

# Rotary Rocket

Featuring  
**RX-7 SETS  
LAND SPEED  
RECORD  
AT BONNEVILLE**



**PLUS Complete details on a customized RX-7 you have to see to believe.**

# Rotary Rocket

Vol. 1, No. 1

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**COVER ART**

The 'CLOSE ENCOUNTER' painting was executed by Ms. Bette Terrell, an outstanding California artist, based on our general conception of the first meeting of two futuristic vehicles.

**MODELS**

We would like to acknowledge the models who contributed their time and beauty to this issue. They are Connie Bruckmeier, Carla Garcia and Cheryl McKey.

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# Welcome to the Club

Welcome to the RX-7 Club of America! We appreciate your interest and backing of our new organization. Our desire is to satisfy your needs as an RX-7 owner-enthusiast and have you as a member for many years to come. Our goal is to become the largest and best sports car organization in the world. This is certainly not a modest objective but we feel it is realistic, given our commitment and the fact that we are associated with the revolutionary new Mazda RX-7 sports car, already being called a classic. Whether you are fortunate enough to already own one of these gems or are awaiting delivery, we feel that you will find your membership in RX7 CA to be an asset in terms of entertainment, education, and money saved through member discounts.

Mazda Motors of America recognizes our organization and has been very helpful in providing information on the RX-7 and factory support activities. In addition, many Mazda dealers have been very cooperative in making our brochures available at their dealerships.

The RX-7 Club of America, however, is neither affiliated with nor subsidized by Mazda. Our total financial support comes from membership fees and, to a limited extent, advertisements. We are therefore obligated to no one but our members and are free to publish what we feel best serves their interests. To their credit, Mazda has not attempted to influence what we publish in any way.

We plan to cover all aspects of RX-7 ownership, from the care and maintenance of your investment to advice on customizing and accessorizing your car. Because a rotary engine differs in many respects from a conventional reciprocating engine, special attention will be given to rotary engine operation and upkeep, including tune-up information. Members will be kept informed on a variety of topics related to the RX-7, including coverage of racing events and factory news. We will promote the formation of local RX-7 club chapters and publicize their events. In

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# SPEC 1:

## AWARD-WINNING CUSTOM RX-7

In its stock form the RX-7 is an exceptionally clean design. Mazda wisely eliminated all the gewgaws and chrome excesses normally found on Japanese cars. Its sleek form offers numerous possibilities for customizing, limited only by one's imagination. It is a virtual certainty that custom targas, coupes, and the like will soon be created by enterprising owners.

Probably the first all-out custom RX-7 was created by Chuck Stetler of Garden Grove, California. Chuck began his conversion of the RX-7 this past May for two major reasons. First, he is a car freak and saw the potential of the RX-7 for creating the type of custom vehicle he wanted to build. In addition, Chuck is a distributor for SPEC-1 athletic shoes and realized

that an eye-catching car would be an asset in promoting his line. Chuck has succeeded in both goals for his SPEC-1 custom RX-7 commands attention wherever it is driven or shown. Chuck entered his SPEC-1 RX-7 in the 1978 Long Beach Custom Car Show. On November 19, the car was awarded both "Best Foreign Sports Car" and the sweepstakes award "People's Choice."

We recently had the pleasure of visiting Chuck at his home. Not only did we obtain a detailed interview about the genesis of the SPEC-1 concept and its execution but were treated to a ride. Not only is the car stunning in a visual sense; its performance and handling are outstanding.

The first part of the interview was taped during a ride on the Garden Grove Freeway.



**Q.** How did the idea of a customized RX-7 come about?

**A.** I have always been a fanatic for performance cars and was looking for a sports car with the potential for conversion into a real freeway flyer. When I saw the RX-7 I knew it was what I had been waiting for?

**Q.** How did you originally hear about the RX-7?

**A.** I read a brief report in 1977 about a 2 seat rotary sports car to be introduced by Mazda in 1978 while I was visiting a client in Bakersfield, California. While details were lacking, even then I thought this might be the car I needed. I immediately went to the nearest Mazda dealer (Miracle Mazda) and put down a deposit. They accepted it with surprise since they didn't know any more about the car than I did. Then I waited for six long months.

**Q.** Did you do any planning while you were waiting?

**A.** Sure! Every publicity leak gave me a little more information on what the RX-7 was going to look like. Then in April everything broke loose. I saw the RX-7 at the import car show in Los Angeles and really got turned on to the possibilities. Right after that all the magazines had feature articles on the RX-7 and I was able to get enough information on the car dimensions, weight distribution, and shape to finish my plans.

**Q.** Then you had all the plans finalized when you got the car.

**A.** Well, I knew what I wanted to do with the RX-7 but once the job got started, a lot of refinement had to be done. I got my RX-7 in May and drove it straight to Kolor-Me-Kustom in Anaheim, California. I had gotten a yellow GS model, the 207th one off the assembly line. I was amazed, even after reading all the reports, at how well the stock model performed.

**Q.** Did Kolor-Me-Kustom take your plans and carry them out?

**A.** Basically. They do top-of-the-line work and offered very helpful suggestions. I had originally conceived the car as having a black lacquer finish with red markings and a burgundy interior. I still think that would be a great combination but since I needed a car that would photograph well and attract a lot of attention, we decided that a pearlescent yellow with black marking would be better.

**Q.** Right, it is certainly an attention grabber. What is the purpose of the flying bird in abstract form along the sides?

**A.** That is the bird-in-flight logo of SPEC-1 athletic shoes. As it turned out, the logo blends with the overall SPEC-1 car form and shape. I feel the RX-7 is an ideal vehicle for publicizing my product since they are both of excellent quality yet affordable.

**Q.** While the overall styling of the SPEC-1 RX-7 is dramatic, the design really flows from the massive front dam to the large air foil at the rear. Are they strictly for appearance?

**A.** While appearance is important, they are definitely functional and both are necessary. The tail was added to give a better high speed stability than the stock model. The air foil is a GTX design as opposed to the GTU type used by Mazda for racing, but I feel it is more suitable for freeway use. The air dam in front is used to slow the car down since it seems to race through the air with no friction without the dam. Its effect is astounding! I can pull up against the tail of a car in front and the SPEC-1 virtually brakes itself by the effect of the dam. The aerodynamics of the air foil and the air dam give a

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# The Care and Feeding of Your RX-7

After agonizing months of waiting, you finally take delivery of your RX-7. It looks magnificent - those sleek lines gleaming in the sun. You enter the virgin cockpit, and get high on the new-car smell. The entire car is immaculate, a thing of beauty — but maybe not forever.

What will be the appearance of your RX-7 after several years? Will the exterior finish succumb to the debilitating effects of sitting in the sun in an environment of smog, slush, salt, tree sap, and birds which are not housebroken? What about the effects on the interior due to the sun's heat, muddy shoes, greasy hands, and several dripping popsicles? The only way to guarantee that the apple of your eye won't become an eyesore is to begin now to keep it CLEAN. There is no miracle product on the market that can substitute for your care.

All right, you say, I agree, but my RX-7 is brand new and there is

nothing I can do until at least a little dirt or grime accumulates. Wrong again, rotary breath! There are a number of things you could and should do before the first smudge appears.

First, go to your dealer or auto store and get a good pair of floor mats. While coco mats are desirable, even the cheapest rubber mats will preserve the carpets, keeping dirt from getting ground into the fibers and heels from gouging holes. A good car cover will maintain that beautiful exterior finish, preventing fading from the sun, oxidation by ozone and smog, and will prevent bird droppings and tree sap from eating away the surface. Just make sure your car cover is porous enough to breath, allowing heat and moisture to escape. Finally, a bra will protect the front end from an onslaught of bugs and chips.

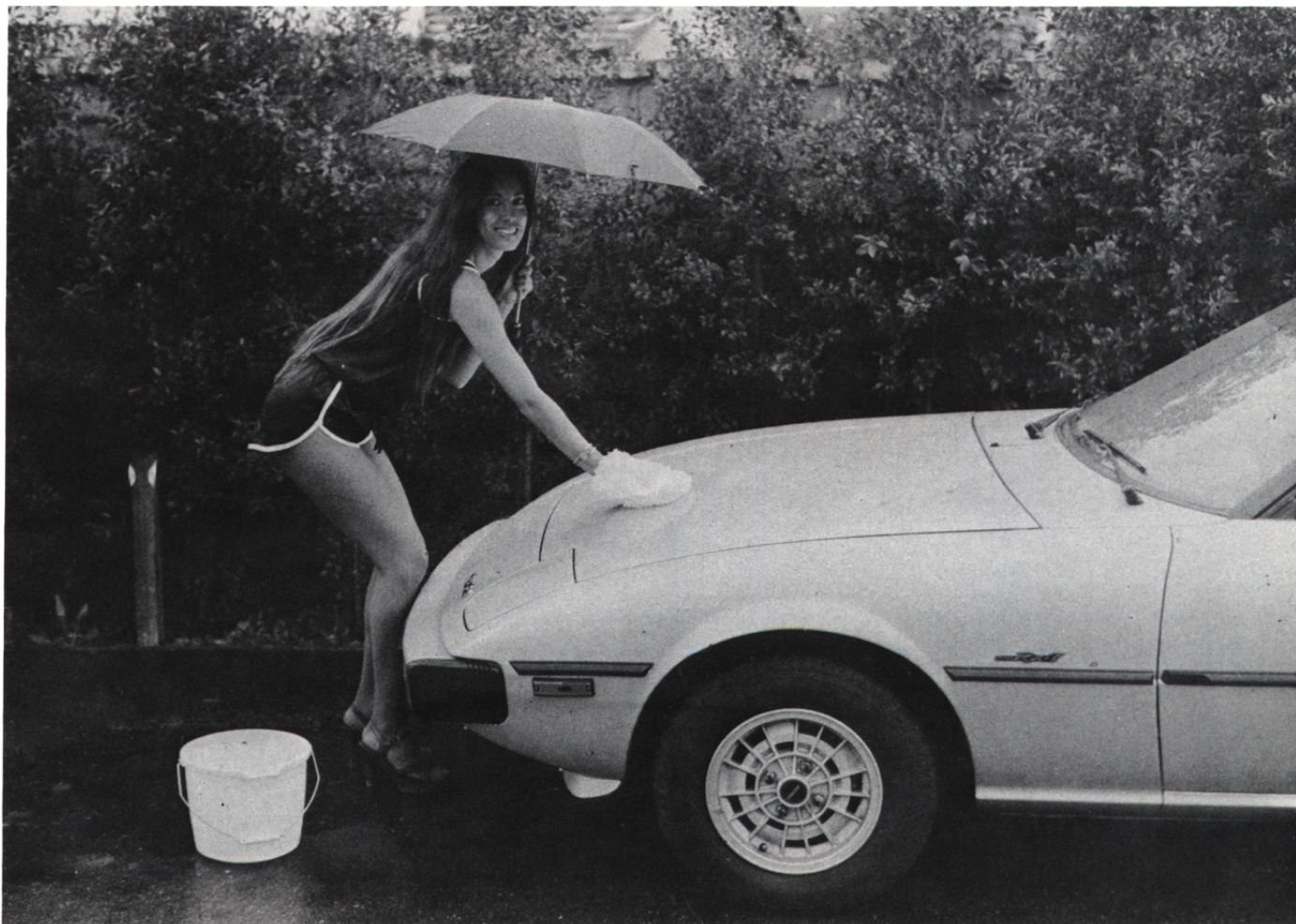
If you have cloth seats, spray them with Scotchgard or similar stainproofer before stains or dust begin to accumulate on the fabric. Finally, buy a large container of a

protectant such as *Armor-All* and apply it to every articles in the car made of vinyl, rubber, and plastic. Similar products include *RVL*, *Pizazz*, *Carisma*, *Visual Ade*, and *Nu Vinyl*.

*Armor All* is absorbed into polymer materials, forming a bond with the material making it waterproof and less susceptible to deterioration from the sun, ozone, smog, salt, and dirt. It is non-toxic, noncorrosive, and won't burn.

In the RX-7, *Armor-All* can be used on the dash, vinyl seats, door panels, headliners, boots, and the steering wheel rim. Externally, use it on all the black rubber moldings, rubber bumper inserts, tires, and especially on all rubber gaskets around the doors, windows, hatch, and sunroof. It can even be sprayed in the engine compartment to protect rubber belts and hoses, first making sure the engine is cool. You will be surprised how an application of *Armor-All* (or equivalent) to the exterior molding and tires will improve their appear-





It never fails to rain when you wash your car

ance. Use on all rubber seals will pay dividends in the future, insuring flexibility of the rubber to prevent air or water leakage through the seals.

The label says that the surface should first be clean. Apply the first coating, which is absorbed. After several hours, the excess should be buffed off and a second application put on. A third coating 24 hours later is advisable, at least initially, to insure complete penetration. Thereafter, the protectant need be reapplied every few months, the time depending on the type of vinyl and rubber as well as the environment. External surfaces need retreatment more often than the interior. Following a treatment, the surfaces will usually be slippery but this effect wears off rapidly. One caution: do not use such products on cloth seats or clear glass.

You now have a good head start in helping your new RX-7 weather the elements and careless occupants. Now use common sense and con-

inue protective maintenance. Don't let dirt or grease accumulate. Clean up spots when they occur and keep the interior dirt free. Use a feather duster or soft polishing cloth to remove dust from the should not be soaked in the same way that rugs normally are when cleaned. There are several specially formulated cloth seat cleaners available at markets, car dealers, and auto parts stores, but always test the cleaner first in an inconspicuous place to make certain instrument panel and seats. Vacuum the interior regularly with a good tank-type vacuum cleaner. The small cleaners which plug into the cigarette lighter can be used but their suction is far less powerful. Interior vinyl can be cleaned with a special vinyl cleaner or with suds made from a mild, non-alkaline soap. Cloth seats and carpets can be cleaned with rug shampoo. First, test the cleaner in an out-of-the-way place to be sure the color is not affected. Note that seats that no adverse effects will occur.

Finally, if you don't have a car cover, park your car in the shade whenever possible or place a covering over the dash and seats.

While water may remove dirt from your windows, it is not very effective for removing road film, smoke film, and the residue that emanates from vinyl. These films can be removed without streaking by adding three or four tablespoons of vinegar or ammonia to a quart of water. Standard household glass cleaners are also effective. First, wipe or wash off excess dirt with a soft clean cloth or paper towel, apply cleaner, then use another towel to wipe off glass and a third to polish it. Finally, never use the windshield wipers on a dry dirty windshield. Tiny pits and scratches may result due to rubbing the dirt particles against the glass surface, resulting in streaking and glare from the sun or the lights of oncoming vehicles.

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## SPECIAL FEATURE:

# RX-7 SETS WORLD SPEED RECORD AT BONNEVILLE



On September 28, 1978, a rotary-powered 1979 Mazda RX-7 sports car set a world speed record of 183.904 miles per hour at the Bonneville Salt Flats in Utah. The specially prepared Mazda easily smashed the old record of 167.208 mph for Class E grand touring cars, which was held by a Chevrolet Corvette. Typically, Bonneville records are only a few miles per hour over the old mark. Therefore, the margin of 16.7 mph over the old record is especially noteworthy.

This new speed record was set during the 30th annual Bonneville National Speed Trials, sponsored by the Southern California Timing Association. The RX-7 was driven by Don Sherman, technical editor of Car and Driver. The E grand touring class is for production sports cars with engines up to 4.0 liters displacement. The Mazda rotary engine used had only 80 cubic inches. Under Bonneville rules, no changes in bodywork are allowed and high speeds can be achieved only by cars with a very low drag. The slippery clean RX-7 body has excellent aerodynamics, contributing to the high speed reached.

At Bonneville, a car must make two runs, one each way, through an accurately measured mile. The final speed recorded is the average of the two passes so that wind conditions can be averaged out. Don Sherman's first run

was 183.467 mph and his return run was 184.341 mph.

The idea for using an RX-7 to set a new speed record originated with Jim Mederer and Ryusuke Oku. Their firm, Racing Beat, prepared the car at their Anaheim, California facility. Racing Beat was formed in August 1971 to provide custom Mazda rotary accessories for performance improvement and to develop GTU racing versions of the rotary-powered Mazda cars. Their firm makes and sells a wide variety of products to Mazda enthusiasts, from Recaro seats to engine and suspension modification components.

The following article was prepared by Jim Mederer. He discusses the development of the RX-7 which set the Bonneville record, highlights their racing plans for 1979, and presents his views on turbocharging.

### THE RACING BEAT GOES ON

by Jim Mederer

My partner and I had been interested in taking a rotary-powered car to Bonneville to try setting a new speed record. When we began getting details on the new RX-7 early in 1978, we felt that this new sports car might be the ideal vehicle to use. We talked with Mazda who exhibited some



interest but didn't wholeheartedly support the idea until we got Car and Driver magazine interested. We contacted Car and Driver, who some years ago had taken part in the Bonneville speed trials. They weren't required to provide anything other than their technical editor, Don Sherman, to drive the car. Don is an excellent driver and liked the idea. David E. Davis, Jr., the publisher of Car and Driver, gave Don his approval.

With this, Mazda provided substantial assistance. This was a total RACING BEAT project, but we obtained help from other firms besides MAZDA and CAR AND DRIVER. KONI provided special shortened shock absorbers for the lowered RX-7, NGK provided racing plugs, RECARO provided seats, GOODYEAR tires

were used, and AKAI loaned us a video tape recorder and camera. The camera was positioned behind the driver to keep a visual record of all instrumentation readings. We found this to be a valuable tool for evaluation and we plan to use it for our future racing projects.

### **10,000 RPM and Still Accelerating**

The RX-7 was prepared for this event over a period of four months, although activity wasn't constant over that period. Early in September we took the car to Barstow, California and tried it out to roughly determine its capabilities. I got it over 180 mph in the short two-mile run. Amazingly, at 10,000 rpm the car was still accelerating! We took the car back to our shop

in Anaheim, put it on the dynamometer and found a number of areas in which the engine was off. These were corrected to further increase the horsepower.

Bonneville rules require that the car be virtually stock. We thus had to use stock or optional available parts. For example, we were able to use Mazda's optional rear spoiler which was very helpful. Engine modifications are fairly liberal but no supercharging is allowed. Any intake or exhaust can be used if it is capable of being closed off, eliminating individual pipes. Thus, a number of things which could have been done to make the car even faster were not legal.

The chassis was not changed to a great extent and even

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**"... our engine modifications enabled us to produce 326 horsepower at 9750 rpm ..."**

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the original undercoating was left on. A roll cage was added with part of the cage going through the air conditioner outlets. The interior changes included the required instrumentation, the AKAI video system, and a mandatory fire extinguisher. The parking brake lever was used as the parachute release control.

Externally, besides lowering the car, we added the Mazda stock rear spoiler, 22.0/6.00 x 13 GOODYEAR racing tires, and a parachute package. Incidentally, the parachute was not needed for the speed trials since at those speeds, aerodynamics alone does a great job of slowing the car rapidly once the throttle is released. The parachute was only used for publicity pictures. Under

the hood, we used the stock battery location and the stock radiator which handled the cooling requirements very well. We did de-activate vacuum booster on the brakes.

The RX-7 is a very slippery car but we lowered the car to further decrease the drag. Aerodynamics is critically important at these high speeds and even adding aluminum covers on the wheels helps performance.

Lowering the car necessitates suspension modifications. The front suspension was unchanged but the rear geometry was modified. The stock rear suspension is acceptable for street use but inadequate for hard racing. Anyone who considers lowering the RX-7 rear without

modifying the suspension geometry will get very poor handling as a result. The geometry is all wrong for this. We lowered the back of the rear trailing link and raised the front of the upper link. This makes the links more closely aligned and results in only a minor amount of squat. This change was necessary to prevent the car from pitching over uneven surfaces. As a result, the rear axle housing doesn't rotate even at the extreme rpm's used.

The stock 4-speed transmission was used since the gear ratio is better for racing than the 5-speed. The 3.636 rear axle ratio coupled with the direct-drive high gear minimizes power loss. A needle roller bearing was put in the extension housing to eliminate the heat buildup that occurs at sustained high speeds.

The biggest changes were to the Mazda 13B rotary engine we used. The emission system was eliminated. Peripheral intake ports were used with a 58 mm Weber carburetor. This is the largest



size carburetor ever made in quantity and it worked very well.

We started runs with conditions of about 55° F with high humidity and ended with an air temperature in the 90's and very low humidity. Since one or two hours can elapse between runs, mixtures cannot be tweaked for one run based on the previous run. Jetting problems made us go to an instrumented correction system.

A sealed barometer, with a tube running into the air cleaner housing, was used to measure the air pressure on the course at speed. A sling Sychrometer measured wet & drybulb temperature and all these combined to generate a correction factor, necessary for the drastic atmospheric changes that occurred.

A two-cylinder exhaust gas temperature (EGT) gauge was used to display EGT during the run. By jetting #1 and #2 cylinders differently, making the EGT's even, we were able to increase the horsepower

both on the dynamometer and the track.

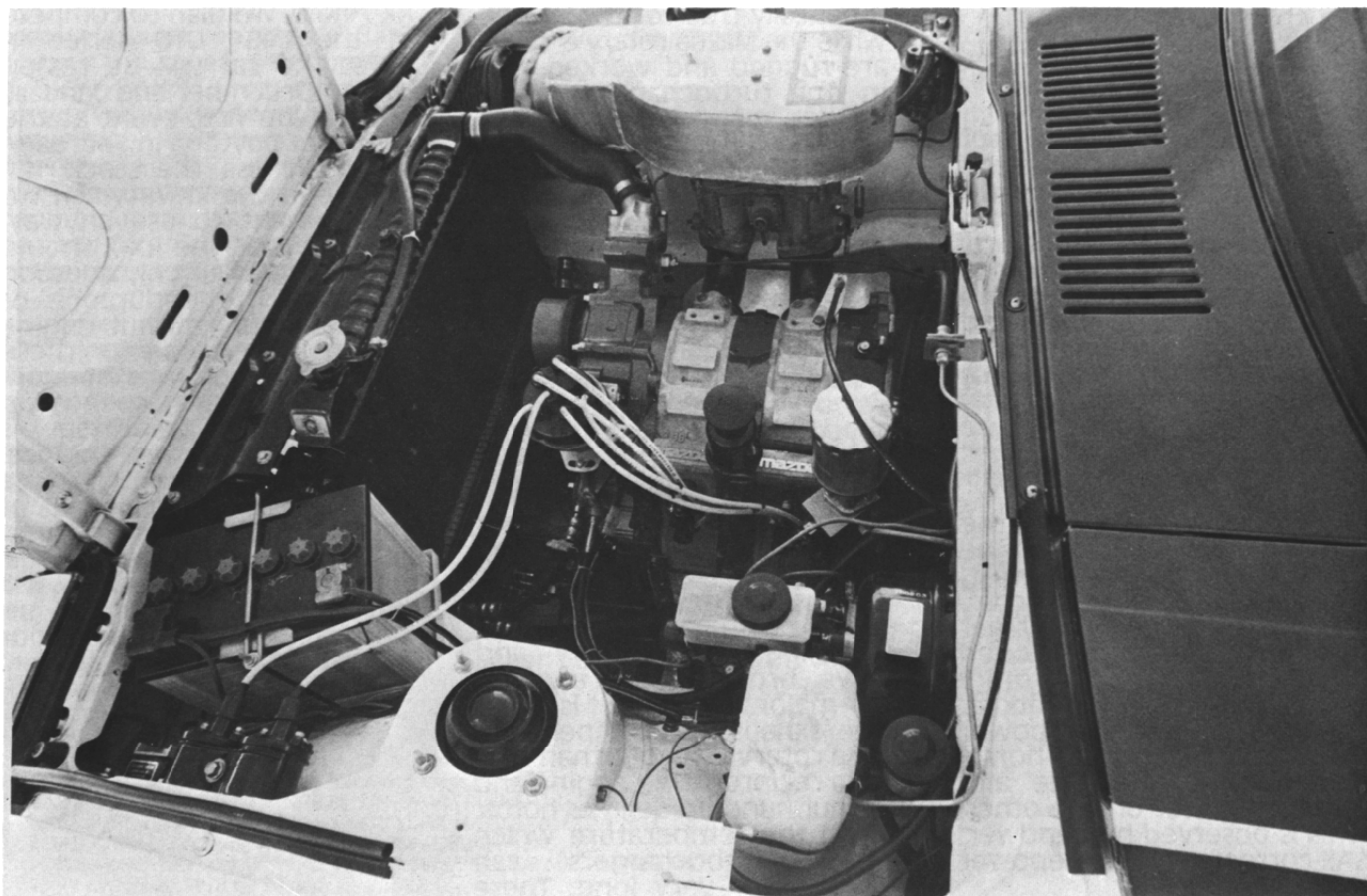
We also developed a custom crankshaft-triggered ignition system to eliminate variations in timing. For racing, there can be backlash between the distributor gear and the gear that drives it in the higher rpm range, due to the vibrations that occur. As the distributor shaft wanders around, timing varies. For our engine, even a change of one degree can produce a five horsepower loss. The crankshaft-triggered ignition, mounted off the front cover, gets around this problem and works extremely well.

A word of caution: this ignition system is not for street use since there is no advance or retard built into it. Also, removing the rubber from the rear suspension trailing links is not streetable since it transmits too much vibration to the chassis. We do supply a variety of suitable ignition and suspension systems intended for stock rotaries but our special racing components should not be used on the street.

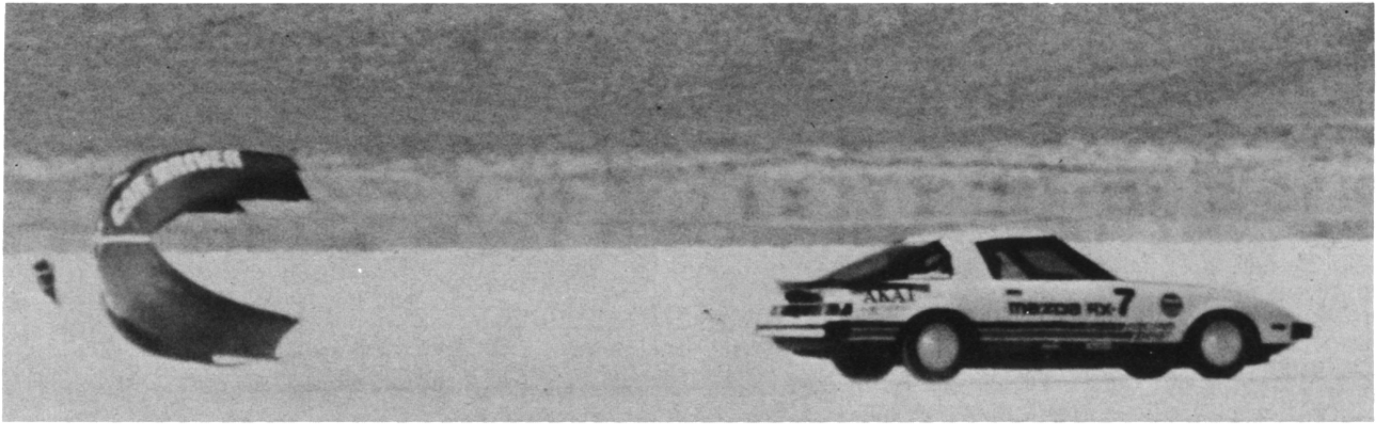
All told, our engine modifications enabled us to produce 326 horsepower at 9,750 rpm out of the 13B rotary. To complicate things, the speed trials at Bonneville are run at an altitude of 4,200 feet which results in about 17% loss of horsepower. Even running with only about 260 true horsepower, the RX-7 recorded a trap speed of 184.5 mph and was turning 10,200 rpm. We aren't sure what speed we could get at sea level but it should definitely go faster. We actually set two speed records (note: two different days; one on Sept. 26 and one on Sept. 28). The first was done without the Mazda stock rear spoiler, and we beat the previous speed by over 10 mph. The second had the spoiler in place and significantly increased our speed. The spoiler really does its job.

I have a high respect for the Mazda RX-7. It is an excellent car overall and a genuine bargain. Comparing it to anything even remotely

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close in price, it is unsurpassed in terms of performance and handling. I feel the RX-7 will be around for a long time and other car makers will leave it alone in its performance/price class (as Datsun has done with their ZX series).

I would like to see Mazda put their 13B rotary into the RX-7 as an option, but they have no incentive in doing so since the RX-7 is such a resounding success as it is. We have a 13B on order and plan to put it in an RX-7, with a little engine tweaking to get the output up to 200 horsepower. The performance should be outrageous, enabling the RX-7 to absolutely eat up Camaros, Corvettes, and virtually anything else.

As a matter of fact, the 13B engine easily drops into the RX-7, since both the available space and motor mounts are adequate to handle the larger rotary. The 35 pound weight increase is minor and the front mid-engine placement maintains reasonable weight distribution. The only major change needed is use of our bolt-on headers.

Why not turbocharge the rotary? While it can be done and we have done it, there are a number of complications involved for street use. Racing Beat developed two turbocharged 12A rotary engines for aircraft applications. The normal 100 horsepower was boosted to 310 horsepower on one engine and 330 horsepower on the other. (This is observed horsepower. SAE-corrected horsepower is even higher.)

However, serious turbocharging requires extensive engine modifications. For a reciprocating engine, one must O-ring the blocks, use special crankshafts, special rods, special pistons, and lower the compression ratio or the head gaskets will blow. Unless a turbo is added to a very rugged engine that is clearly working well below its performance limit, boost can be used only for a limited duration such as passing or hill climbing. For heavy street use, the engine can't survive such heavy demands for long.

What is true for the piston is basically true for the rotary. While the Mazda rotary engines are rugged and worked well in our turbocharging applications, we learned the hard way that we had to substantially lower the compression ratio. Although we used 10.5 pounds of boost (50 inches of manifold pressure relative to absolute zero), this should be limited to 3 or 4 pounds for street use to provide engine longevity unless the engine is extensively reworked.

Anyone who thinks he can just slap a turbocharger on his rotary is kidding himself and may be in for serious trouble. I know several people who have tried turbocharging their rotary and have broken their engines. A major problem is that the exhaust gas temperature of a rotary is higher than that of a reciprocating engine and is four hundred degrees hotter than the temperature which most turbochargers can handle for very long. These

high temperatures can distort the turbine housing on the hot side, making the turbine wheel rub. In a fraction of a second, the bearings can be destroyed and the pieces hurled down the intake into the motor. In addition to the high chance of destroying the engine, I don't feel the trouble and expense of turbocharging is justified by the increase in performance, unless you take advantage of all its potential - and that is very expensive.

As far as our immediate plans are concerned, we are working on our road racing RX-7 now. We plan to compete in the IMSA GTO series in 1979. The car will be tested during December and January before the first event at the 24 hrs. of Daytona in February. We must use the stock 12A engine in the RX-7, which we would want to use anyway. We feel that the RX-7 should do very well. Our only question concerns the endurance of the maximum output engine we are developing for these races. Racing for 24 consecutive hours at speeds up to 170 miles per hour is extremely hard on engines. We see no reason for the engine not to survive but at this point we simply have no hard experience behind us. However, we certainly will have a lot going for us, between the RX-7 and our co-driver Don Sherman.



# RX Appeal

*A recent automotive magazine began its road test feature on the RX-7 with the statement: "Yet another rave review is precisely what the Mazda RX-7 doesn't need at this point." Yet the article continued for several pages giving the RX-7 yet another rave review. Coverage of the RX-7 in the press has been phenomenal and has contributed to the tremendous demand for this bold newcomer to the sports car scene.*

*Articles and reviews of the RX-7 have appeared not only in automotive magazines but in such diverse publications as OUI, BUSINESS WEEK, 73, PLAYBOY, and NEW WEST magazines. New articles are still appearing and the raves show no sign of abating. This article will attempt to highlight several of the published reviews and commentaries. While a comprehensive tabulation of all the published material on the RX-7 would require a small*

*volume, the essence of the various sources will be presented here. For the complete article, go to the source. We begin with the raves:*

## **<sup>1</sup> CAR AND DRIVER (Sept. 1978)**

At its Japanese introduction, Mazda's prodigy was like the star of spring training: radiant with promise, but totally unproven against established pros. Now that we've driven it here, we feel as though the Mazda RX-7 has just pitched its first game and scored a no-hitter. The car is even better than our first brief encounter suggested it might be.

The heart of the matter is the Mazda's personality, which makes its acceleration far more useful in the real world than its arch rival's. From the first eager hum of the RX-7's rotary engine, you know you've got

a tear-around tiger. It begs to be redlined through the gears, likes to be tossed into turns, and loves you when you twitch its steering wheel affectionately through traffic. There's plenty of incentive to move quickly in the Mazda because the engine does its job without the usual thrashing of a piston engine. There's a whoosh from the exhaust and a whirl from under the hood, but none of the cacophony you have to contend with in a 280-Z squeezed for acceleration. Mazda's rotor motor feels like a speed vending machine. The longer you hold the right pedal down, the more you get. Heavy flywheel action damps the thrill of acceleration somewhat, but the engine keeps on winding higher and higher up a horsepower curve that seems straightedge linear. The rush feels as though it will last forever, until the over-rev alarm goes off at 6500 rpm to remind you to pull the shift lever at the 7000-rpm redline.

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It's this high-rpm happiness that makes the RX-7 quicker in real life than cars capable of beating it on the drag strip. You can rush around town flat-out all day long because the RX-7 feels lean and lithe, while a 280-Z in the same circumstance is lanky and lumbering. Never mind that both cars are close to the same build on the outside, the RX-7 scampers like a short-stop, while the Z-car thumps about like a burly catcher. This under-the-jersey discrepancy reveals itself at weigh in. There's a 380-pound difference in bulk between these two, which the Z-car, despite its 49 percent horsepower advantage, never quite overcomes.

Three hundred and eighty pounds might as well be a ton when it comes to handling and braking. The RX-7 isn't just quick in a straight line, it also loves to dart and dodge with the best of them. Fortunately, all the tuning screws have been turned the right way, so good basic coordination isn't wasted on bad habits. The brakes haul you down neatly, with the front wheels locking slightly in advance of the rears, just as they should. Seventy-to-zero takes 206 feet, a commendable stopping performance that would

be even better with more traction from the tires. The Bridgestone 70-series radials work just fine in handling, however. With the RX-7 GS's combination of front and rear anti-sway bars acting through 5.5-inch aluminum wheels, this car will deliver whatever posture you prefer in the turns. Take your choice of any attitude between neat-and-tidy understeer and ferocious, oversteer; it's all controlled by the power pedal. If you'd prefer a nice, smooth ride home from work, go lightly on the gas across the apexes and the RX-7 will hang in its tracks like a caterpillar. But if you feel a little more adventuresome, just turn up the wick and the RX-7 will slide around a bit at both ends as it annihilates the best ET you ever posted in your old commuter.

But be advised that every one of our lead-footed field agents, and most civilians we've spoken to, report that they too take their very first bend in an RX-7 flat-out and tail-wide. It's this Mazda's own special way of getting the cornering job done. Confidence is the key. You don't get white of knuckle and sweaty of palm engaging in road antics in this sports car, because it never snaps back.

This comes not by accident, but from highly developed chassis manners.

The visibility out of the RX-7 is just about like viewing the world from your own personal lighthouse. The hoodline is low where it meets the windshield, and drops completely out of sight on its way to the front bumper. The beltline is down near elbow level, so the whole inside of the RX-7 basks in cheery brightness.

The RX-7 rides as if it has air suspension. You never have to endure the usual punishment from tar strips, potholes, and broken pavement, because few road imperfections ever make their way through the chassis. The wheel travel is generous, the shock damping seems to be spot on, and the jounce bumpers very effectively dull sharp impacts that are too much for the rest of the suspension.

With such a plush ride and such a mellifluous motor, the RX-7 has no trouble winning friends. Its air of comfortable competence is further reinforced by an interior that quickly makes you feel right at home. Space-capsule delusions have been purposely avoided. This car's business is sports motoring, and nothing distracts from its ►

central mission. There's not a splinter of wood-grain, no power-assisted ashtrays, and almost no chrome trim inside to clutter up the control deck. The instruments have sharp white numerals on a field of flat black, the indicator needles are Day-Glo orange, and all the information you need to know is clearly visible.

Controls are carefully located so that everything lies at your fingertips, not at the end of your reach. All light and wiper functions are handled by steering-column stalks, and the parking brake and the shift lever are less than a hand's width from the steering wheel.

## **2 NEW WEST** **(July 3, 1978)**

by David Barry

Now Mazda's back in the game with their brand-new baby - a real, get-down-and-boogie sports car called the RX-7. The car is a two-seater coupe with sleek, sexy lines born of wind-tunnel testing and sophisticated styling engineers. No chrome gewgaws, fake hood scoops, accent stripes, louvers or screaming-eagle decals; this car doesn't need visual hype to turn heads. The real fun, however, is driving it. The RX-7 accelerates fast like a Camaro V8, handles like a Porsche 924.

It adds up to a package that will run and hide from a Porsche 924 (which costs twice as much), a Datsun 280-Z, Triumph TR-7, Fiat 124, Capri SS, and all the others.

There has to be hitch, right? Wrong. At least, until you try to buy one. The car as it stands is one of those models that occasionally comes on the market offering more for less than any other comparable car, like the early BMW 2002 and the Datsun 240-Z, before they gained weight and got slower and more expensive.

The reason for the action is that the RX-7 really does what a sports car is supposed to do. Unlike the Stone Age British sports cars - which prove their pedigrees by jouncing your kidneys with harsh suspensions that manage to make

you uncomfortable, and engines that perform poorly - the RX-7 is smooth, quiet, comfortable and holds the road like a Thoroughbred. Automatic transmission is optional, and the two-rotor engine is happy humming through traffic and cruising the freeway, if that's your style. But the power is so much fun to turn on that it would be a sin to own one without ever driving it fast. The RX-7 goes where you steer it, unless you get absolutely crazy. And there's no need to push the car near its limit because you can blow off the competition without running close to the edge.

If there's any justice in the auto industry, the RX-7 will give corporate hives to Chrysler and Ford, who bad-rapped the rotary engine after deciding against it in the early 1970's.

## **3 ROAD & TRACK** **(May 1978)**

To love the RX-7 is to drive it. This starts with the rotary's usual hushed idle that causes you to glance at the tach to make sure the engine is running. It continues with typically quiet and smooth and torquey rotary performance that has the tach twisting to the 7000-rpm redline before you realize it. Then an over-rev buzzer jars you into reaching for the next highest gear. The 5-speed gearbox with 5th over and up to the right, as I prefer it, has typical Mazda feel: Shifts are light, quick and a little notchy. As the performance chart shows, with either manual gearbox, the RX-7 accelerates to 60 mph in about 8.6 sec. and runs the quarter mile in around 16.7 sec. The RX-7 also takes well to the automatic, with 0-60 and quarter-mile times quicker than most of its manual gear-box equipped engine fans. The reality is just as exciting as the promise. Performance is outstanding, as competition. Either version will pull past redline in top gear, indicating between 120-125 mph on the Miyoshi banked high-speed oval. And what's most impressive is the almost eerie lack of wind noise at speed.

Mazda really has its act together in this area.

Even more impressive than the rotary's acceleration or top end is its overall flexibility. Lug the engine down to 1000 rpm in 5th, step on the throttle and the engine pulls, albeit slowly, without a judder of protest.

For comparison purposes Mazda had a 1977 California-specification Porsche 924 for the press to drive. The rotary engine's acceleration, driveability and noise advantages were quickly apparent.

Driving the RX-7 and the 924 across various rough roads proved quite educational as well as entertaining. Where the 924 thumps, vibrates and rattles, the RX-7 is tight, compliant and composed. There's little kick-back through the Mazda's recirculating ball steering and the live rear axle is well behaved. Overall, the RX-7 probably has the best combination of shock absorber control of any Japanese car I've driven.

The interior can best be described as "enthusiast friendly," imparting a feeling of instinctively knowing where all the major controls are located the first time you slide into the driver's seat. Few sports cars, regardless of price, have as effective a heating and vent system. Mazda's management is noncommittal on what direction future development of the RX-7 will take. And who could blame them? There's little I can think of that should be added to the car.

If you don't think the RX-7 is a return to the thrilling days of yesteryear when sports cars performed like sports cars, I suggest you turn in your Gucci loafers, your stringback driving gloves and your Cool-Rays and walk down to your local purveyor of American cars and purchase the largest, softest sprung, 6-cylinder, automatic transmission, 4-door sedan you can find.

## **4 POPULAR SCIENCE** **(Nov. 1978)**

The RX-7 is, of course, the car long awaited by rotary-



might be expected with a big rotary engine in a lightweight, 2350-pound chassis. In acceleration tests, the RX-7 clearly beat the 924 and 320i. And even the ultra-expensive exotic cars had better watch out. In an impromptu match-up with a new Ferrari 308GTS, accelerating up to turnpike speed, the \$35,000 Ferrari could gain only about 10 feet on the little Mazda. That was impressive!

We know this will sound strange but the Mazda just may run too smoothly. Accelerating through the gears, it is incredibly easy to wind past the engine's 7000-rpm redline. Happily, Mazda has provided a 65000-rpm warning buzzer. It sounded on each of our acceleration tests, a clear indicator of just how easy it is to push the smooth, quiet engine past the redline, even when you're anticipating overspeed.

The flagship of the Mazda lineup is more than just a car to compete with the 924 and the new 280-ZX. The RX-7 is Mazda's way of saying, "Look here, world, the rotary is not dead. We've made it work, and it's great." And there's no question that it is great. The engine is so smooth that we were more than once fooled into thinking it had stalled when we stopped in traffic.

One of the biggest objections to the rotary has been the notion of poor fuel economy. But that day is past. And when emission restrictions get tougher, the rotary may get even stingier.

The RX-7 is an absolutely outstanding sports car. - Mazda will easily sell all of these gems they can bring over.

## **5 73 MAGAZINE FOR RADIO AMATEURS** (Oct. 1978)

The RX-7, I'm delighted to report, is fantastic. You really need a radar detector with it because when you think you are driving 40 mph, you look at the speedometer and find it around 80. The car is comfortable and quiet at 100 mph and is so steady you can take your hands off the wheel until the passenger is chewing the upholstery.

## **6 MOTOR TREND** (Sept. 1978)

The Mazda feels sprightly. Again, an odd word to apply to a car; but the feeling it generates is that of a middleweight fighter, in prime condition, dancing in eager anticipation of the forthcoming battle. The compact size and weight of the rotary engine makes it the ideal power-plant for a sports car, and it is located to the advantage of handling - behind the centerline of the front wheels.

The rotary engine in the Mazda accelerates so smoothly and with so little vibration that it feels like an electric motor. It pulls strongly all the way to redline, with a maximum torque of 105 pounds-feet at 4000 rpm. The ratios in the 5-speed transmission are ideally suited to the power curve, and the throws are short and firm with an almost silky feel. The exhaust note is surprisingly loud and distinctly aggressive. It produces a slight resonance that is carried back up through the accelerator pedal to produce a not unpleasant tingle in the bottom of your foot.

Around town, the engine's willingness makes it a master at sliding in and out of traffic. The idle is so smooth that you find yourself constantly blipping the throttle to assure yourself it's still running.

The interior of the Mazda seems more Germanic than Japanese. Everything is carefully placed for the driver's convenience.

The ventilation system follows Mazda tradition by putting out enough air to force you to comb your hair when you get out. The air conditioning is particularly effective and makes only the slightest of differences in the way the engine runs when it is switched on.

## **1 CAR AND DRIVER** (May 1978)

You'd gladly trade your favorite fantasy for an RX-7 after one quick test drive. A rotary engine humming eagerly

through the gears is absolutely charismatic, and, if this doesn't ring your chimes, you'll be pleased to find the rest of the car in harmony with the melody under the hood. A low-slung RX-3 it's not. The RX-7 could only be a smash hit.

It sneaks into the fray with an unsophisticated chassis layout, a tiny beer keg of a motor and blows off well-seasoned leaders - Datsun's 280-Z and Porsche's 924 in particular - by at least a thousand dollars in price and precious seconds in acceleration time.

The RX-7 makes its point with all the go, stop and turn you get for under \$7000, but there is one more ace up its sleeve: The interior inspires love at first sight. The order seems Teutonic, but the bright colors, soft seats and glut of gadgets would never come in a Porsche or a BMW. And the first time you sit down to the controls, it's like slipping into a custom-tailored suit.

The steering wheel is perfect for height and rake, the shifter and column stalks are less than a hand's width away and the pedals seem like natural extensions of your feet. There's plenty of head, elbow and knee room and those of extreme build have over seven inches of seat travel to work with.

It's a second day in the sun for Mazda in the U.S., and this time there isn't a cloud in the sky.

## **3 ROAD & TRACK** (Aug. 1978)

Beyond straight-line acceleration, the RX-7 offers those appreciated rotary attributes of incredible smoothness and quietness along with the ability to easily rev up to the 7000-rpm redline. One staffer noted that the engine is so smooth and quiet she found herself driving down the freeway at 80 mph before she knew it. Another commented that, "Not only does the engine rev nicely, it also gives the driver a good belt in the back in each gear after shifting at maximum revs," and added, "I think the Wankel ►

engine just got its third-perhaps biggest-lease on life. And it sound so good!"

The new Mazda is also characterized by a nearly immediate sensation of confidence - all our drivers commented that they felt at home in the RX-7 after driving it a few blocks.

The gear spacing, combined with the rotary engine's wide torque curve, allows the driver to take full advantage of the RX-7's performance capabilities in every driving condition. The gearbox, like every other facet of the car, gives you the feeling that it's working with you to promote the highest possible degree of driving pleasure with this car.

The ride and handling combination is most impressive and the Engineering Editor, who drove the car in Japan, noted, "After driving this car under U.S. road conditions, I'd still say it has the best combination of springing and shocking of any Japanese car." The chassis is nicely balanced and the ride is firm but well controlled on all road surfaces. The RX-7 narrowly missed qualifying for our rarely given "Excellent" overall brake rating.

Ergonomics is perhaps the area of the RX-7's design that best demonstrates how well Mazda did its homework. Everyone rates the RX-7's driving position and comfort features very high, from the 5-ft. 4-in. woman who wrote, "I really feel like I'm part of the car rather than a guest sitting down to dinner at a stranger's home," to the 6-ft. 6-in. man who commented, "This is the first Japanese car I have driven which is comfortable to me. Not only is it comfortable, but the seat and driving position rate among the all-time best."

And that misconception about poor fuel economy with rotary engines should be put to rest - the RX-7 turned in 22.0 mpg in our test which includes city and highway driving. Its fuel consumption is as good or better than the other sports and GT cars in its class.

The result is a car that is "far and away the best in its class," as we said in naming the RX-7 the Best Sports Car Under \$7000 in our "Ten Best Cars for a Changed World" (June 1978). And every person on our staff returned from driving the Mazda with glowing praise for its performance, handling and comfort features - enthusiastic unanimity of that sort is exceedingly rare.

*Now for the bad news! While many of the articles have had nothing but praise for the RX-7, others have had some criticism of certain aspects of the car or the high mark-up which some dealers add to the price. Half of the NEW WEST article dealt with those dealers and private parties who are taking advantage of the tremendous demand for the RX-7 and its limited availability. Other criticisms include:*

While the brakes were very good, the optional Bridgestone RD-106 185/70HR-13 radial tires seemed to lose traction rather easily under hard braking or acceleration when there was only a small amount of dust on the pavement. Overall, however, the Bridgestones are well suited to the RX-7's performance and handling.

(ROAD & TRACK)

We do have a short list of complaints about the interior, however. The seats are not bad for a Japanese sports car, but well shy of the Simply Amazing rating that this car deserves in so many other areas.

No Japanese car could come to America without at least one senseless gimmick, and the RX-7 is no exception. For this car, and this car only, Mazda has invented the dual-function voltmeter-tachometer gauge. With the ignition switch in the "on" position, you get voltage, but once the engine is running, the needle registers only rpm.

Nor do we expect the RX-7 to go down in automotive history for contributions in the area of sunroof engineering. The RX-7's \$250 overhead porthole is in fact a hopeless disaster.

(CAR AND DRIVER)

The hard standing start accelerations I made at the same time uncovered one minor annoyance: axle tramp.

(ROAD AND TRACK)

If there is a disappointment in the RX-7, it is in the passenger compartment. There is the usual carload of gauges and controls, but what is needed is more color, plus more originality in the design of the door handles, parking brake, and steering wheel. The hatchback opening makes the best use of the space behind the seats, but the car needs covered storage where valuables can be hidden.

(POPULAR SCIENCE)

*In addition to the reviews of the RX-7 in the press, ROAD & TRACK honored the RX-7 by naming it one of the "10 Best Cars for a Changed World". Both Motor Trend and Car & Driver are in the process of selecting their Car of the Year. Motor Trend bases their decision on the votes of a panel of experts while Car & Driver relies on the votes of their readers (the voting form appears in the December issue) for their choice. Needless to say, the Mazda RX-7 is a nominee in both magazines.*

*This article is obviously not exhaustive but representative of all the reviews of the RX-7 which we have seen. We would appreciate your bringing to our attention other articles which have appeared on the RX-7. Send us the magazine name, issue date, pages, and a copy of the article, if possible. RX7CA will compile a list of all RX-7 reviews and publish this information in the next issue of ROTARY ROCKET.*



THE CARE  
AND FEEDING  
OF YOUR RX-7  
CONTINUED FROM PAGE 7

While there are hundreds of products designed to protect the exterior finish of your RX-7, the most important decision you can make is to keep your car clean. Don't let dirt, road film, tree sap, bird droppings and the like stay on your car's exterior any longer than necessary. Get them off immediately because surface damage begins from the instant they occur. A daily inspection is a good policy. Remove any chemical agents (including those from bugs, birds, and trees) with a sponge, mild soap and water. A daily feather dusting is all right but never rub dirt off the car with a dry cloth or the surface may be scratched. Frequent washing of the car is necessary, but a few precautions are in order. First, make sure the car paint is cool and never wash in the hot sun. If the car is not too dirty and you are fortunate enough to have soft water, a wash with plain water may be sufficient. When clear water isn't enough, use either a special car washing product or a mild soap such as those designed for dishwashing by hand. Never use laundry soap or dishwashing machine detergents. If your car has a special surface coating, such as Body-Glo, stick with the washing solution recommended by the manufacturer.

Wash with a good quality soft cloth, sponge, or mitt but replace

it often since grease and dirt can accumulate on the surface, eventually scratching the finish of your car. A chamois is recommended for drying the surface without scratching or leaving water spots. Always use the chamois wet and make sure it is clean and soft. Synthetic chamois are cheaper but they don't dry as well as the real item.

A word of caution about automatic car washes. Many use caustic soaps and hard bristle brushes to rapidly remove the dirt. Unfortunately, neither are good for the finish and may abrade the surface or remove the paint or wax along with the grime. Unless you feel fairly confident about your neighborhood car wash, or really don't care, do it yourself. Of course, a wash by machine is preferable to neglect.

Fortunately, the RX-7 has virtually no chrome. However, to make the chrome emblems and exhaust shine use a good chrome cleaner. Special products are also available for aluminum and stainless steel wheels. Again, make sure you have given a thorough cleaning first and never use steel wool, abrasive cleaners, or strong detergents on chrome-plated or anodized aluminum parts.

Finally, what about waxing? Opinions differ drastically concerning how often to wax, what type of wax is best, and whether a polishing

glaze is better. Many dealers are having the RX-7 delivered with *BODY-GLO* (or similar) paint and chrome sealant. The manufacturer states that the vehicle is protected against weather and pollution and no waxing is required. *BODY-GLO* maintenance includes normal washing with *BODYGLO* shampoo and the use of *BODYGLO* conditioner as needed. If your RX-7 is not so protected, wax as often as the exterior finish appears to require a new application. Two or three times a year is normally sufficient if a good quality wax is used and the car is not driven under extreme environmental conditions.

Before polishing or waxing, the car must be washed and dried. Don't skimp - use a high quality wax which is suitable for the synthetic finish of an RX-7 and avoid any polish which contains a large amount of abrasives. While such polishers will cut down the amount of your labor, they might also cut down the amount of paint left on your car.

Keeping your RX-7 in prime condition obviously involves a commitment of time and energy, but your labor will be amply rewarded in pride of ownership and in dollars at resale time.

- The next issue of *Rotary Rocket* will cover the removal of interior and exterior stains from your RX-7.

**mazda**



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# Everything You Wanted to Know About Your RX-7

## Part I

Advertisements for the RX-7 stress the sleek looks and the advanced performance of this new sports car. That's understandable since those qualities appeal to sports car aficionados and increase sales. Fortunately for those who bought an RX-7 for these features, the design and engineering of the car excels in many other areas such as safety, durability, and serviceability. In every issue you will be let in on these well-kept secrets. Engineering innovations and construction details will be discussed to let you become better informed about the car you waited so long to get. The more you learn about the RX-7, the more impressed you will become with the team of designers and engineers who developed the car.

Part I covers those active and passive safety features designed into the car. After all, a car that goes as fast as the RX-7 will often be pushed to its limits. It must not only stop fast but protect the occupants in the event of a crash or rollover.

Foremost among the passive safety features engineered into the RX-7 is the unitized steel body which is welded as a solid unit. The rigid passenger cell offers maximum protection in a collision or a rollover situation. The front and rear sections are designed to absorb the energy of an impact through the mechanism of controlled deformation. This produces an impact force in the passenger compartment which is relatively

flat in comparison to the high peak G forces which can be encountered in the usual automotive environment. For example, with a frontal collision at 50 km/hr, the peak G force in the passenger compartment does not exceed 30.

To reduce the possibility of injury in a rollover, wide double-walled center pillars act as a roll bar. To protect against collisions from the side, strong beams are placed in the doors to add to the impact-absorbing capabilities of the RX-7. For low-speed collisions, integrated front and rear bumpers with telescoping energy absorbing units minimize body damage and shock transmitted to the occupants.

The set-back location of the front mid-engine creates a longer expanse of hood which can absorb a greater impact in a head-on collision before damage reaches the passenger compartment. With the recent publicity concerning PINTO problems, it is reassuring to know that attention was paid to location of the fuel tank in the RX-7. It is located in a protected position under the rear luggage floor and outside of the passenger/luggage compartment.

Other passive safety features include: laminated windshield bonded onto the car frame, anti-burst door locks, interior rear-view mirror on a fall-away stay, and an energy absorbing collapsible steering column. In addition, there is the normal complement of safety features such as integrated head re-

straints, inertia lock reel seat belts, and padded instrument panel and sunvisors.

Human factors were also taken into account in the design of the RX-7 to prevent driver fatigue and increase visibility. Practically unimpeded forward vision is afforded both the driver and passenger through the wide windshield set between two thin but strong front pillars. All glass is tinted to reduce glare and eye strain, and side window-demisters and the rear hatch defroster maintain visibility under adverse conditions. Driver fatigue is materially reduced, especially on long trips, by the extra firmness of the front seats. Finally, the location of all cockpit controls were strategically located within easy reach for safer and more convenient handling at all speeds.

Active safety features permit the RX-7 to cope with the demands that high performance driving impose upon it. First, the virtually ideal weight distribution and the low center of gravity which result from the front mid-engine location produce outstanding yet safe handling and breaking. The front and rear suspension reduce sway and tilt to 1.7 degrees at 0.5 G and the stabilizer bars further reduce sway under hard cornering, thereby giving the driver greater control. The superb aerodynamics of the body contribute to high speed and cross wind stabilities while the integrated airdam holds the front end to the road. Finally, the powerful and stable braking performance assures quick and controllable stops. To prevent loss of control on bumpy road surfaces, Mazda used a recirculating ball and nut steering system to minimize the transmission of road shock to the driver.

Perhaps a few of those items were overlooked which further increase the safety inherent in the RX-7, but it is evident that safety was a prime consideration in the design and engineering of the RX-7. While no safety feature can compensate for a careless or irresponsible driver, occupants can be reassured that Mazda has done everything possible to assure that their ride in an RX-7 will not only be fun but safe.



## SPEC 1 CONTINUED FROM PAGE 5

stability and ride equal to that of a much heavier car, but the effect comes through aerodynamics and not by the performance robbing effects of weight.

**Q.** The ride I had in the SPEC-1 certainly testifies to the superb handling you have obtained. How about some specifics on the body work performed.

**A.** Well, the new body is all steel of unitized construction. As I said, the color is pearlescent gold yellow with black. On the hood is the SPEC-1 logo surrounded by 24 karat gold leaf. The car design was refined as we went, based on actual testing. For example, the front air dam was slotted and grooved to get the correct flow of air and the air dam was reworked four times. A heck of a lot of time went into the body work. The dam ground clearance is five inches so we put a vinyl strip along the bottom edge to give better clearance over dips and driveways. Cibie quartz iodine headlights replace the original headlamps to give improved night visibility. Due to the new air dam, we had to design a custom bra to fit it. We took a conventional Mazda RX-7 bra and enlarged it from a B cup to a size DD, cut for proper air flow. The hood was louvered for better draft on the highway. Western Cyclone wheels were used, with the front and back wheels of different sizes for traction and handling. The front tires are AR 60-13, the rear are CR 60-13, and both are POSITRACTION TWISTER Aramid radials. The rim clearance is 2.5 inches.

We first put boots on the car, then built the steel body around the boots. We opened up the rear of the car by eleven inches to handle the wider tires. The body was then structured so that it flows from the front to back. The rear license plate indentation was removed to allow a straight drop in the back. A translucent plastic panel was inserted between the tail lights to allow a continuous flow across the back, like the Porsche 911. Behind the panel is reflective gold leaf which spells out SPEC-1 when illuminated by the lights of oncoming cars.

**Q.** It's evident a lot of thought went into the body to obtain such an integrated styling. While the resemblance to a stock RX-7 can be determined from a front or side view, the rear view is quite distinctive. I notice you also spelled MAZDA on the rear deck in reflective lettering.

**A.** Yes, I had so many cars coming up on my tail to try to find out what kind of car this is that I felt I had better put an identification back there that could be seen from a distance. The lettering is larger and more distinct than the Mazda logo on the stock car.

**Q.** The innovations on the SPEC-1 aren't limited to the outside. Tell us about interior modifications.

**A.** Well, I basically think Mazda designed a very good cockpit but I wanted to upgrade some of the appointments and add a jump seat. I redid all boots in Italian leather and added a leather map case on the back of the front seat. I put brown Italian mohair on the front seats and recushioned them for better thigh support. The rear jump seat is also made of brown mohair. It is a rigid non-folding bench seat.

I removed the original shift knob and replaced it with a gold anodized alloy knob which contains a digital clock. The clock displays time, day, date, and seconds at the touch of a button. It is very convenient on long trips, especially at night. Since the car gives the visual appearance of going much faster than it actually is, I felt it necessary to install a Whistler Fuzz Buster radar detector. Finally, I added speakers in the rear. In the future I plan to upgrade the radio with a graphic equalizer and higher powered amplifier.

**Q.** Any other touches on the car?

**A.** Well, the windows have been tinted darker to reduce the heat. We used a flow tinting process which permeates the glass. The back of the doors were swept up over the window to produce the effect of motion. Tinted bullet mirrors were put on both sides of the car to offset a slight loss of visibility due to the air foil.

**Q.** I realize that the aerodynamics of the front dam and air foil produce good stability but has performance suffered from the increase in weight?

**A.** The increase in weight is very little. I had the chance to make a run at the Orange County International Raceway and did the quarter mile in 16.7 seconds, hitting 85 mph the first try. That was with the air conditioning on!

**Q.** I see you have quite a bit of mileage on the SPEC-1. It's evident this is not just a show car.

**A.** Right! It's also my work car. I travel extensively throughout California, from San Francisco down to San Diego and throughout Nevada and Arizona. In 4½ weeks I put 12,800 miles on the car and have been able to seriously evaluate it. I feel the RX-7 is unexcelled in quietness, ride, and stability among sports cars under \$20,000.

**Q.** Where do you show the car?

**A.** All over. From openings of shopping centers to custom auto shows. The car gets an incredible reception wherever I take it. I am constantly getting calls and letters from firms wanting the car for display. I may show it in Auto Expo '79.

**Q.** Would you mind telling how much the SPEC-1 cost?

**A.** Including the price of the original RX-7, about \$13,000. The price was held down since I did most of the design work myself and some parts, such as the tires from Western Wheels, were obtained free. It would cost more to duplicate the car.

**Q.** Do you have any plans to produce SPEC-1 versions of the RX-7 for others?

**A.** I have considered a limited production. Whether this will happen depends on the demand as well as my availability. SPEC-1 shoes is having a record year and my time is very limited at present.

**Q.** We certainly appreciated your taking the time to tell us about the car and enjoyed the ride in this extraordinary machine. Any final words?

**A.** I feel that Mazda has produced a superb car in the RX-7. While the stock car is an unparalleled success, I feel there are those like me who always yearn for a bit more. I think I have pointed out some new directions for the RX-7 and have accomplished what I wanted to create - a freeway flyer.



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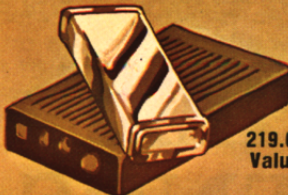
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Quality cap with embroidered emblem,\* adjustable from 7 to 7 5/8. Colors: white/black white/blue, white/gold.

**\$7.95** Specify Code C



## FRENCH CUT T-SHIRT

50% polyester, 50% cotton rib knit with embroidered emblem.\* Sizes: s, m, l, xl. Color: white.

**\$9.95** Specify Code WT-1

## BELT BUCKLE

Exclusive design luxurious plated in 23k gold or rhodium (platinum alloy).

**\$18.50** Specify Code BB



\* RX-7 Embroidered Emblem is of black and "silver" thread.

**100% SATISFACTION OR YOUR MONEY BACK** MEMBERS: DEDUCT 5% FROM PRICES SHOWN. NO C.O.D.'s PLEASE. Please allow 3-4 weeks for delivery. Prices subject to change without prior notice.

## CLASSIC PRODUCTS

P. O. Box 636, San Gabriel, CA 91778

Membership # \_\_\_\_\_

NAME \_\_\_\_\_

ADDRESS \_\_\_\_\_

CITY \_\_\_\_\_

STATE \_\_\_\_\_ ZIP \_\_\_\_\_

PHONE ( ) \_\_\_\_\_

ITEM  
CODE

COLOR

SIZE

QTY

PRICE  
EACH

TOTAL

ITEM CODE	COLOR	SIZE	QTY	PRICE EACH	TOTAL

CALIF. RESIDENTS ADD 6% SALES TAX

ITEM SS: SHOULDER ☐ BREAST ☐

TAX

TOTAL



# RX7 CA MEMBER DISCOUNT DIRECTORY

A directory of firms offering their products and services at a discount to RX7 CA members will be published in each issue of Rotary Rocket. To take advantage of these discounts, members will be required to show their membership cards to the participating firms. If the transaction is handled by mail; members must include their membership number and expiration date with the order.

In addition to enabling members to save money on their purchases, this directory represents a unique opportunity for firms to obtain

exposure to a large number of knowledgeable car enthusiasts at a very low cost. The directory is not limited to automobile products. A wide variety of general products and services (restaurants, cleaners, etc.) are acceptable but RX7 CA reserves the right to refuse the listing of anything which it feels may be detrimental to the interest of club members. A necessary requirement for inclusion in the directory is the offering of products or services to RX7 CA members at a discount from normal prices. The discount must be maintained for

at least the three month period during which the listing appears.

To cover the costs of preparation and mailing, a charge of \$10.00 per quarter covers listing of the firm's name, address, telephone number, and up to twelve additional words describing the product or service and discount offered. Up to 20 extra words are acceptable, at one dollar per word. For a one year listing in the directory, multiply the cost per issue by four and subtract 20%. To be listed in the next issue, send your copy and payment before February 15, 1979.

## WITH A LITTLE HELP FROM YOUR FRIENDS

Local RX-7 clubs complement the national organization and give members a chance to meet a group of people with diverse backgrounds who share a common interest in the RX-7. Whether your group meets once a month to share knowledge and experiences or decides to sponsor rallies, swap meets, and more elaborate events, your participation can increase the enjoyment of owning an RX-7.

RX7 CA actively encourages the formation of local RX-7 clubs. Beginning with the second issue of ROTARY ROCKET, a local club section will be included on a regular basis. This section will contain notice of local club formation plus news and events of existing clubs. Information will be provided to assist members in organizing a new club, operating a club, and planning club activities.

To assist you in starting a club in your area, a club formation notice is printed below to inform potential members. This notice can be posted on your work or school bulletin board or at your local Mazda dealer (with his permission). We also encourage those members who wish to form or have already organized a local club to send us their name, telephone number, and city as soon as possible so that the information can appear in the next issue. Please direct all club related news to:

David Freisleben, O.D.  
21019 Hawthorne Boulevard  
Torrance, California 90503



**138 ARDMORE  
HERMOSA BEACH, CA  
90254**

**A LOCAL RX-7 SPORTS CAR CLUB IS BEING FORMED IN THIS AREA. MEMBERSHIP IS OPEN TO RX-7 OWNERS AND ENTHUSIASTS. FOR FURTHER INFORMATION CONTACT:**

NAME

AT

TELEPHONE

## WELCOME TO THE CLUB CONTINUED FROM PAGE 3

addition to providing RX7 CA products and accessories, we will publish a directory of firms offering products and services at discount for club members.

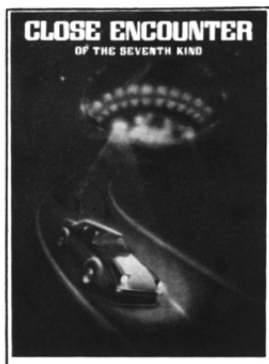
You are now a member of the national association and entitled to all the benefits offered by us. To further increase your enjoyment, we encourage you to join or form a local RX-7 club chapter and get involved. Your participation will be amply rewarded through the opportunity to meet new friends who share your interest in the RX-7. A form is included in this issue to assist you in organizing a chapter in your area. We also want membership in RX7 CA to be a two-way street. We welcome feedback from you on your RX-7, our organization, and other topics of concern to you as a member. In addition, we welcome your contribution of material for publication in ROTARY ROCKET.

Membership is vital in any organization and ours is no exception. While we are making every attempt to inform all current and potential RX-7 owners of our existence and benefits, we are aware that we have not reached all potential members. Your assistance is needed to spread

the word to help enlist new members. Assembling, printing, and mailing a quality magazine is both expensive and time-consuming. A professional publication only makes sense when the cost can be amortized over many thousands of members. In addition, manufacturers of custom RX-7 products require a large potential sales base to justify their production of such items. They can afford to offer larger discounts to club members as their sales volume increases. Indeed, a large membership carries clout with manufacturers, advertisers, and Mazda Motors. Growth benefits all members and enables RX7 CA to offer more and better products and services.

Thanks again for your support. We are very happy to have you as a member. We appreciate the time that many of you spent in filling out and returning the club questionnaire. The results will be published in the next issue of Rotary Rocket to let you know how other members feel about the RX-7 and our club. With our commitment and your continued assistance, we will make the RX-7 Club of America an outstanding organization.

## OFFICIAL RX-7 CLUB OF AMERICA PRODUCTS DISCOUNTED BARGAINS FOR MEMBERS



**Large (22" x 35") full color poster, CLOSE ENCOUNTER OF THE SEVENTH KIND**, featuring a competition RX-7, is now available. Great for display in your home or office, this limited edition print can be purchased using the coupon below.  
**\$3.95\***  
**(\$4.95)**



**Handsome 23K gold plated key ring** with RX7CA logo in black enamel on gold.  
**\$6.95\***  
**(\$7.95)**



**Quality crew neck T-shirt** (100% cotton, pre-shrunk) with black RX7CA logo. Specify size (S, M, L, XL) desired.  
**\$6.95\***  
**(\$7.95)**



**Embroidered RX7CA patch.** Can be sewn or ironed onto jackets, caps, etc.  
**\$2.75**  
**(\$3.45)**

\*Member discount price (include membership number). Nonmember prices shown in parenthesis. SATISFACTION GUARANTEED OR YOUR MONEY WILL BE REFUNDED. We pay postage for orders above \$10.00. For orders under \$10.00, include \$1.00 to cover postage and handling. California residents, include 6% sales tax.

**RX-7 CLUB OF AMERICA**  
**138 ARDMORE**  
**HERMOSA BEACH, CA 90254**

**MEMBERSHIP NO.** \_\_\_\_\_

**NAME** \_\_\_\_\_

**ADDRESS** \_\_\_\_\_

**CITY** \_\_\_\_\_

**STATE** \_\_\_\_\_ **ZIP** \_\_\_\_\_

\*MINIMUM ORDER \$10.00. ALL ORDERS LESS THAN \$10.00 SUBJECT TO \$1.00 SERVICE CHARGE.

### 100% SATISFACTION OR YOUR MONEY BACK!

ITEM ORDERED	QTY	TOTAL PRICE
<input type="checkbox"/> EMBLEM	_____	_____
<input type="checkbox"/> KEY RING	_____	_____
<input type="checkbox"/> T-SHIRT	_____	_____
<input type="checkbox"/> POSTER	_____	_____
<b>Ca. Residents, 6% Sales Tax</b>		_____
<b>Service Charge*</b>		_____
<b>IF BANK CARD PURCHASE:</b>		<b>Total</b> _____
<input type="checkbox"/> VISA	<input type="checkbox"/> MASTERCHARGE	
<b>CARD NO.</b> _____	<b>EXP.</b> _____	
<b>INTERBANK NO.</b> _____		
<b>SIGNATURE</b> _____		



# Helpful Hints

Two areas of difficulty are encountered by some RX-7 owners. One involves an inoperative rear window heater while the other concerns the inability to use the blower fan for boosting outside ventilation without simultaneously turning on the air conditioning compressor.

Unless the rear window heater fuse is blown, the probable cause of failure to heat is due to lack of contact of the connectors on the rear window struts. While this adjustment should have been made during dealer preparation of the car, the fix is simple.

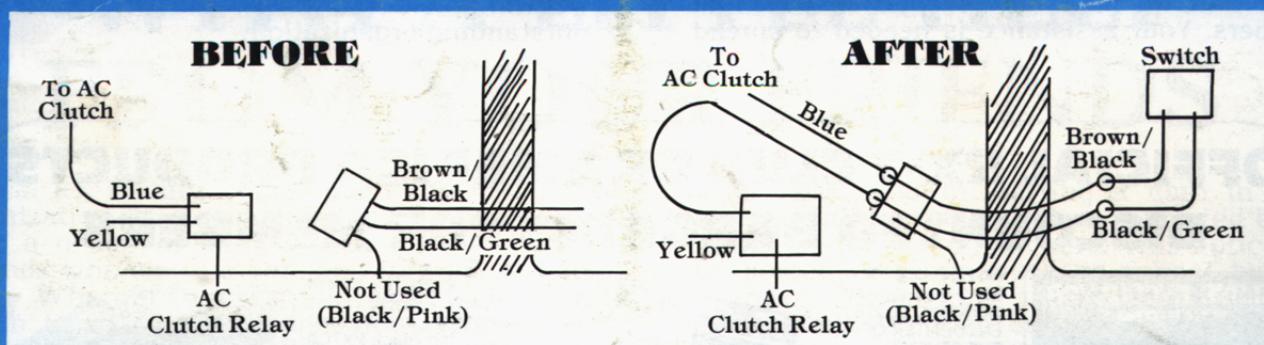
Loosen the screw on the connectors nearest the window, slide downward along the strut and tighten. To check operation, turn ignition key to measure battery voltage. If the voltmeter

reading drops when the window heater switch is depressed, you have succeeded. As a precaution, remember never to clean the inside of the hatch window with any abrasive that could damage the heater elements.

Bob Goza of Tampa, Florida sent the following method for bypassing the air conditioning compressor to allow independent operation of the blower fan:

Install a switch somewhere on the instrument panel or on the side of the console near the driver. Make sure you have space for the switch before you cut a hole. I used a rear window heater switch. Under the dash and near the steering column are two wires that run through the dash. One is brown with a black stripe and the other

is black with a green stripe. The switch can be connected to these two wires with spade connectors. The above two wires run through the dash and terminate near the clutch relay in the engine compartment. The clutch relay is on the driver's side and at the rear edge of the engine compartment. The clutch relay can be identified by two wires, one blue and the other yellow. Remove the blue wire from the clutch relay and connect it to the brown wire with a black stripe. Connect the black wire with the green stripe to the clutch relay where the blue wire was initially. Spade type connectors can be used throughout. Now the clutch for the AC is controlled by the switch inside the car and the blower fan can be operated independently of the AC.



## ROTARY RACING EVENTS

RX-7 racing will begin in February 1979 with the 24 hours of Daytona. This event and other racing news will be carried beginning in the next issue of Rotary Rocket. Coverage of these racing events will include reports by the actual drivers and individuals involved in preparing the cars. RX7 CA is excited by the potential which the RX-7 exhibits for IMSA racing and we are appreciative of the support we have received from Mazda Motors and the racing community. Rotary Rocket will keep you up to date on racing results and events planned in the future.

## ADVERTISING CLASSIFIED

Rotary Rocket accepts classified advertisements from its members. Noncommercial rates are 25¢ per word, with a twenty word minimum charge of \$5.00. Commercial rates are \$1.00 per word, with a twenty word minimum charge of \$20.00. Be sure to include name and address. While Rotary Rocket will use a reasonable discretion in accepting advertisements, we cannot assume responsibility for misrepresentation by the advertiser.