



Terex Utilities	
SERVICE ADVISORY	SA696

DATE: 6/22/2021

REVISED:

TO: Owners, Users, Dealers, Servicing entities, and Installers

MODELS AFFECTED: Aerial Devices and Digger Derricks

SUBJECT: Contamination in Auxiliary Power Check Valve

Issue:

Terex has become aware of Auxiliary Power circuits failing to operate properly. It has been determined that a ½ inch steel bodied check valve, part number 49194, used in the circuit may not operate properly if contaminated. This check valve is normally in the open position so contamination can collect and prevent the poppet from closing properly. If not operating properly the Auxiliary Power pump will not work. An Auxiliary Power system is an option that may be installed on any Terex Utilities model of aerial device or digger derrick.

Action:

Terex recommends users follow the instructions for the daily pre-shift inspection and operate all functions including the Auxiliary Power. Troubleshoot the hydraulic circuit for the Auxiliary Power if it is not functioning properly to determine the cause. If it is determined that the check valve is not operating properly it should be disassembled, inspected for damage and/or contamination, cleaned of any contamination, and reassembled. If there is damage to the internal components or after cleaning and reassembly the check valve still does not operate properly; it should be replaced.

If contamination is found, the source of the contamination must be identified and corrected, and the contamination removed from the hydraulic system. Proper maintenance is vital in preventing the presence of contamination in the hydraulic system. Follow all instructions in the manuals for maintaining the hydraulic system including when operating in dirty or dusty conditions as it may require more frequent filter changes. If contamination is found or suspected in the check valve, verify the return line filter is not in bypass. Replace with a new element and operate the machine at idle speed for 30 minutes to thoroughly filter the oil. Operate all cylinders, including outriggers, and motors to flush any contamination back to the filter. At the end of this operating period, the filter cartridge must be removed and discarded. Install a new filter. If the oil is contaminated due to component failure, it may require more extensive flushing of the lines by looping the hoses and repeat filtering while functioning each control in the system to remove debris.

After troubleshooting the Auxiliary Power circuit and making any required corrections, verify operation by following the operator's instructions in the unit manuals.

Hydraulic systems require clean oil to function properly. There are several sources of contamination that can cause issues, such as:

1. New machines and new oil may have debris in the system that will eventually work through a machine and may lodge in areas.

2. Functions which are not operated may have contamination collect and eventually prevent proper operation.
3. Dirt can be dragged in on cylinder rods as they extend and retract plus through the breather on the hydraulic tank as the oil level changes and air enters the hydraulic tank.
4. Adding make up oil to the hydraulic tank.
5. Component and hose replacement.

Items 1 and 4 are affected by the oil added to units. New oil is not as clean as oil which has been circulated and cleaned by the system filter.

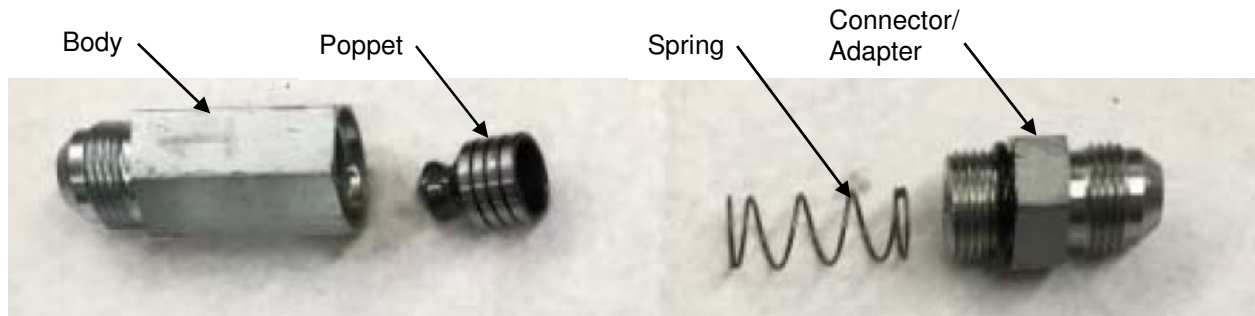


Figure 1. Disassembled check valve

Terex and local industry standards (CSA and ANSI) require the purchaser of a Terex unit report to Terex the model and serial number of each machine sold, as well as the name, address, and telephone number of the new owner, within 60 days of the sale. Use the Owner Update Form in the manual to update the owner status of any of your machines. Terex also asks the seller to provide the new owner information so if you require additional copies of the Owner Update Form or have any questions, please contact TEREX Utilities Warranty Department at 1-844-837-3948 or utilities.warranty@terex.com.