

CMJ / MMJ – OVAL PORT HEAT SHRINK KIT

Description

The CMJ / MMJ Oval Port Heat Shrink kit is used to prepare and install a mid-span loop of cable into the oval port of the closure.

Tools Required

Tools:
Large Screwdriver, File, Gas Torch or Hot Air Gun, Hammer.

Component Parts (pictures not to scale)

1 Oval Port Heat Shrink Qty 1



2 SCOP Sleeve Qty 2



3 Cable Anchor Plate Qty 1



4 Allen Key 2mm Qty 1



Joint and Cable Preparation – Oval port

Step 1



- Knock out the oval port end plate of the Joint from the inside using a large screwdriver and remove any burrs using a file.
- Clean the oval port using the alcohol tissue supplied with the Heat Shrink Kit.
- Abrade the oval port, using the strip provided with the Heat Shrink Kit, in the horizontal position only (as shown).

Joint and Cable Preparation – Oval port

Step 2



- Apply the oval port Heat Shrink over the port of the base, ensuring that the dry end without any glue on the inside is at the top of the port.
- Shrink approximately 60mm using a gas torch or hot air gun. Use the foil in the kit to protect the other ports from the heat as shown. Leave the shrink to cool for 20 minutes.

Joint and Cable Preparation – Oval port

Step 3

Mark centre point of mid span window

- Remove the cables from the footway box and apply a reference mark to the cable where the centre of the window cut will be made.

Joint and Cable Preparation – Oval port

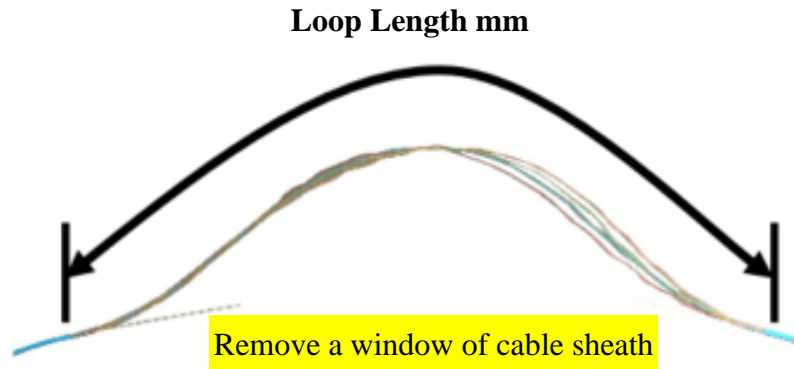
Step 4

Joint Type	Cable Type	Loop Length
CMJ	Loose Tube 6 tubes MAX. Ø1.65mm	2400mm
CMJ	Flextube	2500mm
MMJ	Loose Tube	2700mm
MMJ	Flextube	2700mm

- Identify the length of the mid span window required by identifying the joint and cable type from the table above.

Joint and Cable Preparation – Oval port

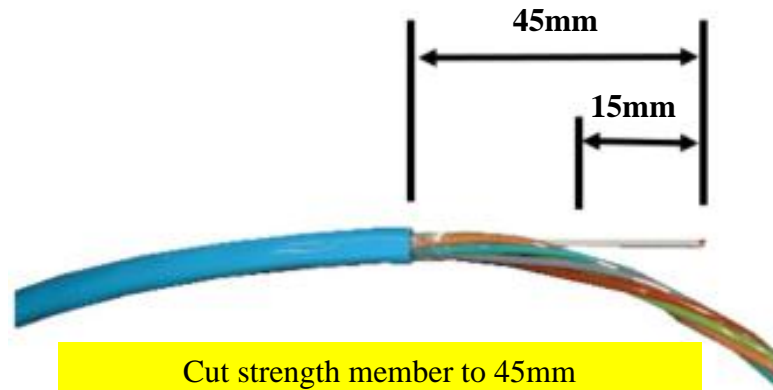
Step 5



- Apply two butt marks back either side of the mid span mark half the distance of the overall loop length. Before removing the sheath double check the two butt marks are the correct distance apart referring to the table in step 4.
- Remove the cable sheath between the two butt marks using approved practices.

Joint and Cable Preparation – Oval port

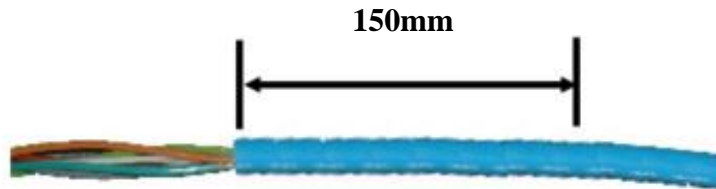
Step 6



- Remove all tapes and binders.
- Access the central strength member and cut it in the centre.
- Cut each end back to 45mm from the cable butt as shown.
- Remove 15mm of sheath from CSM if the CSM diameter is greater than 5mm.

Joint and Cable Preparation – Oval port

Step 7

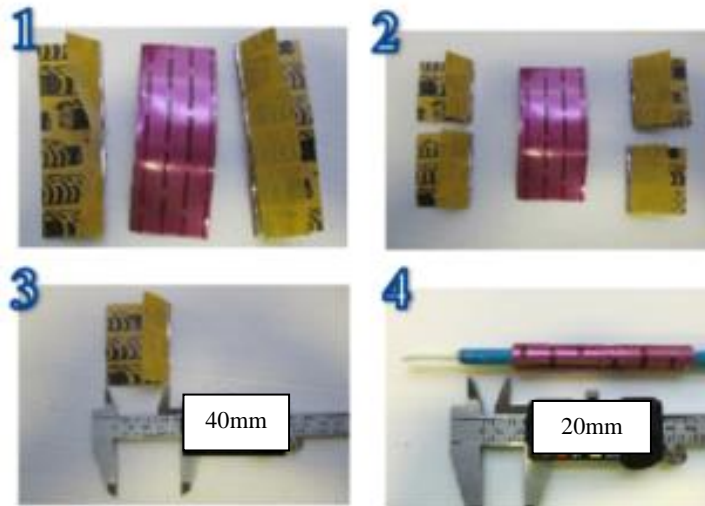


Abrade and clean 150mm back from butt

- Circumferentially abrade the sheath 150mm back from the cable butt using the abrading strip provided with the Heat Shrink Kit.
- Clean the cable sheath at each butt using the alcohol tissue supplied with the Heat Shrink Kit.

Joint and Cable Preparation – Oval port

Step 8



- **For all cables** cut the SCOP twice so that the 2 adhesive sections on each end are removed from the non-adhesive section as shown on picture 1. The adhesive sections are 40mm wide on each side of the SCOP as indicated on the picture 3. Follow steps below, depends on cable diameter.
- **For cables diameter > 9mm** cut the SCOPs as shown on picture 1. Apply the first piece of the SCOP 20mm from the cable butt. Apply the second piece of the SCOP flush against the first piece, further up away from the cable butt, as shown on the picture 4. Apply the SCOP by removing the paper backing and wrap it tightly around the cable sheath, ensuring the adhesive has made complete contact around the cable.
- **For cables ≤ 9mm** cut the SCOP as shown on picture 1, then cut the adhesive pieces in half as shown in the picture 2. Apply the first piece of the SCOP 20mm from the cable butt. Apply the second piece of the SCOP flush against the first piece, further up away from the cable butt, as shown on the picture 4. Apply the SCOP by removing the paper backing and wrap it tightly around the cable sheath, ensuring the adhesive has made complete contact around the cable.

Joint and Cable Preparation – Oval port

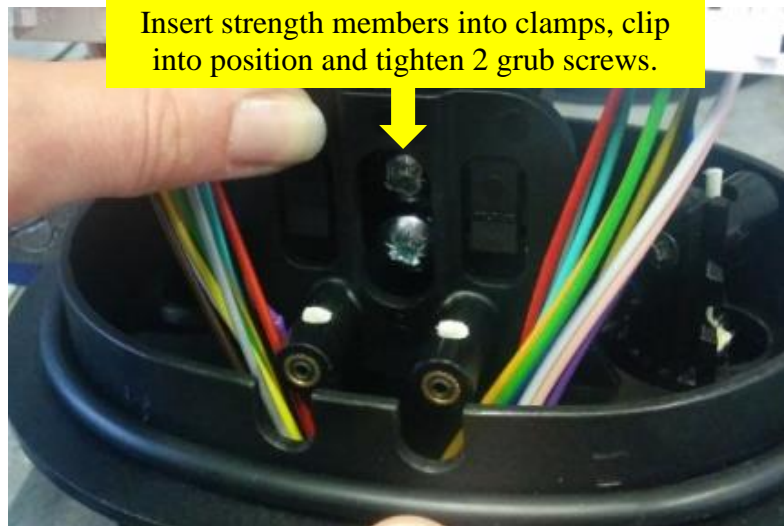
Step 9



- Remove backing paper & apply aluminium foil, supplied with the Heat Shrink Kit around the cable sheath so that it overlaps the SCOP sleeve by approximately 30mm as shown above.
- Smooth out the foil by rubbing with the shaft of a large screwdriver.

Joint and Cable Preparation – Oval port

Step 10



- Carefully feed the cable loop through the oval port of the joint base ensuring not to kink any of the elements.
- Hold the loop into position by inserting the strength members into the Cable Anchor Plate. Tighten the 2 grub screws to hold the cable in position using the Allen Key. Do not over tighten.
- Slide the cable anchor plate into position by sliding down the guides on the chassis and pull down until they lock into place.

Joint and Cable Preparation – Oval port

Step 11

Go to step 12 for CMJ

Go to step 15 for MMJ

- For CMJ loop installation follow steps 12 to 14.
- For LMJ loop installation move to step 15.

Joint and Cable Preparation – Oval port

Step 12



Separate the two
ends of loop

- Firstly, separate the two ends of the loop. Gently straighten the loop away from the CMJ ready to loop into the spine.

NOTE: Take care not to kink the cable elements when installing the loop. Do not rush and follow the instructions precisely. The loop guide is designed to store flexible fibre elements. It is not recommended for installing loose tube elements.

Joint and Cable Preparation – Oval port

Step 13



- Roughly make a loop the same diameter as the loop storage area.
- Cross the elements at the top and flip the loop over to gather the elements into a second loop.
- Repeat and alternate top and bottom until all the elements have been gathered into one circle.

Joint and Cable Preparation – Oval port

Step 14



A single loop should be remaining after several coils have been installed.

- Carefully push the loop under the top and bottom loop storage tabs.
- Ensure to get most of the loop within the side walls of the spine and secure carefully using the plastic strap.
- Go to step 18.

Joint and Cable Preparation – Oval port

Step 15



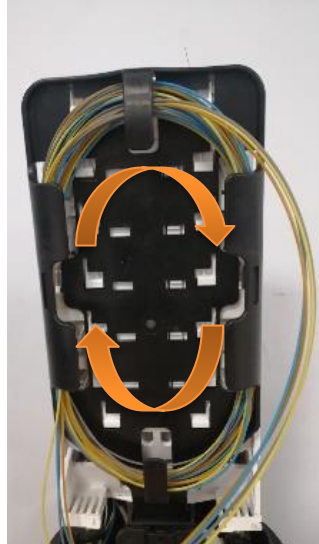
Separate the two
ends of loop

- Firstly, separate the two ends of the loop. Gently straighten the loop away from the MMJ ready to loop into the spine.

NOTE: Take care not to kink the cable elements when installing the loop. Do not rush and follow the instructions precisely.

Joint and Cable Preparation – Oval port

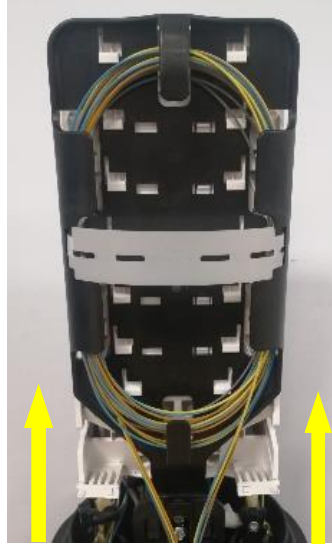
Step 16



- Line up the left-hand side cable elements with the left side of the spine.
- Feed the tubes around in a clockwise direction beneath the tabs for one turn.
- Line up the right-hand side cable elements with the right side of the spine.
- Feed the tubes around in an anti-clockwise direction for one turn.

Joint and Cable Preparation – Oval port

Step 17

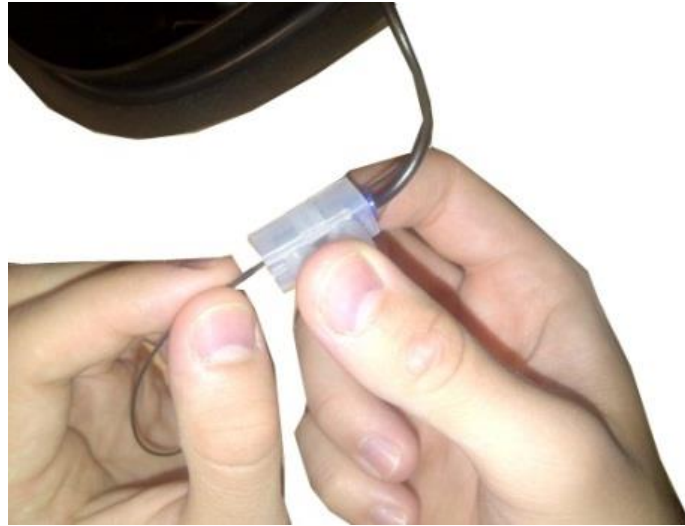


A single loop should be remaining after several coils have been installed.

- Repeat the process until one loop is left.
- Twist the remaining loop over and store beneath the tabs of the loop guide.
- Ensure the loop ends are vertical.
- Ensure to get most of the loop within the side walls of the spine and secure carefully using the plastic strap.

Joint and Cable Preparation – Oval port

Step 18



- If the cable contains copper conductors that need to be terminated and the joint is fitted with a pressure tests valve, route the copper conductors to the terminal block fitted to the valve.
- Strip the wires and secure into the terminal block as shown.

Joint and Cable Preparation – Oval port

Step 19



- Store the terminal block into the centre of the joint.

Joint and Cable Preparation – Oval port

Step 20



- Fit the glue clip from the Heat Shrink Kit (2) onto the Heat Shrink sleeve between the two cables as shown.

Joint and Cable Preparation – Oval port

Step 21



Complete the heat
shrinking of the oval sleeve

- Fully convert the Heat Shrink sleeve using a gas torch or hot air gun. Take care to protect the drop cable ports with foil. Allow 10 minutes for the shrink to cool.