

## Hydraulic Bleeding Procedure and Internal Leak Test

## Bleeding "Leveling system cylinders"



Have your vehicle or trailer parked on level surface, with the system fully retracted to start the bleeding procedure.

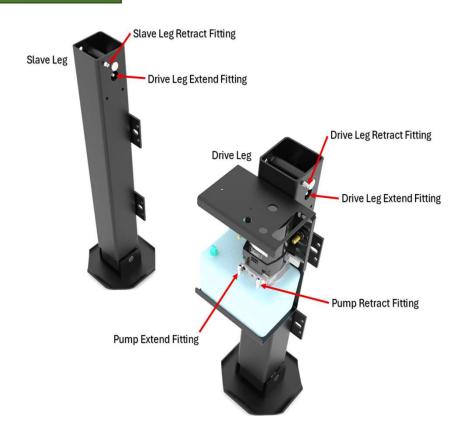
- 1. Using a 15 mm wrench, crack the top extend hose fitting on one of the cylinders, roughly ¾ of a turn, fluid will drip or ooze out, operate the control to extend that particular cylinder in manual mode for 5 seconds. Re-tighten fitting on cylinder and clean up excess fluid. Tighten fittings ¼ turn past hand tight.
- 2. Repeat step #1 for remaining cylinders.
- 3. Now crack the lower retract fittings on all four cylinders, roughly ¾ of a turn, operate the control to retract all or one at a time for 5 seconds. Re-tighten fitting on cylinders and clean up excess fluid.
- 4. From the control, run the auto level feature or extend all four cylinders until there is weight on the cylinder from the vehicle or trailer (tires still on the ground) and visually inspect each extend fitting to ensure there are no leaks. We recommend the vehicle or trailer frame to be properly supported prior to any person(s) under the vehicle.
- 5. Press RETRACT or RETRACT ALL on the control so all cylinders are safely retracted. Visually inspect each retract fitting to ensure there are no leaks.
- 6. You have now completed the bleeding process.
- 7. Fluid level on your Bigfoot system when the jack is fully retracted the fluid shoud be about a 1 inch below the top of the reservoir.



## Bleeding "Square leg jacks"



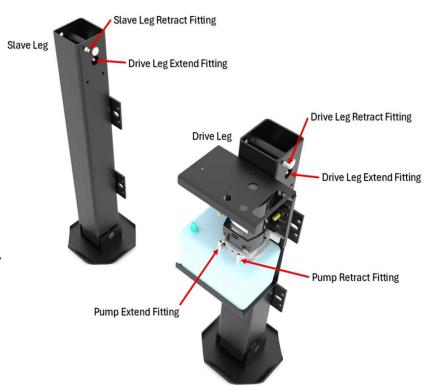
- Bigfoot jacks should not be supporting the trailer in order to perform this procedure. Trailer to be hooked to a truck, the coupler supported by a tripod or the underside of the trailer frame securely supported by jackstands.
- Jack(s) should be fully retracted to start your bleeding procedure.
- Using a 15 mm wrench, crack the retract hose (½-¾ of a turn) and press the retract switch on the controller, if possible: Re-tighten the fitting while the pump is running. Repeat this step if more then one jack. Tighten fittings ¼ turn past hand tight.
- Bump the retract switch again and let sit for 10 minutes.
- Now extend the jack(s) until they reach the ground and stop.
- Using a 15 mm wrench, crack the extend hose (½-¾ of a turn) and press the extend switch on the controller, if possible: Re-tighten the fitting while the pump is running. Repeat this step if more then one jack. Fully extend the jack(s) and let sit for 10 minutes.
- You have now completed the bleeding process.



## Internal Leak Test on "Square leg jacks"



- Bigfoot jacks should not be supporting the trailer in order to perform this procedure.
  Trailer to be hooked to a truck, the coupler supported by a tripod or the underside of the trailer frame securely supported by jackstands.
- 2. Jack(s) should be fully retracted and the pump cover removed to start this procedure.
- 3. If your pump motor is labeled with "R = 2,500 PSI" on the grey sticker, skip to step 6. Other models would state "R = 1,000 PSI" or not state pressure, continue to next step.
- 4. Remove both the extend and retract hose from all jacks, label if needed.
- 5. Install the extend hose(s) to the retract fitting(s). Tighten fittings ¼ turn past hand tight. Place retract hose(s) to a bucket.
- 6. Make sure there are no hoses connected to the extend fitting on the jack(s). Should be an open fitting (remove if have not done already). Clean up any residual fluid from extend fitting or jack. Retract fitting should have a hose(s) installed.
- 7. Press and hold the retract switch on the controller for 20 seconds.
- 8. Visually inspect extend fitting to see if any fluid exits the extend fitting, clean as necessary for residual fluid. If you see <u>consistent</u> fluid coming out of the extend fitting over the next 15 minutes, the cylinder may have an internal seal leak also referred to as "bypassing". Replacement inner cylinder or rebuild is required. If no fluid consistently flows out of the fitting, then the cylinder is OK. Meaning there could be air in the system (most common, hoses or cylinder), the jacks are at lift capacity (weight) or there is a pump issue.
- 9. If performed step 5, flip hoses to proper locations and perform bleeding procedure to get the air out.







Have your vehicle or trailer parked on level surface, with the system fully retracted to start the bleeding procedure.

- 1. Using a 15mm, remove the extend hose and the retract hose.
- 2. Install the extend hose to the retract fitting. Place the retract hose into a bucket. Tighten fittings ¼ turn past hand tight.
- 3. From the controller, in manual mode, press and hold to retract that particular cylinder for 20 seconds (or Emergency Retract).
- 4. Visually inspect extend fitting to see if any fluid exits the extend fitting, clean as necessary for residual fluid. If you see <u>consistent</u> fluid coming out of the extend fitting over the next 15 minutes, the cylinder may have an internal seal leak also referred to as "bypassing". Replacement inner cylinder or rebuild is required. If no fluid consistently flows out of the fitting, then the cylinder is OK. Meaning there could be air in the system (most common, hoses or cylinder), the jacks are at lift capacity (too much weight) or there is a pump or valve issue.
- 5. If performed step 2, flip hoses to proper locations and perform bleeding procedure to get the air out.

