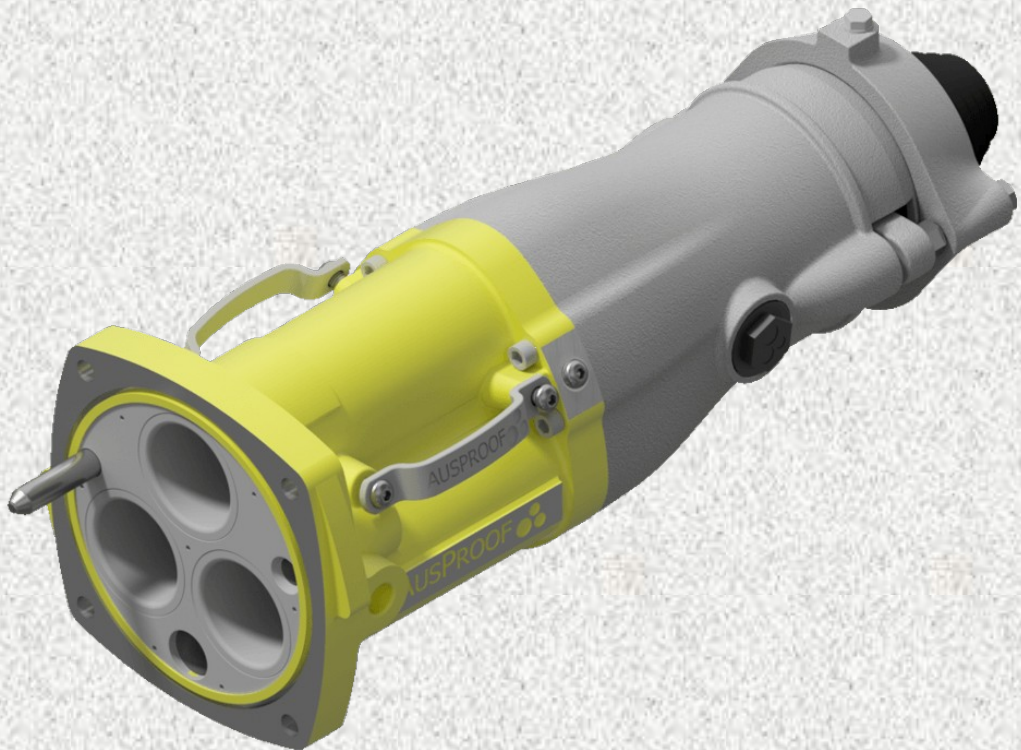




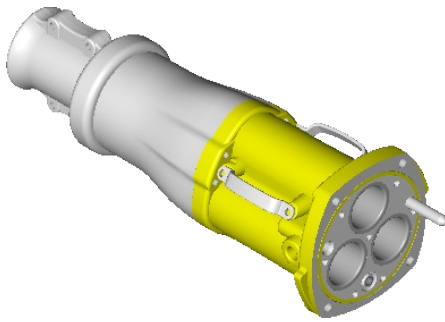
## **6.6kV 800AMP High Voltage Coupler 6.64BKA Range**



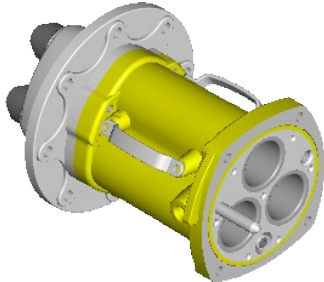
*Pioneering the Difference.*

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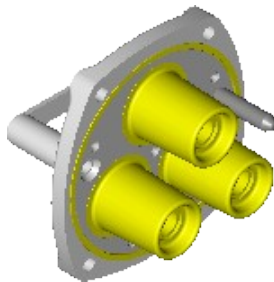
## High Voltage Cable Coupler System Technical Guide



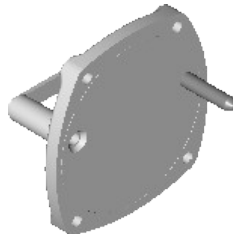
**Description:** Half Coupler-Unarmoured Cable  
**Rating:** 6.6kV 800A  
**Material:** Aluminium  
**Mass:** 14kg  
**LOA:** 590mm  
**Volume:** 3.1 Litres



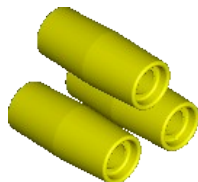
**Description:** Adaptor – Gear Mount  
**Rating:** 6.6kV 800A  
**Material:** Aluminium  
**Mass:** 14kg  
**LOA:** 405mm  
**Volume:** 3.1 Litres



**Stock No:** RS441  
**Description:** Insulated End Cover  
**Rating:** 6.6kV 800A  
**Material:** Aluminium  
**Mass:** 5kg



**Stock No:** RS440  
**Description:** Cast Protection Cover  
**Rating:** 6.6kV 800A  
**Material:** Aluminium  
**Mass:** 3kg

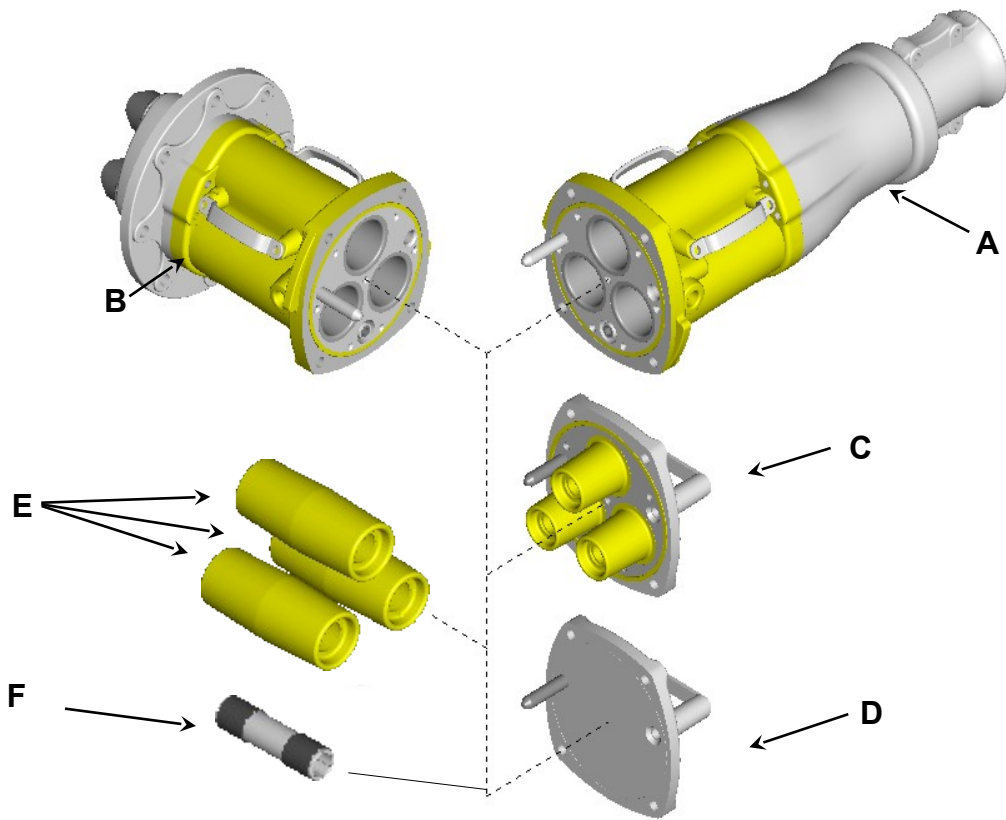


**Stock No:** RS283  
**Description:** Phase Connectors  
**Rating:** 6.6kV 800A



**Stock No:** RS117  
**Description:** Earth Pilot Connector

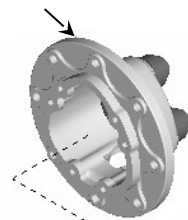
## High Voltage Cable Coupler System Stock Selection Guide – 6.6kV 800A



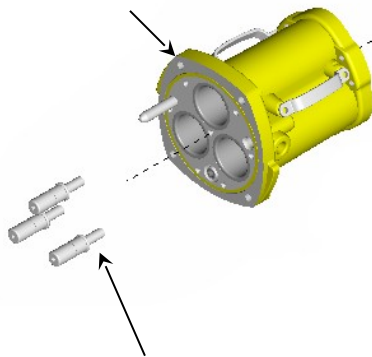
	Description	Stock No.	Page
A	Half Coupler – Unarmoured Cable.....		3
B	Adaptor – Gear Mount.....		3
C	Insulated End Cover .....	RS441	5
D	Cast Protection Cover .....	RS440	6
E	Phase Connectors (3 required per join).....	RS283	
F	Earth Pilot Connector (1 required per join).....	RS117	

# High Voltage Cable Coupler System Cable and Gear Mount Equipment

**6.6kV Gear Mount Flange**  
Stock No: RS191



**6.6kV Coupler**  
Stock No: RS444



Size 1 Trailing Cable Gland	
Cable OD	Stock No
90mm	RS201
85mm	RS200
80mm	RS199
75mm	RS198
70mm	RS197
65mm	RS196
60mm	RS195
55mm	RS194
50mm	RS426
45mm	RS425

**6.6kV Contact Selection (Set of 3)**

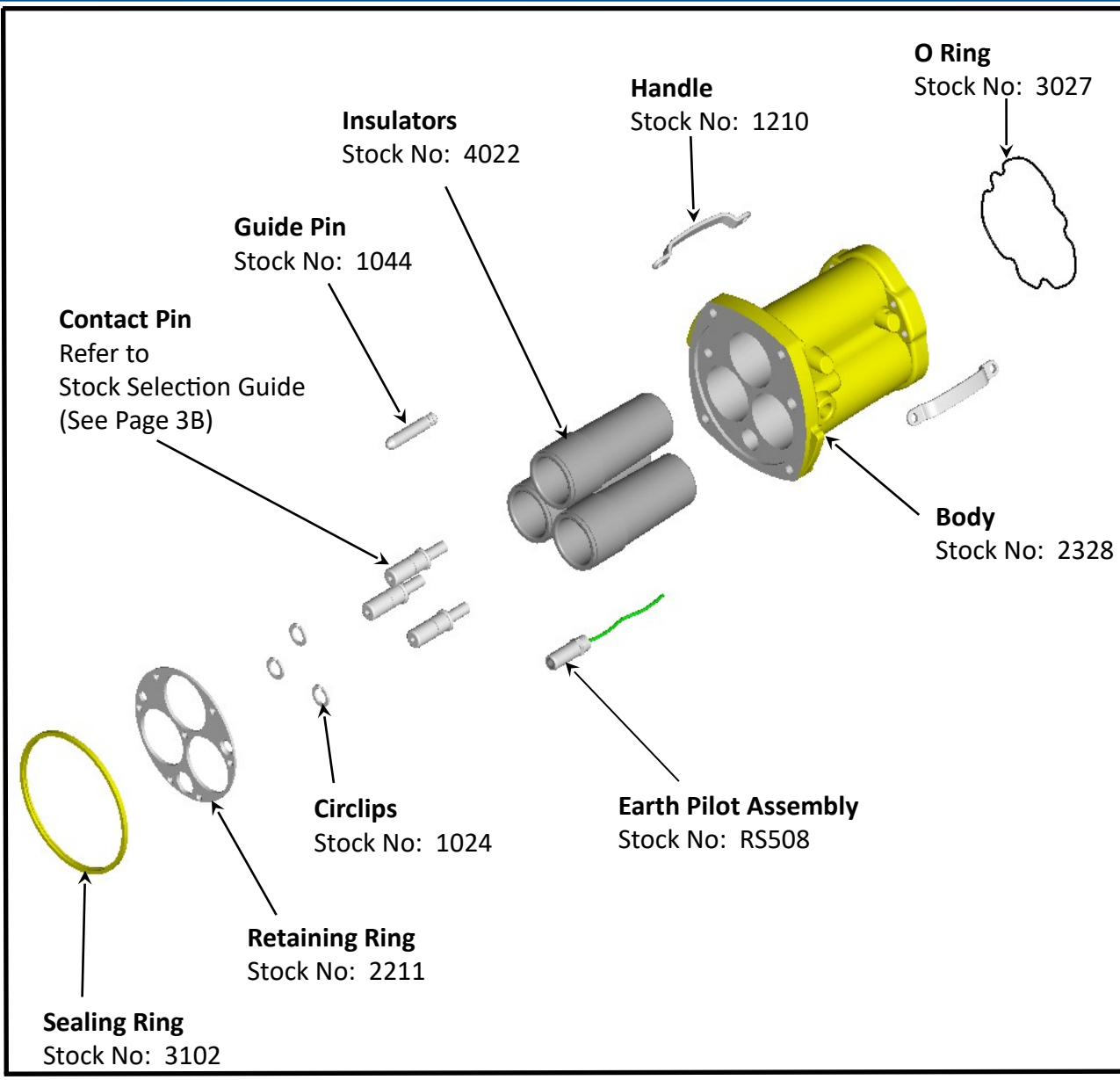
Size	Crimp	Solder	Size	Crimp	Solder
35mm	RS566	RS673	150mm <sup>2</sup>	RS670	RS677
50mm	RS567	RS674	185mm	RS571	RS678
70mm	RS568	RS675	240mm	RS628	RS630
95mm	RS569	RS676	300mm <sup>2</sup>	RS672	RS679
120mm <sup>2</sup>	RS627	RS629			

Size 2 Trailing Cable Gland	
Cable OD	Stock No
117mm	RS207
115mm	RS206
110mm	RS205
105mm	RS204
100mm	RS203
95mm	RS202

# High Voltage Cable Bolted Coupler Body Assembly 6.6kV

## Technical Data

**Stock No:** RS444 – 6.6kV Aluminium Coupler  
**Body**  
**Amps:**800  
**Volts:** 6600  
**Material:** Aluminium



# Insulated End Cover Assembly 6.6kV

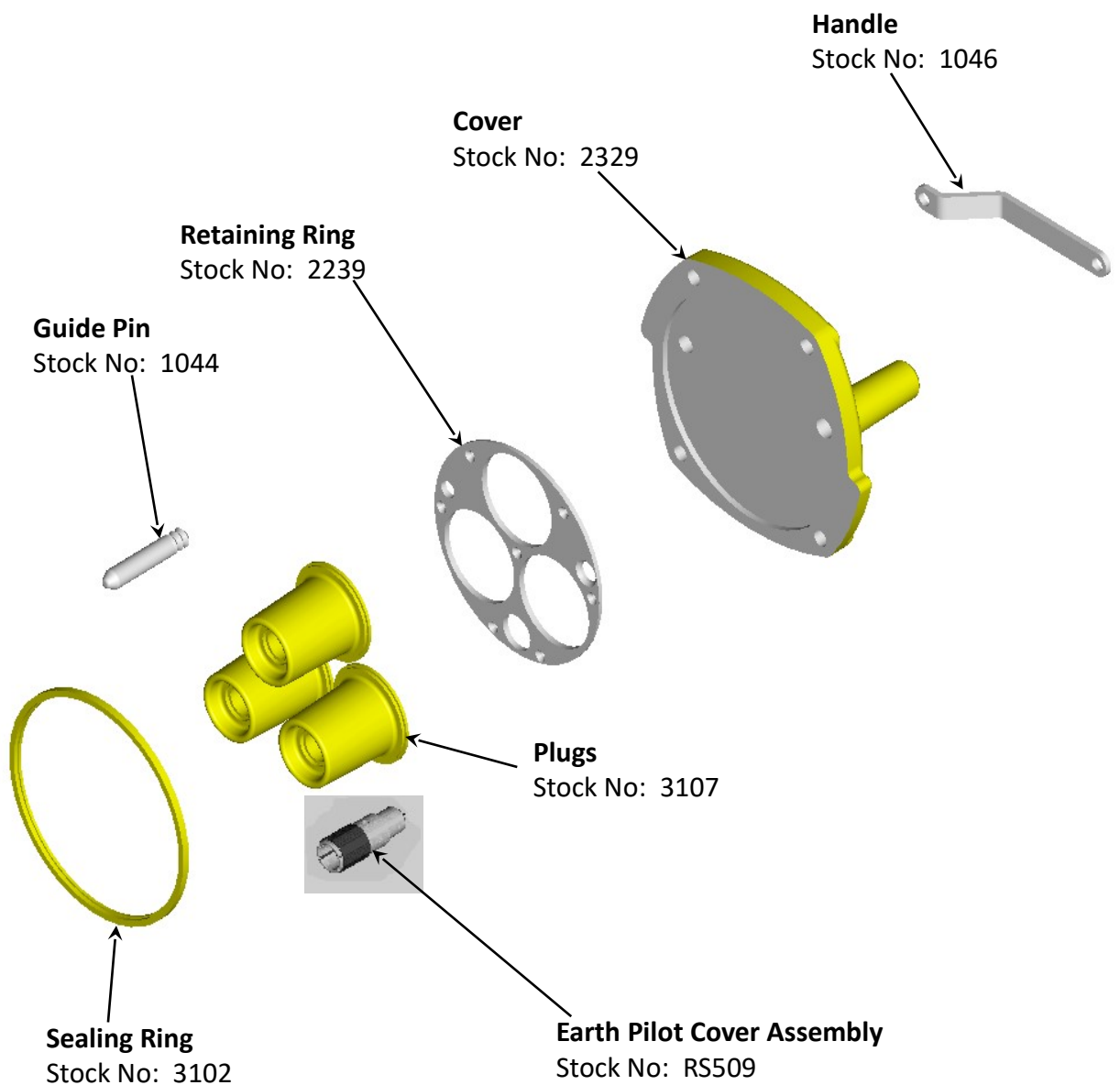
## Technical Data

**Stock No:** RS441 – 6.6kV Insulated End Cover

**Amps:** 800

**Volts:** 6600

**Material:** Aluminium



## Cast Protection Cover Assembly

### Technical Data

**Stock No:** RS440 – 6.6kV Cast Protection Cover

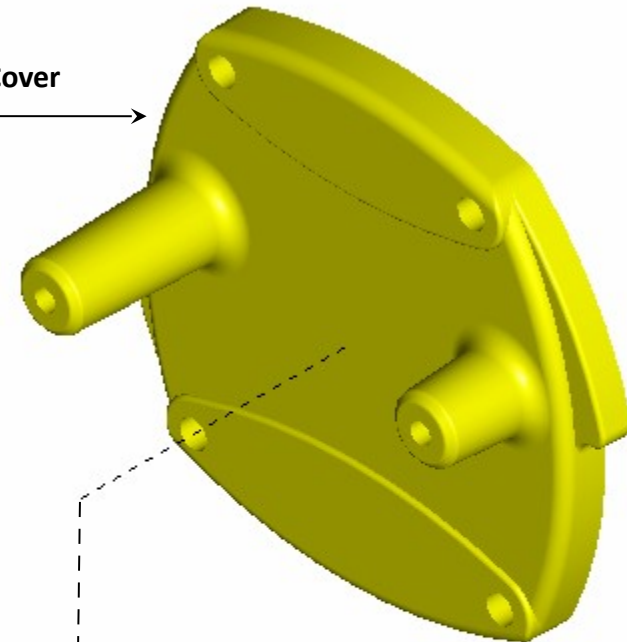
**Amps:** 800

**Volts:** 6600

**Material:** Aluminium

**6.6kV Protection Cover**

Stock No: 2330

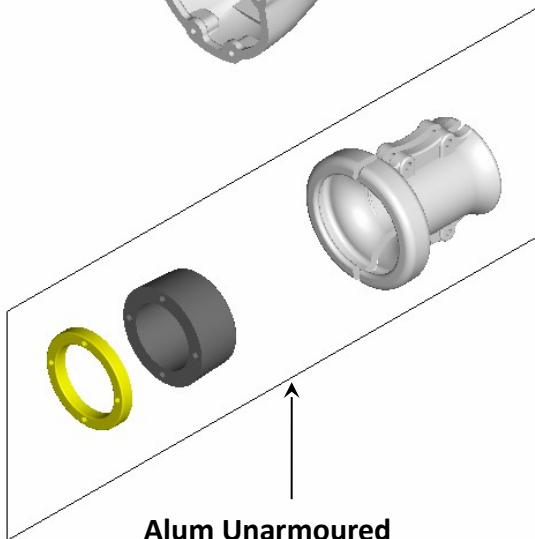
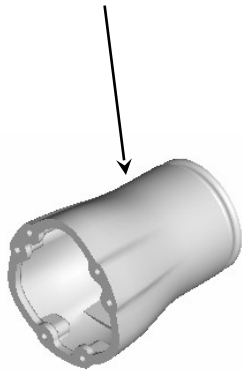


**Handle**

Stock No: 1046

### Size 1 Housing

Stock No: RS257

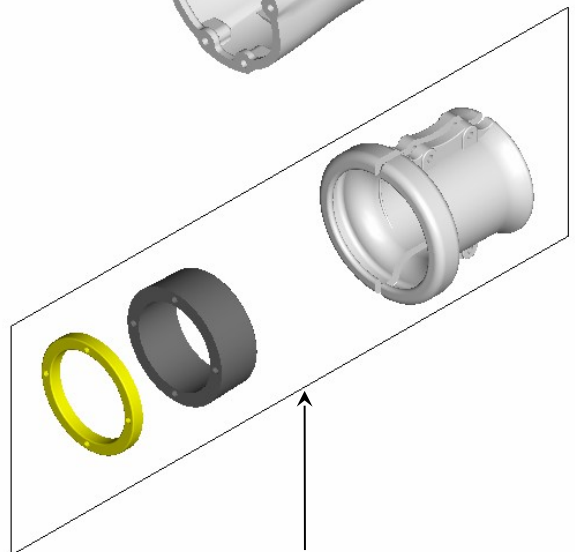
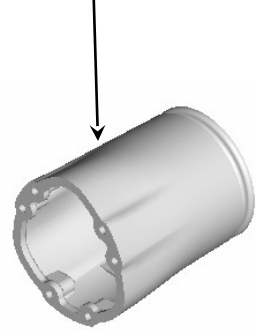


### Alum Unarmoured Compression Clamp Kit

Cable OD	Stock No
90mm	RS294
85mm	RS295
80mm	RS296
75mm	RS297
70mm	RS298
65mm	RS299
60mm	RS300
55mm	RS301
50mm	RS578
45mm	RS579

### Size 2 Housing

Stock No: RS258

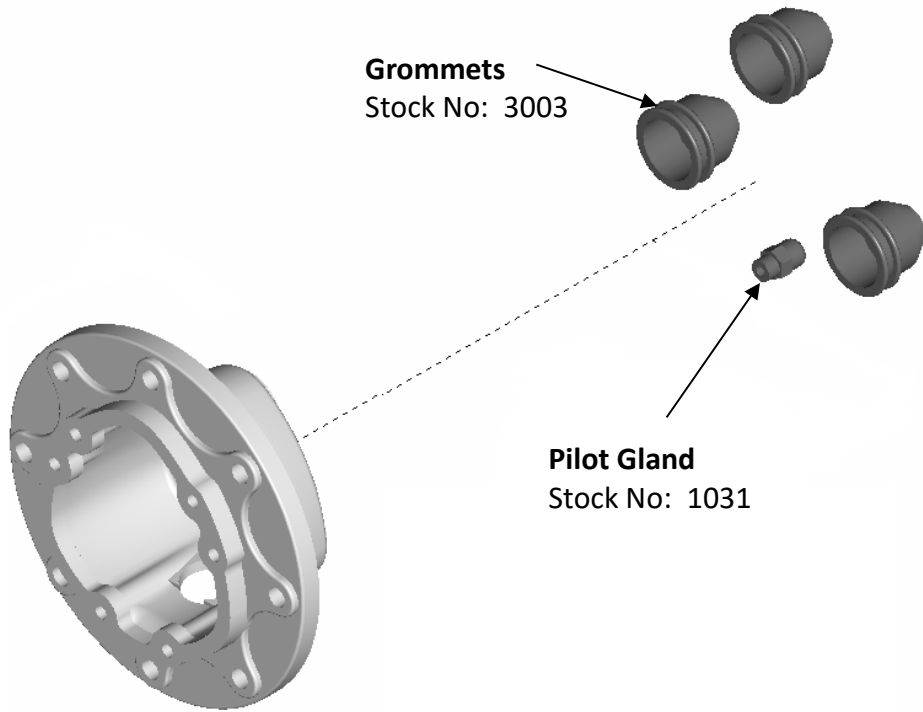


### Alum Unarmoured Compression Clamp Kit

Cable OD	Stock No
117mm	RS288
115mm	RS289
110mm	RS290
105mm	RS291
100mm	RS292
95mm	RS293



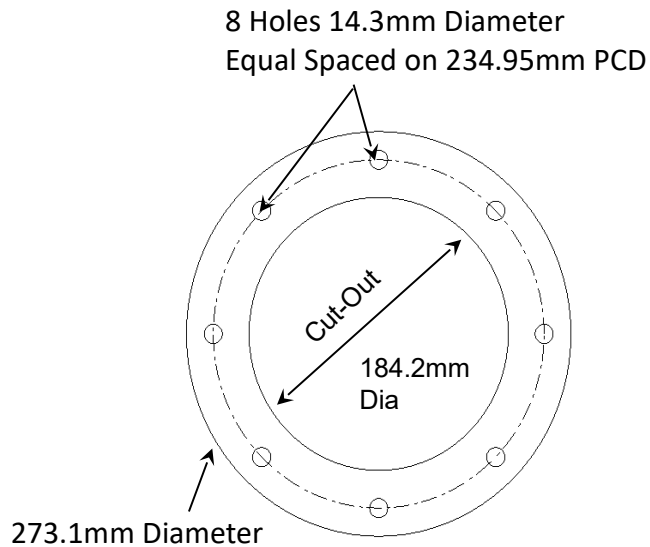
## Adaptor Gear Mount Flange Assembly



**Grommets**  
Stock No: 3003






**Pilot Gland**  
Stock No: 1031

**6.6kV Gear Mount Flange**  
Stock No: 2227



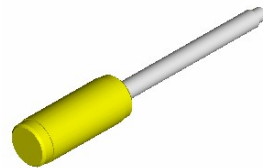
## Tool Kits

### 11kV (4 bolt) Stock No. RS558

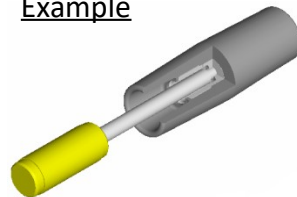
-  2 x Spanner 16mm
-  1 x Slide Hammer
-  1 x Earth Pilot Removal Tool
-  1 x Tool Box
-  15 x High Voltage Cleaning Tissues

### Connector Slide Hammer Stock No. RS177

Used to insert and extract connectors



Example



### 11 kV Alignment Sticks Stock No. RS178

Phase guide stick set for assembly (3 included)



### 6.6kV Testing connectors Stock No. RS436

6 off phase connectors fitted with HV leads ready for testing.



## Termination Kits for Unarmoured Cable

### **SMALL**

#### Termination Kit for 6.6kV Couplers and Adaptors

Stock No. RS407

(to suit core outer diameter 16mm – 28.5mm)



- 3.1L Compound
- 3 x QT5671
- CC2
- 13 Tape

### **LARGE**

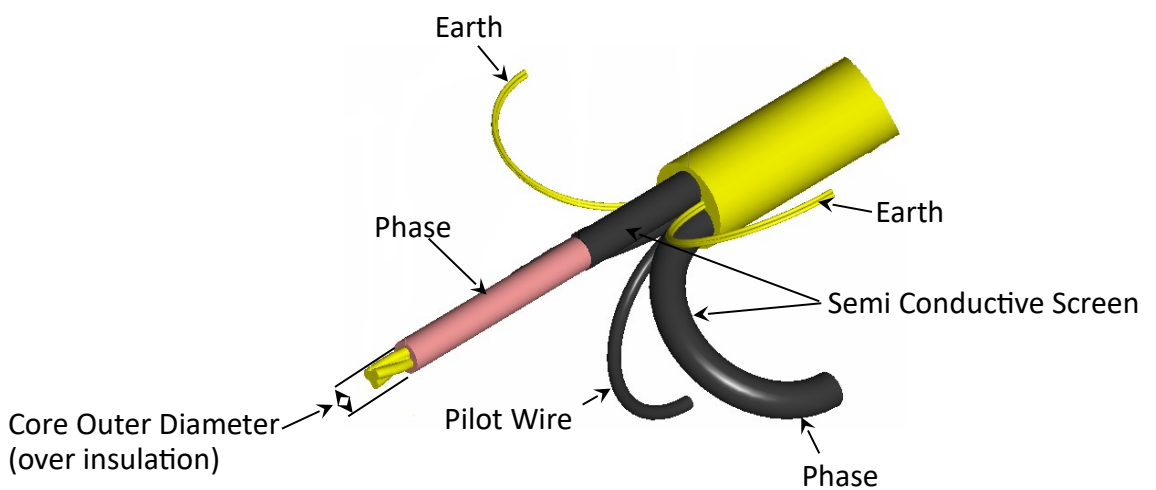
#### Termination Kit for 6.6kV Coupler and Adaptors

Stock No. RS324

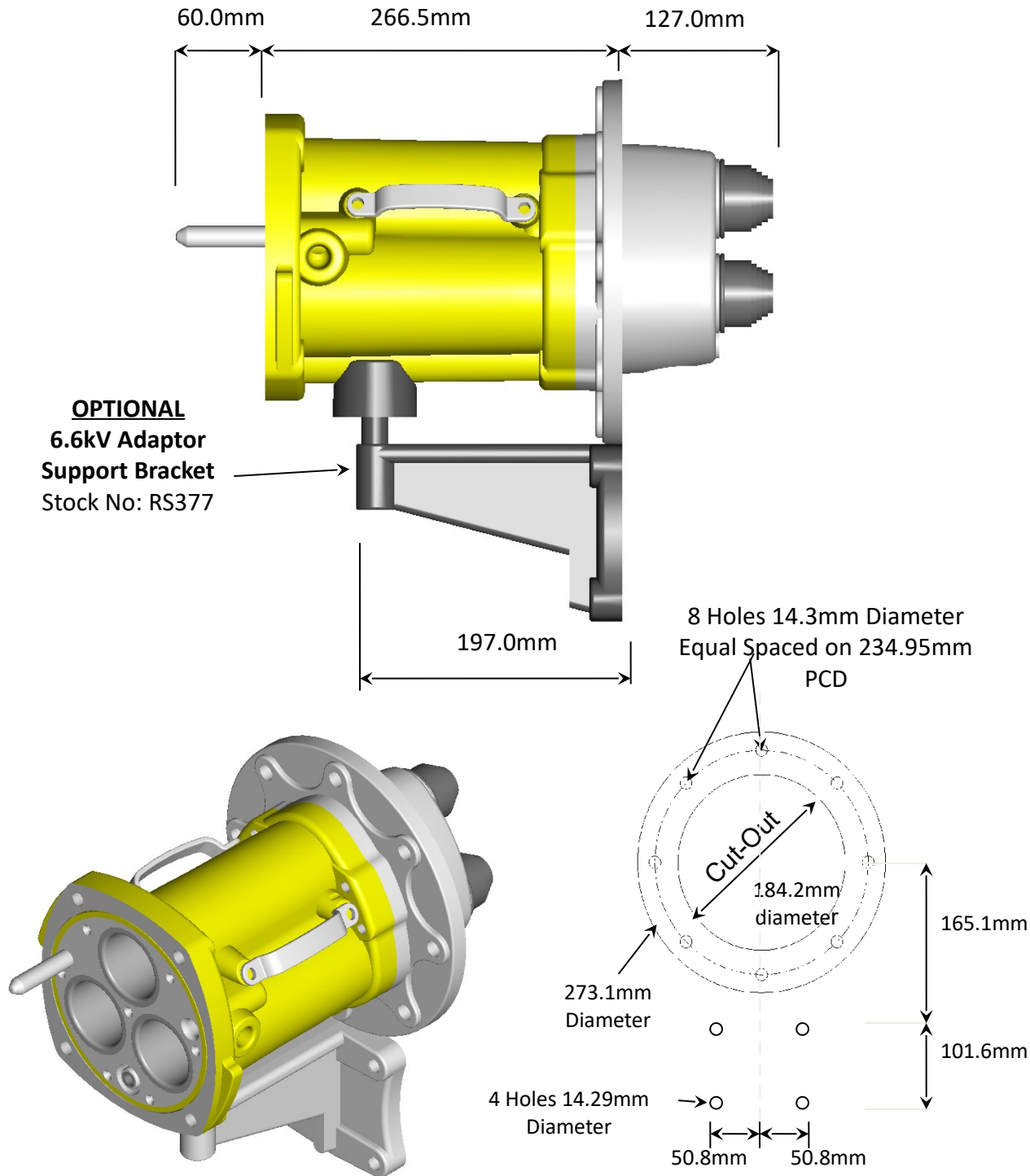
(to suit core outer diameter 24mm – 48mm)



- 3.1L Compound
- 3 x QT5672
- CC2
- 13 Tape



# Adaptor Gear Mount Flange Assembly 6.6kV with Support Bracket



## Coupler Alignment Skid for 6.6kV Couplers

### Technical Data

**Part Number : RS626**  
 Footprint: 1700mm x 950mm  
 Coupler Height: 390mm  
 Mass: 43 kg

#### Cable Clamp

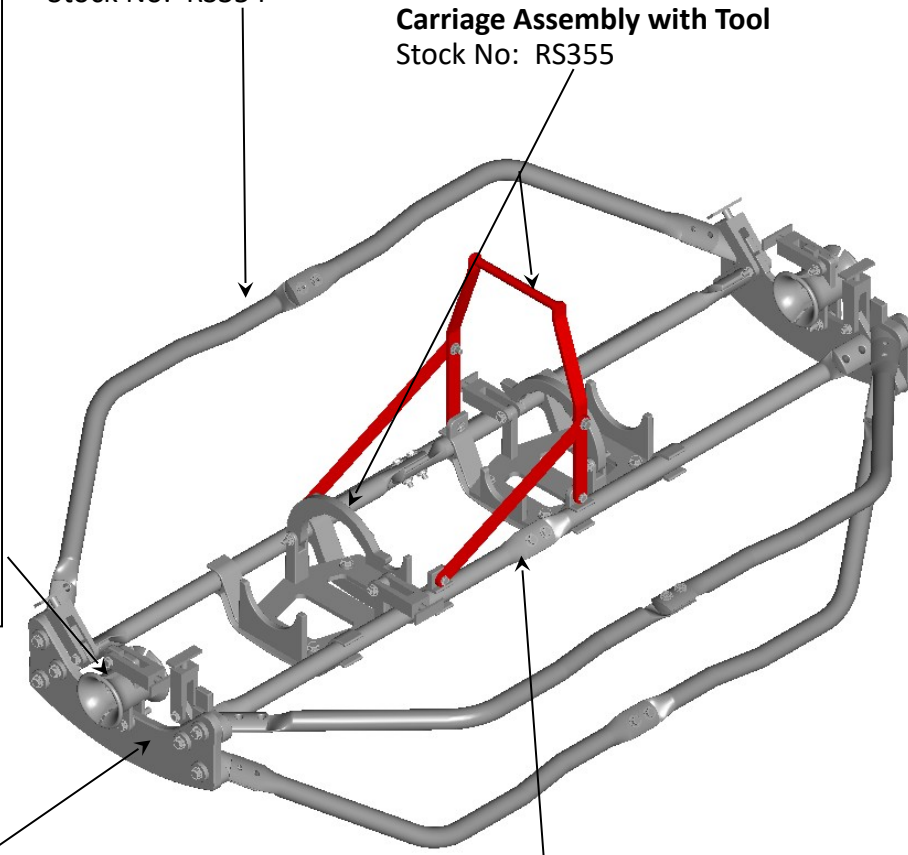
ID Sizes	Part No
120mm	RS326
115mm	RS327
110mm	RS328
105mm	RS329
100mm	RS330
95mm	RS331
90mm	RS332
85mm	RS333
80mm	RS334
75mm	RS335
70mm	RS336
65mm	RS337
60mm	RS338
55mm	RS339
50mm	RS480
45mm	RS481

**Protection Bars (4 Required)**  
 Stock No: RS354

**Carriage Assembly with Tool**  
 Stock No: RS355

**End Plate**  
 Stock No: 2288

**Main Rails (2 Required)**  
 Stock No: RS356



**Note:** When placing order, nominate cable clamp size.

## Coupler Support Stand for 6.6kV Couplers

### Technical Data

**Model No: RS1010**

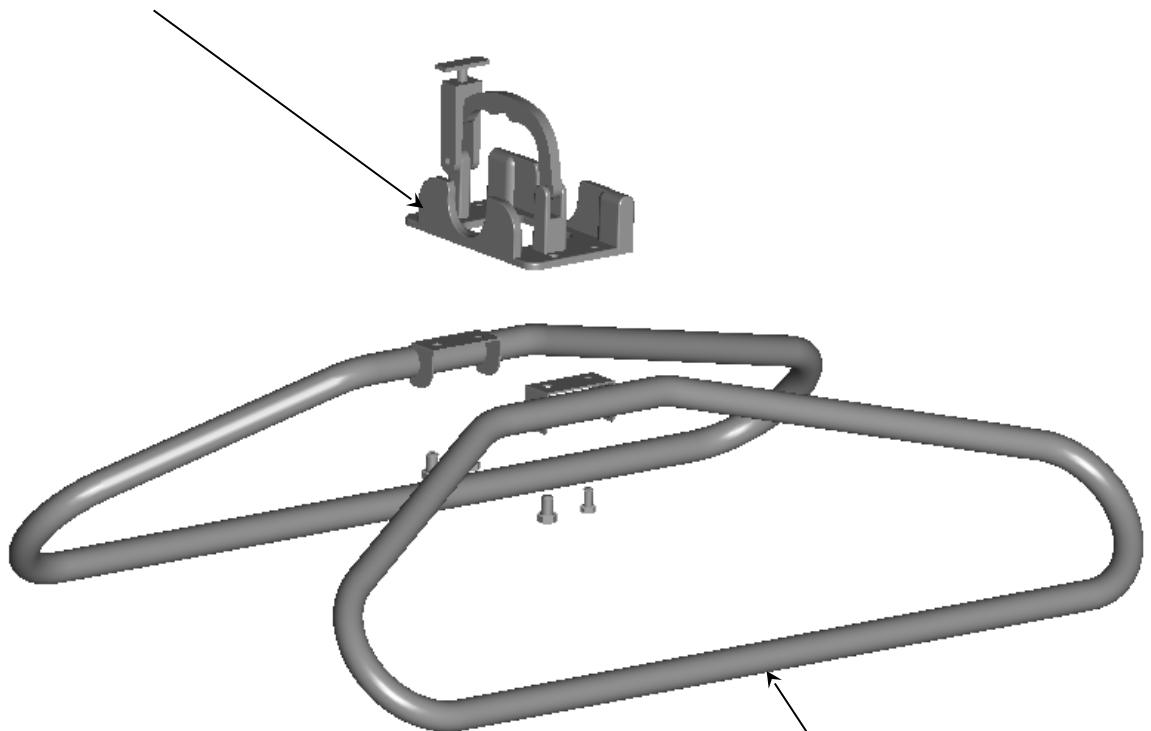
Footprint: 1500mm x 950mm

Coupler Height: 390mm

Mass: 18 kg

#### **Cradle Assembly**

Stock No: RS358

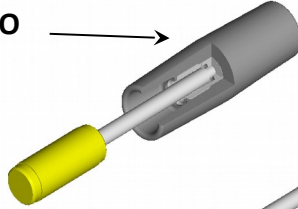


**Legs (2 Required)**

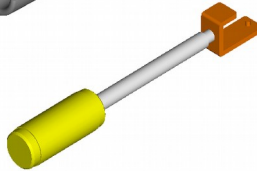
Stock No: RS359

## Inserting Connectors and Coupling Operation

SCREW SLIDE HAMMER INTO CENTER OF CONNECTOR



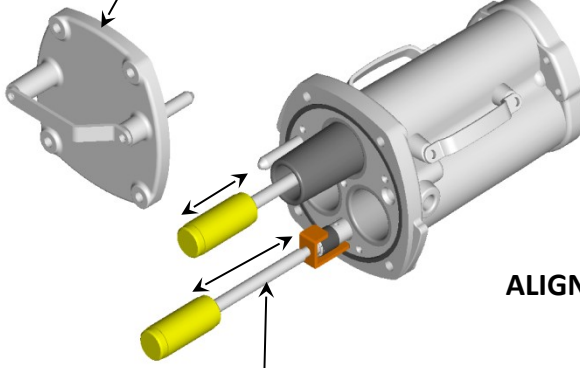
SCREW EARTH TOOL ONTO SLIDE HAMMER



FIT EARTH PILOT CONNECTOR

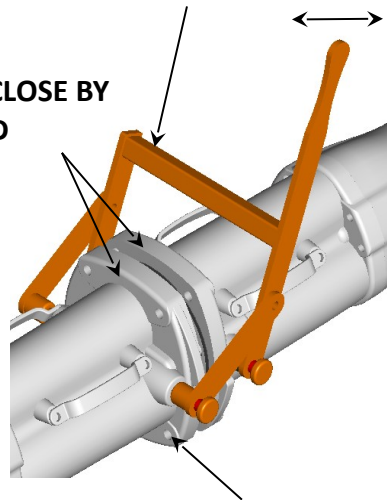
Stock No. RS176

REMOVE PROTECTION COVER



FIT RACKING TOOL TO CLOSE OR OPEN COUPLERS

ALIGN AND CLOSE BY HAND

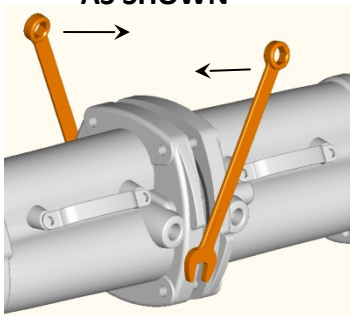


FULLY INSERT CONNECTORS WITH SLIDE HAMMER

Stock No. RS177

BOLT TOGETHER

TO ASSIST WITH OPENING COUPLERS POSITION SPANNERS AS SHOWN

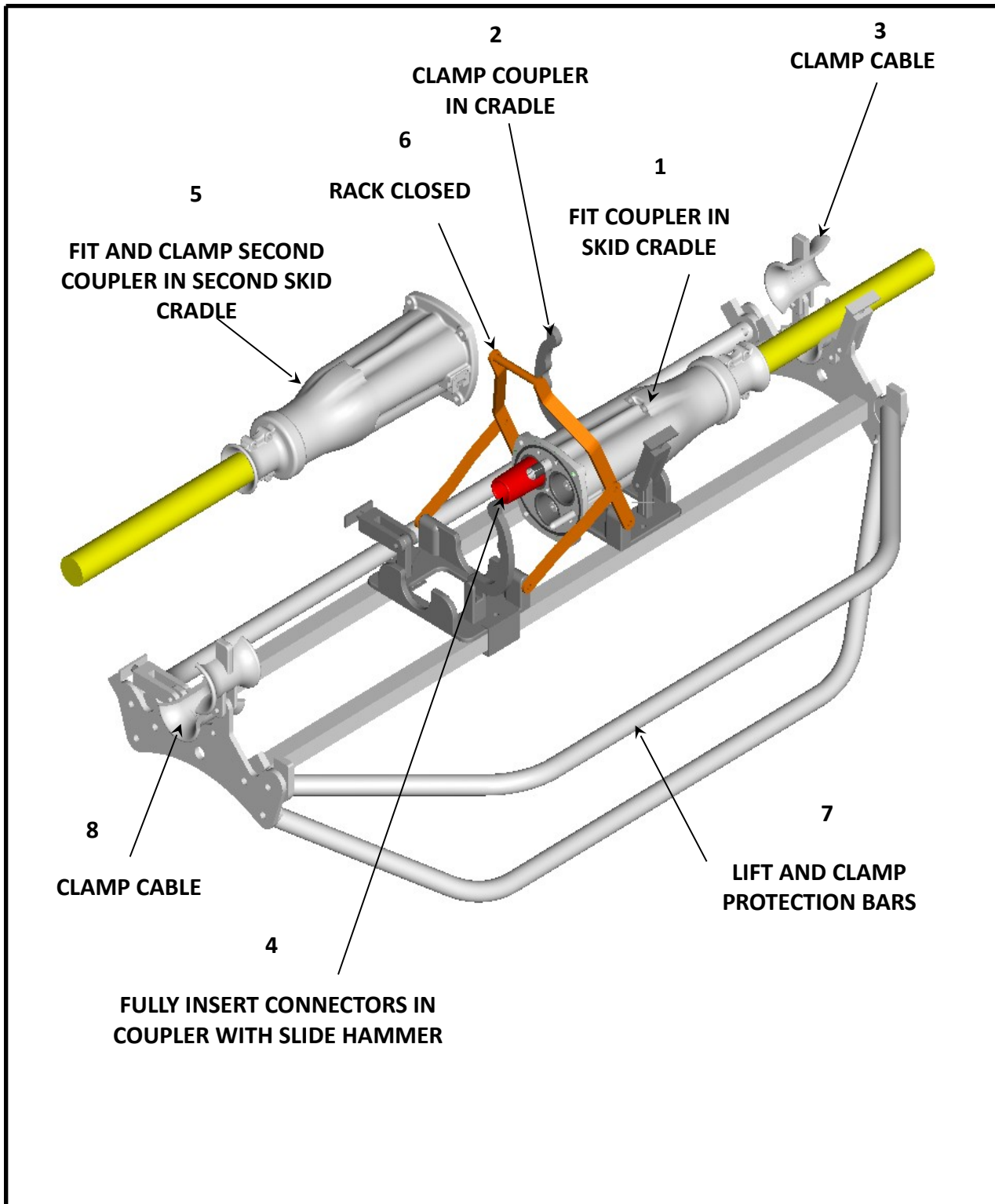


### Coupler Tool Kit (All Voltages)

Stock No. RS284

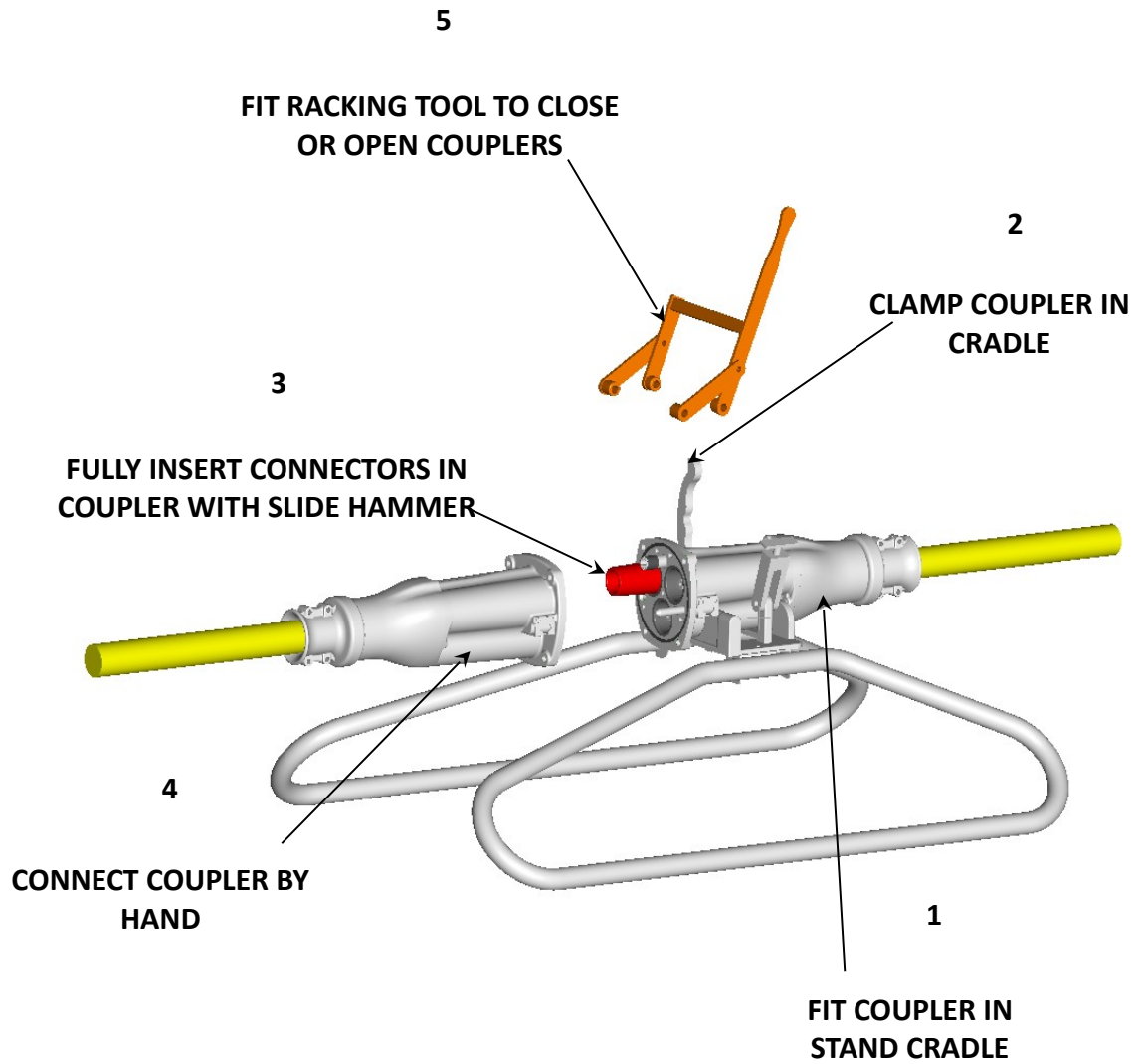
2 off	1246	Spanners
1 off	RS325	Racking Tool
1 off	RS177	Slide Hammer
1 off	RS176	Earth Pilot Removal Tool
15 off	1278	High Voltage Cleaning Tissues

## Alignment Skid Operations



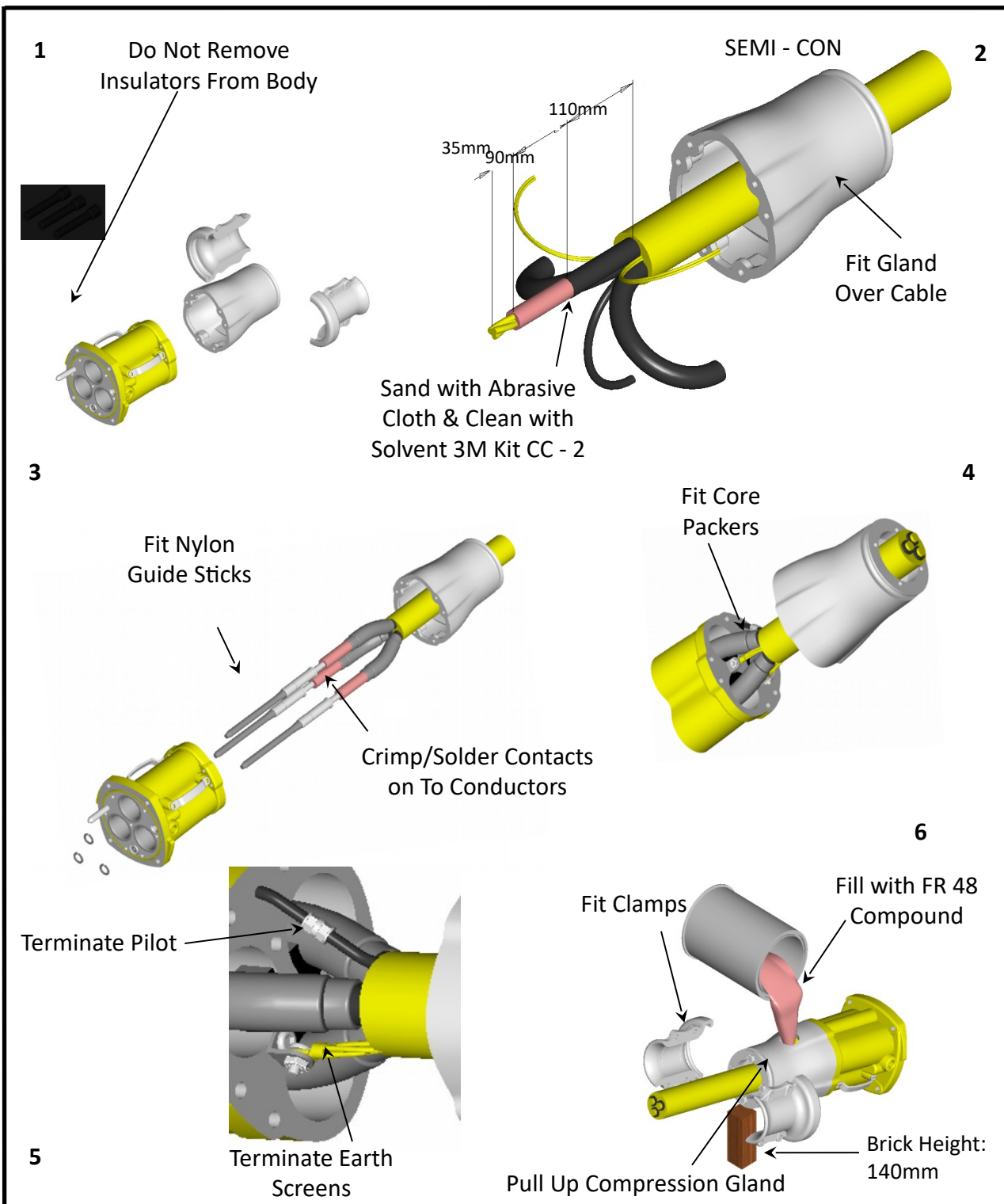


## Stand Operations



## 6.6kV 800A Half Coupler

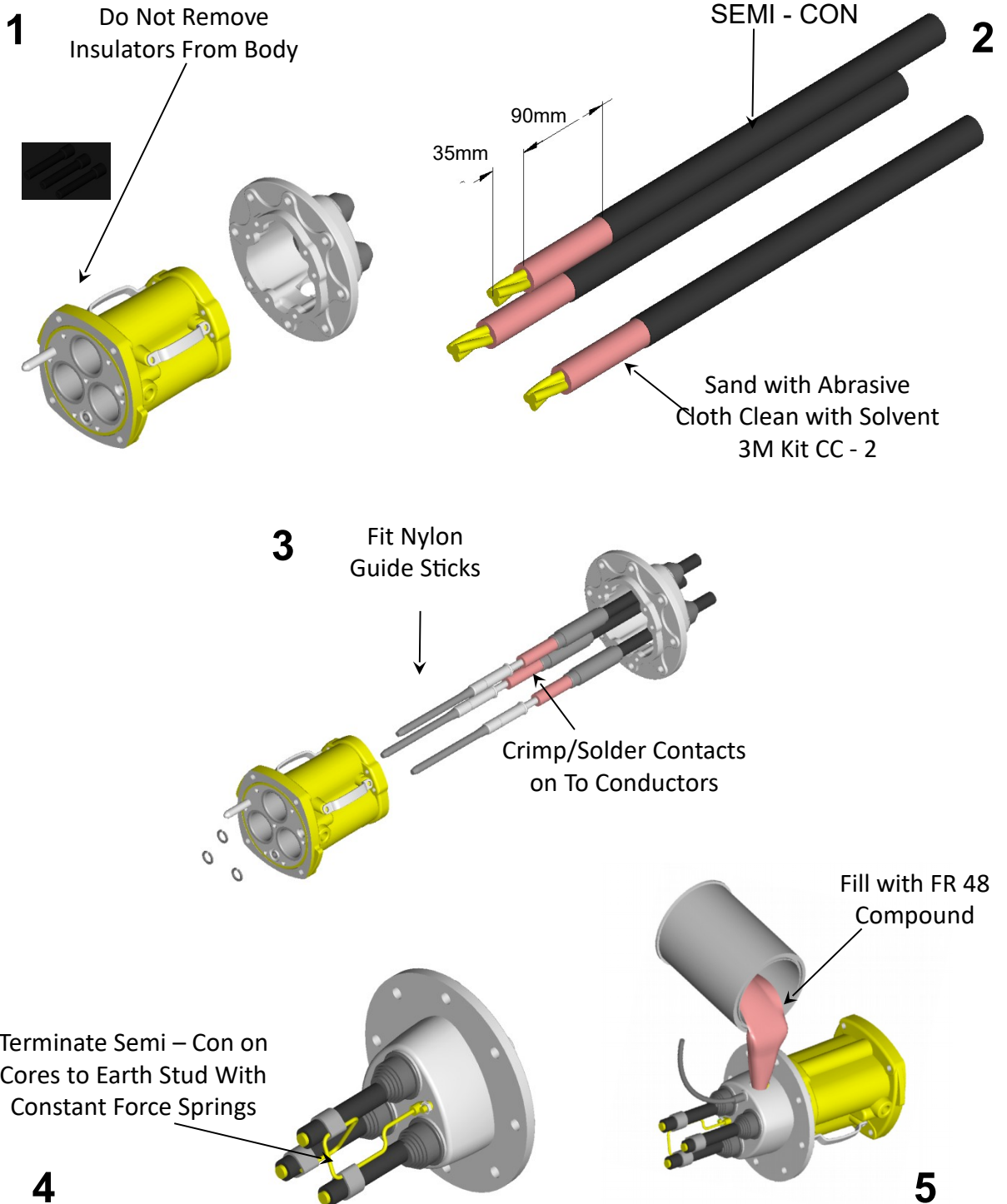
### Termination Procedure for Unarmoured cable



These instructions are intended for use by Competent Persons

## 6.6kV 800A Gear Mount Adaptor

### Termination Procedure for Adaptor

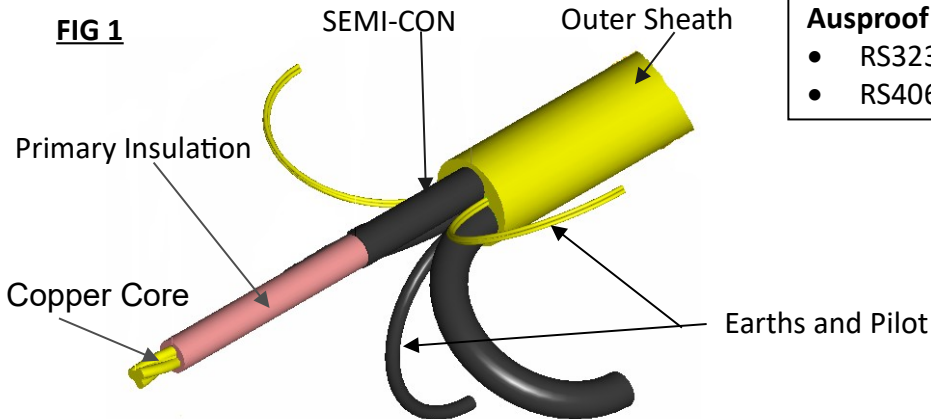


These instructions are intended for use by Competent Persons.

# High Voltage Stress Relief Instructions

## 6.6kV Unarmoured Cable

**FIG 1**



**Ausproof Termination Kits**

- RS323
- RS406

**FIG 2**

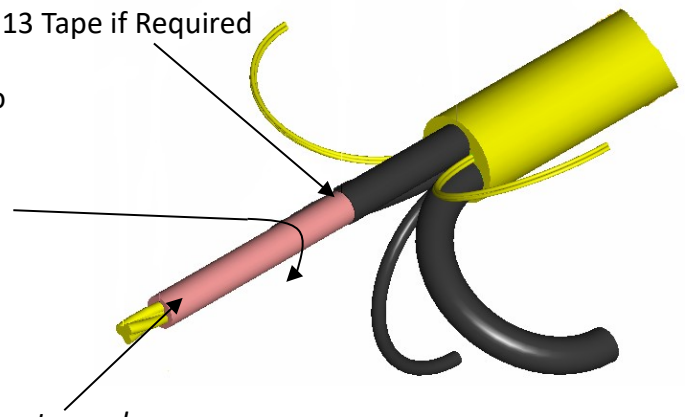
Lightly Sand with Abrasive Cloth to remove any remaining Semi-conductive material.

**Note:** Direction of sanding must be around insulation.

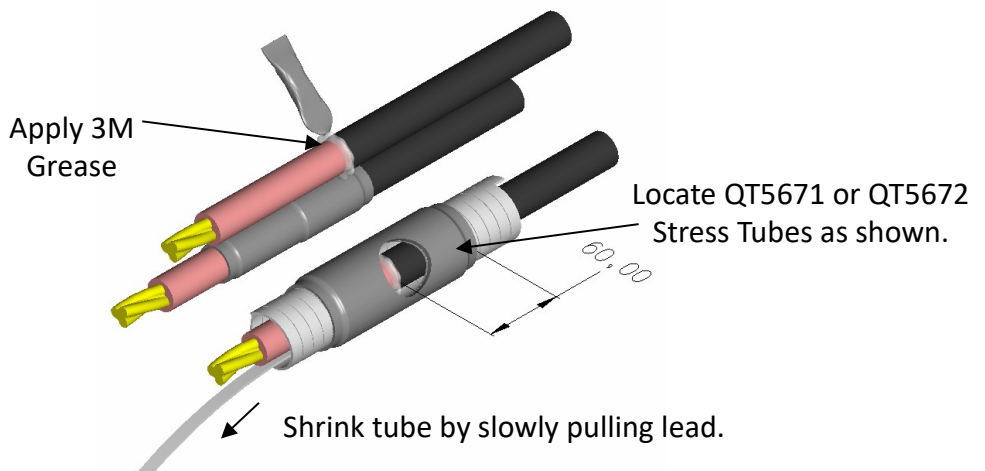
Clean with Solvent  
3M Kit CC-2

**Note:** Wipe from copper core toward semi-con only

Repair end of Semi-Con  
With 13 Tape if Required



**FIG 3**



These instructions are intended for use by Competent Persons.

To ensure the safe operation of the mining couplers, personnel should be aware of minimal ongoing care and maintenance.

- When cables are not in use, ensure that a cast protection end cover is fitted that provides adequate sealing against moisture.
- Ensure that witness marks are brightly painted on the sheath, located where the cable enters the gland. This needs to be routinely inspected to check if a gap appears between the end of the gland and the witness mark.
- A gap may indicate that the cable has been under tension and that the termination in the coupler may have moved.
- The coupler should never be used as a towing or anchor point.
- Ensure that the connector pins have firm contact pressure or grip on the male pin in the coupler. If grip/ pressure is loose then new connectors are required.
- Before bolting couplers together or before fitting an end cover, ensure that the face sealing ring is located correctly in the groove.
- On each occasion before the couplers are bolted together, inspect the male the male pin in the coupler for obvious signs of damage. Also inspect the location of the nylon locking circlip to ensure that it is evenly fitted onto the contact.
- If the circlip appears dislocated or damaged then repairs are necessary. This event indicates that the termination in the coupler has been under tension possibly as a result of handling.
- On regular intervals of up to 12 months, the tension on the gland housing compression ring needs to be maintained. This process requires that the cable clamp be removed and the four compression ring bolts tensioned.