

# Workmanship Specification

#### Fortis ZD 2 and 3 pair shielded right angle and vertical module assembly Inspection Criteria

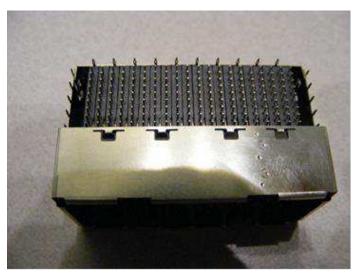
#### 1. SCOPE

This specification defines the acceptable and the not acceptable conditions for the Shielded Fortis modules.

#### 2. INSPECTION CRITERIA

Unless otherwise specified, Figures are shown at approximately 5X to 10X magnification. Parts shall be viewed at 10X magnification for 10 seconds at 405mm to 610 mm [12 in. to 24 in.] from the eyes. Proper lighting should be used to determine acceptance within the specified time and distance.

#### 2.1. Shield Form and Adhesion



#### ACCEPTABLE

- Shield is clearly adhered to all modules.
- Shield is formed at right angles on all corners.

Figure 1

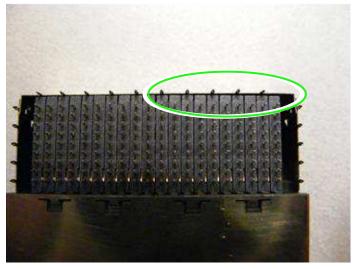
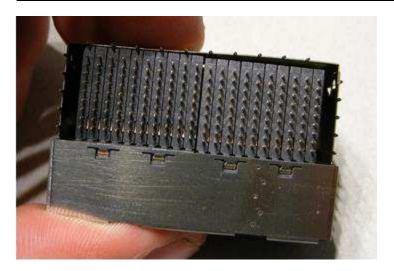


Figure 2

#### ACCEPTABLE

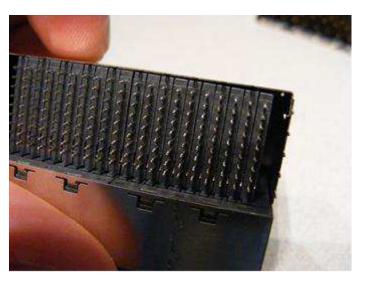
- Hairline separation from modules.
- Shield is still clearly adhered to modules when looked under proper magnification.





- Shield partially separated from right side of module.
- Top right corner folded at acute angle.

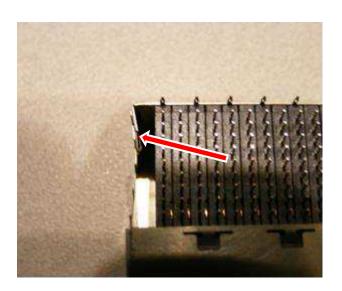
Figure 3



NOT ACCEPTABLE

 Entire right side of shield separated from right module.





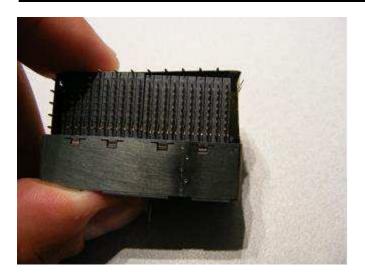
NOT ACCEPTABLE

 Left side of shield plastically deformed out of shape.

Figure 5

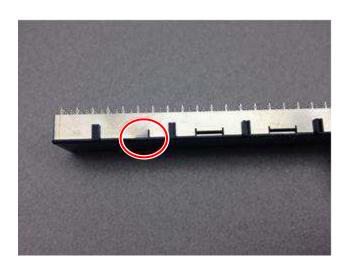
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Shield separated and/or plastically deformed.

Figure 6



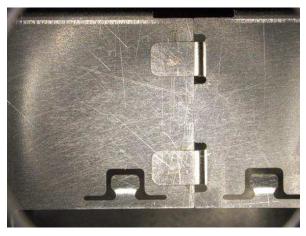
NOT ACCEPTABLE

Unformed and unlatched tab.

Figure 7

### 2.2. Weld Joint

#### 2.2.a 2 PAIR RIGHT ANGLE SHIELD



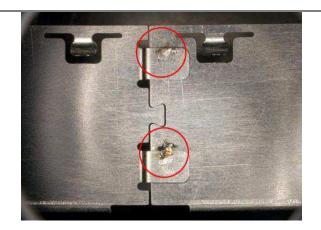
#### ACCEPTABLE

- Good weld sample
- Dovetails aligned and in plane
- Weld centered
- No discoloration
- Slight indentation

Figure 8

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 Welding location too close to edge, resulting in discoloration and spattering

Figure 8

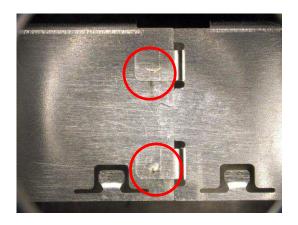


Figure 9



- Raised burr
  - o Insufficient electrode force
  - Dirty electrode

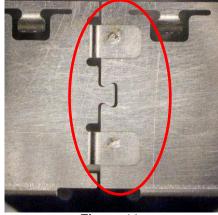


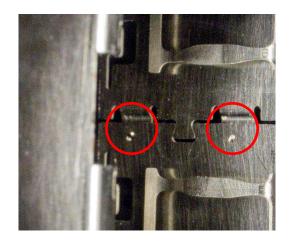
Figure 11

### NOT ACCEPTABLE

- Loose dovetail
- Weld discoloration and location

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 Weld burn through on inside surface

Figure 12

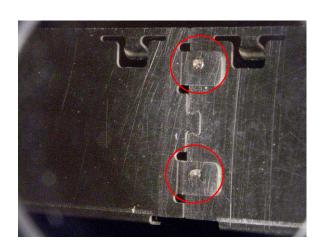


Figure 13

### NOT ACCEPTABLE

- Weld location too close to shield seam
- Excessive indentation, discoloration, and raised burr.

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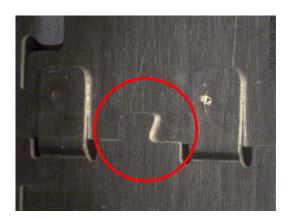


Figure 14

Mismatch in shield dovetail surfaces.

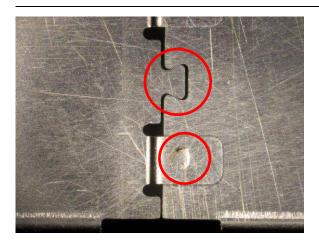


Figure 15

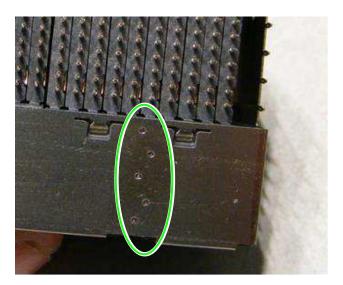
### NOT ACCEPTABLE

- Loose dovetail
- Raised burr

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#### 2.2.b 3 PAIR RIGHT ANGLE SHIELD



### ACCEPTABLE

- All five weld marks present and clean.
- No excessive bending around weld joint.

Figure 16

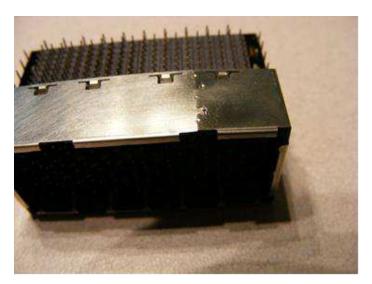


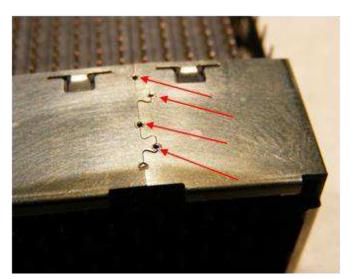
Figure 17

### NOT ACCEPTABLE

Weld joint bent upwards.

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### Figure 18

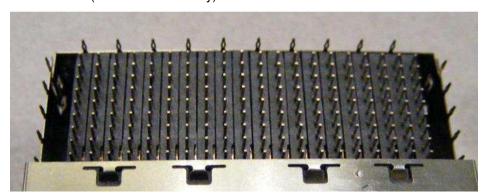
### NOT ACCEPTABLE

Weld joints blown through.

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### 2.3. Pins (Individual and Array)





### ACCEPTABLE

- Pin pattern consistent
- All pins present
- No pins bent

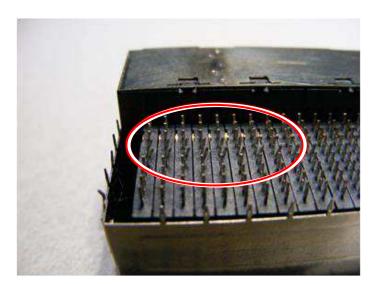


Figure 20

### NOT ACCEPTABLE

- Row of pins in modules bent.
- Individual pins on shield bent.

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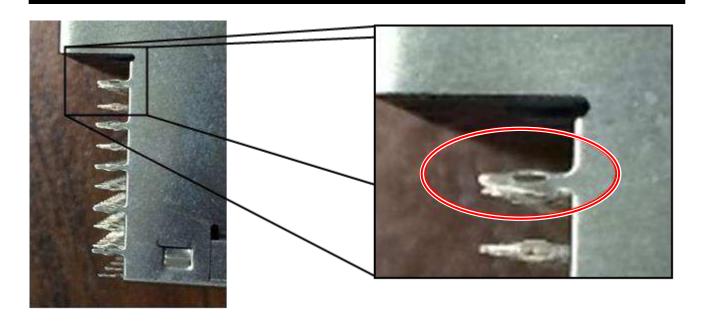


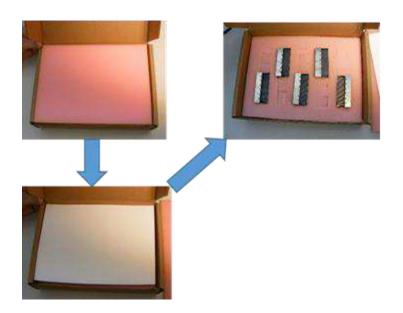
Figure 21

• Eye of needle offset from center of shielded pin.

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### 2.4. Packaging – Right angle assemblies



#### ACCEPTABLE

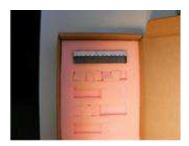
- Layering of packaging materials in correct order (from top to bottom): 1. Foam 2. Cardboard support 3. Nested parts 4. Foam.
- Parts shown are a 30 column part

   pattern and spacing of
   packaging is required of 30, 40,

  50 column parts.

Figure 22





### ACCEPTABLE

 Parts shown are (clockwise from top left) 10 column part, 60 column part, 20 column part.
 Pattern and spacing is typical and required.

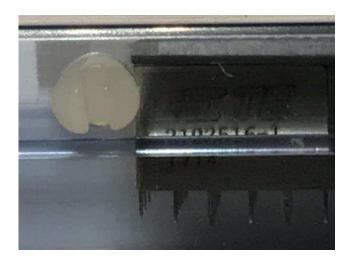


Figure 23

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### Packaging – Vertical assemblies



### ACCEPTABLE

 Correct loading position of vertical assembly part EONs Relative to Pin

Figure 24



Figure 25

### NOT ACCEPTABLE

 Incorrect loading position of vertical assembly part EONs Relative to Pin

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### ACCEPTABLE

 Cut Bubble Sleeve to 25" Length and Load Tube Inside Sleeve – One Tube Per Sleeve

Figure 26



### ACCEPTABLE

 Load Bubble Sleeve Into Box One Per Layer – 6 Layers Per Box

Figure 27

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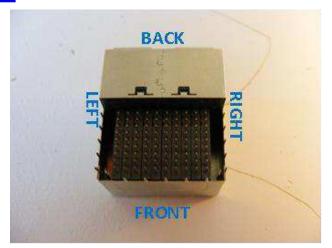


### 2.5. Presence of Module Shielding



#### NOTE

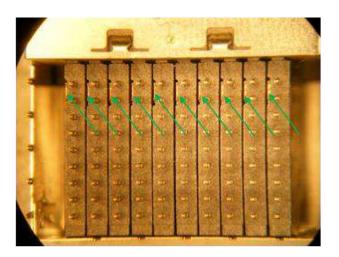
This section (2.5.A) only valid for part numbers 2102247-1 through 2102247-6.



#### REFERENCE

All of the photos in this section that refer to a left or right side of the part refer to the layout as shown in Figure 16.





## ACCEPTABLE

 All shields present on each module as evidence by tab on back left of individual modules.



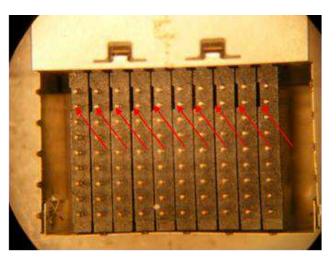


Figure 30

#### NOT ACCEPTABLE

Shield missing.

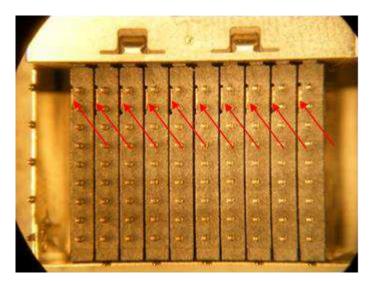
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### NOTE

This section (2.5.B) only valid for part numbers 2102320-1 through 2102320-6.



### NOT ACCEPTABLE

• Shields present on modules.



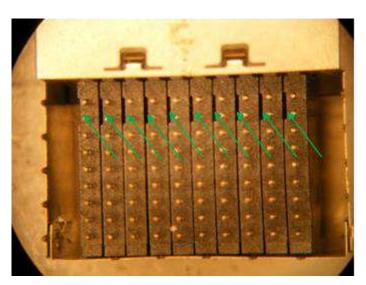


Figure 32

### ACCEPTABLE

• No shields present.

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