



## **ALL HOWE PERFORMANCE PRODUCTS ARE FOR OFF-HIGHWAY USE ONLY**

### **Power Steering Bleed Instructions**

(Please read and understand instructions prior to bleeding the system. If you have any questions, please contact Howe Performance 619 561-7764 or howepformance@sbcglobal.net.)

#### **CAUTION**

**All air must be bled out of the system before engine startup. Severe damage to the steering system could occur.**

#### **CAUTION**

**Do not use ATF (automatic transmission fluid). Severe damage to the steering system could occur.**

REQUIRED P/S FLUID: Howe Performance power steering fluid PN: 1105  
(GM AC Delco PN: 89021182 may be substituted if needed)

1. Raise and support the vehicle so the steering has no weight on it and the tires are off the ground.
2. Carefully fill the p/s reservoir filter with p/s fluid. Screw it onto the bottom of the reservoir hand tight.
3. Remove the reservoir cap. Do not replace the cap until the system has been completely bled.
4. Fill the reservoir with p/s fluid to the baffle.
5. Loosen the two hose connections at the ram fittings enough to let fluid and air seep out. The ram 90° fittings **MUST** face up (not down). This is the initial gravity bleed of the system.
6. Check the fluid level in the reservoir. Add fluid to baffle as necessary.

#### **NOTE**

If at anytime fluid in the reservoir runs out, air will re-enter the system and all the bleeding procedures must be redone.

7. Loosen the connections at the p/s box and pump enough to let fluid and air seep out.
8. When p/s fluid runs clear (with no foam, bubbles, etc) re-tighten all fittings.
9. Check the fluid level in the reservoir. Add fluid to baffle as necessary.
10. Crank engine 3-4 time **WITHOUT** starting it.
11. Check the fluid level in the reservoir. Add fluid to baffle as necessary.
12. Check that the p/s fluid in the reservoir is clear (no foam, bubbles, etc.). If clear, start the engine and let run for approx. 2 minutes.
13. After approx. 2 minutes, slowly turn the steering wheel left and right several times. **DO NOT** turn to the steering stops. This will allow the p/s pump to go into "High Pressure" and will not allow proper bleeding.
14. Check the fluid level in the reservoir. Add fluid to baffle as necessary.
15. Shut off engine and let stand for approx. 5 minutes.
16. Check the fluid level in the reservoir. Add fluid to baffle as necessary.
17. After 5 minutes, note the level of fluid in the reservoir. Start the engine. Note if the level in the p/s fluid reservoir drops. If it drops, air is still present in the system and Steps 5 thru 17 must be repeated.
18. If the level in the reservoir did not drop, the system has been properly bled.
19. Secure the cap on the p/s fluid reservoir and carefully test drive.