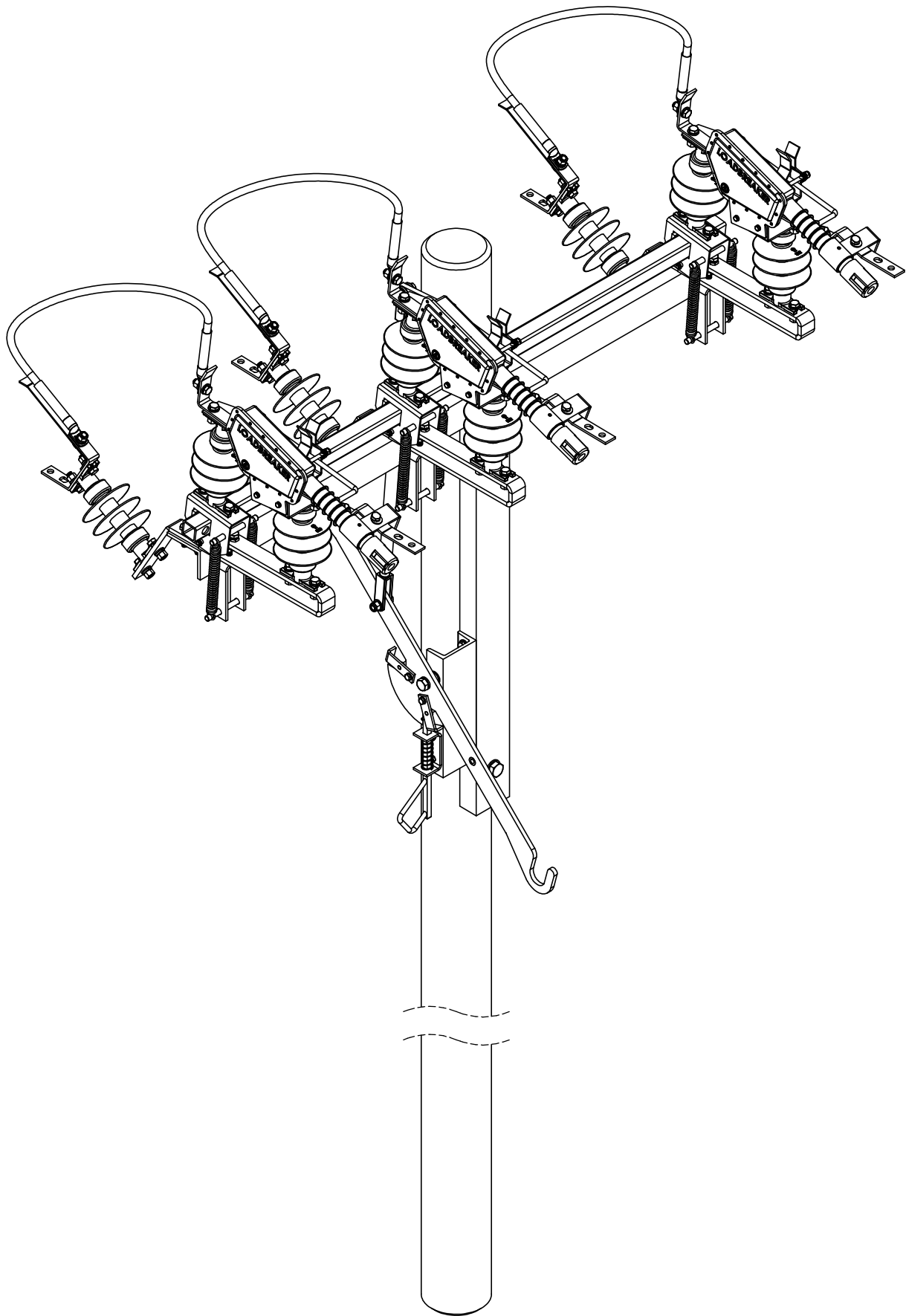
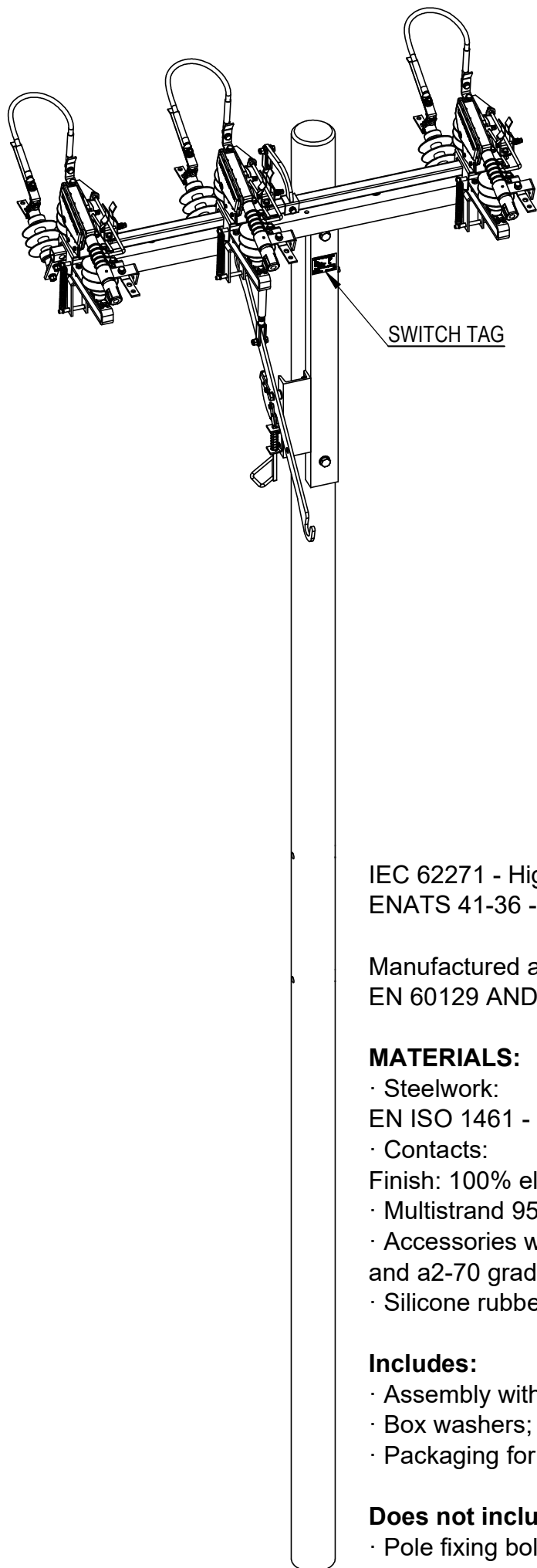


AIR BREAK SWITCH DISCONNECTOR

CAT 0 – 11 KV ABSD



Allied Insulators



ABSD LONG T PIECE

- Operating pole length 855 mm
- Crossarm 1500 mm
- Coupling tube 1600 mm
- Pole t piece 475 mm width 1200 mm length
- Crank 270 mm displacement
- Remote handle
- Phase unit assembly includes 3x11kv post insulator units

87	
AIR BREAK SWITCH DISCONNECTOR	
TYPE	
CATEGORY	
RATED VOLTAGE	
RATED NORMAL CURRENT	
RATED SC MAKING CURRENT (peak)	
RATED ST WITHSTAND CURRENT	
SERIAL No.	DATE
MADE IN ENGLAND	
www.alliedinsulators.com	
 Allied Insulators	
67	

IEC 62271 - High Voltage Switchgear and Control Gear
ENATS 41-36 - Distribution Switchgear for service up to 38KV

Manufactured and tested in accordance with IEC 60694, IEC 62271, BS EN 60129 AND ENATS 41-36

MATERIALS:

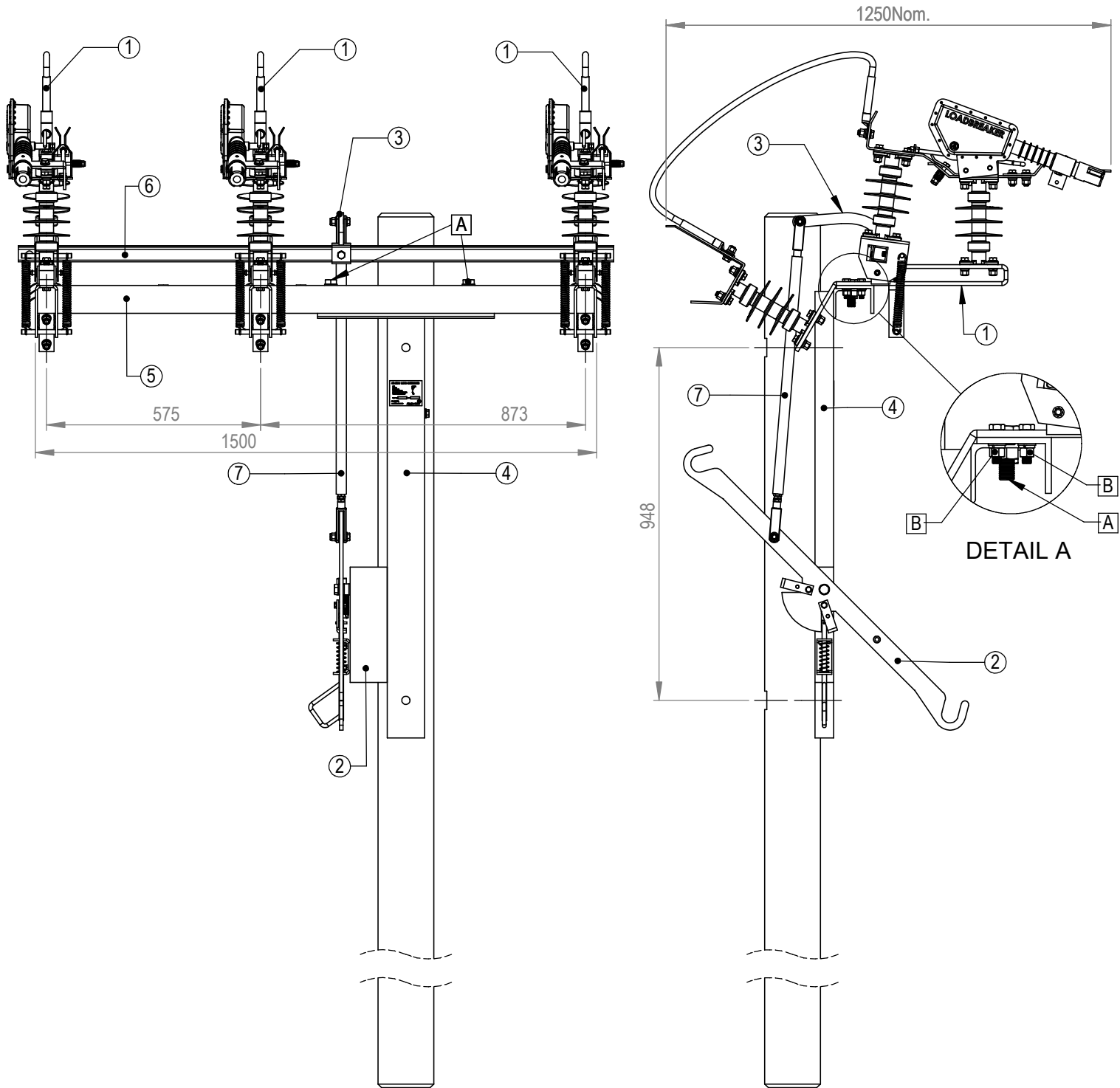
- Steelwork:
EN ISO 1461 - hot dipped galvanized;
- Contacts:
Finish: 100% electro tin to BS 1872;
- Multistrand 95mm² PVC sheathed copper cable;
- Accessories with bolts, nuts and washers in class 8.8 galvanized steel and a2-70 grade stainless;
- Silicone rubber composite insulators.

Includes:

- Assembly with bolts, nuts and washers;
- Box washers;
- Packaging for transportation (wood in accordance with standards).

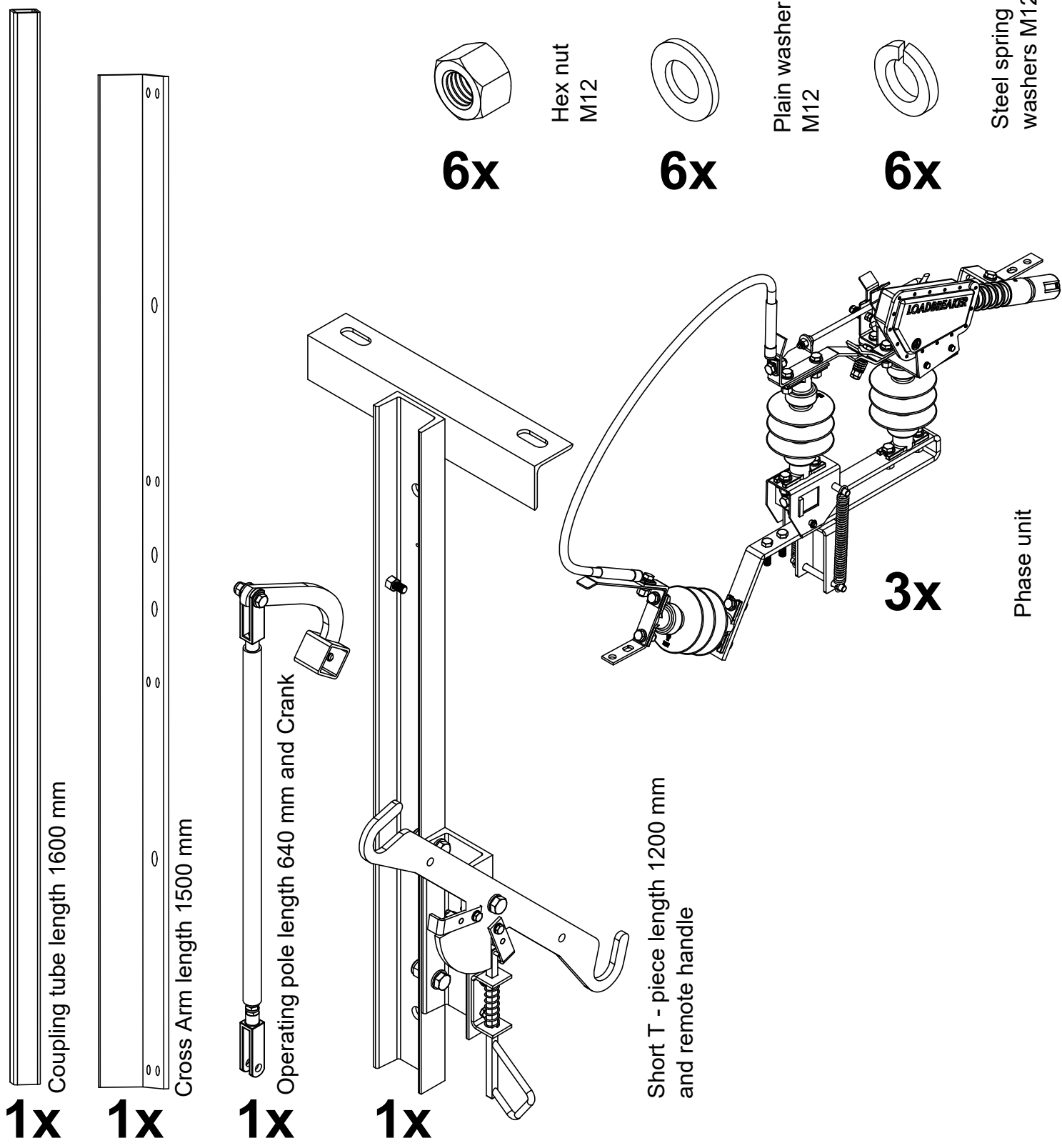
Does not include:

- Pole fixing bolts.



REF.	PART DESCRIPTION	QTY.	WEIGHT (kg)
1	PHASE UNIT	3	18.00
2	REMOTE HANDLE	1	0.00
3	CRANK	1	1.15
4	T- PIECE	1	8.20
5	CROSS ARM	1	15.60
6	COUPLING TUBE	1	6.40
7	OPERATING POLE	1	8.00
		9	57.35

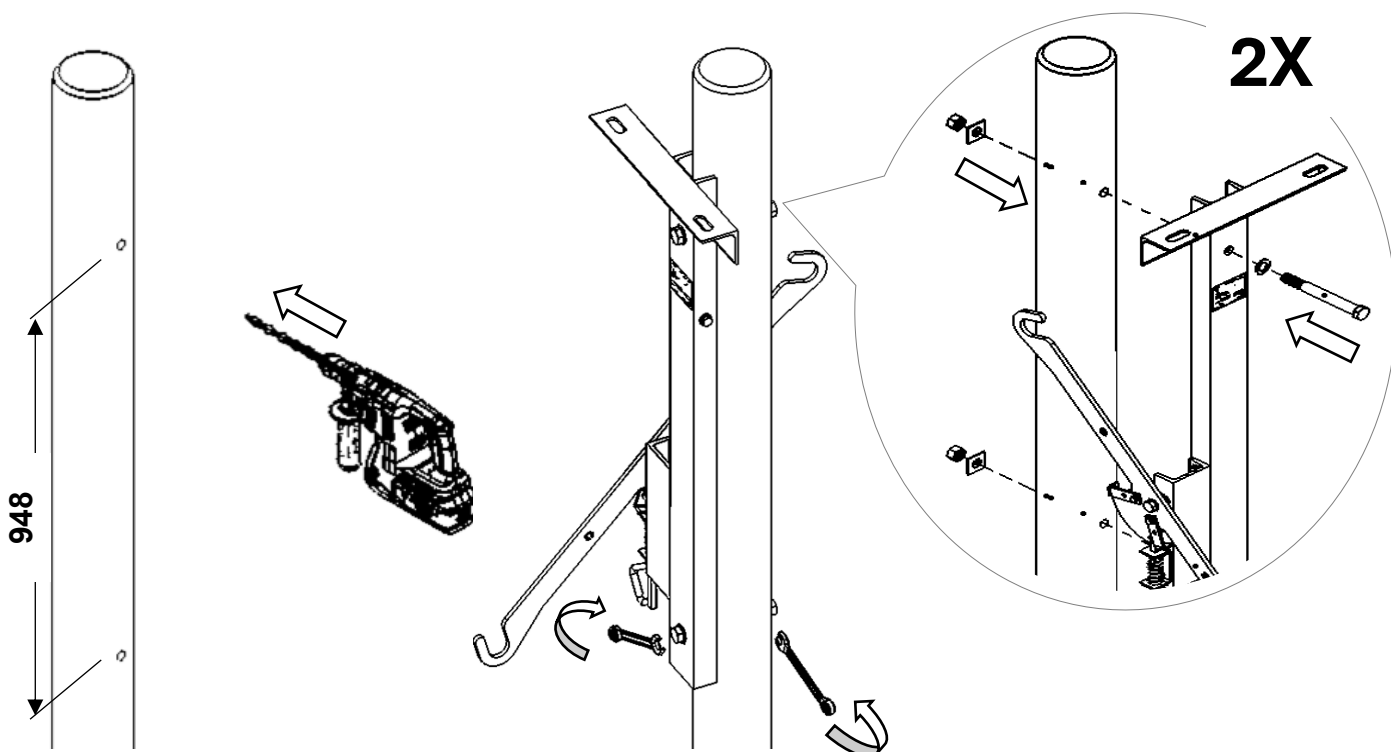
	REF.	ELEMENTS	MATERIAL	QTY.	WEIGHT (kg)
ABSD KIT	A	SCREW M20X60	GALVANIZED STEEL	2	0.8
		WASHER M20			
		NUT M20			
		BOX WASHER			
	B	WASHER 2XM12	A2-70	6	
		NUT M12			
		STEEL SPRING WASHER 12 mm			



6 STEP ABSD INSTALLATION

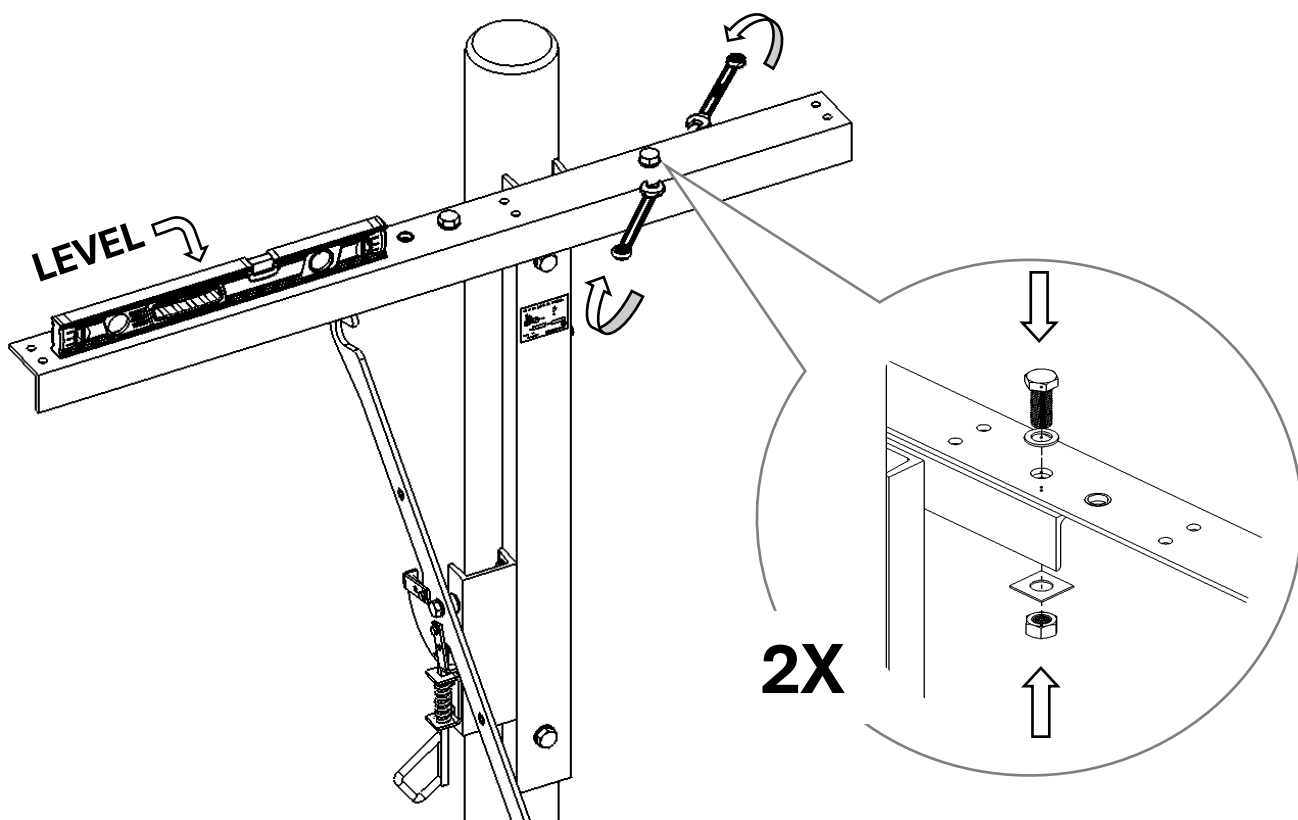
1

Drill pole & fix **Main T Piece** using 2xM20 Pole Bolts. (Not included)



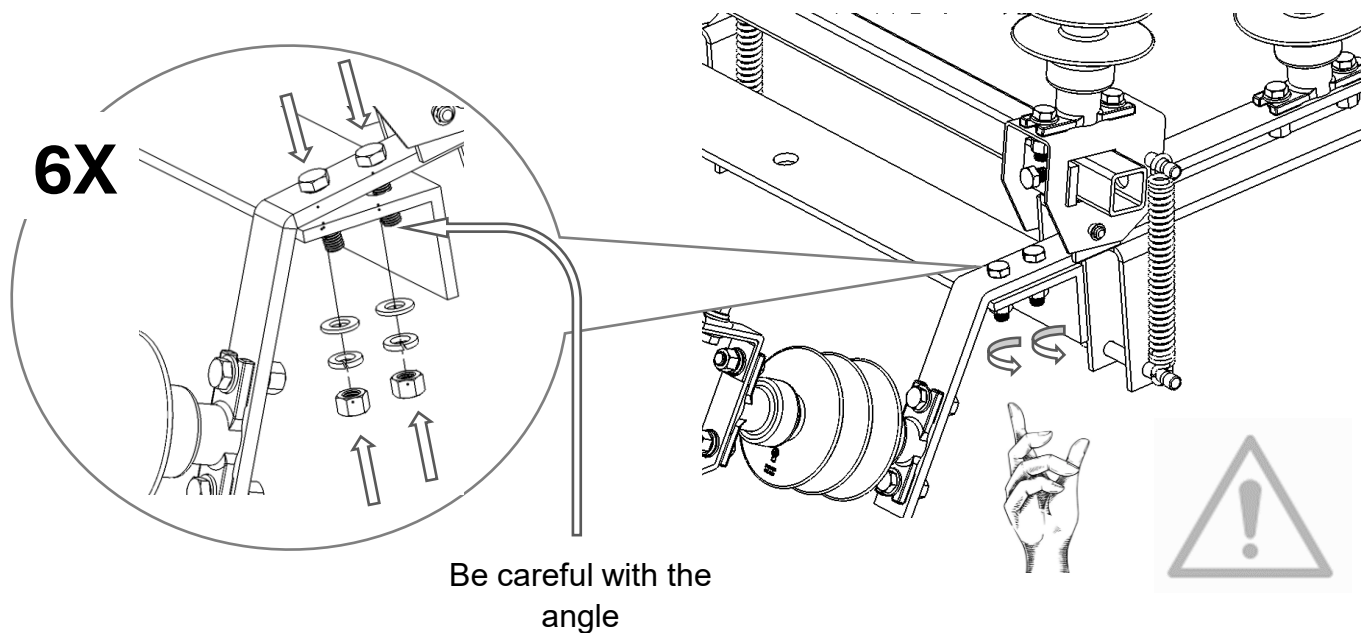
2

Fix **Cross arm** (either Left or Right Handed depending on preference or obstructions) using 2 x M20 Fixing Bolts. Crossarm must be level.



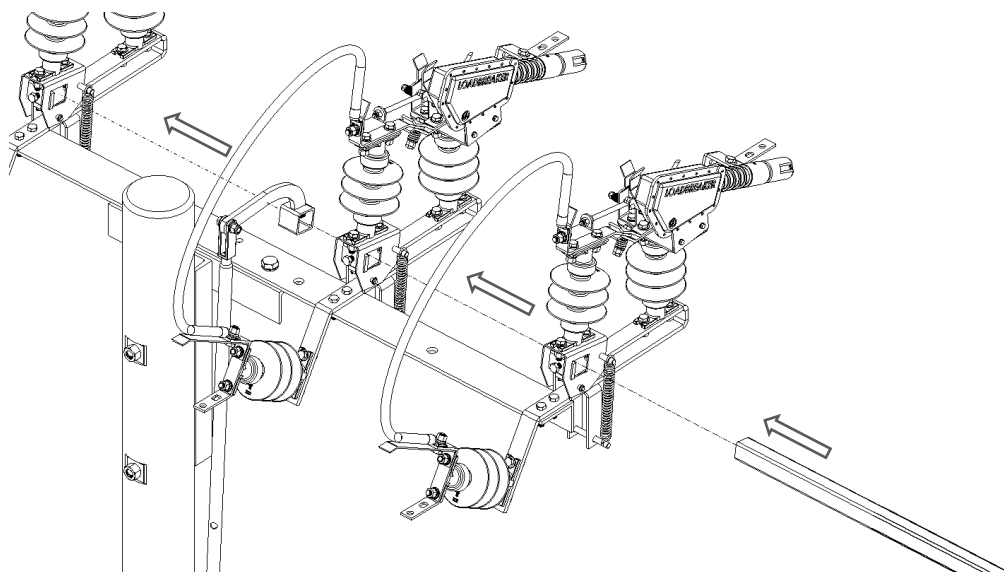
3

Mount Phase Units and loosely fasten M12 fixing nuts by hand.

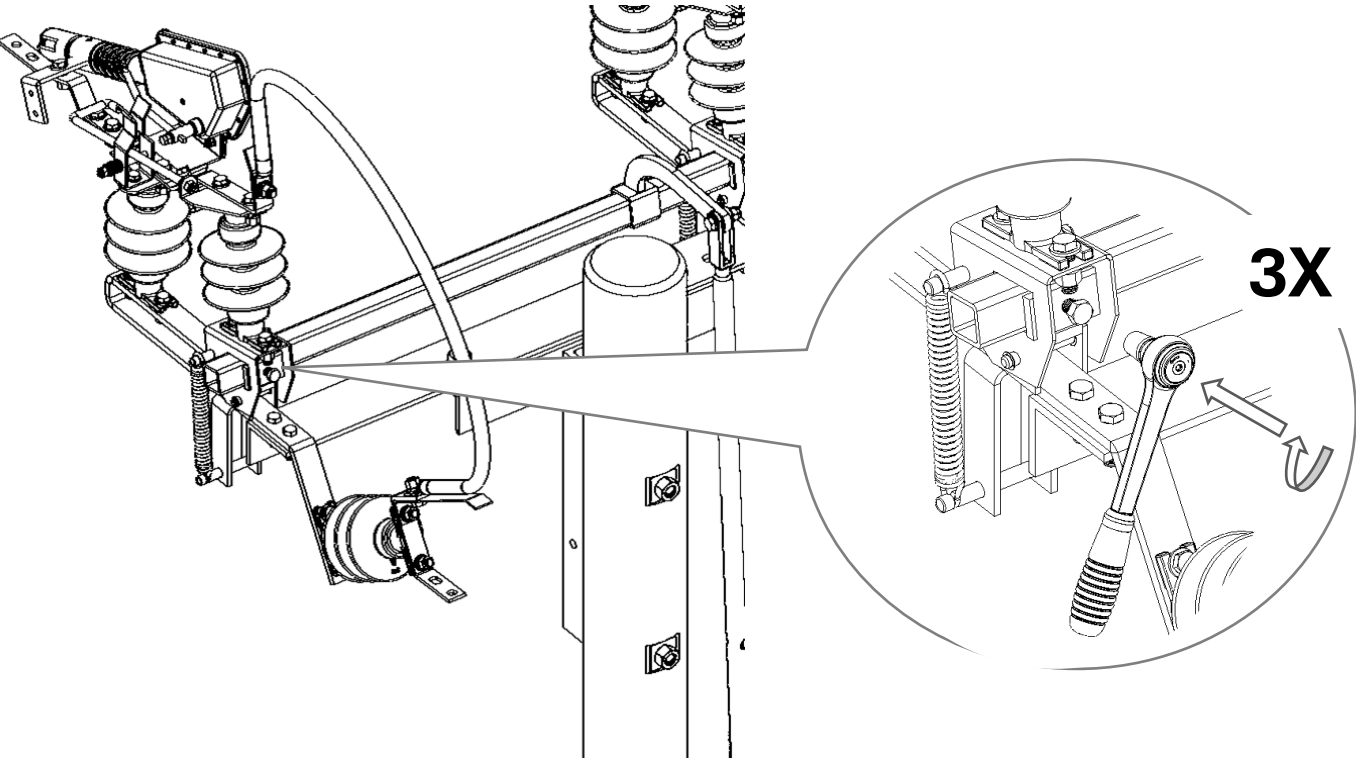


4

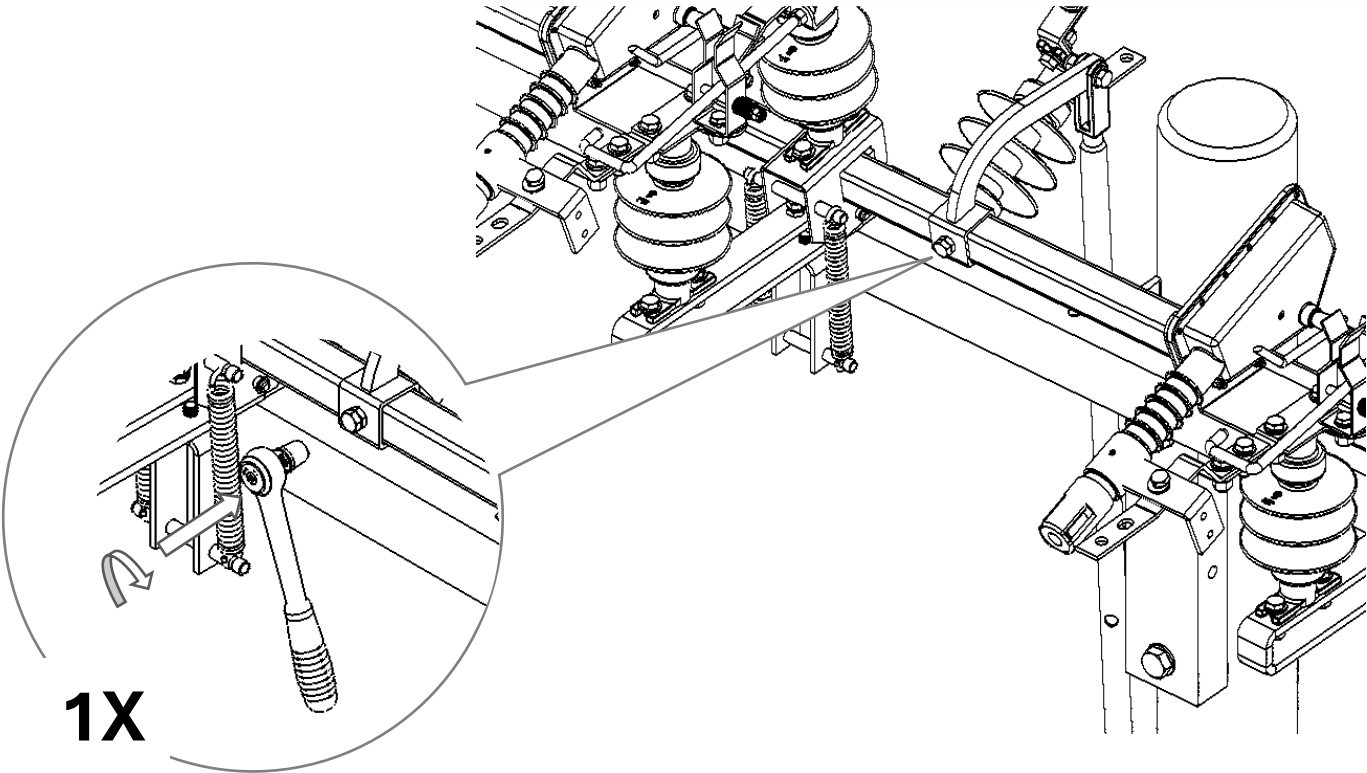
Slide **Coupling Tube** ensuring Crank is fitted in line with the handle & the crank bar on top. Align **Coupling Tube** ensuring sufficient overhang each end and tighten fixing bolts in the following order → [Phase Units and crank to Coupling Tube] → [Phase Units to Crossarm].



BOLT TIGHTENING SEQUENCE:

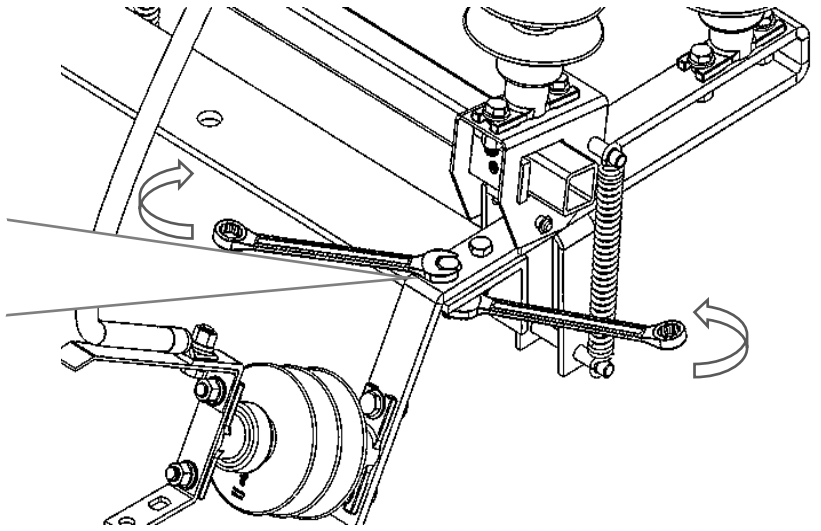
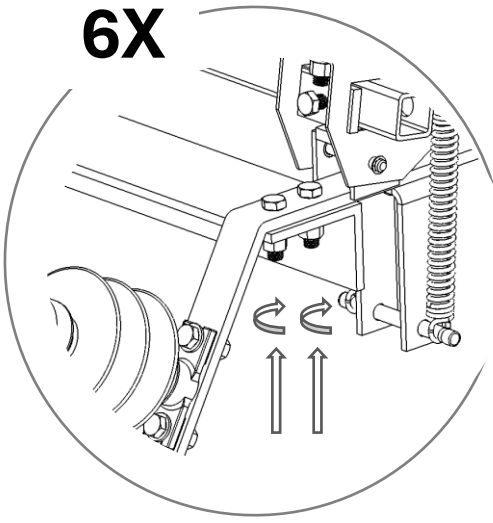


A - Phase Units to Coupling Tube



B - Crank to Coupling Tube

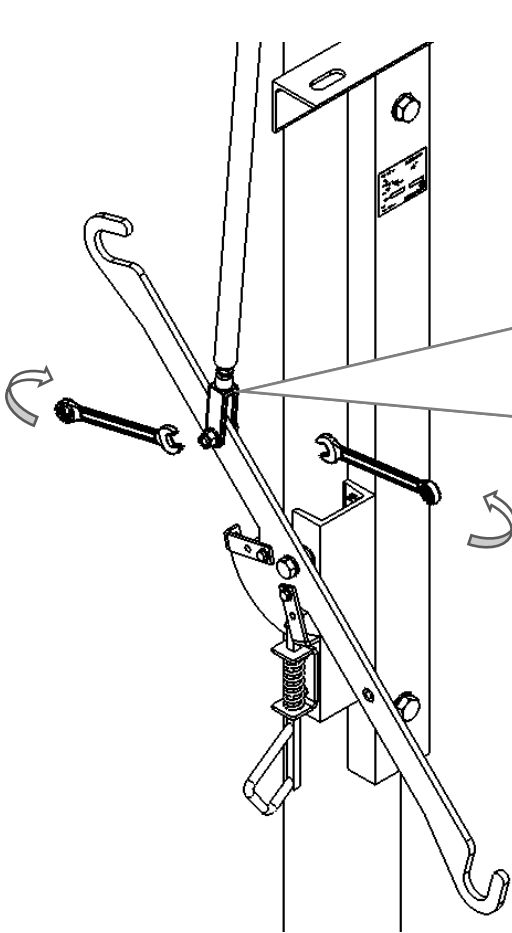
6X



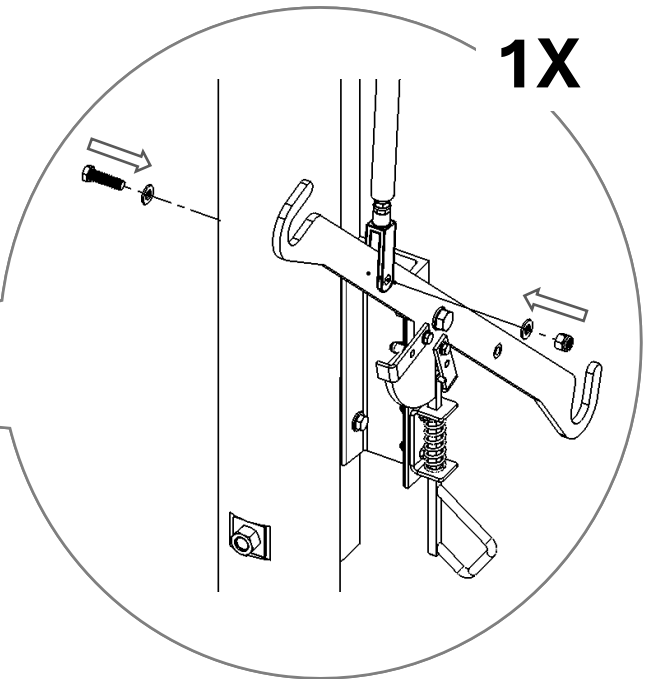
C - Phase Units to Crossarm.

6

Connect the **Operating Link** to the **Remote Handle** and tighten the lock nut. Do not over tighten. Mark position of the fixing holes. Ensuring free movement of the ABSD Handle at all times.



1X



Adjustment should not be required as all ABSD's are factory set, but if necessary minor adjustment can be achieved via the threaded end fitting on the Operating Link

WARNING!

CAUTION – When the ABSD is in the open position the springs are charged and pose a pinching and shearing danger. Ensure all tools, clothing and personnel are clear prior to operation of the ABSD. (Applies to Independent Manual ABSD Only)



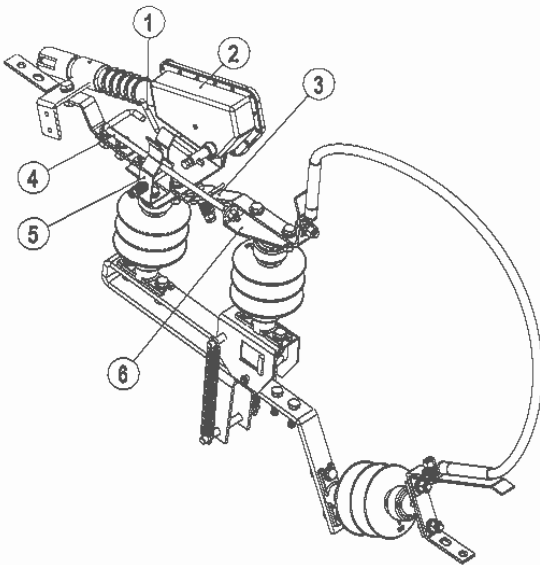
COMMISSIONING CHECKS

The ABSD has been fully assembled, bench tested, operated and checked prior to delivery to site hence commissioning on site should be a simple matter of checking for the following

- Ensure no damage has occurred in transit and nothing is obviously misaligned.
- Check all bolts for tightness and ensure free movement in handle and operating link.
- Check alignment of the main contacts and load break head.
- Check all moving parts are adequately lubricated and free to move.

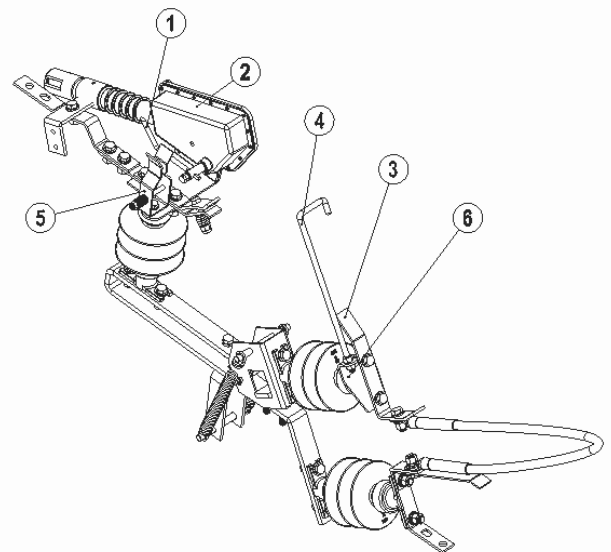
LOADBREAKER OPERATION

- When the ABSD is closed the Arcing horn sweeps past the Loadbreaker operating lever and sits ready for the opening sequence. **Ensure the Arc horn is aligned to engage with the Loadbreaker operating lever.**
- The Loadbreaker & Arcing horn are not in circuit when the ABSD is closed.
- As the ABSD is opened the Arcing horn engages the Loadbreaker operating lever and transfers the load through the Loadbreaker as the main ABSD contacts separate.
- At a given moment during the opening cycle the rotation of the Loadbreaker operating lever operates the load break device thus breaking the circuit load.
- The arcing horn then sweeps clear of the Loadbreaker operating lever and the Loadbreaker automatically resets ready for the next operation.



ABSD
Position is closed

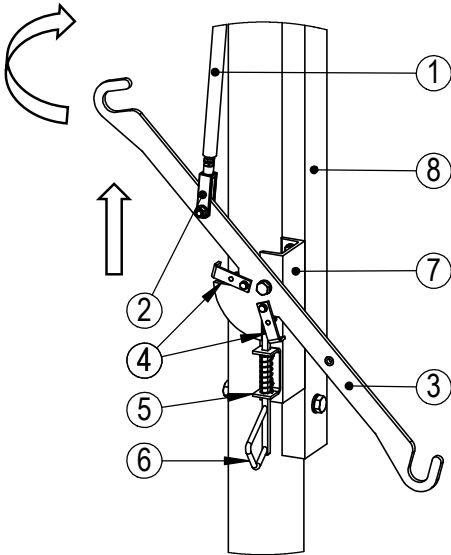
- 1 - Loadbreaker Handle
- 2 - Loadbreaker Head
- 3 - Main Contacts



ABSD
Position is open

- 4 - Arc Horn Rod Male
- 5 - Arc Horn Contactor Female
- 6 - Arc Horn Male Mounting Bracket

OPERATING INSTRUCTIONS



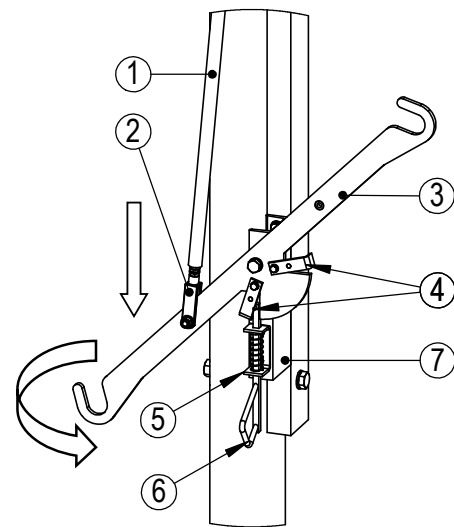
Remote Handle (ABSD position is closed)

- 1 - Tube
- 2 - Threaded clevis
- 3 - Operating arm
- 4 - Sprung latch

TO CLOSE THE ABSD

- Pull down on the Indexing bolt (the spring latch moves into position)
- Using a decisive positive action pull down on the upper main operating arm hook
- As the switch moves over TDC the springs will assist the closing of the ABSD
- The Indexing bolt will now have re engaged preventing further operation.

The switch contacts are visibly closed



Remote Handle (ABSD position is open)

- 5 - Index bolt support bracket
- 6 - Indexing bolt
- 7 - Operating arm mounting
- 8 - Pole t piece

TO OPEN THE ABSD

- Pull down on the Indexing bolt (the spring latch moves into position to retain the indexing bolt)
- Using a decisive positive action pull down on the upper main operating arm hook (note there is a certain degree of force required to overcome the spring tension)
- The indexing bolt will now have re-engaged preventing further operation.

The switch contacts are visibly open



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