

INTERESTS & CARS RESTORED BY CLUB MEMBER DAVE HARRINGTON



Above: Backyard observatory and 16-inch telescope that Dave built in 1976.

Below: Dave's 1966 Chrysler New Yorker that he restored.



Dave was recruited to the club by his longtime co-worker at GM Research, Steve Rohde. Dave has restored two cars, and they are at opposite ends of the restoration spectrum. One is a 100% pure stock restoration on a 1966 Chrysler New Yorker, and the other is a full-race, modified 1984 Buick. He is an automotive engineer, and retired in 2002 from the GM Research Labs after 34 years there. His other hobby is amateur astronomy and telescope building (since 1954), and he and his wife chase total eclipses of the sun all over the world. The next one will be their 18th total eclipse since 1963.

The two cars are both one-owners, and are both big, heavy road cars. The Chrysler is 4312 lbs and the Buick is 3979 lbs. Dave bought the Buick Electra Park Avenue new in 1984, and Dave's Dad bought the Chrysler New Yorker new in 1966. When his Dad died in 1984, the Chrysler sat in the garage for 21 years (without moving) until there was sufficient motivation to start the restoration. This was done in conjunction with Dave's son (who is another automotive engineer).

CHRYSLER RESTORATION

After 40+ years as a Michigan car, and sitting motionless for 21 years, nothing worked or moved due to rust and varnish coatings ... brakes, wheel cylinders, master cylinder, fuel lines, transmission, engine, etc. Everything had to be replaced or rebuilt, even the floorboards. It took about 3 ½ years. It took a while to track down some parts, and stock wheels and hubcaps also had to be found. (Dave's Dad had got rid of them in 1968 for chrome-reverse wheels; remember those?) The interior required a new floor, new headliner and cording,

new door panels, armrests and carpeting. The car is painted in the factory original color, with clear-coat.

TELESCOPE BUILDING & ECLIPSE CHASING

Just for general information, here is the backyard observatory and 16-inch telescope that Dave built in 1976. It still sits there, although the lights of Troy are much brighter now than nearly 40 years ago.

Dave has been to 17 total solar eclipses in locations such as Bolivia, Turkey, South Africa, Tibet, Greece, Columbia, China (the Gobi Desert near Mongolia), Senegal, Boswana, Zambia and Tanzania. Coming up later this year on November 14 is Australia. Don't be puzzled if you have never seen a total eclipse of the sun, with the sky turning to night and the stars coming out, as there has not been one in North America since February of 1979. In general, total solar eclipses do not come to you, you have to go chase them around the world. They only occur in a very narrow path, and you have to make an effort to get into that path. Even the last one here in February of 1979 grazed the northern border of the USA and had to be observed in northern Manitoba. Dave was there, but it was 12 below zero and his cameras froze! The next total eclipse in North America will be on August 17 of 2017 (after nearly 40 years without one here), and it will be a spectacular event, crossing the USA from coast-to-coast in mid-summer. It will be a much-hyped event, and many millions of Americans will see a total solar eclipse for their very first time. That will probably include many of you who are reading this article. You will never forget it when you see it.

BUICK RESTORATION

The second restored car is a 1984 Buick Electra Park Avenue, which is the last of the heavy, big-boat, rear-wheel-drive cars. Dave bought it new and hung on to it for that reason. This restoration was

somewhat tough because, after 25 years of everyday driving in Michigan, there was obviously rust galore. It would be an easier job to restore an Arizona car instead of a Michigan car, but what can you do? One major shock many of you have probably experienced is when you peel back the carpet and find that there are no floorboards left, just a stiff carpet! The restoration took about six years, and included a new, supercharged big-block engine. The old stock engine was a 307 cubic inch, low-power V-8 that was very tired after 200,000+ miles. It is obvious that a complete new fibreglas floorboard had to be constructed, with steel reinforcing straps under the floorboard. It also needed new inner fenders, dashboard, headliner, bumpers, fuel lines, brake lines and a new gas tank, in addition to a new engine. All Park Avenues came with vinyl tops, but Dave had this removed also. As many of you know, these restorations are money pits.

It was decided to build a new 8.0 liter, full-race, supercharged engine, with the block boring, decking and head rework being done by another close friend and GM retiree, Tim Parkham, who has his own engine rebuilding shop. Tim also completely rebuilt the 1966 Chrysler 440 engine in the other car. The race engine build took about 5 months, and the photo shows Dave on the happy day when the engine was done. It turns out that is not easy to find race parts and a blower intake manifold for a Buick V-8. For a big-block or small-block Chevy, Mustang, etc, no problem. Even for a 455 Pontiac, but not for a Buick 455! The blower intake manifold had to be built to special order (ouch). Dave has his hand on it in the photo (so no one will steal it).

The starting point was a block from the largest and most powerful engine that Buick ever built ... a 1970 Stage-1 455 V-8 (7.5 liter) that made 345

horsepower stock and 510 ft lbs of torque in the 1970 Buick GSX. After some luck in finding one (in Romeo, thanks to Tim), the engine was stripped, cleaned, bored and converted to full race with racing pistons, roller racing cam with special supercharger grind, larger valves, 3 ½ inch exhaust and a blower. The compression ratio was necessarily reduced from 11:0 down to 8.1 because of the blower boost. The supercharger is a new 8.71 unit from Hampton blowers in Downey, California. On an 8-liter racing engine at 12 psi of boost, this should give about 720 horsepower and 740 ft lbs of torque according to Don Hampton.

In preparation for installing the engine, the very grungy and greasy engine compartment and frame were completely cleaned, reworked and clear-coated, as shown in the photo. 90% of the old wiring was not used, and it was rewired for the MSD-blower ignition control system. This system is programmable, and has a 3-bar MAP sensor. The two-battery setup shown in the photo (one left and one right) was installed to accommodate the current draw of the performance electric fans, water pump and transmission cooler fan.

All of the usual comfort items were removed to have a cleaner install and engine compartment. Thus, there is no heater, heater hoses, cruise control, AC compressor, AC hoses, AC condenser, etc. Many people at car shows last summer asked Dave ... "why did you put this engine in a big, heavy four-door sedan?" He could only answer "because it was there".

The car turns out to be a great conversation starter at gas stations. Every time Dave stops for gas a crowd gathers to look at it. This is quite often, as it only gets about 4½ miles per gallon!



A tremendous amount of effort went into transforming this 1984 Buick rust bucket into the machine it is today!

