

# ***SmartConduit Electro-Welding And Mechanical Fitting Assembly Instructions***

## **IMPORTANT NOTE - LIMITED WARRANTY**

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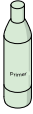
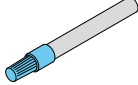

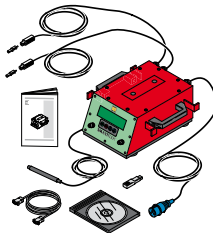

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## ASSEMBLY INSTRUCTIONS

### ELECTRO-WELDING

#### Tools and equipment necessary for electro fusion assembly:

1		Primer	4		Marker
2		Soft cloth	5		Welding unit
3		Conduit cutter			

**WARNING: Electro – welding is not permitted where vapour is present.**

Check that the conduit ends have been protected by the caps. If this is not the case, remove the first 2" (5 cm) of the conduit. This should be carried out using the correct conduit cutter to ensure a clean, burr-free cut at 90° to the conduit.

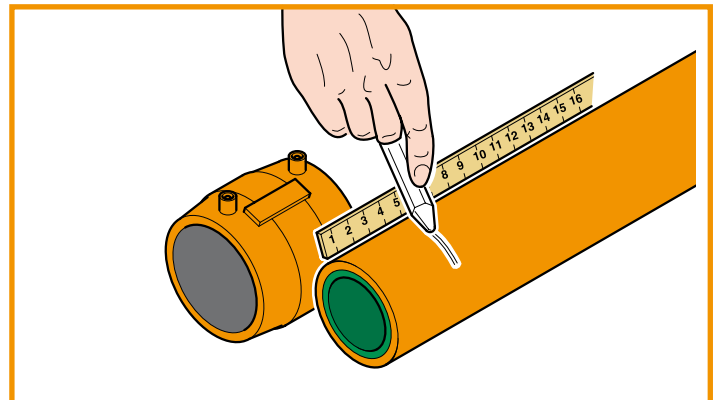
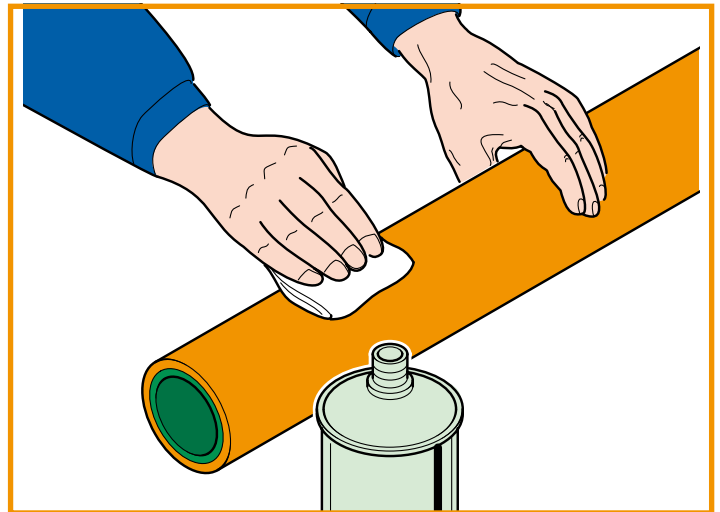
**WARNING: a non-perpendicular cut prevents the complete insertion of the conduit; consequently, molten material will enter the conduit interior during welding.**

1 Clean the parts to be welded; eliminate any traces of dust, mud, grease or anything else using a clean natural fibre (cotton) cloth. Never, under any circumstances, use sand paper, files, knives or makeshift tools.

2 Mark the insertion length on both conduit ends.

3 Clean the conduit ends and the fitting with recommended cleaning solvent and avoid any contact of the cleaned surfaces to be welded with bare or gloved hands or dirty rags.

4 Insert the coupler, elbow or tee onto the conduit until it reaches its stop point.



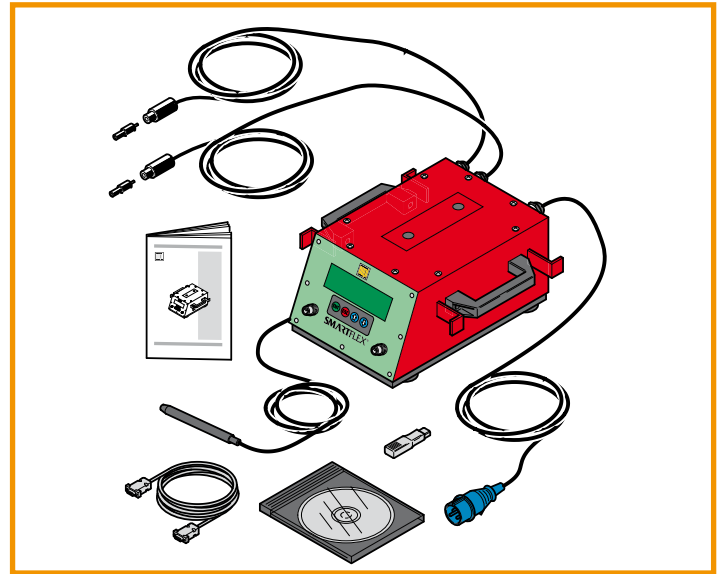
5 A loose fit between the conduit and the fitting should be of no concern. The thermal expansion occurring during welding will accommodate tolerances.

6 Insert the other conduit, or spigot fitting, into the electro-fusion fitting check the assembly with the insertion lengths previously marked. It is important to align assemblies. It is also advisable to level the conduits where possible.

7 You can now commence welding. Connect the leads to the electro-fusion fitting, swipe the optical pen bar code reader on the fitting bar code and proceed according to the instructions shown on the welding unit display.

8 Do not move the assembly till the cooling time is reached.

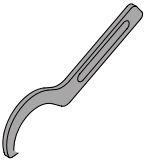
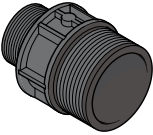


**Warning: Avoid touching the assembly during and immediately after the fusion process as the fitting surface can be very hot.**


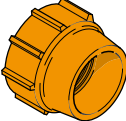


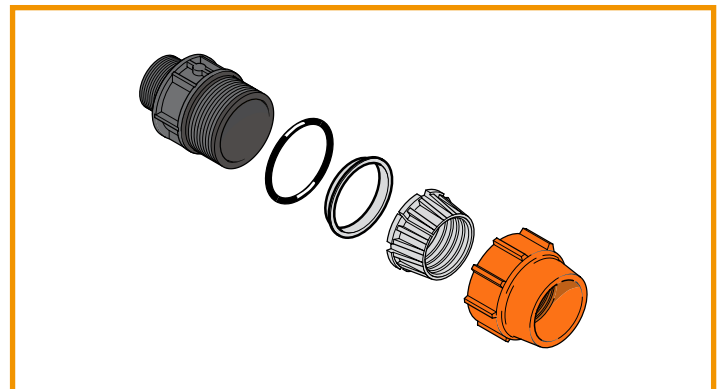
## ASSEMBLY INSTRUCTIONS

### MECHANICAL FITTING

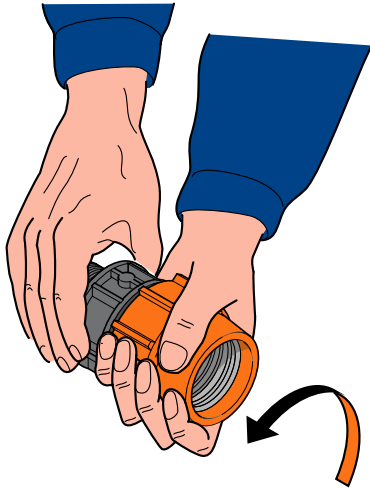
#### Component description:

1		Wrench
2		Fitting body
3		O-Ring
4		Thrust ring

5		Circular conduit retainer
6		Retaining nut



**Fig.1**



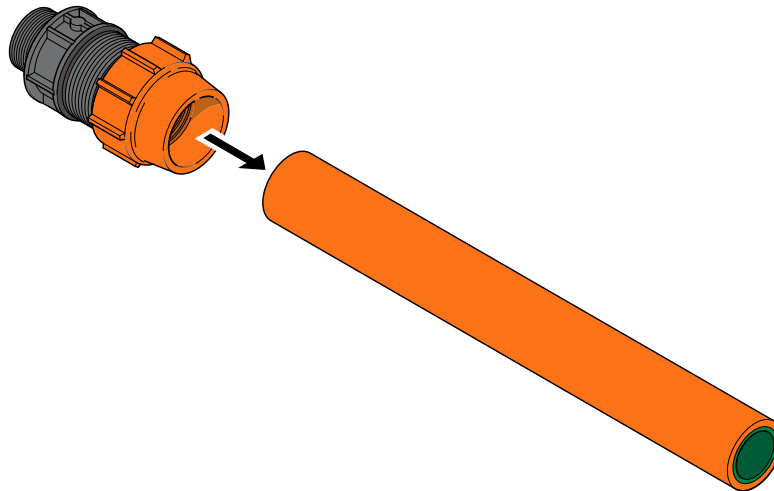
*Shown here as fully assembled.  
Loosen the retaining nut and the circular conduit retainer.*

**Fig.2**



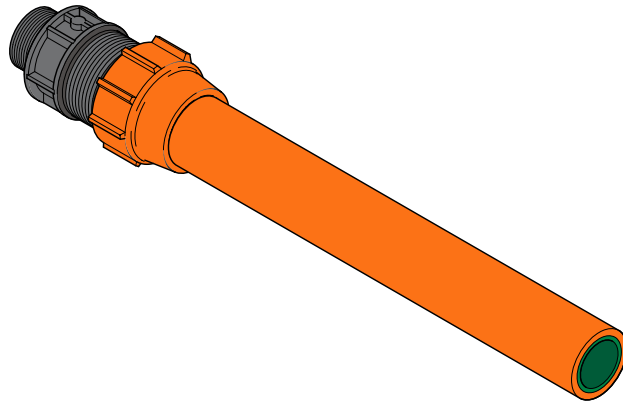
*Shown here as loosened on fitting body.*

**Fig.3**



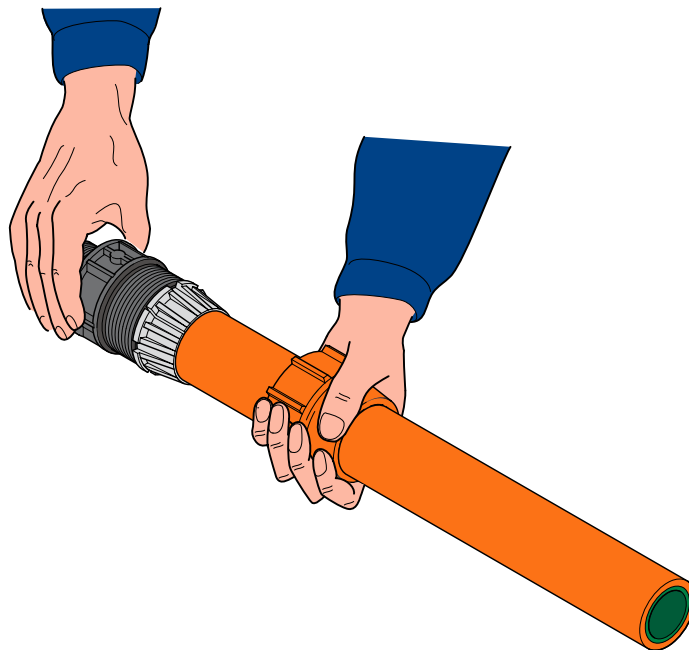
*Push fitting firmly onto the conduit past the o-ring until it reaches the stop inside the fitting body.*

**Fig.4**

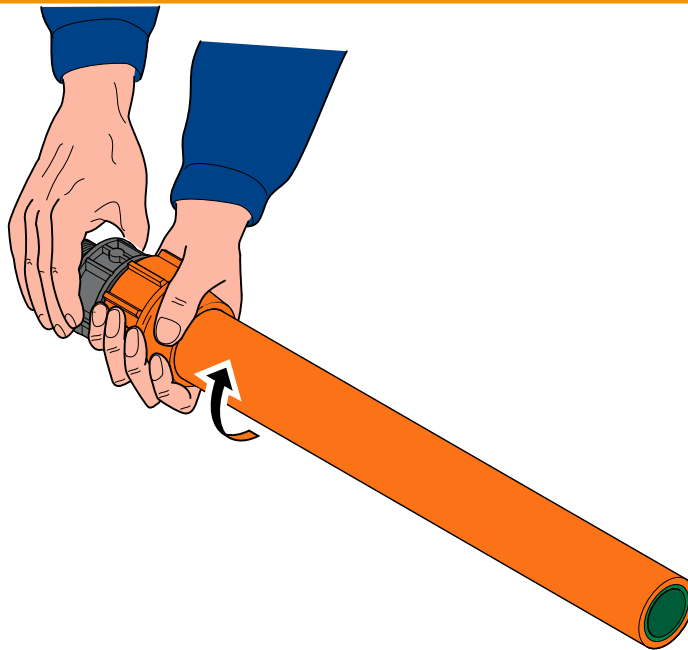


*Fitting inserted into conduit.*

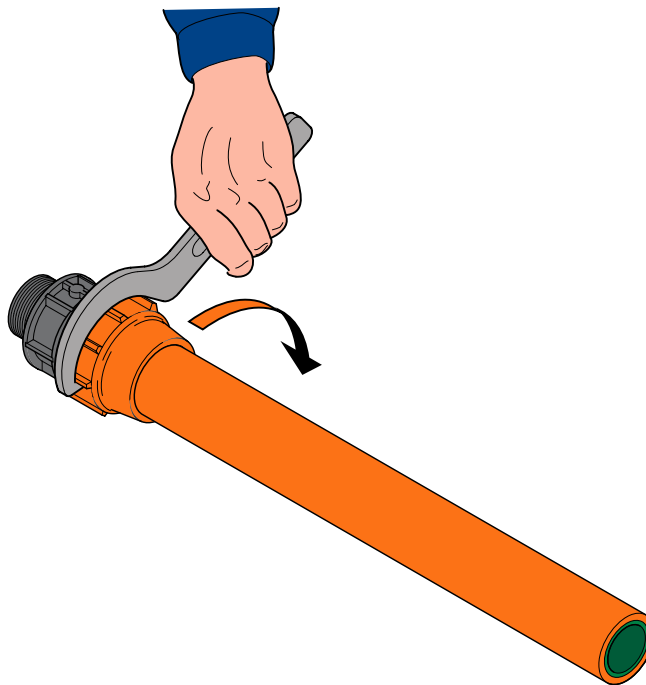
**Fig.5**



*Undo the retaining nut completely and slide back along conduit to confirm that the circular conduit retainer is seated on the fitting body.*

**Fig.6**


*Tighten the retaining nut by hand as far as it will go.*

**Fig.7**


*Use a standard wrench or special tool as shown to tighten the retaining nut.*

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