



**BAVARIAN AUTOSPORT**

# Clutch Slave Cylinder Bleeder Tool Instructions

**SAFETY NOTE:** The vehicle must be raised and safely supported on jack stands or on a lift rack. Follow proper safety procedures in raising and supporting the vehicle.

**NOTE:** It is assumed that the basic procedures for bleeding the clutch hydraulic system are understood by the technician. Therefore, these instructions will detail the use of the bleeder tool as opposed to offering a step-by-step detail of the standard bleeding procedure. It is recommended that the appropriate repair manual be consulted for full procedure details. Appropriate manuals can be purchased from Bavarian Autosport.

**PROCEDURE NOTE:** It is highly recommended that the Bavarian Autosport Clutch Slave Cylinder Bleeder Tool be used in conjunction with the Bavarian Autosport Pressure Brake Bleeder (part# PB01A). This is to prevent damaging the Bleeder Tool. If the clutch pedal is used for bleeding, **DO NOT** use foot pressure on the pedal. Operate the pedal by hand **ONLY**.

## All BMWs

with manual  
transmission

### PART NUMBER:

CBT TOOL

### PROCEDURE:

1. Raise and support the vehicle, using the proper safety precautions for the method being used.
2. Remove the clutch slave cylinder from the transmission bell housing. On models that secure the cylinder with two 13mm nuts (one above the cylinder, one below), use a 13mm socket and a long (or multiple) extension and ratchet. This will ease the access to the upper nut.
3. Affix the slave cylinder in the Clutch Slave Cylinder Bleeder Tool—you may need to open the bleeder screw to compress the piston rod (see Figure 1). Position the slave cylinder in the tool so that the bleeder screw is pointing upward (see Figure 2). Use the tool's adjustable piston rod seat to apply moderate pressure to the cylinder's piston rod. Some cylinders will require that the adjuster be screwed fully out—others fully in, or anywhere in-between. You just need enough pressure on the piston rod to assure that the cylinder will not fall out of the tool.
4. Install the Pressure Bleeder to the brake fluid reservoir following the instructions for the unit (see Figure 3). We will be bleeding the clutch in a similar manner to bleeding the vehicle's brakes. The fluid for the hydraulic clutch comes from the main brake reservoir. Note the hose attached to the side of the fluid reservoir, this hose feeds the clutch master cylinder (see Figure 4). Do not let the brake fluid go below this point in the reservoir.

**NOTE:** We recommend siphoning the old fluid from the reservoir and filling with fresh fluid, before bleeding (unless the fluid has recently been flushed and changed).

5. Pressurize the pressure bleeder following the instructions for the unit (no more than 20 psi for this procedure). Install the bleeder drain hose (included with the pressure bleeder) or the hose from the Bavarian Autosport Brake Fluid Catch Bottle (part# PB02, see Figure 2) or any other drain hose that you may prefer.
6. Open the bleeder screw. Allow fluid to flow until there are no more air bubbles and the fluid is clear and fresh. Close the bleeder screw. Keep an eye on the brake fluid reservoir while bleeding. Do not allow the fluid to go below the clutch hose on the fluid reservoir (as noted in step 4 and Figure 4).



Call Toll Free: **1.800.535.2002**

7. Double-check the fluid level, pressure, etc. Perform a final bleed, as in step 6. During this step, slowly pump the clutch pedal to the floor and back up (by hand), a few times, while bleeding. Close the bleeder.
8. Remove the pressure bleeder. Adjust the fluid level in the reservoir. Remove the slave cylinder from the Slave Cylinder Bleeder Tool. Install the slave cylinder to the bell housing. Be careful to assure that the slave cylinder piston rod seats properly in the end of the clutch release arm, inside the bell housing.
9. Test the clutch operation and then lower the vehicle.

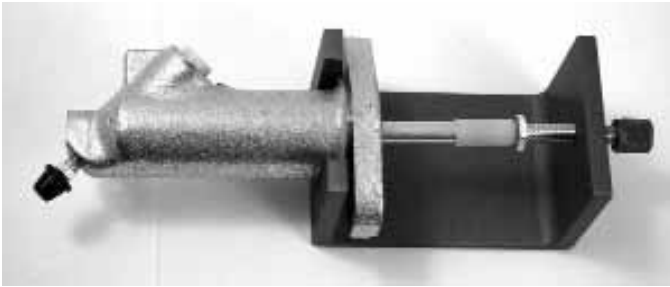


Figure 1



Figure 2



Figure 3

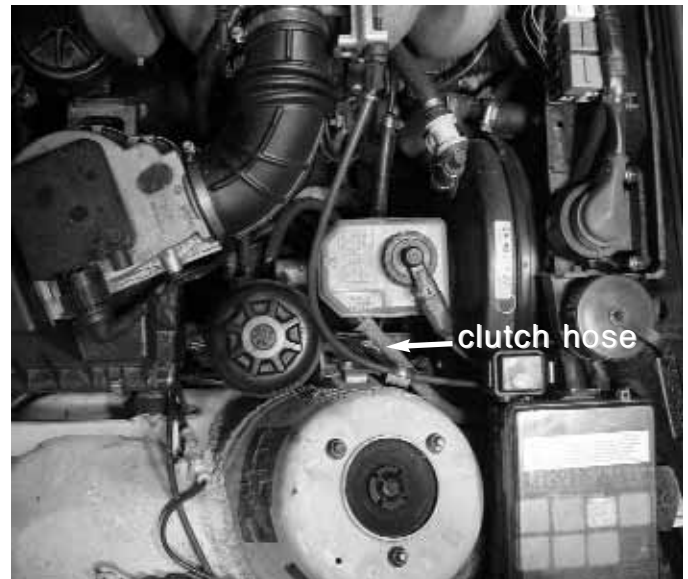


Figure 4