

This file is available for free download at <http://www.iluvmyrx7.com>



[www.iluvmyrx7.com](http://www.iluvmyrx7.com)

TECHNICAL DATA

ENGINE		LUBRICATING SYSTEM	
<b>Displacement</b>	573 cc (35.0 cu-in) x 2 rotors	<b>Oil seal</b>	
<b>Compression ratio</b>	9.4 : 1	<b>Height</b>	5.6 mm (0.2205 in)
<b>Compression pressure</b>		<b>Contact width of oil seal lip</b>	Less than 0.5 mm (0.020 in)
<b>Limit</b>	6.0 kg/cm <sup>2</sup> (85 lb/in <sup>2</sup> ) at 250 rpm	<b>Oil seal protrusion</b>	More than 0.5 mm (0.020 in)
<b>Max. permissible difference between chambers</b>	1.5 kg/cm <sup>2</sup> (21 lb/in <sup>2</sup> )	<b>Corner seal</b>	
<b>Port timing</b>		<b>Outer diameter</b>	11.0 mm (0.4331 in)
<b>Intake opens</b>	32° ATDC	<b>Height</b>	7.0 mm (0.2756 in)
<b>Intake closes</b>	40° ABDC	<b>Corner seal protrusion</b>	More than 0.5 mm (0.020 in)
<b>Exhaust opens</b>	75° BBDC	<b>Main bearing clearance</b>	
<b>Exhaust closes</b>	38° ATDC	<b>Standard</b>	0.04 ~ 0.08 mm (0.0016 ~ 0.0031 in)
<b>Side housings (Front, intermediate and rear housings)</b>		<b>Wear limit</b>	0.10 mm (0.0039 in)
<b>Width standard</b>		<b>Rotor bearing clearance</b>	
<b>Front</b>	40 mm (1.575 in)	<b>Standard</b>	0.04 ~ 0.08 mm (0.0016 ~ 0.0031 in)
<b>Intermediate</b>	50 mm (1.969 in)	<b>Wear limit</b>	0.10 mm (0.0039 in)
<b>Rear</b>	60 mm (2.362 in)	<b>Eccentric shaft</b>	
<b>Limit of distortion</b>	0.04 mm (0.0016 in)	<b>Eccentricity of rotor journal</b>	15.0 mm (0.5906 in)
<b>Limit of wear</b>		<b>Main journal diameter</b>	43 mm (1.6929 in)
<b>Sliding surface</b>	0.10 mm (0.0039 in)	<b>Rotor journal diameter</b>	74 mm (2.9134 in)
<b>Rotor housing</b>		<b>Max. permissible run-out</b>	0.06 mm (0.0024 in)
<b>Width</b>	70 mm (2.7559 in)	<b>End play</b>	
<b>Max. permissible difference in width</b>	0.06 mm (0.0024 in)	<b>Standard</b>	0.04 ~ 0.07 mm (0.0016 ~ 0.0028 in)
<b>Rotor</b>		<b>Limit</b>	0.09 mm (0.0035 in)
<b>Width</b>	69.85 mm (2.750 in)	<b>Alternator belt tension (slack)</b>	
<b>Clearance of side housing and rotor (ΔR)</b>		<b>(Between alternator and eccentric shaft pulleys)</b>	
<b>Standard</b>	0.12 ~ 0.18 mm (0.0047 ~ 0.0071 in)	<b>Belt deflection</b>	15 ± 2 mm (0.59 ± 0.08 in)
<b>Limit</b>	0.10 mm (0.004 in)	<b>Air pump belt tension (slack)</b>	
<b>Apex seal</b>		<b>(Between air pump and water pump pulleys)</b>	
<b>Length</b>	69.85 mm (2.750 in)	<b>Belt deflection</b>	12 ± 1 mm (0.47 ± 0.04 in)
<b>Width</b>	3.0 mm (0.1181 in)		
<b>Height</b>			
<b>Standard</b>	8.5 mm (0.3347 in)		
<b>Limit</b>	7.0 mm (0.2756 in)		
<b>Clearance of apex seal and side housing (ΔS)</b>			
<b>Standard</b>	0.13 ~ 0.19 mm (0.0051 ~ 0.0075 in)		
<b>Clearance of apex seal and rotor groove (ΔG)</b>			
<b>Standard</b>	0.05 ~ 0.09 mm (0.0020 ~ 0.0035 in)		
<b>Limit</b>	0.15 mm (0.0059 in)		
<b>Apex seal spring</b>			
<b>Free height</b>			
<b>Standard</b>	6.9 mm (0.2717 in) or more		
<b>Limit</b>	5.5 mm (0.2165 in)		
<b>Side seal</b>			
<b>Thickness</b>	1.0 mm (0.0394 in)		
<b>Height</b>	3.5 mm (0.1378 in)		
<b>Clearance of side seal and rotor groove (ΔW)</b>			
<b>Standard</b>	0.03 ~ 0.08 mm (0.0012 ~ 0.0031 in)		
<b>Limit</b>	0.10 mm (0.0039 in)		
<b>Clearance of side seal and corner seal (ΔE)</b>			
<b>Standard</b>	0.05 ~ 0.15 mm (0.0020 ~ 0.0059 in)		
<b>Limit</b>	0.40 mm (0.0157 in)		
<b>Side seal protrusion</b>	More than 0.5 mm (0.0197 in)		

<p><b>Oil pressure at idle speed of engine</b>  <b>Pressure regulator valve (Rear housing)</b>          Operating pressure</p> <p>Free length of spring  <b>Pressure control valve (Front cover)</b>          Operating pressure          Free length of spring  <b>By-pass valve (Oil cooler)</b>          Starts to close          Fully closes          Opening pressure</p> <p><b>Oil filter</b>          Type          Relief valve opens at</p> <p><b>Oil metering pump</b>          Feeding capacity of 2,000 rpm of engine  <b>Lubricant</b>  <b>Classification</b>          -10°C ~ 40°C (15°F ~ 100°F)          -10°C ~ 50°C (15°F ~ 120°F)          -18°C ~ 30°C (0°F ~ 85°F)          -18°C ~ 40°C (0°F ~ 100°F)          -18°C ~ 50°C (0°F ~ 120°F)          Below -18°C (0°F)  <b>Oil capacity</b>          Full capacity          Oil pan capacity</p>	<p>0.9 ~ 2.7 kg/cm<sup>2</sup> (13 ~ 38 lb/in<sup>2</sup>)</p> <p>5.0 kg/cm<sup>2</sup> (71.1 lb/in<sup>2</sup>) at 3,000 rpm of engine 46.4 mm (1.8267 in)</p> <p>11.0 kg/cm<sup>2</sup> (156 lb/in<sup>2</sup>) 73.0 mm (2.874 in)</p> <p>50 ~ 55°C (122 ~ 131°F) 60 ~ 65°C (140 ~ 149°F) 3.56 kg/cm<sup>2</sup> at 60°C (50.6 lb/in<sup>2</sup> at 140°F)</p> <p>Full flow, cartridge 0.8 ~ 1.2 kg/cm<sup>2</sup> (11 ~ 17 lb/in<sup>2</sup>)</p> <p>2.0 ~ 2.5 cc/6 min. (0.068 ~ 0.085 U.S. oz/6 min.)</p> <p>A.P.I. Service SD or SE SAE 20W-40</p> <p>SAE 20W-50</p> <p>SAE 10W-30</p> <p>SAE 10W-40</p> <p>SAE 10W-50</p> <p>SAE 5W-20 or 5W-30</p> <p>5.2 liters (5.5 U.S. quarts) (4.6 Imp. quarts)</p> <p>4.2 liters (4.4 U.S. quarts) (3.7 Imp. quarts)</p>	<p><b>Radiator</b>  <b>Type</b></p> <p>Pressure cap opens at</p> <p><b>Cooling capacity</b>          With heater</p> <p>Without heater</p>	<p>Corrugated fin, with expansion tank 0.9 ± 0.15 kg/cm<sup>2</sup> (13.0 ± 2 lb/in<sup>2</sup>)</p> <p>9.5 liters (10 U.S. quarts) (8.4 Imp. quarts)</p> <p>8.5 liters (9.0 U.S. quarts) (7.5 Imp. quarts)</p>																																																																																				
<b>FUEL SYSTEM</b>																																																																																							
<b>COOLING SYSTEM</b>		<p><b>Fuel tank capacity</b></p> <p>55 liters (14.5 U.S. gal) (12.1 Imp. gal)</p> <p><b>Fuel pump</b>  <b>Type</b>  <b>Fuel pressure</b></p> <p>Electrical, plunger 0.26 ~ 0.33 kg/cm<sup>2</sup> (3.70 ~ 4.70 lb/in<sup>2</sup>)</p> <p><b>Feeding capacity</b></p> <p>More than 1,100 cc/min. (1.16 U.S. quarts/min.) (0.97 Imp. quart/min.)</p> <p><b>Fuel filter</b>  <b>Carburetor</b>  <b>Type</b>  <b>Throat diameter</b>          Primary          Secondary  <b>Venturi diameter</b>          Primary          Secondary</p> <p>Cartridge, paper element</p> <p>Down draft, 2 stage 4 barrel</p> <p>28 mm (1.10 in) 34 mm (1.34 in)</p> <p>20 X 13 X 6.5 mm (0.79 X 0.51 X 0.26 in) 28 X 10 mm (1.10 X 0.39 in)</p> <table border="1" data-bbox="1166 1142 1466 1993"> <thead> <tr> <th></th> <th>Manual transmission</th> <th>Automatic transmission</th> </tr> </thead> <tbody> <tr> <td><b>Main jet</b></td> <td></td> <td></td> </tr> <tr> <td>  Primary Calif.</td> <td># 94</td> <td># 95</td> </tr> <tr> <td>  Except Calif.</td> <td># 93</td> <td># 93</td> </tr> <tr> <td>  Secondary</td> <td># 160</td> <td># 160</td> </tr> <tr> <td><b>Main air bleed</b></td> <td></td> <td></td> </tr> <tr> <td>  Primary</td> <td># 90</td> <td># 90</td> </tr> <tr> <td>  Secondary</td> <td></td> <td></td> </tr> <tr> <td>    U.S.A.</td> <td># 160</td> <td># 160</td> </tr> <tr> <td>    Canada</td> <td># 140</td> <td># 140</td> </tr> <tr> <td><b>Slow jet</b></td> <td></td> <td></td> </tr> <tr> <td>  Primary</td> <td></td> <td></td> </tr> <tr> <td>    Calif., Canada</td> <td># 46</td> <td># 46</td> </tr> <tr> <td>    Except for Calif., Canada</td> <td># 48</td> <td># 46</td> </tr> <tr> <td>  Secondary</td> <td></td> <td></td> </tr> <tr> <td>    Calif.</td> <td># 80</td> <td># 80</td> </tr> <tr> <td>    Except for Calif.</td> <td># 100</td> <td># 100</td> </tr> <tr> <td>    Canada</td> <td># 120</td> <td># 120</td> </tr> <tr> <td><b>Slow air bleed</b></td> <td></td> <td></td> </tr> <tr> <td>  Primary No. 1</td> <td># 70</td> <td># 70</td> </tr> <tr> <td>    No. 2</td> <td># 150</td> <td># 150</td> </tr> <tr> <td>  Secondary No. 1</td> <td># 160</td> <td># 160</td> </tr> <tr> <td>    No. 2</td> <td># 60</td> <td># 60</td> </tr> <tr> <td><b>Richer jet</b></td> <td># 40</td> <td>—</td> </tr> <tr> <td><b>Richer air bleed</b></td> <td># 140</td> <td>—</td> </tr> <tr> <td><b>Power jet</b></td> <td></td> <td></td> </tr> <tr> <td>  California</td> <td># 45</td> <td># 45</td> </tr> <tr> <td>  Except for California</td> <td># 50</td> <td># 50</td> </tr> </tbody> </table>			Manual transmission	Automatic transmission	<b>Main jet</b>			Primary Calif.	# 94	# 95	Except Calif.	# 93	# 93	Secondary	# 160	# 160	<b>Main air bleed</b>			Primary	# 90	# 90	Secondary			U.S.A.	# 160	# 160	Canada	# 140	# 140	<b>Slow jet</b>			Primary			Calif., Canada	# 46	# 46	Except for Calif., Canada	# 48	# 46	Secondary			Calif.	# 80	# 80	Except for Calif.	# 100	# 100	Canada	# 120	# 120	<b>Slow air bleed</b>			Primary No. 1	# 70	# 70	No. 2	# 150	# 150	Secondary No. 1	# 160	# 160	No. 2	# 60	# 60	<b>Richer jet</b>	# 40	—	<b>Richer air bleed</b>	# 140	—	<b>Power jet</b>			California	# 45	# 45	Except for California	# 50	# 50
	Manual transmission	Automatic transmission																																																																																					
<b>Main jet</b>																																																																																							
Primary Calif.	# 94	# 95																																																																																					
Except Calif.	# 93	# 93																																																																																					
Secondary	# 160	# 160																																																																																					
<b>Main air bleed</b>																																																																																							
Primary	# 90	# 90																																																																																					
Secondary																																																																																							
U.S.A.	# 160	# 160																																																																																					
Canada	# 140	# 140																																																																																					
<b>Slow jet</b>																																																																																							
Primary																																																																																							
Calif., Canada	# 46	# 46																																																																																					
Except for Calif., Canada	# 48	# 46																																																																																					
Secondary																																																																																							
Calif.	# 80	# 80																																																																																					
Except for Calif.	# 100	# 100																																																																																					
Canada	# 120	# 120																																																																																					
<b>Slow air bleed</b>																																																																																							
Primary No. 1	# 70	# 70																																																																																					
No. 2	# 150	# 150																																																																																					
Secondary No. 1	# 160	# 160																																																																																					
No. 2	# 60	# 60																																																																																					
<b>Richer jet</b>	# 40	—																																																																																					
<b>Richer air bleed</b>	# 140	—																																																																																					
<b>Power jet</b>																																																																																							
California	# 45	# 45																																																																																					
Except for California	# 50	# 50																																																																																					
<p><b>Water pump</b>  <b>Type</b>  <b>Feeding capacity at 6,500 rpm of engine</b></p> <p><b>Pump driven by</b>  <b>Pulley ratio of eccentric shaft and pump</b></p> <p><b>Fan</b>  <b>Fan diameter</b>  <b>Number of fan blades</b></p> <p><b>Fan drive</b>  <b>Standard revolution of fan</b></p> <p><b>Thermostat</b>  <b>Type</b>  <b>Starts to open</b>  <b>Fully opens at</b>  <b>Lift</b></p>	<p>Centrifugal impeller 150 ~ 160 liters/min. (39.6 ~ 42.3 U.S. gal/min.) (33.0 ~ 35.2 Imp. gal/min.)</p> <p>"V" belt 1 : 1.18</p> <p>410 mm (16.1 in) 7</p> <p>1,400 ± 200 rpm at 4,200 rpm of engine</p> <p>Wax pellet 82 ± 1.5°C (180 ± 2.7°F) 95°C (203°F) 8 ~ 10 mm (0.3 ~ 0.4 in)</p>																																																																																						

<b>Vacuum jet</b> <b>Primary</b>  <b>Secondary</b>	1.8 mm (0.0709 in)  1.0 mm (0.0394 in)	1.8 mm (0.0709 in)  1.0 mm (0.0394 in)	<b>Trailing</b>  <b>Condenser capacity</b> <b>Firing order</b> <b>Ignition timing</b> Leading Trailing <b>Timing mark location</b> <b>Spark plug</b> Type	<b>Starts:</b> 0° at -200 mm-Hg <b>Maximum:</b> 15° at -400 mm-Hg 0.24 ~ 0.30 μF 1-2  0 ± 1° ATDC 20 ± 2° ATDC <b>Eccentric shaft pulley</b>  <b>NGK: BR7ET, BR8ET, BR9ET</b> <b>NIPPON DENSO:</b> <b>W22EBR</b> <b>W25EBR</b> <b>W27EBR</b> 1.05 ± 0.05 mm (0.041 ± 0.002 in)												
<b>Fast idle adjustment</b> (Clearance between primary throttle valve and bore when choke knob is fully pulled)	<b>U.S.A.</b> 1.30 ~ 1.50 mm (0.051 ~ 0.059 in) <b>Canada</b> 0.90 ~ 1.10 mm (0.035 ~ 0.043 in)		<b>Initial gap</b>  <b>Alternator</b> <b>Ground</b> <b>Rated output</b> <b>Number of poles</b> <b>Load test</b> Voltage Current Revolution <b>Number of brushes</b> <b>Brush length</b> <b>Wear limit</b> <b>Brush spring pressure</b>  <b>Pulley ratio of eccentric shaft and alternator</b> <b>Ignition coil (Leading)</b> Type Primary resistance <b>Ignition coil (Trailing)</b> Type Primary resistance	13.5V 39amp. Less than 2,500 rpm 2 18 mm (0.71 in) 8 mm (0.31 in) 315 ~ 426 gr (11 ~ 15 oz)  1 : 1.82  <b>LB-84 or FTC-3</b> 0.9 ± 0.09 Ω at 20°C (68°F)  <b>LB-84 or FTC-3</b> 0.9 ± 0.09 Ω at 20°C (68°F)												
<b>Float level</b> (from surface of gasket) <b>Float drop</b> (from surface of gasket) <b>Idle speed</b> <b>Manual transmission</b> <b>Automatic transmission</b> ("D" range) <b>CO. concentration at idle</b> <b>Sub-zero starting assist fluid</b>	16.0 ± 0.5 mm (0.63 ± 0.020 in) 51 ± 0.5 mm (2.0 ± 0.02 in)  750 ± 25 rpm 750 ± 25 rpm  Less than 0.1% Anti-freeze 90% Water 10%															
<b>ELECTRICAL SYSTEM</b>																
<b>Battery</b> <b>Type</b> California Except for California Manual transmission Automatic transmission Canada <b>Capacity (20hour rate)</b>  <b>Voltage</b> <b>Terminal ground</b> <b>Specific gravity at 20°C (68°F)</b>  <b>Fully charged</b> <b>Recharged at</b>	G60-5, Y60-5, N50-S, K60-5  G60-5, Y60-5, N50-S, K60-5 NS70S NS70S 55 amp. NS70S 45 amp. G60-5, Y60-5, N50-S, K60-5  12 Volt Negative  G60-5, Y60-5, NS70S N50-S, K60-5  1.260      1.280 1.200      1.220															
<b>Distributor</b> <b>Air gap</b>  <b>Centrifugal advance</b> <b>Leading</b>  <b>Trailing</b>  <b>Vacuum advance</b> <b>Leading</b>	0.2 ~ 0.6 mm (0.008 ~ 0.024 in)  <b>Starts:</b> 0° at 500 rpm <b>Maximum:</b> 10° at 1,500 rpm  <b>Starts:</b> 0° at 500 rpm <b>Maximum:</b> 10° at 1,500 rpm  <b>Starts:</b> 0° at -100 mm-Hg <b>Maximum:</b> 7.5° at -400 mm-Hg															
			<b>Starting motor</b> <b>Capacity</b> <b>Lock test</b> Voltage Current  <b>Torque</b>  <b>Free running test</b> Voltage Current  <b>Speed</b>  <b>Number of brushes</b> <b>Brush length</b>  <b>Wear limit</b>	<table border="1"> <thead> <tr> <th>Manual transmission</th> <th>Automatic transmission</th> </tr> </thead> <tbody> <tr> <td>1.2KW</td> <td>2.0KW</td> </tr> <tr> <td>5.0 volt Less than 600 amp. 0.96 m-kg (6.9 ft-lb)</td> <td>5.0 volt Less than 1,050 amp. 2.2 m-kg (15.9 ft-lb)</td> </tr> <tr> <td>11.5 volt Less than 50 amp. More than 5,600 rpm</td> <td>11.5 volt Less than 100 amp. More than 6,600 rpm</td> </tr> <tr> <td>4</td> <td>4</td> </tr> <tr> <td>18.5 mm (0.73 in) 11.5 mm (0.45 in)</td> <td>18.5 mm (0.73 in) 11.5 mm (0.45 in)</td> </tr> </tbody> </table>	Manual transmission	Automatic transmission	1.2KW	2.0KW	5.0 volt Less than 600 amp. 0.96 m-kg (6.9 ft-lb)	5.0 volt Less than 1,050 amp. 2.2 m-kg (15.9 ft-lb)	11.5 volt Less than 50 amp. More than 5,600 rpm	11.5 volt Less than 100 amp. More than 6,600 rpm	4	4	18.5 mm (0.73 in) 11.5 mm (0.45 in)	18.5 mm (0.73 in) 11.5 mm (0.45 in)
Manual transmission	Automatic transmission															
1.2KW	2.0KW															
5.0 volt Less than 600 amp. 0.96 m-kg (6.9 ft-lb)	5.0 volt Less than 1,050 amp. 2.2 m-kg (15.9 ft-lb)															
11.5 volt Less than 50 amp. More than 5,600 rpm	11.5 volt Less than 100 amp. More than 6,600 rpm															
4	4															
18.5 mm (0.73 in) 11.5 mm (0.45 in)	18.5 mm (0.73 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)	Oil capacity	1.7 liters (1.8 U.S. quarts) (1.5 Imp quarts)
Control switch	Solenoid	Solenoid	Main shaft	
Voltage required to close solenoid contacts	Less than 8 volt	Less than 8 volt	Max. permissible run-out	0.03 mm (0.0012 in)
Undercutting mica	0.5 ~ 0.8mm (0.020 ~ 0.031 in)	0.5 ~ 0.8mm (0.020 ~ 0.031 in)	Clearance between main shaft and gear (or bush)	
Clearance between armature shaft and bush	Less than 0.2 mm (0.008 in)	Less than 0.2 mm (0.008 in)	Wear limit	0.15 mm (0.006 in)
Armature shaft end play	0.1 ~ 0.4mm (0.004 ~ 0.016 in)	0.1 ~ 0.4mm (0.004 ~ 0.016 in)	Reverse idle gear	
Clearance between pinion and stop collar	0.5 ~ 2.0mm (0.020 ~ 0.079 in)	0.5 ~ 2.0mm (0.020 ~ 0.079 in)	Clearance between reverse idle gear bush and shaft	
<b>CLUTCH</b>			Wear limit	0.15 mm (0.006 in)
Clutch pedal			Shift fork and rod	
Free play (at pedal pad)	0.6 ~ 3.1 mm (0.024 ~ 0.122 in)		Clearance between shift fork and clutch sleeve	
Engagement height (from floor)	More than 75 mm (2.95 in)		Wear limit	0.5 mm (0.020 in)
Master cylinder			Clearance between shift rod gate and control lever	
Bore	15.87 mm (0.625 in)		Wear limit	0.8 mm (0.031 in)
Clearance between piston and bore			Synchronizer ring	
Standard	0.032 ~ 0.102 mm (0.0013 ~ 0.0040 in)		Clearance between synchronizer ring and side of gear when fitted	
Limit	0.15 mm (0.006 in)		Standard	1.5 mm (0.059 in)
Release cylinder			Wear limit	0.8 mm (0.031 in)
Bore	19.05 mm (0.750 in)		Lubricant	
Clearance between piston and bore			Above -18°C (0°F)	A.P.I. Service GL-4 or GL-5 SAE90
Standard	0.040 ~ 0.125 mm (0.0016 ~ 0.0049 in)		Below -18°C (0°F)	A.P.I. Service GL-4 or GL-5 SAE80
Limit	0.15 mm (0.006 in)		<b>AUTOMATIC TRANSMISSION</b>	
Clutch disc			Gear ratio	
Thickness limit	7.0 mm (0.276 in)		Low	2.458
Rivet depth limit	0.3 mm (0.012 in)		Second	1.458
Lateral run-out limit	1.0 mm (0.039 in)		Top	1.000
Diaphragm			Reverse	2.181
Finger out of alignment			Fluid type	M2C33F (Type F)
Limit	1.0 mm (0.039 in)		Fluid capacity	6.2 liters (6.6 U.S. quarts) (5.5 Imp. quarts)
Finger groove wear dipth			Drive plate run-out	
Limit	1.0 mm (0.039 in)		Limit	0.5 mm (0.020 in)
<b>MANUAL TRANSMISSION</b>			Oil pump	
Gear ratio	4-Speed	5-Speed	Side play of inner gear and outer gear	
First	3.674	3.674	Limit	0.08 mm (0.003 in)
Second	2.217	2.217	Clearance between outer gear and crescent	
Third	1.432	1.432	Limit	0.25 mm (0.010 in)
Fourth	1.000	1.000	Clearance between outer gear and housing	
Reverse	3.542	3.542	Limit	0.25 mm (0.010 in)
Fifth		0.825	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)

<b>Rear clutch</b> Thickness of drive plate Limit Total clearance measured between retaining plate and snap ring Low and reverse brake Thickness of friction plate Limit Total clearance measured between retaining plate and snap ring Gear assembly Total end play  Planetary gear side play Limit Engine stall speed In break-in period After break-in period		1.4 mm (0.055 in) 0.8 ~ 1.5 mm (0.031 ~ 0.059 in)  1.8 mm (0.071 in) 0.8 ~ 1.05 mm (0.031 ~ 0.041 in)  0.25 ~ 0.50 mm (0.010 ~ 0.020 in)  0.8 mm (0.031 in)  2,250 ~ 2,500 rpm 2,300 ~ 2,550 rpm		<b>Governor pressure</b> <table border="1"> <thead> <tr> <th rowspan="2">Driving speed</th> <th rowspan="2">Output shaft speed</th> <th colspan="2">Governor pressure</th> </tr> <tr> <th>kg/cm<sup>2</sup></th> <th>lb/in<sup>2</sup></th> </tr> </thead> <tbody> <tr> <td>20</td> <td>1,070 ~ 1,170</td> <td>0.8 ~ 1.3</td> <td>11 ~ 18</td> </tr> <tr> <td>35</td> <td>1,900 ~ 2,030</td> <td>1.6 ~ 2.3</td> <td>23 ~ 33</td> </tr> <tr> <td>55</td> <td>3,000 ~ 3,170</td> <td>3.1 ~ 4.2</td> <td>44 ~ 60</td> </tr> </tbody> </table>				Driving speed	Output shaft speed	Governor pressure		kg/cm <sup>2</sup>	lb/in <sup>2</sup>	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										
Driving speed	Output shaft speed	Governor pressure																																	
		kg/cm <sup>2</sup>	lb/in <sup>2</sup>																																
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																																
<b>Valve body spring</b> Pressure regulator valve  1st-2nd shift valve  2nd-3rd shift valve  Pressure modifier valve  Throttle back-up valve  Solenoid down shift valve 2nd lock valve  Throttle relief valve  Orifice check valve		Wire diameter  Free length	<table border="1"> <thead> <tr> <th rowspan="2">Manual range</th> <th colspan="2">Engine idling condition</th> <th colspan="2">Engine stall condition</th> </tr> <tr> <th>kg/cm<sup>2</sup></th> <th>lb/in<sup>2</sup></th> <th>kg/cm<sup>2</sup></th> <th>lb/in<sup>2</sup></th> </tr> </thead> <tbody> <tr> <td>R</td> <td>4.0 ~ 7.0</td> <td>57 ~ 100</td> <td>16.0 ~ 19.0</td> <td>228 ~ 270</td> </tr> <tr> <td>D</td> <td>3.0 ~ 4.0</td> <td>43 ~ 57</td> <td>9.0 ~ 11.0</td> <td>128 ~ 156</td> </tr> <tr> <td>2</td> <td>8.0 ~ 12.0</td> <td>114 ~ 171</td> <td>8.0 ~ 12.0</td> <td>114 ~ 171</td> </tr> <tr> <td>1</td> <td>3.0 ~ 4.0</td> <td>43 ~ 57</td> <td>9.0 ~ 11.0</td> <td>128 ~ 156</td> </tr> </tbody> </table>				Manual range	Engine idling condition		Engine stall condition		kg/cm <sup>2</sup>	lb/in <sup>2</sup>	kg/cm <sup>2</sup>	lb/in <sup>2</sup>	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
Manual range	Engine idling condition		Engine stall condition																																
	kg/cm <sup>2</sup>	lb/in <sup>2</sup>	kg/cm <sup>2</sup>	lb/in <sup>2</sup>																															
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																															
<b>Shift speed</b> <table border="1"> <thead> <tr> <th colspan="2">Throttle condition (Manifold vacuum)</th> <th>mph</th> </tr> </thead> <tbody> <tr> <td rowspan="4">Kick-down (0 ~ 100 mm-Hg) (0 ~ 3.94 in-Hg)</td> <td>D1 → D2</td> <td>32 ~ 45</td> </tr> <tr> <td>D2 → D3</td> <td>59 ~ 77</td> </tr> <tr> <td>D3 → D2</td> <td>51 ~ 65</td> </tr> <tr> <td>D2 → D1</td> <td>14 ~ 30</td> </tr> <tr> <td rowspan="2">Half throttle (200 ± 10 mm-Hg) (7.87 ± 0.39 in-Hg)</td> <td>D1 → D2</td> <td>9 ~ 21</td> </tr> <tr> <td>D2 → D3</td> <td>18 ~ 40</td> </tr> <tr> <td>Fully closed throttle</td> <td>D3 → D1</td> <td>6 ~ 12</td> </tr> <tr> <td>Manual 1</td> <td>12 → 11</td> <td>24 ~ 33</td> </tr> </tbody> </table>		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	<b>PROPELLER SHAFT</b> Max. permissible run-out Max. permissible unbalance at 4,000 rpm At front At rear Universal joint Spider diameter  Wear limit Journal swinging torque										
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																																	
<b>REAR AXLE</b> Reduction ratio Backlash of ring gear and pinion Pinion bearing preload (Without pinion oil seal) Differential side bearing preload (Without pinion) Backlash of side gear and pinion gear Rear wheel bearing end play Lubricant Above -18°C (0°F) Below -18°C (0°F) Oil capacity "L" (Case spread)		0.4 mm (0.016 in)  15 cm-gr (0.21 in-oz) 15 cm-gr (0.21 in-oz)  25 + 0.021 mm + 0.008 mm (0.9843 + 0.0008 in) + 0.0003 in)  24.908 mm (0.9806 in) 3 ~ 8 cm-kG (2.6 ~ 6.9 in-lb)																																	

STEERING		Front disc brake	
Reduction ratio	17.0 ~ 20.0 : 1	Thickness of brake disc	18 mm (0.7087 in)
Free play of steering wheel (Turning direction)		Standard	17 mm (0.6693 in)
Limit	40 mm (1.57 in)	Limit	0.1 mm (0.0039 in)
Backlash between rack and sector gear	Adjust to 0 mm	Max. allowable lateral run-out of brake disc	
Worm bearing preload		Thickness of lining	14 mm (0.5512 in)
Without sector shaft and column bush	2 ~ 5 cm-kg (1.7 ~ 4.3 in-lb)	Standard	6 mm (0.236 in)
With sector shaft and column bush	6 ~ 12 cm-kg (5.2 ~ 10.4 in-lb)	Wear limit	50.80 mm (2.0 in)
Clearance between sector shaft and housing bush		Wheel cylinder bore	
Wear limit	0.1 mm (0.004 in)	Rear drum brake	
End clearance of adjusting screw and sector shaft	0 ~ 0.1 mm (0 ~ 0.004 in)	Drum diameter	200 mm (7.8741 in)
Lubricant	A.P.I. Service GL-4 SAE 90	Standard	201 mm (7.9135 in)
Oil capacity	290 cc (0.31 U.S. quarts) (0.26 Imp. quarts)	Limit	
Max. Wheel angle on full lock		Thickness of lining	4.0 mm (0.1575 in)
Wheel on inside of curve	39°40' ± 2°	Standard	1.0 mm (0.039 in)
Wheel on outside of curve	32°14' ± 2°	Wear limit	19.05 mm (0.750 in)
Idler arm revolving torque	2 ~ 6 kg/135 mm (4.4 ~ 13.2 lb/5.315 in)	Wheel cylinder bore	
Knuckle arm ball stud revolving torque	5 ~ 12 cm-kg (4.3 ~ 10.4 in-lb)	Clearance between piston and bore	
Steering geometry		Standard	0.040 ~ 0.125 mm (0.0016 ~ 0.0049 in)
King pin inclination	10°44'	Limit	0.15 mm (0.006 in)
Camber	1° 10' ± 30'	Remaining pressure	0.5 ~ 1.0 kg/cm <sup>2</sup> (7.1 ~ 14.2 lb/in <sup>2</sup> )
Max. permissible differ- ence in camber between sides	± 30'	Clearance between drum and lining	0.1 ~ 0.15 mm (0.004 ~ 0.006 in)
Camber offset	38 mm (1.50 in)	Parking brake	
Caster	Right-hand side 4° 30' ± 30' Left-hand side 4° 00' ± 30' ± 40'	Drum diameter	200 mm (7.8741 in)
Max. permissible differ- ence in caster between sides		Standard	201 mm (7.9135 in)
Caster trail	20 mm (0.79 in)	Limit	
Toe-in	0 ~ 6 mm (0 ~ 0.24 in)	Thickness of lining	4.0 mm (0.1575 in)
		Standard	1.0 mm (0.039 in)
		Limit	3 ~ 7 notches at 10kg (22lb)
		Lever travel	
BRAKES		WHEELS AND TIRES	
Brake pedal free travel		Wheel disc	
Before power brake piston operates	7 ~ 9 mm (0.28 ~ 0.35 in)	Front	5-J x 13WDC
Brake pedal height (from floor)	190 <sup>+5</sup> <sub>-0</sub> mm (7.48 <sup>+0.20</sup> <sub>-0</sub> in)	Rear	5½-JJ x 13WDC (Aluminum)
Master cylinder		Run-out limit	5½-JJ x 13WDC (Aluminum)
Bore	20.64 mm (0.813 in)	Radial	1.0 mm (0.04 in)
Clearance between piston and bore		Lateral	0.5 mm (0.020 in) Aluminum
Standard	0.040 ~ 0.125 mm (0.0016 ~ 0.0049 in)		1.0 mm (0.04 in)
Wear limit	0.15 mm (0.006 in)		0.5 mm (0.020 in) Aluminum
Power brake unit		Tire	
Clearance between piston and push rod	0.1 ~ 0.5 mm (0.004 ~ 0.020 in)	Front	185/70 HR 13
		Rear	165 HR 13
		Inflation pressure	185/70 HR 13
		Front	165 HR 13
		Rear	
		Run-out limit	1.8 kg/cm <sup>2</sup> (26 psi)
		(with wheel disc)	1.8 kg/cm <sup>2</sup> (26 psi)
		Radial	
		Lateral	2.5 mm (0.098 in)
		Front wheel bearing preload (at wheel set bolt)	3.0 mm (0.118 in)
			0.45 ~ 0.65 kg (0.99 ~ 1.43 lb)



SUSPENSION		TIGHTENING TORQUE		
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 <sup>+5</sup> / <sub>-0</sub> cc (0.23 <sup>+0.05</sup> / <sub>-0</sub> U.S. quarts)			
Rear coil spring				
Spring constant	1.8 ± 0.13 kg/mm			
Free length				
Standard	323.5 mm (12.74 in)			
<b>DIMENSION</b>				
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			
<b>TIGHTENING TORQUE</b>				
		m-kg	ft-lb	
<b>Engine</b>				
Oil pump sprocket	3.0 ~ 3.5	22 ~ 25		
Oil pan	0.8 ~ 1.1	6 ~ 8		
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		
<b>Clutch</b>				
Flywheel	40.0 ~ 50.0	289 ~ 362		
Clutch cover	1.8 ~ 2.7	13 ~ 20		
<b>Transmission</b>				
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	1.2 ~ 1.6	9 ~ 12		
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		
<b>Automatic transmission</b>				
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		
<b>Propeller shaft</b>				
Yoke to rear axle companion flange	3.5 ~ 3.8	25 ~ 27		
<b>Rear axle</b>				
Ring gear	7.0 ~ 8.5	51 ~ 61		
Differential side bearing caps	3.8 ~ 5.3	27 ~ 38		
Companion flange to pinion	13 ~ 18	94 ~ 130		
<b>Steering</b>				
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	15 ~ 18	108 ~ 130		
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		

TIGHTENING TORQUE					
	m-kg	ft-lb		m-kg	ft-lb
Tie rod to knuckle arm	3.0 ~ 4.5	22 ~ 33	Front stabilizer support plate	3.8 ~ 4.7	27 ~ 34
Tie rod lock nut	7.0 ~ 8.0	51 ~ 58	Shock absorber to axle housing	6.5 ~ 8.2	47 ~ 59
Steering gear box end cover lock nut	23 ~ 26	166 ~ 188	Upper link to axle housing	7.7 ~ 10.5	56 ~ 76
<b>Brake</b>			Upper link to frame	7.7 ~ 10.5	56 ~ 76
Master cylinder union bolt	1 ~ 1.6	7 ~ 12	Lower link to axle housing	7.7 ~ 10.5	56 ~ 76
Master cylinder outlet plug	6 ~ 7	43 ~ 50	Lower link to frame	7.7 ~ 10.5	56 ~ 76
Brake tube union nut	1.3 ~ 2.2	9 ~ 16	Shock absorber upper	1.3 ~ 2.5	9 ~ 18
Flexible hose union	2.2 ~ 2.7	16 ~ 20	Watt link bracket	7.7 ~ 10.5	56 ~ 76
Wheel cylinder union bolt	0.7 ~ 1.0	5 ~ 7	Watt link to axle housing	6.5 ~ 8.2	47 ~ 59
<b>Wheels</b>			Watt link to bracket	6.5 ~ 8.2	47 ~ 59
Wheel bolts	9 ~ 11	65 ~ 80	Rear stabilizer support plate	3.2 ~ 4.7	23 ~ 34
<b>Suspension</b>			Stabilizer lock nut	1.0 ~ 1.6	7 ~ 12
Suspension arm to cross member	4.0 ~ 5.5	29 ~ 40	<b>Unless otherwise specified</b>		
Knuckle arm to shock absorber	6.4 ~ 9.5	46 ~ 69	<b>6T</b>		
Suspension arm ball joint to knuckle arm	6 ~ 8	43 ~ 58	6 mm bolt/nut	0.7 ~ 1.0	5 ~ 7
Front shock absorber			8 mm bolt/nut	1.6 ~ 2.3	12 ~ 17
Piston rod to mounting block	6.5 ~ 8.2	47 ~ 59	10 mm bolt/nut	3.2 ~ 4.7	23 ~ 34
Seal cap nut	5.0 ~ 6.0	36 ~ 43	12 mm bolt/nut	5.6 ~ 8.2	41 ~ 59
Tension rod to lower suspension arm	5.5 ~ 6.9	40 ~ 50	14 mm bolt/nut	7.7 ~ 10.5	56 ~ 76
Tension rod to bracket	11 ~ 15	80 ~ 108	<b>8T</b>		
Tension rod bracket to frame	7.6 ~ 9.5	55 ~ 69	6 mm bolt/nut	0.8 ~ 1.2	6 ~ 9
Stabilizer bar to suspension lower arm	2.4 ~ 3.5	17 ~ 25	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