

Emax Technical Bulletin 02

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E-Max Switch Bar Matrix Upgrade

This Document contains Instructions, Diagrams and Procedures to upgrade the E-Max Switch Bar Matrix. This upgrade will correct the problem of the support bracket fatiguing and breaking. This document is for Arrow personnel only! This document is not to be reproduced in any manner without the written consent of Arrow International Inc.

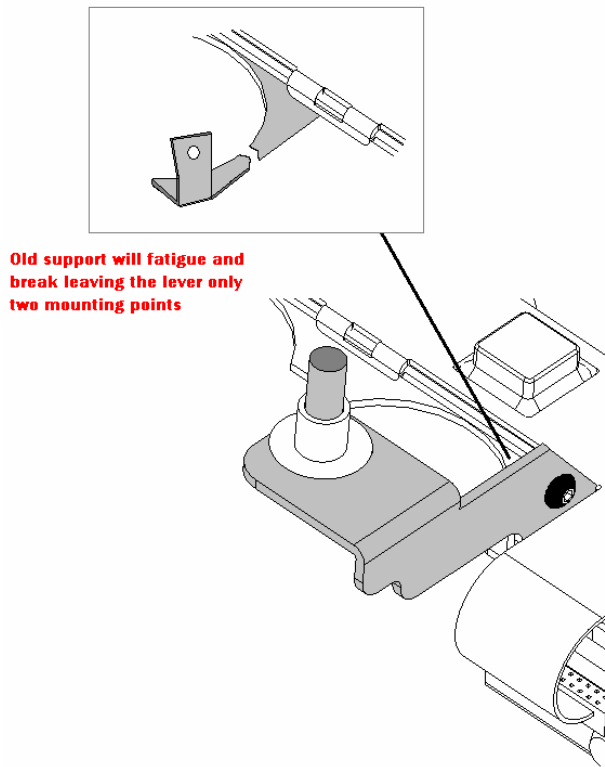


Technical bulletin Installation Guide for
HH1077 Left Ball Tray Release Bracket Field Repair Kit

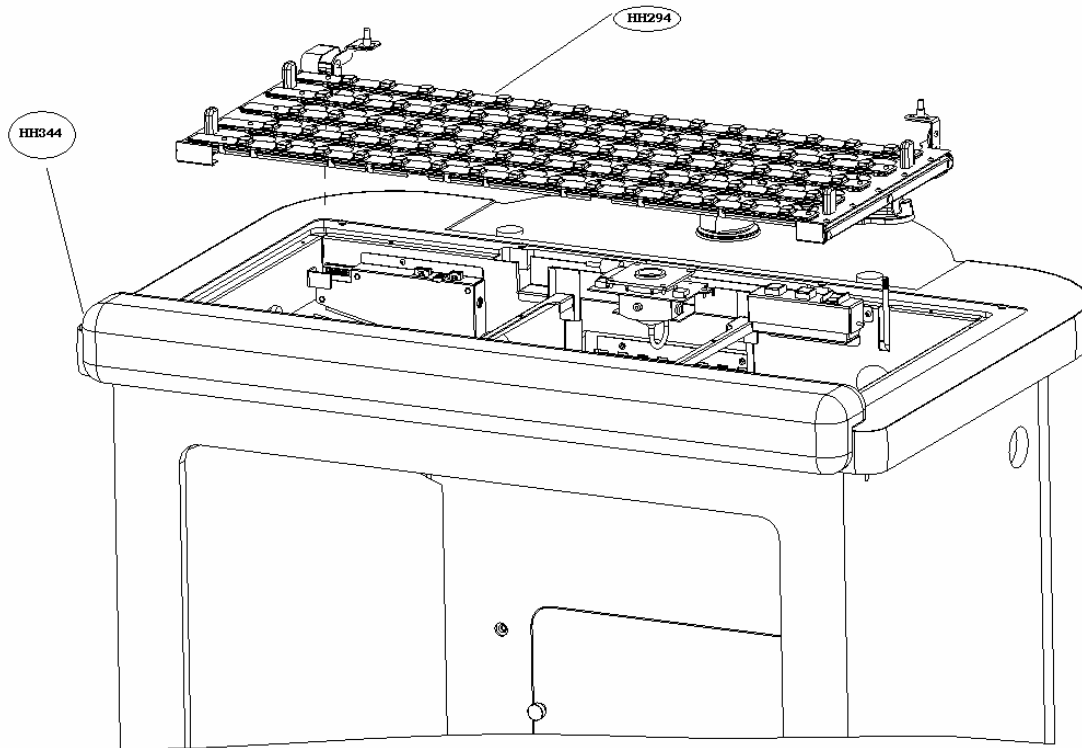
To perform this upgrade you will need to drill a 7/64" hole into the switch bar matrix. A drill bit and a plastic block are provided in the upgrade kit.

The following is the inventory list of the upgrade components:

(1)	HH1076	Release Bracket, Ball Tray, Lt
(1)	HH1078	7/64" Drill Bit
(1)	HH1079	1"X6" 1/8 Polycarbonate Strip (drill bit block)
(1)	HH303	Nylon Shoulder Washer
(1)	HH430	# 6 Sheet Metal Screw



1. Remove the Switch bar Matrix



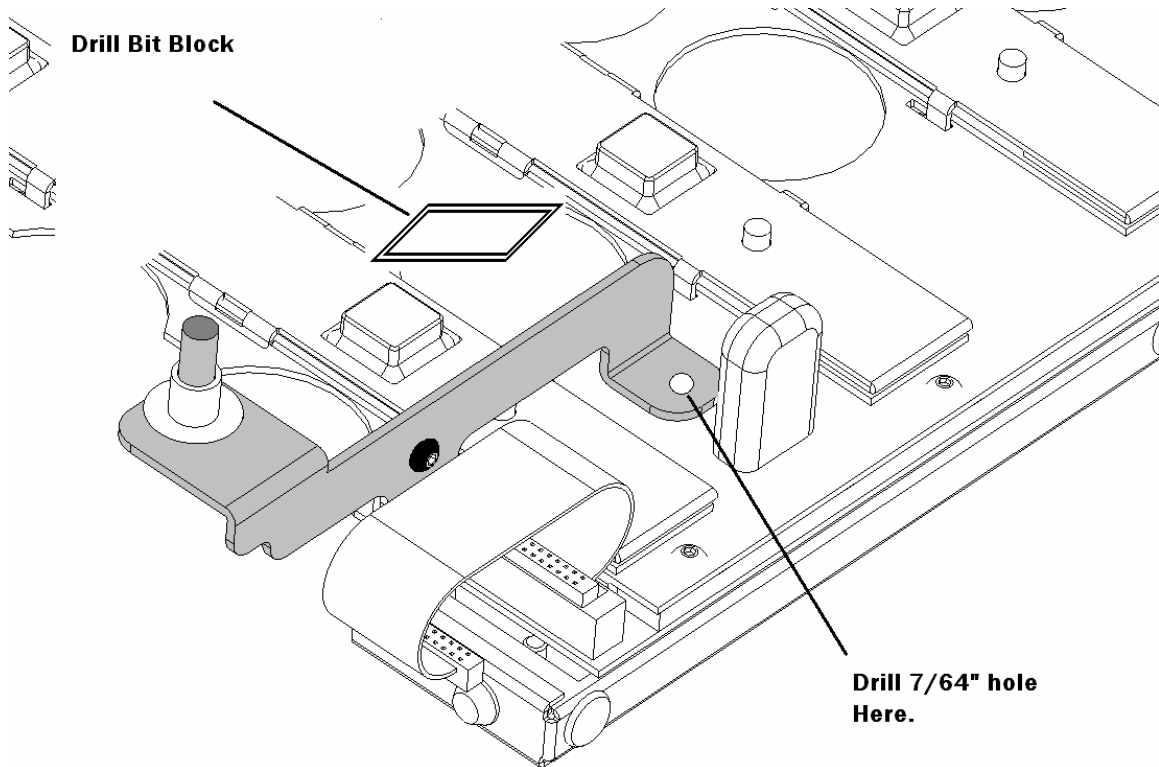
CAUTION! Ensure that the ball console power switch for the blower motor is in the off position and the console is unplugged before servicing the ball chamber and its components.

To remove the switch bar matrix, refer to the following procedure and Figure 1

1. Remove the ball tray
2. Disconnect the ribbon cable from the matrix
3. Remove the Switch Bar Matrix
4. Remove the old Release lever bracket from the matrix

NOTE: If the joint between the old bracket and the switch bar matrix is broken, simply discard that piece. It is not necessary to the installation of the new bracket.

2. Install the new release lever bracket

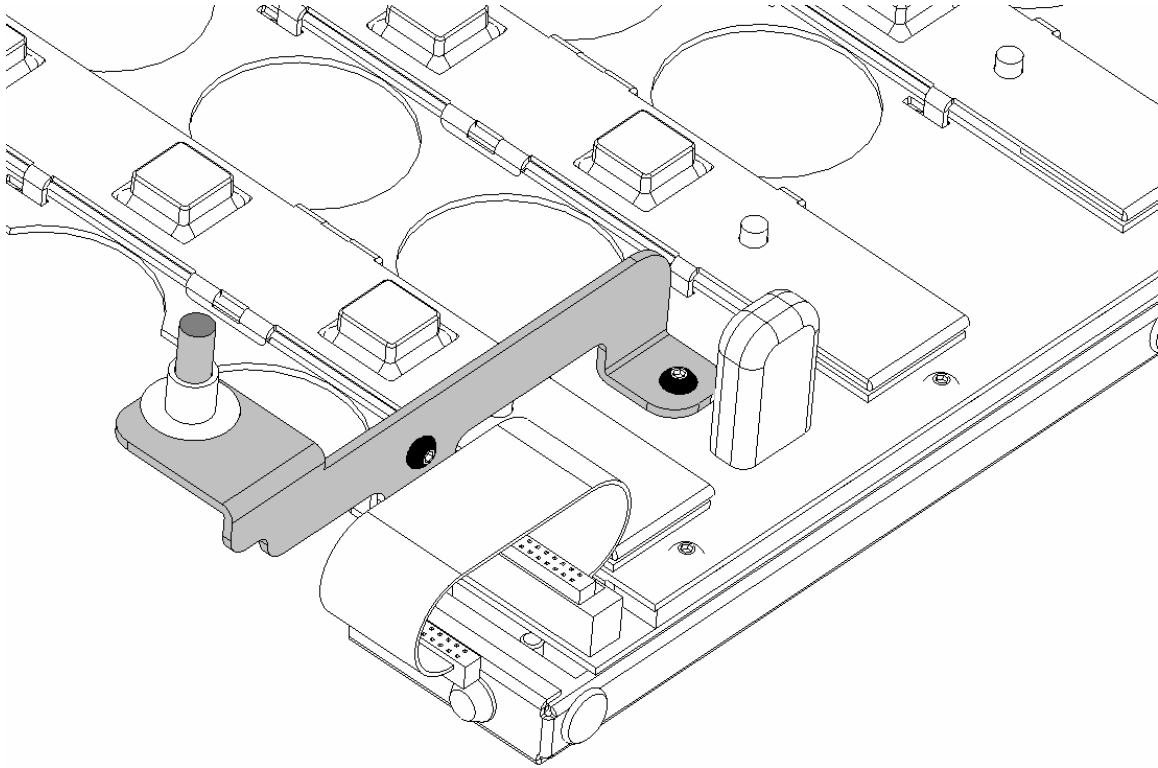


WARNING! Ensure that the drill bit block is positioned under the point where the hole needs to be drilled. The block is used to prevent the drill bit from damaging the printed circuit board. Use Very Light Pressure to drill the hole

1. Align the new release lever with the existing holes and secure with the old screws.
2. Flip the Matrix over
3. Insert the drill bit block between the switch bar PCB and the matrix
4. Using the new release lever as a guide, drill a 7/64' hole into the matrix using the bit provided.

NOTE: After drilling, clean the area around the hole of all metal debris. Press down on the PCB to ensure that the board is properly seated.

3. Complete Installation

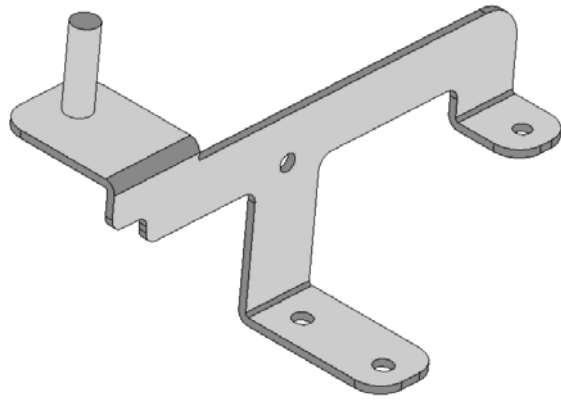


1. Secure the new bracket with the # 6 sheet metal screw provided
2. Reinstall the switch bar matrix
3. Connect the ribbon cable

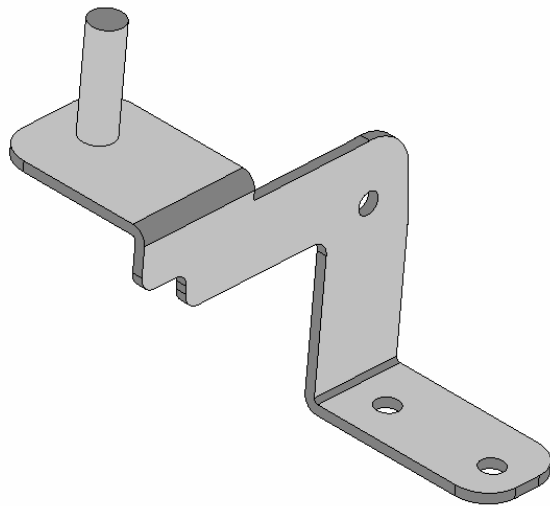
NOTE: Power the console up and test the switch bar matrix prior to completing the assembly of the ball tray.

4. Install the ball tray
5. Install lever handles

NOTE: Conduct a complete ball console test to ensure proper operation.



HH1076
New Ball release lever bracket



OLD BRACKET