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## Leaking Cylinders: Single-Activating Cylinders

**Notice:** Before performing any service on a machine read and understand all safety instructions in the owner's manual. Manuals are available free of charge. If you do not have one, please call the Customer Service Department at the toll-free number below.

The following is a list of checks to perform before determining whether a cylinder is defective or if the seals are leaking.

If the hydraulic power unit tank is overfilled, the following will happen:

1. As the machine descends, oil returns from the cylinder(s) back into the tank.
2. As the oil level rises in the tank, the clear plastic line draws air from the tank and deposits the air in the backside of the cylinder(s).
3. If there is more oil in the system than is necessary to run the machine, the clear plastic line will pick up the excessive oil and start to fill the backside of the cylinder(s). This happens on the down stroke only.
4. As you raise the machine up there is now oil in the bore of the cylinder that is forced to escape through a 1/4-inch hole. Because of the volume of the oil and the small escape route, the remainder of the oil is forced out past the rod wiper. This gives the appearance that the seals(s) and/or the cylinder(s) are defective.
5. To check and verify if the cylinder is defective, or there is an overfill situation, simply remove the clear plastic line from the reservoir and run the machine up and down several times. If fluid continues to flow from the clear plastic line, then there is a cylinder seal problem. If the flow of oil stops, then it is an overfill situation.
6. When the machine is collapsed, the oil level in the tank should be approximately 3/4 inch below the vent plug. This 3/4-inch of air space is critical for the hydraulic system to vent properly.

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