

# The Challenge Machinery Company

## PRODUCT SAFETY BULLETIN

**Date: November 1, 2014**

**Product: Diamond Cutters - 193, 265, 305**

**305 Champion Cutters - MC, MCPB, MPX, MPC, CRT**

**Serial Number Range: Diamond Cutters 101 - 2864**

**Champion Cutters (Sequential numbers) 11197 – 13906**

**(Serial numbers by year started in 1991) 91101 – 94131D**

### Description:

A potential malfunction of the 4-way directional control valve manufactured by Parker Hannifin Corporation - Hydraulic Valve Division has been discovered. It is now possible given the age of these machines for the springs inside the valve to fail causing the valve spool to shift. This could cause the knife bar to move unexpectedly in either the up or down direction. This motion could occur without pressing the cut buttons. This could create a hazardous condition if the valve fails in the mode that sends the knife down while a machine operator has their hands in the cut / clamp zone, even though we warn against such work practices. The exact cause of the failure has not been determined, but could be due to corrosion of the spring over time due to water in old hydraulic oil, fatigue, or a defect of the spring steel. The valves have now exceeded their useful safe life.

The machines that used this Parker valve are now up to 32 years old and are no longer supported by Challenge for repair parts. They have reached the end of their useful safe life and no longer comply with ANSI safety standards. **Machines that use this Parker valve should be taken out of service immediately and no longer used.**

Photo of Parker Valves.



### Valve Note

If the valves on your machine are not Parker brand valves as shown in the photo this bulletin does not apply to your machine.

**This is not an endorsement of the use of any other brand of valves in this machine.**



**Fact 2:** Some things do change! A paper cutter that is over 22 years old is not the same as one built today. Even if it is well maintained, it undergoes normal wear and tear which leads to metal fatigue and loss of tolerance specifications that can be critical to its proper operation. In addition to this, changes in technology, changes in safety regulations, and thoroughness of maintenance all contribute to the obsolescence of a machine. Machines that were in production fifteen to twenty years ago were designed and built on state-of-the-art technology of that period. However, since then there have been significant modifications and improvements in technology for both productivity and safety. At some point in time, it is no longer cost effective, productive, or safe to continue to operate older equipment. Challenge's "Equipment Support Policy" recognizes this, and provides all of us; manufacturer, distributor, and customer, a reasonable and responsible guideline to know when certain equipment should no longer be used and supported.

**Fact 3:** All the models of machines covered by the November 1, 2014 Product Safety Bulletin were either already in "non-support" status under the "Equipment Support Policy", or were going on "non-support" status as of 12/31/2014. This would have been the case even if the hydraulic valve safety issue had not surfaced. Because it did surface, we immediately put the remaining models on "non-support." Our policy did not change. The only thing that did change was that several models went on "non-support" two months earlier than they would have under the policy. All machine models affected by the "Equipment Support Policy" as "non-supported" are a minimum of 22 years old. Those impacted by the safety bulletin are between 22 and 32 years old. These machines are simply beyond their cost effective useful safe life, can be potentially dangerous and, as was stated in the "Product Safety Bulletin," they should be, "taken out of service immediately and no longer used."

**Fact 4:** Some distributors/remanufacturers would have you believe these machines are perfectly good paper cutters and are still safe to use today with certain modifications. They would lead you to believe that OSHA (Occupational Safety and Health Administration) only requires two-hand cut-control buttons to meet their guarding requirements. This is simply not true. Paper cutters under OSHA are subject to the machine guarding requirements of 29 CFR 1910.212(a)(1) and (a)(3)(ii). Under that standard, OSHA refers to and uses applicable industry consensus standards such as those published by the American National Standards Institute, Inc. (ANSI) for guidance as to what the industry practice is for safeguarding machines. In the case of paper cutters, OSHA recognizes that under the requirements of 29 CFR 1910.212(a)(1) and (a)(3)(ii), the "appropriate standards therefor," are the requirements set forth by ANSI B65-1:1991 and revisions thereof. The current ANSI standard, among other things, requires redundancy in the power control circuits to protect against the risk of any power component failure. Challenge models that utilize the pre-1994 hydraulic system do not meet that requirement. Currently, there is no repair or retrofit kit available that Challenge would approve/authorize to make these machines usable, safe, and no longer subject to the published Product Safety Bulletin.

**Fact 5:** Currently, to our knowledge, there has been one serious injury resulting in the loss of several fingers due to the malfunction in one of the cutters covered by the Product Safety Bulletin. Although, after 22+ years of these machines being in use, this is a very small fraction of the machines still in the market, in our opinion one is still too many. Understand that with each passing day time marches on and these machines continue to age resulting in the possibility of another malfunction to increase.

**Fact 6:** If an accident occurs on one of the machines impacted by the November 1, 2014 Product Safety Bulletin, and a lawsuit is later filed, Challenge will vigorously defend itself against any potential legal claim. This would include adding as additional defendants in a lawsuit any party that subsequent to mailing the notice on 12/17/2014, sold, repaired, retrofitted, or performed any other type of work on these machines. We believe we have taken the necessary steps to protect ourselves and our customers, limiting our potential liability by proactively warning about the potential hazard and declaring that these machines should be removed from service and no longer used. If dealers and/or customers ignore our warnings and proceed to retrofit these non-supported machines, we will look to them as responsible for any future resulting legal claims. Certainly we are concerned about the monetary value of any potential judgement against Challenge if someone is injured, but far more important to us is the safety of the users of our equipment because the potential cost to them is far greater in terms of their health and quality of life.

I trust this fact sheet will answer most of your questions relating to our stance on the issue of product safety relating to guillotine paper cutters and, in particular, to the November 1, 2014 Product Safety Bulletin. I also hope it also dispels some of the misinformation and misconceptions of why Challenge made the decision it did on these machines. We recognize that in the short-term, publishing this Safety Bulletin has cost Challenge in terms of our reputation and credibility in the marketplace. However, sometimes a company has to make a tough decision simply because it is the right thing to do. This is one of those times.