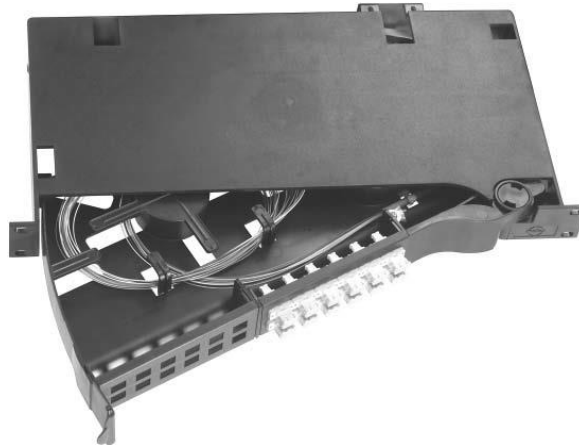


## FIBER OPTIC SWING-OUT PATCH PANEL INSTRUCTION SHEET



### 1.0 SCOPE

This document provides installation instruction of Fiber Optic Swing-out Patch panel

### 2.0 PRODUCT DESCRIPTION

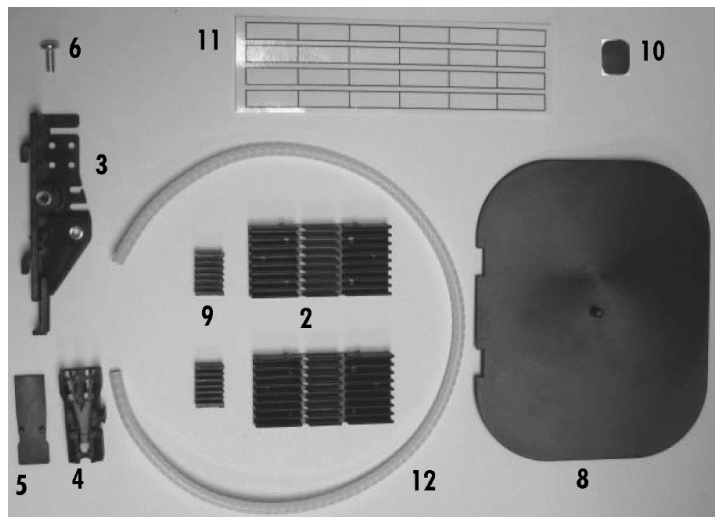
#### Included items-

#### Component Parts:

1. 1 x Swing-Out Panel Chassis (above), cabinet fixing kit and installation instruction sheet.

#### Accessory Kit:

2. 2 x Splice Holders
3. 1 x Cable Anchor Base
4. 1 x Cable Anchor Manifold
5. 1 x Cable Anchor Manifold Cover
6. 2 x M4 8mm screws
7. 2 x 5mm x 12mm washers(Not shown)
8. 1 x Splice Tray Cover
9. 2 x Tight Buffer Fiber Holders
10. 1 x Tight Buffer Fiber Inserter Tool
11. 1 x Front Plate Label
12. 1 x Bend Limiting Tube (435mm)



EC/ECM NO: <b>173528</b>	SAP NO : <b>187000315</b>	Doc No: <b>AS-18700-031</b> Doc part: <b>AS</b>	REV- <b>A2</b>
SAP EC NO: <b>10888193</b>	<a href="http://www.molexces.com/">http://www.molexces.com/</a>		DATE: <b>2018/MAR/28</b>

### 3.0 PROCEDURE

#### 3.1 ASSEMBLY INSTRUCTIONS

##### PART ONE: PATCH PANEL ASSEMBLY

###### FITTING FRONT PLATES

1. Fit the Front Plate into the chassis, ensuring the correct orientation (Fig 1)
2. Push plate until the tabs lock into place (an audible click)

Bottom edge of plate -  
Fit into bottom of chassis

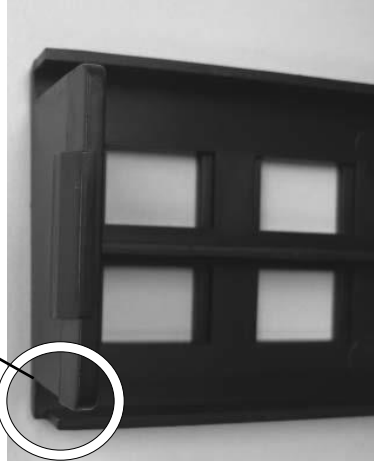
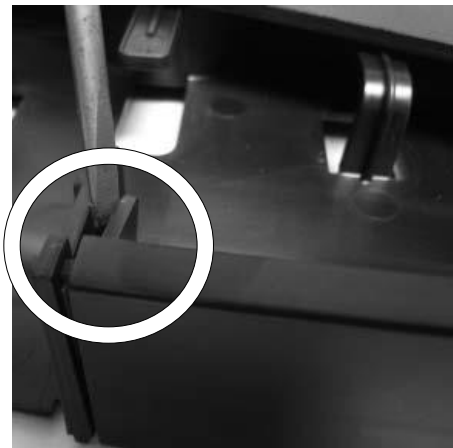


Fig. 1

3. To remove Front Plates, insert a flat screw driver into the side tab to release (Fig2)



Remove front  
Plate

Fig.2

##### PART TWO: CABLE PREPARATION

This panel is designed to accept Tight Buffered (Section 1) or Loose Tube (Section 2) or Blown Fiber (Section 3) cables. Follow the termination methods below for Direct Termination or Fusion Splicing for each cable type.

###### INDEX

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Option 2: Fusion Splicing, Splice to Pigtails.....page 4-5
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Option 2: Fusion Splicing, Splice to Pigtails.....page 7-8
3. Blown Fiber Cable:  
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Option 2: Fusion Splicing - Splice to Pigtails.....page 8

## 1. Tight Buffered Cable

- a) Remove 1m of cable sheath exposing the fibers.
- b) Mark the sheath 500mm from end of the stripped fiber.
- c) Secure the cable to rear of panel with two cable ties, with the marked position in the Centre of the ties (Fig.3).



Fig.3

- d) Secure yarn to chassis using the M4 x 8mm screw and 2x12mm washers (Fig.4)
- e) Secure cable inside chassis with cable tie (Fig.4).

NOTE: Ensure that the lower tray pivots freely when the fiber cable is dressed inside the chassis

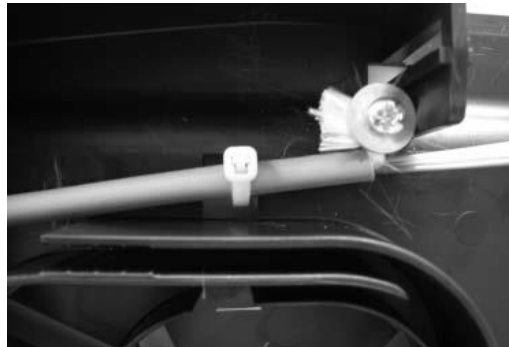


Fig.4

### **OPTION 1: Tight Buffered (TB) Fibers - Direct Termination**

- i) Terminate buffered fibers and route through fiber cable management section, connecting to Front Adapter Plates (Fig.5)

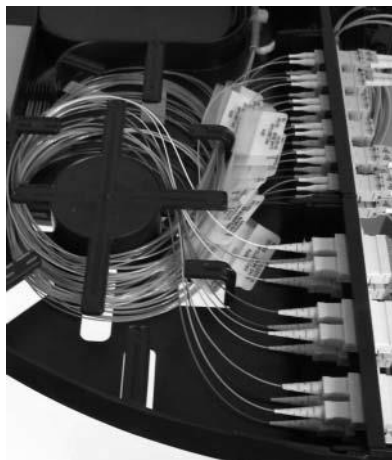
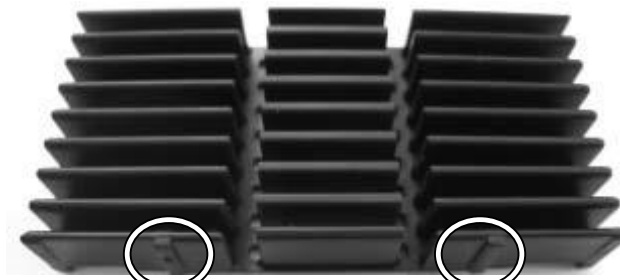


Fig.5

## OPTION 2: TB Fibers - Fusion Splicing, Splice to Pigtails

NOTE: 2.2mm splice protectors part number KFR-00040 must be used.

- i) Insert Splice Holder (Component No 2) in splice management section, ensuring correct orientation (Fig.6 and 7). Each Splice Holder can accept up to 24 x 2.2mm splice protectors. Splice Holders can be double stacked to accommodate 48 splices.



- ii) Splice fiber to pigtail

Fig.6

Ensure tabs are located as shown

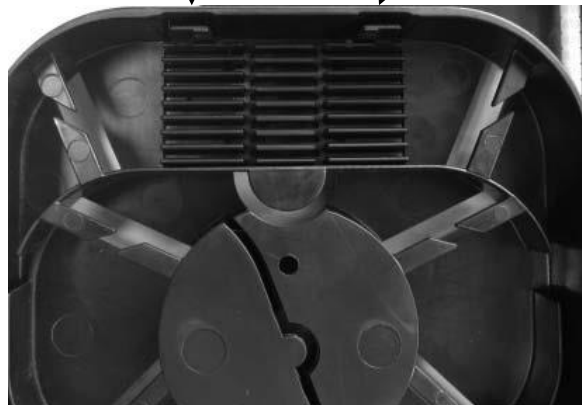


Fig.7

- ii) Insert TB Fiber Holder (Component No 9) (Fig 8) - this is an optional feature. TB Fiber Holders can be double stacked allowing for 48 TB fibers in total.

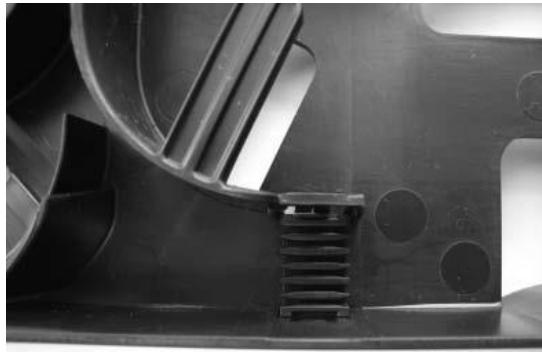


Fig.8

- (iv) Route fibers through cable management section to splice management section (Fig.9)

Routing to fusion spliced TB fibers.

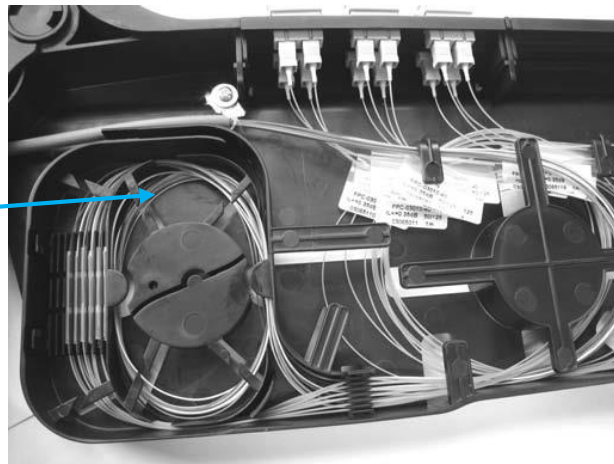


Fig.9

- (v) Dress fibers into chassis routing it through TB Fiber Holder (optional) using TB fiber Inserter tool (Component no 10) or the end of a cable tie (Fig.10)



Fig10

- (vi) Route pigtails through cable management section and connect to Front Adapter Plates

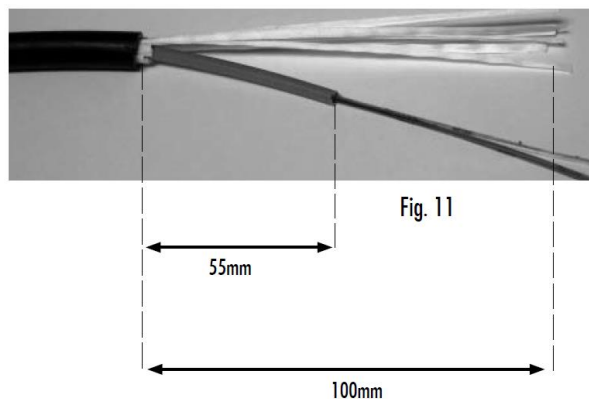
NOTE: For easy-strip, semi-tight buffered pigtails the TB Fiber Holder must be used.

- (vii) Fit Splice Tray Cover (Component No. 8) over splice management section.

## 2. Loose Tube Cable

- a) Remove 1.5m of cable sheath exposing the tube/s (Fig.11)
- b) Trim yarn 100mm (Fig.11)

- c) Strip tube allowing 55mm of tube remaining sheathed (Fig.11)
- d) Fit Cable Anchor Base (Component No 3) to slots at rear of chassis.



- e) Secure fiber to Cable Anchor Base with a large cable tie (Fig.12)
- f) Assemble washers and screw into cable anchor base
- g) Dress yarn through routing leg and between the washers (Fig.12)



- h) Tighten screw to secure yarn (Fig.13)
- i) Feed fibers through Bend Limiting Tube (Component No 12) (Fig.13)
- j) Secure bend limiting tube with two small cable ties (Fig.13)



- k) Route Bend Limiting Tube (Component No12) through chassis, into splice management Section (Fig.14).

**NOTE:** Ensure that the lower tray pivots freely when bend-limiting tube is dressed inside the chassis

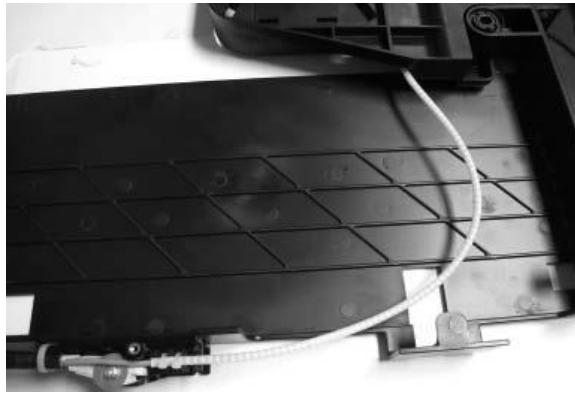


Fig.14

- l) Push bend limiting tubes into the grips of the splice management section (Fig.15)
- m) Route fibers through splice management section and follow steps for either Direct Termination OPTION 1 or Fusion Splicing OPTION 2 below.

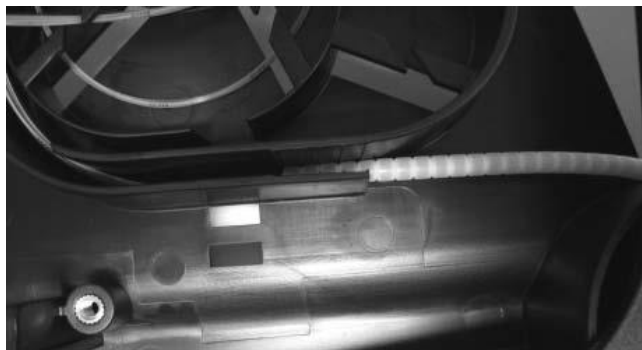


Fig.15

**OPTION 1: Loose Tube Fibers - Direct Termination using a Break out Kit.**

- (i) Place Break-Out Kit in place of splice holder in splice management section (Fig.16)
- (ii) Insert TB Fiber Holder (Component No 9)



Fig.16

- (iii) Dress fiber into chassis routing it through TB Fiber Holder, using TB Fiber Inserter Tool (Component No 10) or the end of a cable tie (Fig.17)
- (iv) Direct terminate fibers to connectors and insert into Front Adapter Plate (v) Fit Splice Tray Cover (Component 8) over splice management section.

Break out Kit

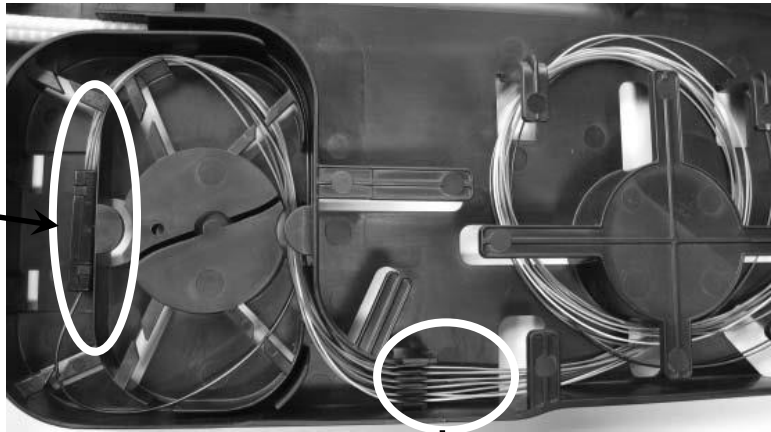


Fig. 17

Tight-buffered fiber holder

**OPTION 2: Loose Tube Fibers - Fusion Splicing, Splice to Pigtails**

Follow steps (i) to (iii) in **OPTION 2: TB Fibers Fusion Splicing - Splice to Pigtails** section, page 4

(iv) Dress Loose Tube Fibers into splice management section (Fig 18)

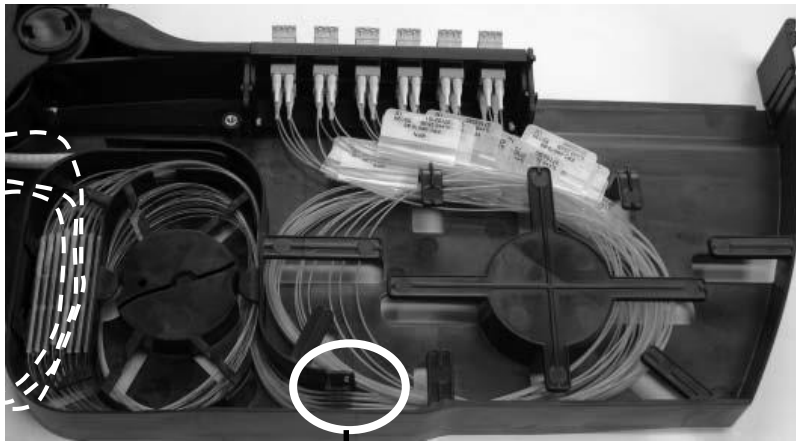


Fig.18

Tight-buffered fiber holder



(v) Dress Fiber into chassis routing it through TB Fiber Holder (optional), using TB Fiber Inserter Tool (Component No 10) or the end of a cable tie (Fig 19). Route pigtails into cable management section and connect to Front Adapter Plates.



Fig.19

(vi) Fit Splice Tray Cover (Component No 8) over splice management section.

### 3. **Blown Fiber Cable**

- a) Fit Cable Anchor Manifold to Cable Anchor Base (Component No 3 & 4) (Fig.20 and 21).
- b) Fit Cable Anchor Base to slots at rear of chassis.

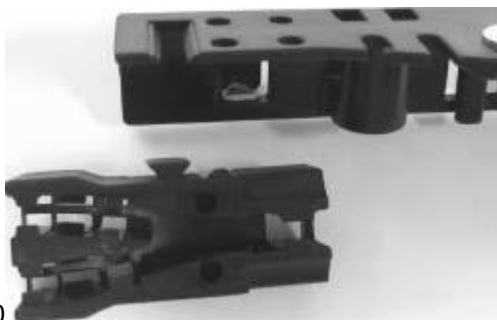


Fig.20



Fig. 21

- c) Push blown fiber tube into Cable Anchor Manifold (Component No 4) (Fig.22).
- d) Secure blown fiber tube to Cable Anchor Base with a large cable tie (Fig.22).
- e) Route Bend Limiting Tube (Component No 12) through chassis into splice management section (see Loose Tube Section, step (k) Fig 14, and page.6).



Fig.22

- f) Push Bend Limiting Tube into the grips of the splice management section (see Loose Tube Section, step (l), Fig.15, page.6).
- g) Feed EPFU through Bend Limiting Tube.
- h) Push Bend Limiting Tube into Cable Anchor Manifold (Fig.22).
- i) Fit Cable Anchor Manifold Cover (Component No 5) to Manifold.

#### **OPTION 1: Blown Fiber Direct Termination using a Break out Kit**

Follow steps (i) to (v) of **OPTION 1: Loose Tube Fibers**

- **Direct Termination using a Break out Kit** page 7 – 8

#### **OPTION 2: Blown Fiber - Fusion Splicing, Splice to Pigtails**

Follow steps (i) to (vi) of **OPTION 2: Loose Tube**

**Fusion splicing, splice to pigtails page 7.**