

# If your application is not listed below... Do Not Attempt To Install This Kit\*

\* A power steering adapter kit (#77901) is available for other applications, call for info 1 (708) 588-0505.

#### #77905 - Power Steering Hose Kit - Bolt-on Reservor

#### **Tools needed:**

- 1" open end wrench
- 15/16" open end wrench
- 11/16" open end wrench
- Electrical/vinyl tape
- Hacksaw with fine tooth metal blade OR cut off wheel

#### **Applications:**

- GM metric rack & pinion
- 1978 present GM metric 800 gear box
- 1965 77 GM SAE 800 gear box
- Classic Performance Products 500 Series box
- Flaming River rack & pinion
- Dodge Omni rack & pinion
- 1974-77 Ford Mustang II rack & pinion

#### **Before Installing This Hose Kit:**

- Install the Tru Trac or V Trac system in vehicle.
- Install the Bolt-on reservoir per the instructions included with reservoir.
- Never run the motor without power steering fluid in the pump as severe damage will occur and void the pump warranty.

#### Tech Tip:

Install the proper adapter into the Rack/Box. Do not use Tefon tape or pipe dope, this can get into the system and do substantial damage. Inverted flare fittings should be torqued to 25-24 ft/lbs and 0-ring fittings should be torqued to 20 ft/lbs.

**Step 1:** Prepare the fittings and adapters for installation. Use the guide below to select the correct adapters for your application. Compare the existing hose ends to the adapter if you are unsure of the box/rack that you have.

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•Denotes number of fittings required for the listed application	11/16-18 inverted flare to -6AN power steering adapter	1/2-20 inverted flare to -6AN power steering adapter	5/8-18 inverted flare to -6AN power steering adapter	M18 x 1.5 O-ring to -6AN power steering adapter	M16 x 1.5 O-ring to -6 AN power steering adapter	M14 x 1.5 O-ring to -6 AN power steering adapter	-6 AN 90° hose end	-6 AN straight hose end
GM Metric Rack & Pinion				•	•		••••	•
1978-up GM Metric 800 gear box				•	•		••••	•
1965-77 GM SAE 800 gear box	•		•				••••	•
Classic Performance Products 500 Series gear box	•		•				••••	•
Flaming River Rack & Pinion					•	•	••••	•
Dodge Omni Rack & Pinion				•	•		••••	•
1974-77 Ford Mustang II Rack & Pinion		•	•				••••	•



#### **Step 2: Measure For Hose**

Double check your measurements. Measure twice, cut once.

Measure the length needed from the pressure side of the pump to the rack/box. Keep in mind tight bends in the hose are not recommended and may pinch off supply select the appropriate fitting to route the hose as straight as possible.

Mark your measurements below.

Pressure line length \_\_\_\_\_\_

Fitting to pump (must use a 90° fitting) Fitting to rack/box \_\_\_\_\_ 90° \_\_\_\_ Straight

Return line length \_\_\_\_\_\_

Fitting to rack/box \_\_\_\_\_ 90° \_\_\_\_ Straight Fitting to reservoir \_\_\_\_\_ 90° \_\_\_\_ Straight

## **Step 3: Cutting The Hose**



Start by tightly wrapping electrical tape around the hose in the area to be cut.

Place hose in a vise without crushing it. Cut hose square to length with a Fine tooth hack saw or cut off wheel ( **Important!** Make sure that your cut is square!).

Remove hose from vise and remove tape slowly. Deburr the inner Teflon hose and trim away any stray stainless braid.

Blow out the inside of the hose to clear any debris. Debris that is left in the line may cause substantial damage.

#### **Step 4: Assemble Hose Ends to Hose**



Install the threaded socket end on the hose and slide it back out of the way.



Insert the nipple portion of the hose end into the Teflon part of the hose to size it back up to shape then remove it.



Push the brass ferrule around the Teflon and in between the braided hose. Seat the Teflon hose squarely against the bottom of the ferrule; this can be done by pushing the hose and sleeve against a workbench or vise.



Example



Follow by placing the hose end in a vise, sparingly lubricate the threads with 30wt oil or similar lubricant.

Insert the hose over the nipple making sure the ferrule does not pop off the Teflon tube.



Finish by threading the socket end onto the nipple by hand.



Now tighten with a wrench until the gap between the nipple and the socket is no more than 1/16".



Example

Clean the hose and blow out with compressed air to clear any debris.

### **Step 5: Install Hoses**

Install hose assembly to each component. Check and make sure the lines are free and clear of any moving parts.



#### **Bleeding Procedure**

- Fill the steering system with high quality Fluid and let it sit undisturbed for a few minutes. Leave the power steering reservoir cap off.
- Raise the front wheels of the vehicle off the ground and support vehicle with jack stands. Without starting the engine slowly begin to turn the steering wheel left to right – keyword being "slowly"; about 1 revolution per 8-10 seconds.
- Continue to top off the power steering reservoir. When the level remains steady, inspect for leaks and then prepare to start the engine.
- Start the engine. Check the Fluid level with the engine running and inspect for leaks once again.
- Slowly cycle the steering wheel again in both directions from steering stop to steering stop. Continue to check the fluid level and add fluid if necessary.

If the pump begins to get noisy, there is air in the system. Turn off the engine and let it sit for 15 minutes. Air in the system will cause the pump to growl and the fluid level may rise when the engine is turned off.

- Repeat the above steps until the system is operating normally. If air is still in the system
  after several rest periods, it may be that air is entering the system faster than it can be
  expelled at the reservoir. Check for leaks, even the smallest leak can be a source.
- Replace reservoir cap. Test drive the vehicle then check Fluid level.

#### **Trouble Shooting**

#### Growling noise from pump

- First check Fluid level in reservoir.
- Check supply hose for collapse.
- Check for air in system and re-bleed. If this cures the noise temporarily and then reoccurs again there may be a supply Fitting allowing air back into the system.
- Debris in line or pump from assembly. Disassemble and clean. Re-bleed system.

# Steering wheel moves violently from side to side OR Steering wheel moves just to one side

• Pressure and return line are reversed on box or rack.

#### Hissing noise traveling up the column

• This is a normal power steering sound. Installing a vibration damper or isolator on the steering shaft will help quiet this down.