Purging Air From Hydraulic Trigger Release

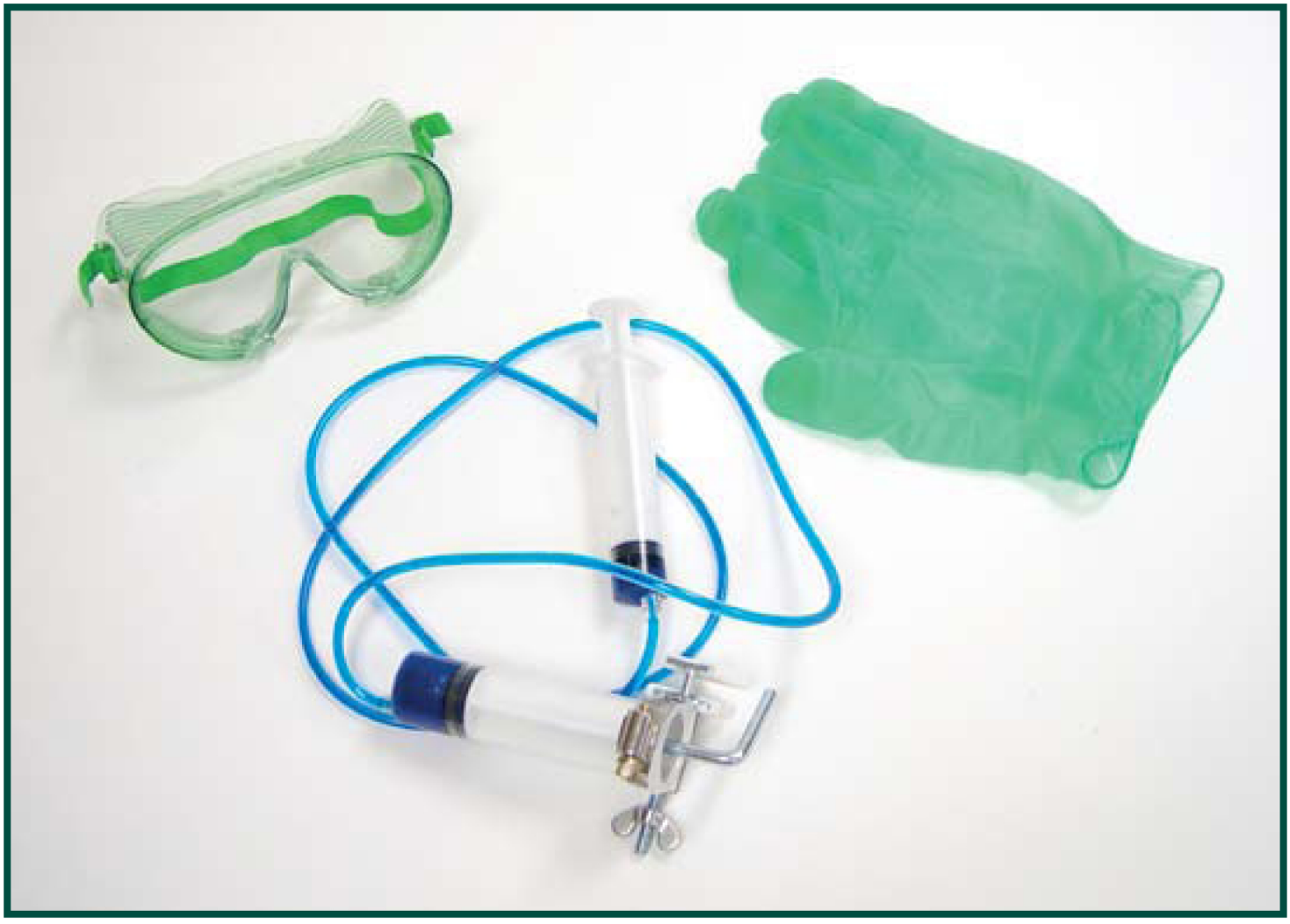
*** Wear safety goggles and protective gloves before beginning this procedure! ***

On occasion, air can be introduced into the hydraulic fluid. This occurs when either the piston/activator on the slave cylinder or the plunger/piston on the master cylinder is withdrawn too rapidly. What happens is that when either the plunger or slave piston is withdrawn faster the fluid can fill the cylinder a vacuum is created. When the vacuum increases to a point where the integrity of the seal between the piston and the cylinder wall is exceeded by atmospheric pressure, air enters the cylinder.

As in any hydraulic system, the fluid does not compress. However, since air will compress, too much air in the system will cause a "spongy" feel when the plunger is pressed and can also cause a delay in moving the activator in the slave cylinder. Fortunately the situation is easy to correct, simply follow steps 2 - 6 as outlined in the pictures.

The fluid is either propylene glycol antifreeze which has been colored red / orange for the purpose of identifying any air bubbles or ethylene glycol which has been colored blue or is clear.

Before beginning the procedures outlined above, it is our recommendation to perform the operation over some type of an absorbent material such as paper towels and/or a piece of plastic (such as the trash can liner that we used). In the event that you spill some of the fluid, this makes clean up an easy process. It should also be noted that glycol can be irritating if it gets into the eyes or on the skin. Therefore, it is strongly recommended that safety goggles and protective gloves be worn during this procedure. In addition, under certain conditions, glycol can be extremely poisonous to animals, especially dogs and cats. It is, therefore, recommended that any spillage be discarded in a manner where it will not be accessible to pets. Although the clear fluid will not cause color stains, the blue or red might.



Air in Hydraulic System

Step 1

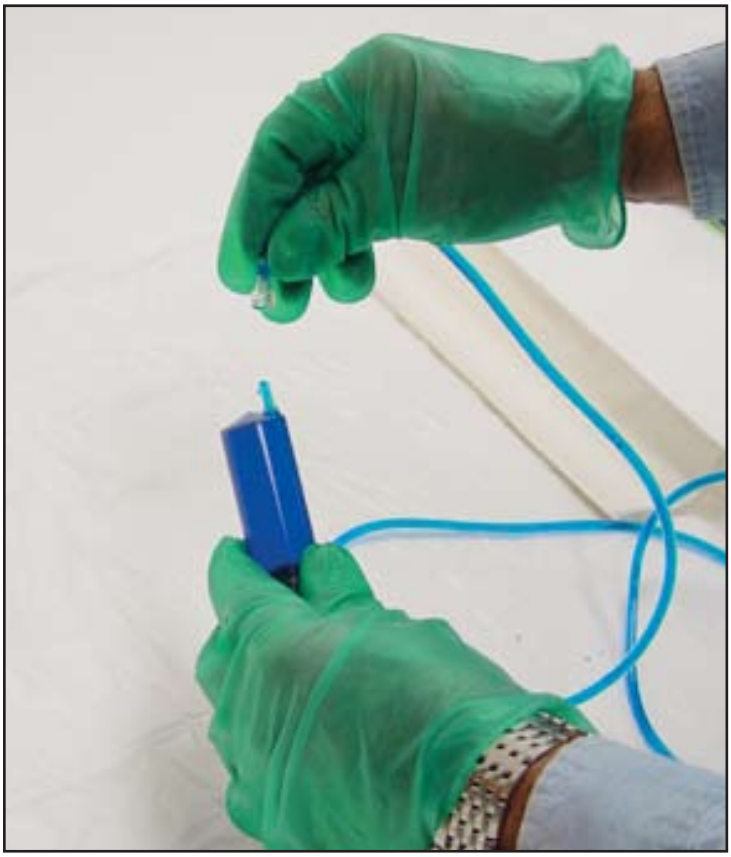
Withdraw Plunger of master cylinder until plunger of slave cylinder reaches bottom position. The air will now be in the master cylinder.

Grasp the collar at the end of the tube. Firmly grasp the barrel of the cylinder with one hand. Gently twist & pull until the tube separates.

Step 3

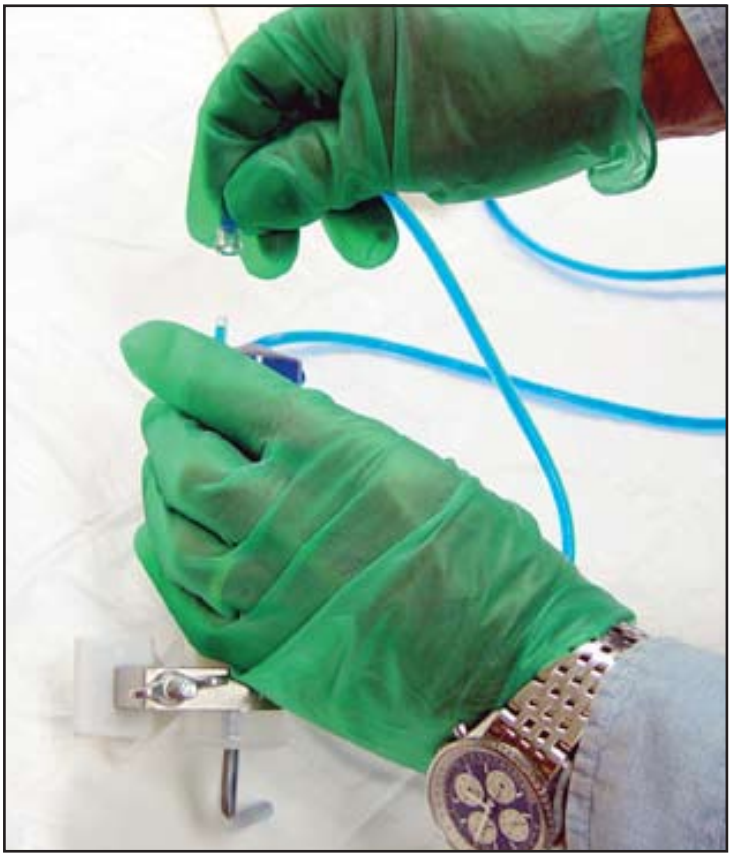
Point the cylinder up & gently press the plunger until the plunger until the air is exhausted. If you are careful no fluid will leak out.

Step 4



Grasping the cylinder in one hand and the collar on the tube with the other, slide the open end of the tube over the nipple on the cylinder. Firmly press into place.

Step 5



If air remains in the tube near the slave cylinder, repeat steps 1 - 4 at that end also.

System with all air purged!