3M™ Fiber Dome Stubbed Terminal FDST 08 and 3M™ External Cable Assembly Module (ECAM) FD Factory Terminated Fiber Drop

Instructions

1.0 General

The 3M™ Fiber Dome Stubbed Terminals FDST 08 are available in 4, 6, 8 or 12-port configurations and designed to be used with the 3M™ External Cable Assembly Module (ECAM) FD Factory Terminated Fiber Drop with SC connector or with field terminated drops.
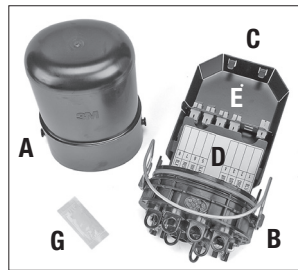
The 3M ECAM FD fiber drop is a factory-terminated fiber drop with an SC connector on one or both ends.

It is available in lengths ranging from 50 to 2000 feet (15 to 610 meters). The ECAM FD fiber drop is shipped with a pulling sock to protect the drop and to allow the drop to be pulled through trees and conduits.

2.0 Kit Contents
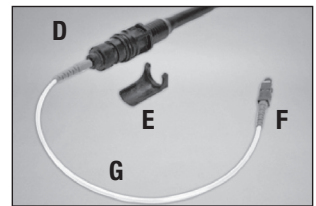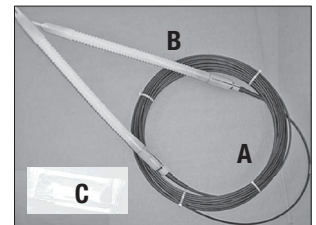
2.1 3M™ Fiber Dome Stubbed Terminal (FDST) 08

A. Dome (Size M)
B. Base assembly
C. Storage basket
D. Removable protective cover with label
E. Removable SC coupling bracket
F. Factory-terminated ECAM (4/6/8/12) multi-fiber fan-out with SC connector (Not shown)
G. Silicone lubricant

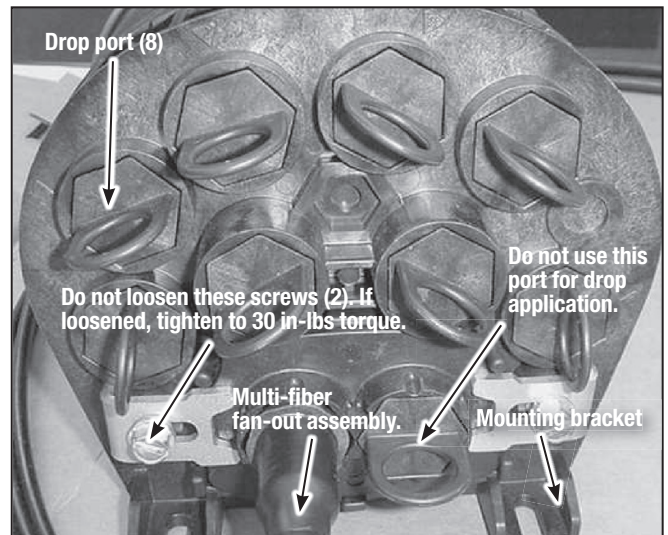3M™ Fiber Dome Stubbed Terminal (FDST) 08 with Splitter installed

2.2 3M™ External Cable Assembly Module (ECAM) FD Factory Terminated Fiber Drop

A. ECAM FD Factory-terminated fiber drop with SC connector on both ends
B. Pulling sock
C. Silicone lubricant
D. ECAM FD Assembly
E. Fork/latch
F. Factory-terminated SC connector
G. 3 mm flexible jacketed tubing

Note: *Visually inspect all components. If any component is missing or appears damaged, do not install and call customer service at 1-800-426-8688 for a replacement product.*

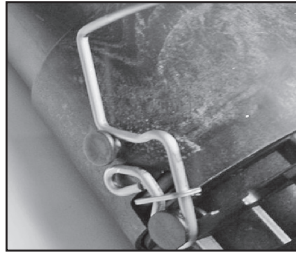## 3.0 3M™ Fiber Dome Stubbed Terminal (FDST) 08 Base Configuration:

Drop port (8)

Do not loosen these screws (2). If loosened, tighten to 30 in-lbs torque.

Do not use this port for drop application.

Multi-fiber fan-out assembly.

Mounting bracket

3M

4.0 3M™ Fiber Dome Stubbed Terminal FDST 08 Installation

4.1 Unpack the terminal & uncoil the stubbed tail.

4.2 Route and splice terminal tail per company practice.

4.3 Install FDST 08 terminal using appropriate mounting bracket per company procedure.

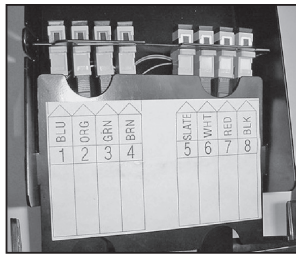## 5.0 3M™ Fiber Dome Stubbed Terminal (FDST) 08 Terminal Opening & Closing:

Opening:

5.1 Lift dome off base by pulling down on latch. Slide dome off of the base and set aside in clean area.

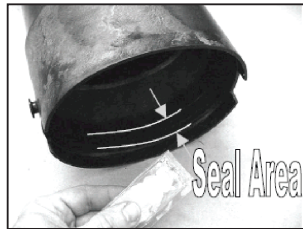5.2 Internal storage basket with SC coupling bracket and fiber fan-out protection cover is visible now.

5.3 Multi-fiber fan-out fiber color coding and coupling assignment for proper splicing are indicated on the label.

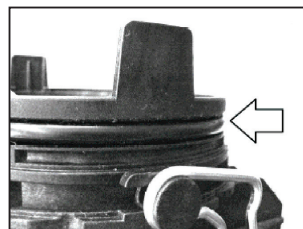5.4 The label can be used for logging the multi-fiber fan-out fiber splice assignment.

Closing:

5.5 Ensure both the dome seal area and base O-ring are free of dirt or any damage. If needed, clean area and apply a light film of supplied silicone lubricant. Failure to maintain a clean seal area may lead to leakage.
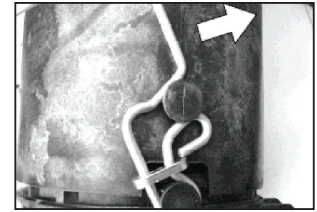
Note: *Follow health, safety and environmental information, refer to product label or Material Safety Data Sheet for silicone lubricant.*

5.6 Clean and lubricate O-ring.

5.7 Replace dome and engage latch over dome ear as shown.

5.8 Fully close latch to seat dome onto the base.

6.0 Loopback Test Configuration (optional and not available on all models)

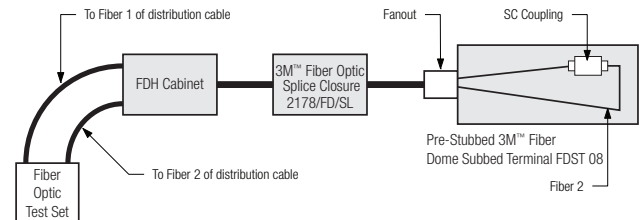The optional loopback test configuration is always configured at the factory.

The figure below shows an example of a 4-port 3M™ Fiber Dome Stubbed Terminal (FDST) 08 with a loopback test configuration. The configuration is as follows:

Fiber 1 (blue) of the fan-out & fiber 2 (orange) of the fan-out are connected together and fiber 3 (green) of the fan-out and fiber 4 (brown) of the fan-out are connected together inside the terminal at the factory.

To conduct the link qualification test, a technician is located at the FDH cabinet.

The technician connects fiber 1 and fiber 2 to the port of the bidirectional loss test sets and runs qualification tests.
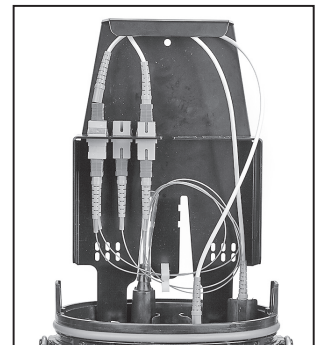
Upon first service activation the technician needs to change loopback test mode configuration to the normal service mode.

Configuring loopback test configuration to normal service mode

Note: *This section is applicable to the stubbed terminals with loopback test configuration option only.*

6.1 Before the first 3M™ External Cable Assembly Module (ECAM) FD Factory-terminated service drop installation, the terminal needs to be configured from loopback test mode to normal service mode using the following procedure described in this section.
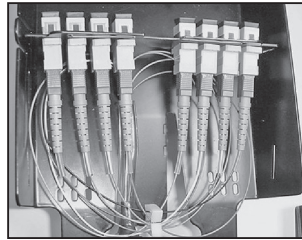
6.2 Open the 3M™ Fiber Dome Stubbed Terminal FDST 08 per section 5 instructions.

6.3 Remove protective cover.

6.4 SC connectors in the loopback test, configured at the factory per table below, are visible now.

SC Coupling #	1	3	5	7
Bottom	Blue	Green	Slate	Red
Top	Orange	Brown	White	Black

Note: ***4-fiber fan-out set up is shown.***

6.5 Before installing the first fiber drop, re-configure the multi-fiber fan-out fibers in normal operational mode as shown to the right.
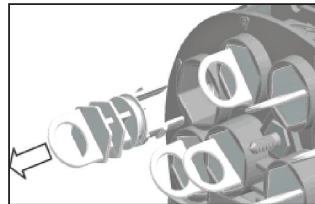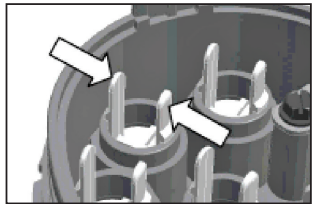

6.6 If necessary, clean SC couplings and SC connectors per company practice.

6.7 Re-install dust caps on SC couplings.

7.0 Installation of 3M™ External Cable Assembly Module (ECAM) FD Factory-terminated Fiber Drop and Fiber Fan-out

Note: ***The ECAM Factory Drop and the Fiber Fan-out are installed in the same manner. For demonstration purposes, the ECAM Factory Drop will be used.***
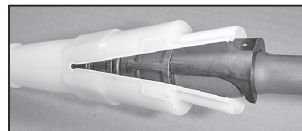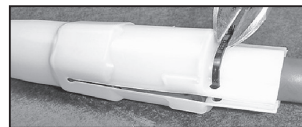
Port Preparation

7.1 Clean any dirt from port in base.

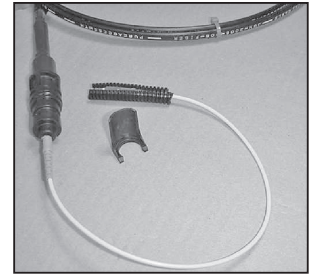7.2 Remove plug by squeezing tabs together inside base and pulling ring on plug.
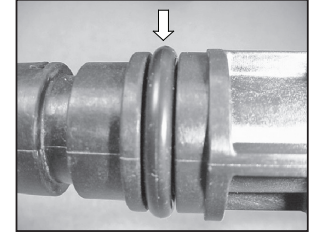

Pulling Sock Removal

7.3 Cut tie wrap near end of the pulling sock.

7.4 Pull away the open ends of the pulling sock and slowly pull out and remove drop cable from pulling sock. Save the loose fork/latch. You will need it for securing drop into the port later.

7.5 The 3M™ External Cable Assembly Module (ECAM) FD Factory-terminated Fiber Drop end after pulling it from the pulling sock is shown.
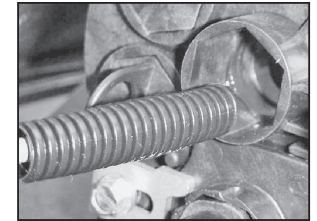
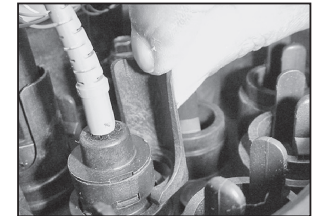7.6 Lightly lube the O-ring of the ECAM fiber drop using the supplied silicone lubricant.

Note: ***Carefully follow health and safety environmental instructions as given on Material Safety Data Sheet for the silicone lubricant.***
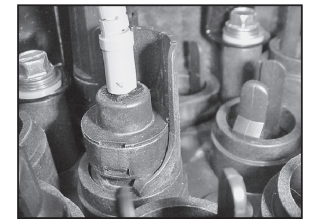
Fiber Drop Installation

7.7 Select the desired port of the base and feed ECAM drop through port and push ECAM drop firmly into port after aligning the hex on ECAM drop with hex opening in base as shown to the right.

7.8 Install locking fork by sliding fork/latch into groove on the 3M™ External Cable Assembly Module (ECAM) while holding the clip parallel with the groove in the ECAM drop.
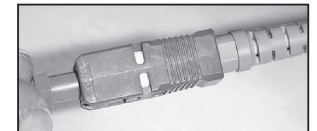

7.9 Fully seat clamp into groove. Rotate locking fork as required to reduce interference with drop.

7.10 Remove protective cover (corrugated tubing) from the SC connector body.

7.11 Pull & remove dust cap from the SC connector ferrule end.
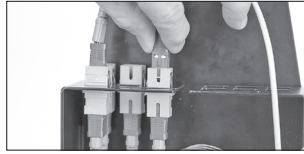
7.12 Clean SC connector per company procedure.

NOTE: ***Damaged SC connector can be easily field replaced by using the 3M™ No Polish SC Connector.***

7.13 Route the 3M™ External Cable Assembly Module (ECAM) Fiber Drop from the base port over the SC coupling bracket through retaining slot as shown.

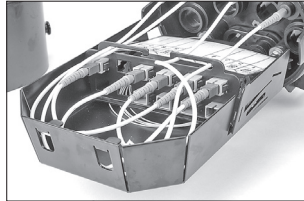*Note:* ***ECAM fiber drop minimum bend radius is 0.6 inch (15mm).***

7.14 Match the key on the SC connector and SC coupling and mate the SC connector to the SC coupling.
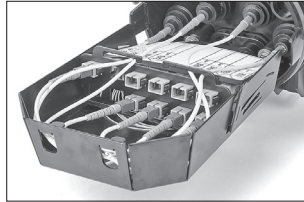

8.0 Fiber Drop Installation for Configuration with Installed Splitter

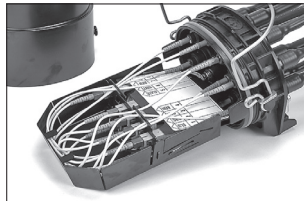8.1 Follow steps 8.1 through 8.4 to install fiber drop.

8.2 Route the top ports 1-4 on the terminal to the top ports 1-4 on the adapter plate as shown.

8.3 Route the bottom ports 5-8 on the terminal to the bottom ports 5-8 on the adapter plate as shown.
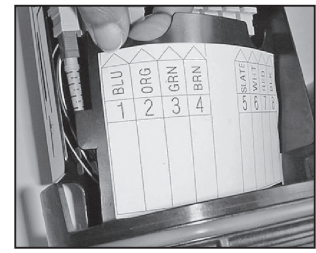

8.4 The terminal should look as shown when all ports are placed in service.
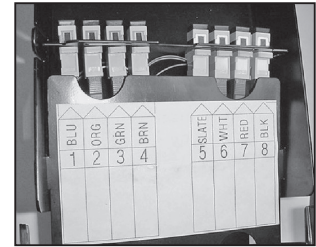

9.0 Finish

9.1 Install protective cover in the basket to cover fan out assembly. Make sure that all ports are labeled per best company practice.

9.2 Follow instructions per Section 5 and seal closure.

10.0 3M™ Fiber Dome Stubbed Terminal FDST 08 and 3M™ External Cable Assembly Module (ECAM) FD Factory-terminated Fiber Drop Accessories

Product Number	3M ID	Description
FDST/FDT-08M-AERIAL-SHB	80-6113-3206-7	Aerial Strand Mount Hanger Bracket For FDST 08 And FDT0 8M
FDST/FDT-08-POLE/PED-HB	80-6113-3205-9	Polemount, Walmount, BD4, BD5, CHNL MAH100 Pedestal Mount Bracket For FDST 08, FDT 08, FDT 08M And FDT 08S

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