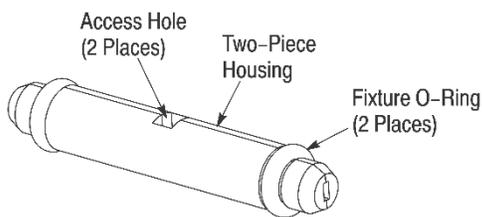


CURING FIXTURE	CONNECTOR TYPE
1693797-1	PRO BEAM Jr. EB Cable Plug (For Cable with Aramid-Fiber Strength Members)
	PRO BEAM Jr. EB Sealed D- Hole and Square Flange Bulkheads
	PRO BEAM Sr. EB 2- and 4-Channel D- Hole and Square Flange Bulkheads
1985905-1	PRO BEAM Jr. EB Right-Angle Cable Plug
1693800-1	PRO BEAM Jr. EB Standard D- Hole and Square Flange Bulkheads
1693803-1	PRO BEAM Jr. EB Cable Plug (For Ø3.8 mm Cable with Steel Strength Members)
1754132-1	PRO BEAM Sr. EB 2-and 4-Channel Cable Plug
1918023-1	PRO BEAM Mini EB Cable Plug and Sealed D- Hole Bulkheads
1516296-1	MEB-Style 38999 Plugs and Receptacles (For Mil-Tactical Style Cable)
2304706-1	PRO BEAM Sr. EB 8-Channel Cable Plug
2309702-1	PRO BEAM Sr. EB 8-Channel Bulkhead



CURING FIXTURE	CONNECTOR
1754122-1	PRO BEAM EB Jr. Low-Profile D-Hole and Square-Flange Bulkheads

Figure 1

1. INTRODUCTION

The curing fixtures listed in Figure 1 are designed specifically for use with the connectors listed in Figure 1. The curing fixture ensures that the ferrule assembly will cure in the proper position on the fiber to obtain the required functional length for the connector (given in the instructions included with the connector).

The curing fixtures fit in Universal Heat Cure Block 502276-1 or FSD Heat Cure Block 502222-1 used with Heat Cure Oven Assemblies 502134-[]. For operating instructions for the heat cure oven, refer to Instruction Sheet 408-9460.

Reasons for reissue of this instruction sheet are provided in Section 5, REVISION SUMMARY.

2. DESCRIPTION (See Figure 1)

All curing fixtures except 1754122-1 consist of a top, middle, and bottom curing block. The curing blocks are designed to separate the ferrule assemblies for curing. Two captive thumb screws secure the curing blocks together.

Curing Fixture 1754122-1 holds one ferrule assembly. This curing fixture is a two- piece housing. Two O-rings secure the housing pieces together.

3. USING THE CURING FIXTURE

CAUTION *BE VERY CAREFUL NOT TO BREAK THE BARE FIBER; otherwise, it will be necessary to repeat the stripping and termination procedures.*



3.1. All Curing Fixtures Except 1754122-1

This procedure describes curing a 4-channel connector. For other channel counts, perform the steps needed for each ferrule assembly.

Proceed as follows:

- Loosen, but do not remove, the captive thumb screws, and lift the top curing block from the bottom curing block. Remove the middle curing block from the bottom curing block.
- Place the crimp sleeve in the small nest of the bottom curing block; and place the cable in the cable track. Make sure that the crimp sleeve sits securely in the small nest. For PRO BEAM EB Sr. cable plug connectors, the crimp sleeve will extend outside of the small nest. Refer to Figure 2.
- Refer to Figure 3, and using tweezers, perform the following:



To avoid breaking the bare fiber, use tweezers to handle the fibers.

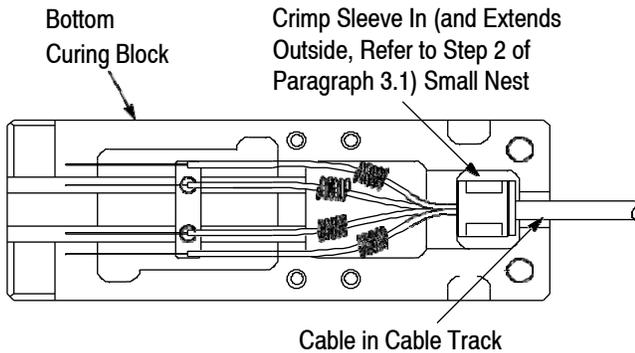


Figure 2

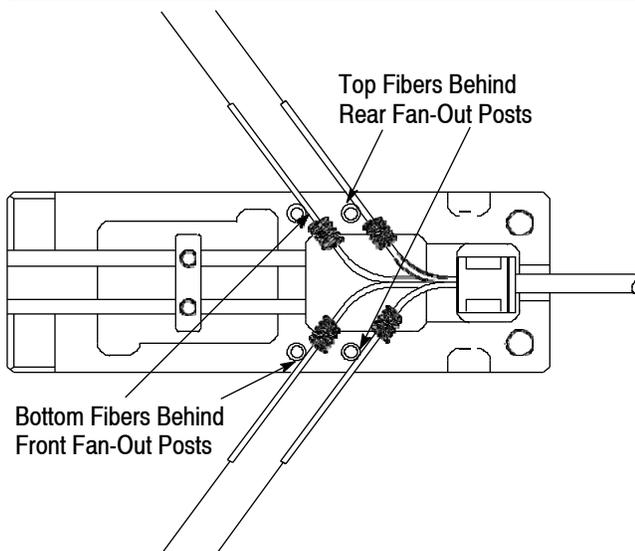


Figure 3

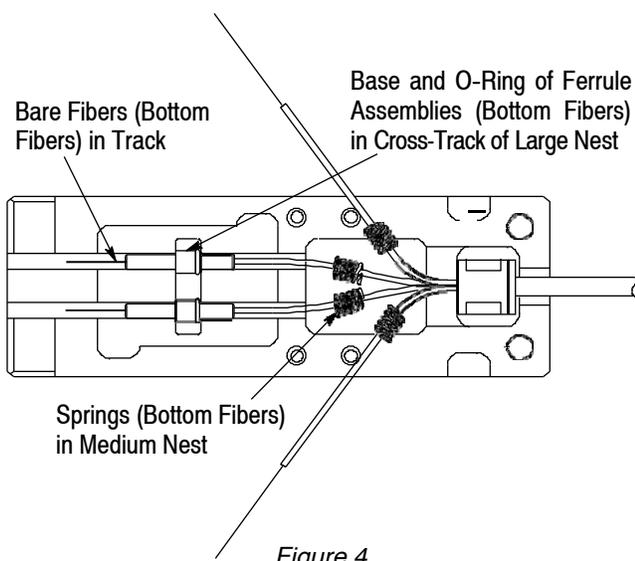


Figure 4

Without crossing the fibers, place one of the *top* fibers behind one of the rear fan-out posts and the remaining *top* fiber behind the remaining rear fan-out post.

Without crossing the fibers, place one of the *bottom* fibers behind one of the front fan-out posts.



It is important to not cross the fibers. Crossing fibers will result in excess fiber length and cause high insertion loss during connector assembly.

4. Refer to Figure 4, and perform the following for the remaining *bottom* fiber:

a. Carefully insert the fiber into the back of the ferrule assembly (previously prepared with epoxy). Simultaneously slide and rotate the ferrule assembly on the fiber (to prevent any air pockets from being trapped in the epoxy) until it bottoms. Make sure that the bare fiber is protruding from the end face of the ferrule assembly. If it is not, re-strip and re-terminate the fiber.

b. Place the ferrule assembly in the track of the large nest so that the base and the O-ring sit in the cross-track. To avoid breaking the bare fiber during placement, make sure that it does not hit the raised lip of the bottom curing block.



A small amount of bend in the fiber is allowed. However, if the ferrule assembly does not stay in the track, the fiber was not stripped properly. Remove the ferrule assembly, re-strip and re-terminate the fiber, and perform Step 4 again.

c. Slide the spring into the medium nest of the bottom curing block.

5. Repeat Step 4 for the remaining *bottom* fiber. See Figure 4.

6. Place the middle curing block over the ferrule assemblies in the large nest of the bottom curing block so that half of its thickness sits in the nest. See Figure 5.



The middle curing block is designed to fit in the large nest in any orientation.

7. Refer to Figure 6, and perform the following for one of the *top* fibers:

a. Carefully insert the fiber into the back of the ferrule assembly (previously prepared with epoxy). Simultaneously slide and rotate the ferrule assembly on the fiber (to prevent any air pockets from being trapped in the epoxy) until it bottoms. Make sure that the bare fiber is protruding from the end face of the ferrule assembly. If it is not, re-strip and re-terminate the fiber.

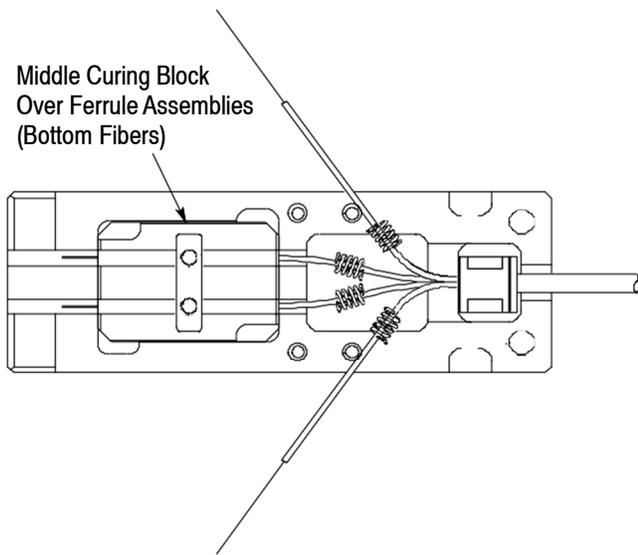


Figure 5

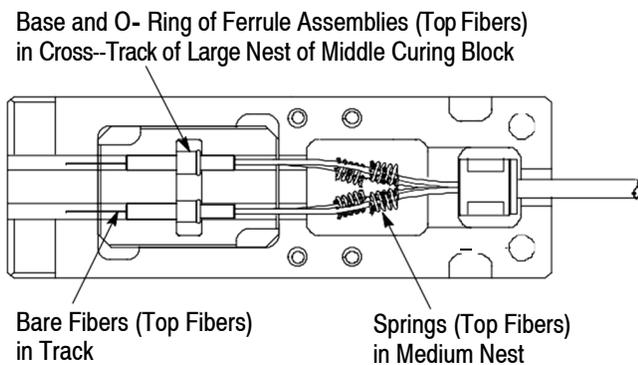


Figure 6

- b. Place the ferrule assembly in the middle curing block so that the end face and bare fiber sit in the track and the base and the O-ring sit in the cross-track. To avoid breaking the bare fiber during placement, make sure that it does not hit the raised lip of the bottom curing block.

CAUTION  A small amount of bend in the fiber is allowed. However, if the ferrule assembly does not stay in the track, the fiber was not stripped properly. Remove the ferrule assembly, re-strip and re-terminate the fiber, and perform Step 7 again.

- c. Slide the spring into the medium nest of the bottom curing block.

8. Repeat Step 7 for the remaining top fiber. See Figure 6.

9. Slide the tongue-end of the top curing block into the groove-end of the bottom curing block,

and lower it onto the bottom curing block. Finger-tighten the captive thumb screws.

10. Place the curing fixture in the heat cure block.

3.2. Curing Fixture 1754122-1

1. Remove the fixture O-rings from the housing.
2. Slide one of the fixture O-rings over the ferrule assembly and onto the protective tubing.

CAUTION  BE VERY CAREFUL NOT TO BREAK THE BARE FIBER; otherwise, it will be necessary to repeat the stripping and termination procedures.

3. Separate the two pieces of the housing.
4. Place the assembly in either housing piece so that the base and the O-ring of the ferrule assembly sit in the slot in the channel at one end of the piece and the bare fiber and the protective tubing lay in the channel at the other end of the piece. See Figure 7.

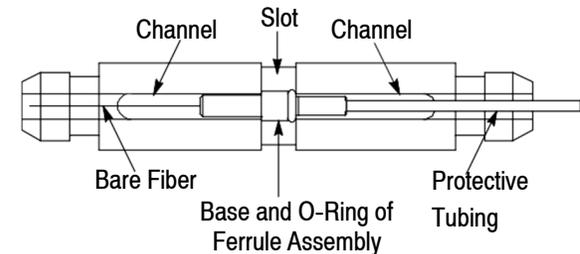


Figure 7

5. Fit the other housing piece over the assembly making sure that the ferrule assembly is in place and secure.

6. Firmly hold the housing pieces together, and slide the fixture O-ring on the protective tubing into the groove at the end of the housing; then slide the other fixture O-ring into the groove at the other end of the housing. Make sure that the O-rings sit in the grooves. Refer to Figure 8.

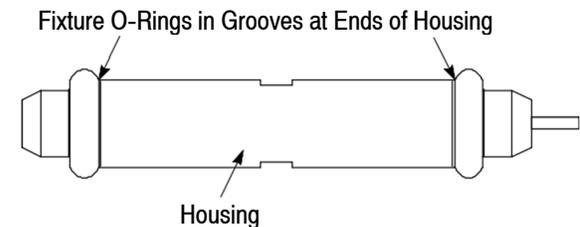


Figure 8

7. Place the curing fixture in the heat-cure block.

4. REMOVAL

4.1. All Curing Fixtures Except 1754122-1

Cured excess epoxy could cause the ferrule assemblies and curing blocks to stick together then cause damage to the fibers during removal. During removal, make sure that:

— when removing a curing block, if a curing block does not lift easily, slide the blade of a flat-blade screwdriver into the slots on the sides of the curing block, and carefully loosen the curing block before removing it

— when removing a curing block, if a ferrule assembly sticks to a curing block, use tweezers to loosen the ferrule assembly from the curing block before removing it or insert the tip of the tweezers through an access hole (refer to Figure 1 for location), and push the ferrule assembly out of the curing block

Proceed as follows:

1. Remove the curing fixture from the heat cure block. Allow the fixture to cool to room temperature.



Handling the ferrule assembly before it cools may cause the fiber to break.

2. Loosen, but do not remove, the captive thumb screws, and lift the top curing block from the bottom curing block. The top ferrule assemblies should remain in the middle curing block.

3. Using tweezers, carefully remove the ferrule assemblies from the middle curing block, placing each behind the fan-out posts.



To avoid breaking the bare fiber, use tweezers to handle the ferrule assemblies.

4. Remove the middle curing block. The bottom ferrule assemblies should remain in the bottom curing block.

5. Using tweezers, carefully lift the remaining ferrule assemblies from the bottom curing block.

6. Grasp the cable, and lift the assembly out of the curing fixture.

4.2. Curing Fixture 1754122-1

Cured excess epoxy could cause the ferrule assembly and housing pieces to stick together then cause damage to the fiber during removal. During removal, make sure that:

— when separating the housing pieces, if the pieces do not separate easily, insert the blade of a flat-blade screwdriver through an access hole (refer to Figure 1 for location), and carefully loosen the pieces before separating them

— when removing the ferrule assembly from the housing piece, if the ferrule assembly sticks to the piece, use tweezers to loosen the ferrule assembly from the piece before removing it

Proceed as follows:

1. Remove the curing fixture from the heat cure block. Allow the fixture to cool to room temperature.



Handling the ferrule assembly before it cools may cause the fiber to break.

2. Remove the O-rings from the housing, and separate the housing pieces. The ferrule assembly might remain in one of the housing pieces...if necessary, use tweezers to carefully remove the ferrule assembly from the housing piece.

3. Grasp the protective tubing, and lift the assembly out of the housing piece.

5. REVISION SUMMARY

Revisions to this instruction sheet include:

- Added curing fixture for PRO BEAM Jr. right-angle plug connector to Figure 1.