POINTED IN THE RIGHT DIRECTION

Modifying a Stock Column for Your Driving Pleasure

by Mike Briggs

There are a lot of parts we put into our projects that have become commonplace. Independent front suspensions, V-8 engines, and an automatic transmission have all generally become the norm when building any vehicle nowadays. When it comes to pointing them in the right direction, the tilt steering column is always at the top of the list. Then it is topped off with a billet steering wheel.

This is nice, but way overdone and too predictable. For me, I really like the trend of reusing the old stock stuff, but modified and reconditioned. Stuff like the steering column and steering wheel, stock heater, and crank windows can go a long way as well. Modified to work in my application, it gets the looks when you are sitting at a show.

I wish I could sit here and say it’s cheaper to use the stock column over an aftermarket tilt column, but it’s really too close to call. The tilt will usually set you back $100-$500 depending on what you buy, used or brand new. Then another $150 in U-joints and shaft, and $50-ish for a column drop – then getting it mounted and wired in.

With a stock column, you might have it left over from when you did the front suspension or you can pick one up at a swap meet at maybe $100 or $150 for the complete thing. You need the complete setup to start with: the steering column tube, column drop/mount, and the steering box and shaft. On our F-100s, the shaft is part of the steering box and has to be cut off right at the top of the box.

Normally the turn signal components are junk so...
02 If you are tired of tilt steering columns and want something a bit “different” to point your truck, give the stock steering column another look. With Classic Performance Products Billet Steering Column Saver kit you can adapt a stock steering column to any type of steering device you’re using. I added a spinned end to my shaft for a stronger connection and better overall look. Plus I could reuse the steering U-joints that had already been installed on the truck.

03 Here’s what I started with. A column tube, a column drop mount for the dash and the needed clamp pieces. I will order a new rubber piece from Mid Fifty x 36-spline. That is the same as my tilt column U-joint. With a call to Classic Performance Products I confirmed that they sold a spinned 3/4-inch shaft and went to pick it up ($15 for the shaft).

I laid out my cuts and welds so they wouldn’t interfere with the billet column saver pieces or its operation. They ended up above the column saver. When I finished I had the spinned shaft end I wanted and I can reuse the U-joint I already have. My big cost was the reproduction steering wheel. I have about $300 in it after buying all the pieces it takes. But I do like the look of it and the truck drives nice with a big wheel. Plus the horn button choices are cool. A future swap meet will yield a cool brody knob I’m sure.

I also replaced the turn signal components and turn signal lever. After fitting it and getting it painted and reinstalled, it’s going to cost me more than if I had stayed with the tilt I had and just painted it. But, I wanted to be a little bit different and the pepping labor for paint was my own so that didn’t really cost me – and that’s why we’re here, right? Follow along to see how I reuse a stock steering column using Classic Performance Products’s Billet Steering Column Saver and then making it functional with the finishing pieces from Mid Fifty F-100 Parts. 

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04 I sat in the seat and held the steering wheel where I thought it should go and took a few measurements. I measured from the bottom of the steering wheel to the floor and then from the floor to the end of the column that is currently installed. I came up with 23 inches to the floor and 4 1/2 inches to the end of the column and shaft, roughly. So what this told me was that I needed to cut the steering column tube at 27 1/2 inches.

05 To support the steering shaft at the bottom of the column tube I am going to use a "Billet Column Sever" from Classic Performance Products. This kit locks the shaft in between two flat bearing plates, supports the end of the shaft, and has a great-looking machined end that caps off the end of the steering column nicely. The kit I used for my 7/8-inch-diameter steering column tube was the part number CP150B5CS. It shows an application of '48-'64 Ford car and trucks with this sized tube.

06 When I bought the truck it already had a GM tilt column installed. Tilt is OK, but I really liked the stock column and steering wheel I used in my last '56 and I wanted this one to have the same thing.

07 I cut a steering shaft off of an old donor steering box. I cut it close to the box although I'm not going to need the whole thing, but this way I have enough to use to make it as long as I need.
08 Although not shown, I put the steering wheel on the shaft and slipped the tube over the shaft. I slid it up to the bottom of the steering wheel and laid it on the table to figure out some cuts. At this point I hadn't really decided on how the U-joint was going to connect to the shaft. The easy way would be to drill the U-joint and shaft and run a 1/4-inch bolt through them to hold the U-joint. Or, since the U-joint from the old tilt column is 5/16-36, why not get a piece of splined shaft and weld it on? Then I can reuse the U-joint.

09, 10 The Column Saver needs a 5/16-inch hole to secure the aluminum collar with a 5/32 screw. It is a 1/2 inch from the edge, so that's where I mark and drill my hole.

11 I decided to go with the splined shaft option and got a section of splined 11/16-inch shaft from Classic Performance Products. I trimmed the splined end down to fit the U-joint and cut a few inches back to weld to the shaft. I added an extra inch to the length needed on the splined shaft and machined a stud with the lathe to fit inside the hole of the steering shaft. That helps keep the two shafts aligned as they are welded.
12 I laid the shafts on a piece of 1-inch angle iron. With downward pressure as I tack them together, this keeps the shafts perfectly straight. Then I can weld them completely together.

13 After the shaft cooled, I assembled the steering wheel onto it, slid it into the tube, and slid the Column Saver onto the shaft and into the end of the tube. With it sitting straight up on the table, I marked where the end of the steering column tube was on the shaft. Then I removed the tube and started sliding on the Column Saver. I sanded the weld area down to allow the locking collar ring to slide over it and slipped the upper bearing plates onto the shaft, then the machined support, the lower bearing plate and its locking ring.

14 The lower collar is tightened first. I lined it up with the mark I made on the shaft. This collar and bearing plate will be recessed into the bottom of the Column Saver support.
15 Pushing the support, upper bearing plate, and lock ring all down onto the lower one will load up the support on the bearing plates and hide the lower lock ring. Then tighten the upper lock ring.

16 Assembled and ready to install into the tube. A short $5/8$ screw retaint the support.

17 Here's the Column Saver support in place within the steering column tube and secured with the $5/8$ machine screw. I'm glad I went with the splined shaft. I like how this all came out.

18 With the column mocked in place, I put the U-joints on the shafts and measured between them to see how long of a piece of Double D shaft I was going to need. Turned out it was $3/4$-inches worth. I slid it into the U-joints and centered it, then tightened the two set screws on the flat area to mark their location.

19 Next I removed the shaft, center punched the impressions made by the $5/8$-inch set screws, and drilled an indentation into the shaft with a $5/8$-inch drill. These will help keep the shaft locked into the U-joints once the set screws and their lock nuts are tight.

20 After final positioning, this is where the steering wheel and column ended up. I like my steering wheel just off my leg so I can sit my hand on my knee area and drive comfortably. My bench seat is also mounted right to the floor, no stock moveable seat tracks anymore.

21 I also made a new floor fill out of a piece of aluminum. I holesawed a $3/4$-inch hole for the steering column and two $1/8$-inch holes to form the brake pedal opening. The small tab was welded on the column tube for lower support and will have a $1/4$-inch bolt securing it.

22 Here we have the final fit. The steering column, U-joints, double D shaft, and steering wheel have all been fit and checked.
23 After I was satisfied with the fit and had welded on the lower tab, I stripped it down and sent it out for sandblasting. Next I'll get some primer on it and get it and the other needed pieces ready for paint.

24 With the column tube finally painted red, I reassembled it for the last time and gave the small bearing plates within the Billet Column Saver a good coat of white grease as it all went back together.

25 Mid Fifty F-100 Parts got me all set up with everything I needed for the top of the steering column: a new reproduction steering wheel, the required pieces to hold the horn button in place, a new turn signal mechanism, and chrome lever to actuate it.

26 I'm really happy with how this came out. It is basically a new column, and the turn-signal switch, steering wheel, and horn button are all new reproductions from Mid Fifty F-100 Parts. Now I can cruise with my hand resting on my knee comfortably with a custom steering column you don't see all the time.