

## MECH SEAL – GM 4 WAY ULW CABLE INSTALLATION GUIDE

### Description

This kit is used to install up to 4-6mm ultra-light weight drop cables into TM node series only.

The suitable cable would have an internally secured strength retention system.

### Tools & Additional Items Required

**Tools:**

Cable Sheath Stripper  
Fibre stripping tools  
Allen Key  
Long Nosed Pliers  
Nipper Diagonal Cutting

## ASSEMBLY COMPONENTS



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**Step 1**

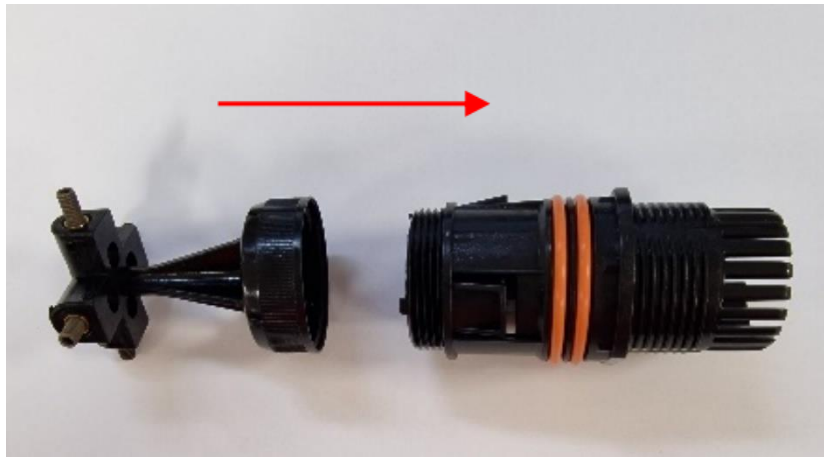


- Remove port blank from base by squeezing together the tabs from inside the base.
- Using your other hand or pliers, hold the central rib and firmly pull until the port blanks are released.

**NOTE: YOU MAY NEED TO ROTATE THE BLANK IN THE PORT TO SQUEEZE THE TABS.**

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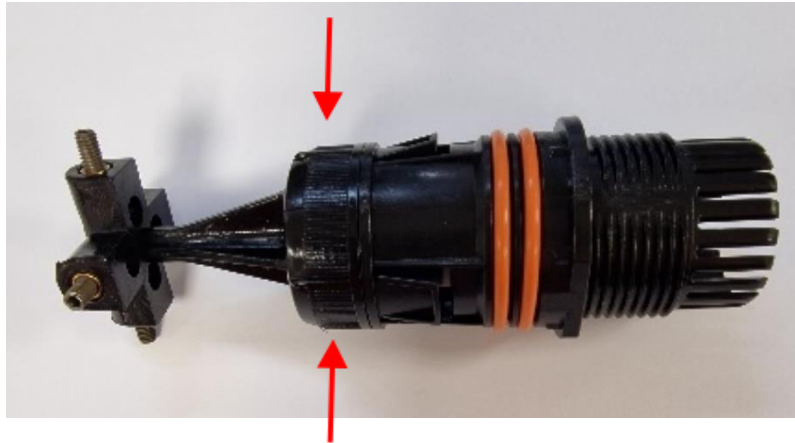
**Step 2**



- Align the gland body and csm bracket.

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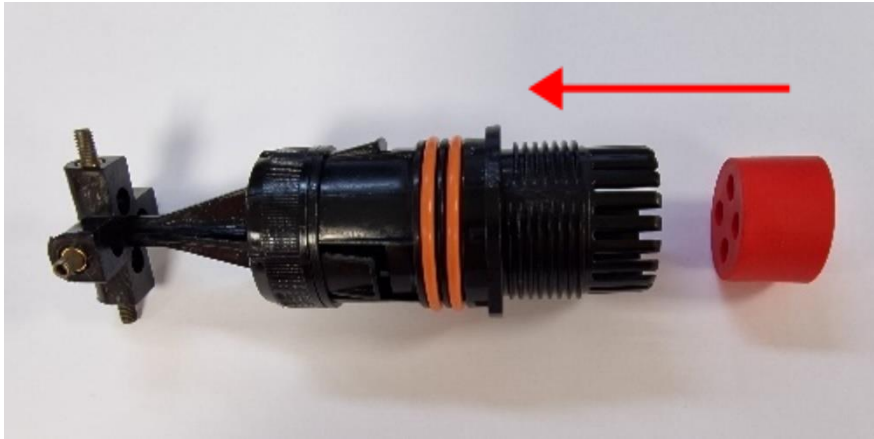
**Step 3**



- Screw the csm bracket onto the threaded portion of the gland body.
- Ensure the face mate.

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**Step 4**



- Align the ULW seal with the gland body assembly.

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**Step 5**



- Insert the seal into the gland body assembly.
- Check the holes of the seal align with the csm holes. If they do not, simply rotate the seal until they do.

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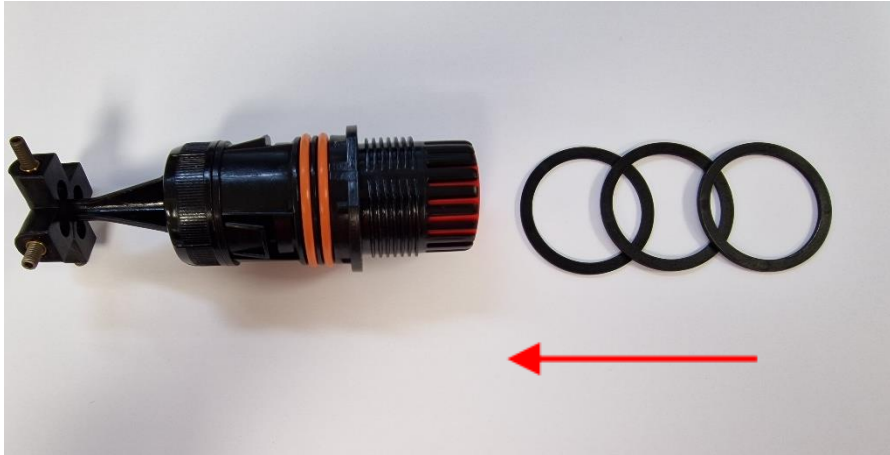
**Step 6**



- Check the alignment from both ends of the gland body assembly.

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**Step 7**

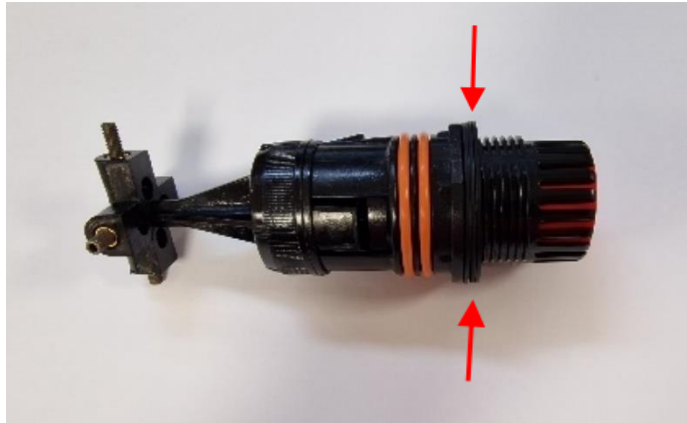


- Align the 3 - 1 mm spacers with the gland body assembly.



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**Step 8**



- Feed over the 3 - 1 mm spacers to the position as shown.

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**Step 9**



- Open the grease sachet.

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**Step 10**



- Dispense a small amount of grease onto your fingertip.

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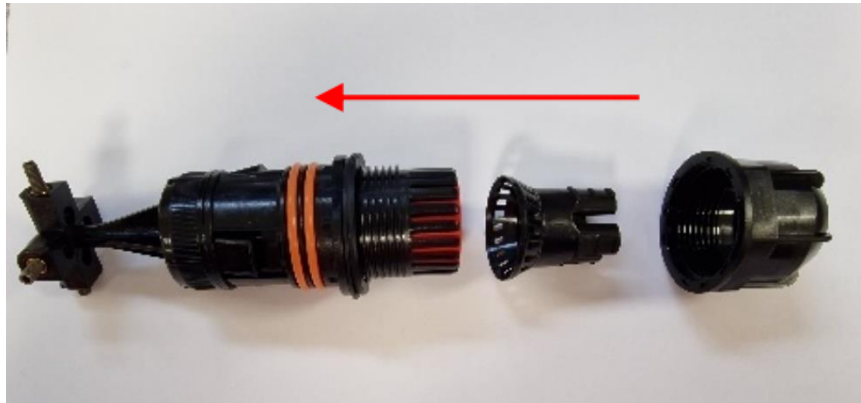
**Step 11**



- Apply the grease to the inside thread of the nut.
- Spread the grease 360 degrees around the thread.

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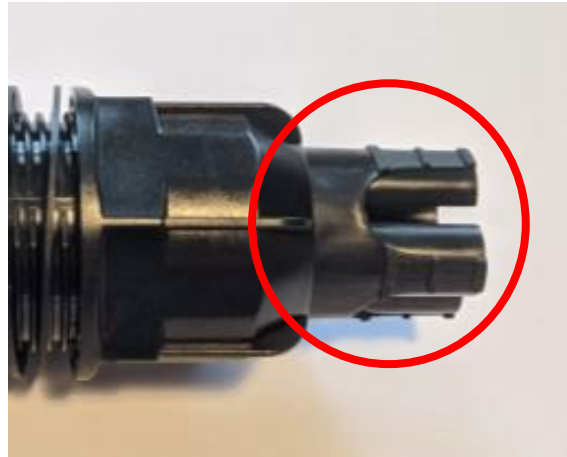
**Step 12**



- Align the anti-torsion part and nut with the gland body assembly.

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### Step 13



- Firmly push the anti-torsion part into the nut until the torsion piece is fully inserted into the nut.
- You will hear a click.
- **NOTE: Do not use the tightening of the nut to engage the torsion piece.**

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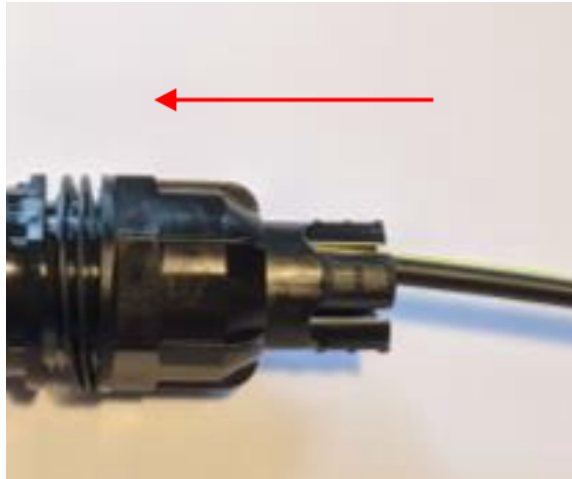
**Step 14**



- Loosely screw the nut onto the gland body assembly (approximate 4 turns).

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### Step 15

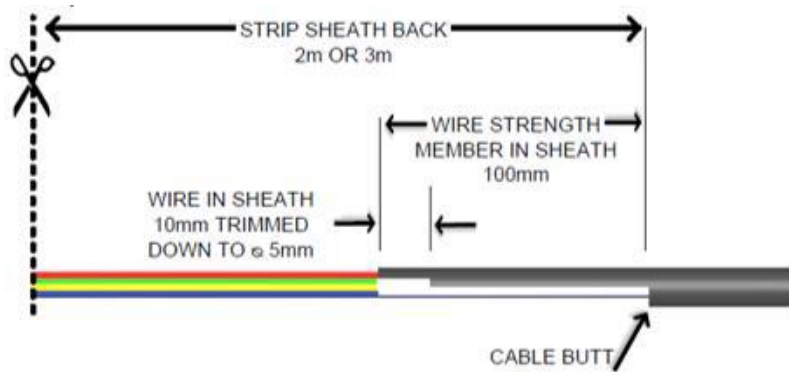


- Apply a small amount of grease to the cable and pull through enough ULW cable to strip back 2m of sheath (C/MMJ) using approved practices.
- Follow your locally approved instructions to longitudinally split 2 m of cable sheath along the yellow line.
- The resulting two halves of the cable sheath should each contain a strength member.



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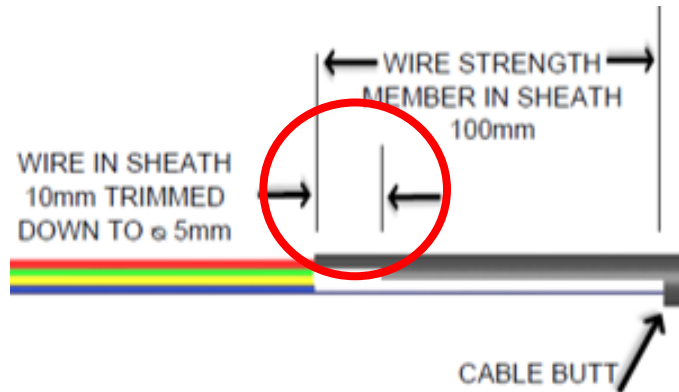
### Step 16



- Cut one of the sheath halves containing a strength member to a length of 100mm from the cable butt.
- Cut the other sheath half containing a strength member flush with the cable butt.

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### Step 17



- Using an approved diagonal cutting, trim the end of the remaining sheath to a diameter of approximately 5mm such that 10mm length.

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**Step 18**



- Insert the strength member into the csm restraint hole.

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**Step 19**



- Pull back cable so cable butt is in line with the top of the csm clamp nut.

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### Step 20



- Using a 2mm Allen key tighten the grub screw onto the strength member. Ensure the wire in the sheath strength member is caught beneath the grub screw securely or repeat this step.

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**Step 21**



- Trim the strength member in line with top of csm clamp.
- Ensure to wear protective gloves when trimming the sheath, the wire can be very sharp.

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**Step 22**



- Repeat for as many cables that are to be installed.
- Install blanks, which can be red, into the remaining empty ports where cables are not installed. The red blank plugs should be inserted until the larger part of the plugs hit the back of the torsion piece.

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**Step 23**



- Secure all installed cables to the adjacent post using a cable tie.
- Ensure the cable tie is seated in the groove on the anti-torsion part.



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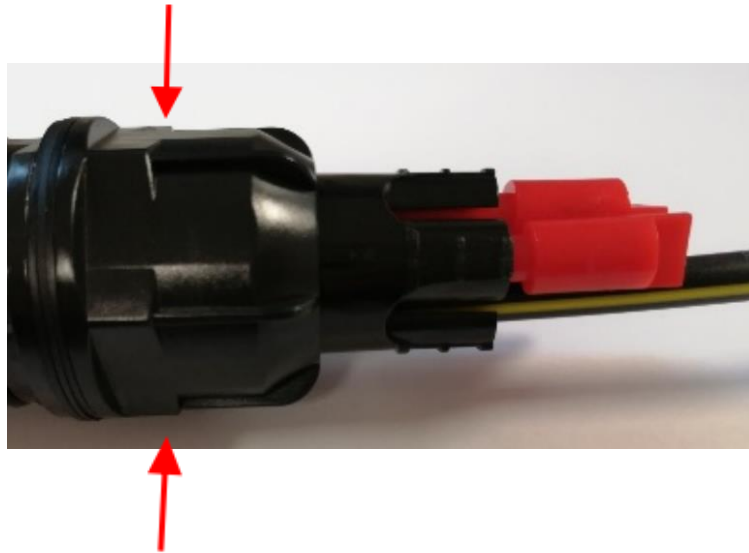
**Step 24**



- Trim the cable tie flush.

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**Step 25**



- Fully tighten the nut to the gland body.
- If you struggle to hand tighten use gland nut tightening tool.

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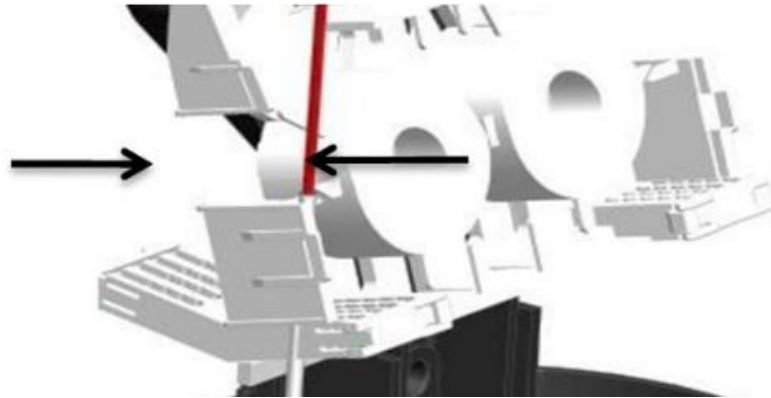
### Step 26



- Feed the tubes through the port of the base and orientate the gland and push into the base.
- Once resistance on O-ring is felt, continue pushing with a twisting action until an audible click is heard.
- Visually check from inside the base that all 3 clips are secured into the base.

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**Step 27**



- Insert the cable tube into the manifold restraint and strip the tube at the indicated position.
- Route elements and fibres as per closure installation guide.

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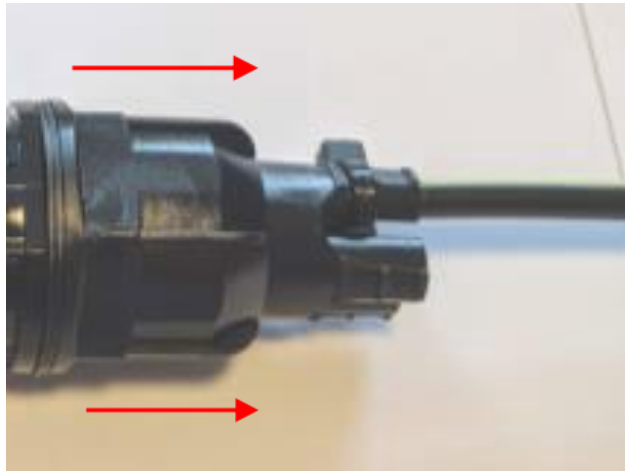
**Step 28**



- Replace the manifold cover by clipping into place.

## HOW TO ADD ADDITIONAL DROPS – ULW CABLE

### Step 1



- Loosen the gland nut by hand or using the gland tightening tool.
- Do not remove the nut.

## HOW TO ADD ADDITIONAL DROPS – ULW CABLE

### Step 2



- Using long nosed pliers remove the number of blanks required.
- Only remove blanks, (which can be red) which will be replaced by new ULW cable.

## HOW TO ADD ADDITIONAL DROPS – ULW CABLE

### Step 3

- Follow the preparation and installation steps 16 to 25.