

MGM Brakes

A Division of Indian Head Industries, Inc.

TECHNICAL BULLETIN

SUBJECT: P/N 8291xxx e-Stroke Disc Low Lining Clearance Fault Detection

1.0 PURPOSE

To notify e-Stroke GEN 3 system customers that firmware version V3.25 supports disc caliper low lining clearance detection.

2.0 BACKGROUND

P/N 8291xxx series CCM's are used with all S-CAM / Drum and Disc e-Stroke GEN 3 Brake Monitoring Systems. The same firmware version is used in all e-Stroke GEN 3 applications (vehicle make, model, year, drum & disc brakes).

3.0 SCOPE

The following 8291xxx series CCM P/Ns will be upgraded with V3.25 firmware.

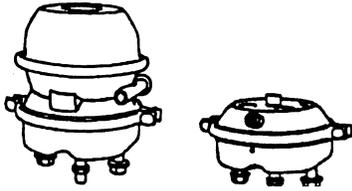
8291100	8291101	8291102
8291103	8291104	8291105
8291106	8291107	8291108
8291109	8291110	8291111
8291116	8291117	8291118
8291119	8291120	8291121
8291122		

Every e-Stroke GEN 3 firmware update is fully backwards compatible for all previous firmware versions. P/N 8291xxx V3.25 firmware version is an acceptable service part replacement for all previous 8291xxx CCMs. Previous system functionality will not be affected by this update.

Moving forward, P/N 8291xxx Service Part CCMs should be verified to have V3.25 firmware or higher before using as a service part replacement for an existing CCM with V3.25 firmware.

4.0 TIMELINE

Production and Service V3.25 CCM shipments begin June 2014.



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5.0 FUNCTIONALITY

5.1 e-Stroke System Functionality

The 8291xxx CCM V3.25 firmware includes detection of over-adjusted air disc caliper lining clearance. The updated e-Stroke disc system now monitors disc caliper applications to determine if a “Low Lining Clearance” fault condition is present. Low Lining Clearance is a measurement of running clearance between the lining and rotor, not the thickness of the lining friction material. Drum and Disc Drag, Non-Function, Over-Stroke fault conditions remain the same as with previous firmware versions. Contact MGM Brakes for further detail regarding this firmware update. Contact the Caliper Manufacturer for specific lining running clearance values and inspection method.

5.2 P/N 9090109, 9090111 Laptop Diagnostic Tools

MGM P/N 9090109, 9090111 Laptop Diagnostic Kits include the MGM P/N 8090091 Tech Manual which intern includes MGM P/N 8091202 Diagnostic Software. P/N 8091202 software has been updated to V10.293 to support CCM V3.25 firmware.

P/N 8091202 V10.293 diagnostic software is backwards compatible for all previous versions of P/N 8291xxx CCM firmware. P/N 8091202 V10.293 is however required for full Low Lining Clearance diagnostic functionality of the new V3.25 CCM firmware.

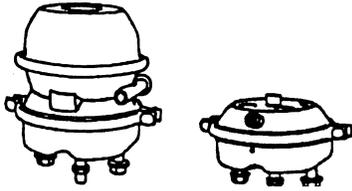
Previous P/N 8091202 diagnostic software (V7.0, V9.6, V10.1) can be used to verify CCM firmware version as described in section 7.0. Reference MGM Engineering Document EB 11-001 – e-Stroke Diagnostic Program Users Guide for diagnostic tool operation. EB 11-001 is available for download on www.mgmbrakes.com.

5.3 P/N 9090110 e-DT Diagnostic Tool

MGM P/N 9090110 e-DT diagnostic tool software has been updated to support CCM V3.25 firmware. Updated e-DT firmware is required for full Low Lining Clearance diagnostic functionality of the new V3.25 CCM firmware and is also fully backwards compatible as with the P/N 8091202 software.

Note that the e-DT cannot be used to verify CCM firmware versions. Contact MGM Brakes Technical support to update existing e-DT firmware.

Reference MGM Engineering Document EB 08-013 – e-DT Diagnostic Tool Users Guide for operation instructions. EB 08-013 is available for download on www.mgmbrakes.com.



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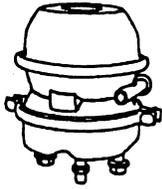
6.0 PRODUCT IDENTIFICATION

6.1 P/N 8291xxx CCM Front Customer Label – Reference for CCM P/N and Date Code

Front Label Information:

- MGM Purchased P/N: 8291xxx
- Configuration ID Number (CFG)
- CCM Serial Number (S/N)
- Date Code (D/C)





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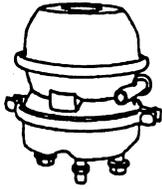
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6.2 P/N 8291xxx CCM Back Manufacturing Label – Reference for Firmware Version





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7.0 FIRMWARE VERSION ELECTRONIC VERIFICATION

8291XXX installed CCM firmware version can be verified using the MGM P/N 9090109, 9090111 laptop diagnostic tools with [P/N 8091202](#) diagnostic software.

Reference MGM Engineering Document EB 11-001 – e-Stroke Diagnostic Program Users Guide for diagnostic tool operation. EB 11-001 is available for download on www.mgmbrakes.com.

7.1 Example Diagnostic Program Data showing Firmware Version

e-Stroke Diagnostic Program

Serial Number	3330000123
Software Version Number	3.25
Tractor axles with drum brake stroke sensors	None
Tractor axles with disc brake stroke sensors	1, 2,
Axles with wire loop brake lining wear sensors	None
CCM Type	PSI Truck / Bus
Pressure Scale	100 PSI

***Contact MGM Brakes e-Stroke Technical Support
for Technical Support
and Diagnostic Tool Software Updates***

***1-877-4-e-STROKE
www.mgmbrakes.com***