

AIR BLEEDING PROCEDURES

1. **BE AWARE OF ALL MOVING PARTS THAT CAN CAUSE PERSONAL INJURY!**
2. During all steps of these procedures do not allow reservoir to run low on fluid.
3. Inspect reservoir and ensure that it is mounted above the pump level. Check that hoses are routed to prevent going above the reservoir.
4. Inspect all components and hoses for tightness, and leaks. Repair if needed.
5. Fill system with approved fluid. Do not mix types of fluid!

TRW - HF, HFB AND TAS SERIES SHEPPARD - 272, 292, 392, 492, 592

1. Adjust poppets as required.
2. If steering gear is inverted and has a bleed screw, remove/loosen screw and allow fluid to flow until it is clear of air bubbles. Re-install screw and start engine. With engine at idle, crack screw open. Tighten screw again and turn steering gear full travel both directions 3 or 4 times. Repeat procedure as required.
3. If steering does not have a bleed screw or if it is not located on the top of the gear, turning stop to stop several times should remove air from system providing that the stops are properly adjusted.
4. If your vehicle is equipped with a slave box, do not forget to bleed it as well. It is recommended to start bleeding procedure here and then go back to the main gear. You may need to remove the pitman arm from the slave gear while turning wheel full travel to allow poppets to activate on slave gear.

POWER ASSIST CYLINDERS

1. If you have a tie rod mounted assist cylinder you may need to slightly loosen the return side of hose while pressure is applied to the other hose. Be sure to retighten before the cylinder hits the end of its stroke. **Extreme care should be given to avoid placing hands or arms between the tie rod and axle or cylinder. Same care should also be given to avoid wheel travel. Severe personal injury could occur if either of these circumstances were to occur!** Since both hoses act as both pressure and return hoses, it will be necessary to repeat this procedure for both directions several times.
2. If your vehicle is equipped with a frame mounted assist cylinder the same procedure as in Step 1 will apply but it may be necessary to disconnect one end of the cylinder to allow the ports to be positioned above the cylinder. **If this is done again extra care should be given to prevent injury as the cylinder is extended and retracted.**