

# INSTALLATION QUICK-GUIDE

## Buffer Mounting for IMT Connectors: ST, SC, FC, SP

For preparation of 250 $\mu$  buffer fiber mounting  
insert into required fan-out tubing & cut fiber even with tubing

### STEP 1

Slide appropriate strain relief boot(s) onto the fiber

### STEP 2

#### Buffer stripping

- For **250 $\mu$  buffer fiber**, insert required fan-out tubing and cut fiber even with the tubing
- For **900 $\mu$  & 250 $\mu$  buffer** fiber in fan-out tubing – Strip buffer **3 to 5 mm** (~1/8" min. to 3/16" max.)
- Clean any residue on fiber to facilitate threading step

### STEP 3

#### Threading of fiber

- Place the rear end of the connector onto the Crimp Tool for holding purpose (without actual crimping at this time)
- Thread fiber through connector **as far as it will go** (gently move the connector/tool to facilitate threading of the fiber)

### STEP 4

#### Buffer crimping

Crimp the back of the connector to the buffer using appropriate die hole marked for 900 $\mu$  or 250 $\mu$  buffer fiber in fan-out tubing respectively

### STEP 5

#### Impact mounting

- Using the Hand Tool, place the ST/ SC/ FC/ SP Insert onto the rails (use a screwdriver to secure the Insert)  
**DON'T overscrew - this will bend the 2 rods and make alignment block hard to slide**
- Lay the connector snugly on the V-groove of the insert by **placing the tail end of the connector first**
- Slide the alignment block forward to the connector tip (sliding should be easy if rods are not bent)
- Hold down the handle without actual impacting to help bring alignment block forward next to the connector tip
- **Test proper alignment** by sliding the alignment block slightly in and out of the tip of the connector by hand; it should be easily done
- Do actual Impact Mounting by squeezing the handle hard (a "click" sound will be heard)

### STEP 6

#### Hand cleaving

Place the blade parallel to the surface of the connector tip and cleave at the very base of the fiber; then bend the fiber with the blade for a clean break-off

**Caution: Dispose all fibers safely; glass fibers are harmful to your health**

### STEP 9

Slide strain relief boot(s) in place over the back of connector

### STEP 10

#### For SC connector only

Install SC component parts together with correct alignment

### STEP 11

#### Hand Polishing

- First remove any rough edges by hand polish in the air with **12 $\mu$  paper** 2 to 3+ times
- Using an appropriate polishing puck, polish fiber surface with **3 $\mu$  paper** about 12 time (light pressure first for about 2 seconds and then press harder)
- Finish gently with **0.3 $\mu$  paper** for another 12 times

**Use figure-8 motion** to cover a diameter of 4" for all polishing or best results; center core fiber should be mirror-finished; ignore minor scratches outside core (repolish more if necessary to achieve desirable result)

**DO NOT Over polish:** too much polishing will remove the impacted connector tip and fiber will loosen up

## Additional Tips

**STEP #1** - It is recommended to use both small and big strain relief boots for buffer fiber mounting for additional support

**STEP #2** - Make sure the transparent buffer is completely stripped to avoid threading problem

**STEP #4 & #8** - Make sure to squeeze handles of crimp tool to close completely for full force

**STEP #5** - Do not impact driver cone without connector in it; it will damage the empty cone

**STEP # 5** - Clean driver cone frequently with brush for any debris to avoid impact mounting problem

## For 250 $\mu$ buffer fiber – fan-out tubing is required

Buffer crimp will not compress on smaller fiber without the tubing





### OPERATIONAL TIPS

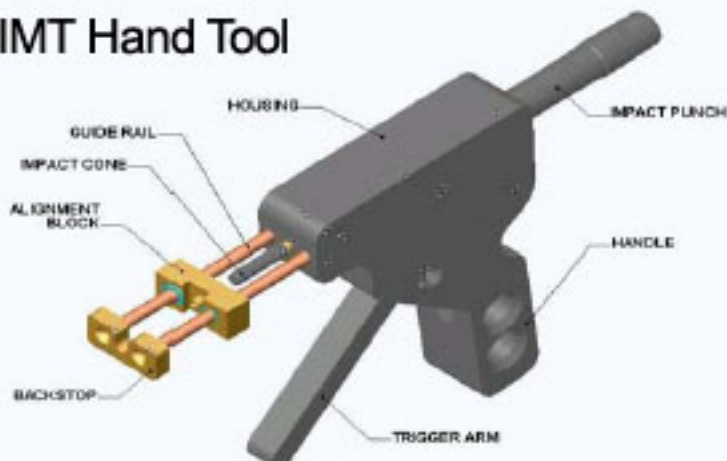
#### DO:

1. Always **handle fiber carefully** and dispose of any debris in a safe manner. Glass fiber can cause serious health problems.
2. It is important to **check driver cone frequently** for any broken fiber debris inside. Clean as necessary with brush. Debris will cause problem for impact mounting.
3. Strip buffer about **3mm to 5mm** max in length. Too much bare fiber protruding at the front tip may cause breakage in the cone.
4. Make sure the clear, transparent buffer coating is completely stripped by firmly stripping the fiber buffer through the Micro-Strip stripper. **Incomplete stripping** of the buffer coating will not allow fiber to be inserted through the connector. Clean all residue from the stripped fiber for easier threading through the connector.
5. **To test for perfect alignment of the connector, alignment block and impact cone:**
  - a) slide the alignment block forward to the connector (sliding should be easy if rods are not bent by over-screwing when installing the insert)
  - b) Hold down the handle without actual impacting to bring the alignment block forward next to the connector tip
  - c) Alignment block should be able to slide in & out of the tip easily when tested by hand
6. Crimping should be done in a single smooth motion. Jerking and irregular motion may result in misalignment of components and/or broken fibers.
7. Squeeze the handles of the crimping tool until they **COMPLETELY** close (this may go beyond the ratchet release) to ensure the crimping action has the maximum force.
8. It is recommended to **hand polish** with a **12 $\mu$  ALO** lapping paper in the **AIR**, 2 to 3 times to remove any rough edges prior to polish with the polishing tool.
9. Always start polishing **GENTLY**, then increase pressure gradually with **3 $\mu$  ALO** paper. Too much pressure at the start may break the fiber. Finish gently with **0.3 $\mu$ CA** paper. Center core of the fiber should have mirror-finish. Any scratches outside the core can be ignored. Achieve fast polish - no epoxy to remove.

#### DON'T:

1. **DO NOT over polish.** It will remove the impacted area and the fiber will become loose. Total polishing should take no more than 20 seconds. Polishing is fast because there is no need to remove epoxy (count no more than 12 times for each polishing paper).
2. **DO NOT overscrew** when installing insert, this will bend the 2 rods and make alignment block hard to slide.
3. **DO NOT** interchange driver cone with other tool kits. Calibration of the kit will be affected.
4. **DO NOT** fire the punch with empty cone. This may damage the cone.
5. **DO NOT** adjust the impact mount power of the impact tool. The power adjustment has been preset.

#### IMT Hand Tool



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