Instructions on replacing EMI band for 38999 & 83723 Connectors (Any Size)

L-40984-015
Rev A

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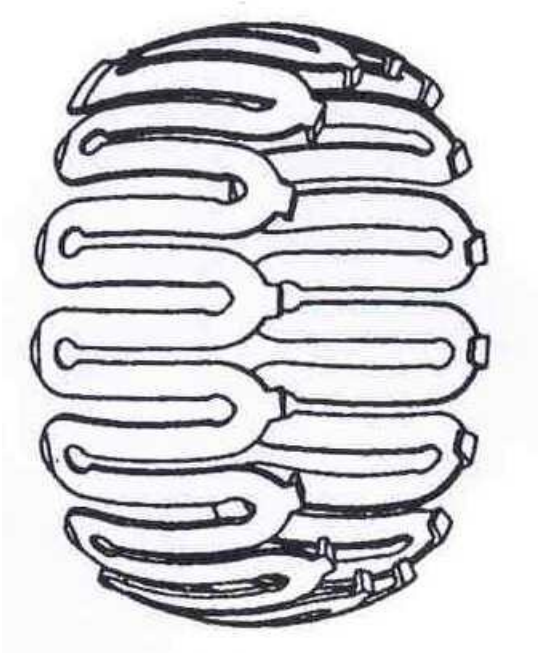
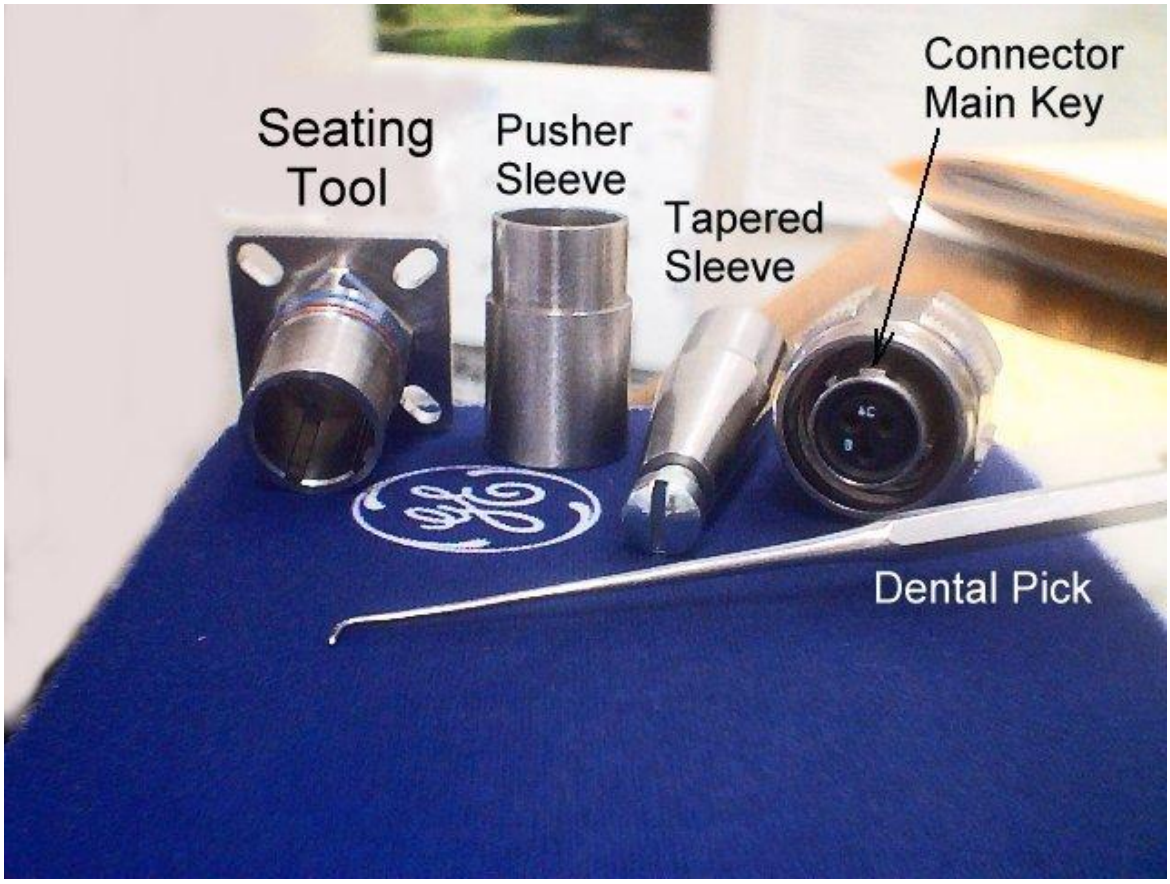


Required Tools:



Required tools for the EMI band replacement

- Different tools would be provided for each connector size.

Cautions:

- **Do not apply Excessive force to EMI band. The band is thin copper material and should be handled carefully.**
- **Discard any bent or distorted bands – band should be uniformly cylindrical as shown on cover page.**
- **Note – Dental pick is not included, equivalent tool will function as well such as small flat head screw driver.**

Instructions on replacing EMI band
38999 & 83723 Connectors (Any Size)

(See Identification of tools on page 2)

Important: Read all instructions when replacing the EMI band.
Perform operation with safety glasses under bright light.

1. Using Dental Pick- Remove All of Original Band (band will be destroyed and not available for reuse). Make sure all the pieces are removed.

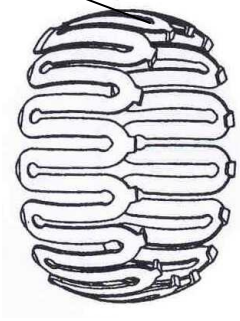
2. Locate main key (wide key) in connector and orient it to the 12 o'clock position.

3. Place Tapered Sleeve over Connector Shell and align Sleeve Line (longitudinal groove on sleeve) with Connector main key.

4. Orient the EMI Band- put straight end on Sleeve first, Hook End (with 90 degree bend) away from connector. **(Do not apply Excessive force on EMI band and discard any bent or distorted band – band should be uniformly cylindrical as shown on cover page)**.

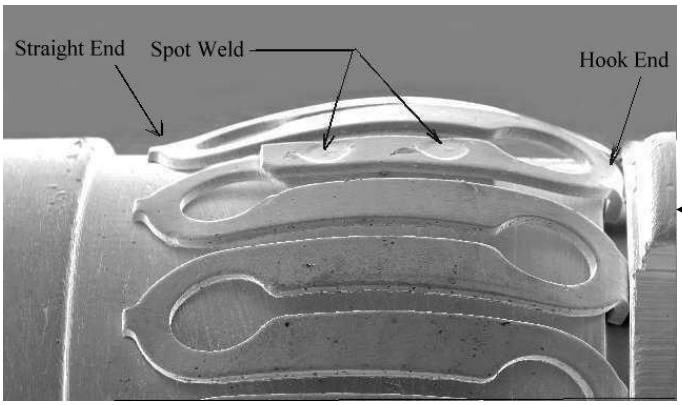
EMI Band Geometry

EMI band goes this way



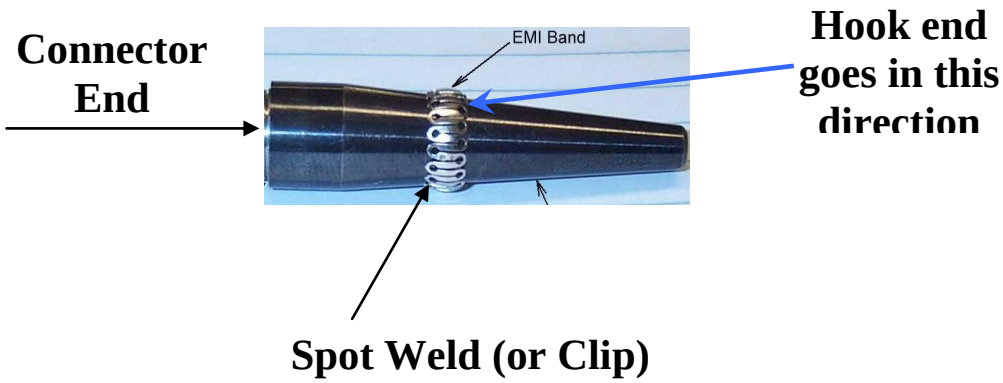
Band Hook

Cable End



Connector End

5. Rotate Band until Spot Weld (or Clip) is over Longitudinal groove.

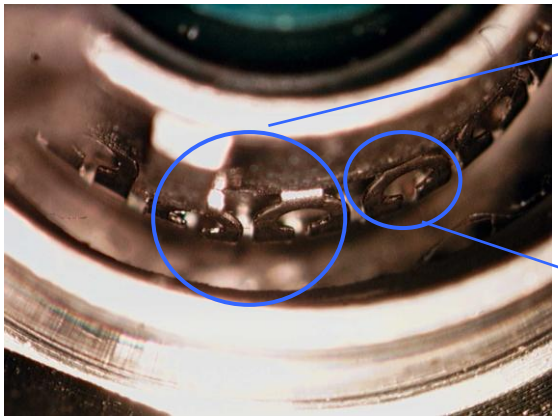


6. Using fingers, slide EMI Band down Tapered Sleeve toward connector until it is completely down tapered section.

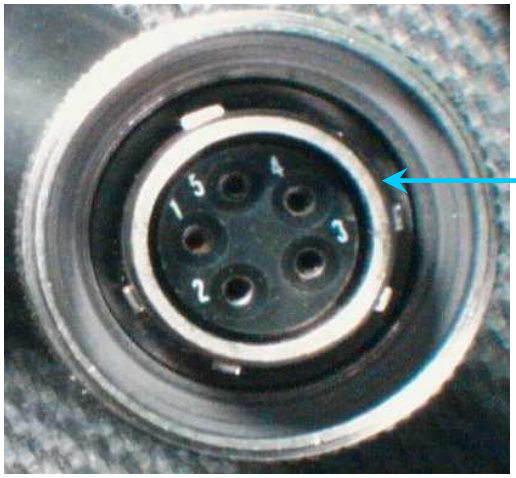
7. Using Pusher Sleeve (smaller diameter end towards connector) - Slide Band completely inside the Coupling Nut until it stops (band will position itself in groove). Remove pusher sleeve and tapered sleeve.

8. Using Seating Tool Connector (less threads), push Seating Tool completely into connector till it stops (disregard blue line) to make sure final seating in groove takes place. Remove Seating Tool.

9. Perform post inspection: (Avoid having lifted EMI band tang).



10. EMI band should be fully seated in grooves.



11. Remove & replace band if damaged.

Replacement Repair of EMI BAND PYLE 83723-III tools required. Tapered tool, Pusher sleeve 33800-C, Seating tool, mine is made from Receptacle shell. 1st machining removing mating Threads to thread min and machining to the Blue Band. 2nd machining inside I.D. 15˚ .200 deep just over the shell keying diameter. Dental tool straight and 90˚ Replacement EMI BAND BS-89XX-14H-272.

Notes:

you will have to make alternate seating tools for alternate shell rotations.

Seating tool made from Receptacle (by removing Mating thread to Min. and to the blue band and machining I.D. of receptacle just over the Keying diameter 15˚ .200 deep.

I made Tapered Sleeve with-out the alternate shell keying.

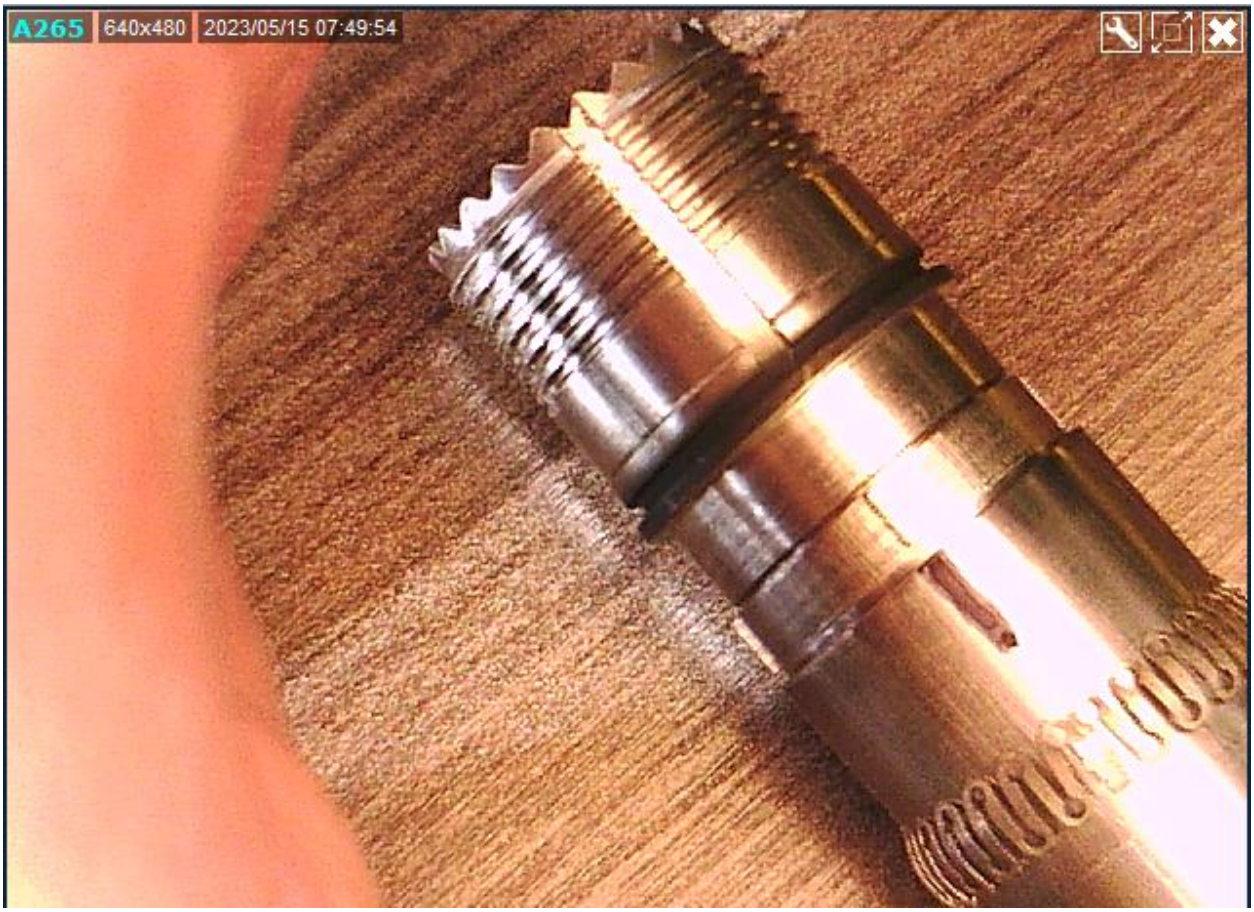
The tapered sleeve will fit into the pusher tool to protect the thin wall, when not in use.

The smaller the size's need more patents you may need, spare EMI BANDS?

This is Size 12 shown in photos.

Step # 1 make mark with sharpie marker on tapered sleeve this will allow you to Align the clip of the EMI BAND to the Main key of the Plug shell.

Step #2 assemble the EMI Band to the tapered sleeve.



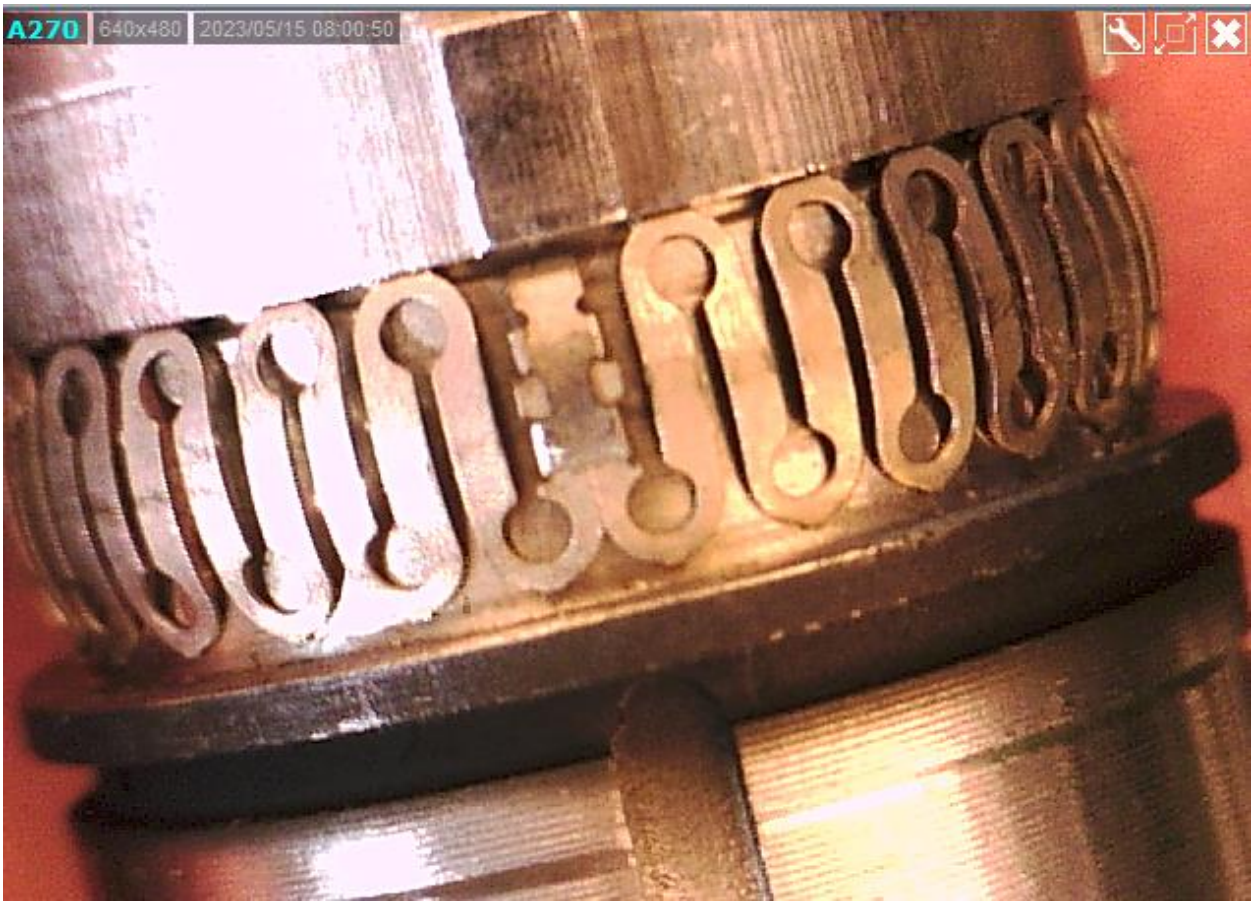
Assemble Tapered Sleeve to Shell align mark/clip of EMI BAND use Pusher Sleeve to push the EMI Band to Plug Shell should look like photo below

Remove the Tapered Sleeve and Pusher tool, should look like photo below.

Use Dental tool to move EMI BAND to groove like shown in the photo below.

Seat the EMI BAND by taking Dental tool and pressing on back of EMI BAND and pulling forward to lock the tab into groove of shell should look like photo below. Go all the way 360˚ around part. Then inspect EMI BAND (The EMI BAND should cantilever the tab into the groove go 360˚ around shell).

Inspect EMI BAND to groove and tab into groove. 360˚ around shell should look like below.



Take Pusher tool and assemble over Plug shell align keys and push to shell to shell bottom. The pressure of the EIM BAND will hold the parts together.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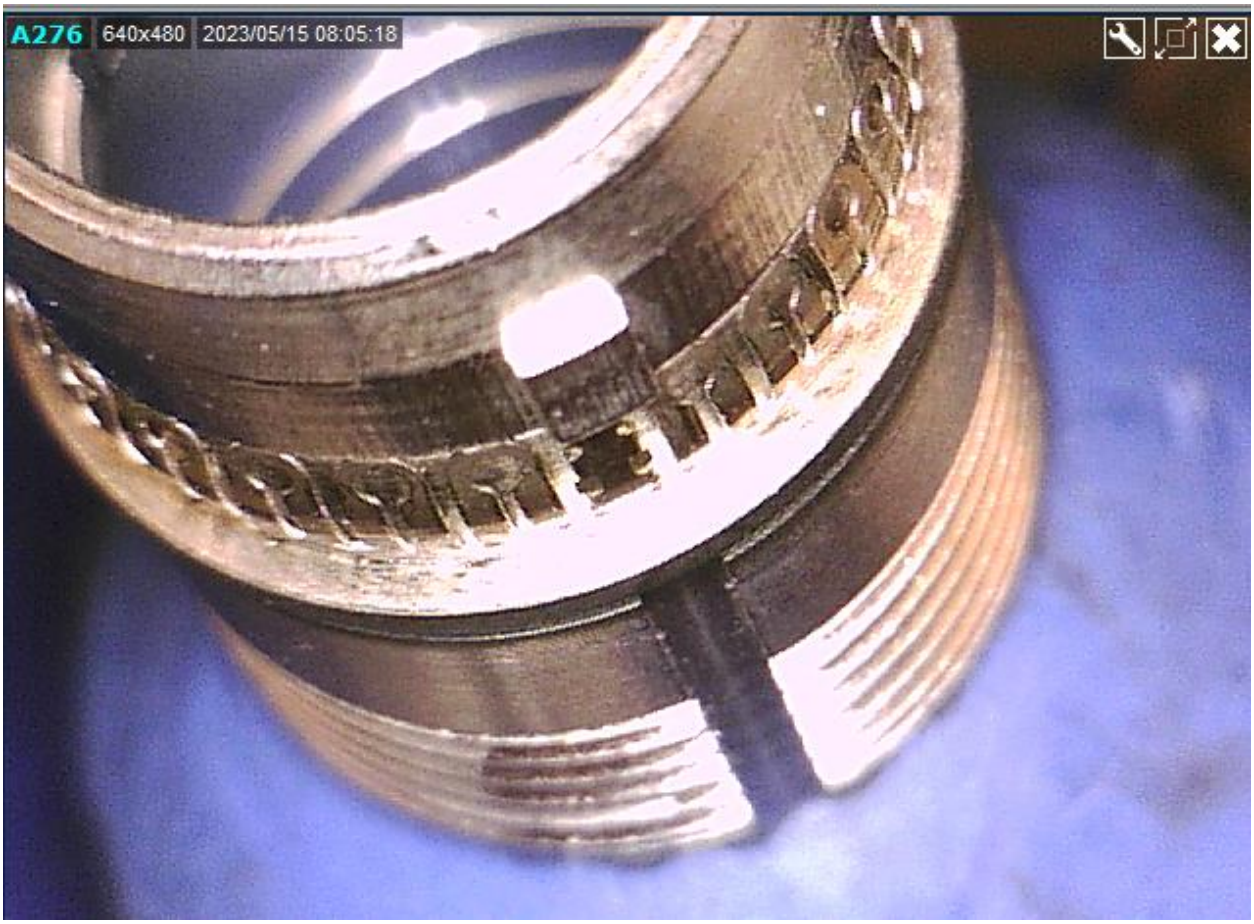
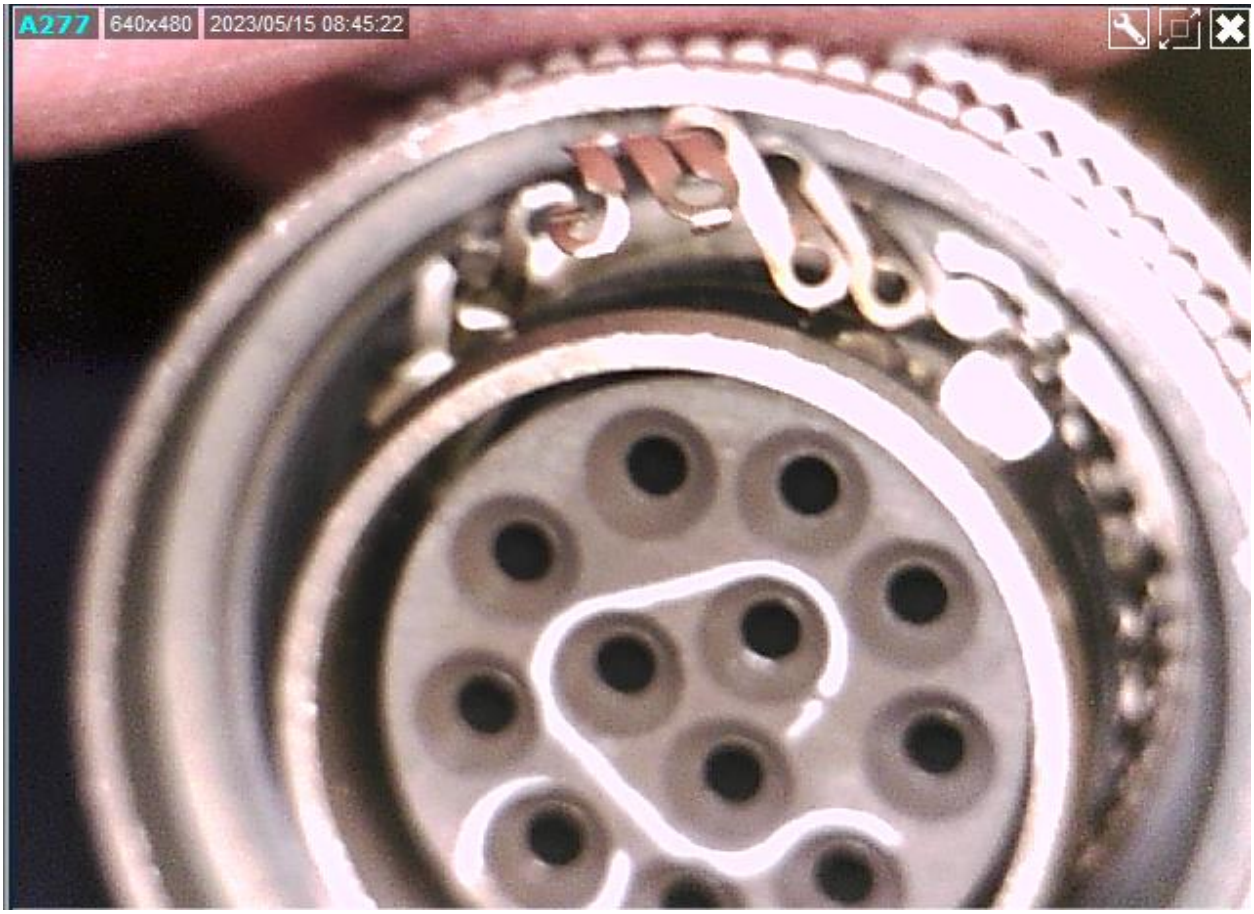
Remove the Seating tool inspect EMI BAND check for tab to be locked behind alternate keys and use Dental tool to seat tab behind keys, except for main key. Should look like below.

Inspect again. Should look like below.



Connector repair

Take Plug connector and remove all of the EMI Band.

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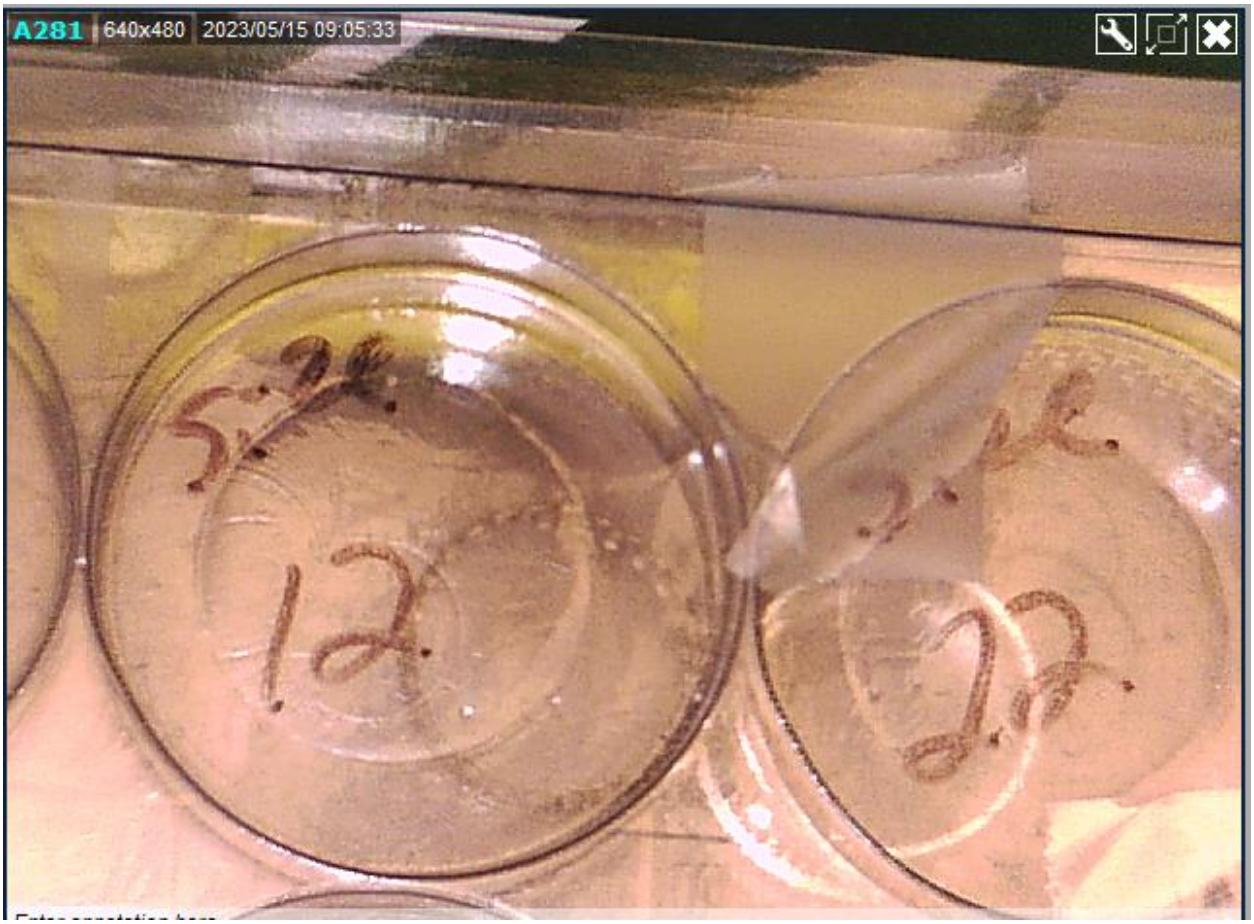
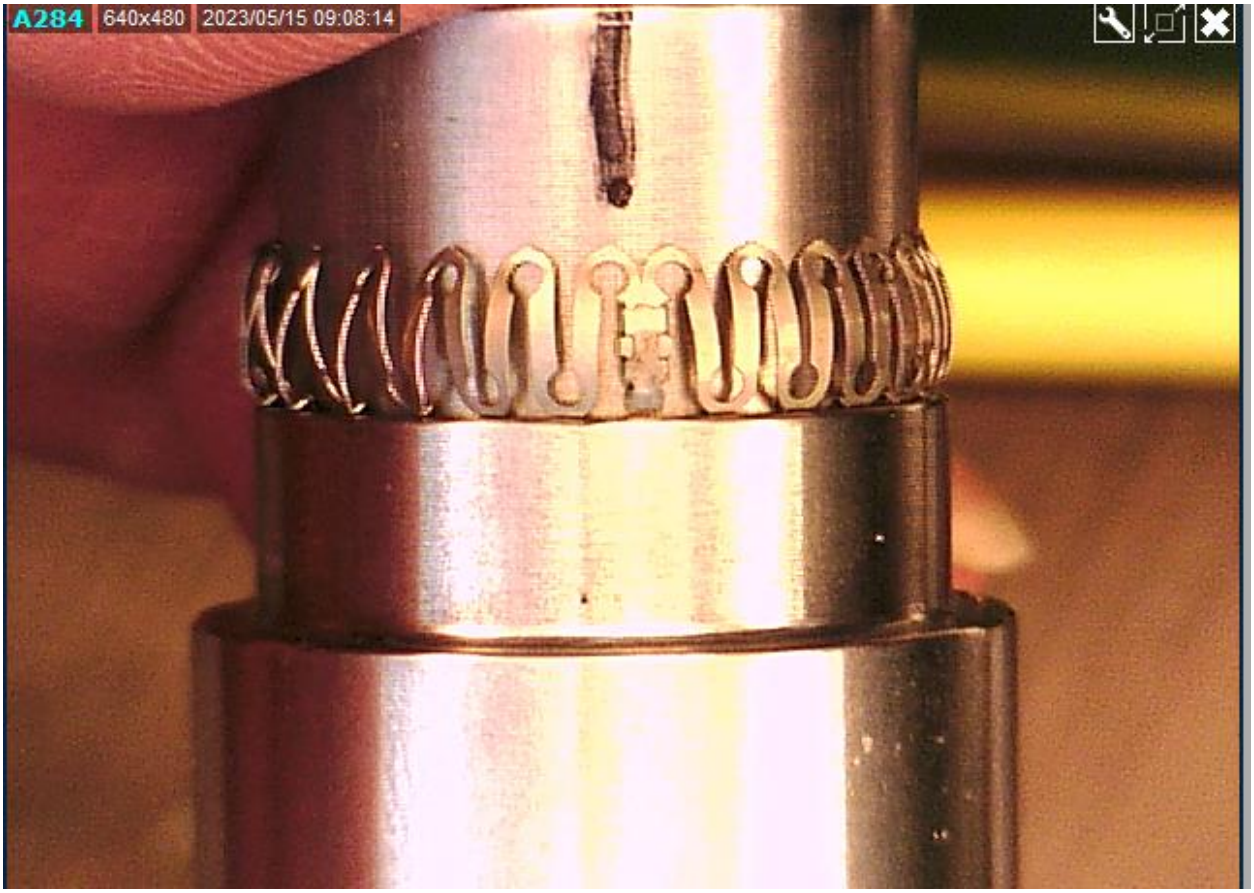
Inspect to make sure you got all of the EMI BAND out of the Plug connector.

The EMI BANDS should be individually packaged for handling protection.

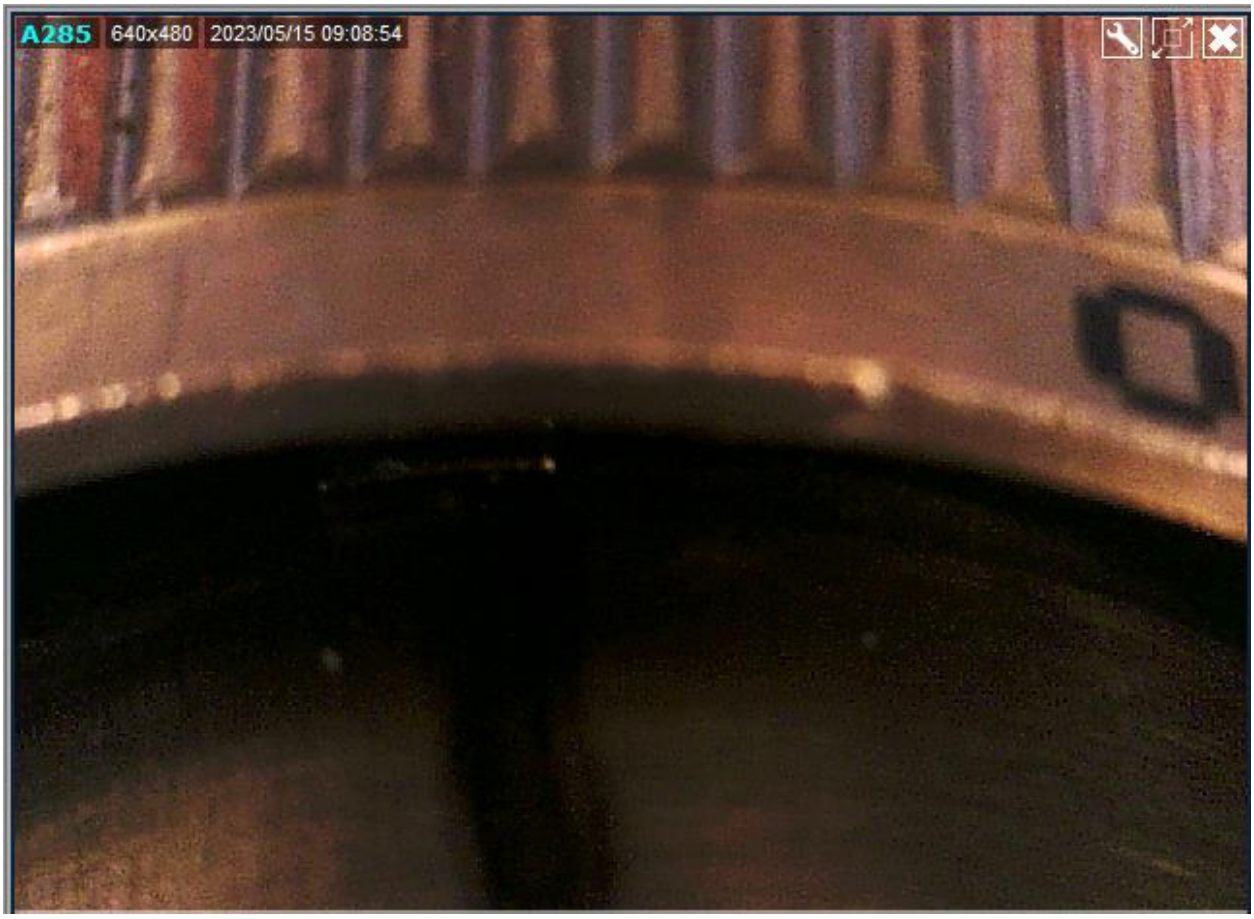


Assemble EMI BAND with tab is toward the smaller end of the tapered sleeve, and slowly walk EMI BAND along the tapered sleeve till you get to Shell diameter. The EMI BAND is MAXED/stretched out like photo below.

Take the Pusher Sleeve like photo below.



Assemble Tapered Sleeve with EMI BAND to Plug connector Align Marker to main key of plug.

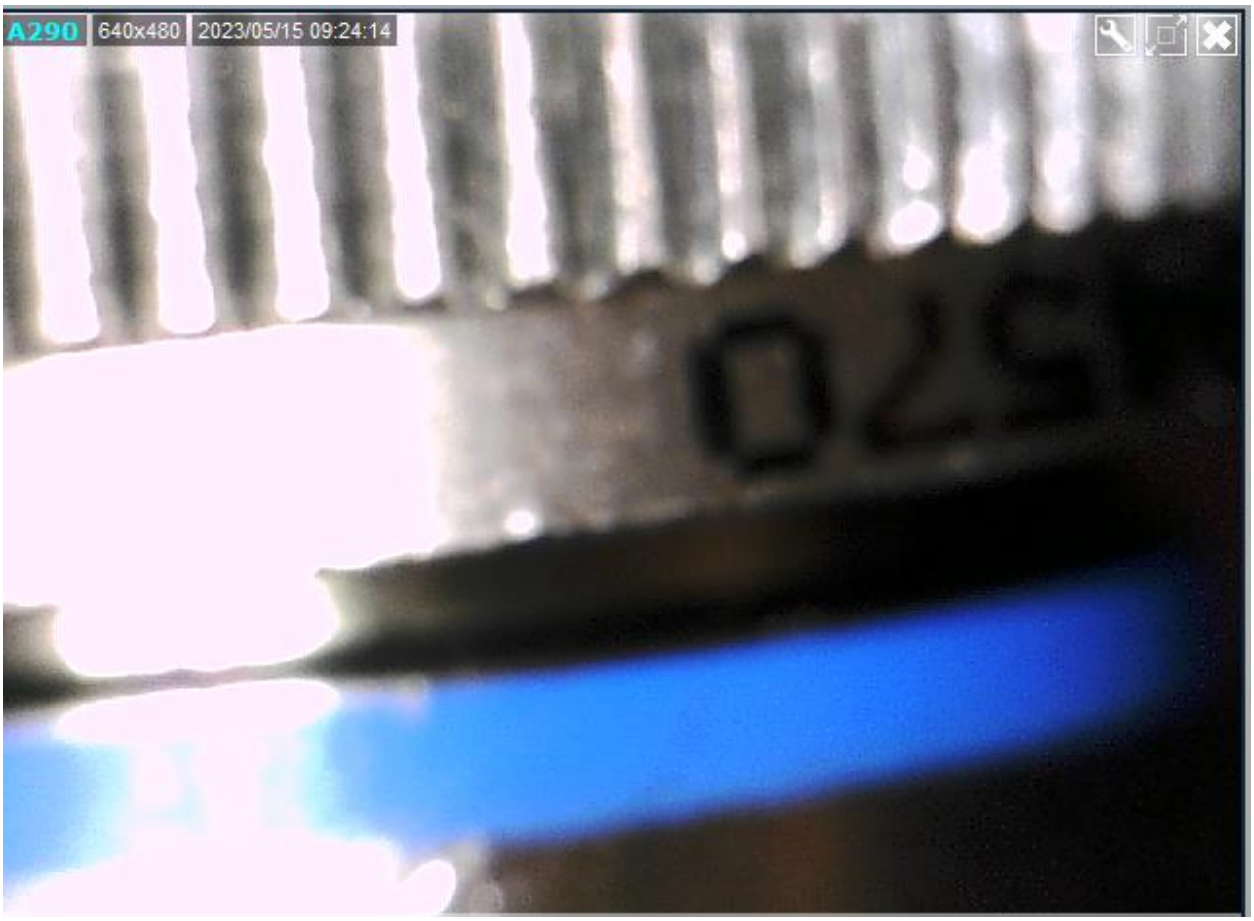


Use Pusher Sleeve and push the EMI BAND to Plug connector shell should look like photo below.

Check alignment of clip/weld to be behind Main key of connector Plug shell. You may have to adjust the EMI BAND. Use Dental tool to seat clip into the groove of shell 360˚ around Plug shell connector.

Seat clip with dental tool 360˚ around the Plug shell should look like photo below

Use Seating tool to seat the EMI BAND and bottom shells together. The EMI BAND will hold the shell together.



Inspect EMI BAND check behind alternate keys you may have to lock these tabs manually. Mate to receptacle connector and un-mate and inspect EMI BAND should be seated into Plug shell groove 360˚