

Installation Instructions

POWER STEERING HOSE KIT - PS-116

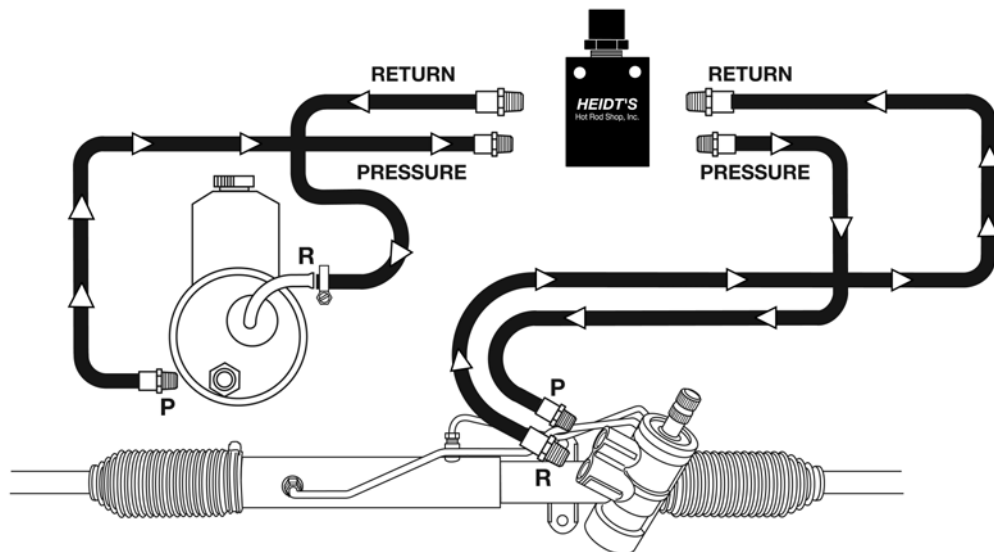
GM Integral Reservoir Pump to Omni Rack & Pinion using Adjustable Power Steering Valve

*Please read these instructions completely **BEFORE**
starting your installation!*

Your HEIDTS Hot Rod Shop Power Steering Hose Kit
contains the following items:

- | | | |
|-----------------------------|----------------------------|---------------------------|
| 5' S.S. Braided Teflon Hose | 3) Hose End, -6 90° | 1) Adapter, -6 to M18x1.5 |
| 1) Hose Clamp | 2) Adapter, -6 to 1/4 Pipe | 2) Adapter, -6 to 5/8-18 |
| 4) Hose End, -6 Straight | 2) Adapter, -6 to 3/8 Pipe | |

Your HEIDTS Hot Rod Shop Power Steering Hose Kit is used to hook up a GM power steering pump to an Omni rack & pinion, using an Adjustable Power Steering Valve. This kit contains fittings and hose to complete a basic hook up in a typical installation. The parts supplied for your particular installation should be included in the kit. Begin the installation by assembling the proper adapters into the pump, rack & pinion and Adjustable Valve. The high pressure fitting is the M18x1.5 thread port which is toward the rear of the rack, closest to the pinion input shaft, and the return line fitting is 5/8-18 thread port that is at the front. **WARNING!** Please note that on this rack port sizes are **opposite** of other racks. On the Mustang II and other racks the 9/16-18 port is the pressure and the 5/8-18 port is the return. Care must be taken that the hoses are hooked up correctly, since the braided hose adapters supplied with most hook-up kits convert both ports to a -6 hose size. If the hoses are incorrectly installed, the internal pressure will blow out the seals under the boots and cause leaking. Incorrect hose installation will void the warranty, as the rack and pinion units are pressure tested at the rebuilder's plant. The kit comes with both straight and 90° hose ends. Work out your Adjustable Valve placement and hose routing and decide where to use each hose end (extra hose ends and hose are available). The diagram shows the general routing of a power steering system using an Adjustable Valve. Use this to install your Valve and hoses. The illustrations on the reverse side of the instructions will show how to install the hose ends onto the hoses.



Braided Hose Assembly

1. Begin your hose assembly by laying out your hose routing. Cut the first hose to the required length. We recommend the use of an abrasive cutoff wheel, but it can be done successfully with a 32 teeth per inch hacksaw blade. In either case, the hose must be tightly wrapped with electrical or masking tape and the cut made through the tape. Do not cut the hose with a chisel, snips, pliers, or a shear, as these may crush the Teflon liner. (Figure 1)

2. Deburr the Teflon and trim any loose ends of braid with sharp snips or diagonal cutting pliers.

3. Install the socket on the hose with the threaded end of the socket toward the cut end of the hose. This will be a lot easier and you will end up with fewer holes in your fingers if you hold the socket in a vise. Push the socket well beyond the end. (Figure 2)

4. Place the hex portion of the nipple in the vise. Insert the end of the hose onto the nipple and bottom the hose against the shoulder of the nipple with a rotary motion of the hose. This will size the I.D. of the Teflon tube. (Figure 3)

5. Separate the braid from the O.D. of the Teflon tube using a small screwdriver or a scribe. Be careful not to scratch or nick the Teflon.

6. Install the sleeve between the braid and the Teflon tube. Make sure that none of the braid is trapped between the Teflon and the sleeve. Bottom the tube against the shoulder of the sleeve and make sure that the sleeve is inserted square. (Figure 4)

7. With the nipple held in the vise, push the hose and the sleeve onto the nipple until the sleeve bottoms. Remove the hose and make sure the Teflon tube is still bottomed against the shoulder of the sleeve and the sleeve is still square. (Figure 5)

8. Push the hose and sleeve back onto the nipple and bottom against the shoulder. Start the socket onto the nipple threads and hand tighten.

9. Place the socket in the vise and complete the assembly by tightening the nipple onto the socket with a wrench until the gap between the face of the socket and the shoulder of the nipple is $1/32$ ". Blow the assembly clean, then install on the car. (Figure 6)

Figure 1

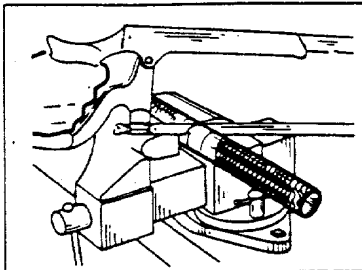


Figure 2

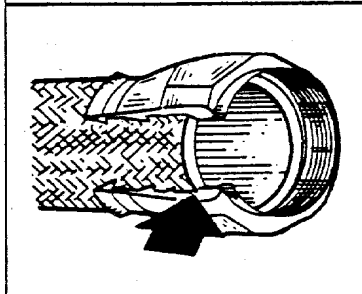


Figure 3

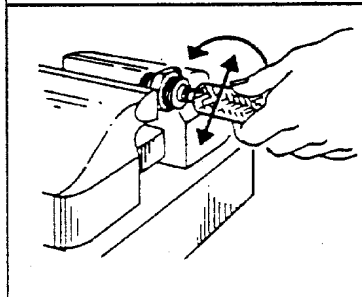


Figure 4

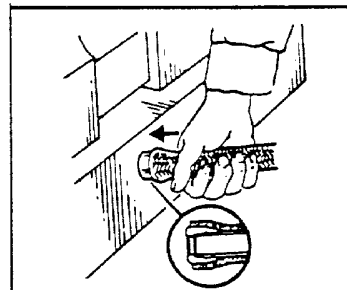


Figure 5

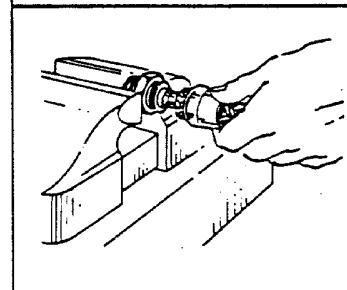


Figure 6

