

## *Power Steering Shaft, SN95 (MMST-14)*



*Read all instructions before beginning work. Following instructions in the proper sequence will ensure the best and easiest installation.*

### Improving Performance Over the Stock Steering Shaft

The stock Mustang steering shaft has a rubber rag joint that flexes, giving the steering wheel a vague and imprecise feeling. On many cars it causes enough play that the steering wheel can be moved an uncomfortable amount before causing the tires to change direction. Replacing the rubber rag-joint with a race-quality needle-bearing U-joint sharpens steering response. The car will respond much more quickly to the driver's steering inputs.

### The Problems of Aftermarket Steering Shafts

Other aftermarket steering shaft assemblies have their U-joints secured to the steering shaft with small setscrews. These setscrews protrude out from the U-joints. It is not unusual for the end of a setscrew to hit a tube of an aftermarket header.

MM has long recommended the aftermarket steering shaft assemblies because they improve the car's steering response. We have suffered through not only the problem of setscrews hitting the header tube, but also the continued loosening of those setscrews, which causes very sloppy and unsafe steering. Even when a thread-locking compound is used, the heat from the exhaust will cook it out, and the setscrews will eventually loosen. This is simply the wrong place to use setscrews. We have endured the drawbacks of aftermarket steering shaft assemblies in order to enjoy the sharper steering response they provide.

### MM's New Design

The MM Engineering Team designed a **new steering shaft** that does not use setscrews. That's right, *no setscrews!* Instead, we secure the U-joints by welding them to the shafts. We attach the steering shaft assembly to the steering rack with a pinch-bolt, just like Ford did with the stock steering shaft assembly. An added bonus with the MM Steering Shaft is the addition of a telescoping center portion to the assembly. This collapsible section eases installation, improves fitment with aftermarket k-members, and improves safety in the event of an accident.

1. Raise the front of the car and place it safely on jack stands.

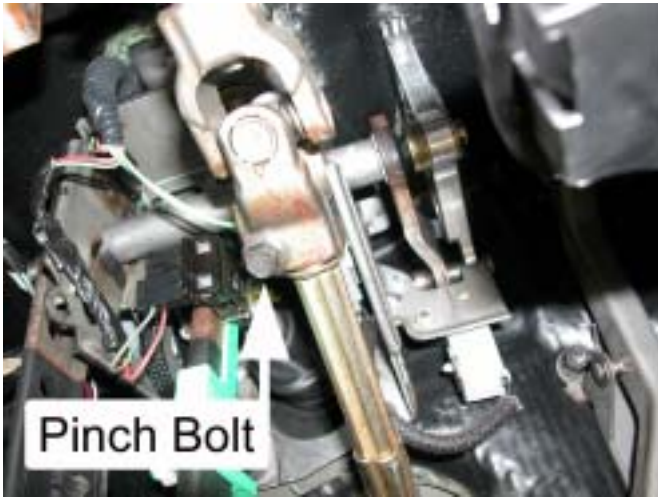
NOTE: Make sure that the wheels are pointed straight ahead for proper installation of your new MM Solid Steering Shaft.

2. Remove the stock steering shaft lower pinch bolt where it attaches to the steering rack input shaft.



3. Remove the stock steering shaft upper pinch bolt located underneath the dash, where the steering shaft connects to the upper U-joint.

NOTE: There is a pinch bolt located on each end of the upper U-joint. Remove only the pinch bolt located nearest the firewall so that the upper U-joint remains on the vehicle.

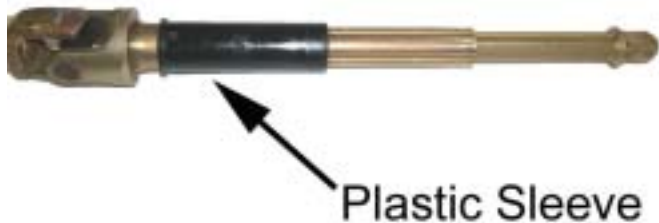


4. Remove the steering shaft from the vehicle.

NOTE: The stock steering shaft is collapsible, and must be slightly collapsed for removal from the vehicle. It is easiest to grab the rag joint and push it towards the firewall until the steering shaft collapses enough to free the steering shaft from the steering rack input shaft. Once free, pull the entire steering shaft forward from the firewall and remove it from the vehicle.

5. Carefully remove the plastic sleeve located on the upper portion of the stock steering shaft. The sleeve will usually slide off the shaft with minimal effort.

NOTE: This sleeve must be reused with your new MM Solid Steering Shaft. Contact your local Ford dealer for a replacement if it was broken during removal.



6. Remove the upper rubber accordion boot from the upper telescoping joint of the MM Solid Steering Shaft.

NOTE: It will be necessary to remove the zip ties retaining the rubber accordion boot.



7. Wipe off any grease or oil located on the inside diameter of the plastic sleeve.
8. Wipe off any grease or oil located on the outside diameter of the upper half of the MM Solid Steering Shaft, specifically along the first 3"-4" where the shaft is welded to the U-joint.
9. Apply silicone or RTV sealant to the first 1"-2" of the upper half of the MM Solid Steering Shaft. Start at the weld bead and work outwards from there.

NOTE: A majority of the silicone should be placed on the flat faces of the shaft.



10. Slowly slide the plastic sleeve removed in Step 5 over the previously applied silicone, until the flanged portion of the sleeve is touching the weld bead.
11. Evenly spread the excess silicone over the plastic flange, until there is no gap between the plastic sleeve and the flats of the shaft. The goal is to prevent fumes from the engine bay entering the passenger compartment through the gap between the steering shaft and the plastic sleeve.



This kit includes:

- 1 Solid Steering Shaft
- 2 Zip ties

12. Allow the steering shaft to sit for an hour to ensure that the Silicone is dry before continuing with the rest of the installation.
13. Reinstall the rubber accordion boot over the upper telescoping joint.
14. Use the supplied zip ties to secure the ends of the rubber accordion boot to the steering shaft.
15. Remove the pinch bolt from the lower U-joint of the MM Solid Steering Shaft.
16. Install the upper half of the steering shaft through the hole in the firewall and connect the lower U-joint to the steering rack input shaft.
17. Install the pinch bolt removed in Step 15 into the lower U-joint and torque to 24 ft-lbs. Because of the groove in the rack input shaft, the pinch bolt can only be inserted when the lower U-joint is properly positioned on the rack input shaft.
18. Make sure that the steering wheel is still pointed in the "straight-ahead" position.
19. Extend the MM Solid Steering Shaft's upper telescoping section enough to allow the upper half of the shaft to attach to the upper U-joint, located underneath the dash.
20. Insert the pinch-bolt into the upper U-joint. Because of the groove in the shaft, the pinch-bolt can only be inserted when the upper U-joint is properly positioned on the upper stub shaft.
21. Torque the upper pinch-bolt to 24 ft-lbs.
22. Safely lower the car to the ground.

NOTE: To prevent corrosion, either paint the MM Steering Shaft, or periodically spray it with rust-inhibiting oil.