

# PROJECT STRAT STREAK '55

by Gerry Burger

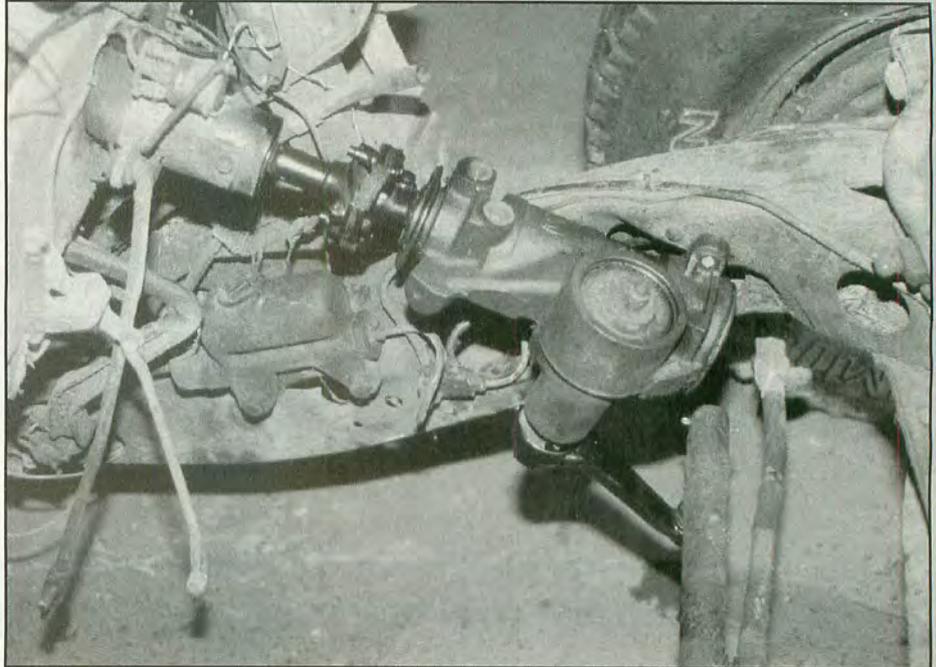
## INSTALLING A STATE-OF-THE-ART GUIDANCE SYSTEM... THE 605 GM POWER STEERING BOX.

**O**kay, work has been minimal on the old '55, but with rod run season in full swing, there just wasn't any time . . . but come Labor Day Weekend, now that seems like a fitting time to work! The trek to Buster's Frames and Components in Rock Hill, S.C. was made, the old Pontiac dragged into the shop (everytime I show up it rains for three days) and work commenced in earnest. (*Is that a suburb of Rock Hill? Ed.*)

I had purchased a 605 power steering box (mid-size GM late seventies... Monte Carlo, Cutlass, etc.) from Carl's Auto Salvage in Wachula, FL. (813-767-0123) Seems Carl is a reader/rodder and had a '57 Pontiac rear, so when we went to pick up the rear, we snagged a steering box, not to mention some '55 trim pieces and other goodies.

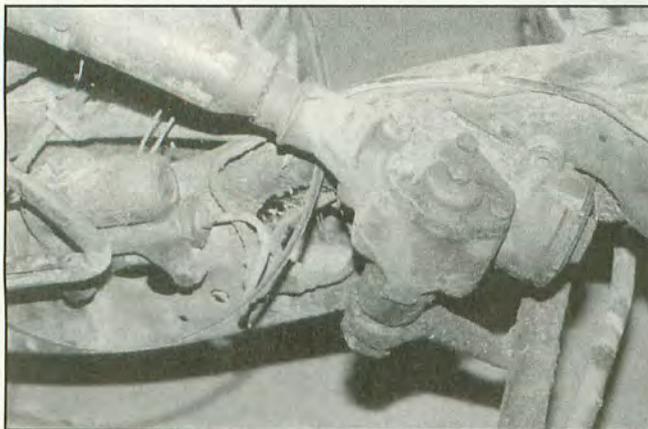
First step of the operation was to remove the stock box. First we cut through the steering column mast and shaft (port-a-band or Sawzall will make quick work of this).

The next chore was removing the pitman arm from the connector link. This link is of tubular design and to free the pitman arm from the link you must first remove the cotter pin from the driver's-side end. Then, using a very large screwdriver blade socket, remove the end plug (left is loose, right is tight). A squirt of good penetrating oil will help here, and the use of an air impact wrench will really make it move. After the plug comes out, a pair of springs will follow. Another squirt or two of penetrating oil, firmly tap the cross link with a hammer and the pit-



man arm socket should loosen. The pitman arm has a ball on the end of it that goes into a receiver in the link. You may have to smack the pitman arm a couple times to free things up. The link will lift off, be careful to keep the sheet metal shield and springs with the pitman arm. Now remove the three bolts that hold the steering box to the chassis (located on the outside of the frame rail).

With the stock steering box removed, take it to the work bench and remove the pitman arm nut. Use a puller to remove



**Above** — The stock box worked okay, but is 40 years old, and we wanted power steering... time for this unit to leave.



**Above** — The steering column mast and shaft were cut off and the stock box unbolted from the frame.

the pitman arm.

Do the same with the new 605 power steering box. You will note that the pitman arm nut is metric, size: larger than any metric wrench I own. After removing the nut we used a belt sander to sand a bit off all sides so it would fit a SAE wrench. So much for the Metric system.

Now for the good news, the stock '55 Pontiac pitman arm spline is the same as the 605 box, sooooo, just center the steering box (lock to lock) and install the old arm on the new box.

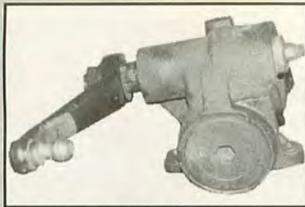
Carry this combo back to the car and hold things in position. More good news, two out of three of the box holes (the top ones) line up. However after a little checking we decided that the angle of the box was off just a little. We opted to use the top forward stock hole. A single bolt was tightened into the steering box to hold it in place and we marked the location of the other two holes through the steering box flange.

The stock bolts pass through the frame rail sides and have a brace/guide in between the side walls of the frame to add strength and prevent collapse of the side rails. These guides are held in by two rivets and must be removed to permit drilling of the new holes. A hammer and chisel were used to remove the heads of the rivets, then the braces were removed.

We drilled two holes approximately 5/8" in diameter. Two pieces of heavy wall tubing were cut to size and slid into the holes to act as sleeves for the mounting bolts. Since we had to drill in the area (as a matter a fact partially into) of the stock mounting holes we fabricated a couple of large washers to cover all the holes (both sides) and get us up onto the frame for good welding.

We tacked the sleeves in place, mounted the box, measured, thought, discussed and decided it was in position.

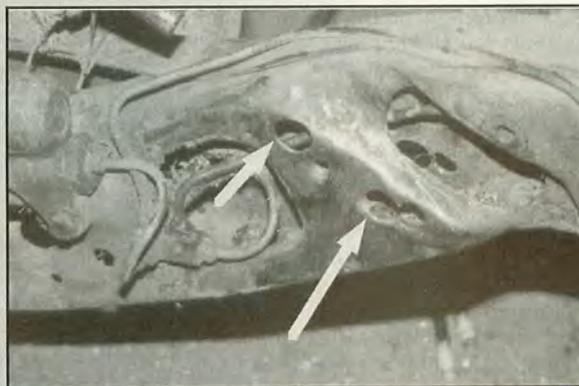
The box was removed and final welding was completed. Be certain the frame is very clean prior to welding and as always, if you are not an excellent welder have a pro do it for you . . . suspension



**Above and Right** — The '55 pitman arm fit the new 605 box, same spline. Check for wear on the pivot ball. Ours was like new . . . if not you will need a new 1955 pitman arm.



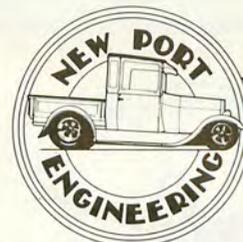
**Above** — With the inner frame guides removed we are ready to mount the 605 (See Text). The two middle holes are from the rivets, the other three are stock box mounting holes



**Above** — Top rear hole was opened up to 3/4" while a new location was used for the bottom hole. The 3/4" hole permits heavy-wall tubing sleeves to be inserted into the frame.



**Above** — This is the outside of the frame rail, 3/4" holes ready for sleeves. Stock brake line must be moved, we will replace these later anyway.



### CLEAN WIPE WINDSHIELD WIPER DRIVES

The Clean Wipe Windshield Wiper Drive is a true Bolt-In replacement for your vacuum windshield wiper motor. Each model of the Clean Wipe Drive is designed for the specific year and model of vehicle to assure proper fit and operation. No Universal kits.



- Wiper drives attach to the stock mounting brackets.
- Designed for direct attachment to the stock wiper transmission linkage arms, without modifications.
- Each kit comes complete with nylon bushings to replace the rubber grommets in the wiper transmission linkage arms. (When required)
- Clears stock cowl vent and air conditioning.

#### STANDARD FEATURES:

(All components Made in U.S.A.)

- Heavy Duty, Two-Speed Self Parking Motor
- Rotary Switch
- Wiring Harness
- Installation Instructions
- One Year Guarantee

#### APPLICATIONS:

- Passenger Cars
- 1935-52 Chevrolet
  - 1940-48 Ford
  - 1939-51 Mercury
- Trucks
- 1947-59 Chevy
  - 1948-50 Ford

**ALL MODELS \$160.00**

(plus shipping)

#### NEW!!

- Intermittent Delay Switch
- 3 Position Switch for intermittent low or high speed.
- Easily attached to existing Clean Wipe Wiper Drives with color coded wiring harness.

**\$54.95**

We accept Visa and Mastercard  
TOLL FREE ORDER LINE

**1-800-829-1929**

**NEW PORT  
ENGINEERING**

2760 NewPort Road  
Washington, MO 63090

**314-239-1698**

CATALOG

\$2.00

## Hot Rod Hardware From ...

INTERIOR KITS • ENGINE KITS



### GARDNER-WESTCOTT

NUTS • SCREWS • ALLEN BOLTS



### Chrome Brake Bleeders

For that perfect detailing touch, Gardner-Westcott offers chrome-plated brake caliper and wheel cylinder fittings. Available for most popular applications.



### Chrome & Brass Fittings

We've expanded our line of parts to include brass automotive plumbing fittings. Available in brass or chrome, we have fittings for vacuum, fuel, heaters, brakes and more. Call or write today for a **FREE** illustrated catalog.



### Stainless Line Clamps

In stock, ready to ship! Stainless line clamps for wires, hoses, brake lines. All sizes from 1/8" to 3/8". Rubber lined to protect wires and tubing.

**THE SOURCE** for ALL Your  
**HOT ROD HARDWARE**

**Gardner-Westcott Co.**

10110 Six Mile Road,  
Northville, MI. 48167  
1-800-521 9805  
(Fax 1-810-305-5110)

and steering are no place to learn how to weld!

We had been using the stock steering box bolts but they are about 1/4-inch too short, so three new grade-5 bolts were used to hold the box in place.

We had decided to use the stock steering column so the next step was joining the column to the new box. The shaft of the column was very close to lining up. The steering column would have to move about 1/4-inch to the center of the car.

On the inside the cover plate around the steering column was removed (about 8 sheet metal screws). This permitted the column to move to the right. Next a stock "rag joint" was slipped onto the Saginaw 605 box. The tubing on the rag joint proved to be the proper diameter for the steering shaft from the stock column. The steering shaft and steering wheel had been slid up into the car at this point. We pushed the shaft down into the tubing, took a measurement (in our case 2-1/2 inches, but it will vary with each cut) and cut the shaft so that it bottomed out in the rag joint tubing and the steering wheel fit the column properly on the inside. Once again the steering wheel and shaft were slid back out.

The end of the steering column was ground straight and smooth. Then a bushing was made to support the steering shaft. This bushing was tapped up into the end of the steering column jacket. Two 1/2-inch holes were drilled in the jacket and a "plug weld" performed to locate the bushing.

The shaft was slid down into the rag joint for the final time. One last check of everything, it looked good. The rag joint tubing was welded to the main steering shaft. Then two 3/8-inch holes were drilled into the side of the rag joint tubing, and into the steering shaft approximately 1/8". These holes were also "plug" welded, in effect an insurance pin is formed with these welds. This is a must, remember welding should be professional quality, and all parts new... this is steering we're working on folks, something you have a tough time enjoying a hot rod without!

There you have it, power steering that looks factory, uses stock parts and the geometry is unchanged. Next step is to fit some disc brakes to the front. Stay tuned. **RD**



**Above** — Two sleeves formed from heavy wall tubing slide into the frame rail. Large washer will cover the rivet holes and be welded in place.



**Above** — The sleeve-washer assemblies are welded in place; this shows the inner frame rail finished.

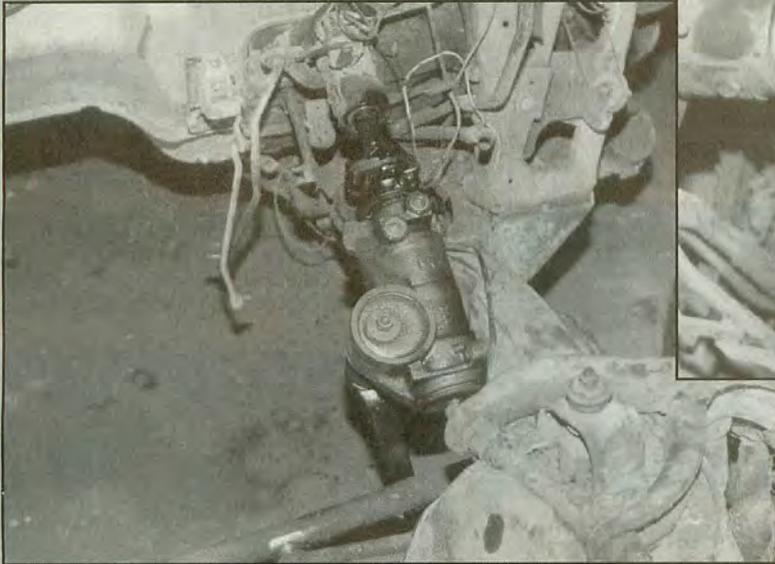
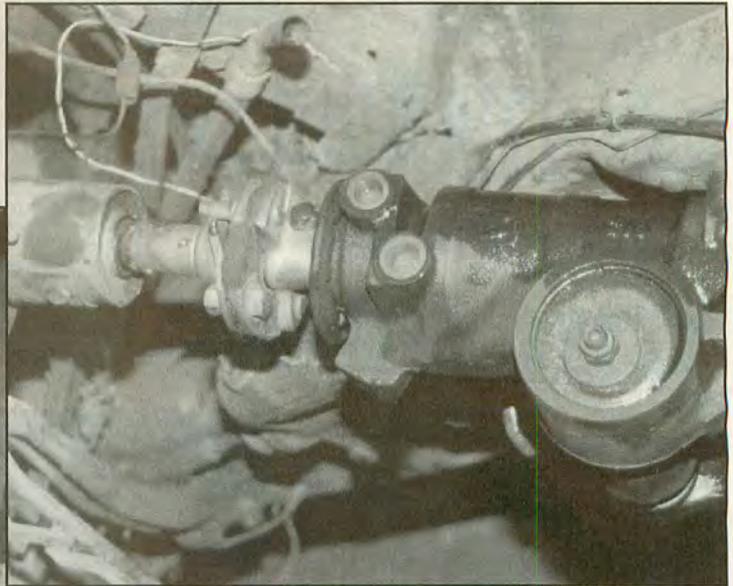


**Above** — A view from the outer frame rail showing what the finished product looks like out there. Note washers used again.



**Above** — The new 605 box fits in and looks factory. Stock hoses will connect to GM power steering pump later.

**Right** —A late model factory rag joint provided the proper size tubing for the steering shaft. No universals were required in the installation. Alignment was simple.



**Above** — The finished installation is neat, clean, and quite simple. Elapsed time on the project was approximately six hours.

**RODDER'S DIGEST**  
MAGAZINE  
REGULAR PROJECTS FOR  
REGULAR GUYS!

# HOLIDAY POSTER BLOWOUT!



**SORCHIK  
STUFF!**

Check or Money Order in US funds only please. New Jersey residents add 7% sales tax. Canada add \$1.00 shipping, foreign orders add \$3.00.

**Coupes are Not for Chickens!**  
(20x28, black and purple duotone on white, see RD 36)

**In the Rough is Just Enough**  
(20x28, black and blue duotone on white, see RD 48)

**You Know You're a Real Rodder When ...**  
(20x26, purple and gray on white, see RD 54)

Posters are mailed first-class in a heavy-duty mailing tube.

Offer Expires Dec. 25, 1994

(Allow 2-3 weeks for shipping.)

**GET ALL 3 FOR  
\$20!**

A \$32.00 value!  
(Shipping included!)



po box 7258, Sussex, NJ 07461

... Hot Rods in the Second Dimension