

# SERVICE MANUAL

***SUBARU 360 SEDAN***



**BODY SECTION**



***FUJI HEAVY INDUSTRIES LTD.***

TOKYO JAPAN



## **FOREWORD**

This service manual has been prepared as reference for effective service and maintenance of the body for Subaru 360 Sedan, Subaru 360 Custom.

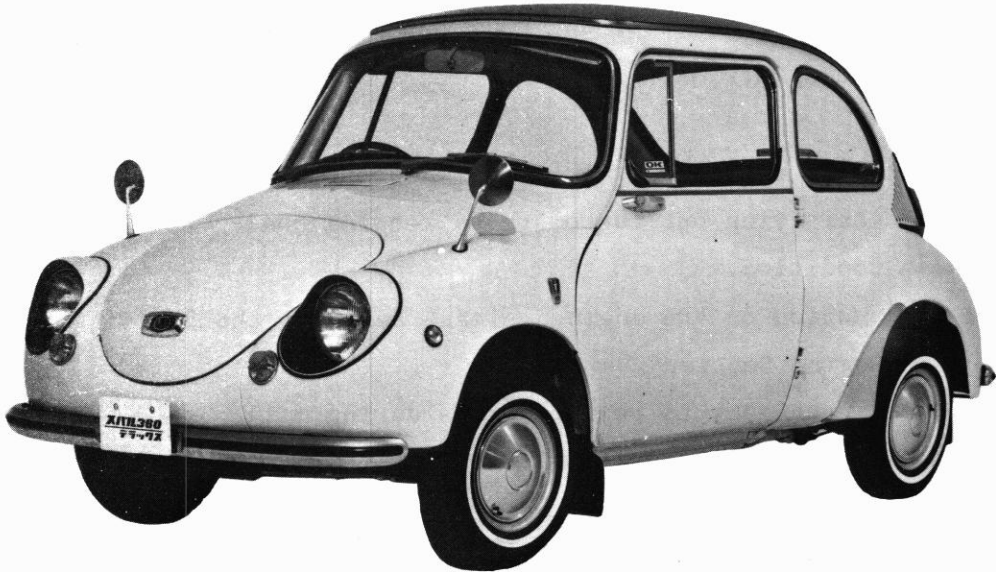
Please utilize this manual fully to ensure complete maintenance work for satisfying our customers by keeping their vehicles in the best condition.

(For information on the engine, please refer to the "Service Manual - Engine Section".)

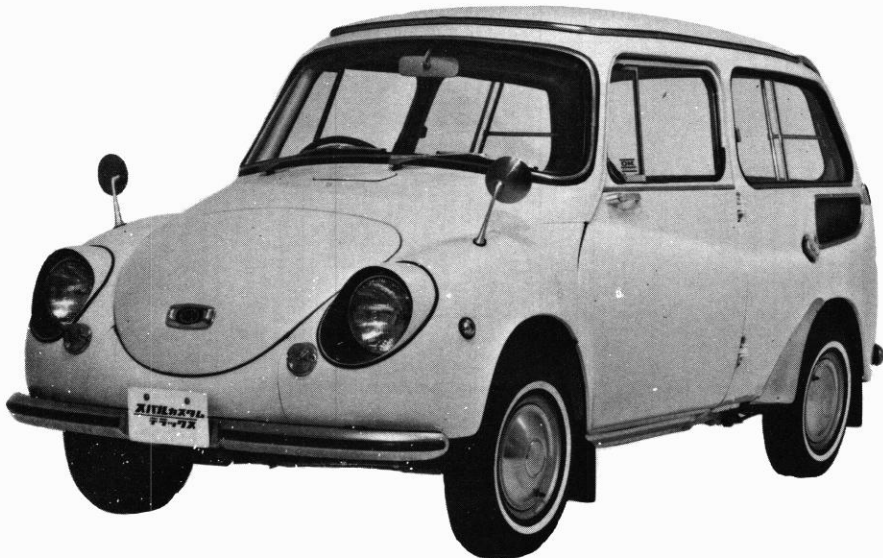
When it is necessary to replace parts during maintenance, be sure to use genuine Subaru parts.

## EXTERIOR PHOTOGRAPHS

SUBARU 360 SEDAN

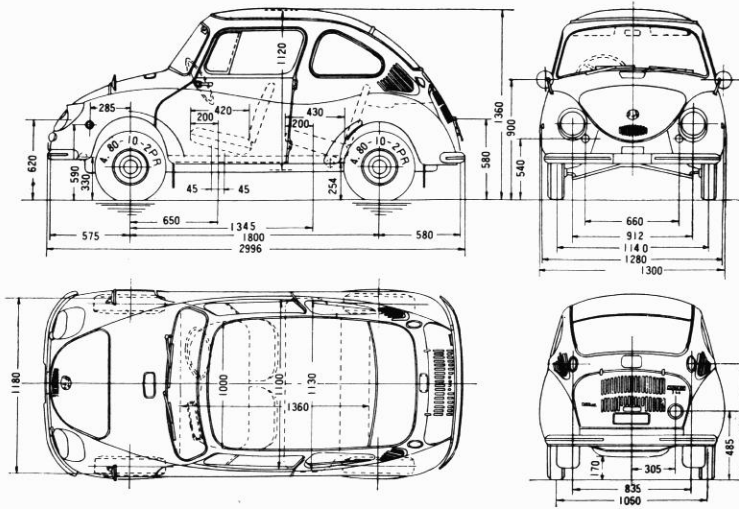


SUBARU 360 CUSTOM

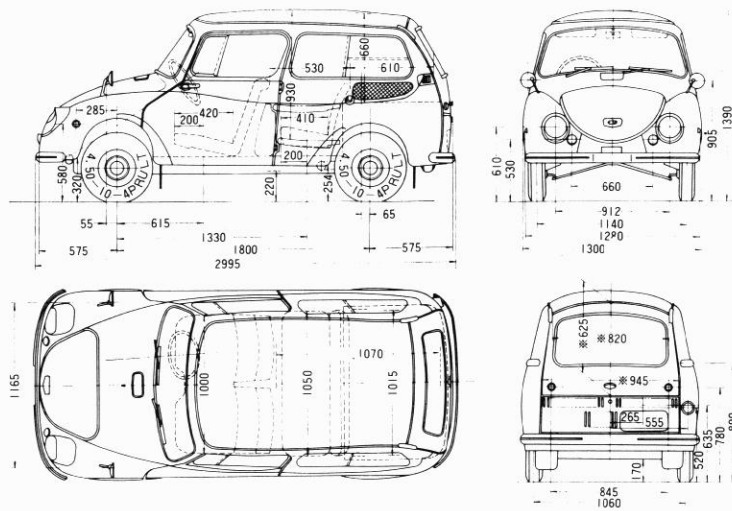


# VIEWS OF FRONT, BACK, SIDE AND TOP

## SUBARU 360 SEDAN

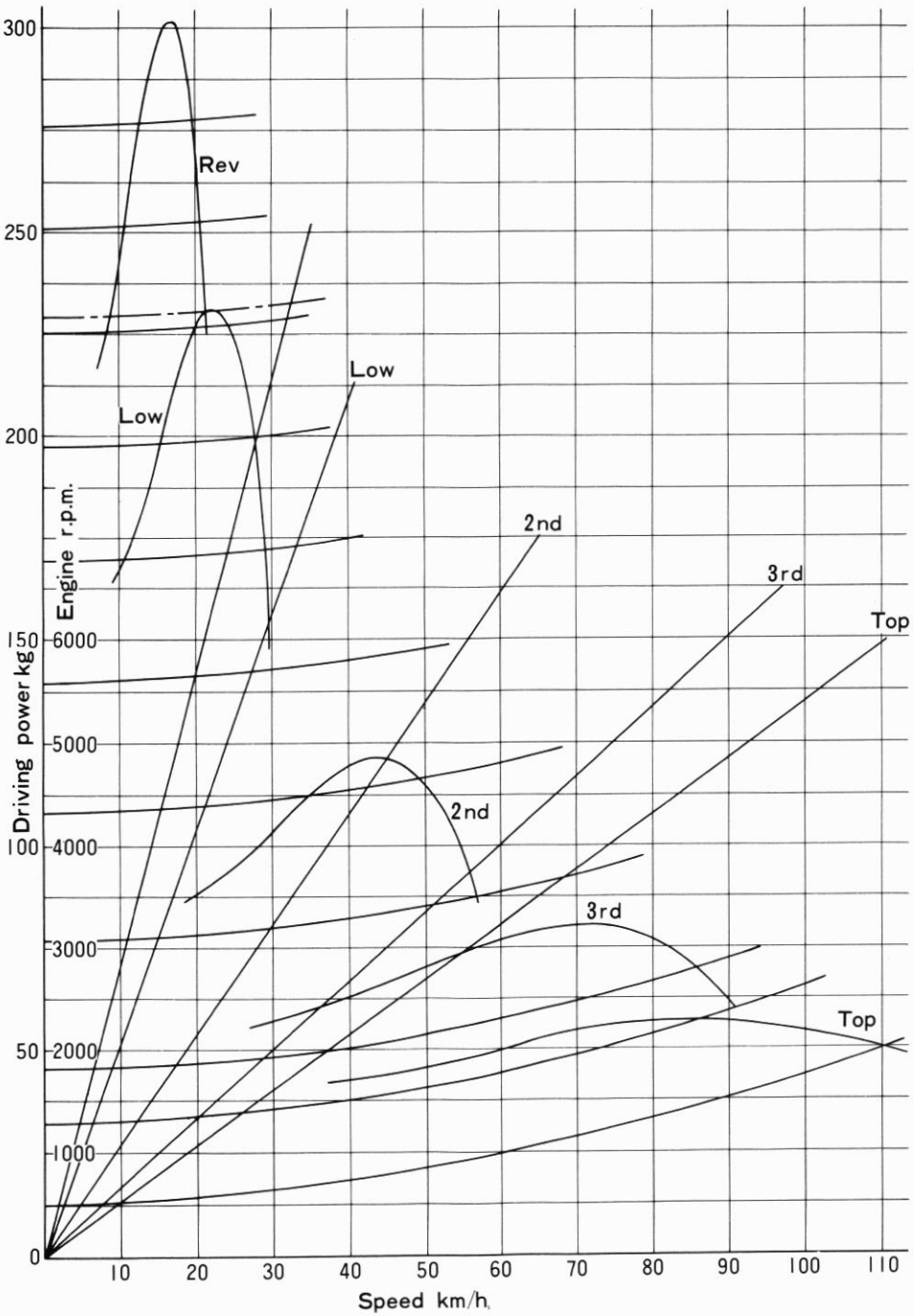


## SUBARU 360 CUSTOM

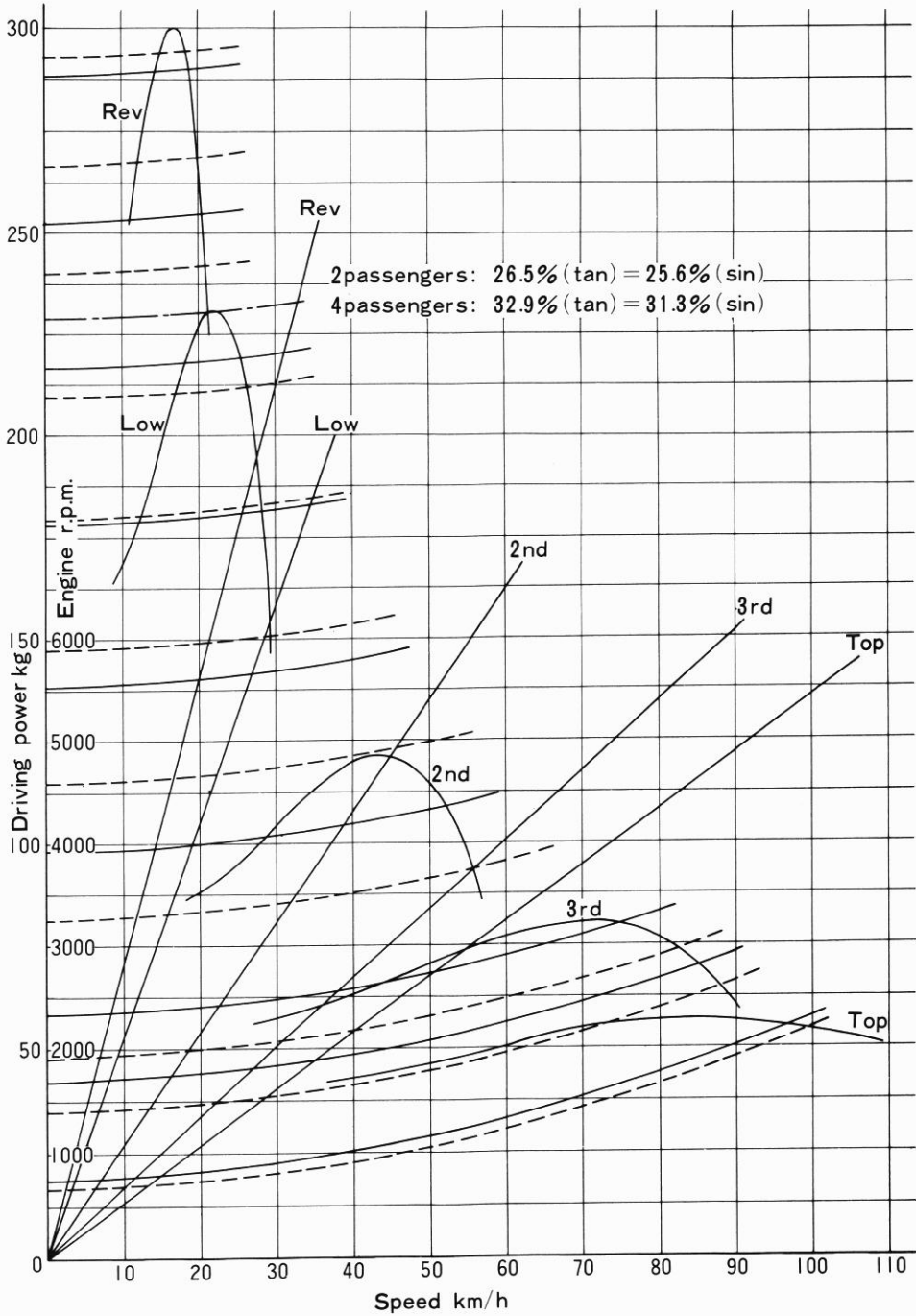


Unit : mm

# Subaru 360 Sedan Performance Curve



# Subaru 360 Custom Performance Curve



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**CHAPTER 1: SPECIFICATIONS AND PERFORMANCES**

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# CHAPTER 1. SPECIFICATIONS AND PERFORMANCES

## 1-1: MAJOR SPECIFICATIONS AND PERFORMANCES

	Subaru 360 Sedan	Subaru 360 Custom	
Model	K111D (K111DL)	K142 (K142L)	
Category	Sedan	Sedan-type Van	
Dimensions and Weights			
Length	2995 mm (117.9 in)	"	
Width	1300 mm ( 51.2 in)	"	
Height	1350 mm ( 53.1 in)	1390 mm ( 54.7 in)	
Compartment (Interior Dimensions)		(2 pass.) (4 pass.)	
Length	1410 mm ( 55.5 in)	1070 mm (42.1 in)	579 mm (22.8 in)
Width	1100 mm ( 43.3 in)	1050 mm (41.3 in)	1000 mm (39.4 in)
Height	1120 mm ( 44.1 in)	928 mm (36.5 in)	660 mm (26.0 in)
Floor Height	220 mm ( 8.7 in)	"	
Minimum Road Clearance	160 mm ( 6.3 in)	"	
Wheelbase	1800 mm ( 70.9 in)	"	
Tread (Front Wheel)	1140 mm ( 44.9 in)	"	
Tread (Rear Wheel)	1070 mm ( 42.1 in)	"	
Vehicle Weight	420 kg (925.0 lb)	460 kg (1014.1 lb)	
Load Distribution (empty)			
Front Wheel	160 kg (352.0 lb)	175 kg ( 385.7 lb)	
Rear Wheel	260 kg (573.0 lb)	285 kg ( 628.0 lb)	
Height of Center of Gravity	670 mm ( 26.4 in)	530 mm ( 20.9 in)	
Maximum Tipping Angle (both sides)	44°30'	45°50'	
No. of Passengers	Four	Two	Four
Maximum Cargo Load	-	250 kg ( 550 lb)	150 kg ( 330 lb)
Gross Vehicle Weight	640 kg (1411.0 lb)	820 kg (1807 lb)	680 kg (1499 lb)

	Subaru 360 Sedan	Subaru 360 Custom
Load Distribution (loaded)		
Front Wheel	260 kg (573.0 lb)	255 kg (562 lb) 275 kg (606 lb)
Rear Wheel	380 kg (837.0 lb)	565 kg (1267 lb) 405 kg (892 lb)
Load on Front Wheels (loaded)	40.6 %	31.0 % 40.4 %
Tire Loading: (loaded)	Front 70.3 % Rear 102.7 %	56.7 % 61.1 % 125.6 % 90.0 %
Overhang excl. Bumper:	Rear 580 mm (23.0 in) Front 575 mm (22.6 in)	575 mm (22.6 in) "
Tire	Front 4.80 - 10 x 2P Rear 4.80 - 10 x 2P	4.50 - 10 x 4P 4.50 - 10 x 4P
Cargo Bed Offset	-	65 mm (forward)
Performance		
Maximum Speed	110 km/h (68 mph)	95 km/h (59 mph)
Climbing Power	0.340	0.259 0.294
Minimum Turning Diameter	8 m (26.2 ft)	"
Braking Distance (50 km/h)	12 m (39.4 ft at 31 mph)	"
Engine		
Manufacturer	Fuji Heavy Ind.	"
Type	Gasoline Engine	"
Cooling	Forced Air-Cooled	"
Cylinders	Two in line	"
Cycle	2-cycle	"
Combustion Chamber Shape		
Bore x Stroke	61.5 mm x 60 mm (2.42 in x 2.36 in)	"
Total Displacement	356 cc (21.7 cu/in)	"
Compression Ratio	6.7	"

	Subaru 360 Sedan	Subaru 360 Custom
Max. Mean Effective Pressure	5.3 kg/cm <sup>2</sup> (76.4 lb/in <sup>2</sup> )	"
Max. Horsepower	25 HP (5500 rpm)	"
Max. Torque	3.5 m-kg (25.3 ft-lb)/4500 rpm	"
Dimensions	622x618x475 mm (24.5x24.3x18.8 in)	"
Weight	78.3 kg (172.3 lb)	78.8 kg (173.4 lb)
Location	Rear	"
Starting	Starter Motor	"
Ignition	Battery & Ignition Coil	"
Firing Angle	13° before TDC (2000 rpm)	"
Maximum Advance Angle	20° (4000 rpm)	"
Firint Sequence	1 - 2	"
Spark Plug	B <sup>7</sup> H (N.G.K.) M46 (Hitachi)	"
Spark Plug Thread Size	14 mm	"
Spark Plug Gap	0.7 mm (0.027 in)	"
Distributor	29100 - 136 - 0 (Nihon Denso)	"
Ignition Advance Control	Automatic centrifugal	"
Ignition Coil	C14 - 50 (Hitachi)	"
Carburetor	Solex type (Hitachi)	"
Carburetor Model & Quantity	HAB28 1 ea	"
Air Flow Direction	Side-ways	"
Air Cleaner	Paper filter type 1 ea	"
Fuel Tank Capacity	25 liters (6.6 USgal) (4.5 ImpGal)	20 liters Utilizing (5.3 USgal) crankcase (4.4 ImpGal) compression
Fuel Pump	Mechanical	Disphragm type

		Subaru 360 Sedan	Subaru 360 Custom
Lubrication System		Separate force-feeding type	"
Oil Pump		Plunger type	"
Oil Tank Capacity		2.5 liters (2.64 US qt) (2.20 Imp qt)	"
Steering System			
Steering Gear Type		Rack and Pinion	"
Steering Gear Ratio		20.6	"
Steering Angle (Inner)		36°	"
Steering Angle (Outer)		27°	"
Steering Wheel Diameter		380 mm (15.0 in)	"
Undercarriage and Suspension			
Number and Position of Wheels		2 ea in front and rear	"
Front Wheel Axle		Trailing arm type	"
Toe-in		12-16 mm (0.47-0.63 in)	"
Camber		2°	"
Caster		13°17'	"
Trail		101 mm (3.98 in)	"
King-Pin Angle		7°	"
Rear Wheel Axle		Swing Axle Type	"
Brake Type		Hydraulic on all four wheels	"
Brake Shoe (WxTxL)	Front	30x5x156 mm (1.2x0.2x6.1 in)	"
	Rear	30x5x180 mm (1.2x0.2x7.1 in)	"
Brake Shoe Area	Front	187 cm <sup>2</sup> (29.0 in <sup>2</sup> )	"
	Rear	216 cm <sup>2</sup> (33.5 in <sup>2</sup> )	"

		Subaru 360 Sedan	Subaru 360 Custom
Brake Drum Diameter	Front	170 mm (6.7 in)	"
	Rear	"	"
Master Cylinder Inner Diameter		19.05 mm (0.75 in)	"
Wheel Cylinder Inner Dia.	Front	20.64 mm (0.79 in)	"
	Rear	17.46 mm (0.68 in)	"
Max. Hydraulic Pressure (foot)		100 kg/cm <sup>2</sup> (1422 lb/in <sup>2</sup> )	"
Hand Brake		Mechanical on rear wheels	"
Hand Brake Shoe (WxTxL)		30x5x180 mm (1.2x0.2x7.1 in)	"
Hand Brake Shoe Area		216 cm <sup>2</sup> (33.5 in <sup>2</sup> )	"
Brake Drum Diameter		170 mm (6.7 in)	"
Front Suspension		Independent	"
Front Torsion Bar (dia. x length)		18.0 m/m x 435 mm (0.7 in x 16.93 in)	"
Coil Spring (wire dia. x center dia. x length - effective coils)		14.5x57.5x113 mm-4.2 (0.56x2.25x4.7 in-4.2)	"
Rear Suspension		Independent	"
Rear Torsion Bar (dia. x length)		17.6 mm x 427 mm (0.67 in x 16.7 in)	20.5 mm x 434 mm (0.81 in x 17.1 in)
Shock Absorber	Front	Hydraulic, double cylinder	"
	Rear	Hydraulic, single cylinder	"
Body Frame		Frameless monocoque	"
Lighting Equipments			
Headlights		12V50W/40W x 2 ea (S8842 - Koito)	12V50W/40W x 2 ea (S8842 - Koito)
Side turn Signal light		12V6W x 2 ea	"
License Plate Lamp		12V8W x 1 ea (white)	"

	Subaru 360 Sedan	Subaru 360 Custom
Reflector (in tail lamps)	32 mm $\phi$ x 2 ea (red)	36 mm $\phi$ x 2 ea
Front combination lights (turn signal/parking)	12V 23W/7W x 2 ea (red)	"
Rear combination lights (turn signal/parking/stop/tail)	12V 23W/7W x 2 ea (red)	"
Room Lamp	12V 8W / 1 ea (white)	"
Miscellaneous		
Horn	BS (MARUKO) 22W. double	"
Rear View Mirror	Square type x 2 ea	"
Windshield Wiper	Double Blade	"
Speedometer	Magnet type (Nihon Denso)	"
Fuel Gauge	Bi-metal type (Nihon Denso)	"