



## MAZDA 110S



A NEW ERA COMES TO THE WORLD OF AUTO TECHNOLOGY!

Announcing the advent of the Mazda 110 S, with the world's first dual rotor engine! Not since the first sputtering car outpaced the horse's buggy has there been an automotive engineering breakthrough of this dimension. Already a legend in the auto industry, the rotary engine has been under development in the auto capitals of the world for a decade. Now at last it's here. Toyo Kogyo is pleased to bring it to you in the Mazda 110 S. And to top it all off, the beauty of this new car is as breathtaking as its speed.  
(LICENSE NSU-WANKEL)



**MAZDA**  
TOYO KOGYO CO., LTD.



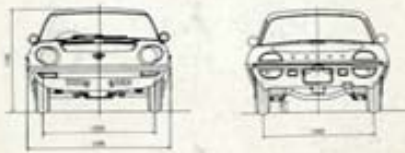
The interior of the 110 S is even roomier and more plush than you'd expect from a car styled along GT lines. Step inside, have a look: See: Black cockpit, corner to corner. Nice. Curved glass side windows for roomy, contoured interiors. Dashboard console of blackened matte stainless steel. Plush-padded

reclining bucket seats. Padded dash. Deep-piled, wall-to-wall carpeting. Blue paned windows. An instrument panel that looks like the dash aboard a space satellite! Leather covered gear box with wooden knob and wooden steering wheel. Safety belt fittings? Of course, the best, the three-point kind.

The revolutionary engine of the Mazda 110 S tosses out the old idea of up and down, start and stop jerky reciprocal engines. Out also goes all the accompanying clutter of cams, valves, rods, bearings and things. Instead, the rotary engine uses a couple of clean, classic, trouble-free rotary pistons. These

go 'round and 'round, always moving in the same direction. You can enjoy a smoother, quieter, and almost vibrationless ride. This exciting new engine delivers 110 horsepower and puts out up to 7000 rpm's without sweating it. It races at speed up to 185 kph. Accelerates from a dead stop to 100 kph in 8.7 seconds. In another 7.6 seconds, it dashes past the quarter mile post. And this engine is so smooth, so highly flexible that even in top gear, it accelerates smoothly from 27 kph right on up to top speed.

## SPECIFICATIONS (MAZDA 110 S MODEL: L10A)



**DIMENSIONS**

Overall Length	4,140mm (13' 7")
Overall Width	1,595mm (5' 3")
Overall Height	1,165mm (3' 10")
Wheel Base	2,200mm (7' 2")
Road Clearance	125mm (5")
Tread (Front)	1,250mm (4' 1")
Tread (Rear)	1,240mm (4' 1")

**CAR WEIGHT** 940 kg (2,072 lb)

**ENGINE**

Fuel	Gasoline
Cooling System	Water-cooled
Number of Rotors	2, in-line
Type of Piston	3-lobe type rotors
Total Displacement	Single chamber of rotary engine: 491 cc (30 cu. in.) x 2 rotors
Compression Ratio	9.4
Maximum Output	110 hp / 7,000 r.p.m.
Maximum Torque	13.3 kg-m (96.0 lb-ft) / 3,500 r.p.m.
Type of Carburetor	Zenith Stromberg, 2 stage, 4-barrel

**PERFORMANCE**

Maximum Speed	185 kph (115 mph)
Climbing Ability sin θ	0.488
Minimum Turning Radius	4.9m (16' 1")
Braking Distance	14m (45' 11") at initial speed of 50 kph (31 mph)
Weight per Horsepower	8.55 kg (18.8 lb)/hp

**POWER TRANSMISSION SYSTEM**

Clutch	Single dry type, diaphragm spring
Transmission	Forward: 4 speed, fully synchromeshed Reverse: 1 speed
Gear Ratios	1st: 3.379 2nd: 2.077 3rd: 1.390 Top: 1.000 Reverse: 3.389
Gear Shift	Floor shift

**FINAL REDUCTION GEAR**

Type of Gear	Hypoid gear
Gear Ratio	3.700

**STEERING SYSTEM** Rack and Pinion

**BRAKES**

Foot Brakes (Front)	Hydraulically-operated disk brakes
(Rear)	Hydraulic drum brakes
Hand Brake	Effective on rear wheels only, cable operated

**AXLE & SUSPENSION**

Front	Wishbone ball joint, independent coil spring, double-acting oil damper
Rear	De Dion, semi-elliptic leaf spring, double-acting oil damper

**FRAME** Monocoque  
**TIRE** 165 HR 14 Radial Tire  
**FUEL TANK CAPACITY** 57 l (15 U.S. gal.)

The above specifications are subject to change without notice.

