

# *RX-8*

- *The RX-8 has an aluminum hood that incorporates “Shock Cone” technology to minimize head injuries in the event of an accident with a pedestrian*
- *The RX-8 power steering is electric instead of the old style hydraulic systems*
- *The RX-8 has a return-less fuel system. This means warm fuel isn’t returned to the tank and fuel evaporation is reduced.*
- *The RX-8 actually holds approximately 7 quarts of oil, but when you change the oil only 4 quarts are drained and replaced. This is because the oil cooler(s) are not drained when you drain the oil pan, and why a 3,000 mile interval between changes is really beneficial, since you never really have completely fresh oil.*
- *The RX-8 has an electric power steering system. If your RX-8 engine stalls for whatever reason (i.e. run out of fuel) then the electric power steering continues to operate allowing you to steer safely to the side of the road.*
- *The front seatbelts can be buckled into the rear seatbelt clasp but cannot be unclashed. DO NOT DO THIS.*
- *The hood and rear doors of the RX-8 are aluminum. Additionally, they aren’t welded together but instead joined via friction.*
- *The combustion chamber is covered with a resin coating to improve the initial engine break-in.*
- *The E shaft has a bypass valve that opens when the oil is cold to allow cold oil to bypass the rotors and help reduce the engine warm-up period.*
- *RX8’s already have the seat heater wiring in place in the center console, even if you don’t have leather seats or seat heaters.*
- *The RX-8’s fuel tanks contain two roll-over valves that close and stop your charcoal canister from being contaminated with fuel in the unlikely event of an RX-8 rollover.*
- *The glove compartment light is on all the time while your headlights are on.*
- *It is possible to disable the TCS/DSC completely on an RX-8 by pressing and holding the DSC switch until both indicator lights illuminate.*
- *The RENESIS rotary engine utilizes a metered oil pump to inject a small amount of oil onto the apex seals of each rotor to keep them lubricated and reduce failure.*
- *The RX-8 Tire Pressure Monitor System has both a low pressure and a high pressure setting.*
- *The high frequency sound you hear under the hood when the key is on but the engine is off is the electric throttle actuator pushing the throttle butterfly toward closed, waiting for you to start the engine.*
- *Every time you first start driving the RX-8 there is an audible “thump” heard from the car. That is the ABS braking system performing a self-test.*
- *The M/T RX-8 has a carbon fibre drive shaft while the A/T RX-8 employs a steel drive shaft.*
- *The spare tire is not standard in US.*
- *Not tightening your gas cap correctly after fueling will cause a CEL (Check Engine Light).*
- *The Shinka has water-repellent front glass, front door windows and door mirrors.*
- *Using the factory supplied tire sealant as a repair requires the replacement of the tire.*
- *The RX-8 clutch pedal height is adjustable.*
- *There is an audible “shift-alert” tone when your car reaches 8,500 RPMs.*
- *Chassis Dyno-ing an RX-8 will make the ABS/DSC system think it has a malfunction and give you a CEL. However, if you shut off the DCS and TCS you can dyno the car without causing a CEL or DTC. Additionally, the dealership technicians can tell if you’ve set the DSC/TC to “full off” mode because doing it stores a fault code.*
- *The RX-8’s automatic headlight adjusters, for the HID equipped cars, sensor is on the REAR sway bar, which is why a lot of folks complain about headlight aim after they install lowering springs.*
- *The catalytic converters contain Platinum and that’s why they’re so expensive to replace.*
- *The stainless steel exhaust systems grow in length by about an inch when they are up to temperature.*
- *It is possible to listen to sounds coming from each individual speaker of your car, in a prescribed order. With the radio on, Press the power button and AUTO-M at the same time for 1 s. The speakers will then sound in the following order: Front passenger side speaker and tweeter, drivers side Front speaker and tweeter, drivers side rear speaker, and finally passenger side rear speaker.*
- *The early RX-8’s had black windshield (windscreen) washer tanks, and later ones had opaque white so you can see contents without taking cap off.*
- *All the instrument cluster warning and indicator lights are LED’s.*
- *The 18" (non-bright finish) OEM alloy wheels are painted and clear coated.*

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- *The RX-8 has drive-by-wire. There is no accelerator cable. The accelerator pedal sensor is a dual sensor that outputs to the PCM dependant on pedal position. Each sensor is a backup to the other if one fails. The PCM outputs to the throttle body which also has dual sensors.*
- *The MAZDA RX-8 has a 5-Star roll over rating from the NHTSA. The RX-8 was the only auto in the US that got the 5-star rating.*
- *The rear brake rotors have 60 vents, while the front rotors on a base model have 52 vents and the sport package front rotors have 54 vents.*
- *Additionally, the front disks on the sport package equipped RX-8 are the largest ever offered on a MAZDA production car.*
- *The Power train Control Module (PCM) carries out a full sixty step test of the Metering Oil Pump (MOP) every twelfth time the engine is turned off.*
- *“Zoom-Zoom-Zoom” is from a 1994 soundtrack CD “Only The Strong” & was written by a guy named Kao Rossman, performed by Serapis Bey.*
- *The roof on the RX-8 has structural members that are constructed of nitride treated steel? Nitriding fuses titanium to the steel with nitrogen through heat. This produces a very strong, yet lighter weight (2.2 lbs less than ordinary steel) roof and contributes to better handling.*
- *The SHINKA edition RX8 has foam filled suspension members to further improve the handling without increasing the weight.*
- *The RX-8 employs mode control panels which are 2 circular depressions in the floor panels. These two circles vibrate alternately creating “waves” which cancel each other out and reduce noise and vibration in the cabin.*
- *At about 13,000rpm harmonic vibrations will destroy a RENESIS, but it could theoretically live its entire, long life just shy of that.*
- *There are four side seals in the RENESIS rotor. A keystone to scrape carbon buildup from exhaust gases, a cut-off seal to eliminate blow-by between intake and exhaust ports, and twin oil seals to well, you know, keep the oil where it needs to be.*
- *There is a Seat Track Position Sensor that tells the onboard airbag system what position your seat is in.*
- *There is also an airbag sensor in the front seatbelt buckles to tell the system that your seatbelt is unfastened.*
- *The 4 speed AT has larger secondary fuel injectors than the 6 speed manual.*
- *The clock on the NAV system is nearly perfectly accurate thanks to GPS.*
- *The carbon fibre drive shaft is protected from damage by shields and the connector pipe of the exhaust system.*
- *The Automatic Level Controls for the radio incorporate a microphone that was tuned to “listen” to the sounds your car makes while ignoring sounds of other vehicles in order to automatically adjust volume appropriately.*
- *The trunk lip spoiler is required in Europe for fuel economy reasons.*
- *The electric power steering management is based, like the engine AFRs, on a programmed map that takes into consideration vehicle speed, steering input torque and engine speed.*
- *The RX-8 steering wheel has a magnesium core to save weight.*
- *As the rotors rotate the apex seals are actually sucked away from the rotor housing and therefore a spring is needed to keep the seals planted against the trochoid chamber walls.*
- *The rear differential doesn't use clutch disks like normal LSD's do? Instead it uses a complex series of gears to allow the wheels to rotate at slightly different speeds, but still lock under given conditions.*
- *The fender vents are not just for show, but do indeed help to vent hot air from the engine bay.*
- *The RX-8 employs a first ever multi-link rear suspension for a MAZDA production sports car.*
- *Each Renesis engine is hand-built (assembled) from start to finish by a single person.*
- *The RENESIS name stands for Rotary Engine Genesis ... But also for Rotary Engine for the New age with Exhaust on the Side and Intake on the Side.*