

ISO/TS16949 REGISTERED
TB-057 • July 2013

Air Actuated No-Slack® Fifth Wheel Lock Lubrication Procedure

Step 1: Make sure the fifth wheel lock is closed. The fifth wheel lock can be closed by pushing the tip of the bumper forward using a crowbar or large screwdriver.

Warning: The jaw and wedge will close quickly with significant force. Keep your hands clear of this area.



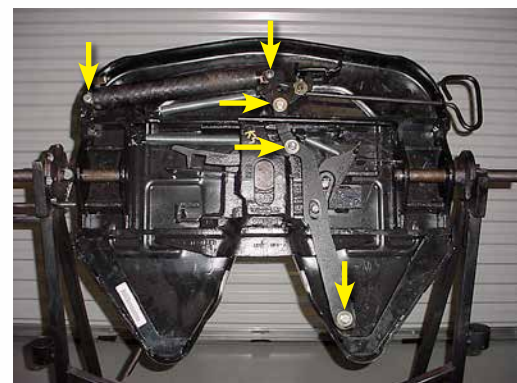
Step 2: With the fifth wheel lock closed, remove any old stiff grease that has built up in the throat of the fifth wheel. Lubricate the fifth wheel locking mechanism. Use a screwdriver to separate the jaw and wedge for cleaning and lubricating these parts. Reapply grease to the surfaces of the jaw and wedge. Make sure that the serrated surfaces between the jaw and wedge are well lubricated. (Use Mobilgrease XHP 320 or equivalent. This is a Lithium Complex Lubricant with a 5% Molybdenum Sulfide additive.) Attention: Please reference Fontaine Fifth Wheel Technical Bulletin (TB-008) for the recommended Cold Weather Maintenance procedures.

<http://www.fifthwheel.com/pdfs/technicalbulletins/TB-008.pdf>



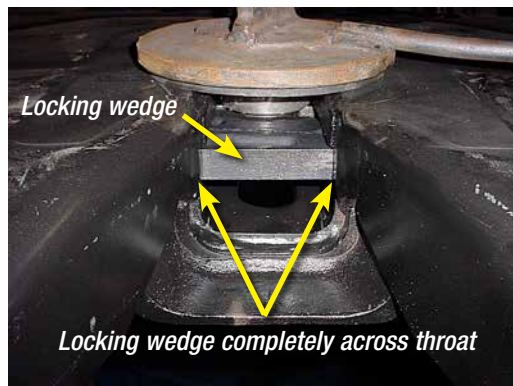
Step 3: Lubricate the pivot points of the locking mechanism using an aerosol spray WD40 lubricant (Testing has shown that WD40 Spray Lubricant has provided excellent cold weather performance.)

Note: Do not use lubricants containing Silicon or PTFE (Teflon). These lubricants will damage the interior of the cylinder.



Step 4: Use a test kingpin to close the fifth wheel. Check to see if the fifth wheel locking mechanism is functioning properly:

Make sure the locking wedge is completely across the throat of the fifth wheel.



Make sure that the grip of the pull handle is within 1" of the side of the fifth wheel. This ensures that the secondary lock is engaged.



- If the fifth wheel has coupled to the test kingpin properly, check the stop rod adjustment. Check the travel of the wedge stop rod by pushing on the head of the hex head of the rod with thumb pressure. It should have 1/4" of movement. If less, turn wedge stop rod counter clockwise; if more, turn clockwise. This lubrication service is now complete.
- If the fifth wheel did not couple properly, proceed to Step 5.



Step 5: When inserting the test kingpin, did the pull handle retract into the fifth wheel some amount? If yes, check for any foreign object(s) interfering with the fifth wheel's locking mechanism. If no, check for damage to the locking mechanism (operating handle, pull handle, handle guide, cover plate, etc.). Check the tip of the bumper and make sure it is not worn, bent or broken.

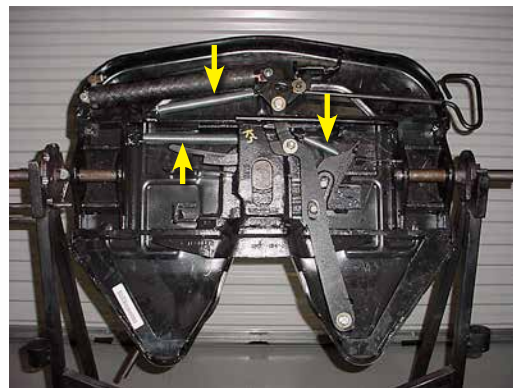
When inserting the test kingpin, did the pull handle grip move towards the center of the fifth wheel but not fully close?

- If no, check the tip of the bumper and make sure it is not excessively worn, bent or broken.
- If yes, check for foreign object(s) interfering with the fifth wheel's locking mechanism.



Step 6:

- Make sure that the bumper, secondary lock and timer springs are not missing or damaged.
- Check the locking components (pull handle, operating handle, bumper, timer, secondary lock) for any signs of damage.



Step 7: Check the stationary jaw and make sure it is not broken or bent.



Step 8: With the fifth wheel lock closed, disconnect the air line to the cylinder's quick exhaust valve (make sure the air line is not pressurized), and then disconnect the shaft end of the air cylinder from the secondary lock casting. Rotate

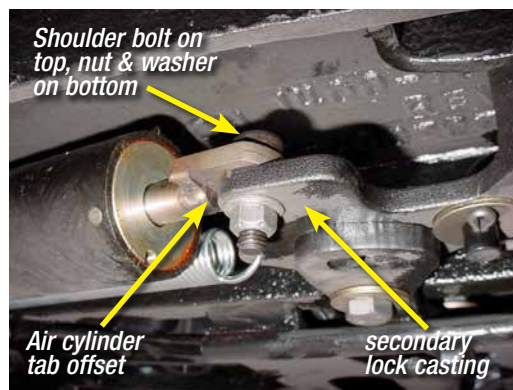


the air cylinder forward a small amount. This will allow the cylinder shaft to be extended by hand. Do not use the pull valve in the cab of the tractor to extend the cylinder. Clean the shaft of the cylinder removing any dirt or grime that has built up. WD40 can be used to aid in cleaning the cylinder shaft.

The left side photo shows dirt and grime that has built up on a cylinder shaft. The right side photo shows that same cylinder after the shaft has been wiped clean using a shop rag.

Reconnect the shaft end of the cylinder to the secondary lock. Make sure that it is assembled as shown in the photo (The tab on the shaft end has an offset and must be oriented on top of the secondary lock. The shoulder bolt must be oriented as shown.

Note: Photo at right shows fifth wheel in normal operating position.



Step 9: Using an aerosol can of WD40, spray a small amount of the lubricant around the inside of the cylinder tube through the cylinder's vent hole. Direct the lube around the interior of the cylinder. Do not over lubricate the cylinder. Manually pull on the pull handle. Do not completely open the lock. Partially open the lock and allow it to close several times will help spread the lubricant in the interior of the cylinder. Reconnect the air line to the cylinder's quick exhaust valve.

Note: Do not use lubricants containing Silicon or PTFE (Teflon). These lubricants will damage the interior of the cylinder.



Step 10: Use the air toggle valve located in the tractor cab to latch the fifth wheel lock in the open position (This will fully extend the fifth wheel air cylinder). Most of the WD40 applied to the interior of the cylinder tube as well as any interior debris will be forced out of the cylinder through the vent hole. Care should be taken to contain this expelled lube and debris. A barrier can be placed to contain it. Wipe off the cylinder vent hole to remove expelled debris.



Step 11: The fifth wheel lock should be opened using the air cylinder and tripped closed using a test kingpin two or three times. This will help to clean the interior of the cylinder tube and distribute the lubricant.

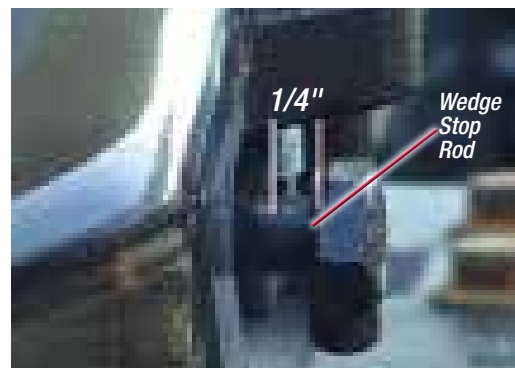
Step 12: Use a test kingpin to couple the fifth wheel. Check to see if the fifth wheel locking mechanism is functioning properly.

- Make sure the locking wedge is completely across the throat of the fifth wheel.
- Make sure that the grip of the pull handle is within 1" of the side of the fifth wheel. This ensures that the secondary lock is engaged.

Step 13: If the fifth wheel has coupled to the test kingpin properly, check the stop rod adjustment. Check the travel of the wedge stop rod by pushing on the head of the hex head of the rod with thumb pressure. It should have 1/4" of movement. If less, turn wedge stop rod counter clockwise; if more, turn clockwise. This lubrication service is now complete.

If the fifth wheel has not coupled properly to the test kingpin proceed to Step 14.

Fontaine Parts Connection
KIT-NOSLACK-KP shown



Step 14: If the lock is not closing properly, disconnect the air line from the cylinder's quick exhaust valve (make sure that the air line is not pressurized) and remove the air cylinder. Make sure the fifth wheel lock is closed before removing the cylinder. After the cylinder is removed, manually open and use a test kingpin to close the fifth wheel. If the fifth wheel is not coupling properly, contact Fontaine Parts Connection (800-874-9780) for additional trouble shooting assistance. If the fifth wheel couples properly proceed to Step 15.



Step 15:

Note: Photos at right shows top plate laying upside down on a table during servicing. Not in normal operating position.



Install a new air cylinder (KIT-AA-6000L: This kit is for use with left hand release 6000 & 7000 series fifth wheels including the Clean Connect Series). Be sure to follow the instructions included in the kit. Pay special attention to the mounting tab cylinder orientations and do not over torque the fasteners.

Step 16: Use a test kingpin to couple the fifth wheel. Check to see if the fifth wheel locking mechanism is functioning properly.

- Make sure the locking wedge is completely across the throat of the fifth wheel.
- Make sure that the grip of the pull handle is within 1" of the side of the fifth wheel. This ensures that the secondary lock is engaged.

Step 17: If the fifth wheel has coupled to the test kingpin properly, check the stop rod adjustment. Check the travel of the wedge stop rod by pushing on the head of the hex head of the rod with thumb pressure. It should have 1/4" of movement. If less, turn wedge stop rod counter clockwise; if more, turn clockwise. If the fifth wheel has not coupled properly to the test kingpin contact Fontaine Parts Connection (800-874-9780) for additional trouble shooting assistance.