



**PRODUCT TECHNICAL BULLETIN 35923:
GRADER BRAKE SYSTEM
QUICK EXHAUST VALVES**

APPLICABLE DESIGN REGISTRATION: MDR 088446 TBS

Date: 12-04-2019
Issue: B
Prepared for: Industry
Prepared by: Cougar IME

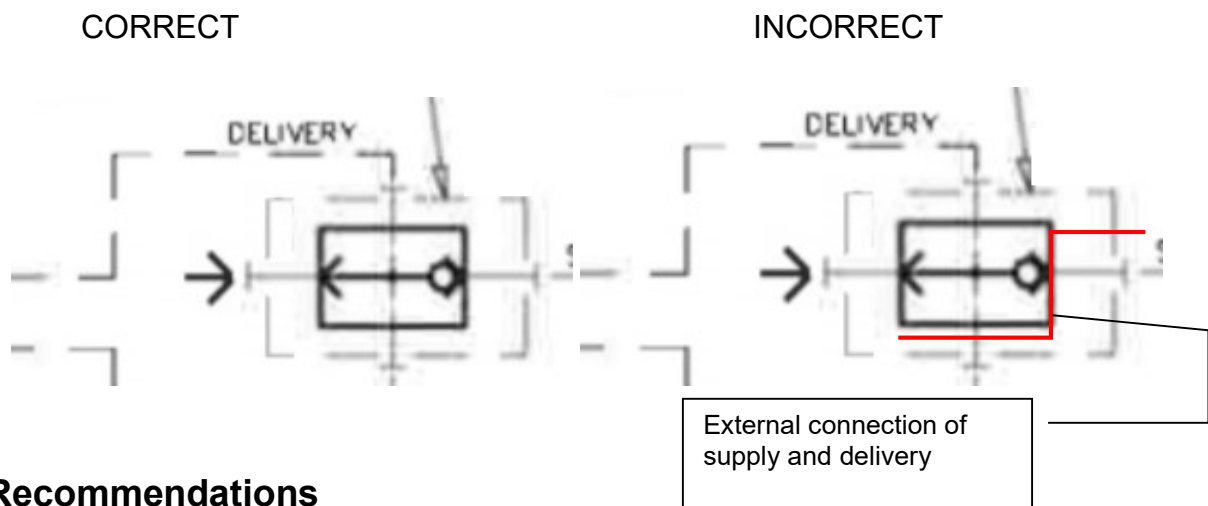
12-14 Martin Drive
Tomago
02 4028 0400

Background:

During review of the Grader brake system it has come to the attention of Cougar IME that some grader quick exhaust valves, particularly the one installed on the park/secondary brake pneumatic circuit may be hoses incorrectly. If hoses incorrectly, whereby the supply is interconnected with the delivery port external to the valve, this can lead to a delayed brake response for the park/emergency brake application or delayed release for service brakes.

Communication:

For clarity of information, improved valve detail is provided below, specifically indicating port identification for the quick exhaust valves. This is not a change in design but communication for clarity of the original design.



Recommendations

1. Review installations of the grader quick exhaust valve 7-090797-700 for correct plumbing as per this communication and to ensure the supply and delivery ports are not externally interconnected. (refer item 10) drawing 7-091004-700.
2. Review park brake / secondary brake response time to confirm this is less than 1.0 seconds and for service brakes less than 0.7 seconds as per design requirements specified in MDG 39 reference 1.

Figure 1: Grader quick exhaust valves (7-091004-700B)

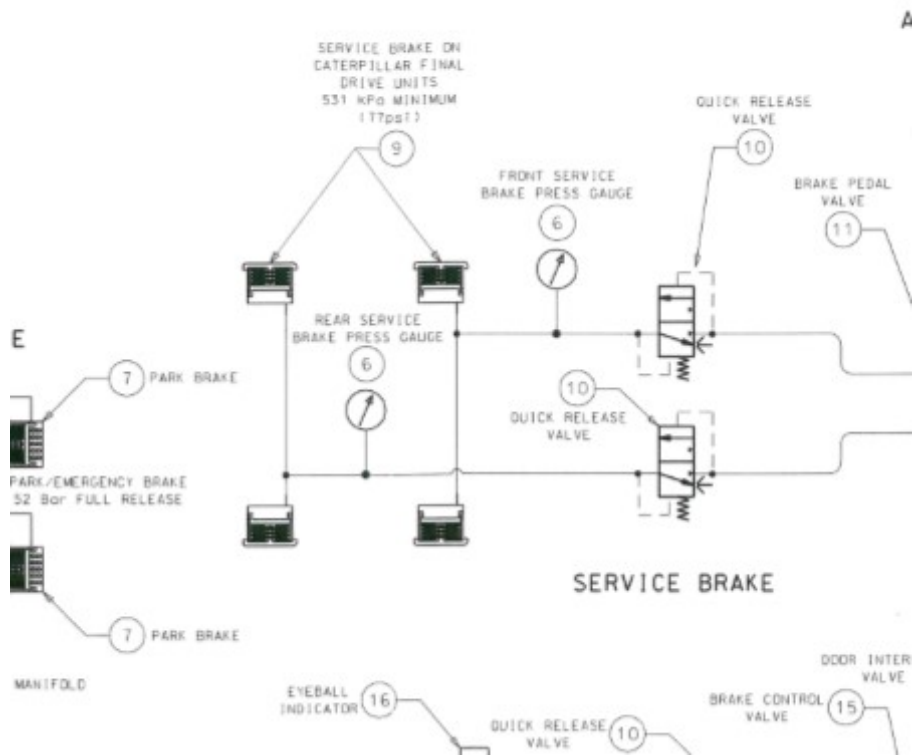
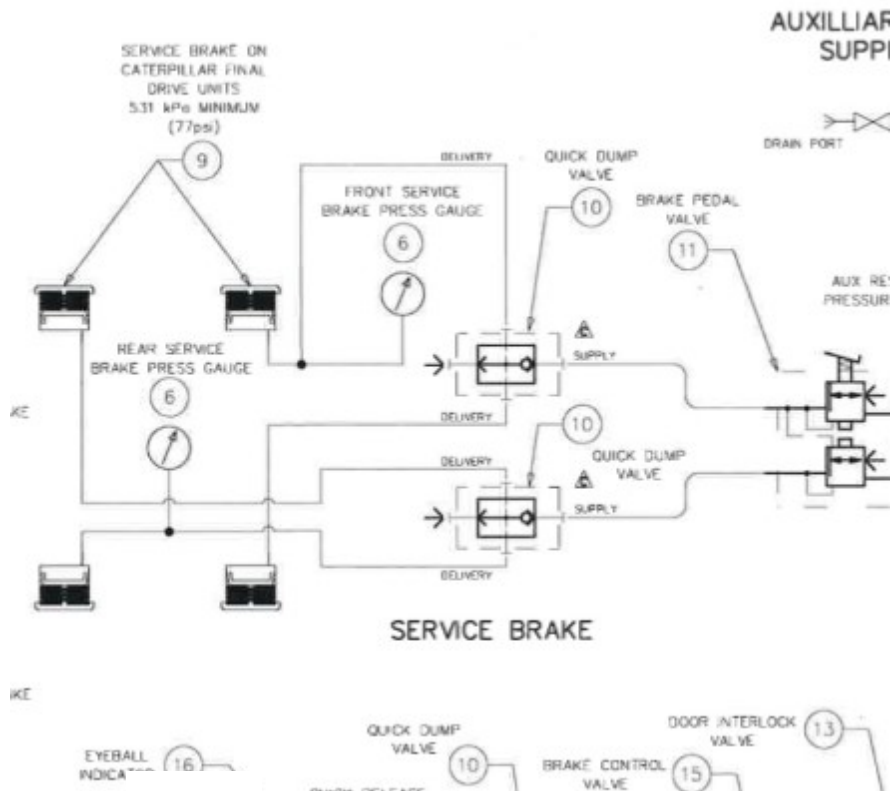


Figure 2: Grader quick exhaust valves (7-091004-700C) Improved valve detail:



Please distribute this bulletin to all relevant personnel

Cougar IME Contacts in respect to this bulletin:

Workshop Manager NSW	Garrad Latham	0407 272 296
Workshop Manager QLD	Brett Brown	0488 031 816
Product Manager billd@cougarime.com.au	Bill Davidson	0409 562 385

References

1. MDG 39: *‘Handbook for Approval Assessment of Transport Braking Systems on Free-Steered Vehicles in Underground coal Mines’*
2. 7-091004-700 BRAKE CIRCUIT MECHANICAL GRADER