

# Technical Service Bulletin MHTSB-2022-01

## Subject: Emergency Bypass Control Switch Upgrade

Replacement of the Exhaust-port filter fitting on the MH 2ip/4ip Emergency Bypass Control (EBC) Switch Assembly

### Reason:

Under some circumstances the EBC outlet (4mm/Red tubing) of the remote regulator (IPR) may fail to shut off and oxygen will continue to flow when the EBC switch is cycled to the "OFF" position. This can be attributed to excessive restriction in the exhaust-port filter installed at Port "C" of the EBC Switch which prevents the control line from properly purging in the "OFF" condition.

### Corrective Action:

Replace the exhaust-port filter with a less-restrictive one.

### Replacement Parts:

A replacement exhaust-port filter should be provided with this Bulletin. Otherwise, contact MH Customer Service to request the replacement part. Note that the "old" part may be variously marked "05" / "F05" / "MB-05", whereas the new replacement part is marked "43" / "S43" / "MBS-43" allowing the 2 items to be distinguished should they become mixed-up.

### Tools Required:

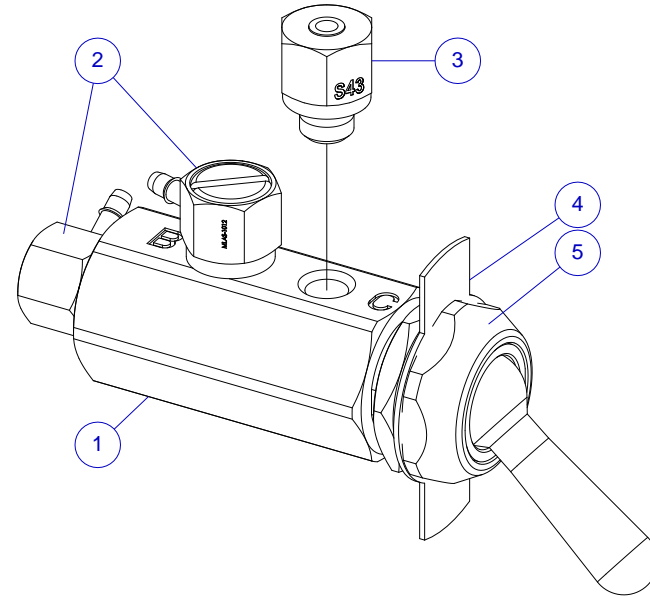
5/16 Socket Wrench, Spanner or Nut-Driver  
Slotted Screwdriver  
(optional: Torque Driver)

### Procedure:

- Turn the oxygen system OFF before proceeding.
- You will need sufficient access to the EBC Switch (Item 1) to allow you to remove and replace the Exhaust-port Filter (3) installed at Port "C". In some situations you may be able to do this without removing the EBC Switch from the panel. Otherwise, remove the Dress Nut (5) and Legend Plate (4) and remove the EBC Switch from the rear of the panel.
  - If you still do not have sufficient access, you will need to disconnect the EBC Switch and remove it completely. Make note of which line goes to the "A" port and "B" port respectively so that they can be re-installed correctly. Use a screwdriver to loosen and remove the banjo fittings (drive-slot in top of fitting). Be careful not to lose the outer O-ring mounted around the threaded post - the connection will leak if this O-ring is missing. Tape, bag, or otherwise secure the O-rings against loss. **Note that the "A" circuit is always on and oxygen will leak from the "A" fitting while it is disconnected.**
- Remove the existing Exhaust-port Filter (3) installed at Port C and replace it with the new one provided by MH (5/16 Hex). If you have a suitable torque driver, torque the new fitting to 7 in-lbs - otherwise "snug" (do not over-tighten).
- As required, re-connect and/or re-install the EBC Switch. Refer to MH Document 51000-0152-00 for installation details.
- Test the modified system for proper operation.

### References:

51000-0152-00 Emergency Bypass Control Switch Installation Instructions



Item	Part Number	Description
1	19026-0004-01	EBC Switch Body
2	19055-1002-00	Banjo Fitting
3	09025-0023-43	Exhaust Muffler
4	50001-0003-00	Legend Plate
5	19027-0006-00	Dress Nut

UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN INCHES.  
DIMENSIONS IN [ ] ARE MILLIMETERS (REF)  
TOLERANCES ARE:  
0.X ±0.015 ANGLES ±3°  
0.XX ±0.010 FRACTIONS ±1/64  
0.XXX ±0.005  
63 ✓  
INTERPRET GD&T PER ASME 14.5

THIRD ANGLE PROJECTION  
DRAWN SGO 2022-01-10  
CHECKED  
ENGINEER  
APPROVED  
DO NOT SCALE DRAWING

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Technical Service Bulletin  
**Emergency Bypass Control Switch Upgrade**  
MHTSB-2022-01  
DWG NUMBER  
SRC FILE APCR0-0152-00\$A0 INV. PART NUMBER APCR0-0152-00 PROD. NAME 2ip/4ip EBS  
DWG REV. **A0**  
DWG FORMAT: ESR-002 Rev H [27] DWG SCALE DWG SHEET 1 OF 1 DWG SIZE **A** 11x8½"