

HISTORY OF THE "RAD CAR"

(Up-Date: August, 2021)

The first RAD (Recycled Automotive Design) car was a student Senior Project for 10 students in the 1990-91 school year. The students were in the Automotive Engineering Technology, Bachelor of Science program at Minnesota State University, Mankato (MSUM) (formerly Mankato State). Professor Kirk Ready was the faculty advisor for the project.

The RAD car was a bespoke design for a kit-car using a 1975 Chevrolet Monza (and other equivalent years and the Pontiac & Buick models) as the "donor car". The only parts from the donor were the front and rear suspension, the drivetrain, and the engine. The engine choices were a 4, 6, or 8 cylinder the first MSU car was a 350 Chevy V-8). The transmission could be a 4 speed or an automatic (the first MSUM Car was an automatic).

Once completed, the car was displayed in November, 1991, in the Concept Center at the SEMA Show in Las Vegas.

The next summer (1992) a workshop was held at MSUM where the plan was to build 12 more RAD cars. One was built for MSU to keep, and the other 11 were partially built and paid for by each of the students. Professor Ready also was going to build one. The bodies were sprayed-up in the same mold the first car used, and then the chassis were semi-mass produced. At the end of the two-week workshop, everyone had a body (fresh out of the mold), and a rolling chassis (just tac-welded together).

At the end of the workshop, people were going to finish the cars on their own. A few may have been finished (records are incomplete). At least three were taken home and never completed (including Professor Ready's).

The second MSU car, from the workshop, was completed in the summer of 1993, and used as a support car for MSU's solar car entry in the 1993 GM Sunrace that ran from Arlington, TX, to the Minnesota Zoo. It is still at the University.



First prototype for 1991 SEMA show (blue) & First 1992 Workshop car (red)

PROFESSOR READY'S "RAD CAR"

Jump forward about 29 years and Professor Ready had never done anything with his. So, he decided it was about time to finish the build. The first two photos show what he started with on May 16, 2021.



Bare chassis with final welding completed on the joints that connect the 86 separate chassis pieces



Stripped chassis up-side-down with the aluminum floor panels being fabricated from 1/8" aluminum.

The next steps are to mount the seats, figure out the steering and brake/clutch/throttle assembly, fabricate the interior panels, and design the engine and transmission mounts. A Mazda 13B rotary engine and a 5-speed manual transmission from a RX-7 will be used. Many more steps will follow. It looks like a three year build time. We'll see how that plan goes.