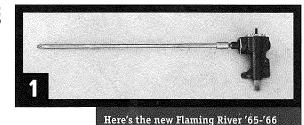


SUPERIOR STEERING

GLIDE INTO THE CORNERS WITH CONFIDENCE WITH FLAMING RIVER'S ALL-NEW STEERING BOX FOR EARLY MUSTANGS

TEXT AND PHOTOGRAPHY BY WAYNE COOK



HEN WE LEARNED ABOUT THE NEW FLAMING RIVER STEERING BOX FOR vintage Mustangs, we were more than interested. Until now, there have been few options available to those who wanted to upgrade the steering on their early Mustangs. Rebuilt steering boxes were available, but they used all original Ford parts, so when you're done, you're

still running the original equipment box with its cavernous on-center spot and built-in play.

We've always wanted a steering upgrade that would bolt into the car without radical changes, unlike rackand-pinion. That upgrade is now here in the form of a brand-new steering box from Flaming River.

Designed and built especially to fit

early Mustangs, the Flaming River box contains all-new components, with nothing rebuilt or reused. This goes even for the steering box casing. Until now, even new old stock parts had to go into an old casing because there was no alternative. Whatever wear was present in the casing was what you got in your rebuilt box.

Currently, Flaming River offers only a 16:1 steering ratio, but it feels

Mustang steering box with the steering column already attached. The rubberinsulated attachment collar, not present on original Ford boxes, helps reduce the amount of vibration that reaches the steering wheel.

quicker than it is because of the tightas-a-drum quality.

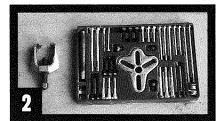
We're going to show what's involved in installing the Flaming River box on a '66 Mustang, but allow us to jump ahead a little and tell you about the end result. All of our expectations were exceeded when we first drove the car with the new box installed. Gone completely is the slop in the steering where the steering

wheel is moved from side to side but the car still goes straight down the road. Now the steering is accurate and concise. Any movement of the wheel results in a change of direction. The steering now has a tight feel, very much like the

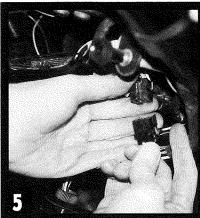
rack-and-pinion found on newer Mustangs. The car doesn't feel flighty, and there is still a nice on-center feeling at the wheel that a rack-and-pinion setup completely lacks.

We also noticed a substantial reduction

in the steering effort. However, the greatest benefit, at least from our perspective, was not noticed until we got out on the freeway and began to stretch our Mustang's legs. High-speed tracking is dramatically improved. Gone is the



You'll need to rent these tools from your local auto parts store if you don't already have them in your tool box. The set includes a steering wheel/harmonic balancer puller that you'll more than likely need to pull the steering wheel. The other tool is a pitman arm puller used to separate the pitman arm from the steering box. A two-jawed puller might work if you have one, but the correct tool is the best bet, and very inexpensive to rent or buy.



Remove the turn-signal stalk, then disconnect the two plugs near the base of the column on the wires that emerge from the column. The plug shown is for turn signals,



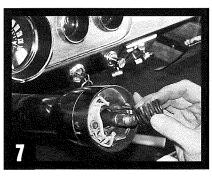
the other is for the horn.



under the dash. There are two nuts on



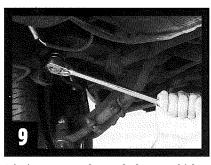
Remove the column support bracket from threaded studs, one on each side.



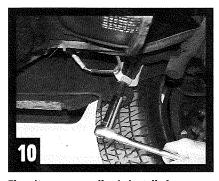
Pull this spring off the column end. Beneath it is a tapered bushing that keeps the column centered within the tube. It should come up with a yank on the column tube, but if not, you'll need to work the bushing free with a small screwdriver.



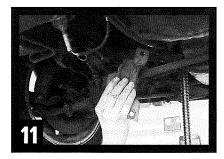
Our tapered bushing wasn't stubborn at all, so the column came right out of the car.



It's time to go underneath the car, which should be properly supported if you don't have access to a lift. Our first step down here is to remove the pitman arm retaining nut.



The pitman arm puller is installed as shown and used to pull the arm free of the steering box.



We removed the motor mount bolts and jacked up the engine. Here, the motor mount comes away from the car.



Start the steering R and R by removing the steering wheel. Push the horn button all the way to the seat, then rotate counterclockwise to remove. Next, remove the retaining nut that holds the wheel onto the column. It's tight, so hold firmly onto the steering wheel.

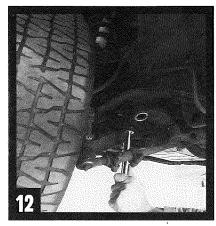


There are threaded holes in the steering wheel that allow you to attach the puller. Once the tool is in place, use a wrench or ratchet to screw the threaded center rod down to press on the column end, and the wheel will slide off.

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car's tendency to wander and the need for constant correction. The car tracks like it's on rails at high speeds, giving us a sense of confidence previously lacking during high-speed use.

Windsor-Fox Performance Engineering,



Going further into the job, it became clear that we needed to remove the main crossmember that goes under the engine.



Next, the support casting that goes between the motor mount and framerail had to be removed.



We loosened our driver's side header bolts from up top, then disconnected the short-tube header from the pipe. Jacking the engine up a little allowed us to remove the header from the car. This step is not required on a car with factory exhaust manifolds.

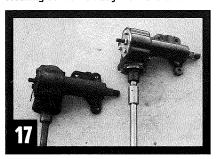
where the conversion was performed, is often our location of choice for projects that may be technically challenging. Installation of the Flaming River box turned out to be a straightforward affair with no surprises, although our EFI fastback has JBA shorty headers, which we had to remove for clearance during the installation. Other than that, installation should be no different for your car.



To free the steering box, remove the three bolts that hold the box onto the framerail.



With a little experimentation, the old steering box came away from the car.



This comparison photo shows how there is no vibration collar on the old unit (left). Although it's difficult to tell in this photo, the steering box casing on the Flaming River unit is a different casting.



For installation, all we need to do is to reverse the procedure. Here, the new box goes in. With everything out of the way, getting the new box into position was not difficult.



Things go back together quickly as Ed Marsh of Windsor-Fox snugs up the pitman arm onto the new steering box.



When reinstalling the column tube, be patient with the column support bracket. The nuts up top are not tack welded into place, but rather are captive in a small housing. This is so they can be moved around to provide adjustment, but it can make it a little difficult getting your threads started.



There's not much left to do now as the steering wheel goes back into place. The whole conversion took us about two hours once we had all of our tools and materials gathered together. In terms of return for our labor, this turned out to be one of the most worthwhile conversion projects we've ever done.

SOURCE

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