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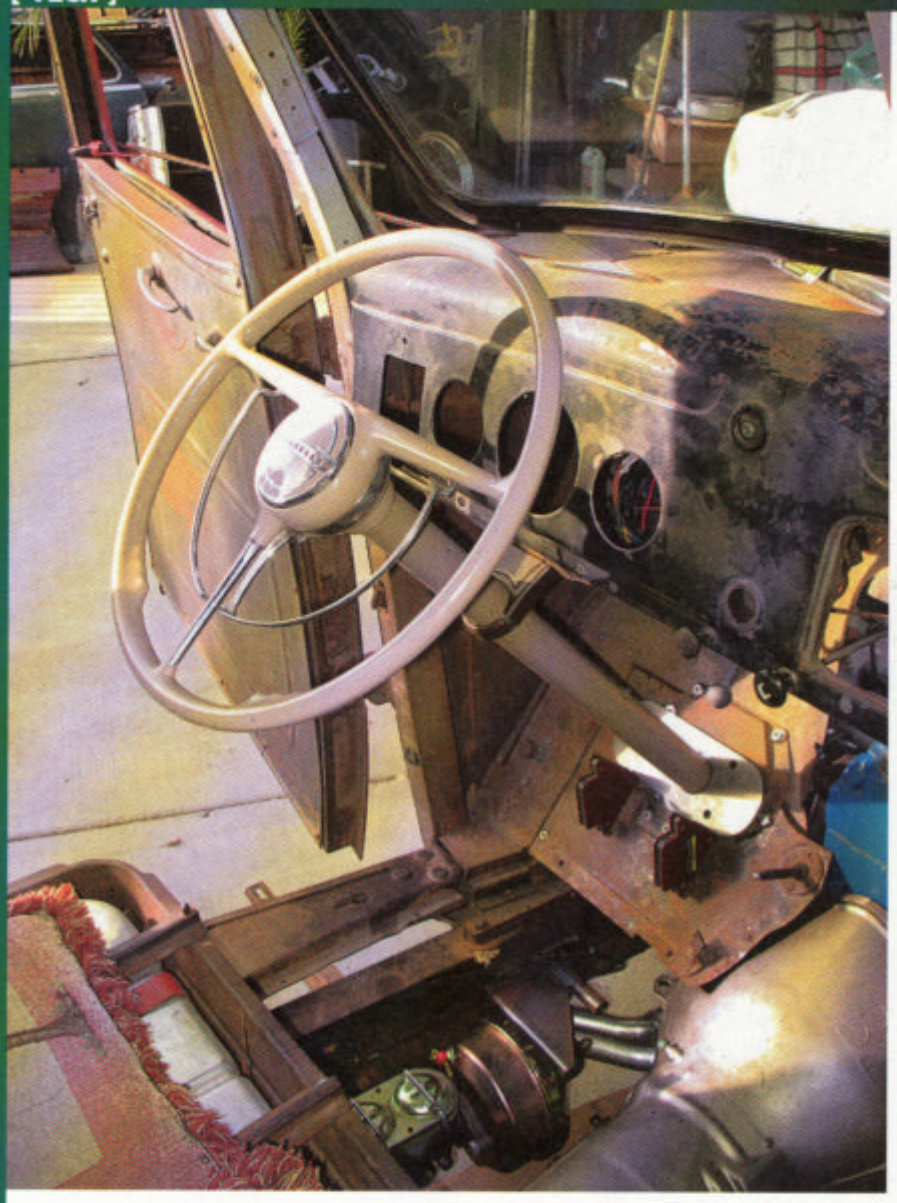


THE DIRTY THIRTY (NINE)

Steering The Old To The New

BY ROB FORTIER

Ever get the feeling that modern technology is getting to the point where it's nearly impossible to enjoy some of the more nostalgic things in life ... or your truck, to be more specific? While there's absolutely nothing wrong with bringing an antiquated pickup up to date in the way of certain mechanical aspects—drivetrain, brakes, and steering in particular—there are many of us, myself included, who prefer to keep a certain amount of vintage appearance intact. By performing most upgrades, you sometimes take the risk of losing more of your truck's natural appeal, especially when it comes to the steering. Or do you?

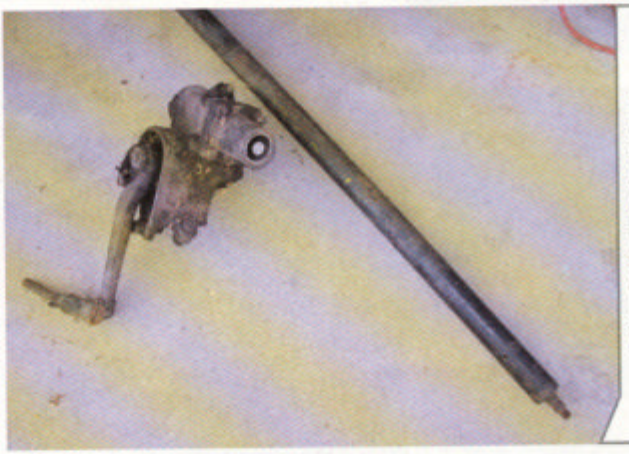
After I'd hauled ol' Dirty home from Total Cost Involved, I was left with a tough decision: how to make a modern rack-and-pinion steering unit work with the original equipment from the cab back (or in my case, later '40s components)? From the rack back is not a problem, as I obtained the needed U-joints, intermediate shaft, and shaft support bearing from Flaming River. It's from that point on that had me scratching my head—do I just cut the column and come up with some sort of homemade retainer/bearing setup or bite the bullet and buy a new steering column? Well, because I was dead set on using a '40 Chevy DeLuxe wheel, which uses an integral bell, I didn't want create more headaches trying to mate it to a new column. So it was clear I had to improvise ... or so I thought.

Some time ago, there was an item on the market that allowed you to modify an OE '40s-50s column (after separating it from the stock steering box) to be used with a rack or later-model steering box. Unfortunately, I couldn't find

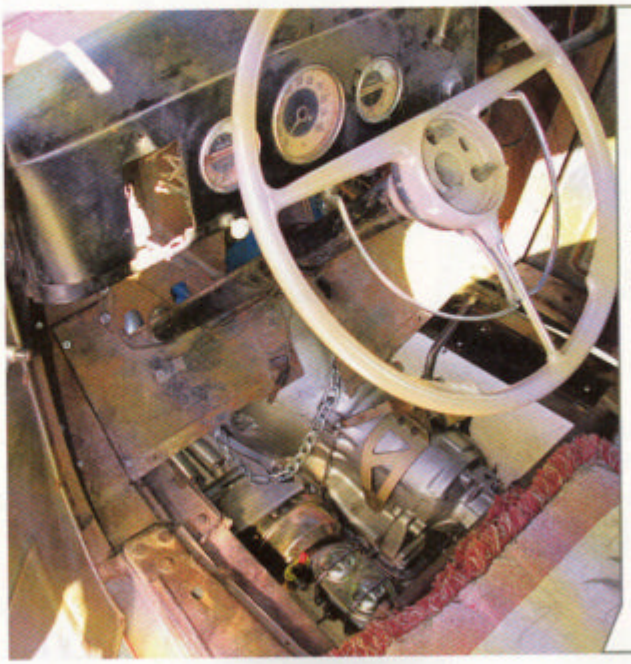
I won't lie, there's nothing wrong with a new aftermarket steering column—but what to do if you'd prefer to use an early OE column with upgraded steering? With Flaming River and CPP, you can literally save your old column.

what I was looking for. But someone mentioned that CPP had recently taken the idea and come up with an improved "column saver" kit, which was available in three diameters (1 ½-, 1 ¾-, and 2-inch), giving it more widespread application for early cars and trucks. Suffice it to say, I wasted no time further investigating this. And the rumor turned out to be fact, as CPP does indeed offer a machined aluminum collar/bearing kit that's easy to install and works as good, if not better, than the finished product looks. To top it all off, you don't need to have access to anything more than simple hand tools in order to make it all work. In other words, if I can do it with professional results, you can too.

So, let's get down and get Dirty steered in the right direction! **CT**



In the case of the '39, using the stock column wasn't an option due to its smaller diameter (CPP's smallest Column Saver is too big), but that wasn't an issue as I'd planned to use a '47-54 column anyway. As you can see here, first step was to sever it from the box with a chop saw.



I was able to re-use the stock column drop, and with a newly acquired '40 Chevy DeLuxe wheel, I mocked everything up in the cab and started taking measurements, including my own ... in relation to wheel placement and angle, that is.

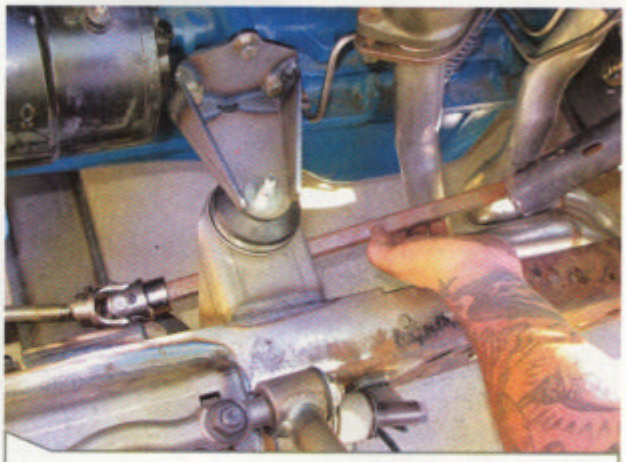
sources:

FLAMING RIVER
866-798-8064
www.flamingriver.com

CLASSIC PERFORMANCE PARTS
800-830-1724
www.classicperform.com

TOTAL COST INVOLVED
800-984-6250
www.totalcostinvolved.com

Once the column was fitted from the firewall back, the exact location of the drop was marked accordingly for future reference (and also because without proper support down below, things tended to move around without warning!).



To set the correct angle and determine how much to trim the column tube back, I slipped a Flaming River 9/16-26x3/4DD joint on the rack output shaft with an oversize piece of DD intermediate shaft held in place. This also tells if there will be any interference between the rack and column, which luckily there wasn't.

With the CPP kit, you need no less than 2 inches of steering shaft extending beyond the column tube, so I decided how far I wanted the column coming through the firewall and went from there.

Everything was once again removed from the truck and the shaft pulled completely from the column. The upper column bearing (shown) should be replaced if necessary, or in this case, greased properly at this point, otherwise it'll affect future measurements negatively if done after the fact.

The column tube needs to be cut as squarely as possible, and once cut, make sure to deburr the opening as well as thoroughly clean the inside of the tube beyond where the Column Saver will go.

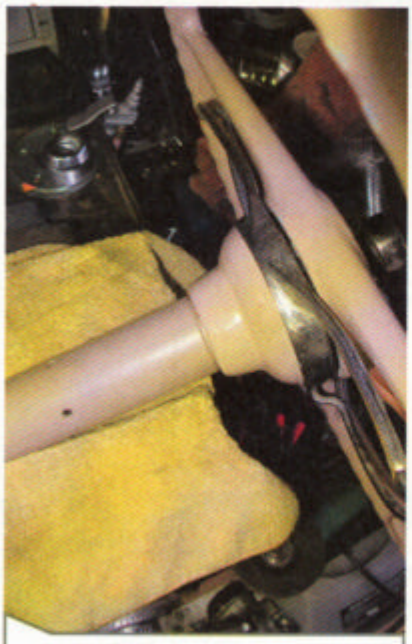
I reinstalled everything and hung them back in the truck. Using an existing slotted hole in the tube for the setscrew, the Column Saver components were loosely installed for the first time and everything checked out good so far.

Before cutting the shaft to length, the steering wheel needs to be mounted and have around an eighth inch of play between the bell/hub and column. Having done that, I proceeded to measure and mark the shaft (notice that the lower shaft collar is in the correct location as well).

You don't need a machine shop to modify your column shaft—as long as it's not hollow, you can hand-machine it into a DD with just a couple good files and some masking tape for reference.

Which is exactly what I did. Keep a U-joint handy, using it to gauge progress so you don't file off too much material and end up with a loose fitting.

In order to allow the Flaming River U-joint setscrews to do their job, the surface to which they set should be slightly "indented." I did so after mocking things up and clocking, or phasing, the U-joints correctly so I wouldn't end up drilling extra holes.

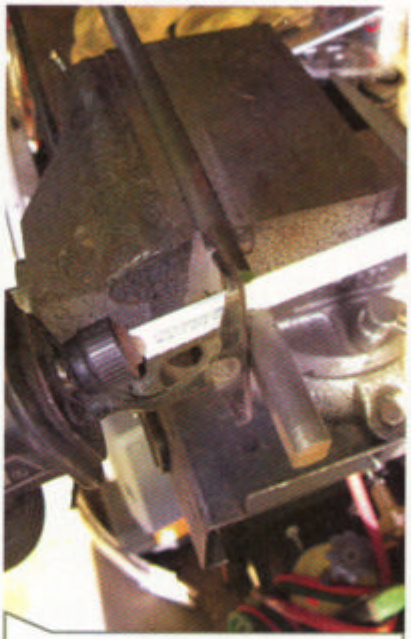


Now that the steering shaft had been cut, machined, and drilled accordingly, the steering wheel was reinstalled and the two slipped back in the column. (Here's where you could get in a little trouble if you didn't already address the upper bearing situation.)

With just the billet column adapter portion inserted into the column, I marked the steering shaft right where the bottom edge of the adapter was—this will tell me where to locate the lower steering shaft collar, which will in turn dictate where the upper one goes.

Next, the steering wheel was removed from the shaft in order for the Column Saver to be completely installed—which requires the shaft to come out from the bottom of the column.

Now the fully retrofitted column assembly (wheel, shaft, column adapter, and U-joint) could be installed in the truck and attention shifted toward wrapping things up. With the U-joint on the rack as well, the intermediate shaft was measured appropriately.



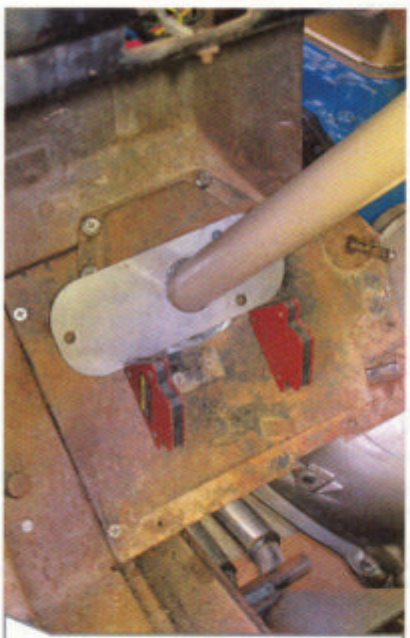
For those without access to one, an alternative to a chop saw is a Sawzall—or a hacksaw, for that matter. Just remember to always measure at least twice and cut once!

I should point out that with Total Cost Involved's particular crossmember design, you'll likely need a "low-profile" U-joint such as Flaming River's FR1924 chrome-moly one—they don't come in stainless or billet, but unlike those (as shown), they will keep you from having to notch the crossmember.

While many two-joint steering systems don't require it, if you have the room, include a support bearing on the intermediate shaft as shown. I drilled my framerail boxing plate to mount, but these are also available with integral frame brackets, too.

I don't know about you, but one of the last things I want is for my steering linkage to come loose while I'm behind the wheel, even if I am a loose nut myself. Along with the use of Loctite, make certain you always lock down the setscrews appropriately.

To secure the bottom of the steering column to the truck, I ended up modifying CPP's basic '47-59 column floor mount to work on the engine side of the firewall—as such, it not only kept the area clean inside, but is very inconspicuous mounted like so.



On this particular model, the stock, two-piece toeboard portion of the floor is not too accommodating to the new setup—for now, I may attempt to integrate a piece like this '47-59 filler plate from CPP. However, it's looking more like I'll be replacing the floor completely using a kit from Direct Sheetmetal instead.

If performing this steering retrofit yourself—regardless the year/make of car/truck—be sure to have things such as your exhaust and even your brake/clutch pedal in place. It's easier to do something right the first time than having to redo anything once.

I may regret not using an early automatic steering column in the first place, and despite what I just said, I may end up doing just that down the road, especially considering that I finally found what I was looking for (after this was finished) thanks to a gracious reader! Nonetheless, ol' Dirty is definitely getting steered in the right direction now.