

**RX7 SPORTS
COUPE**



mazda

Mazda Cars (UK) Limited, Mount Edgecumbe, Tuxford Road, Kettering NN16 8RS



The Mazda RX7 never fails to stir the emotions. Even standing still.

The low gentle contours of the body were fashioned and honed in a wind tunnel. The result is a drag co-efficient that is the envy of the Porsche 928—a mere 0.32.

The beauty of the front air dam and the rear spoiler lie not only in the way they blend in with the car's overall shape but also in the way they help reduce fuel consumption while increasing the top speed (upwards of 120 mph).

The RX7 looks, and is, perfectly balanced. The reason for this is also the reason the car is unique. For beneath that unusually sleek bonnet there lies not a conventional piston engine but the revolutionary rotary engine.

Patently developed by our engineers over a period of 20 years it has proved itself to be more than compact. It's also light and exceptionally efficient.

The proof can be seen in a track record that speaks for itself.

It won the British Saloon Car Championship outright in consecutive years, 1981 and 1982. In 1981 it proved its class, and its stamina by winning the gruelling Spa Francorchamps 24 hours. And in 1982 Jim Downing and his RX7 won the American GTU Driver's Championship.

To see how the lessons learnt under such testing conditions benefit you behind the wheel of the RX7, turn the page.

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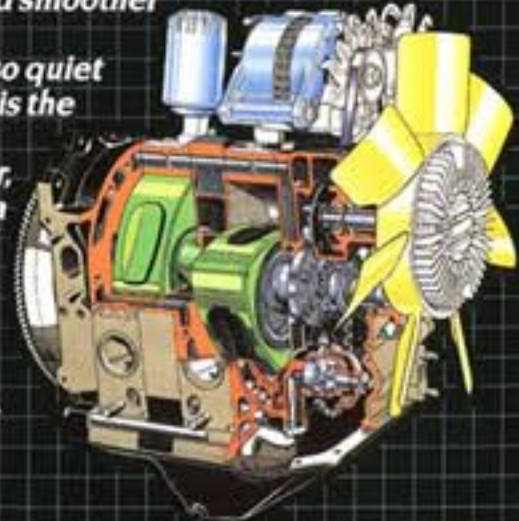
Before you step inside the Mazda RX7, a word about what you're getting into. Be prepared for an utterly stable ride, even under the most adverse road and weather conditions. This is due to the ingeniously designed independent McPherson strut front suspension that incorporates coil springs and gas filled dampers. While on the rear there are coil springs, gas filled dampers and four live trailing arms. In fact, the car feels as balanced as any on the road today.

Much of the credit for this must go to Mazda's rotary engine. It's compact enough to sit behind the front axle thereby creating a perfect balance and ideal weight distribution between the front and rear wheels - front 51% rear 49%. As a result, the car's centre of gravity is exceptionally low, just 18" off the ground.

The engine itself is the most powerful (in a production car) for its size in the world. Its twin rotors of 573 cc each are rated to be the equivalent of 2.3 litres and produce 115 ps at 6,000 rpm and a 0-60 time of 8.8 seconds. And being a rotary unit there are far fewer moving parts than in a conventional piston engine.

This means it's quieter, lighter, easier to maintain and smoother on the road.

In fact, so quiet and smooth is the controlled flow of power, every Mazda RX7 is fitted with a warning buzzer which tells you when you're about to reach the rev limit.





You are now in the cockpit of the RX7. The front seats have been designed to support all parts of the body, particularly the lower back, so your comfort is assured, even on long journeys. The seats have plenty of fore and aft adjustment, reclining back rests and adjustable head restraints. The rear seats fold down to make the RX7 as versatile as any hatchback. To your left, the shift for the five-speed gearbox fits snugly into your hand. At high speeds it lowers the revs and your fuel bill. In front, is the dashboard of a thoroughbred sports car. The rev counter dead ahead, the speedometer alongside. Oil pressure, water temperature, voltmeter and warning lights are clear to see. Minor



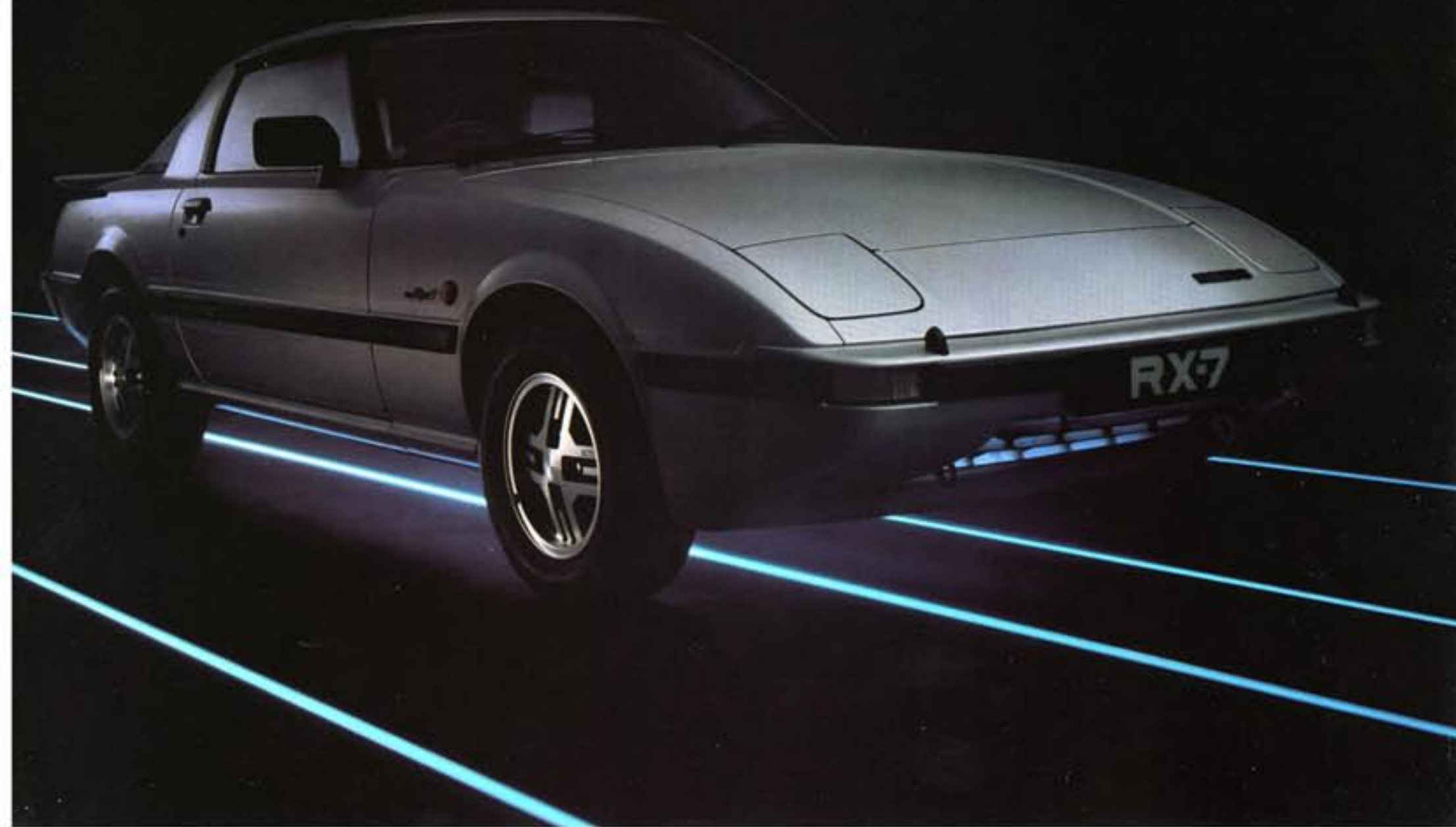
controls are on hand: steering column stalks or conveniently placed rocker switches. One such switch operates the electrically powered driver's door mirror. And on either side of this switch are the buttons for the interior hatch release and fuel flap release.

Within easy reach are the powerful ventilation and heating controls and the super 4 x 9 watt stereo radio cassette with its four speakers to help you fully appreciate every note.

Turn the key and you'll still be able to listen to the music. All you will hear is an almost inaudible hum as the engine comes to life. (Even at the legal limit you're hardly aware of either noise or vibration).

And, before you set off, you can check the route courtesy of the adjustable map reading light above the rear view mirror.





As you have seen, in terms of looks and luxury, the Mazda RX7 has much in common with cars carrying far more exotic price tags. The RX7 shares one other feature: it lacks for nothing in performance terms either. For a start, it stops every bit as quickly as it goes. There are servo-assisted disc brakes on all four wheels. To be sure the handling is neat and agile, rain or shine, bend or straight the RX7 benefits from Mazda's own recirculating ball and nut steering system. It is direct, responsive and precise, and has plenty of 'feel' at high speeds. Yet it remains light and easily manageable around town, especially when parking.

To add extra grip to the car's already exceptional road holding the alloy wheels are fitted with steel braced radials. (185/70 HR13).

To save you energy, there are electric windows. To ensure excellent visibility there is an unusually wide glass tailgate and heated screen. It has a wash/wipe and its handsome curved surface contributes to the car's low drag co-efficient. And as you

can see below, there's also an electrically adjustable driver's door mirror. It works via a handy 4-way rocker switch to the right-hand side of the steering wheel.

As a safety precaution, there's a special tonneau cover to hide your luggage from prying eyes.

To let the sunshine in, there's a steel sunroof. To let the fresh air in you can remove the sunroof completely and stow it in a special wallet in the rear of the car.

To be certain of the best possible reception, there's an electric aerial. And to make sure you have the best possible visibility at night the retractable headlamps are fitted with washers as standard.

To complete the car's streamlined appearance, there's an air dam at the front and a spoiler at the rear to reduce drag and increase directional stability. Finally, long life is built in. The bodysell is completely dipped and rust prone areas are coated in PVC to provide a total anti-corrosion treatment.



Technically, the Mazda RX7 is one of a kind: the world's only rotary engine sports car. The engine is not only the heart of the car but also the key to its success, on road as well as track. This success is a tribute to the persistence of our engineers who had the imagination, vision and necessary skill to take the much maligned rotary unit and make it clean, economical and reliable. (Their achievement is all the greater when you remember that the piston engine has benefitted from more than a century of continuous development).

In fact, the Mazda rotary engine is delightfully simple. It dispenses with camshafts, valves and pistons so it is lighter, more compact and easier to maintain. It's also quieter. So quiet that when the car is ticking over you hear only a gentle hum. Floor the accelerator and you'll reach 60 mph in 8.8 seconds.

So efficient is the engine, you can comfortably cruise at the maximum 120 mph (where legal) in either fourth or fifth

gear with very little mechanical noise or fuss.

The compactness of the engine has another direct benefit. It means it can be

But at Mazda, power, however smooth and efficient, is not an end in itself.

What preoccupies our engineers is the overall driving experience. This includes creating the right environment for the driver so he can fully appreciate the engineering at his fingertips - pampering him, yet keeping him safe and alert. For example, to the right hand

standard feature is the five-speed gearbox. It comes into its own at high speeds when it will lower the revs and save you fuel (remarkably, the RX7 runs on 2-star petrol).

Another surprising fact about the Mazda RX7 is the high level of standard equipment it has to offer.

Power windows, a steel sunroof that tilts up at the rear or can be removed completely and stowed in a special wallet,

a 4 x 9 watt stereo radio/cassette

you're driving the RX7 is the driving position. The car may be every inch a sports coupe but the visibility is still excellent. This is due, in part, to the large glass area but also to the body shape, in particular the sloping bonnet which gives the driver a clear, unimpeded view of the road ahead.

A feature of the RX7 that every driver will appreciate when they're out on the road, is the direct and precise steering. This is achieved by Mazda's recirculating ball and nut system. It's positive and has plenty of 'feel' at high speeds, yet it remains light and easily manageable around town.

But although the RX7 is first and foremost a sports car, it is also extremely practical. The ergonomically designed front seats are as comfortable as they look with reclining back rests and plenty of fore and aft adjustment. Meanwhile, real hatchback versatility is provided by the wide glass tailgate and the rear seats which fold flat to take extra amounts of luggage.

To protect your luggage against prying eyes, there's also a tonneau cover which can be pulled across the

luggage compartment.

So not only is the RX7 fast and luxurious, it's also exceptionally practical.

But this practicality extends further than just load carrying ability.

The RX7 is practical in terms of sheer ground covering ability. In other words, it is a true grand tourer, able to eat up the miles effortlessly and efficiently. This is largely thanks to the quiet engine, the relaxed 5th gear cruising and the stable ride.

A major factor in the car's stability is, of course, the suspension. It's as imaginative and innovative as the engine. The independent front suspension has specially tapered coil springs and an anti-roll bar. By tapering the springs they can compress inside each other making the suspension both more supple and more sensitive.

Meanwhile the rear suspension incorporates coil springs, gas filled dampers

and four trailing arms. The result is a firm, comfortable ride and the handling of a true sports car.

The Mazda RX7 has something else in common with other true (and often more expensive) sports cars.

The fact is, it has not only been well built, it has also been built to last.

As part of Mazda's superb quality control system, each car is checked at least 2,500 times during the course of its manufacture before it is allowed to leave the factory.

In addition to being thoroughly checked, the RX7 is also thoroughly protected.



Each bodyshell is completely dipped as part of a special cathodic electro-coating process. Then any areas which are particularly vulnerable are also coated in PVC to provide a complete anti-corrosion treatment. The quality of the RX7's paintwork also

has an important part to play as far as rust prevention is concerned. Four coats are expertly applied, first a coat of primer, then a middle coat followed by a top coat, and finally, in the case of metallics, a coat of lacquer. On the subject of bodywork, the car's smooth lines

were created in a wind tunnel where all the wrinkles were expertly ironed out. However fast you're travelling the on-coming air has an unimpeded path over and across the car's body. So good is the drag coefficient (a mere 0.32) that it's the envy of many so-called exotic cars. The front air dam and rear spoiler endows the RX7 with superb directional stability at the high speeds the car is capable of.

As well as having good directional stability, the RX7 also has a minimum amount of body roll even when cornering hard.

For instance, the roll angle of the RX7 at 0.5G lateral

acceleration is only 1.6 degrees. By comparison an ordinary passenger car averages 4.0 to 4.5 degrees under the same amount of lateral acceleration.

This exceptionally low roll angle is thanks to the RX7's wide track and low centre of gravity coupled with front and rear anti-roll bars.

The Mazda RX7 is a sports car that has been engineered to combine a racing pedigree, opulent luxury and practical performance all at a price within your reach. However, a car this special isn't available at every Mazda Dealer - only the ones that have been especially designated to sell such a car as the RX7.



STANDARD EQUIPMENT CHECK LIST

- Alloy wheels
 - Halogen headlamps
 - Headlamp washers
 - Laminated windscreen
 - Heated rear window
 - Remote exterior mirror
 - Integral rabbling strip
 - Side indicators
 - Reversing lights
 - Rear fog lamp
 - Front & rear towing hooks
 - Rear wash/wipe
 - Steel sunroof (tilt & removable)
 - 5-speed gearbox
 - Power windows
 - Quartz clock
 - Cigar lighter
 - 3-speed fan
 - Oil pressure gauge
 - Temperature gauge
 - Voltmeter
 - Rev counter
 - Trip meter
 - 2-speed wipers
 - Intermittent and flick wipe facility
 - Electric windscreen washers
 - Remote fuel filler flap release
 - Remote boot hatch release
 - Rheostat
 - Adjustable headrests
 - Handbrake warning light
 - Cooler level warning light
 - Washer fluid level warning light
 - Alternator warning light
 - Oil warning light
 - Rear fog lamp on warning light
 - Folding rear seat
 - Tonneau cover
 - Tool kit
 - Map reading light
 - Independent aerial switch
 - Ignition key cylinder light
 - 4 x 9 watt stereo radio/cassette
 - Electric aerial
- #### TECHNICAL SPECIFICATIONS
- ENGINE
- Type: Rotary 2 rotor in line

Capacity: 573 cc x 2
Compression Ratio: 9.4:1
Max Power: 115/6000 ps/rpm DIN
Max Torque: 15.5/4000 kgm/rpm DIN
Cooling Capacity: 2 gals (9.5 litres)
Engine Oil Capacity: 9 pts (5.2 litres)
Ignition System: Transistorized
FUEL SYSTEM
Carburettor: 2 stage 4 barrel downdraught
Fuel: 2 star
Fuel Tank Capacity: 12 gals (55 litres)
TRANSMISSION
Type: 5 Speed Manual
Gear Ratios:
1st 3.674:1 2nd 2.217:1 3rd 1.432:1
4th 1.00:1 5th 0.825:1 Rev 3.542:1
Gearbox Oil Capacity: 3 pts (1.7 litres)
Final Drive Ratio: 3.909:1
Rear Axle Oil Capacity: 2 pts (1.2 litres)

STEERING
Type: Recirculating ball & nut
Ratio: 17-20:1
Turns Lock to lock: 3.7
Turning Circle: 31' 6" (9.6 m)

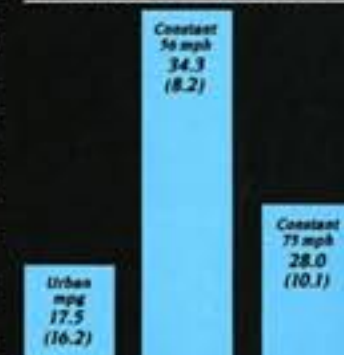
BRAKES
Type: Hydraulic dual circuit servo assisted
Front: Discs 9" diameter
Rear: Discs 9" diameter
Vacuum Servo: 8" diameter

SUSPENSION
Front: MacPherson strut, coil springs and gas filled dampers
Rear: Coil springs, four trailing arms and watts linkage, telescopic gas filled dampers

WHEELS
Type: Aluminium alloy
Diameter: 13"

Rim Width: 5 1/2"
Tyre Size: 185/70 HR13
Type: Steel braced radials
DIMENSIONS
Wheelbase: 7' 11" (2420 mm)
Track Front: 4' 8" (1420 mm)
Track Rear: 4' 7" (1400 mm)
Overall Length: 14' 3" (4320 mm)
Overall Width: 5' 6" (1670 mm)
Overall Height: 4' 2" (1260 mm)
Kerb Weight: 2315 lbs (1050 kgs)
Towing Weights:
Trailer with brakes 1984 lbs (900 kgs)
Trailer without brakes 882 lbs (400 kgs)
FUEL CONSUMPTION

In each case, the first figure shown in the chart below represents miles per gallon, whilst the second figure, in brackets, represent litres per 100 km.



The results recorded in an official fuel economy certificate of the officially approved tests for determining fuel consumption carried out on a car of this model range of models are as shown.

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THE MAZDA INSURANCE SCHEME

Once you've bought your new Mazda, you'll be entitled to join the exclusive Mazda Insurance Scheme. Tailored to meet the needs of Mazda owners, it offers you first class insurance on the best possible terms. The scheme is also underwritten by the Bradford-Pennine Insurance Group - one of the country's largest and most reputable insurance companies. Ask your Mazda Dealer for a leaflet and quotation or contact: Mazda Insurance Services, Station Tower, Station Square, Coventry CV1 2GR. Tel: 0203 553411. N.B. Customers in Northern Ireland should ask their Dealers for details of a scheme underwritten by Phoenix Assurance.