

CADILLAC CONVERSION



Text and Photos by Fred Fisher

CUSTOMERS of Smith and Castillo's Douglas Service Station get a real surprise when they ask for a push start. A rapid push-off with none of the usual bumping or jerking caused one customer to comment favorably and he was allowed a look inside the cab and under the hood. After a short test ride he was so impressed he called our attention to this unusual engine and transmission conversion.

One day, soon after, we dropped by to see this truck. With the exception of Cadillac hub caps and three chrome outlined air vents in the hood the external appearance of the vehicle was just as General Motors had intended. However, the resemblance to a Chevrolet truck ended rather abruptly when we began investigating its unusual equipment.

Under the hood we found a 1952 Cadillac engine coupled to a modified Hydra-Matic transmission. Power is supplied through a '48 "60 Special" drive shaft to a 1942-48 rear-end equipped with '39 Cad brakes.

Two 22" steel pack mufflers help to lower the engine exhaust note to an acceptably legal level.

Eugene Smith, the owner, claims that his original purpose in making the installation was to reap the benefits provided by the automatic transmission and extra horse power. Little did he realize that before completing the job he would have over \$1600 tied up in Cadillac parts not to mention the many hours of labor involved. "Gene" and his partner operate a

repair business alongside their service station and here they worked in spare time and on weekends for one month converting the truck to its present state.

Having previously owned a '52 GMC pick-up which was practically a duplicate of this Chevy (before modifications), I was eager to take the truck out for a test hop.

Getting in, I noticed that the dash was stock except for the replacement of the oil pressure gauge with one from a GMC and a 110 mph Buick speedometer. As I placed the selector on the '49 Cad steering column into the spot marked for Lo range, Gene explained that the transmission had been modified so that full depression on the throttle automatically shifted the transmission into Lo even though the selector was placed in the Drive range position.

So, getting on the throttle fairly hard we experienced that feeling denoting excessive wheel spin and once the tires got a good bite on the pavement we got underway unlike any truck I had driven previously. Shifting from Lo to second speed occurs at 23 mph with the other shifts following at 38 and 70 mph. A control cable permits locking the Hydra-Matic in third gear for hill country or in heavy traffic conditions where it is really needed. This feature is very useful when towing a mobile home. This cable controlled mechanism, designed by Smith and Castillo, eliminates much of the "monkey motion" associated with some of the accessory devices. With

their set-up the Hydra-Matic becomes as versatile as the dual range models.

While driving down a shady side street Gene told me that he really gets a lot of pleasure out of this truck on his hunting and fishing trips. For these, he adds a "house" onto the pick-up bed which has all the comforts of home.

Acceleration performance of the truck was at least equal to if not a shade better than the '53 model Cadillacs. Approximate weight of the vehicle is nearing 4200 lbs. and Gene has a few other accessories to be installed. Although much of the weight is on the front wheels, steering is not particularly hard except when making 90 degree turns at low speed. This difficulty was undoubtedly contributed to by the large tires mounted on Cadillac wheels.

Retention of full leg room in the cab necessitated locating the engine well forward in the chassis. This extra weight on the front wheels makes the vehicle unsuitable for road racing and high speed cornering but then it was not built to participate in any kind of competition driving. Since the owner doesn't intend entering the machine in any road races or engaging in any fast or twisting mountain road climbing, he feels that extra front end, or even overall weight, is not of any great importance so long as the high speed roadholding on straight roads is not impaired materially.

Stopping is smooth and easy with the standard Chevrolet master cylinder supplying pressure to the '39 Cadillac brakes. My personal feeling is that stiffer front shocks would eliminate some of the excess front-end dipping on sudden stops. However, this seems to be a common failure on most of the late model automobiles through all price classes.

The truck certainly performs like a hop up, yet with engine performance that is absolutely smooth. The machine may be idled down to a few miles per hour with none of the bucking and jerking so characteristic of hopped-up production engines. Mileage tests, made with hard driving, showed that the new installation was equal to the old Chevrolet in that about 16 m.p.g. was tops.

While measuring the Cadillac engine along with the engine compartment of the truck, it was found that the left head and rocker cover would not fit into position as long as the steering column and gear box remained in the stock location. A Cadillac steering unit was mounted into a notch cut into the frame, so that the steering was moved over approximately 3 inches for clearance. In order to retain the original structural rigidity of the frame, the frame was boxed in around the new installation. In addition, Cadillac idler arm assemblies were attached to each side of the frame, and modified Cad tie rods installed. The whole arrangement is done in a very neat manner and

with no lost motion in it is a tribute to Gene's efforts and workmanship.

Once the engine was installed there was no room for the horns. When looking under the front of the car, an imposing pair of air horns stick their noses between the front suspension crossmember and the radiator frame, a neat place for hiding them. An air reservoir mounted under the floor of the cab provides motive power for these powerful units. Anyone towing a trailer or often called upon to push other cars will realize the value of these.

Some difficulty was experienced with the Hydra-Matic in trying to get it to down shift properly, even though stock Cad parts were used. A small arm was bolted to the Cad four barrel carburetor to permit radius adjustment, and although the geometry of the assembly was not just as General Motors intended, it works smoothly.

Gene makes no excuses for the chrome "decorations" on the hood panels. The huge engine so filled the small engine compartment as to cut down the airflow through the radiator. A cooling problem had arisen and Gene spent a few restless nights before deciding to cut the holes in the hood and then camouflaged them with the chrome rings shown in the photos. Evidently the airflow is right as Gene has experienced no over-heating problems to date.

Looking under the front end again we find that a '39 Chevrolet coil spring assembly has been carefully notched to fit the frame and then welded into position. A wheel alignment correction of only one degree was required after the installation—proving that careful workmanship always pays off!

After fitting and trying various makes and models, Gene found that the Cad backing plates were interchangeable with the '39 Chevy and that the drums and hubs mounted bearings identical to those on the '39 Chev. A 1/8" spacer was placed between the spindle and backing plate and then the stock Cad steering arm was bolted right into place. Parts interchangeability has been a great help in the modification of this truck and can be of equal assistance to anyone with the time for experimentation and research.

An extra fifteen gallon capacity tank was installed just ahead of the rear bumper, eliminating the need to purchase gas while away from his own pumps. The filler neck for this tank is found in the right rear fender. Two electric fuel pumps provide fuel to a reservoir, which in turn supplies the carburetor. No starvation here, unless you are out of gas.

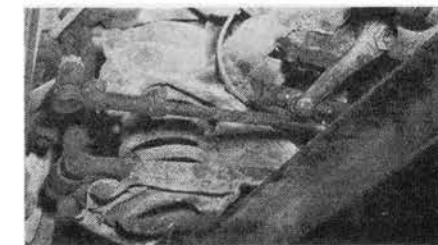
After installing the engine it was found that the Cadillac front springs, which had already been installed, were not adequate for the additional weight. Casting around for a substitute it was found that Hudson Hornets were equipped with a 6" diameter coil spring on the front. To install these meant that the top and bottom

spring perches had to be enlarged to obtain proper operating clearances. The crossmember was cut out, boxed in, and the shock absorber mount on top ended up in its stock position.

Stock Chevy shocks were used at the rear-end and a Hudson sway bar was added to eliminate the fender and tire rubbing tendencies caused by the wider tread of the Cad rear-end.

We will not hazard a guess as to the probable top speed of this vehicle but Gene says that it will keep up with any stock '53 Cadillac. Our *around town* and *open road* tests showed that there is no set cruising speed. It seems to move effortlessly at all speeds.

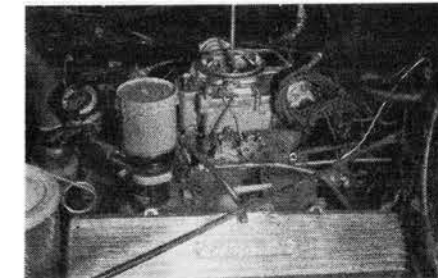
Congratulations, Mr. Smith, on your neat pick-up and its commendable all-around performance.



CHEVROLET front suspension has replaced regular truck axle and springs



PARTNERS discuss advantages of Cadillac's latest four throat carburetion



INSTALLATION shows oil cleaner and the use of Edmunds rocker arm cover

UNDERCARRIAGE shows Hydra-Matic transmission and dual exhaust pipes

