HECHNICAL BULLETINFONTAINE

TB-080 • October 2024

Air Cylinder Warranty, Troubleshooting and Maintenance Information



Air cylinder warranty

The air cylinder is covered under a manufacturer's warranty for two years. This <u>warranty covers</u> material and manufacturing defects. <u>Refer to Fontaine's Warranty Statement for more information</u>.

Air cylinders that have been damaged from abnormal use or Improper Installation are not covered under warranty. Improper installation can cause offset loading of the cylinder and mounting hardware leading to cylinder failure. If the air cylinder is not installed as per the instructions provided in Fontaine Fifth Wheel tech bulletin TB-004, warranty claims will be denied.

Contaminants like particulate matter, oil, water, and others are often easily introduced into the pneumatic cylinder through the operating environment or the pneumatic air supply. Left unmaintained, this can degrade the cylinder function and could eventually lead to cylinder failure. Contaminants can collect in the exhaust valve and degrade valve function which could cause fifth wheels to be slow opening and/

or slow closing. Changing air supply filters regularly and according to manufacturer specifications

will help protect your cylinder from damaging contaminants. It is the customers' responsibility to ensure that air supply contamination is

controlled, the air cylinder and exhaust valve are maintained and cleaned as needed to ensure proper operation. If it is determined that the air system has introduced oil and contamination into the air cylinder, the air cylinder must be cleaned as described in this procedure. Warranty will not be approved for contaminated air cylinders.

Exhaust valve damage or missing exhaust valves are not covered under warranty and the air cylinder will not be covered under warranty for any reason where the exhaust valve has been damaged or removed. Replacement exhaust valves can be ordered under Fontaine Fifth Wheel kit number KIT-AA-VLV. Refer to Fontaine tech bulletin TB-075 for exhaust valve information and replacement instructions. It is the customers' responsibility to ensure that the exhaust valve is in good working condition.

Troubleshooting

Slow Closing Fifth Wheel – This is typically not caused by the air cylinder. So before removing the air cylinder check the following: Check the fifth wheel for broken, bent or missing components. The fifth wheel is closed by two main springs. Ensure these springs are attached and in good working condition. Slow closing can be caused by several factors. The most common factor is thick grease build up in the fifth wheel. Another factor can be lack of grease that has led to excessive rust on the locking mechanism components. Refer to LT-072 for proper cleaning and lubrication instructions. Refer to LT-203 for special warnings and instructions for cold weather applications.

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On air actuated fifth wheel models the pneumatic cylinder must be maintained for optimal performance. As with all pneumatic cylinders the seals must be kept clean and lubricated for proper operation. The air cylinder shaft must be kept clean of all foreign material, grease, grime and paint in order to protect the shaft seals and avoid cylinder contamination. As with any pneumatic cylinder it must have a clean air supply to operate properly.

If oil is added to the air supply any contaminants pulled into the cylinder will collect inside the tube, along with the oil, causing sluggish operation over time. Follow these procedures if you feel that the cylinder has contaminants in the tube that are impeding proper operation.

Air Cylinder Maintenance Procedures

Remove the air cylinder from the fifth wheel. (Refer to to TB-004 for information about air cylinder removal and installation.) Extend the shaft out of the cylinder and clean if necessary. Wipe the shaft with WD40 or degreaser if necessary, removing all grease, grime, and foreign materials. Dry the

shaft thoroughly and apply a thin coat of WD40 on the shaft. Retract the air cylinder and spray a liberal amount of WD40 into the vent hole located in the end cap. Do not use diesel fuel or cleaners with heavy oils that can leave an oil residue in the cylinder tube. Do not use harsh chemicals that can damage the piston seal. This could cause degraded operation and air leaks. Slowly extend the cylinder working contaminants out of the vent. Repeat this process until the fluid being expelled from the air cylinder is clear and free of contaminants and the shaft and piston inside the tube moves freely in the cylinder. After cleaning the cylinder, extend the shaft and wipe clean, ensuring there are no contaminants remaining on the cylinder shaft. Reinstall the cylinder into the fifth wheel. It is extremely important that the air cylinder is installed properly according to the instructions given in Fontaine Fifth Wheel tech bulletin TB-004.

It is extremely important to maintain your fifth wheel according to Fontaine's maintenance instructions. Failure to properly install, maintain and operate the fifth wheel and air actuated components could result in tractor-trailer separation causing serious injury or death.

Referenced Literature



Warranty Statement (LT-077)



KIT-AA-6000 Air Actuated Installation (TB-004)



Cylinder Valve Replacment (TB-075)



Maintenance
Quick Start
(LT-072)



Cold Weather
Maintenance
(LT-203)

