

# *Eunos Cosmo*



## **Mazda's ultimate.**

The Eunos Cosmo is the pinnacle of rotary technology. Mazda simply did not compromise when designing what is arguably the ultimate vehicle in their automotive history. With its legendary rotary engine now available in 3 rotor form, the Cosmo was designed with the sporting affluent in mind, & to exceed all their expectations.

Jaguar, BMW & Mercedes luxury coupe's were the targets Mazda aimed for, & when released onto the Japanese market in 1990 the Cosmo easily outshined the best of them with styling years ahead of its time. Introduced as well was Japan's first factory fitted G.P.S.S (Global Positioning, Satellite System) & touch screen system to take the Cosmo well into the next decade. Motoring journalist throughout the world made pilgrimage to Mazda's Hiroshima headquarters to test drive Japan's most technically advanced car. Reports such as "Rotary masterpiece" & "Japanese Jaguar" were features of prominent motor magazines from the U.S & Europe.

Manufactured between 1990 & 1996, Mazda kept production at a selected rate to ensure the maximum build quality possible. A consequence of this being the price premium buyers were forced to pay in order to enjoy its prestigious status. Mazda Australia investigated the sale of the Cosmo back in 1990 but were deterred by the expected \$110,000 price tag to have it on Australian roads, as well as being a couple of years behind in setting up the luxury Eunos sales channel.

In order to advance on the level of motoring the Cosmo is reputed for, Mazda surveyed buyers of the previous HB series Cosmo coupe (82-88) to find the luxury interior with its "advanced" features was an important factor in deciding to purchase the car. The "wrap around" cockpit of the JC Cosmo has been designed to cater for the personalised tastes of such buyers with the quality of the optional leather interior matching the best of many a European marque. The top level "Type-E.CCS" model with its touchscreen "Car Control System" handles most of the car's systems at the touch of a finger & real "Milano" wood graces the dash to add the required prestige.



Mazda's famous rotary engine has been steadily improving since their original L10 Cosmo from the 60's. The Cosmo's heart has been enlarged from the well known 2 rotor 13B to the 3 rotor 20B which shines as the ultimate example of a production rotary engine. It's the worlds first series production engine employing a twin "sequential" turbo system & has resulted in an amazing level of torque from it's 1962 cc capacity. With over 390 nm available from as little as 2200 rpm, the 402 nm peak at 3000 rpm drops by less than 10% at the 7000 rpm Redline. Mazda's rated power of 206 kW is at the Japanese power limit, but careful questioning of officials found the real figure to be around the 220 kW mark. How does it work ? The primary turbocharger receives the full benefits of exhaust gas from all the rotors to spool faster, thus improving low speed torque & eliminating lag. The 2nd turbo whilst spinning is still yet to provide any boost. At a pre-determined speed the 2nd turbo comes "on-line" to add full boost. The result is effortless performance combined with the rotaries natural smoothness & flexibility.

The triple mode automatic transmission is superbly matched to it's luxury coupe image. The press of a button gives a choice between "normal" & "power" mode, the latter increases responsiveness to the accelerator position aswell as holding the gear longer before the next upchange. The "hold" mode gives manual control. A great feature for demanding driving aswell as the added safety benefit of 2nd gear take offs giving greater traction during slippery conditions.



The Cosmo interior offers drivers a totally new concept. Mazda designers worked hard to create a top of the line personal automobile. The designed concept of its interior is an "organic space that enhances the relationship between car and driver". The Cosmo's clean and contemporary interior is artistically designed using natural materials, creating a comfortable atmosphere for driver and passengers.

Turning on the ignition a blue analogue display appears on the black screen of the instrument panel. The name Cosmo was inspired by the term Cosmos, where a million stars shine in endless space: this display recreates the feeling of a midnight sky. The wrap around effect of the interior design gives off a feeling personal safety without the cramped styling of a true sports car. Room enough for the tallest drivers, there's plenty of adjustment in both the sport & luxury seats to create comfort & form, a feature many car seat designs have difficulty achieving. Rear seat room whilst not up to the standards of a regular sedan provide ample room for 2 more should the need arise.

Standard with the E.CCS version is the most amazing audio system ever to come from the Japanese stables for automotive production. 6 high quality speakers provide a complete "Surround sound" entertainment atmosphere capable of satisfying the most discerning listeners. The standard stereo ( & optional CD ) whilst not matching the abilities of the E.CCS still provide quality far above the automotive audio standard.



**Type-S.CCS ( Sports.Car Control System )** luxury & driving (series II) The sports appeal of the dark leather interior combine with the luxury of the CCS for an excellent combination. Available only in 13B form & only for the series II.



**Type-E.CCS** (Elegant.Car Control System ). Top of the line luxury. Touch screen controlled car systems including (series I-II)

- 12 stacker CD
- AM/FM stereo
- Tape player
- Climate control
- Ventilation control
- TV ( including AV input )
- G.P.S.S ( Global positioning satellite system )
- Mobile phone ( optional )

Secondary climate & Audio control from steering wheel-Power controlled seating-Power tilt adjust steering-Cruise control-Power windows-power mirrors ( heated on series II ) -Remote controlled central locking-Full leather interior.

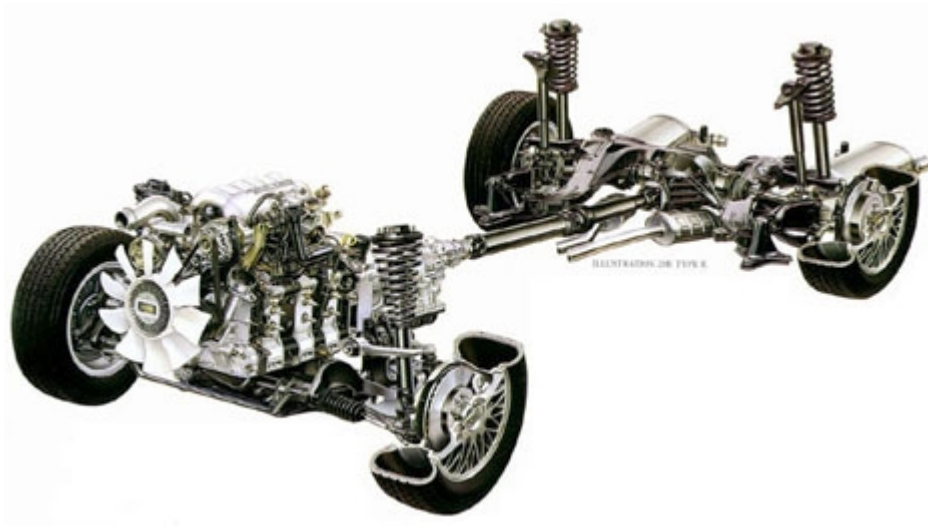


**Type-E** (Elegant ) Mid range luxury. (series I) Incorporates the features & leather interior of the E.CCS with the exception of the CCS. In it's place sits a single CD player aswell as an impressive AM/FM stereo cassette. A push button controlled ventilation /climate control system fills the gap.



**Type-S** ( Sports ) The drivers car. (series I) Dark cloth trim replaces the leather of the above versions for the appeal of the sportsman driver-Thick black leather bounds the steering wheel-Electically controlled support setting for the sports seats adjust for every driver-AM/FM stereo with optional CD-Push button controlled ventilation/climate control-power windows-power mirrors

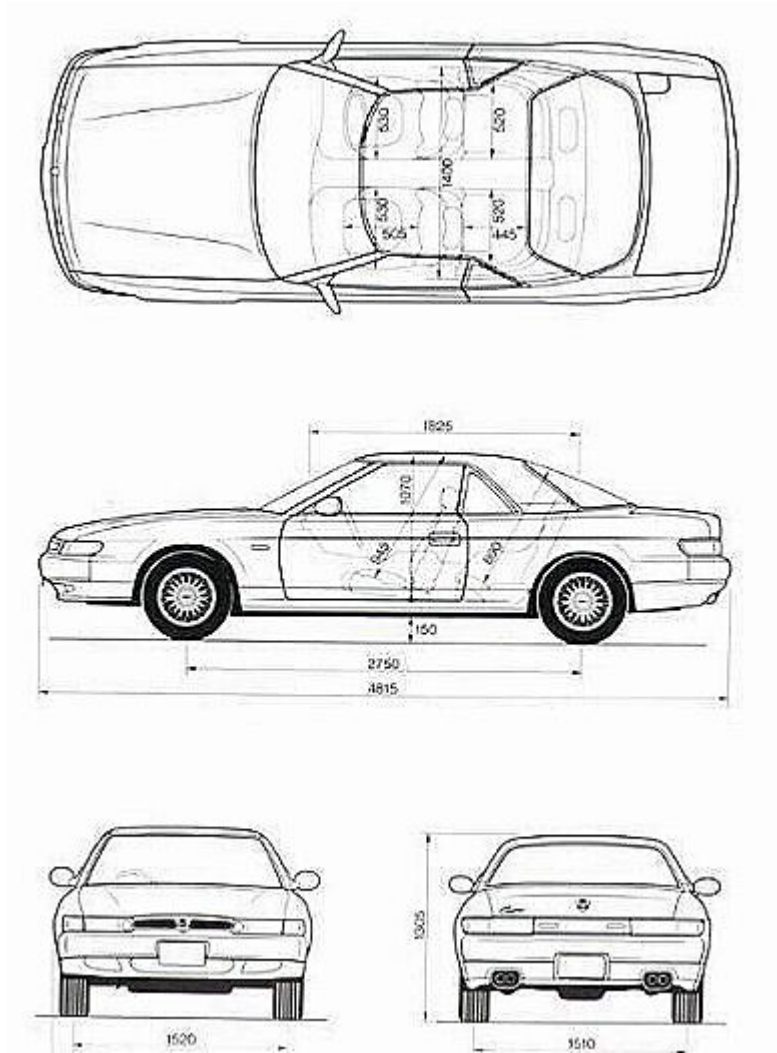
**Type-SX** ( sports extra ) The drivers car (series II) Dark leather seats with cloth inserts combined with a dark leather interior are the changes for the series II version, shifting the appeal of the sports to a higher level.



With a clean slate to start from, Mazda engineers have designed a truly remarkable chassis to provide the form & function demanded of this high performance coupe. Safety has been well catered for with the use of carefully designed crumple zones & safety impact bumper bars front & rear. ABS is standard for all 20B versions a capable of returning the 1500+ kg of the Cosmo to a full stop in amazingly short distances. Suspension is fully independent with the “E-type” rear incorporating twin dampers. Progressively sprung to give sure footed handling & control. Stiffer spring rates & dampers for the “type-S” show it’s performance advantage over “type-E” versions.

Mazda updated the Cosmo for the 93 model with the addition & omission of a new version to reflect tastes of the series I buyers. The series I thus runs from 1990-1992 with the series II from 1993-1995. Changes to the exterior were minimal but trim levels did get altered.

# Specifications



**- TECHNICALITIES -**

<b>BODY TYPE</b>	2 door coupe	
<b>MODELS</b>	- JC-3SE / JC-3S -	- JC-ESE / JC-ES -
<b>ENGINE TYPES</b>	2 rotor Wankel	3 rotor Wankel
<b>SPEC LEVELS</b>	Type-S (sports) Type-E (elegant)	

<b>ENGINE</b>		
<b>TYPE</b>	13B-REW	20B-REW
<b>CAPACITY</b>	1308 cc (654 x 2)	1962 cc (654 x 3)
<b>COMPRESSION</b>	9.0	9.0
<b>RATED POWER</b>	230 hp --- 172 kw	300 hp --- 224 kw
<b>RATED TORQUE</b>	217 lb/ft - 294 nm	297 lb/ft - 402 nm
<b>INDUCTION</b>	EFI with twin sequential turbochargers	
<b>MAX BOOST</b>	570 mm hg	500 mm hg
<b>INTERCOOLER</b>	Air to air intercooling	
<b>FUEL TANK</b>	72 lt	85 lt

<b>DRIVETRAIN</b>		
<b>GEARBOX</b>	4 speed, triple mode electronically controlled auto	
	<b>13B-REW</b>	<b>20B-REW</b>
<b>1st</b>	3.027	2.784
<b>2nd</b>	1.619	1.544
<b>3rd</b>	1.000	1.000
<b>4th</b>	0.694	0.694
<b>REVERSE</b>	2.272	2.275
<b>REAR DIFFERENTIAL</b>	4.300	3.909

<b>CHASSIS</b>		
<b>STEERING</b>	Power assisted rack & pinion	
<b>FRONT SUSPENSION</b>	double wishbone	
<b>REAR SUSPENSION</b>	multi link IRS with quad dampers	
<b>F/R STABILISER</b>	torsion bar	
<b>BRAKES</b>	ventilated disc's + ABS	
<b>A.B.S</b>	optional	standard (20B)
<b>VISCOUS L.S.D</b>	with ABS	standard (20B)
<b>WHEELS</b>	16x7 (Type-S) . . 15x6 (Type-E)	
<b>TYRES</b>	225/50 (Type-S). . 215/60 (Type-E)	

<b>PERFORMANCE</b>		
<b>TURNING-CIRCLE</b>	5.6 M	
	<b>13B-REW</b>	<b>20B-REW</b>
<b>ECONOMY - CITY</b>	7.2 km/l	6.0 km/l
<b>ECONOMY - HWY</b>	10.5 km/l	9.7 km/l
<b>0--400M -- 1/4 mile</b>	15.3 sec	14.1 sec
<b>TOP SPEED</b>	235 kph (185 kph electronic cut out)	260 kph (185 kph electronic cut out)