

TECHNICAL SERVICE BULLETIN (TSB) 20180525-01 Issued: May 25, 2018 (updated 6/28/2018)



## Important Safety Notice: Standard Operating Procedure for the A-720/A-721/A-724 Angle Valves Requires Tightening and Periodic Inspection of Valve Packing Screw

**Scope:** This TSB is an addendum to the Midland A-720/A-721/A-724 Installation and Operations Manual, and is not intended to conflict with or supersede your company's approved operating procedures. This TSB is intended to provide guidelines to aid in the normal and safe operation of <u>A-720/A-721/A-721B/A-724 Angle Valves</u>. This TSB: (1) alerts tank car builders, owners/lessees of tank cars, and repair shops that if the valve packing on these valves is not tightened properly, this may cause unintended rotation of the hand wheel and valve stem in certain circumstances; and (2) provides guidance on how to tighten the valve packing. Please read this TSB and contact Midland if you have any questions or require further assistance.

**Background:** Midland has received a few reports that after the valve was fully closed on some of these valves, the hand wheel and valve stem immediately rotated counterclockwise. Although no serious incidents were reported, this condition may indicate that the valve packing has not been properly tightened. Midland investigated these reports and has determined that if the valve's packing screw is properly tightened to the torque levels specified in this TSB to secure the valve packing, this will help prevent unintended rotation of the hand wheel and valve stem.

**Recommended Actions:** These valves are designed with adjustable Teflon packing which may creep over time if not properly maintained. As part of the valve's normal operation, it is important for the valve packing screw to be tightened properly to secure the valve packing. Please follow these operating procedures immediately:



## 1. Tighten the Packing Screw To Secure the Valve

**Packing:** To tighten the packing screw, first loosen the lock nut (highlighted in blue) using a 1- 3/4" wrench. Then tighten the packing screw, using a 1- 1/16" wrench. <u>Tighten the packing</u>



screw to a minimum of 65 ft-lb for all A-720 series valves. (When using a crowfoot socket for torqueing, position it at 90° to the torque wrench for accuracy. Push down on the crowfoot socket to ensure maximum contact with the packing screw.) Once the packing screw is tightened to the above specification, tighten the lock nut to 65 ft-lbs to keep the packing screw from loosening while the valve is in use. Please note: these steps are part of the routine operating instructions for the valves and may be completed as approved by your safety department, when the valve is otherwise operating normally. If the valve has failed or is inoperable, or if unintended rotation of the hand wheel or valve stem is observed, the valve should be removed from service immediately and repaired by an AAR certified facility.

2. Future Inspection & Maintenance: Good operating practice requires periodic inspection and adjustment of the valve packing to ensure that the valve is functioning properly. More frequent observations are recommended under extreme operating conditions.

The bulletin is based on extensive testing and performance experience and is the most current information available. Midland reserves the right to make changes in specifications and other information contained in this document without prior notice. The user should in all cases consult Midland to determine whether any such changes have been made.