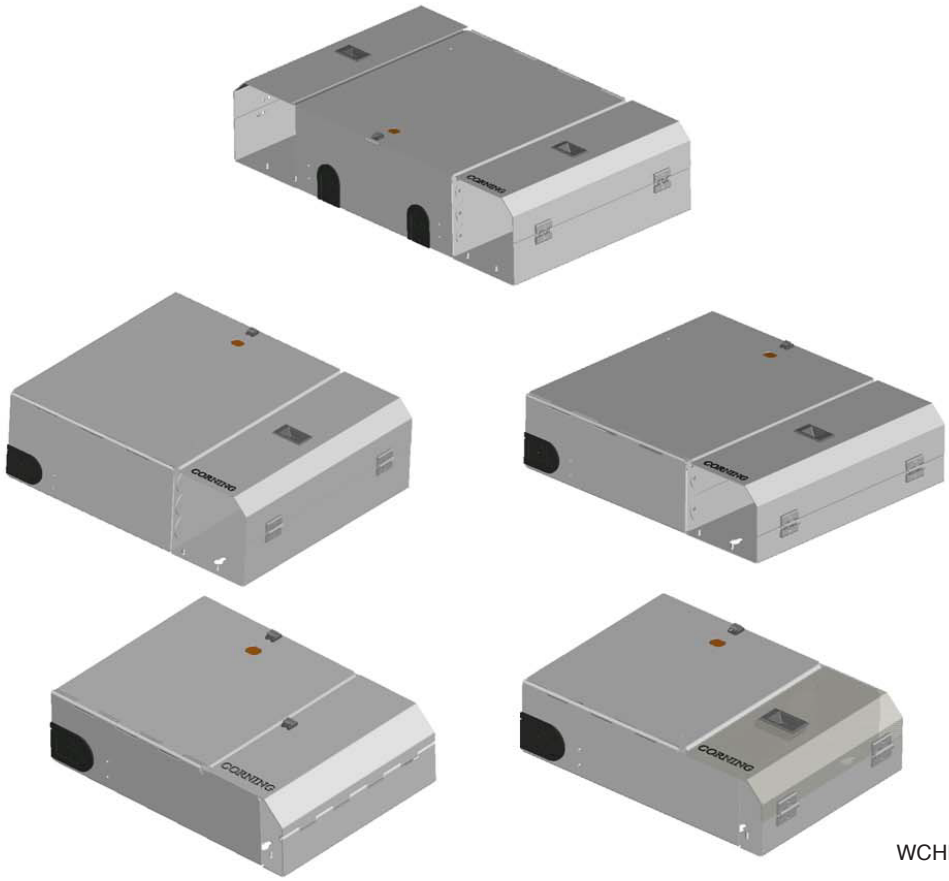
CORNING

Installation Instructions

Issue 4, June 2023

Wall Mount Closet Housing (WCHE-02P, -02P-P, -04P, -06P, -12P)

These instructions are provided as guidance for the trained craftsperson carrying out the installation.



WCHE_0060

Warning!

Laser/LED radiation in the non-visible spectrum possible!

If the degree of hazard of the laser/LED radiation is not known, on no account look into open fiber ends.

Caution

The assigned degree of hazard is a matter for the constructor/operator of the communication equipment to finally determine and indicate in a responsible manner (e.g. by affixing standards-compliant warning labels as per DIN EN / IEC 60825-1, applicable issue, by compliance with BGV B2 “Laser Radiation“, applicable issue).
If the technical data should change in a way that affects the degree of hazard, the warnings must if necessary be amended accordingly and work safety precautions must be taken, see also e.g. DIN EN/IEC 60825-2, applicable issue.

Contents

1. General

1.1 The WCHE family of housing units comprises 4 different sizes with 2, 4, 6 or 12 panels for holding fiber optic connectors. The different sizes are designated WCHE-02P, -02P-P, -04P, -06P and -12P. The different panels available are equally suitable for use in all housing sizes and are designed to accommodate the following connector types: MTP, ST, FC, E2000, MTRJ, SC, duplex SC and duplex LC.
Connectorized cables can be routed and strain-relieved at the top and/or bottom of the housing. The external connections are covered by transparent doors (-02P not transparent). The main door is secured to the housing with a quarter-turn latch and to lock it there is a lock kit (HDE-WR-LOCK-KIT) available. When hinged down, the door can be secured with the attached lanyard and used as a light-duty workshelf.

1.2 WCHE wall mount housings accommodate splices for single- and multimode fiber optic systems.
The WCHE-02P and WCHE-02P-P housing can accommodate up to 2 Standard splice trays (type ´96) on purchasing the optionally available tray mounting bracket.

Housings -04P, -06P and -12P can accommodate a maximum of 4 to 6 type MFT trays depending on the size of the housing. To use the splice trays, each housing requires the installation of a tray holder (kits purchased separately).

1.3 To facilitate field connectorization, the individual fibers of a buffer tube can be fanned out using the buffer tube fan-out kits S46998-Z1-A5 or -A39 (purchased separately).

1.4 A dust cover kit for the top and bottom jumper ports is optionally available for all WCHE housings (except -02P) to reduce the size of the jumper port opening and provide additional protection (purchased separately).

1.5 The WCHE housings may also be rack mounted to a 19- or 23-inch rack with the Universal Rack Mount Bracket available as a kit (purchased separately). Installation instructions for mounting to a rack are included with the kit.

2. Description of the Housings

Housing type WCHE-02P and WCHE-02P-P

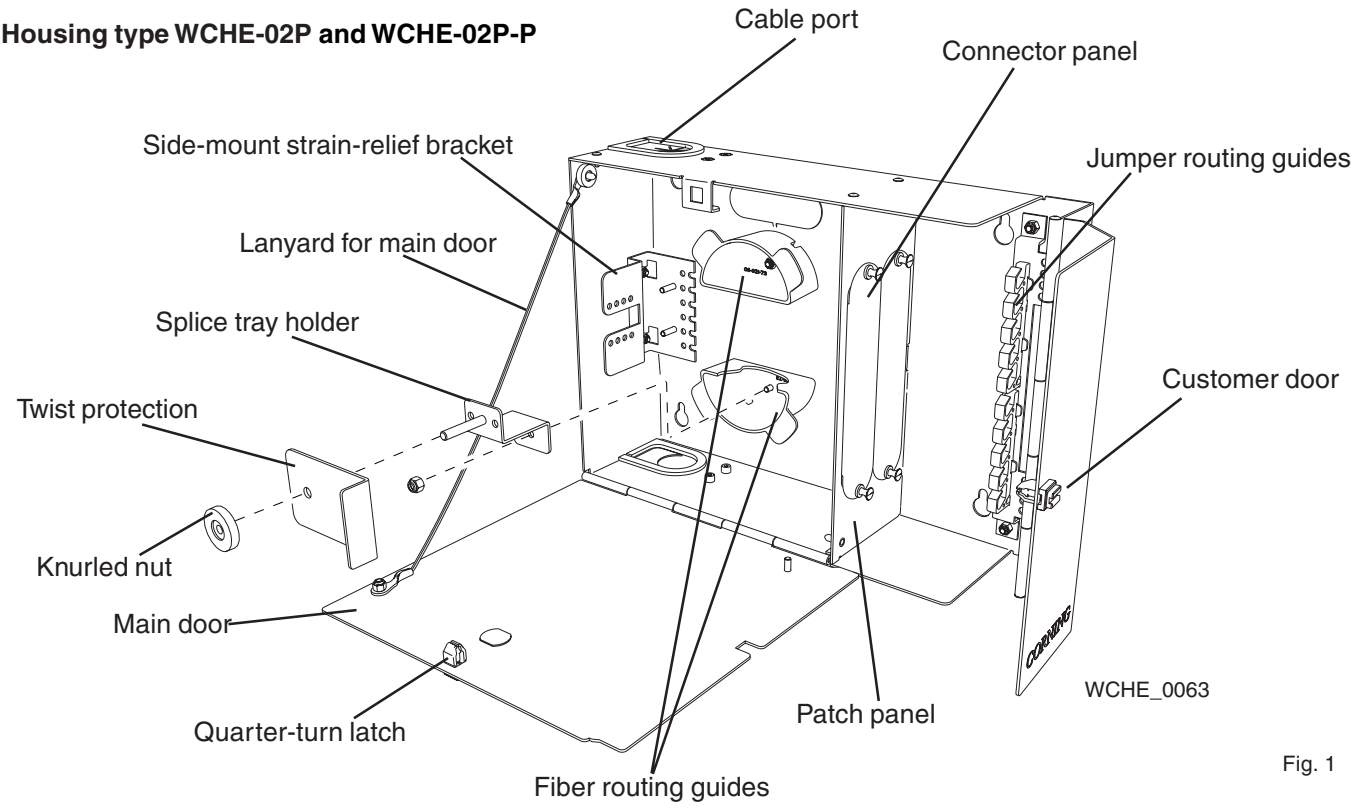


Fig. 1

Housing type WCHE-04P, -06P, -012P

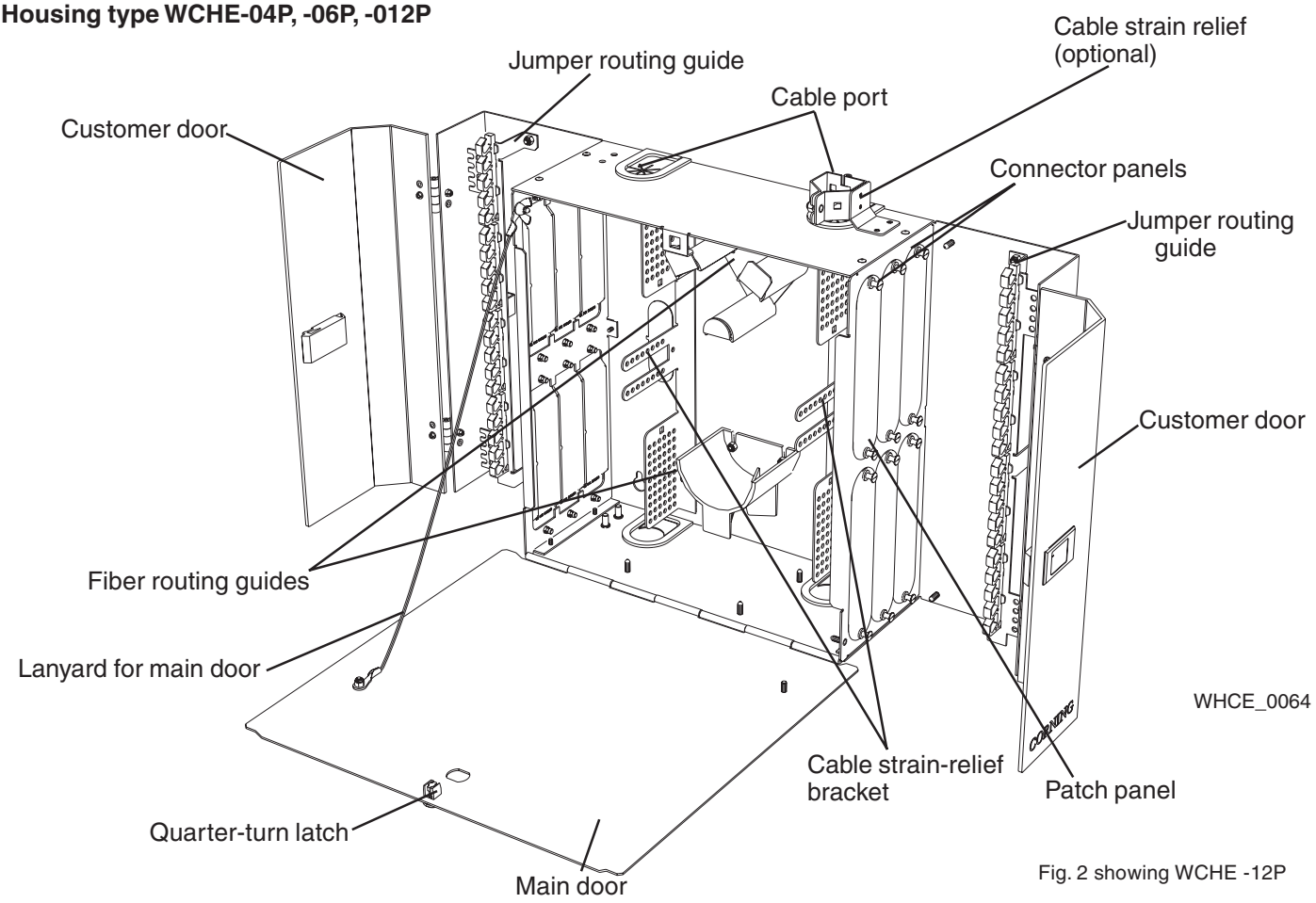
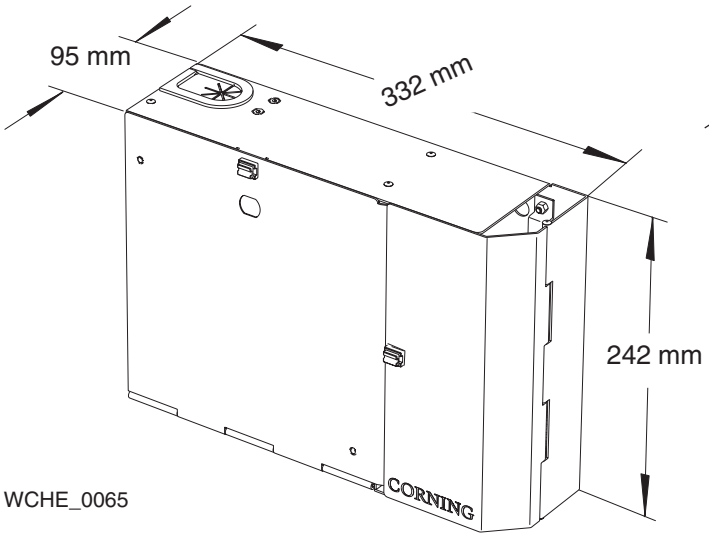


Fig. 2 showing WCHE -12P

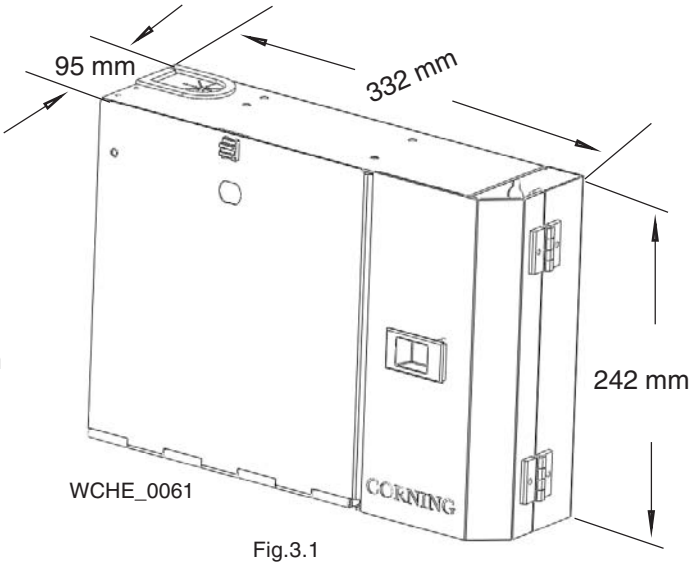
Max. dimensions of WCHE-02P



WCHE_0065

Fig. 3

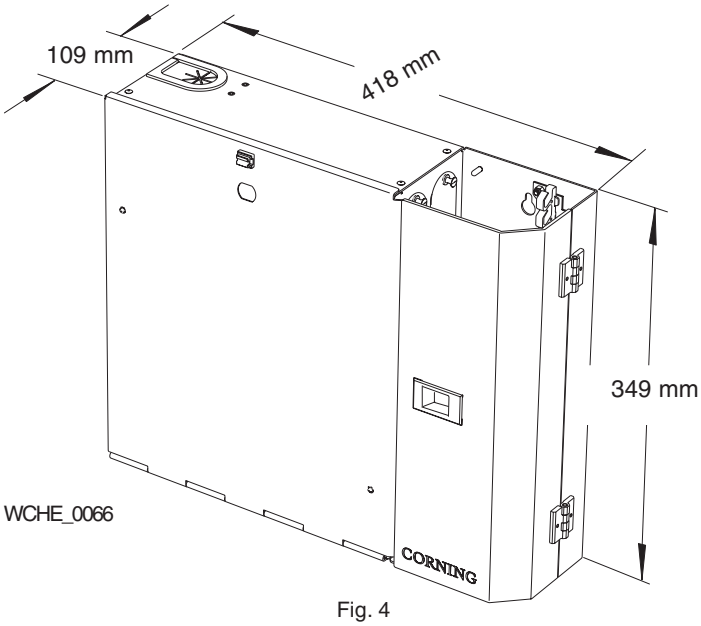
Max. dimensions of WCHE-02P-P



WCHE_0061

Fig.3.1

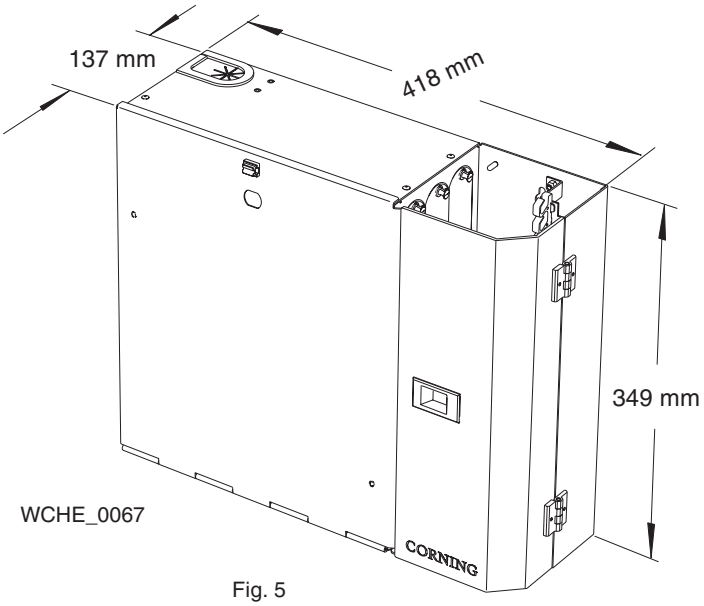
Max. dimensions of WCHE-04P



WCHE_0066

Fig. 4

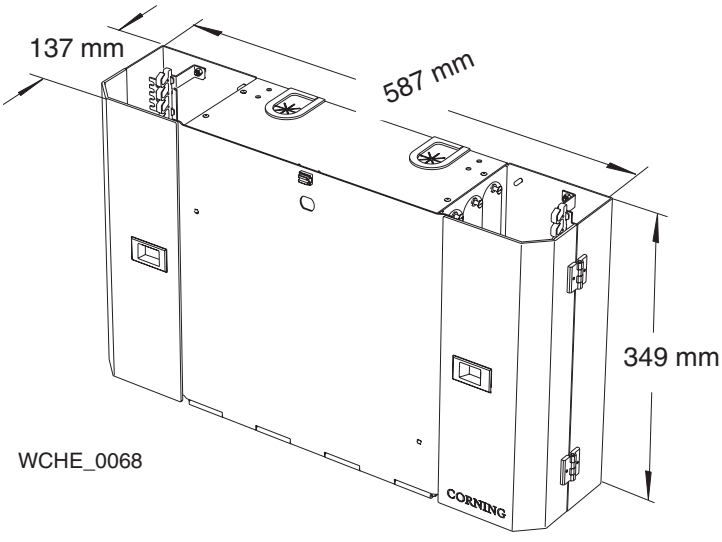
Max. dimensions of WCHE-06P



WCHE_0067

Fig. 5

Max. dimensions of WCHE-12P



WCHE_0068

Fig. 6

3. Opening the WCHE Housing

The WCHE doors are secured with a quarter-turn latch. To open or close either door, turn the latch one quarter turn (Fig. 7).
A coin or slotted screwdriver may be used.

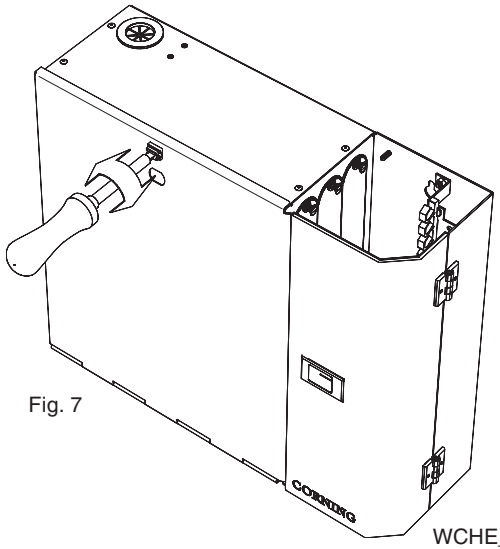


Fig. 7

WCHE_0007

4. Mounting the Housing

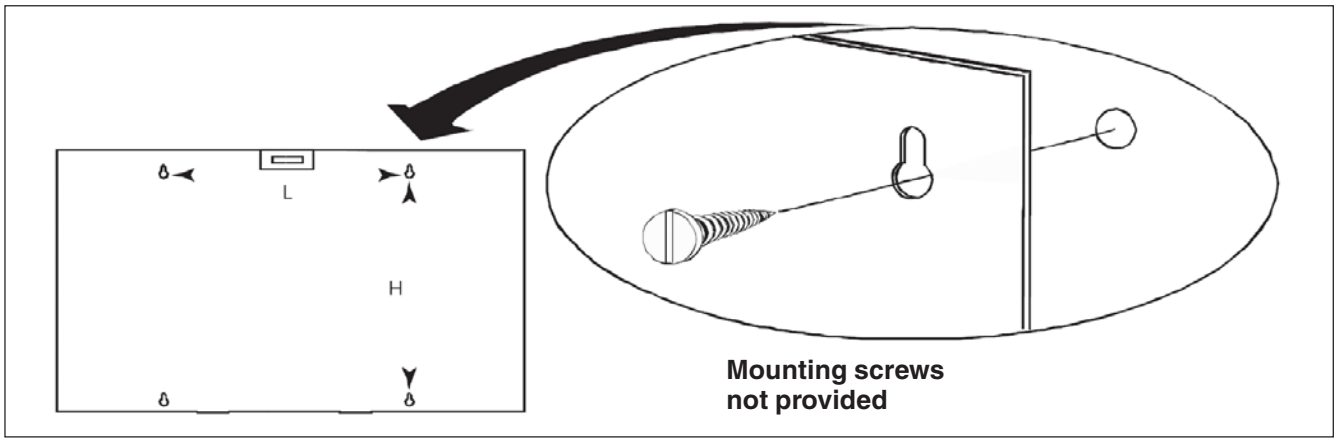


Fig. 8

4.1 The housing may be mounted directly to a wall. An optional wall standoff kit (purchased separately) may be used for mounting to allow cable routing between the cabinet and the wall. The wall standoff may be installed following instructions provided with the kit.

4.2 When mounting directly to the wall, select a vertical surface. The surface should be flat so that the housing does not warp when the mounting screws are tightened.

4.3 Hold the housing in position on the wall and mark the hole locations with a pencil.

- Mounting holes for WCHE-02P and WCHE-02P-P housing:
  L: 254 mm
  H: 184 mm
- Mounting holes for WCHE-04P and WCHE-06P housings:
  L: 305 mm
  H: 283 mm
- Mounting holes for WCHE-12P housing:
  L: 254 mm
  H: 283 mm

Drive screws in at these locations leaving a gap of about 3 mm between wall and screw head. The hardware used for mounting depends on the mounting surface.

4.4 Place the housing on the mounting hardware and tighten the screws.

5. Main Door

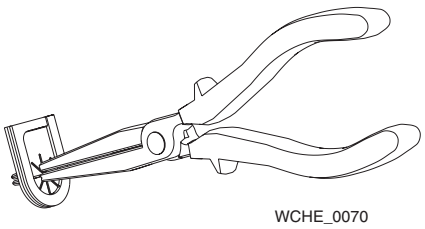
5.1 The housing's main door can be opened down and secured at a 90° angle by attaching the lanyard from it to the housing. Avoid putting excessive weight on the door when using it as a shelf; doing so may cause the door to bend or break.

5.2 It is possible to close the main door without disconnecting the lanyard. When closing, make sure that the lanyard does not become trapped between between door and housing or interfere with the fibers and connectors.

6. Installing Cable (Spliced or Connectorized)

6.1 Pierce the grommet in the top or bottom of the cabinet as shown in Fig. 9 and thread the cable through the hole.

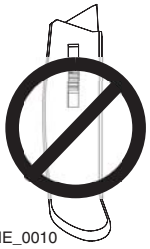
Preparing the cables



WCHE_0070

Use a pair of needle-nose pliers to pierce the cable port grommet. Never use a knife or cutters because the grommet must fit tightly to prevent intrusion of insects, water, dirt or foreign particles. A knife may cut all the way through the grommet, and cutters may cut a hole that is too large for a tight fit.

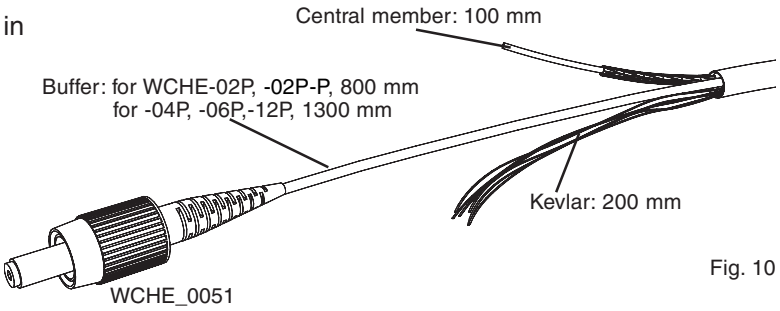
WCHE_0009



WCHE_0010

Fig. 9

6.2 Perform cable sheath removal steps as specified in instructions for the cable being installed. Suggested lengths are shown in Fig. 10.



WCHE_0051

Fig. 10

6.3 Trial position the cable on the cable strain-relief bracket as in Fig. 11/12 minimizing bending of the cable. If the cable being installed contains Kevlar and a central member, you will need to attach a square-neck bolt, a U-shaped washer and flat washers to the bracket to strain relieve the cable. In the case of the WCHE-02P and WCHE-02P-P housing the bolt is mounted permanently.
Start the bolt into a square hole in the strain-relief bracket as shown. Wrap the Kevlar from the cable around the bolt (between the U-shaped washer and the strain-relief bracket) in a clockwise direction. Insert the central member between the U-shaped washer and the first flat washer. Place the second flat washer on top and tighten the wing nut (Fig. 11/12). Trim the excess central member and Kevlar.

6.4 Secure the cable sheath to the strain-relief bracket with cable ties.

Note: Use care not to overtighten the tie wraps. This may macro/microbend the cable, thus damaging the fiber.

6.5 If the cable being installed needs to be connectorized, do so at this time as per the connector manufacturer's instructions.

Strain relief WCHE-02P, -02P-P

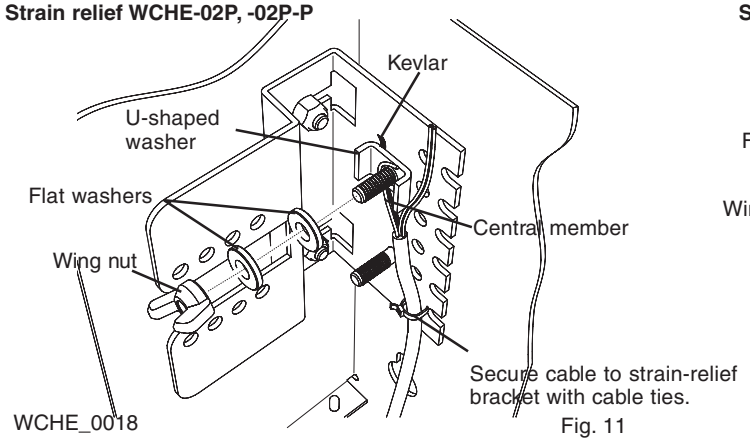


Fig. 11

Strain relief WCHE-04P, 06P, 12P

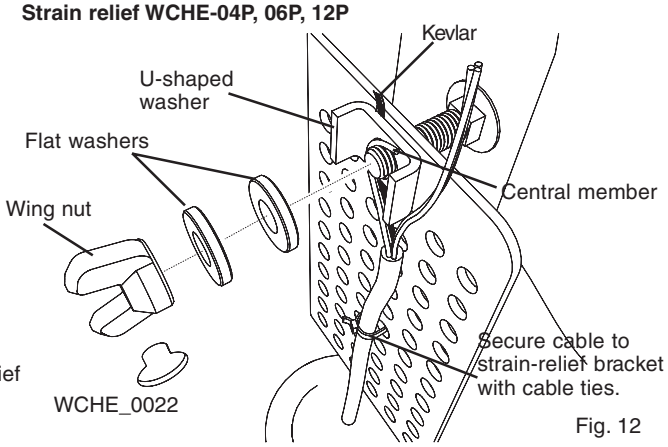


Fig. 12

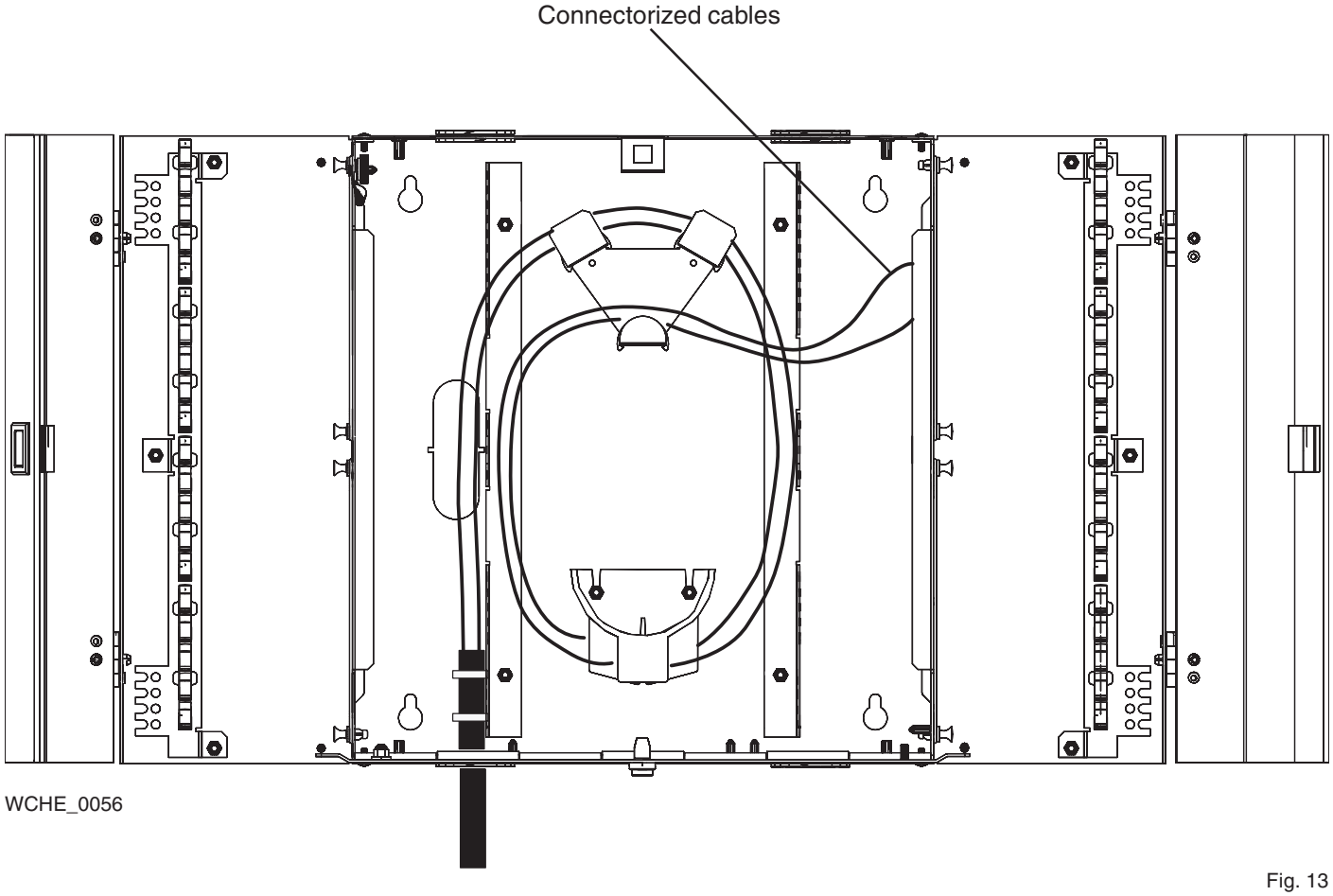


Fig. 13

6.6 Once the connectors have been terminated, route the fiber using the routing pattern shown in Fig. 13.

7. Installing Cable with Fan-Outs

7.1 General: Buffer tube fan-out kits are mounted inside the housing on fingers at the center of the strain-relief bracket. The fan-outs slide between the fingers and are secured with a cable tie wrap threaded through the holes in the fingers (Fig. 14).

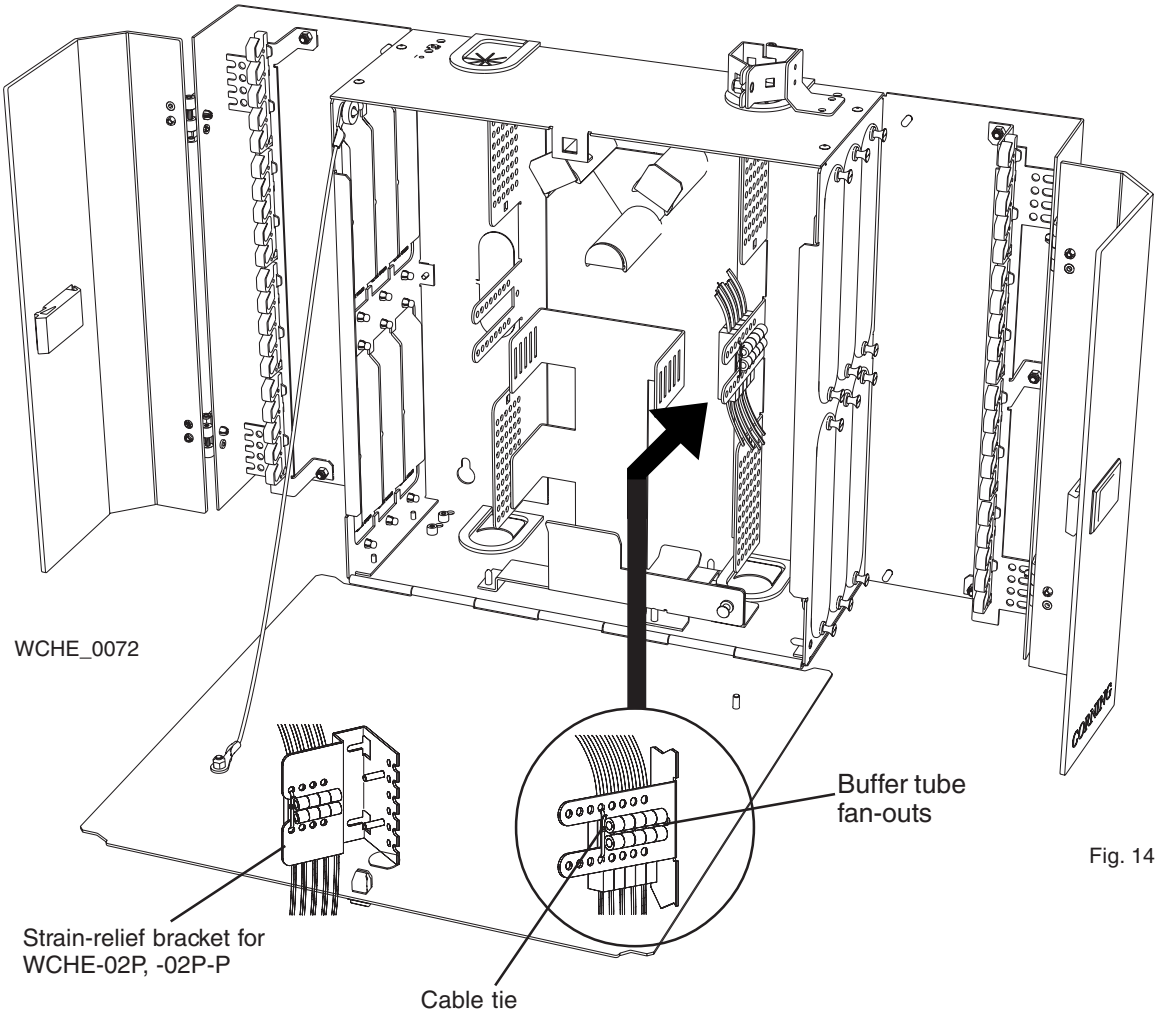


Fig. 14

Note: Install fan-out kits and connectors as described in the relevant installation instructions.

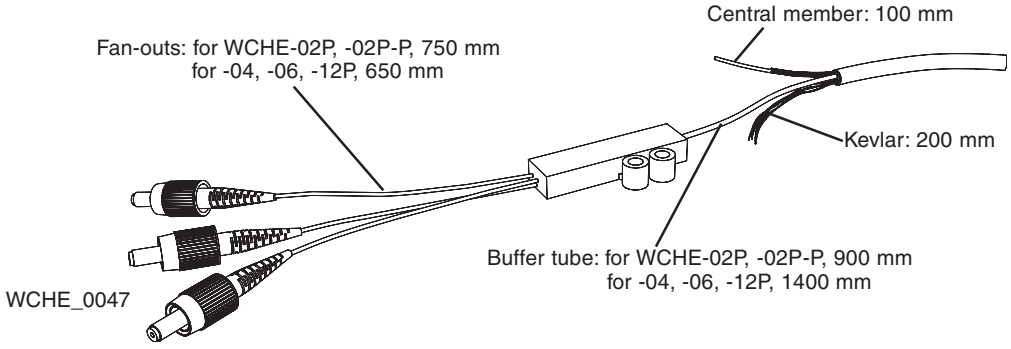


Fig. 15

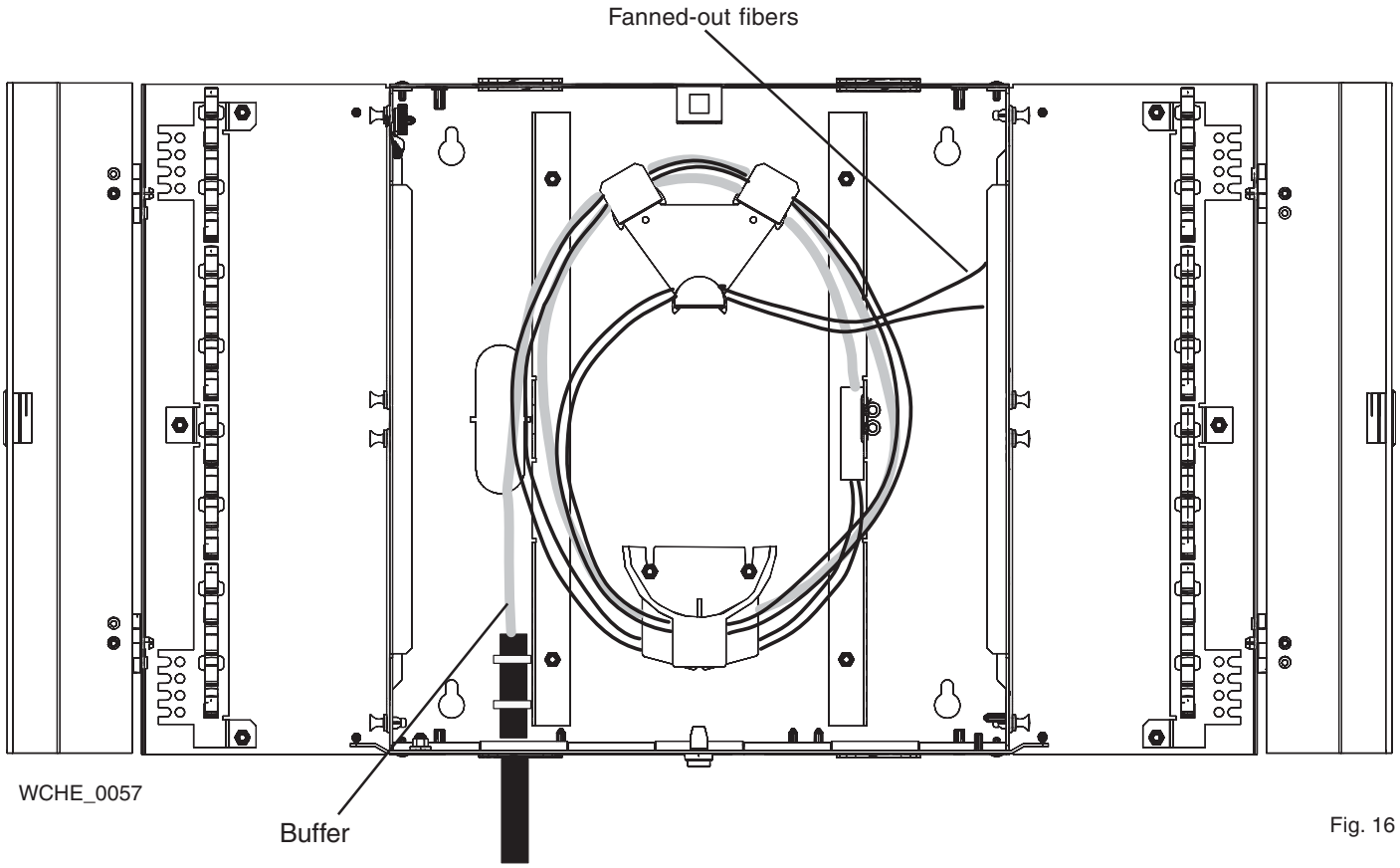
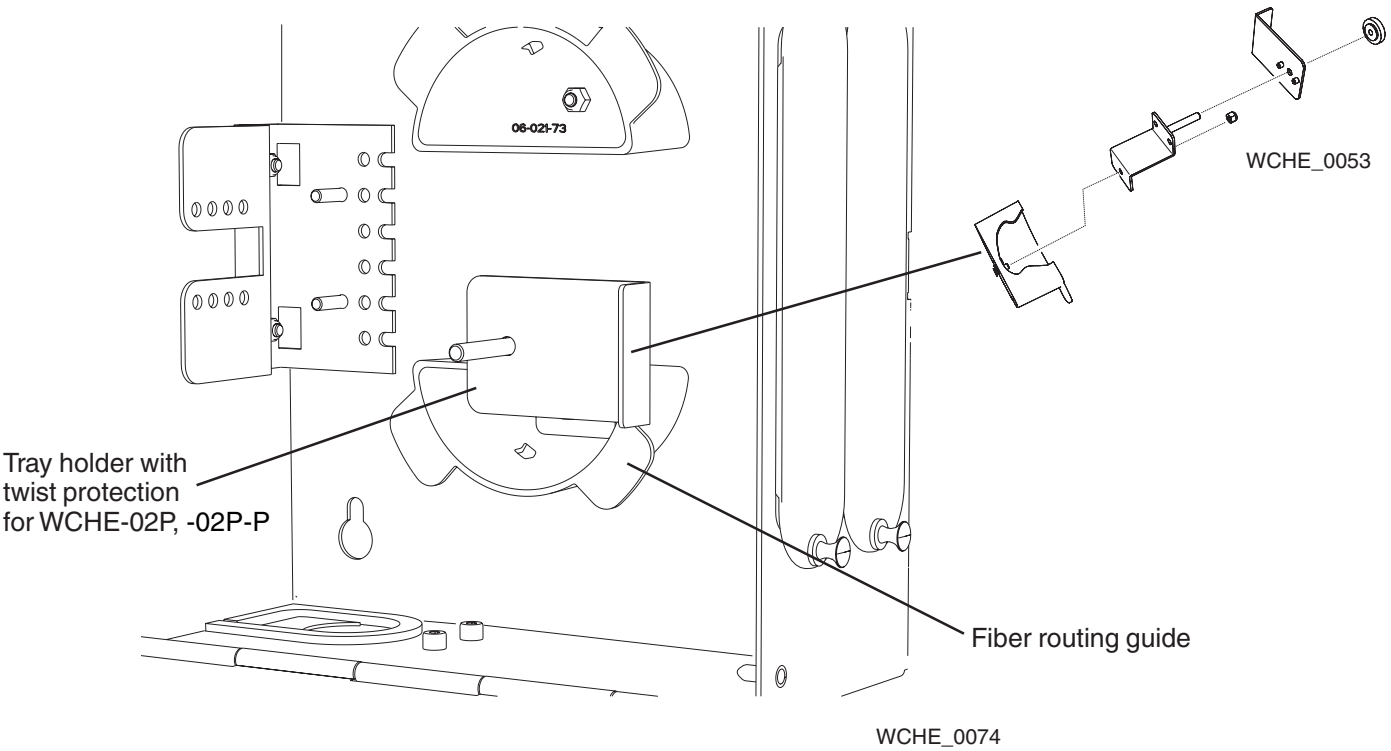


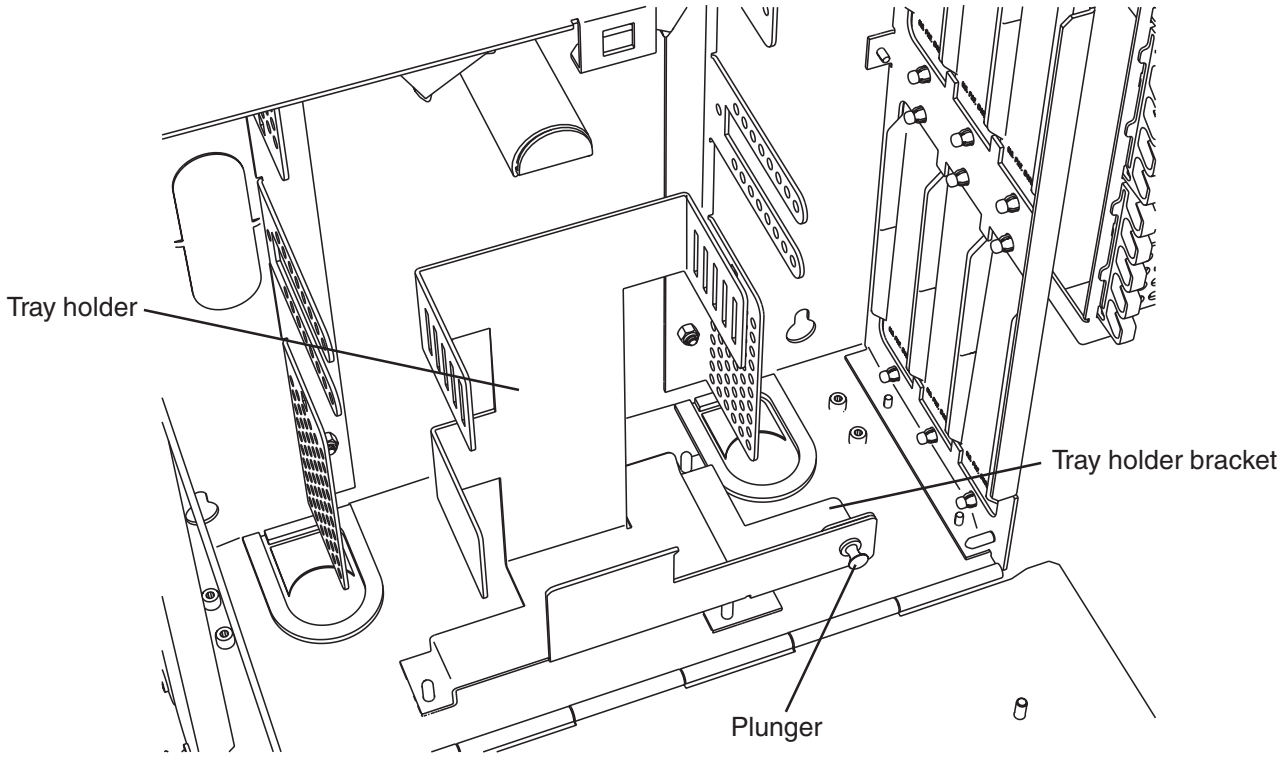
Fig. 16

7.2 Route buffers carefully around the routing guides (2-1/2 loops). Slide the fan-outs between the fingers on the strain-relief bracket, route the fanned-out fibers and mate connectors to connector adapters (Fig. 14 and 16). Secure the fan-outs with a cable tie.

8. Installing Splices

8.1 In the case of the WCHE-02P and WCHE-02P-P housing the tray holder with twist protection for type '96 trays is co-mounted on the lower mounting for the fiber routing guide.





WCHE_0020

Fig. 17

8.2 Splice trays are located in the optional splice tray holder. To install the splice tray holder kit, use a nut driver or socket to undo the nuts holding the lower routing guide so that the guide can be removed.

8.3 Remove the vinyl caps from the three studs in the bottom of the cabinet and place the splice tray holder and its bracket over the studs as shown in Fig. 17.
Place and fasten the nuts provided to hold the bracket and holder in place. Swing the tray holder into its closed position and push the plunger into the hole to secure (see also Fig. 21).

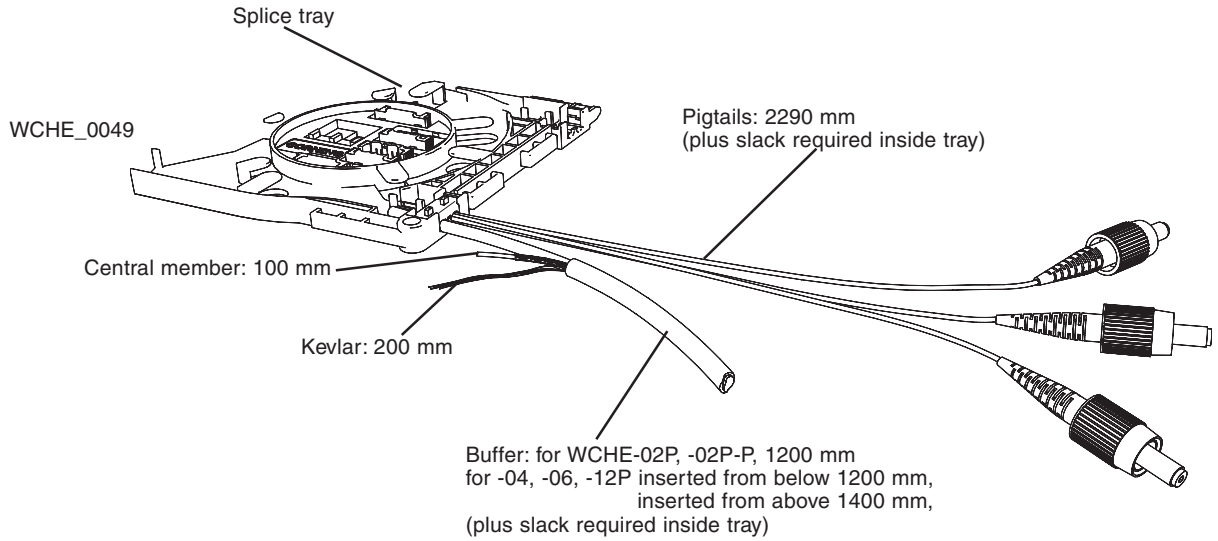


Fig. 18

8.4 If splicing is required, recommended cable sheath removal lengths are shown in Fig. 18.

8.5 Splice trays may be inserted into the holder and secured with the velcro tape.

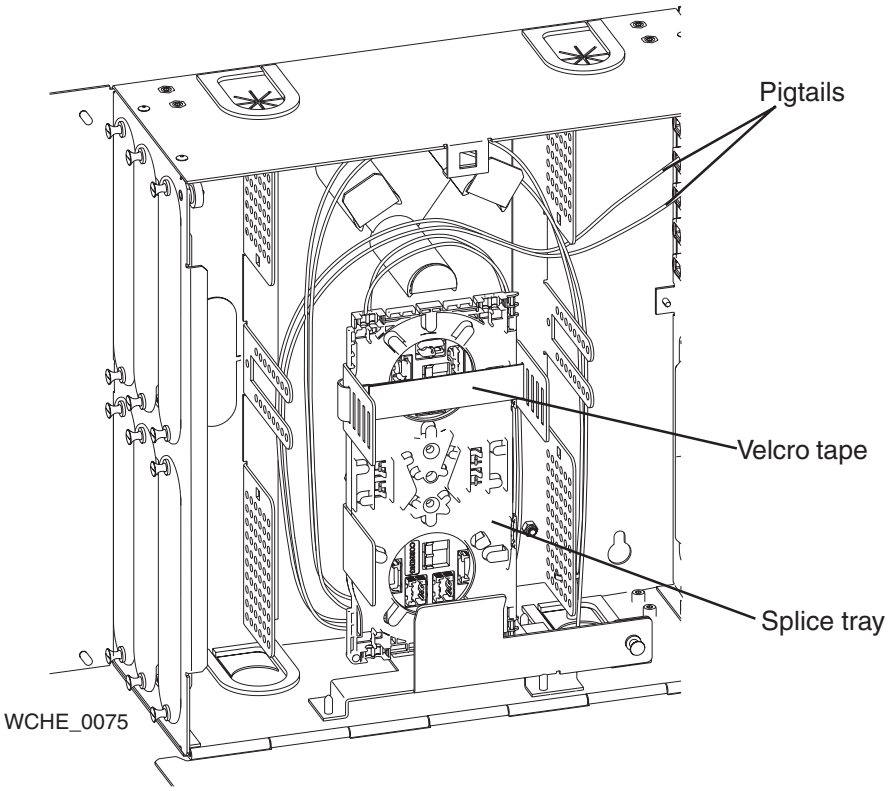


Fig. 19

9. Installing an External Strain-relief on the Housing

The optional Universal Cable Clamp kit (purchased separately) with an insert, which manages up 5 cables, can be screw-mounted to the exterior of the housing over any of the grommeted entry holes.
The mounting angle for the Universal Cable Clamp kit is also purchased separately.

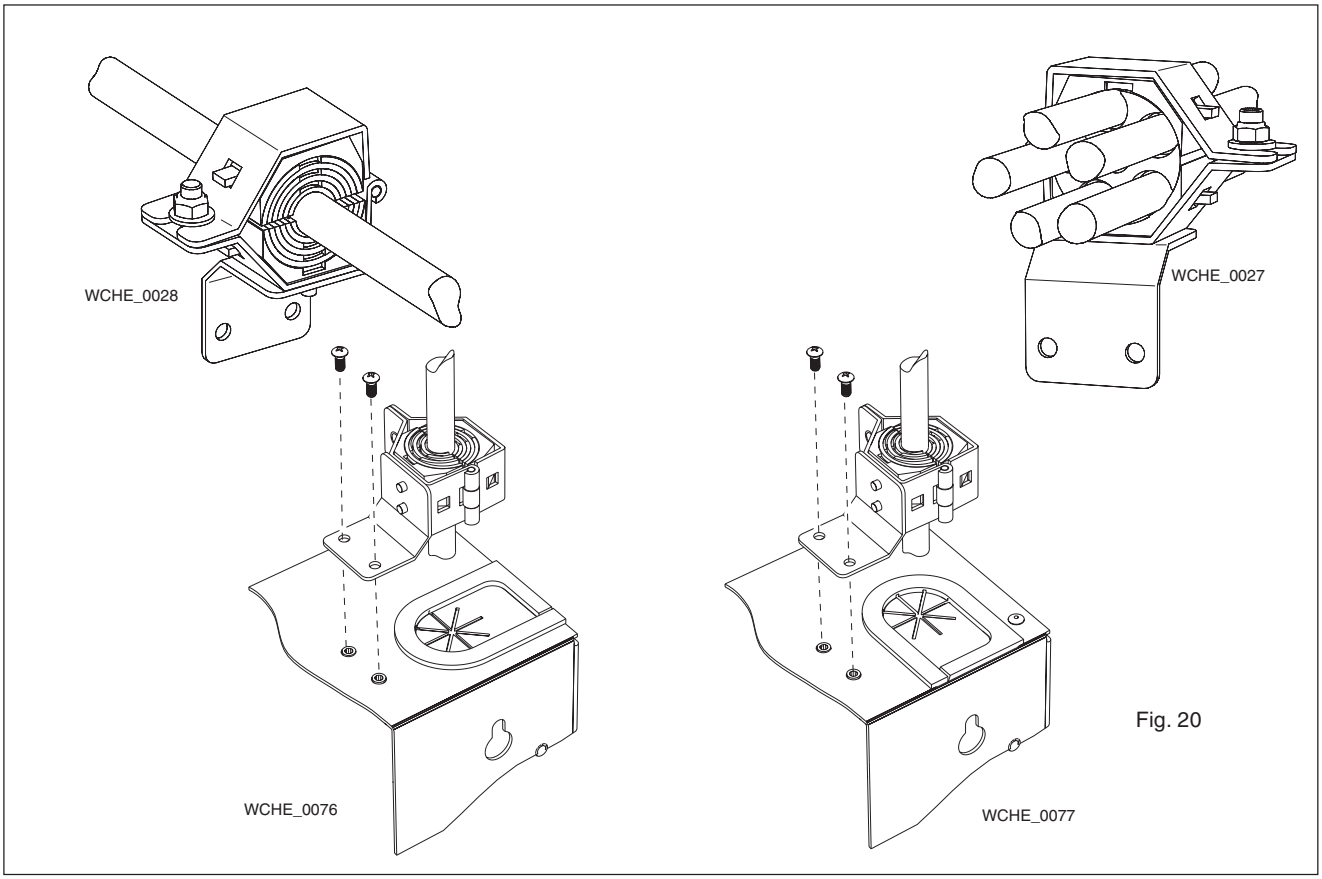


Fig. 20

10. Installing Connectors

10.1 Follow manufacturer's connector installation instructions carefully. Observe the following additional precautions:

- Use a clean tissue soaked in alcohol to gently clean the connectors. Clean all areas that will contact the receptacle.
- The connector is a delicate device. Do not press heavily on it as you clean. Doing so may scratch or crack the surface, making it unusable.
- Carefully insert the connector into its receptacle and lock/screw it tight. DO NOT OVERTIGHTEN. Doing so can damage the connector surface, making it unusable.

Note: In some instances it may be necessary to field-install connectors to the cable. Prepare the fibers as specified in appropriate sheath removal and stripping procedures and install the connector according to the manufacturer's instructions.

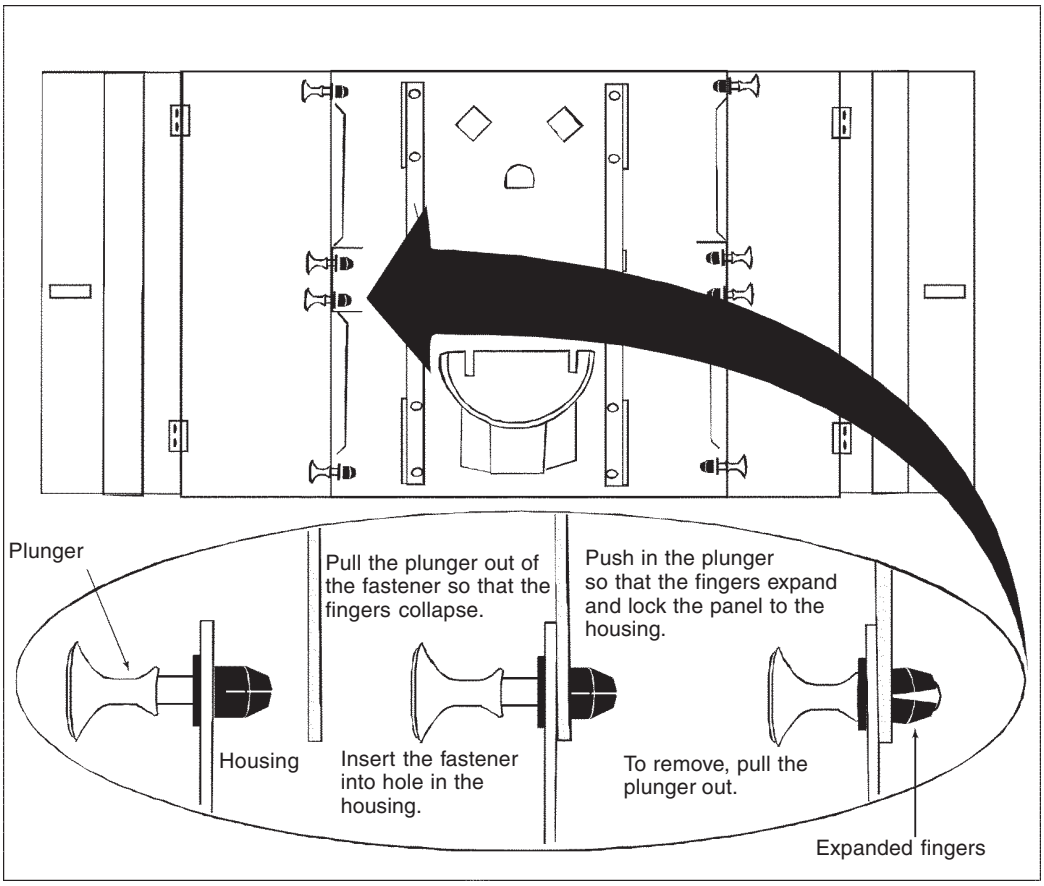


Fig. 21

10.2 Panels can be mounted or demounted as shown in Fig. 21.

11. Installing Jumpers

11.1 Develop a plan for routing jumpers from the housing and locate the fibers in jumper routing guides (Fig. 22).

11.2 Take care to maintain a reasonable bend radius when routing jumpers out of the housing. Carefully dress the jumpers through the jumper routing guides. Group the jumpers together at the housing output with adhesive tape.

Note: Do not overtighten jumpers with adhesive tape or tie wraps. This may cause macro/microbending, thus damaging the fiber.

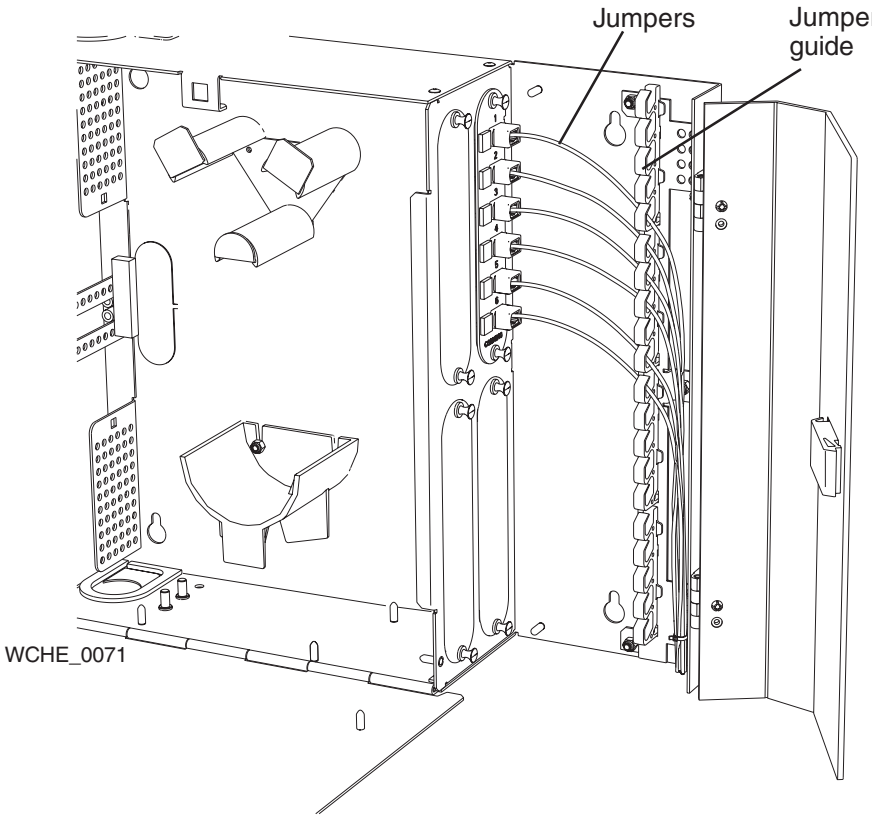


Fig. 22

12. Documentation

12.1 Record information on each fiber on the label located on the inside of the door (Fig. 23).

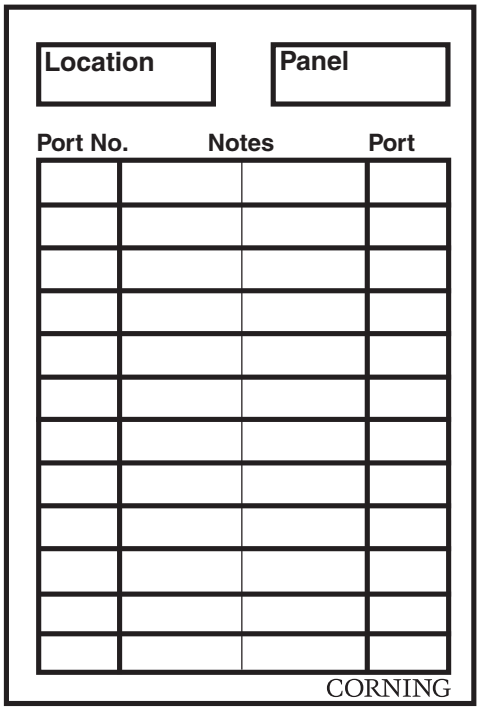


Fig. 23

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