



TECH

TILT AND TURN... ...Made Easy!



There are a number of things that most of us are willing to accept as par for the course when it comes to driving old trucks. Sure they might rattle a bit, the windlace might whistle, and the floor and firewall might get a little hotter than we'd like, but hey, that's just part of the whole experience, right? But there are a number of other things that most of us are not willing to accept and are easily upgraded to make the driving experience much more enjoyable.

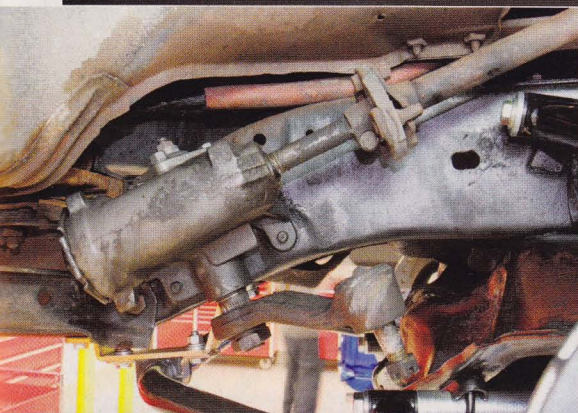
Things like disc brakes and updated suspension designs not only make the truck more comfortable, but also add a heavy dose of safety to a vehicle that's design is not up to par with today's demands. Other things, like power windows, air conditioning, power steering, and tilt steering columns are creature comforts that many of us have come to expect from our rides.

It was with this in mind that I decided to update the '68's steering from a manual box with a 17-inch wheel atop the stock column to

power steering, a tilt column, and the reduced-diameter 15-inch wheel from last month's restoration story. The goal was to get the steering duties for the '68 more in line with what a contemporary truck would feel like. And with the long wheel-base, an easier time steering the beast was starting to sound really good!

So I made a few phone calls and with a little legwork I soon had all the components to match up the stock steering wheel to the power

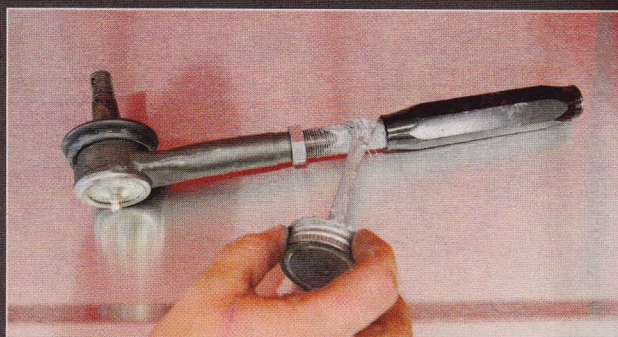
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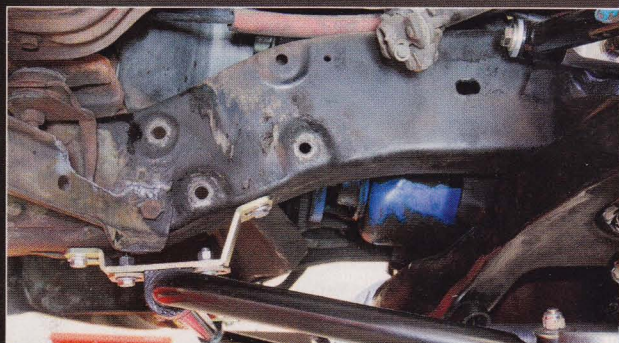
The first step in upgrading the steering is to remove the stock manual steering box.



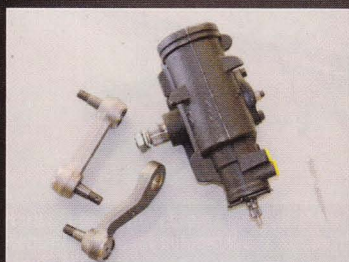
CPP's kit comes with new billet-aluminum adjusting sleeves, which allow for super easy alignment, and once locked tight, that alignment won't change.



To prevent the threads from galling due to the aluminum versus steel component, anti-seize is applied to the tie-rod end.



Three fasteners on the framerail and a rag joint are all that attach the stock box to the truck. Note the section that was trimmed from the bumper bracket to clear the new power box.

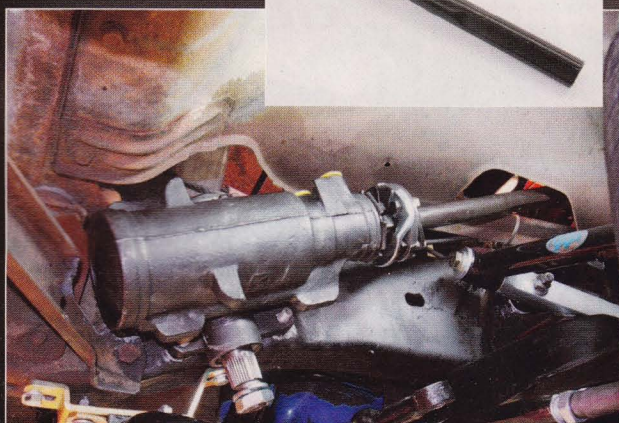
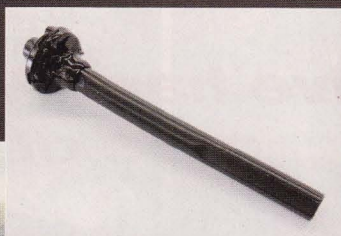


CPP's power steering box for '67-72 Chevy trucks is a 700 Series Saginaw unit rebuilt to exceed factory specs. A new pitman and idler arm round out the package.



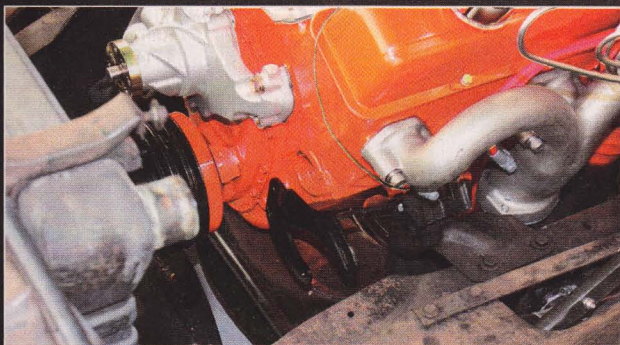
Once in place, the billet adjusters are locked down using the lock nut at either end.

A new rag joint and sleeve allow the box to be mated to the column via a $\frac{3}{4}$ -inch DD shaft.

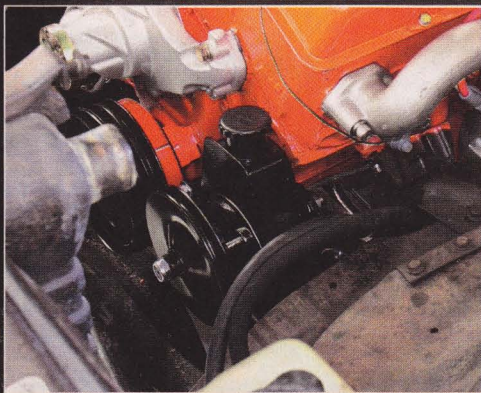


Mounting the engine accessories created a slight problem as the early heads were not drilled out to accept any brackets. Alan Grove Components solved this problem for us by providing a set of brackets and pulleys to ensure all the accessories will line up nicely, including the power steering pump.

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The bracket uses the two lower front block holes as well as one of the motor mount bolts to give the power steering pump a very stable mount.



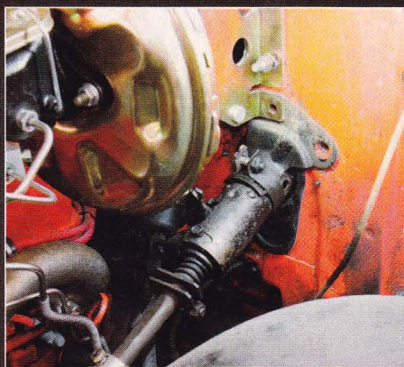
With the pump bolted to the block, it was a simple matter of mating the proper hose end with its respective fitting to finish the pump install.

As I mentioned last month, the stock steering column and wheel were looking pretty rough so it was decided to replace them both when it came time to do the power steering upgrade.



Removing the column is a fairly simple task. First, the emergency brake handle is removed, followed by the steering column retaining plate.





Inside the engine compartment, the firewall retaining plate is unbolted from the firewall and the clamp that secures the column is loosened.



Last but not least, the wiring harness is disconnected.



Here's a beautiful chrome version of the same Retrofit Series tilt column we're using from ididit. These columns feature an eight-position tilt, stock GM-style 3/4-inch wiring harness, 3/4-36 output spline, four-way flashers, self-canceling turn signals, knobs and handles, and are compatible to stock GM steering wheels as well as a number of three-, five-, six-, and nine-bolt steering wheels via an adapter.



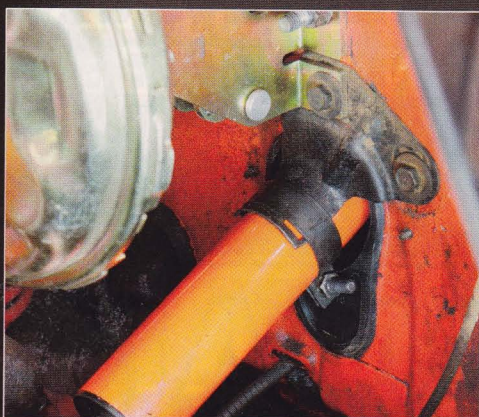
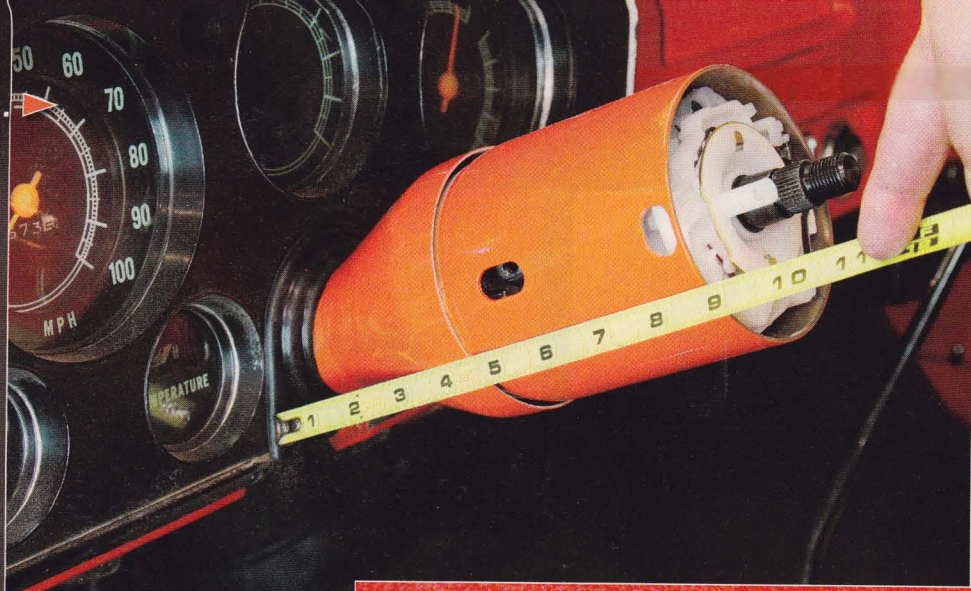
We opted for the less blingy, plain steel version, so it will have to be painted before we install it in the truck. For this, we're using the same Eastwood Hugger Orange two-stage paint that we used last month to squirt the steering wheel.



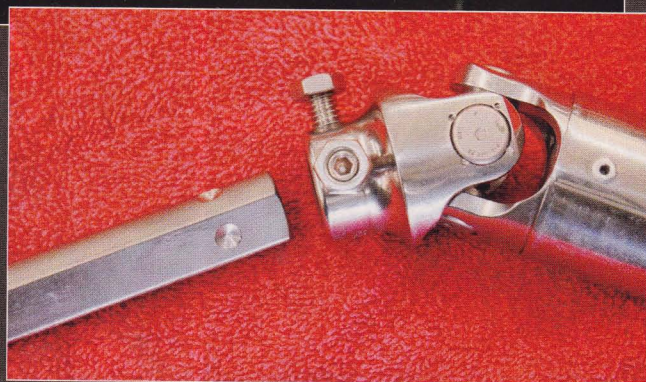
Before we install the new column it's necessary to inspect and replace a few components as necessary. For these, we went to one of the largest reproduction parts houses in the world, LMC Truck. The seals at the top and bottom of the stock column were thrashed, so we decided to play it safe and ordered not only the floor and upper seal, but the lower seal retainer as well.

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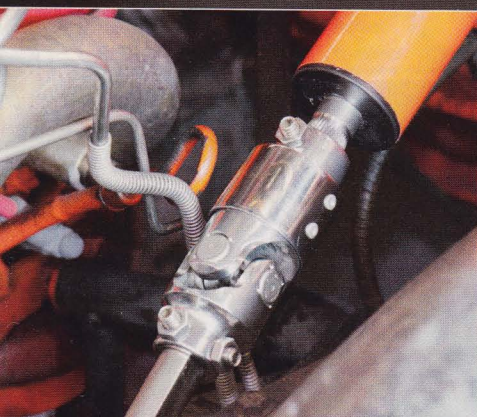
Since ididit's Retrofit Series columns are designed to stock specs, it was a simple matter of sliding the column into place and deciding how far from the dash to locate the steering wheel. I decided to go with the same measurement as stock.



Here, the lower seal and retainer is installed as well as the lower column mount and clamp. Note the amount of stickout on the firewall side; there is plenty of room to move the column either closer or farther from the driver if one is so inclined.



When I initially installed the U-joint and shaft, I tightened the set screws just enough to mark the surface of the shaft. Then, I used a 1/4-inch drill bit to dimple the shaft, providing a recess for the set screws to bite into.



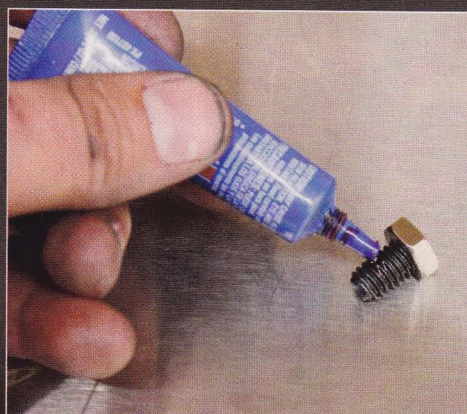
To mate the bottom of the column to the rag joint sleeve assembly on the box, a 3/4-36x3/4DD stainless steel vibration reducer U-joint is used combined with a length of 3/4DD shaft. The first step is to determine the length of the DD shaft by sliding the U-joint onto the output shaft of the column and measuring the distance from the 3/4DD end to the rag joint sleeve assembly attached to the box.



I did the same process on the section of the DD shaft that is inside the sleeve assembly to prevent it from working loose and dropping inside.

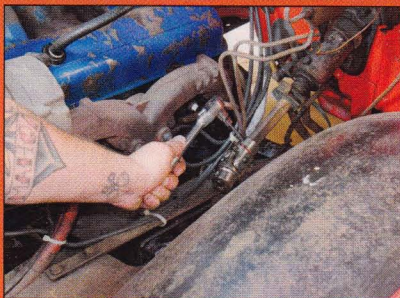


Since the rag joint sleeve assembly is designed as a slip shaft, allowing the DD shaft to collapse inside of it, figuring out the length the DD shaft needed to be was a simple matter of making it just long enough, ensuring there was a good 6 inches or so inside the sleeve assembly.

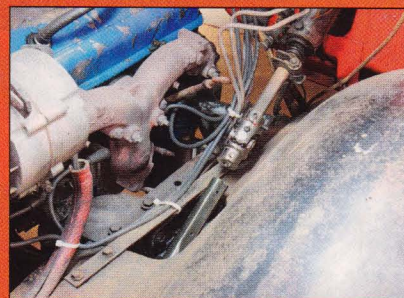


Be sure to use Loctite on the set screws as well as the lock nuts to keep them from working free!

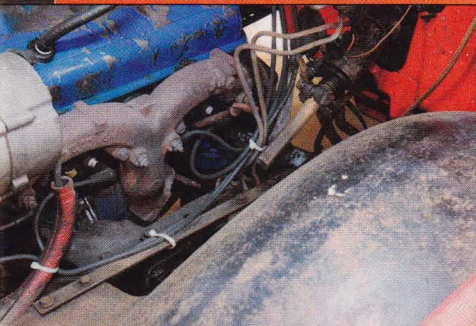
Stock Options



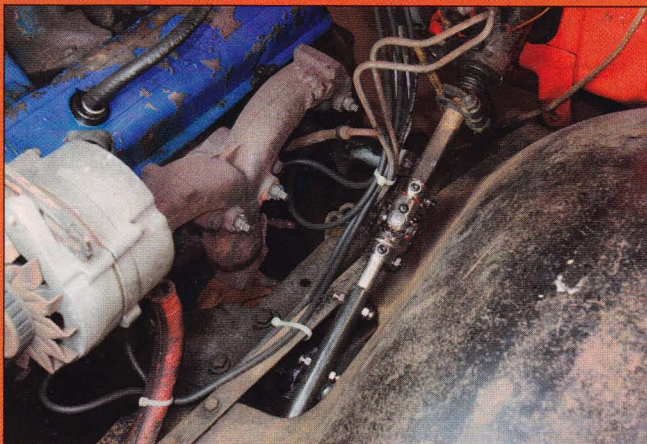
Then a $\frac{3}{4}$ DDx $\frac{3}{4}$ DD U-joint is mated to the stock lower shaft of the column.



The same rag joint sleeve assembly is used at the box side...



Mating the stock steering column to a new power steering box is just as easy as using a new column. All that's required is the DD shaft on the end of the column be cut and everything below that removed (stock manual box included of course!).



...and it's the same technique to mate the two, a simple section of DD shaft.

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Here's the final assembly of the steering shaft, from column to rag joint sleeve.



...to the full "up" position...



With the newly restored wheel installed, you can see the difference in positions. From stock...



...to the full "down" position.

■ *continued from page 56*

box. An eight-position tilt column from ididit would be coupled via a Borgeson vibration reducer U-joint to a Classic Performance Products (CPP) 700-Series Saginaw power steering box.

The really cool thing about the '67-72 Chevy trucks (and most likely why there's so many on the road still) is that many of these upgrades are simple bolt-ons. Later model disc brake components will bolt right up. Power steering components from later trucks will bolt right up, as well. The CPP box used the same holes as the manual box did and ididit's column slipped right in place under the dash using the same mounts as the stock column. Using an adapter provided by ididit, the wiring harness plugged right into the factory harness as well. The only thing that needed to be fabricated was a short DD shaft to mate the column to the

box, which took about five minutes to measure, cut, and install.

In a day's time, we went from forearm-busting manual steering to pinky-spinning power with the added luxury of adjusting the angle of the steering wheel to suit one's preferred driving style or comfort zone. I have to admit that I've never actually had a vintage truck with a tilt column in it, though I've driven my

share of rental cars that had, and it's surprising the level of comfort that it adds. Though I have yet to actually log some serious miles on the truck, I know that it'll pay dividends when it comes to driving long distances, being able to adjust the position and all. And anything that adds to the level of enjoyment I get from driving my old truck is worth it to me! **CCT**

SOURCES

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www.classicperform.com