrusion	More than 0.5 mm (0.0197 in)
		Oil seal	
		Height	5.6 mm (0.2205 in)
		Contact width of oil seal lip	Less than 0.5 mm (0.0197 in)
		Oil seal protrusion	More than 0.5 mm (0.0197 in)
		Corner seal	
		Outer diameter	11.0 mm (0.4331 in)
		Height	7.0 mm (0.2756 in)
		Corner seal protrusion	More than 0.5 mm (0.0197 in)
		Main bearing clearance	
		Standard	0.04 ~ 0.08 mm (0.0016 ~ 0.0031 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	15.0 mm (0.5906 in)
		Journal	
		Main journal diameter	43 mm (1.6929 in)
		Rotor journal diameter	74 mm (2.9134 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)
1. ENGINE			
Displacement			
12A Engine	573 CC (35.0 cu-in) X 2 rotors		
13B Engine	654 CC (40.0 cu-in) X 2 rotors		
Compression ratio	9.4 : 1		
Compression pressure	600 kpa (85 lb/in ²)		
Limit	at 250 rpm		
Max. permissible differ- ence between chambers	150 kpa (21 lb/in ²)		
Port timing			
12A Engine			
Intake opens ATDC	32°		
Intake closes ABDC	40°		
Exhaust opens BBDC	75°		
Exhaust closes ATDC	38°		
13B Engine			
Intake opens ATDC	32°(Pr.) 32°(Sec.) 45° (Auxil- iary)		
Intake closes ABDC	40°(Pr.) 30°(Sec.) 70°		
Exhaust opens BBDC	71°		
Exhaust closes ATDC	48°		
Side housings (Front, intermediate and rear housings)			
Width standard			
Front	40 mm (1.5748 in)		
Intermediate	50 mm (1.9685 in)		
Rear	60 mm (2.3622 in)		
Limit of distortion	0.04 mm (0.0016 in)		
Limit of wear			
Sliding surface	0.10 mm (0.0039 in)		
Rotor housing			
Width			
12A Engine	70.0 mm (2.7559 in)		
13B Engine	80.0 mm (3.1497 in)		
Max. permissible differ- ence in width	0.06 mm (0.0024 in)		
Rotor			
Width			
12A Engine	69.8 mm (2.7481 in)		
13B Engine	79.85 mm (3.1438 in)		
Clearance of side housing and rotor (ΔR)			
Standard			
12A Engine	0.12 ~ 0.19 mm (0.0047 ~ 0.0075 in)		
13B Engine	0.12 ~ 0.21 mm (0.0047 ~ 0.0083 in)		
Limit	0.10 mm (0.0039 in)		

Alternator belt tension (slack) (Between alternator and eccentric shaft pulley) Belt deflection	15 ± 2 mm (0.5906 ± 0.0787 in)		Oil metering pump Feeding capacity of 2,000 rpm of engine	
Air pump belt tension (slack) (Between air pump and water pump pulley) Belt deflection	12 ± 1 mm (0.4724 ± 0.0394 in)		12A Engine	1.8 ~ 2.2 cc/6 min. (0.110 ~ 0.134 U.S. cu-in/6 min.)
TIGHTENING TORQUE			13B Engine	0.8 ~ 1.2 cc/6 min. (0.049 ~ 0.073 U.S. cu-in/6 min.)
	N-m	ft-lb	Lubricant	A.P.I. Service SD, SE or SF
Oil pump sprocket	32 ~ 47	23 ~ 34	Classification	SAE 20W-40 or 20W-50
Oil pan	8 ~ 11	6 ~ 8	Above -10°C (15°F)	SAE 10W-30
Inlet manifold	19 ~ 26	14 ~ 19	-25°C ~ 30°C (-13°F ~ 86°F)	
Exhaust manifold	32 ~ 47	23 ~ 34	Above -25°C (-13°F)	SAE 10W-40 or 10W-50
Spark plugs	13 ~ 18	9 ~ 11	Below -20°C (-4°F)	SAE 5W-20
Eccentric shaft pulley	100 ~ 120	72 ~ 87	Below 0°C (32°F)	SAE 5W-30
Temperature gauge unit	7 ~ 8	5 ~ 6	Oil capacity	
Tension bolts	32 ~ 38	23 ~ 27	Full capacity	12A Engine
Water temperature switch	35 ~ 45	25 ~ 33		4.6 liters (4.9 U.S. quarts)
				13B Engine
			Oil pan capacity	5.8 liters (6.1 U.S. quarts)
			12A Engine	4.2 liters (4.4 U.S. quarts)
			13B Engine	4.6 liters (4.9 U.S. quarts)
2. LUBRICATING SYSTEM				
Oil pump Type	Rotor		TIGHTENING TORQUE	
Feeding capacity at 1,000 rpm of engine	7.0 liters/min. (7.4 U.S. quarts/min.) (6.2 Imp. quarts/min.)			
Oil pump driven by	Chain and sprocket			
Limit of chain slack	12 mm (0.4724 in)			
Outer rotor and body			Oil pump sprocket	32 ~ 47
Clearance			Oil pan	8 ~ 11
Standard	0.20 ~ 0.25 mm (0.0079 ~ 0.0098 in)			23 ~ 34
Wear limit	0.30 mm (0.0118 in)			6 ~ 8
Clearance between rotor lobes			3. COOLING SYSTEM	
Standard	0.01 ~ 0.09 mm (0.0004 ~ 0.0035 in)		Water pump	Centrifugal Impeller
Wear limit	0.15 mm (0.0059 in)		Type	150 ~ 160 liters/min
Rotor end float			Feeding capacity at 6,500 rpm of engine	(39.6 ~ 42.3 U.S. gal/min.) (33.0 ~ 35.2 Imp. gal/min.)
Standard	0.03 ~ 0.13 mm (0.0012 ~ 0.0051 in)		Pump driven by	"V" belt
Wear limit	0.15 mm (0.0059 in)		Pulley ratio of eccentric shaft and pump	1 : 1.18
Oil pressure at 3,000 rpm of engine	450 ~ 550 kpa (64.0 ~ 78.2 lb/in ²)		Fan	
Oil pressure at idle speed of engine ("D" range for automatic)	90 ~ 270 kpa (12.8 ~ 38.4 lb/in ²)		Fan diameter	390 mm (15.3546 in)
Pressure regulator valve (Rear housing)			Number of fan blades	8
Operating pressure	500 kpa (71.1 lb/in ²) at 3,000 rpm of engine		Fan drive	Less than 900 rpm at 3400 rpm of engine
Free length of spring	46.4 mm (1.8268 in)		Standard revolution of fan	
Pressure control valve (Front cover)			Thermostat	
Operating pressure	800 kpa (113.8 lb/in ²)		Type	Wax pellet
Free length of spring	69.6 mm (2.7402 in)		Starts to open	82 ± 1.5°C (180 ± 2.7°F)
By-pass valve (Oil cooler)			Fully opens at	95°C (203°F)
Opening pressure	300 kpa at 60°C (42.7 lb/in ² at 140°F)		Lift	8 ~ 10 mm (0.3150 ~ 0.3937 in)
Oil filter			Radiator	
Type	Full flow, cartridge		Type	Corrugated fin, with expansion tank
Relief valve opens at	80 ~ 120 kpa (11.4 ~ 17.1 lb/in ²)		Pressure cap opens at	90 ~ 15 kpa (12.8 ± 2.0 lb/in ²)
			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)

TIGHTENING TORQUE				
	N-m	ft-lb		
Temperature gauge unit	7 ~ 8	5 ~ 6	Air cleaner element	
Water temperature switch	35 ~ 45	25 ~ 33	Sub-zero starting assist fluid	
Water pump	18 ~ 27	13 ~ 20	Long life dry Anti-freeze 90% Water 10%	
4. FUEL SYSTEM			13B Engine	
12A Engine	63 liters (16.4 U.S. gal.) 13.9 Imp. gal.)		Fuel tank capacity	
Fuel tank capacity			63 liters (16.4 U.S. gal.) 13.9 Imp. gal.)	
Fuel pump	Motor		Fuel pump	
Type	20 ~ 25 kpa (2.84 ~ 3.55 lb/in ²)		Type	
Outlet pressure	More than 1,400 cc/min. (1.48 U.S. quarts/min.) (1.23 Imp. quarts/min.)		Outlet pressure	
Feeding capacity	Cartridge, paper element		350 ~ 500 kpa (49.8 ~ 71.1 lb/in ²)	
Fuel filter	Down draft, 2 stage 4 barrel		Feeding capacity	
Carburetor	28 mm (1.10 in) 34 mm (1.34 in)		More than 1,700 cc/min. (1.80 U.S. quarts/min.) (1.50 Imp. quarts/min.)	
Type	20 X 13 X 6.5 mm (0.79 X 0.51 X 0.26 in)		Fuel filter	
Throat diameter	28 X 10 mm (1.10 X 0.39 in)		Nylon 6 - 150 mesh	
Primary			Pressure regulator	
Secondary			Type	
Venturi diameter			Diaphragm	
Primary			200 ~ 260 kpa (28.4 ~ 37.0 lb/in ²)	
Secondary			Fuel pressure	
	Manual transmission	Automatic transmission	Throttle chamber	
Main jet	#92	#91	Type	
Primary	#160	#160	Horizontal - draft (2 stage, 3 barrel)	
Secondary			Throat diameter	
Main air bleed			Primary	
Primary No.1	#70	#60	Secondary	
No. 2	#70	#70	800 rpm	
Secondary	#140	#140	Air cleaner element	
Slow jet			Sub-zero starting assist fluid	
Primary	#46	#46	Long life dry	
Secondary	#110	#110	Anti-freeze 90%	
Slow air bleed			Water 10%	
Primary No. 1	#70	#70		
No. 2	#170	#150		
Secondary No. 1	#160	#160		
No. 2	#60	#60		
Richer jet	#40	-		
Richer air bleed	#130	-		
Vacuum jet	1.8 mm (0.0709 in)			
Primary				
Fast idle adjustment	1.0 ~ 1.2 mm (0.039 ~ 0.047 in)			
(Clearance between primary throttle valve and bore when choke knob is fully pulled)				
Float level	16.0 ± 0.5 mm (0.63 ± 0.020 in)			
(from surface of gasket)				
Float drop	51 ± 0.5 mm (2.0 ± 0.02 in)			
(from surface of gasket)				
Idling speed				
Manual transmission	750 rpm			
Automatic transmission ("D" range)	750 rpm			
			TIGHTENING TORQUE	
			N-m	ft-lb
			19 ~ 26	14 ~ 19
			32 ~ 47	23 ~ 34
			5. ENGINE ELECTRICAL SYSTEM	
			Battery	
			Type	
			California	
			50 D20R	
			Except for California	
			Manual transmission	
			50D20R, 65D23R	
			Automatic transmission	
			65D23R	
			Capacity (20 hours Rate)	
			55 amp, 65D23R	
			50 amp, 50D20R	
			Voltage	
			12 Volt	
			Terminal ground	
			Negative	
			Specific gravity at 20°C (68°F)	
			50D20R, 65D23R	
			Fully charged	
			1.280	
			Recharged at	
			1.220	
			Distributor	
			Air gap	
			0.5 ~ 0.9 mm (0.020 ~ 0.035 in)	

Centrifugal advance 12A Engine Leading	Starts: 0° at 500 rpm	Load test Voltage Current 12A Engine 13B Engine Revolution Number of brushes Brush length Wear limit Brush spring pressure Pulley ratio of eccentric shaft and alternator Ignition coil (Leading) Type Primary resistance Ignition coil (Trailing) Type Primary resistance	13.5V	
	Maximum: 12.5° at 2,063 rpm		More 26 amp. More 21 amp. Less than 1300 rpm	
Trailing	Starts: 0° at 500 rpm	2	18.5 mm (0.650 in)	
	Maximum: 12.5° at 2,063 rpm		8 mm (0.315 in)	
13B Engine Leading	Starts: 0° at 500 rpm	1 : 2.08	LB-84 or FTC-3	
	Maximum: 13.75° at 2,000 rpm		0.9 ± 0.09 Ω at 20°C (68°F)	
Trailing	Starts: 0° at 500 rpm	LB-84 or FTC-3	0.9 ± 0.09 Ω at 20°C (68°F)	
	Maximum: 13.75° at 2,000 rpm			
Vacuum advance 12A Engine Leading	Starts: 0° at 100 mm-Hg (3.9 in-Hg)	Starting motor Capacity Lock test Voltage Current Torque Free running test Voltage Current Speed Number of brushes Brush length Wear limit Standard spring tension Control switch Voltage required to close solenoid contacts Undercutting mica Clearance between armature shaft and bush Armature shaft end play Clearance between pinion and stop collar	Manual transmission	Automatic transmission
	Maximum: 4.5° at -190 mm-Hg (7.5 in-Hg)		1.2 KW	2.0 KW
Trailing	Start: 0° at -100 mm-Hg (3.9 in-Hg)	5.0 volt Less than 420 amp. 9.6 N-m (6.9 ft-lb)	4.0 volt Less than 1,100 amp. 31 N-m (22.4 ft-lb)	
	Maximum: 15° at -400 mm-Hg (15.7 in-Hg)			
13B Engine Leading	Starts: 0° at -100 mm-Hg (3.9 in-Hg)	11.5 volt Less than 60 amp. More than 6,500 rpm	11.5 volt Less than 100 amp. More than 3,500 rpm	
	Maximum: 5° at -250 mm-Hg (9.8 in-Hg)			
Trailing	Start: 0° at -100 mm-Hg (3.9 in-Hg)	4	4	
	Maximum: 12.5° -350 mm-Hg (13.8 in-Hg)		17 mm (0.67 in)	
Condenser capacity Ignition timing Leading 12A Engine 13B Engine Trailing Timing mark location Spark plug Type	0.24 ~ 0.30 μF	0.031 in)	1.4 ~ 2.6 kg (49 ~ 92 oz)	
	0° ATDC		1.4 ~ 2.6 kg (49 ~ 92 oz)	
Initial gap	5° ATDC	0.020 ~ 0.031 in)	Solenoid Less than 8 volt	
	20° ATDC		Solenoid Less than 8 volt	
Eccentric shaft pulley	NGK: BR7EQ14, BR8EQ14 BR9EQ14	0.5 ~ 0.8 mm (0.020 ~ 0.031 in)	0.5 ~ 0.8 mm (0.020 ~ 0.031 in)	
	NIPPON DENSO W22EDR14 W25EDR14 W27EDR14		0.5 ~ 2.0 mm (0.020 ~ 0.079 in)	
Alternator Ground Rated output 12A Engine 13B Engine	1.4 ± 0.05 mm (0.055 ± 0.002 in)	0.020 ~ 0.079 in)	0.5 ~ 2.0 mm (0.020 ~ 0.079 in)	
	Negative			
	12V 50A			
	12V 55A			

Front clutch Total clearance measured between retaining plate and snap ring End play of front clutch drum	1.6 ~ 1.8 mm (0.0630 ~ 0.0709 in) 0.5 ~ 0.8 mm (0.0197 ~ 0.0315 in)
Rear clutch Total clearance measured between retaining plate and snap ring	0.8 ~ 1.5 mm (0.0315 ~ 0.0591 in)
Low and reverse brake Total clearance measured between retaining plate and snap ring	0.8 ~ 1.05 mm (0.0315 ~ 0.413 in)
Gear assembly Total end play	0.25 ~ 0.50 mm (0.0098 ~ 0.0197 in)
Planetary gear side play Limit	0.8 mm (0.0315 in)
Engine stall speed	2,400 ~ 2,650 rpm

Valve body spring	Wire diameter	Free length
Pressure regulator valve	11.7 ± 0.2 mm (0.4606 ± 0.0079 in)	43.0 ± 1.0 mm (1.6929 ± 0.0394 in)
1st-2nd shift valve	6.6 ± 0.2 mm (0.2598 ± 0.0079 in)	32.0 ± 1.0 mm (1.2599 ± 0.0394 in)
2nd-3rd shift valve	6.9 ± 0.2 mm (0.2717 ± 0.0079 in)	41.0 ± 1.0 mm (1.6142 ± 0.0394 in)
3rd-4th shift valve	7.3 ± 0.2 mm (0.2874 ± 0.0079 in)	25.8 mm (1.0158 in)
Throttle back-up valve	7.3 ± 0.2 mm (0.2874 ± 0.0079 in)	31.8 mm (1.2520 in)
Solenoid down shift valve	5.55 ± 0.2 mm (0.2185 ± 0.0079 in)	22.0 ± 1.0 mm (0.8662 ± 0.0394 in)
2nd lock valve	5.55 ± 0.2 mm (0.2185 ± 0.0079 in)	33.5 ± 1.0 mm (1.3189 ± 0.0394 in)
Throttle relief valve	6.5 ± 0.2 mm (0.2559 ± 0.0079 in)	26.8 ± 1.0 mm (1.0551 ± 0.0394 in)
Orifice check valve	5.0 ± 0.2 mm (0.1969 ± 0.0079 in)	15.5 ± 2.0 mm (0.6102 ± 0.0079 in)

Shift speed		
Throttle condition (Manifold vacuum)		mph
Kick-down (0 ~ 100 mm-Hg) (0 ~ 3.94 in-Hg)	D1 → D2	34 ~ 41
	D2 → D3	63 ~ 70
	D3 → D2	58 ~ 65
	D2 → D1	29 ~ 36
Half throttle (200 ± 10 mm-Hg) (7.87 ± 0.39 in-Hg)	D1 → D2	7 ~ 11
	D2 → D3	19 ~ 22
	D3 → D4	59 ~ 70
Fully closed throttle	D3 → D1	7 ~ 11
Manual 1	12 → 11	27 ~ 34
Lock up on	D4	42 ~ 48

Governor pressure

Driving speed	Governor pressure		
	mph	Kpa	lb/in ²
20	80 ~ 140	11 ~ 17	
35	150 ~ 230	20 ~ 28.4	
55	320 ~ 410	46 ~ 58	

Line pressure

Manual range	Engine idling condition		Engine stall condition	
	Kpa	lb/in ²	Kpa	lb/in ²
R	400 ~ 700	57 ~ 100	1800 ~ 1900	228 ~ 270
D	300 ~ 400	43 ~ 57	900 ~ 1100	128 ~ 156
2	800 ~ 1200	114 ~ 171	800 ~ 1200	114 ~ 171
1	300 ~ 400	43 ~ 57	900 ~ 1100	128 ~ 156

TIGHTENING TORQUE

	N-m	ft-lb
Drive plate to converter weight	83 ~ 95	60 ~ 69
Drive plate to torque converter	35 ~ 50	25 ~ 36
Converter housing to engine	32 ~ 47	23 ~ 34
Converter housing to transmission case	45 ~ 55	33 ~ 40
Extension housing to transmission case	20 ~ 25	14 ~ 18
Oil pan	5 ~ 7	36 ~ 51
Piston stem (when adjusting band brake)	12 ~ 15	9 ~ 11
Piston stem lock nut	15 ~ 40	11 ~ 29
Servo piston retainer	7 ~ 9	5 ~ 7
One-way clutch inner race	13 ~ 18	9 ~ 13
Control valve body to transmission case	5.5 ~ 7.5	4.0 ~ 5.4
Lower valve body to upper valve body	2.5 ~ 3.5	1.8 ~ 2.5
Side plate to control valve body	2.5 ~ 3.5	1.8 ~ 2.5
Reamer bolt of control valve body	5 ~ 7	3.6 ~ 5.1
Oil strainer	3 ~ 4	2.2 ~ 2.9
Governor valve body to oil distributor	5 ~ 7	3.6 ~ 5.1
Oil pump cover	6 ~ 9	4.3 ~ 6.5
Drum support	6 ~ 9	4.3 ~ 6.5
Inhibitor switch	5 ~ 7	3.6 ~ 5.1
Manual shaft lock nut	30 ~ 40	22 ~ 29
Oil cooler pipe set bolt	24 ~ 36	17 ~ 26
Oil pressure test plug	5 ~ 10	3.6 ~ 7.2
Actuator for parking rod to extension housing	8 ~ 11	5.8 ~ 8.0

8. PROPELLER SHAFT					
Max. permissible run-out	0.4 mm (0.0157 in)			Backlash between rack and sector gear	Adjust to 0 mm
Max. permissible unbalance at 4,000 rpm				Worm bearing preload	
At front	15 cm-gr (0.21 in-oz)			Without sector shaft and column bush	0.2 ~ 0.5 N-m (1.7 ~ 4.3 in-lb)
At rear	15 cm-gr (0.21 in-oz)			With sector shaft and column bush	0.6 ~ 1.2 N-m (5.2 ~ 10.4 in-lb)
Universal joint				Clearance between sector shaft and housing bush	
Journal swinging torque	0.3 ~ 0.8 N-m (2.6 ~ 6.9 in-lb)			Wear limit	0.1 mm (0.004 in)
TIGHTENING TORQUE				End clearance of adjusting screw and sector shaft	0 ~ 0.1 mm (0 ~ 0.004 in)
		N-m	ft-lb	Lubricant	A.P.I. Service GL-4 SAE90
Yoke to rear axle companion flange		35 ~ 38	25 ~ 27	Oil capacity	290 cc (0.31 U.S. quarts) (0.26 Imp. quarts)
9. REAR AXLE				Max. Wheel angle on full lock	
Reduction ratio				Wheel on inside of curve	39°40' ± 2°
Standard diff.	3.933			Wheel on outside of curve	32°14' ± 2°
Limited slip diff.	4.076			Idler arm revolving torque	2 ~ 6 kg/135 mm (4.4 ~ 13.2 lb/5.315 in)
Backlash of ring gear and pinion	0.09 ~ 0.11 mm (0.0035 ~ 0.0043 in)			Kuckle arm ball stud revolving torque	More than 0.4 kg (14 oz)
Pinion bearing preload (Without pinion oil seal)	0.9 ~ 1.4 N-m (7.8 ~ 12.2 in-lb)			Steering geometry	
Differential side bearing preload (Without pinion)	0.6 ~ 2.1 N-m (5.2 ~ 18.2 in-lb)			King-pin inclination	
Backlash of side gear and pinion gear	0 ~ 0.1 mm (0 ~ 0.0039 in)			13 inch tire vehicles	10°44'
Rear wheel bearing end play	0 ~ 0.1 mm (0 ~ 0.0039 in)			14 inch tire vehicles	11°20'
Lubricant				Camber	
Standard diff.				13 inch tire vehicles	1°00' ± 30'
Above -18°C (0°F)	A.P.I. Service GL-5 SAE90			14 inch tire vehicles	0°35' ± 30'
Below -18°C (0°F)	A.P.I. Service GL-5 SAE80			Max. permissible difference in camber between sides	±30'
Limited slip diff.	A.P.I. Service GL-5 SAE90 (Special Lubricant For Limited Slip Differentials)			Camber offset	38 mm (1.50 in)
Oil capacity				Caster	Right-hand side 4°10' ± 30'
Standard diff.	1.2 liters (1.3 U.S. quarts) (1.1 Imp. quarts)			Max. permissible difference in caster between sides	Left-hand side 3°40' ± 30'
Limited slip diff.	1.6 liters (1.7 U.S. quarts) (1.4 Imp. quarts)			Caster trail	±30'
"L" (Case spread)	185.428 ~ 185.500 mm (7.3004 ~ 7.3033 in)			Toe-in	20 mm (0.79 in) 0 ~ 6 mm (0 ~ 0.24 in)
TIGHTENING TORQUE				10B. POWER STEERING	
		N-m	ft-lb	Type	Integral ball nut
Ring gear		70 ~ 85	51 ~ 61	Reduction ratio	15.83 : 1
Differential side bearing caps		38 ~ 53	27 ~ 38	Free play of steering wheel (Turning direction)	
Companion flange to pinion		13 ~ 18	94 ~ 130	Standard	5 ~ 20 mm (0.2 ~ 0.8 in)
10A. MANUAL STEERING				Limit	40 mm (1.57 in)
Reduction ratio	17.0 ~ 20.0 : 1			Backlash between rack and sector gear	
Free play of steering wheel (Turning direction)				Clearance between gear housing and ball nut	
Standard	5 ~ 20 mm (0.2 ~ 0.8 in)			Limit	0.15 mm (0.0059 in)
Limit	40 mm (1.57 in)			Clearance between gear housing and sector shaft	
				Limit	0.10 mm (0.0039 in)
				Worm bearing preload	
				Before adjusting backlash	0.4 ~ 0.7 N-m (3.5 ~ 6.1 in-lb)
				After adjusting backlash	0.5 ~ 0.9 N-m (4.3 ~ 7.8 in-lb)
				Max. wheel angle on full lock	
				Wheel on inside of curve	39°14' ± 2°
				Wheel on outside of curve	32°14' ± 2°
				Oil	ATF Type F (M2C33-F)

TIGHTENING TORQUE			Remaining pressure	50 ~ 100 kpa (7.1 ~ 14.2 lb/in ²)
	N-m	ft-lb	Clearance between drum and lining	0.1 ~ 0.15 mm (0.004 ~ 0.006 in)
Steering wheel nut	40 ~ 50	29 ~ 36	Parking brake	6 ~ 8 notches at 10 kg (22 lb)
Steering gear housing to frame	44 ~ 55	32 ~ 40	Lever travel	
Pitman arm to sector shaft	150 ~ 180	108 ~ 130	TIGHTENING TORQUE	
Idler arm bracket to frame	44 ~ 55	32 ~ 40		
Idler arm to center link	25 ~ 35	18 ~ 25		
Pitman arm to center link	30 ~ 45	22 ~ 33		
Tie-rod to center link	30 ~ 45	22 ~ 33		
Tie-rod to knuckle arm	30 ~ 45	22 ~ 33		
Tie-rod lock nut	70 ~ 80	51 ~ 58		
Steering gear box end cover lock nut	230 ~ 260	166 ~ 188		
11. BRAKES				
Brake pedal free travel	7 ~ 9 mm (0.28 ~ 0.35 in)			
Before power brake piston operates	190 ~ 195 mm (7.48 ~ 7.68 in)			
Brake pedal height (from floor)				
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 (0.0039 in)			
Thickness of lining				
Standard	9 mm (0.3543 in)			
Thickness limit	1 mm (0.039 in)			
Caliper cylinder bore	50.80 mm (2.0 in)			
Rear disc brake				
Thickness of brake disc				
Standard	10 mm (0.3937 in)			
Limit	9 mm (0.3543 in)			
Max. allowable lateral run-out of brake disc	0.1 mm (0.0039 in)			
Thickness of lining				
Standard	6 mm (0.2362 in)			
Thickness limit	1 mm (0.039 in)			
Caliper cylinder bore	34.93 mm (1.3752 in)			
Rear drum brake				
Drum diameter				
Standard	200 mm (7.8741 in)			
Limit	201 mm (7.9135 in)			
Thickness of lining				
Standard	4.0 mm (0.1575 in)			
Thickness limit	1.0 mm (0.039 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)			
12. WHEELS AND TIRES				
Wheel disc				
Front	5-J x 13 WDC			
Rear	5½-J x 13 WDC (Aluminum)			
Front	5-J x 13 WDC			
Rear	5½-J x 13 WDC (Aluminum)			
Temporary spare tire	5½-J x 14 WDC			
Run-out limit	4-T x 15			
Radial	1.0 mm (0.04 in)			
Lateral	0.5 mm (0.020 in) Aluminum			
Tire				
Front	185/70 HR 13			
Rear	165HR 13			
Temporary spare tire	205/60 VR 14			
Inflation pressure	185/70 HR 13			
Front	165HR 13			
Rear	205/60 VR 14			
Temporary spare tire	T135/70 D 15			
Run-out limit (with wheel disc)	190 kpa (27 psi)			
Radial	200 kpa (28 psi)... 14 in only			
Lateral	190 kpa (27 psi)			
Front wheel bearing preload (at wheel set t .lt)	200 kpa (28 psi)... 14 in only			
	420 kpa (60 psi)			
	2.5 mm (0.098 in)			
	3.0 mm (0.118 in)			
	0.45 ~ 0.65 kg (0.99 ~ 1.43 lb)			
TIGHTENING TORQUE				
	N-m	ft-lb		
Wheel bolts	90 ~ 120	65 ~ 87		

13. SUSPENSION			15. BODY ELECTRICAL SYSTEM		
Front coil spring	2.16 ± 0.15 kg/mm		Item	Specification (W)	
Spring constant			Headlights		
Free length			Halogen headlights	50/60 50, 40/66 (Normal)	
Standard	Left	334.5 mm (13.17 in)	Rear side marker lights	3.8	
	Right	32.5 mm (12.80 in)	Turn-signal lights	27	
Front shock absorber			Front parking lights	8	
Fluid capacity	225 ⁺⁵ / ₋₀ cc (0.23 ^{+0.05} / ₋₀ U.S. quarts)		Rear turn signal lights	27	
Rear coil spring			Tail lights	8	
Spring constant	1.8 ± 0.13 kg/mm		Stop lights	27	
Free length			Back-up lights	27	
Standard	323.5 mm (12.74 in)		License plate lights	6	
TIGHTENING TORQUE			Interior lights	10	
	N-m	ft-lb	Map lights	6	
Suspension arm to cross member	40 ~ 55	29 ~ 40	Luggage compartment lights	5	
Knuckle arm to shock absorber	64 ~ 95	46 ~ 69	Indicator and warning lights		
Suspension arm ball joint to knuckle arm	60 ~ 80	43 ~ 58	Turn signals	3.4	
Front shock absorber			High beam	3.4	
Piston rod to mounting block	65 ~ 82	47 ~ 59	Oil pressure	1.4	
Seal cap nut	50 ~ 60	36 ~ 43	Alternator	1.4	
Tension rod to lower suspension arm	55 ~ 69	40 ~ 50	Stop lights	1.4	
Tension rod to bracket	110 ~ 150	80 ~ 108	Brake	1.4	
Tension rod bracket to frame	76 ~ 107	55 ~ 77	Parking brake	1.4	
Stabilizer bar to suspension lower arm	12 ~ 18	9 ~ 13	Fuel	3.4	
Front stabilizer support plate	38 ~ 47	27 ~ 34	Hazard	3.4	
Shock absorber to axle housing	65 ~ 82	47 ~ 59	Washer level	1.4	
Upper link to axle housing	77 ~ 105	56 ~ 76	Seat belt	1.4	
Upper link to frame	77 ~ 105	56 ~ 76	Illumination lights		
Lower link to axle housing	77 ~ 105	56 ~ 76	Automatic selector lever	3.4	
Lower link to frame	77 ~ 105	56 ~ 76	Heater	3.4	
Shock absorber upper	13 ~ 25	9 ~ 18	Meter	3.4 & 1.4	
Watt link bracket	77 ~ 105	56 ~ 76	Cigarette lighter	3.4	
Watt link to axle housing	65 ~ 82	47 ~ 59	Radio	3.4	
Watt link to bracket	65 ~ 82	47 ~ 59	Rear window defroster	1.4	
Rear stabilizer support plate	32 ~ 47	23 ~ 34	TIGHTENING TORQUE		
Stabilizer lock nut	10 ~ 16	7 ~ 12		N-m	ft-lb
			Unless otherwise specified		
			6T		
			6 mm bolt/nut	7 ~ 10	5 ~ 7
			8 mm bolt/nut	16 ~ 23	12 ~ 17
			10 mm bolt/nut	32 ~ 47	23 ~ 34
			12 mm bolt/nut	56 ~ 82	41 ~ 59
			14 mm bolt/nut	77 ~ 105	56 ~ 76
			8T		
			6 mm bolt/nut	8 ~ 12	6 ~ 9
			8 mm bolt/nut	18 ~ 17	13 ~ 20
			10 mm bolt/nut	37 ~ 55	27 ~ 40
			12 mm bolt/nut	64 ~ 95	46 ~ 69
			14 mm bolt/nut	104 ~ 140	75 ~ 101