

## Hale Products, Inc. Service Bulletins

Bulletin#:	SB101	Revision#: A Date: 8/11/08
Product Type Covered: Hale Pump X Hurst Tool Lukas Tool		
Keywords:	Reducing	Valve Maintenance on SVS Valves
Product Covered:		Torrent SVS Valves
Problem Statement:		How can I make my Torrent SVS valves more reliable?
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## **Body of the Bulletin**

Water quality variations, usage, installation details, lubrication frequency and the type of lubricant can all affect the amount of maintenance that a Torrent SVS valve installation may require. The elastomeric valve seal in the SVS valves provides a superior and durable seal, however it requires periodic lubrication to operate properly. There are some simple checks and techniques to make your Torrent SVS Stainless Steel valves operate with less effort and require less frequent maintenance/lubrication.

1. <u>Use waterproof grease</u>. It has been shown that a quality synthetic water proof grease will last longer and ease operation effort. Hale has tested "Waterproof Green Grease" manufactured by Omni lubricants for compatibility with the food grade greases listed in the manual and this grease is not only superior, it is compatible with the other approved lubricants. In addition, the "Green Grease" is less than half the cost of the food grade greases listed in the manual and it is more readily available at major auto parts stores such as AutoZone. A standard 14 Oz grease gun tube can be ordered from Hale under P/N 029-0661-00-0 or contact Hale Products Customer Service department.

Note that any high quality valve lubricant that is compatible with water, foam, acetal, viton and buna elastomers can be used, but to prevent interactions between the lubricants, it is advisable to disconnect any remote grease lines and purge the lines of the old grease when changing to a new grease that has not been tested by Hale for compatibility

2. <u>Lubricate with the valves in the open position</u>. The grease is much more effective when it is properly distributed around the valve ball. Lubricate the valves with the valve open and cycle them back and forth to distribute the grease. Using the lower cost grease listed in number one and lubricating with the valves open can make a dramatic difference in the operating effort and the time required between service intervals.

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- 3. <u>Check valve linkage</u>. In many cases, the original linkage may have a shortened lever which increases valve operation effort. A lever extender can help improve linkage geometry and leverage. Class1 has linkage extenders in stock to assist in improving valve linkage. See pictures below. Note that adding a valve lever extender can require a change in the push pull control rod and/or reach rod if there is not enough adjustment or throw in the original installation. See Service Bulletin SB92 for further information on valve linkage recommendations.
- 4. <u>Consider installing remote lubrication lines to grease hard to reach valves</u>. Remote lubrication lines can make lubrication of valves a quick 10 minute job during normal preventative maintenance. See Service Bulletin SB97 for information on remote lubrication lines.

Note that inexpensive ¼" diameter DOT air brake tubing and fittings can be used for valve lubrication but a CAUTION decal is required as a powered grease gun (air or electric) may generate sufficient volume and pressure to cause a line to burst or a fitting to fail. This caution decal should advise to use a standard, manual grease gun only. If the use of powered grease guns is required, the parts detailed in service bulletin SB97 have the pressure capability required.



Standard handle with significant angle on reach rod causing side loading of push-pull handle.



After Class1 extension installed to optimize geometry and reduce force control to operate by over 30%

- 5. <u>Check side loading of push-pull controls</u>. Side loading on the push pull controls can cause the controls to bind and can greatly increase the force required to open a valve. Keeping the reach rods as straight and as long as possible will help avoid side loads and reduce the operation effort of installed valves.
- 6. Class1 valve extensions part number 101923 (Straight) and 114551 (45<sup>o</sup> Angle) are available to assist in optimizing the valve linkage installations.

Using the best practices and hints here has been proven to reduce operation effort and extend maintenance intervals on Torrent SVS valve installations.