

# HOW TO INSTALL TOP CYLINDERS & PUMPS

## WARNINGS

DO NOT use silicone brake fluid in top or window systems. Use of silicone brake fluid voids all guarantees!!! Silicone brake fluid has been known to cause system failure!!!

Pumps are not guaranteed if they are burned up or used excessively. Cylinders are not guaranteed against bent rods or physical damage to the tube. We will repair these problems at cost plus shipping.

## TOOLS & SUPPLIES

3 quarts of fluid. Cars older than 1953 use DOT-3 brake fluid. Cars 1953 and up use brake fluid or automatic transmission fluid. Cars prior to 1953 may use ATF if all new hoses have been installed. **CAUTION:** brake fluid destroys paint!!! A turkey baster is a great tool to fill pumps with a filler plug.

**CAUTION:** Never totally fill a reservoir with fluid. Cars with a filler plug should remain at least 25% empty. The air gap is required to prevent system damage or failure. Firewall pump reservoirs should remain 10% empty.

If you are installing just 1 cylinder, the rod on the new cylinder must be either in or out = the same as the unit remaining in the car. All cylinders are shipped with the rod retracted. To extend, put 50-60 pounds of air pressure into the bottom fitting of the cylinder to extend the rod.

You will use your motor/pump to fill the cylinders. Do not force any hydraulic parts. Forcing will DAMAGE!!!

## INSTRUCTIONS

- 1) Install all new parts in the car. Do not connect the rod ends to the top. If only 1 cylinder is being replaced, disconnect the rod of the remaining cylinder from the top. You are going to run the rods in and out without having to wrestle with the top. You are going to be "shooting blanks."

**CAUTION:** As rods go up and down, make sure no harm comes to either the rods or to the top or top frame.

- 2) Fill the reservoir 3/4 full with fluid. Do not bother to replace the plug. Put a rag under the hole to catch overflow that will occur as the system fills.
- 3) Run the pump for 5-10 seconds. You are emptying the reservoir into the cylinder. The rods will start moving as fluids fill the cylinders. One rod will always go up and down first. This is normal.
- 4) Repeat steps 2 and 3 until rods have traveled all the way into or out of the cylinders. If rods are all the way out, do not run the pump too long as the cylinders are not built with stops in them. Running the pump too long will eventually pull the cylinders apart.
- 5) Run the rods all the way in and out several times. At the end of each cycle, check the fluid level. Fill as required, leaving reservoir 25% empty.
- 6) When you are no longer able to add fluid, retract the rods INTO the cylinders. Check the fluid level one last time, filling if required but leaving the reservoir 25% empty. Put plug into reservoir.
- 7) Using the pump, run the rods out so they can be attached to the top. Bolt the rods to the top. Assuming there are no other problems, your top will now work.

