



# Universal Lifter - Insulated Pole or Crossarm User Guide

ELECTRICAL+INDUSTRIAL | TOOLS+TECHNOLOGIES

**TMAC**<sup>TM</sup>  
THEW &  
McCANN  
GROUP

ACTIVE INNOVATION



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## BEFORE YOU START

### GENERAL PRECAUTIONS



**Read and understand this guide before operating this equipment.**

The TMAC Universal Lifter is to be used only by competent personnel and must be used in conjunction with the user's own working and safety procedures, without compromising the integrity of the TMAC product supplied.

Follow all safety instructions contained within this guide.

## COMPETENT PERSON

A Competent person is one who is familiar with the installation, construction, operation or maintenance of the equipment and the hazards involved. In addition, this person is competent, trained and authorized to undertake the work involved in accordance with established safety and working procedures.

### SAFETY SYMBOLS USED IN THE GUIDE



**Mandatory Action** - This symbol indicates the action must be taken to avoid a hazard. Any information that follows this symbol must be obeyed to avoid possible harm.



**Hazard Identification** - This is a general warning sign. It is used to alert the user to potential hazards. Any information that follows this symbol must be obeyed to avoid possible harm.



**Prohibition** - This symbol indicates an action that must not be taken or must be stopped. Any information that follows this symbol must be obeyed to avoid possible harm.

## GENERAL INFORMATION

### DESCRIPTION

The TMAC Universal Lifter - Insulated is designed to raise overhead conductors from the existing support in preparation for cross arm or insulator replacement. It is manufactured from a glass filled nylon with a composite Arm and webbing securing straps with ratchet tightening. It may be mounted on round wood, steel, or concrete poles or on the cross arm or pole extension arm.



**Prohibition** – This Universal Lifter - Insulated is not to be used in association with energised conductors. The device can be used on **de-energised** LV and HV lines **ONLY** providing the WLL is not exceeded.



**Hazard Identification** – The Lifting Arm has two (2) positions to accommodate various work practices. If changing the lifting head height ensure the lower section is nestled on the locating pin to ensure there is no slippage when under load. Each bracket must be tightened evenly to ensure the security of the lifting head.

### PRODUCT INFORMATION

The kit is supplied with the one mounting base and can be used as follows: -

#### 1 Pole mounted version.



## 2 Cross arm mounted version

### 2.1 Horizontal Crossarm.



### 2.2 Vertical Crossarm



## SAFETY

### WORKING LOAD LIMITS

#### Pole or cross arm mounted

- W.L.L: - 250 kg
- Pole Diameters: - 240 mm to 400 mm
- Crossarm:- 100mm X 100mm Minimum.
- Crossarm:- 125mm x 125mm Maximum

#### NOTE

*W.L.L. constraints may be imposed by the structural integrity of the mounting support be it pole or cross arm. The integrity of such support must be identified prior to use of the Universal Lifter - Insulated.*

#### Before Use



Each time a Universal Lifter - Insulated is used, all its components, including the webbing strapping, must be examined for any visible sign of damage or deterioration.



**NEVER** use the Universal Lifter if any component is damaged, worn or faulty.

## OPERATION

### WEIGHT



**The Universal Lifter – Insulated** – The total weight of the Lifter including the Lifting Arm, Bracket, Straps and Ratchet is 14kg.

Before carrying the Lifter, ensure the manual handling risks are assessed in accordance with working and safety procedures.

### CARRYING AND HAULING THE UNIVERSAL LIFTER TO POSITION

The Lifter may be conveniently carried by the handle of the attached Ratchet and can be hauled up into position with a rope attached to the ratchet handle..



## ATTACHING THE LIFTER TO THE POLE



**Pole Sizes and Types** - The suitable pole diameter range is 240 to 400 mm, in timber, concrete or steel.

1. Fully inspect the pole to which the Lifter is to be attached to ensure it is capable of supporting the required load;
2. Attach the hauling rope to the handle of the ratchet to raise to the required position;
3. Pass first the Upper Strap around the pole and hook to the lower bolt on the upper ratchet device. Secure firmly to the pole using the Ratchet Device;
4. Remove the hauling rope, Secure the Lower Strap and tighten with the Ratchet Device;
5. Ensure both straps are horizontal on the pole and located in the groove for the straps. Adjust both Ratchets as required.
6. Attach the hauling rope to the Insulated Arm and lift into position. Insert into the socket in the Bracket and ensure it is seated all the way down to the base of the hole.
7. Check that the Bracket is secured to the pole safely and that it is in a position where it can support the required load without dangerous movement.
8. To release the strap once work has completed rotate the ratchet into the fully upright position and pull on the loose end of the webbing strap which will release the tension. Feed the strap through the ratchet until you can release the hook. Repeat this operation for the other ratchet.



Figure 1 - Pole and Vertical Crossarm Orientation



## ATTACHING THE LIFTER TO EITHER HORIZONTAL OR VERTICAL CROSS ARM



**Cross Arm Sizes and Types** - The suitable cross arm size range is minimum width 100mm to 125mm and of sufficient strength to support the load to be applied.

1. Fully inspect the cross-arm to which the Lifter is to be attached to ensure it is capable of supporting the required load.
2. Check to ensure that there are not any sharp edges on the section of the cross arm to which the Lifter is to be attached.
3. Attach the hauling rope to one of the handles of the ratchet device and lift the bracket into position.
4. Fit the Bracket onto the cross arm, pass the strap around the cross arm and hook the tail end of the strap onto the bolt of the Ratchet Device. Tighten the Ratchet Device to a suitable degree. Repeat with second strap.



5. Attach the hauling line to the top of the lifting arm and haul into position.
6. Insert the Arm into the receptacle provided on the Bracket and ensure the arm rests on the base of the hole.
7. Remove the hauling rope from the lifting arm.
8. Check that the Bracket is secured to the cross arm safely and that it is in a position where it can support the required load without dangerous movement.

## CHANGING THE HEAD HEIGHT



**Hazard Identification** – Make sure the locating socket headed bolt is nestled in its locator on the bottom of the lifting head before evenly tightening the support brackets.

1. You have two (2) lifting heights for the eye bolt. The lower level height is 985mm from the base of the lifting arm whilst the upper level is 1350mm from the base.
2. Remove all four (4) socket headed bolts on the Lifting Head holding it to the arm.
3. Move the Lifting Head to the new height; ensure the locating socket head bolt is located into the bottom slot on the Lifting Head.

4. Replace all four (4) socket headed bolt and tighten evenly.
5. Ensure the locating socket headed bolt is in the bottom slot of the Lifting Head as this will prevent any slippage during load operations.

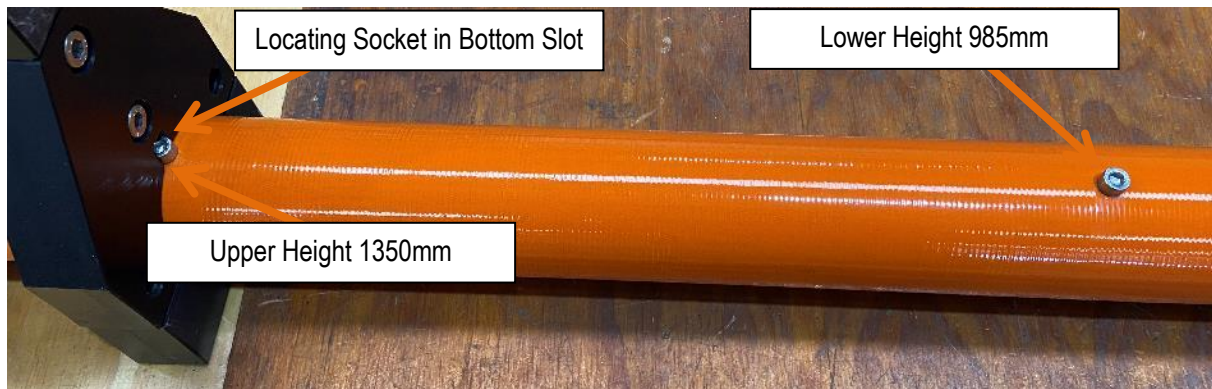
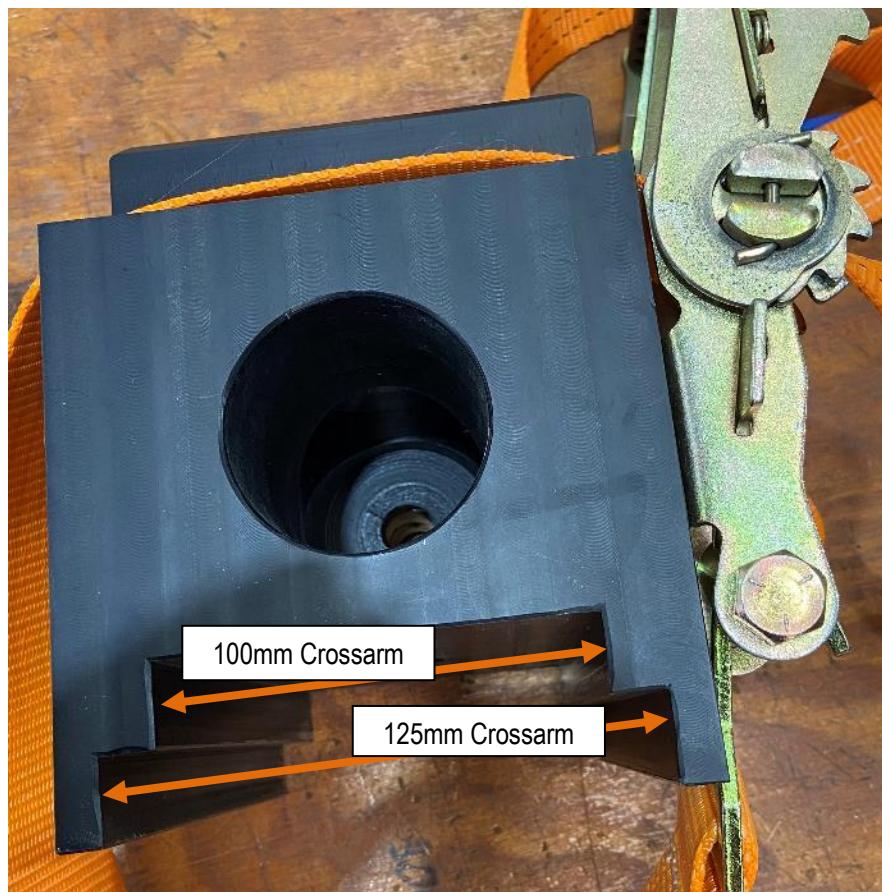


Figure 2 - Height Positions on Lifting Arm



## STORAGE

When not in use, the the Universal Lifter and associated Brackets should be secured to the vehicle to avoid unnecessary movement, which could impair the integrity of the Lifter.

## ROUTINE MAINTENANCE & INSPECTIONS



Every 6 months and irrespective of use, the Lifter must be inspected.

- Clean off any excessive dirt with mild soapy water, rinse and allow to dry;
- Check the Bracket and Arm for the following defects: Cracks, deformation, permanent bending and deterioration of the fibreglass arm;
- Check the ratchets, straps, hooks for damage or distortion;
- Check webbing straps for wear and or abrasion and replace as necessary. Abraded straps may not be used in any circumstances.

## REPAIR

The end user must not repair or modify any component associated with this device without written permission from TMAC.

If repair is required contact TMAC.

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## DEFECTS / WARRANTY

### DEFECTS

Goods are warranted to be free from defects. Provided they have been used strictly as recommended and subjected only to fair wear and tear, Goods (including parts within) which are found to be defective within 90 days after delivery to the Buyer will be repaired or replaced at the option of the Seller and at its expense. Repair or replacement by the Seller is the exclusive remedies of the Buyer.

### WARRANTY

To the maximum extent permitted by law, the Seller makes no warranties, either express or implied, as to merchantability, fitness for purpose or otherwise with respect to the Goods other than in paragraph above and as required by statute. The Seller is not liable for any prospective profits or special, indirect or consequential damages or any general loss or damage, or for any expense resulting from use by the Buyer or others of defective Goods. The Seller's liability is limited to no more than the sale price of the Goods plus replacement delivery charges. Prior authority for the return of goods is required by the seller.

Please contact the seller by email [sales@tmacgroup.com.au](mailto:sales@tmacgroup.com.au), phone 07 3826 6000 or fax 07 3826 6066 for claims related to defective / warranty of goods provided.

FOR THE FULL TERMS AND CONDITIONS PLEASE REFER TO TMAC "STANDARD TERMS OF TRADE"