Backbone Release Switch Upgrade

Document number: 719-00629A-A

Product

- Magnus VLF CL
- Magnus VLF MCU

FCO priority

Next visit

See FCO CA09028

Machines affected MT001 to MT023

Background

A safety hazard exists where somebody's hand can get trapped between the leading edge backbone and the unload table. To provide a quick method of releasing the pressure in the backbone cylinders, two backbone release switches must be installed alongside the red E-stop switches.

Solution

Install the backbone release switches and new brackets. Install the additional wiring required according to the Safety Release Backbone Upgrade Procedure (719-00468A). See FCO CA06631.

Parts required

Part Number	Part Name	Quantity
512-00338A	Upgrade kit	1

Procedure

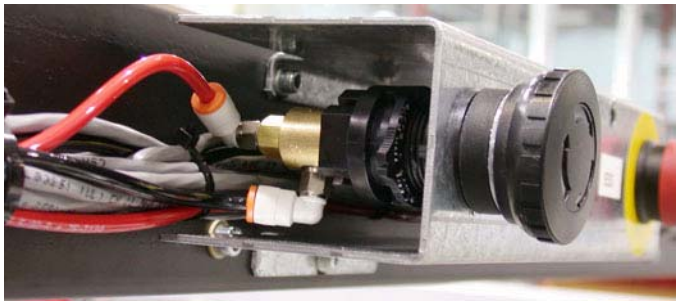
1. Open the device's rear hood. Type `>>door unlock` .
2. Turn off the power and compressed air supply to the device.
3. Remove the away-side rear panel to access the engine manifold.
4. Remove the existing engine manifold assembly from the device—ensure that all electrical and tube connections to the manifold are labeled prior to removal.
   The old manifold must be returned for refurbishment.
5. Install the new manifold assembly and connect all the cables and tubes that were removed in the previous step. Note that the tube that previously connected to the **Roller** regulator now connects directly to the A port of the **roller on/lock/off** valve on the new manifold.
6. Remove the existing E-stop button brackets from the ejector rail and remove the E-stop switches from the brackets. Install the E-stop switches into the new brackets provided in the upgrade kit. Also install the two new backbone release switches in the brackets.



7. Install the new brackets onto the ejector rail.

   Note: The brackets are to be oriented with the red E-stop switches to the center of the device and the black backbone release switches to the outside of the device.

8. Connect the red and black tubing from the upgrade kit to the backbone release switches. The red tube from each switch connects to a Y-fitting and a single red tube is run to the manifold.



9. Route the tubing along the ejector rail to the new engine manifold. Connect the red tube to the **Release Enable** solenoid and connect the two black tubes to the shuttle valve (the U-fitting hanging loose from the manifold). See the pneumatic diagram 718-00023D and manifold drawing 50-2654C item 410).

10. Apply the backbone release switch labels (382-01562A) to the new switch brackets.



Installing the cables

Refer to the **Safety Release Backbone Upgrade Procedure** (719-00468A) for instructions on how to install the new cables that support the backbone release switch operation. The cables for this part of the upgrade are included in kit 512-00338A and it is not necessary to order kit 512-00261A.

Testing the switches

1. Turn on the compressed air supply and the power to the device.
2. Turn the Safety Interlock Override key switch to the Interlock Override position.
3. Move the backbone to the horizontal unload position. Type `>>backbone horizontalunload` .
4. Press a E-Stop button and then press the backbone release switch alongside it. If you are able to move the backbone away from the unload table, then the air has been released from the cylinders and the backbone release switch is functional. If you are unable to move the backbone, then the backbone release switch is not functional. Check all pneumatic and electrical connections to the backbone release switches.
5. Reset all switches and test the other backbone release switch.

See also	Safety Release Backbone Upgrade Procedure (719-00468A) Pneumatic diagram (718-00023D) Manifold diagram (50-2654C) Backbone Safety Hazard (761-00024A)
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