

TECHNICAL SERVICE BULLETIN

Bulletin No.: TSB-042

Date: November 20, 2020

Subject: Cylinder Collar Bolt Retention

Models: Quantum 40' Virtual Pipeline Trailers built before December 2020

Background

Quantum Virtual Pipeline (VP) trailers utilize an aluminum collar mounting block and multiple fasteners to secure to the cylinder to the upper cross member which supports the cylinder assemblies in the trailer.

Condition

Some Quantum 40' VP trailers used in severe operating environments, have been found to have loose upper cylinder support collar bolts. When these bolts become loose it is possible for the fittings connected to the tank head to develop a leak. This issue appears to occur most frequently on the rear row of the trailer.

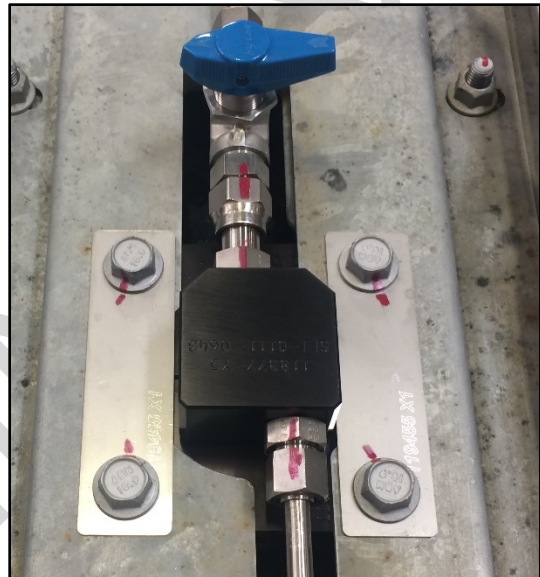
Cause

At this time Quantum is still investigating the cause of this condition.

Correction

Quantum has developed a new fastening system that uses a safety wire to positively secure the fasteners in place.

Until the root cause of this condition can be positively identified, Quantum is recommending that this new fastening system be applied to the last two rows of the trailer immediately to prevent loosening or loss of these fasteners.



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All VP Trailers:

Labor OP Time: Straight Time ~?

Parts Information

Description	Part Number	Qty
Repair Kit – VP Collar Bolt	120731	1 kit per Cylinder

Application

All VP 40' Trailers built before December of 2020.

Contact Information:E-Mail: QTService@qtw.com

Phone: 800.816.8691

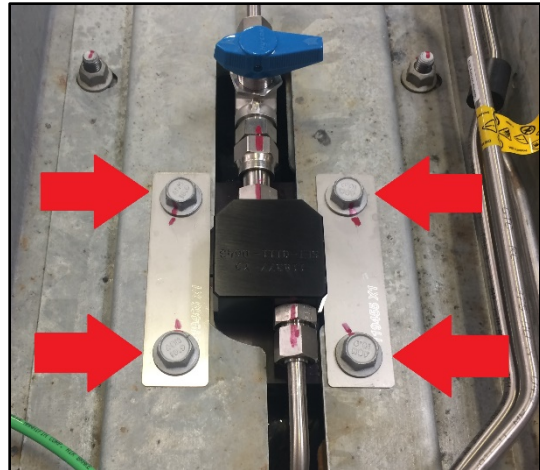
Fax: 949.930.3401

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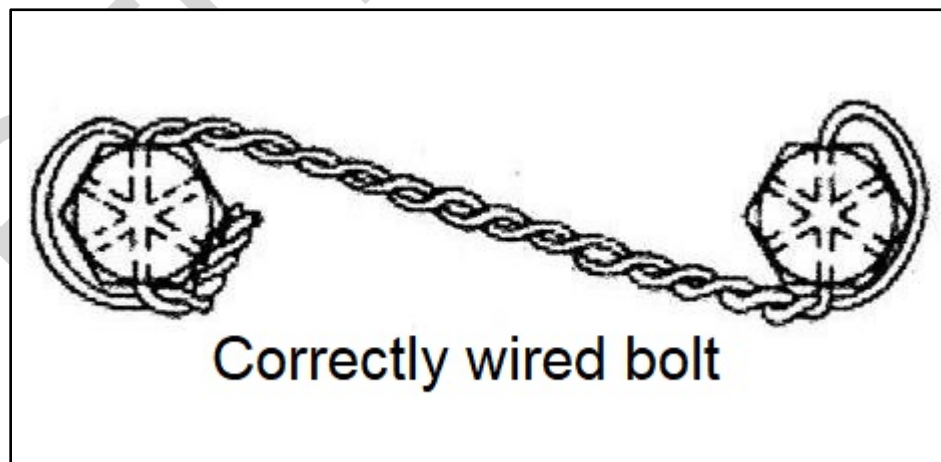
Upper Cylinder Collar Fastener Retention

The following procedure is for replacement of the upper cylinder collar bolts on Quantum VP 40' trailers.

1. Remove two of the bolts retaining the upper cylinder collar and discard.
2. Install two new bolts and tighten. Tighten to 63 Lb. ft. (85Nm).
3. Repeat steps 1-3 for the other two upper collar mounting bolts.
4. Install safety wire on each pair of bolts as instructed below.



- Bolts are to be safety wired in pairs. Use the pair of bolts on either side of the tank head do not cross the safety wire over the tubing.
- New safety wire must be used, never attempt to reuse safety wire.
- The wire should be threaded through the fastener so that it creates tension in the *clockwise direction* to resist loosening of the fastener.
- 0.032" 304 stainless steel safety wire shall be used.
- Wire should be twisted at 6-8 turns per inch (TPI). Twists should be tight and even: the wire between the bolts should be as taught as possible without over-twisting.



5. Repeat this procedure for every cylinder as required.