

## Bulletin 017/2013

**Subject:** Solenoid valves that are not in use, or in storage may be internally corroded and need to be tested.

### Affected Product:

Underground Longwall hydraulic system double 3 port 2 way solenoid valves from the table below that were manufactured in 2012 or 2013 AND having serial numbers **lower than 0496 13 34 16966** that have been in storage for longer than 3 months, OR have NOT been installed into an assembled Longwall system.

The affected part numbers and drawing numbers are listed below:

Part or component number	Drawing Number
113320	8220 004 000 00 00
632557	8220 005 000 00 00
630998	8220 069 000 00 00
284574	8220 070 000 00 00
344857	8220 085 000 00 00
1597841	8220 126 000 00 00

### Problem Overview

The manufacturer has identified that certain solenoid valves in the affected product range have not been adequately protected from corrosion or deposits while in long term storage [greater than 6 months from manufacture date] prior to use. These valves need to be quarantined from use and returned to Hastings Deering for functional testing.

Corrosion deposits in the valve can lead to increased frictional resistance to movement of the internal parts which could cause malfunction of the solenoid valve if the valve was installed. Malfunction of the solenoid valve may result in unintended or uncontrolled movement of hydraulically-actuated roof support components.

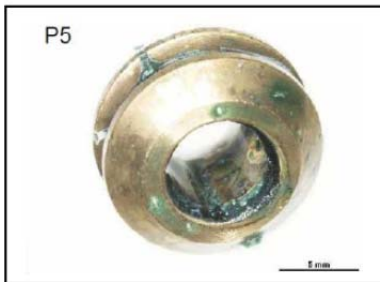
Valves installed in closed hydraulic systems [complete assembled roof supports] when the protection fluid has not been drained out at assembly are NOT affected as the anti-freeze and corrosion protection will have been flushed out by the working fluid and the internal components have not been exposed to air for extended periods.

If the hydraulic fluid in the valve has been drained out longer than 3 months, [such as in roof supports supplied as components or disassembled components for underground transportation], the valves must be returned to Hastings Deering so correct valve operation can be verified on a test bench. This must be done prior to returning the components or system containing the double solenoid valve to service or further storage.

An improved corrosion protection fluid [Quaker Minetech Protection Fluid] has been implemented at the factory on valves with serial numbers after 0496 13 34 16966 and these valves are NOT affected.

# General Equipment Safety Bulletin

Technical Support Department



Stored with CV50 DF



Stored with Solcenic 801E



Stored with Minetech Protecion Fluid

## Risks identified

If a solenoid valve that is affected by corrosion is installed, the valve may malfunction which may result in unintended or uncontrolled movement of hydraulically-actuated roof support components. For safety reasons, personnel should never be under a roof support that is being moved.

## What to Do

Perform the following actions:

1. Inspect existing stocks of Longwall double solenoid valves in parts warehouses for applicability to this bulletin.
2. If valves in the affected product serial number and date range are found, return the parts to Hastings Deering for testing and/or replacement. Hastings Deering will provide an exchange valve. Valves found to be faulty will be returned by Hastings Deering to the manufacturer.

## Contact Details

For further information regarding this bulletin, contact your nearest Hastings Deering branch on 131 228 and ask to speak to an Expanded Mining Products Mining Support Representative.

*This bulletin is to inform you of the recommendations of the supplier in respect of issues dealt with in the bulletin and should not be used as specific advice in respect of any particular events. Advice from a qualified repairer should be sought in respect of any particular events and Hastings Deering (Australia) Ltd accepts no responsibility for any loss or damage occasioned by a party using this general bulletin.*