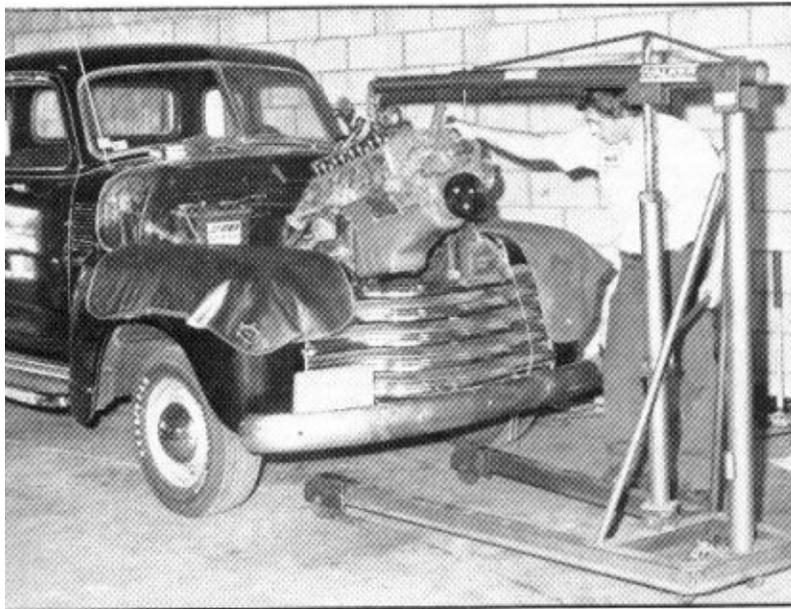


V-8 JUICE FOR YOUR STOVEBOLT



by Pat Ganahl

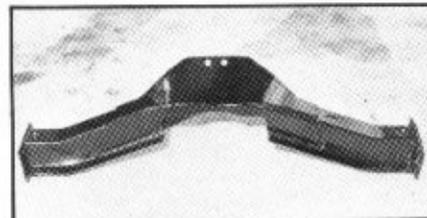
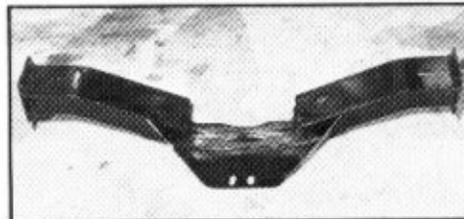
Those of you who have kept track of my personal hot rodding exploits over the past few years, and who, therefore, know my penchant for six-in-a-row Chevy motors, probably aren't going to believe this — but I have just installed a V-8 in my '49 Chevy pickup. Why? Believe it or not, I am planning to substantially increase my fuel economy over the six cylinder's 14 mpg; and I finally got tired of shifting gears. Not only is this my first car with a V-8 engine, it's the first I've owned with an automatic transmission!

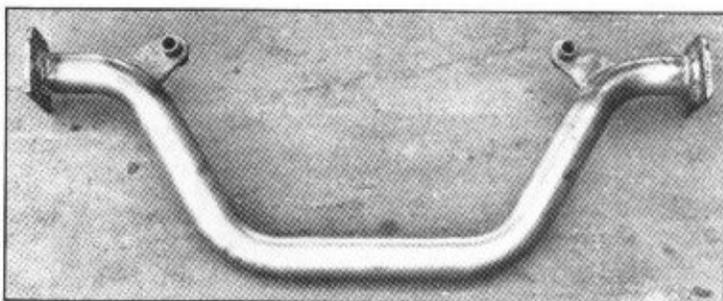
Some of you might think I'm overdoing things a bit by devoting four pages of the magazine to this momentous conversion. But the number of letters we receive annually to our Shop Manual

LEFT—Those who know our editor are going to find it hard to believe that he swapped the six cylinder in his '49 Chevy pickup for a 283 V-8 and automatic. But here's Terry Berzenye of Specialized Auto slipping in the living proof.

BELOW—To get clearance for the automatic under the truck's flat floor, we cut center of stock crossmember, welded on 1/4" plate brace, formed new trans mount.

Ganahl put a smallblock and a Turbo 350 in his pickup, and the swap is similar for most middle-aged Chevis.



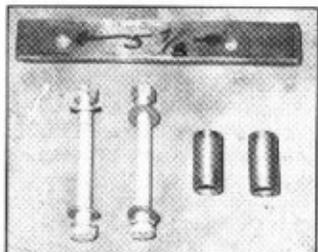


ABOVE & LEFT—"Saddle" type engine mount was cut to fit between frame rails, pieces of 1/4" plate welded on ends, then positioned and drilled for bolting to frame.

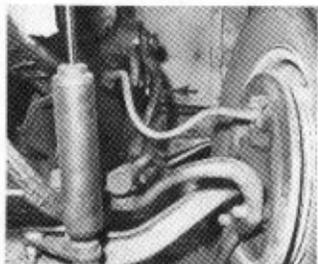


RIGHT—Stock bellhousing crossmember must be cut away (arrow). Thus, crossmember engine mount is preferable.

BELOW—The steering box must be moved 1-1/2" to the left. Terry used a 1/4" plate and two small tube spacers.

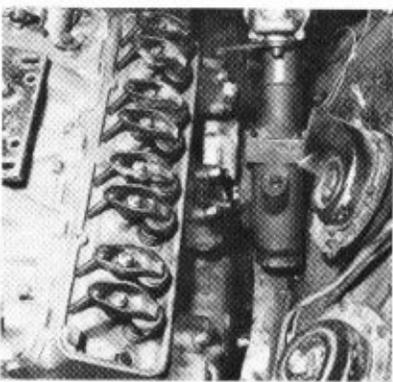
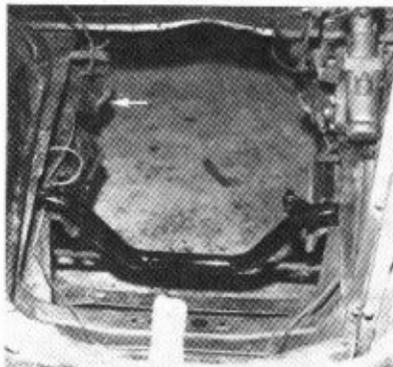


RIGHT—Plate is welded to top of frame rail. Steering box bolts to it and through tubes with longer bolts.



ABOVE—Steering arm had to be heated and bent slightly inwards to compensate for move. Setup works perfectly.

RIGHT—Then we used a 307 Chevy smog-type header, with indentation right next to steering box. Yep, it's tight.

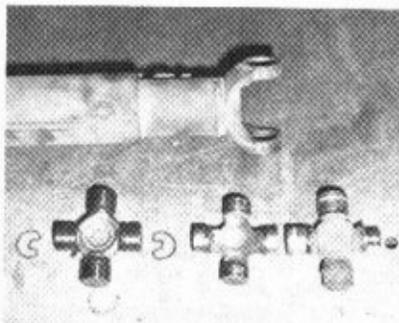
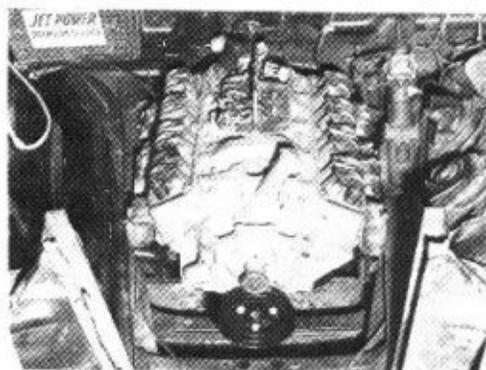


column asking about these pickups, and this swap in particular, is staggering. Unless you've got an old truck like this — or at least have an eye for them — you probably have never noticed just how many are currently on the road (or close to it in farmer's fields). They sort of blend in with the scenery. But literally thousands of them are still rattling around and a very large percentage of these are in the hands of rodding enthusiasts. Chevrolet (and GMC) produced this model of pickup from 1947 through 1954 in both half ton (short bed) and 3/4 ton (long bed) versions. The GMC's had a slightly different grille and hood, as well as their famous "Jimmy six" engines. The Chevies used the familiar 216 splash-oiler and the later 235 and "Job-Master" 261. There have been rumors of a few 265 V-8's being installed in some later '54's or perhaps some very early '55's (retaining the '54 bodystyle), but all the rest had sixes. They also had closed drivelines, which means that the transmission, driveshaft, and rear end must be swapped along with the engine.

When I first built my '49 half-ton I transplanted the entire driveline, electrical system, cooling system, etc., out of a '62 Chevy six-cylinder, three-speed, four-door sedan into the pickup. For that swap I used the stock pickup front motor mount, tacked the '62 "side mounts" to the frame rails for lateral support, and found that the transmission fit onto the stock rear crossmember after the bolt holes had been elongated about 3/4-inch. I cut all the coil spring mounting bracketry from the '62 rear end, fashioned a pair of spring perch pads from 2-inch channel stock, removed two short leaves from each rear spring, and bolted the rear axle in with '57 Chevy U-bolts. I then went to the junkyard to find a driveshaft that would fit, and I'm pretty sure the one I got was of '55-'57 Chevy passenger car variety (it wasn't marked).

Since all pre-'55 GM products used six-volt electrical systems, you will have to convert to twelve-volt for a V-8. As I mentioned, I installed the entire electrical system out of the '62 Chevy: wiring, gauges, switches, battery, horns, radio, etc. And after hassling with several generators (one of which gave up on a Sunday morning in somewhere, east Texas) I later bolted in a '63 alternator, bracket, and regulator (see SR, March '75). If your six volt wiring is serviceable (that's doubtful after twenty-five years), you could use it with twelve volts, as you can the stock light switch, ignition switch (with starter button added on early models), brake light switch,

BELOW—The engine sits right in the middle, and clearance between right exhaust and frame is minimal. With custom headers, engine could be moved slightly to passenger side.



ABOVE & LEFT — We're not giving you any measurements because there are several variables involved in this swap. However, I found that a '70 Olds Cutlass driveshaft was just the right length, and I mated it to the '62 Chevy rear end with a combination U joint. Once engine and rear are mounted, you can probably find a driveshaft to fit at the junkyard.

etc. You will have to change all light bulbs, fuel gauge and sender, ammeter, fuses, all accessories, etc., to twelve volt units. For more details on converting any car from six to twelve volts, see Frank Oddo's story in the Feb. '76 issue.

I also mentioned that I had installed the cooling system from the '62 car into the pickup, but I later found this was a mistake. In fact, the overheating was my first clue that the six cylinder really wasn't the optimum engine for the bulky pickup, especially with its heavy steel camper shell. The engine with the same radiator and fan never overheated in the car — so why wouldn't it work in the truck? It took a little head scratching, but I finally figured it out: that little 235 engine (especially with the passenger car rear end gears) was simply working too hard lugging the pickup around. That also meant that it wasn't working efficiently, which in turn meant poor gas mileage.

The engine I chose to replace the six is a 1968 or so Chevy 283. Actually, we built it out of bits and pieces after turning up a couple of cracked blocks. It is of the side-mount variety, however, which is what I wanted since I already had one of Advanced Racing Transmission's (Ontario, CA) "Bulldog" Turbo 350 transmissions to bolt behind it. With either of the aluminum-cased GM automatics (the Powerglide or the T350), and especially with the longer Turbo 400, we recommend "side-mounting" the engine to relieve the stress that earlier-type front mounts place on the bellhousing.

Since our plan is to carry out a number of modifications on this engine in hopes of significantly increasing fuel economy as well as performance, I began by turning it over to Jim Hayworth for a complete rebuild, including a crank kit, a .030" overbore, new pistons, recon-

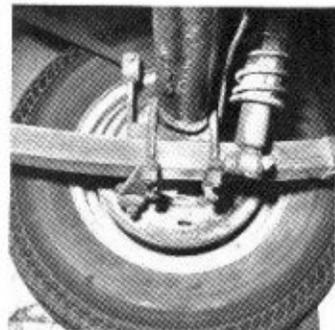
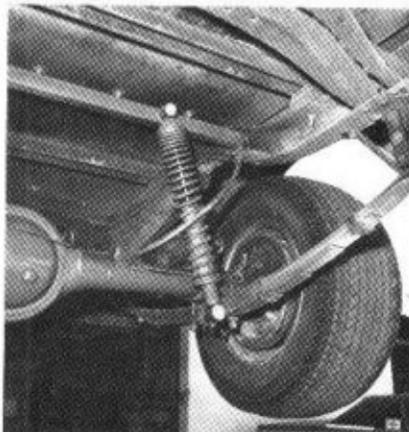
ditioned early (pre-smog) heads, etc. And, so that we wouldn't have to take too much apart again later, we also installed one of Iskenderian's Mile-A-Mor camshafts along with a set of Isky's high performance hydraulic lifters. Everything else inside the engine, at this point, is new but stock. The only other modification so far has been the addition of one of Holley's new Street Dominator intake manifolds along with their new "baby spreadbore" Model 4360, 450 cfm four barrel. The combination seems to be working quite well already (mileage has increased about 2 mpg, and performance is significantly improved over the old six) but we plan to try all sorts of combinations in the near future to see just what works the best.

With the new engine and transmission ready to go, I put them in the back of the truck and drove over to Terry Berzenye's Specialized Auto (1075 N. Harbor, Anaheim, CA) to let him make the swap. Now, I have seen literally dozens of Chevy pickups with V-8's in them and

each conversion has been done in a slightly different way. What we show here is the way we installed a smallblock in my pickup, to meet my needs. And I will try to explain why we did certain things the way we did.

There is only one real problem area in the whole conversion: the steering box. It needs to be moved approximately one and one-half inches to the left to allow clearance for the wider V-8. Moving the box too much would alter steering geometry, so we kept it as tight as possible; and to facilitate the squeeze we installed a Chevy 307 "smog" exhaust manifold on the left side of the engine, which has a neat indentation right where the steering box is. Another solution would be to use the early 265 front-exit exhaust manifold.

Since the V-8 is shorter than the six, you've got plenty of fore-aft leeway in the engine compartment. However, if you were to mount the transmission to the stock crossmember, you would find little distributor clearance at the firewall and far too much between the



I mounted '62 Chevy rear with pads cut from 2" channel. Axle must be located approximately 2" back from stock centering pin (arrow, above). Drill hole in axle pad accordingly.

fan and the radiator. Also, with the automatic trans, floor-to-bellhousing clearance must be considered, and I didn't want to alter the truck's flat floor. Therefore, Terry reworked the trans-mount crossmember to lower the mounting point about three inches and to move it forward approximately the same amount. To hold the front of the engine, he chose a cradle-type tubular crossmember, cut to fit between the frame rails with pieces of quarter inch plate welded on the ends. This way the engine can be positioned in the truck, lined up, and then holes can be drilled through the crossmember ends and the frame at the same time. This saves a lot of time trying to get measurements just right for weld-in mounts, plus it allows removal of the entire crossmember later if necessary.

Since I already had the '62 rear end in place, all we had to do was find a driveshaft to fit. After some junkyard searching, we found that a shaft from a '60 Olds Cutlass was the right length, and we adapted it to the Chevy rear end with one of Motor Master's combination U-joints (available from Driveline Specialists, 7535 Acacia, Garden Grove, CA 92641).

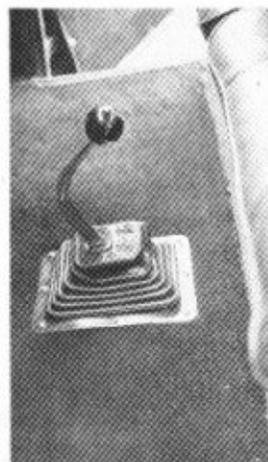
Final hook-ups included fabricating some throttle linkage, mounting the alternator to clear the fenderwell, hooking up transmission linkage, and attaching all wires, hoses, etc. I used some bits and pieces to make throttle linkage since I wanted to retain the funny-looking stock gas pedal. A '56 Chevy firewall throttle linkage could be made

to work easily, or one of the many cable-type throttles could be used. The alternator bracket is a 3/16-inch plate which attaches to the front two intake manifold bolts and has the stock mount bolted to it. If your stock radiator is in good shape, it should handle the V-8 easily.

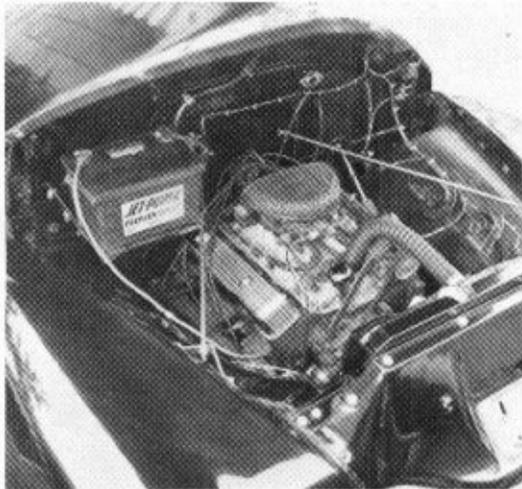
I had had a special 5-row unit built to cure prior overheating, and it mounts in the stock location. Since the V-8 is shorter than the six, you'll need a fan spacer. And I installed a flex-fan for added economy. The cooler for the automatic transmission mounts behind the grille, in front of the radiator. And, finally, if you're putting a Turbo (350 or 400) into a pickup or anything else, I would strongly recommend Hurst's recently re-released Auto Stick I lever-

type floor shift. It's about as rugged and as uncomplicated as you can get. Of course (isn't it always this way?) to make it fit in my truck, I had to raise the shifter bracket about four inches, tilt it forward about thirty degrees, and then lengthen the shifting rod to compensate. But now it works fine.

In fact, the whole truck works just fine. I still find myself fishing for the clutch pedal once in a while, but I don't miss the gear shift a bit. And, as I said, I have already noticed a marked increase in fuel economy. Future plans include such things as electronic ignition, headers, low-restriction exhaust, perhaps some other carbs and manifolds, and maybe even some "street" head porting. Stay tuned for further developments. 



ABOVE—To operate my Bulldog Turbo 350 automatic, I chose a Hurst Auto Stick I rod-type floor shifter. With the transmission set so low beneath the high cab, however, I found I had to raise the mounting bracket about three inches.



Ready to roll with V-8 juice! The late model 283 is fitted with Isky's Mile-A-Mor cam and Holley's Street Dominator manifold with a 4360, 450 cfm four barrel. Our intention is to maximize fuel economy through further modifications, so be watching for more.

