



THE FIRST CONVERTIBLE

By Curtis May

A long time ago, in a Galaxy far away, I dreamed of junking my Ford and getting a convertible—one of those funky little Italian or German jobs. A lot of years and cars have come and gone since that Ford Galaxy of my youth, but my ragtop fantasy has never come true. No doubt a number of you have wished that more than a sunroof could be removed from your RX-7 on a sunny summer afternoon.

No Walther Mitty is Al Dooley, manager of Alhambra Mazda in Alhambra, California. A long time sun and wind worshiper, Al is your basic Southern California convertible aficionado. Not that he really needs one since he already owns several, including a classic '74 Jensen Healey. Only one trouble—none is an RX-7.



You gotta realize that Al is one of the foremost RX-7 enthusiasts around. Since the introduction of the car he has gone through 27, or about one a month. Not really gone through, more like gone beyond. Al uses these cars, which eventually wind up in some lucky owner's hands, as his research laboratories on wheels. Al has tried out virtually every combination of wheels, tires, suspensions, sound systems, and customizations available for the RX-7. Along the way, he has learned what works, what doesn't, and what to try next.

It was inevitable that Al would eventually combine both passions. In fact, from the instant he first saw the RX-7 over two years ago, Al began sketching out his ideas and evolving the basic concept. Above all, he wanted a clean design with top quality all around.

To Al, clean design implies a roof that stows under a metal hatch, not a tonneau cover. Quality includes an all metal design—no fiberglass—plus avoidance of other common cost and time-cutting techniques. The only problem is finding someone with the knowledge, craftsmanship, and patience to bring the dream to reality.

For Al, the choice was obvious. John Petty was the man who could carry it off. Since his first RX-7 Targa conversion (*Rotary Rocket*, Vol. 1, No. 3), John has been chopping the roofs off a whole flock of Mazdas at his firm in La Mirada, Cali-

fornia while his brother Jerry sells Petty designed spoilers, whale tails, and a host of other accessories to RX-7 owners from the front office.

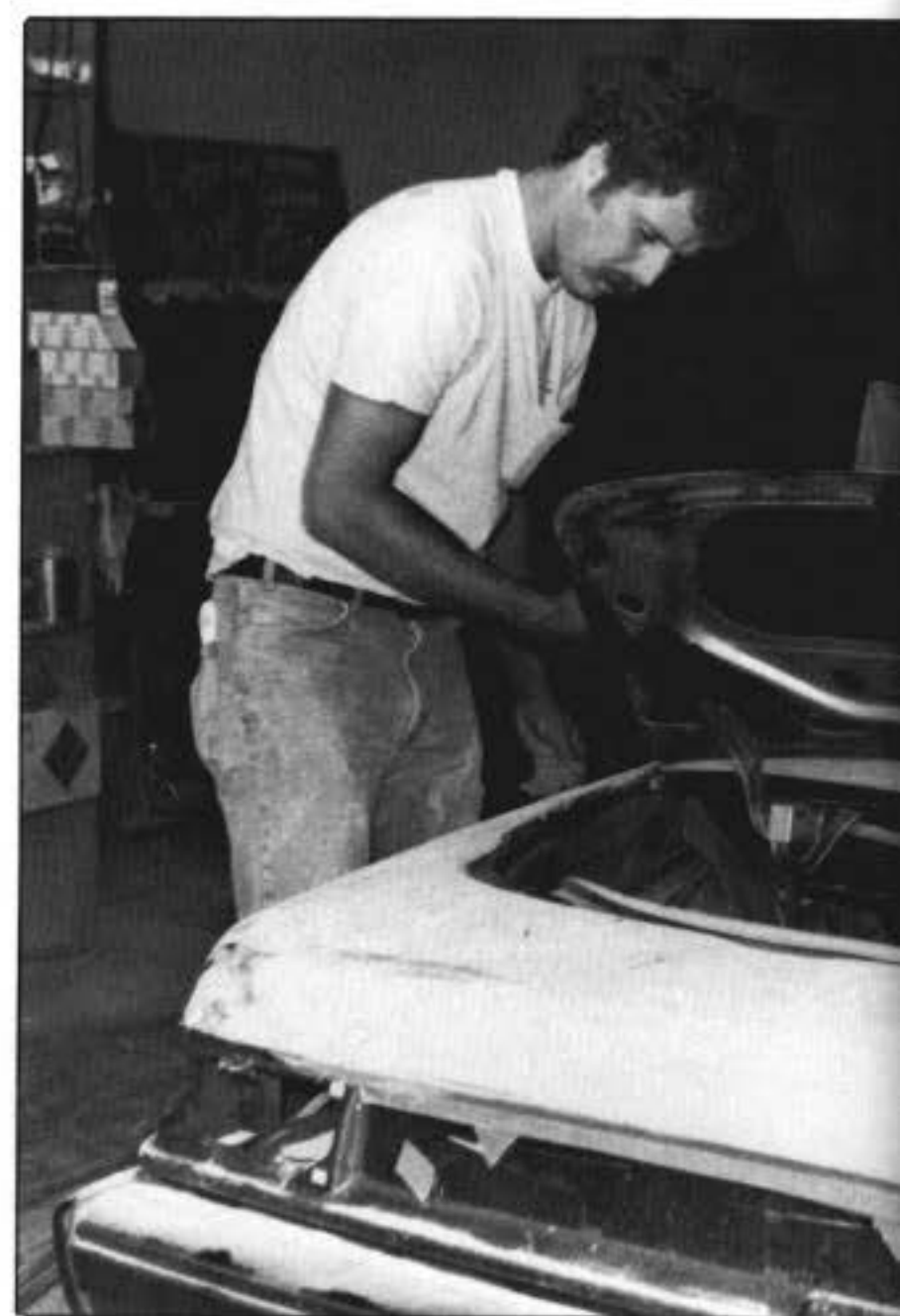
That original Targa conversion had put Petty Engineering on the map. Visitors from all over the U.S. and as far away as Europe and Australia have come to see his work and, in some cases, copy it. From our premier presentation, his Targas have appeared in many magazines including the June 1980 issue of *Esquire*. Perhaps it was time for John to move on and tackle a new project. In any event, Al, the patron, and John, the artist, joined forces. Damn the torpedoes and full speed ahead!

Unfortunately, full speed often resembled a turtle's pace. Making a coupe into a convertible is much more of a task than just cutting off the top, maybe more than either Al or John realized at the beginning. Modern vehicles derive most of their structural integrity from their unit body construction and a coupe like the RX-7 derives a significant amount of strength from its roof section. Remove that and all the beam, or bending strength, must come from the floor area. Thus, this area and the sides must be considerably beefed up with internal reinforcement or the beheaded RX-7 would assume the flex characteristics of a wet tortilla. While John had similar considerations in maintaining the structural rigidity of the Targa RX-7, the problem was compounded with

the convertible and the steps taken were far more extensive.

The following is an attempt to outline some of the steps involved in the bodywork without giving away all of John's trade secrets or delving into the intricacies of structural mechanics. To start with, the RX-7 conversion is more difficult than would be required for many cars since John is dealing with a hatchback. This means the entire top of the car has to be reworked. From the door back, the deck and trunk have to be fabricated and the top must fit down into the available space behind the seats with the hatch cover removed.

To begin, John performed a lobotomy on the new black 1980 RX-7GS delivered by Al. Not only the top, but the entire stock interior was removed. First task was stiffening and bracing of the car body. One eighth inch cold-rolled rocker panels were installed first, followed by an internal X frame inside the car floor constructed of square walled steel tubes running diagonally from the front cowl areas. These give structural integrity to the floor pan. In addition, 3/8" x 2" steel members criss-cross beneath the car floor. Further bracing is provided by a bolt-on center section, detachable for ease of



servicing the transmission and other components underneath the car. Provision is also made for a roll bar installation at a later date.

A two inch wide aluminum casting was made for the area behind the windshield to allow for attachment of the convertible top as well as to provide room for the sunvisors. An appearance brace was added on the door frames to provide additional support for the door windows and to produce a tight seal for the glass, preventing air and water leaks into the interior.

John has gone to a great effort in making the convertible leakproof. Driprails are welded in everywhere along the roof line. An inside thick rubber gasket provides a tight seal to hold water in the driprail trenches while drain holes allow the water to escape. With all the effort expended, John has no fear of either chassis flexing or leakage.

Next comes the matter of re-roofing. The top mechanism in this prototype is a modified Fiat 124 roof assembly. To attach this top mechanism, solid support structures were welded into the side wall behind the front doors. The convertible top is constructed of the same fabric as the top in the Mercedes Benz 450SL but



is two inches wider across. One advantage of the MB top, aside from appearance and durability, is that the inside serves as a headliner.

John had to fabricate both the top hatch cover and the trunk lid. Under strict orders from Big Al, fiberglass was verboten and therefore these lids had to be constructed of steel. The trunk lid begins 24 inches from the back edge of the RX-7 rear deck. The trunk depth is approximately one foot and the width is 49 inches. The spare tire can be removed through the trunk opening and a panel separates the trunk from the interior of the car. The electric hatch opener is now used to open the trunk from the front dashboard.

A second panel covers the ragtop, extending from just behind the seats to the front edge of the trunk lid. Both panels hinge to the center, opening toward each other. As mentioned, the rear deck cover behind the seats has been removed and the floor area fully carpeted. Not only does this space contain the top when recessed but it provides an additional storage area.

To put the top in position, the front hatch cover is opened, the roof pulled forward, and the hatch locked back into place. The front of the roof is connected

to the windshield brace using a pin and spring loaded latch mechanism like the Mercedes. The rear of the convertible top is then snapped down onto a rail on the hatch lid. John says that the car lends itself to the use of a SNUGTOP type of roof if desired as an alternative to the cloth top.

To finish off the bodywork, John molded in the rear recess area normally containing the license plate, and mounted a plastic reflective lens between the taillights. The license plates were dropped to the rear bumper and mounted between two bumper guards taken from a Mazda 626.

The finished product was then painted by John with his usual meticulous attention to detail. For this first convertible, John chose metallic black with gold highlights for the exterior color.

The above description does not do justice to the many months and late nights John spent in working and re-working the various parts of the conversion. As John says, "The easy part was cutting off the old top. From there on, nothing was straightforward."

Maybe the hardest part is over, but the convertible as shown here is far from finished—probably \$10,000.00 from being finished. Al plans to turn this RX-7 into a state-of-the-art design complete with a customized mahogany and gold interior, \$2,000.00 sound system, turbocharged rotary engine, upgraded suspension, Pi-


The finished convertible will be on display at the club convention in Long Beach on August 9-10. John Petty will also present a technical discussion on customizing. The next issue of Rotary Rocket will contain an article covering all the additional features to be incorporated into the convertible.

relli P-7 tires on Gotti wheels, and much more.

This "first convertible" will definitely not be the last. While Al has this one re-





served for his personal use and for display at auto shows, he is already taking orders for the production version. All future convertibles will be based on the 1981 RX-7, 5-speed or automatic, with a choice of custom colors and interiors. With each convertible comes a blue-printed parts and service manual to allow service at any Mazda dealer. But one thing is certain: each convertible will be state-of-the-art throughout. 



DRIVING IMPRESSIONS


Despite having made a number of visits to John's shop in La Mirada during the many months the convertible was taking shape, knowing his reputation, and watching the extensive structural modifications he was performing, I had my doubts. Not doubts that the convertible would look great, but concern over the eventual structural integrity of the car body. My familiarity with other such conversions of stock vehicles indicated that the majority never quite perform like the parent. Every bump tends to elicit squeaks and groans as protests against the chassis flexing that occurs. If these sounds can't be heard in such convertibles, that is usually because the wind noise is drowning them out. To be fair to aftermarket conversions, many factory produced convertibles exhibit similar problems.

The tenth coat of paint had just been

applied on the morning of our photo session and Al Dooley had his first chance to drive his new convertible on the way to the location. Following his arrival, my first indication that things might be all right was the fact that he could hear normal conversations. After everyone had finished admiring the cosmetics of the car, I naturally queried Al about my concerns. He beamed as he told me the car was unbelievably quiet with the top down even at speed. The ramblings of a proud parent or fact?

There was only one way to know for sure and the opportunity came two days later when Al gave me the keys. It wasn't hype. The car body is as quiet as the stock RX-7 and the chassis bracing was obviously doing what it was intended to do. Since the car had been fitted with a Quickor suspension, anti-sway bars, and Pirelli P-7s, it is difficult to compare han-

dling with the stock RX-7. Suffice it to say that the handling was controlled and predictable with a firmer ride than stock. Even aggressive cornering produced no signs of flexing. Wind noise is on a par with what you'd experience driving a stock RX-7 with the windows down and buffeting in the cockpit is noticeably absent. Rather than a gale, the interior receives only a gentle breeze. Credit for that must go to the aerodynamics of the RX-7 as well as Al's design and John's craftsmanship.

Unfortunately, I can't report on the top up sensations since the roof had not been installed. Knowing the results so far, my concerns about that have been considerably diminished. However, I now have an excuse to borrow the convertible again after the top is in place. 

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