

# INSTALL POWER STEERING ON A 1949-51 MERC (OR FORD)

If you've ever owned and cruised in an older set of wheels without power-assisted steering, you may have noticed some disturbing physical changes that you weren't prepared for. In days past, we jokingly called it "Armstrong Steering" and the guys who muscled these cars in and out of parking spots soon possessed Popeye the Sailor-sized forearms and well-defined triceps – leaving the shoulders and biceps looking a little underdeveloped.

here are two remedies for this physical anomaly: a) join the local gym to "even things out" or b) install a power steering unit and enjoy the luxury of index finger steering again.

A well-worn steering box, combined with the tiresome task of muscling this '49 Merc in and out of local car shows, indicated that power steering was needed.

### THE CAR

This '49 Merc, known as "Dixie DeLuxe," is owned by Ol' Skool Rodz (and Car Kulture DeLuxe) publisher, Geno DiPol. She's a big 4-door with manual steering – probably ordered by a post-war steel worker or Arnold Schwarzenegger's old man. Needing restoration, it was rebuilt in 2010 by the illustrious Bo Huff (who passed away in August of 2015) and is generally viewed as being one of the best chopped 4-door Mercs ever built.

"Huff customized it with my participation and his son, Jr. Huff, did all the pinstriping," explained DiPol. "At 18 years old, he was an incredible pinstriper."

Now in his mid-twenties, Jr. Huff has assumed the business from his father and will continue to walk in Bo's footsteps and create custom cars that will be remembered for a lifetime.

#### CPP TO THE RESCUE

A little bit of simple Googling revealed that Classic Performance Products (CPP) had a power steering conversion kit for 1955-57 Chevys (the Merc has

a small block Chevy engine), and that the steering boxes were almost exactly the same size that Ford and Mercury used from 1949-51. The kit came with everything we needed except the belt and a Chevy Vega pitman arm (also available from CPP).

Brian Warrington of Custom Paint and Body in Ft. Pierce, Florida, removed the steering col-

umn and exhaust manifold for better access to the steering box.

Dale

"This Merc was already equipped with a modern steering column," explained Warrington, "but it still required shortening to accommodate a new double U-joint."

Brian mapped out a template for an adaptor plate and cut it out of 1/4" plate. Two 3/8" by 1" flathead socket cap screws, three 3/8" by 4" grade-8 bolts,

> and two 3/8" lock nuts were needed to install the new box and adaptor plate.

> "You may have to notch the top of the frame to allow the box to sit where it needs to be," Brian adds, "and cut out a piece of the fenderwell to clear the box. Also replace the hydraulic brake light switch with a mechanical brake light switch."

It is extremely important that the Pitman shaft angle is not changed. Your Pitman arm must be the same length and the center link must be level. This particular Mercury had a custom finished firewall, so Brian couldn't change the position of the bottom of the column, but compensated by shortening the column, and installing a double U-joint.

If you aren't equipped the make the bracket and modify the pitman arm, Custom Paint & Body can supply you with a complete kit. Contact Dale at (772) 971-9255.

#### DALE & BRIAN WARRINGTON

Geno has entrusted his Mercury to real craftsmen. Dale Warrington is a Vietnam veteran who has been in the automotive restoration and repair business since his discharge from the US Navy in 1969. He's been in Ft. Pierce, Florida, since 1992. Brian is his son and they work side-by-side in the shop.

One of their more famous projects was the bodywork and paint on the restoration of George Barris' iconic "Aztec" full custom '55 Chevy. They've also done work for Jay Leno, and on a '57 Cadillac formerly owned by Elvis Presley.

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 Remove old steering gear box and Pitman arm. Remove exhaust manifold, if necessary. Comparison of old (left) and new steering boxes.



- 2. Here's the 1955-57 Chevy power steering conversion kit from CPP. You'll also need a Chevy Vega Pitman arm.
- 3. Trace a pattern for both gear boxes outlines, the bolt patterns and the end of the Pitman shaft. (Use magnets attach the poster paper to the old gear box). Be sure to mark the center line using the Pitman shaft. Find the center of each hole and punch it out to a 3/8" hole. Dou-



ble check that your holes all line up with your gearboxes, repeat this process to make a template for the new gearbox. Cut out the outline of both templates, then align them using the bolt holes and trace the outline onto the poster board.



4. Cut the finished template (here the template is laid on the 1" steel we'll make the bracket from). Place your template on the frame side and slip the 3 bolts through the holes. (You may find that the template interferes with the pressure

switch on the master cylinder. If it does, it must be relocated).



5. Place the final template onto the new gearbox and align all of the holes. You will notice one hole is blocked. Mark that blocked hole with a paint marker.



6. Remove the template and grind a flat spot to drill where the paint mark is. Replace the template and use a punch to mark the center of the hole. Drill and tap the hole out to 3/8-16 thread.



7. Transfer the template to the 1/4" plate and cut. Then drill out all holes to 3/8". You'll want to countersink the two holes going into the new gear box so that the 3/8" flathead socket cap screws will mount flush.



8. Tapping the 3/8-16 hole we just drilled.



11. Place the gearbox into the car and align the bolt holes. You will most likely find that your wheel housing must be trimmed for clearance of the new gearbox. If so, mark and trim the wheel housing to fit. Once it fits, bolt your new gearbox into place.



9. The finished adaptor plate.



 Mount the adapter plate to the new power steering gearbox.



12. Connect the new Vega Pitman arm, then mount the new power steering pump brackets and pump. Attach the hydraulic lines and fill the pump, check for leaks.

#### RESOURCES:

Classic Performance Products

Placentia, CA

Tech line: (714) 522-2000 www.classicperform.com

Dale Warrington's Custom

Paint & Body Ft. Pierce, FL

Ph. (772) 971-9255