

LIGHTRAY MPX 1 X 1 Vertical, 1 X 2 Vertical (Duplex), 1 X 4 Vertical (Quad) Backplane Housings And Retention Clips

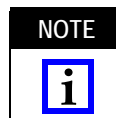
Housing Part No.	Housing Description	Retention Clip Part No.	Seating Tool Part No.	Removal Tool Part no.	Motherboard Support Block Part No.
1374417-1	1 x 1 Vertical Backplane Housing	492740-2	1278315-1 (Plastic Tool)	1457297-1	1278944-3
1374420-1	1 x 1 Vertical Backplane Housing (Shutter)		1374662-2 (Metal Tool)		
1374490-1	1 x 2 Vertical Backplane Housing	1278530-2	1278945-4		1278944-2
1374493-1	1 x 2 Vertical Backplane Housing (Shutter)				
1457768-1	1 x 2 Vertical Backplane Housing (Short)				
1457769-1	1 x 2 Vertical Backplane Housing (Short) (Shutter)	1278530-1	1278945-2		1278944-1
1278392-3	1 x 4 Vertical Backplane Housing				
1278529-1	1 x 4 Vertical Backplane Housing (Shutter)				
1374535-3	1 x 4 Vertical Backplane Housing (Short)				
1374621-1	1 x 4 Vertical Backplane Housing (Short) (Shutter)				

Figure 1

1. INTRODUCTION

LIGHTRAY MPX Backplane Housing Retention Clips are designed to be installed onto Backplane Housings using the seating tools shown in Figure 1. Figure 1 illustrates the relationship between the retention clips, the seating tools, and the motherboard supports used to install Backplane Housings.

The retention clip is used to enable the backplane housing to float in the backplane cutout for ease in aligning mating housings.



Dimensions in this instruction sheet are in metric units [with U.S. customary units in brackets]. Figures are not drawn to scale.

Reasons for revision can be found in Section 4, REVISION SUMMARY.

2. DESCRIPTION

The retention clip has relief bars, detents, and locking latches. See Figure 1. The relief bars and detents are used to properly position and hold the clip in the seating tool. After the clip is installed onto the housing, the locking latches secure the clip to the housing.

3. INSTALLATION AND REMOVAL

3.1. Removal Procedure



DO NOT mar the surface of the pc board on which the connector is mounted during the removal process.

1. Slide the tool between the housing and the retention clip with the slot of the tool under a compliant retention tab. The slot in the tool must captivate the retention tab.
2. Apply slight force to the tab and begin to rotate the tool away from the housing.
3. Continue to rotate the tool until the tab is deformed.
4. Perform the same procedure for each of the four compliant retention tabs. The clip will “pop off” the housing.
5. Discard the housing and clip and install a new housing and clip as described in Paragraph 3.2, Installation Procedure.

3.2. Installation Procedure

1. Place the retention clip onto the open end of the seating tool so that the relief bars fit into the slots in the tool. Also, the detents on the clip will fit into the holes in the tool. See Figure 1.
2. Fit the motherboard support block, or similar support device, into the mating end of the backplane housing so that the housing will be evenly supported. Make sure to orient the white stripe marked on the housing according to your application. Refer to Figure 3, Detail A.



To avoid damage to the housing, the housing must be evenly supported during installation of the retention clip.

3. Install the housing onto the backplane (make sure that the white stripe is properly oriented). See Figure 3, Detail B.

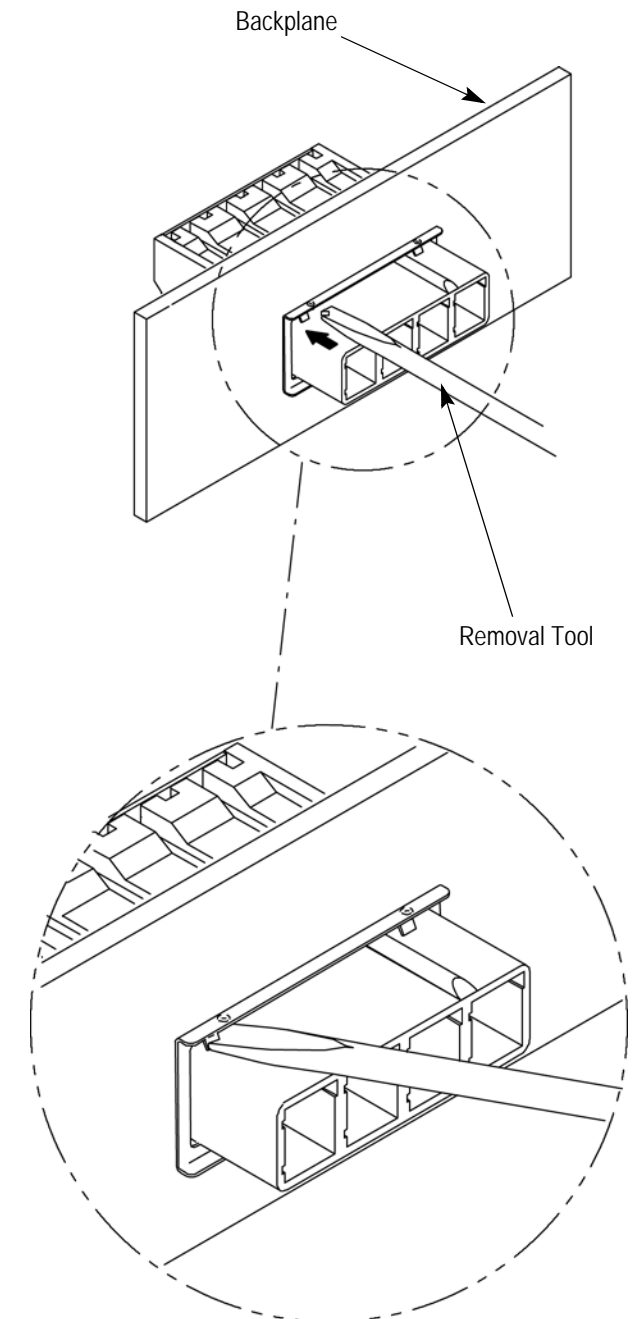


Figure 2

4. Place the end of the tool containing the clip over the housing so that the locking latches of the clip align with the sides of the housing. Then, while firmly holding the motherboard support and keeping the tool in straight alignment with the housing, push the tool until it bottoms onto the backplane. See Figure 3, Detail C.

5. Holding the tool in position, rock the tool to ensure that the clip is fully seated. See Figure 3, Detail D.

6. Pull the tool straight from the installed clip, and remove motherboard support from housing. See Figure 3, Detail E.

7. Refer to Figure 4, and inspect the assembly according to the following:

- Be sure there is no evidence of damage or distortion to the surface or locking latches of the clip.
- Be sure there is a slight gap (approximately 0.13 to 0.64 mm [.005 to .025 in.]) between the corners of the clip and the backplane.

NOTE *The gap can be checked using a plastic shim with GO dimension of 0.13 mm [.005 in.] and NO-GO dimension of 0.76 mm [.030 in.].*

If the installed clip does not conform to these requirements, remove the clip from the housing, discard the clip and the housing, and install a new clip onto a new housing.

CAUTION *Do NOT reuse backplane housings or clips.*

4. REVISION SUMMARY

- Updated document to corporate requirements.

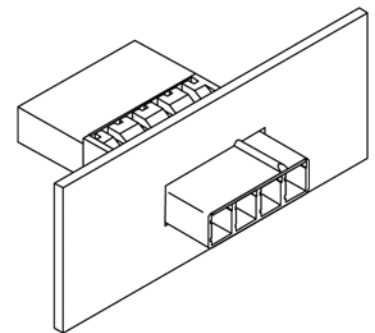
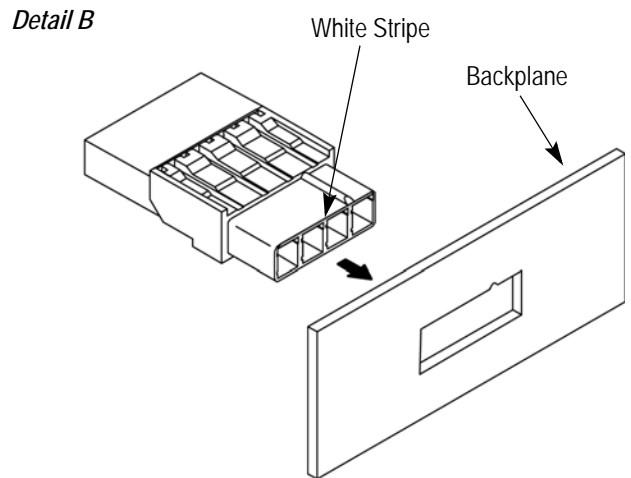
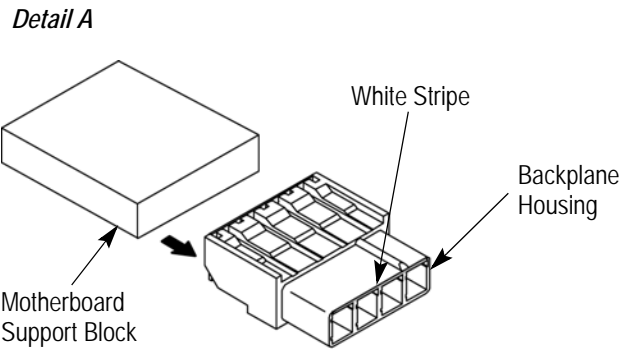
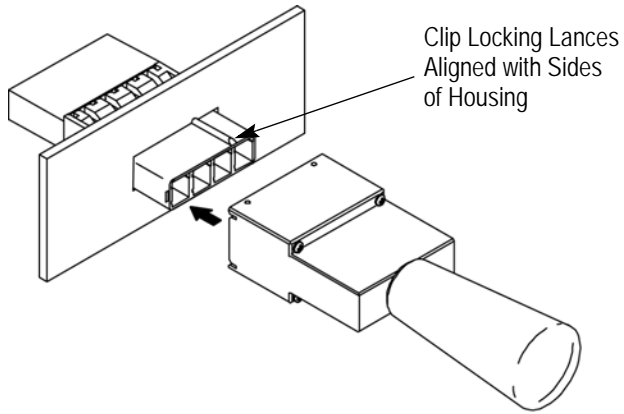


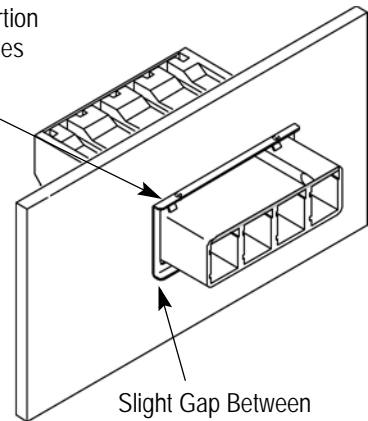
Figure 3 (Cont'd)

Detail C

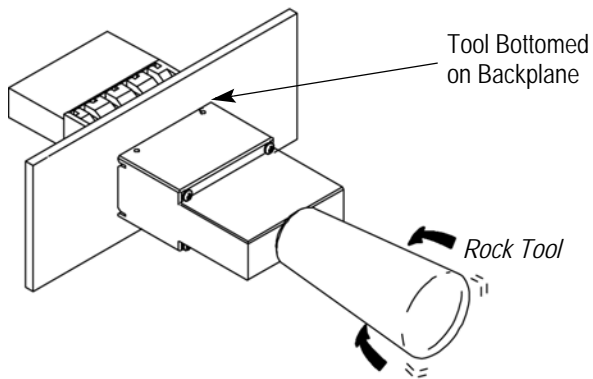


Installed Clip

No Damage or Distortion to Clip Locking Latches (4 Places)



Detail D



0.13 - 0.64 mm
[.005 - .025 in.]
(Approx)

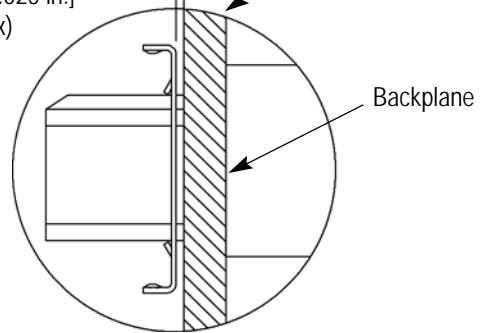


Figure 4

Detail E

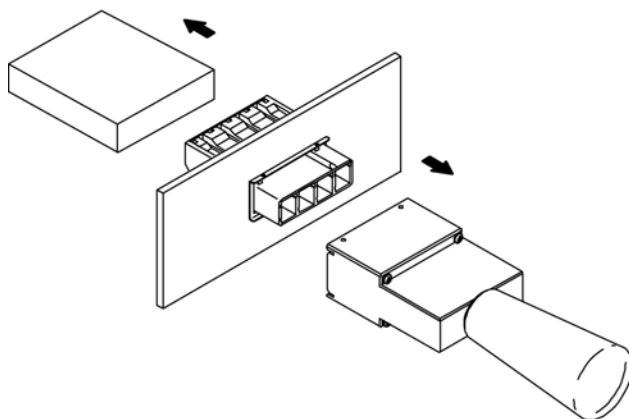


Figure 3 (End)