

## 1994-2004 Mustang Adjustable Steering Column Instructions



In this picture, on one of our display carts, our adjustable steering column is mounted to our billet adjustable pedal assembly.

FFP Customs' adjustable steering column is made of 6061 aluminum with a chromoly steering shaft to provide a rigid steering column while maintaining a low weight. The main components included are the steering column tube and shaft, the upper steering column mount, and the Motion Raceworks steering wheel quick release. What sets our steering column apart from other aftermarket options is its adjustability; the upper steering column mount and firewall mount flange have provisions for 2 different adjustments to accommodate all drivers. In addition to the main components included in the kit, we also include all necessary hardware for installation as well as a gasket for the firewall to prevent fumes from entering the cab. This steering column also utilizes durable Delrin bushings for long lasting, smooth steering. Our columns are designed to be used with a 3.5" or longer steering wheel extension. We do this

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to allow for a portion of the column to be removed with the steering wheel, allowing easier in/out access for the driver.



Here we can see all components and hardware included with the steering column in both natural finish and black

1994-2004 Steering Column Contents

- Motion Raceworks Steering wheel quick release kit
- Chromoly steering shaft with quick release spline welded on (steering shaft OD is <sup>3</sup>/<sub>4</sub>")
- Steering column tube with flange welded on (column tube OD is 1-1/2")
- Firewall gasket
- Upper steering column mount
- Two 6mm x 1 Flange Nuts
- One 5/16-24 x 1-1/4" Grade 8 Bolt
- One 5/16-24 x 1-1/2" Grade 8 Bolt
- Four 5/16" Grade 8 washers
- Two 5/16-24 Grade 8 lock nuts
- Upper steering column mount bushing
- Upper steering column mount clamp bolt: this bolt is the last bolt to be tightened and it prevents the mount from sliding on the column

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When you receive your steering column, the steering shaft and Delrin bushings will already be installed. The next step is to mount the steering column to the firewall. For simplicity, our steering column uses the factory steering column mounting studs. First, place the gasket on the studs so that the round edge is in the bottom left corner. Once the gasket is properly aligned, you can then slide the steering column on to the studs and fasten it to the firewall with the included two 6mm x 1 flange nuts and a 6mm socket. Now is the time you can choose which height setting you want to start on.

Once the steering column is mounted to the firewall mount, you can now slide the upper steering column mount clamp down the column and mount it to our pedal assembly using one 5/16"-24 x 1-1/4" bolt, one 5/16"-24 x 1-1/2" bolt, four 5/16" washers, and two 5/16"-24 lock nuts. The longer, 1-1/2" bolt should be used on the bottom hole of the upper steering column mount and 2 washers should be used for each bolt. Using a 1/2" socket and wrench, tighten the upper steering column mount to the cowl panel mount of the FFP pedal assembly. Make sure the setting chosen on the firewall mount matches the setting chosen on the upper steering column mount to prevent binding, then tighten the upper steering column mount clamp bolt to prevent it from moving along the column; you'll know it's tight when the upper steering column mount lower half is flush up against the upper half on both sides. Now you can install the strange quick release to your steering wheel and find the setting that works best for you. When the preferred setting has been achieved, you can now final torque all the mounting bolts and install your steering U- joint to the end of the shaft.



The steering column is mounted in the proper orientation when the round edge of the firewallmount flange is facing the bottom left corner. Shown at highest setting mu.

onSince the cowl Panel mount is thicker where the bottomingbolt of the upper steering column mounts, the longer boltmust be used in the lower mounting hole



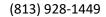
When we install steering U-joints here at FFP customs, we bolt the shaft to the joint using a 1/4"-28 bolt and a through hole. When drilling the hole in the shaft and the joint, it is imperative that the holes be aligned and have zero slop. To achieve this, we drill both the joint and shaft together. This ensures that the holes will be perfectly aligned, and the bolt will go in easily with zero slop. The placement of the hole on the shaft should allow for maximum shaft engagement in the joint while still allowing for full articulation of the joint.



Here you can see how the chromoly steering shaft is inserted and through bolted to allow full articulation while still engaging as much of the shaft as possible

This method of installing steering joints also provides an extra measure of safety, since the space between the steering joint and the Delrin bushing should be relatively small; if the set screw that holds the steering joint to the rack and pinion were to come loose, the upper steering joint (joint pictured below) would hit the Delrin bushing, preventing full disengagement of the splines in the rack and pinion.

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Notice the small gap between the steering bushing and the joint, this prevents full disengagement of the shaft if your set screw were to fail (STEERING JOINTS NOT INCLUDED)

If you have made it this far, we trust you have installed the 1994-2004 Mustang Adjustable Steering column with relative ease. Like all our products, this steering column is designed to bolt on with little drama or confusion. However, if you have hit a snag or have questions, don't hesitate to contact us via phone or social media. We would rather you call us for clarification instead of being frustrated with the installation.

Like all FFP Customs products, this 1994-2004 Mustang adjustable steering column is designed and made here in the USA. FFP Customs

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