

TECHNICAL BULLETIN

Ref Document No.	TB24001	Issue No.	1
Subject	JUG-A-0 Park Brake Valve Exhaust Vent Fitting		
Release Date	20 th February 2024		

Purpose – To advise owners of PPKME JUG-A-0 vehicles that due to a recent incident involving an operation fault of the park brake actuation valve, an investigation was conducted resulting in the subsequent recommendation.

Applicability – PPKME JUG-A-0 vehicles fitted with 0401-10007 park brake actuation valve.

Background

PPKME has been made aware of a reported fault of a park brake actuation valve on a JUG-A-0 vehicle; the valve was reported to have an intermittent application fault, therefore an investigation was implemented by the mine site of this JUG-A-0's park brake system.

Investigations/ Findings

In brief, during the investigation the faulty park brake actuation valve was removed, dismantled, and examined, then on close inspection of the sintered bronze breather fitting, it was found the internal cavity had trapped several pieces of what appeared to be O-ring material. The trapping of this material created a situation where the breather's venting efficiency was restricted and in turn the brake valve's operation was impaired.

Therefore, due to this finding of accumulated O-ring material and to aid in preventing this situation from reoccurring, a less restrictive and more open flow exhaust breather fitting is recommended to be installed in the park brake valve exhaust port. The recommended breather fitting is shown in images on the following page.



Park brake valve with open flow breather installed, a cut-off 90 degree fitting.

Recommendations

1. Users should be aware of the potential for the sintered bronze breathers to trap material, which can create a hazardous situation where a trapped signal impairs the valve's function.
2. Install a less restricted flow thru breather fitting in the exhaust port of the park brake actuation valve. Initial recommendation for a suitable exhaust vent is installing a modified hydraulic fitting, a 7/16 JIC x 1/8 BSP 90° elbow fitting with the JIC end removed. Refer to photos above.

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