



Hale Products, Inc. Service Bulletins

Bulletin#: **SB-97**

Revision#: **A**

Date: 02-15-08

Product Type Covered: Hale Pump ☒

Hurst Tool ☐

Lukas Tool ☐

Product Covered:

Torrent Stainless Steel Valve Lubrication Kit

Problem Statement:

Valve lubrication is sometimes almost impossible. Remote valve lubrication kit can make lubrication of difficult to reach valves easier to perform at low cost.

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5-12-07

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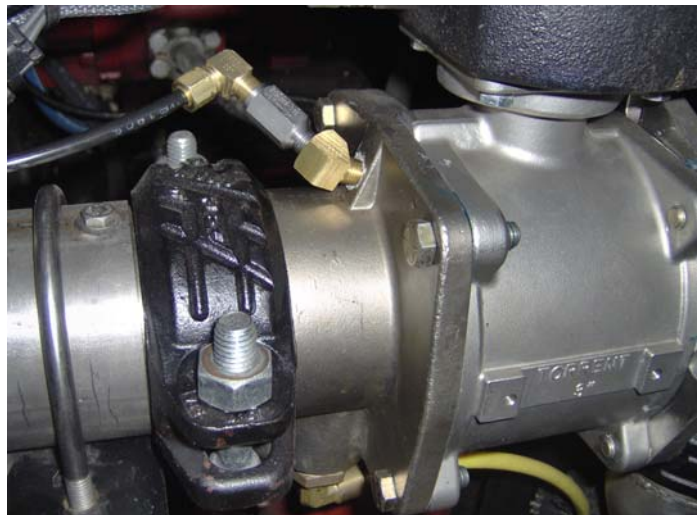
Customer Service Designee:

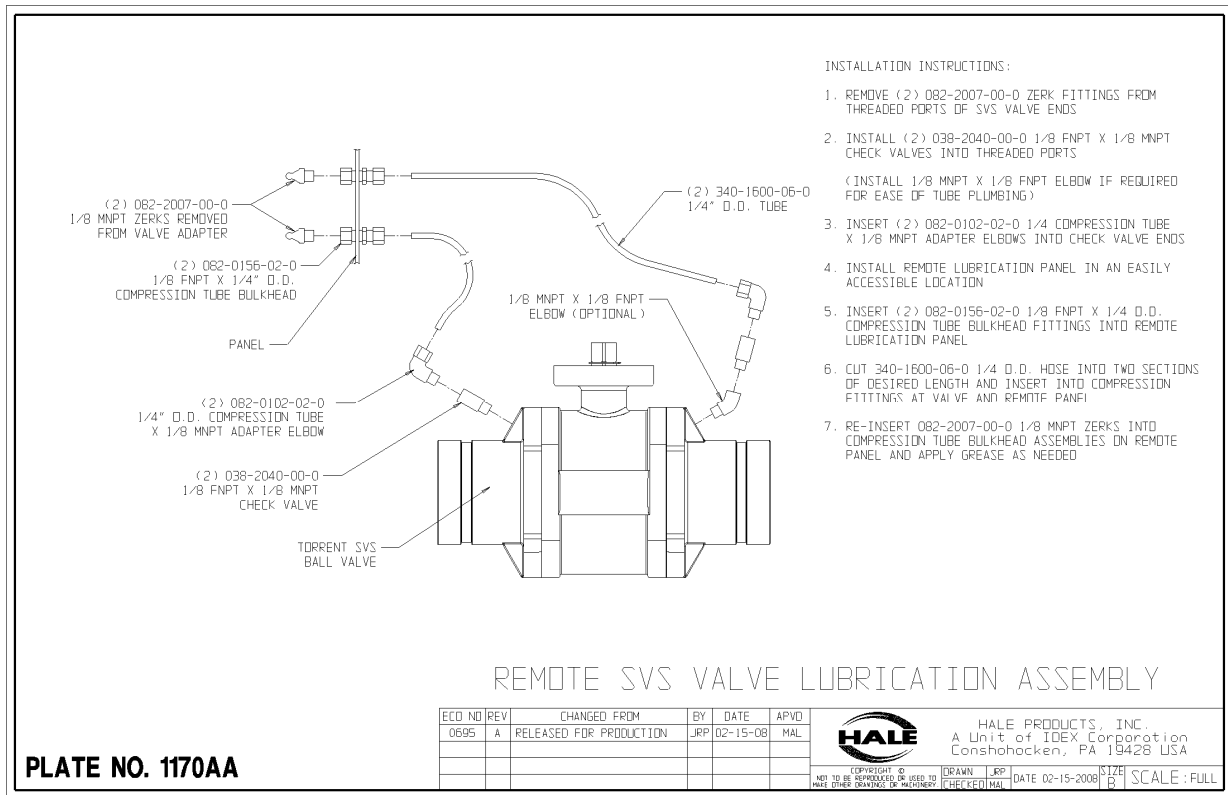
Steve Phipps

Body of the Bulletin

Regular valve lubrication as part of a robust Fire Apparatus maintenance program will reduce valve operation effort and increase the life of the valves. Torrent SVS valves incorporate an exclusive grease fitting to allow easy external lubrication of the valve seats. However, some valves may be very difficult to access when installed in a truck. These valves can benefit from having remote valve lubrication points. For consistency and quality, Hale is providing recommendations to assemble a remote valve lubrication system. Hale offers a kit (P/N 546-6250-00-0) that will include the necessary fittings, tubing, etc. to plumb remote lube points for a valve. The installer can purchase the kit or substitute equal or better parts and assemble in a similar manner.

This remote valve lubrication assembly consists of (2) check valves, (2) pipe to tube adapters, (2) bulkhead fittings, (2) zerk fittings, tubing, remote lubrication panel, and loom as seen in the accompanying figures. While not always required, a 45° elbow may be used between the Torrent SVS valve and the check valve to create enough space in order to assemble the fittings. The check valve is necessary in order to prevent water from back flowing up the line and freezing in the tube. It is recommended that the adapter be an elbow which can direct the tube line away from the valve linkage or other moving parts. The loom should be rated up to 300° F to properly cover and protect the tubing. The bulkhead fitting converts the line from tube to pipe and allows it to be mounted to a panel or bracket or to be wire tied to a convenient location that will allow easy access for maintenance. The zerk fitting that comes standard on the Torrent SVS valve can be removed from the valve and reused by attaching it to the bulkhead. This fitting has a seal inside; do not substitute an automotive grease fitting.





The parts provided in the kit meet certain requirements which must be maintained when assembling with substitute parts. The requirements for all fittings and tubing can be found below in a tabular format. The check valve should be capable of 1400 psi working pressure because of the pressure that can be developed during lubrication. It should also have a cracking pressure of at least 20 psi in order to prevent leakage when the ball valve experiences vacuum. All fittings and tubing should also have a working pressure of at least 1400 psi. This is sufficient for use with a 1/4" OD tube with a 0.050" thick wall that is up to 8' long. Lengths longer than 8' or tube with a smaller ID will undergo pressures greater than 1400 psi when lubing the ball valve and therefore would require working pressures greater than 1400 psi. Additionally, using a tube with a 1/4" OD is recommended to ensure grease moves uniformly through the tube as well as to reduce the volume of grease that idly fills the length of tube while not requiring too much pressure to move the grease through the tube. All fittings should be 1/8" NPT size for similar reasons. Additionally, all fittings should be brass or stainless steel to prevent corrosion.

Parts List for Hale Kit, P/N 546-6250-00-0

Part	Hale P/N	Inlet	Outlet	Min. Requirements	Actual Spec
Bulkhead	082-0156-02-0	1/8 FNPT	1/4" compression	1400 psi working	2000 psi
Tube	340-1600-06-0	1/4" OD	1/4" OD	1400 psi working	2200 psi working
Elbow Adapter	082-0102-02-0	1/4" compression	1/8 MNPT	1400 psi working	1400 psi working
Check Valve	038-2040-00-0	1/8 FNPT	1/8 MNPT	1400 psi working 20 psi cracking	5000 psi working 35 psi cracking
Loom	200-2690-00-0	1/4"	1/4"	300° F	300° F
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