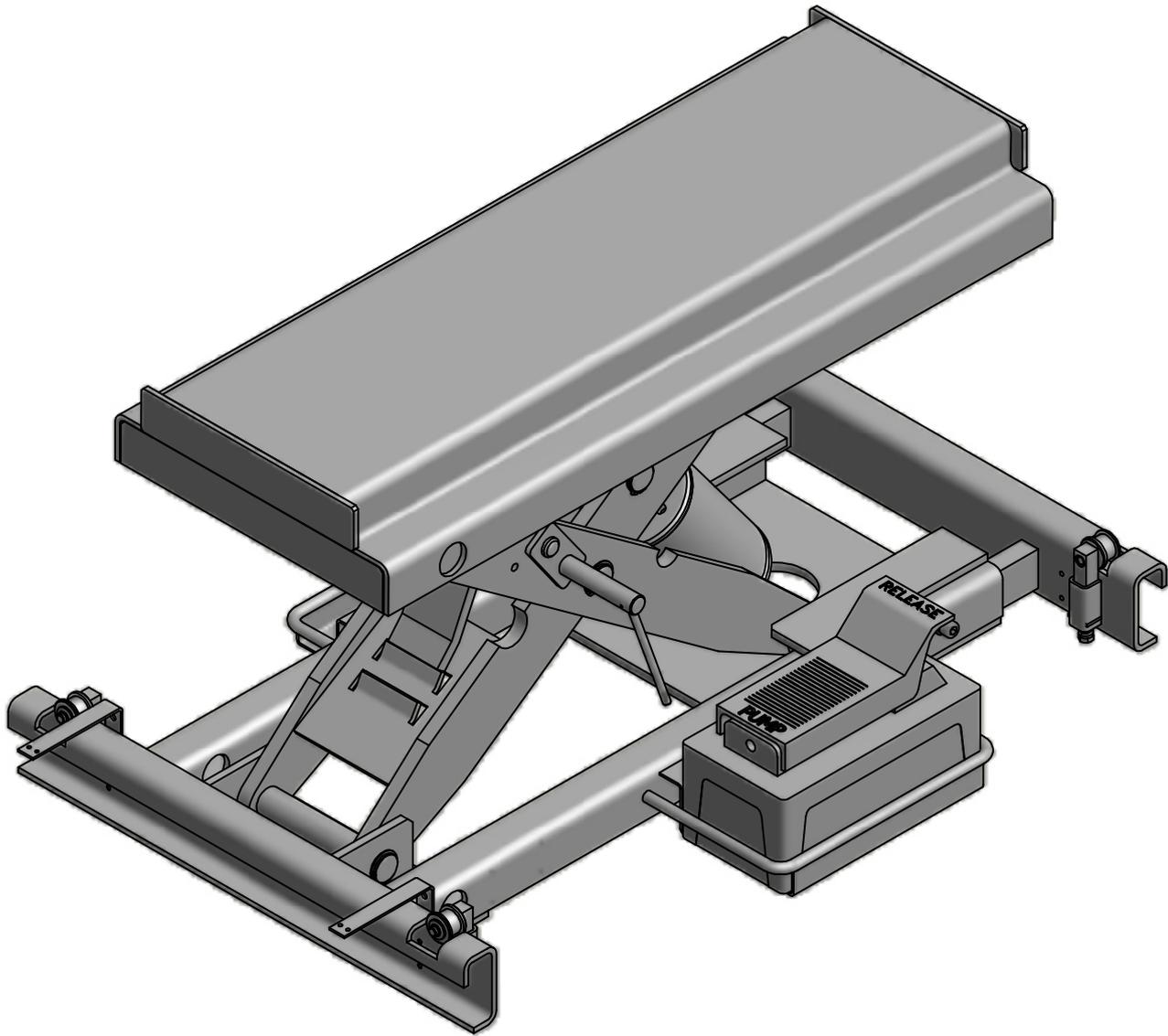


*Installation, operation  
maintenance instructions  
Molnar Air Jacking Beam*

# INSTRUCTIONS

*MICRO 3000*



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STENHØJ GROUP

The Air Jacking Beam is for use with Molnar SM450-A Four Post Hoists. Using a pair of Jacking Beams in tandem provides total 'wheels free' servicing options. The Air Jacking Beam utilises an air-over-hydraulic pump unit for quick, simple, strong and reliable lifting. The top beam includes sliding extension arms to suit a wide range of vehicles and pick-up points.





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## KEY

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	General warning
	Electrical hazard

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## OVERVIEW

The Air Jacking Beam is an auxiliary lifting mechanism for use with the SM450-a Molnar Four Post Hoist. Using a pair of Jacking Beams in tandem provides total 'wheels free' servicing options for these hoists.

Designed to address the operational constraints of the modern vehicle servicing workplace, the Air Jacking Beam utilises an air-over-hydraulic pump unit for quick, strong and reliable lifting. The top beam includes sliding extension arms to suit a wide range of vehicles and pick-up points. The unit is simple to operate and includes a range of features to maximise workshop safety and efficiency.

## FEATURES

- Simple installation on Molnar Four Post Hoists.
- 3 tonne lifting capacity per unit
- Compact yet powerful air powered hydraulic pump with pressure valve to prevent overloading.
- Rail guide system allows easy unit positioning but restricts movement once load applied.
- Active mechanical load hold mechanism to lock load at 3 lift height positions.
- Restricted load lowering speed to minimise possibility of injury.

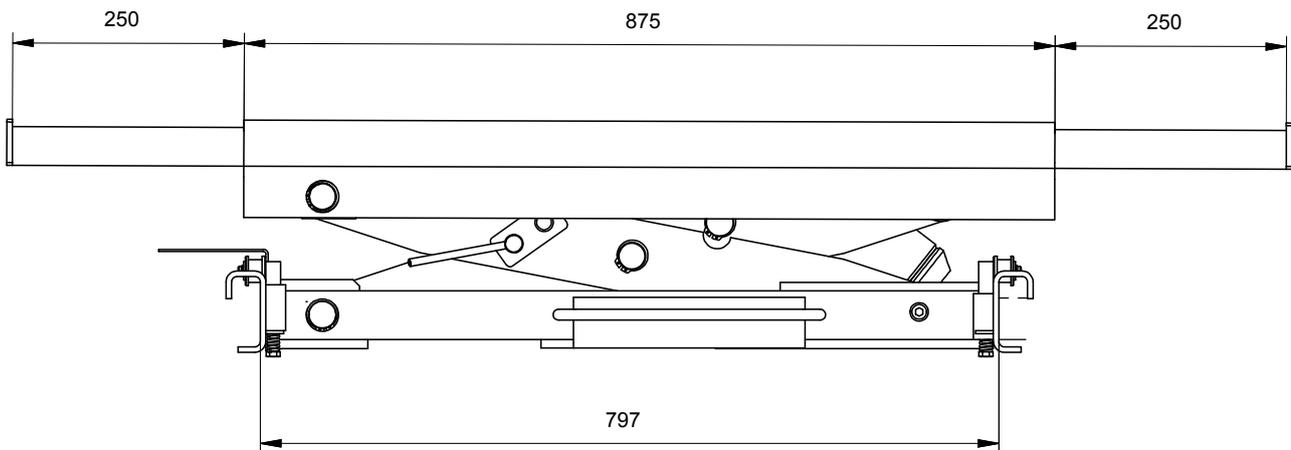
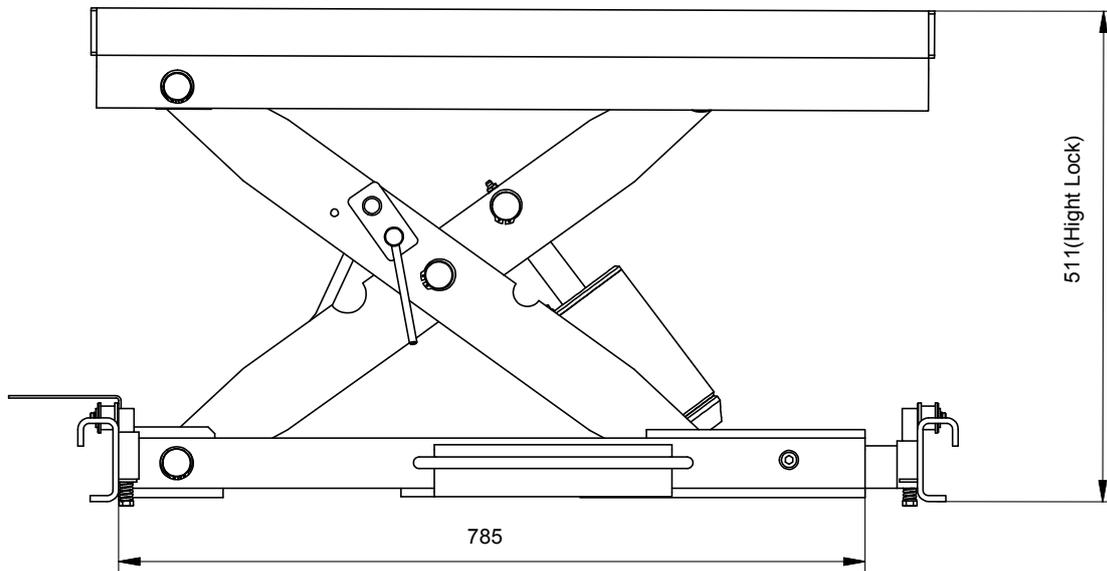
tray side rack for easy storage of pads or other additional lifting aids. The tray also features grasping zones to help when moving the unit.

- Four pick-up pads included with each unit, plus full range of accessories to ensure safe lifting for difficult applications.

*As the policy of Molnar is one of continuous improvement, the manufacturer reserves the right to change specifications without notice. Information is correct and true at time of printing (JULY 2011)*



## SPECIFICATIONS



TECHNICAL DATA	
<b>MODEL NO.</b>	<b>MICRO 3000</b>
<b>LIFTING CAPACITY</b>	<b>3000 kg</b>
<b>MAX.LIFTING HEIGHT</b>	<b>511 mm</b>
<b>MIN. HEIGHT</b>	<b>250 mm</b>



## SAFETY PRECAUTIONS

*For your own safety and the safety of equipment, always take the following precautions*

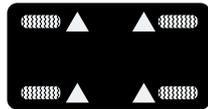
 Ensure you carefully read and understand the operation and safety instructions detailed in this Manual before using the equipment.



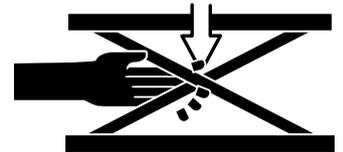
 Load must be locked at all times, except when raising or lowering.



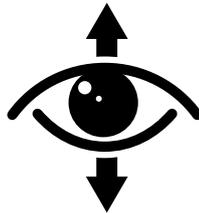
 Use only vehicle manufacturer's pick-up points.



 Keep hands or other obstructions free of the descending unit.



 Monitor vehicle, hoist and area before use and during operation of hoist. Ensure area is clear of any personnel or obstructions when raising or lowering.



 Unit requires clean (contaminate free) and dry regulated air supply at 7 Bar (100 psi) for correct operation. Unit failure resulting from contaminated air supply will void warranty.



 Do not exceed the rated lifting capacity of the unit (2000 kilograms per unit).



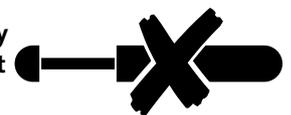
 Regular service and maintenance must be carried out as per the Maintenance requirements detailed in this Manual. Failure to do so may void warranty and cause risk of injury.



 Do not over tighten when closing the Pressure Valve.



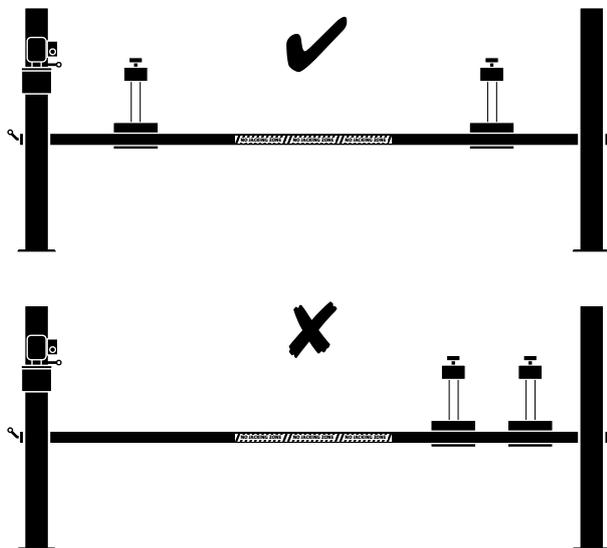
 The Hydraulic Pump contains no user serviceable parts and must not be serviced by unauthorised persons. Unit failure resulting from any unauthorised service will void warranty.





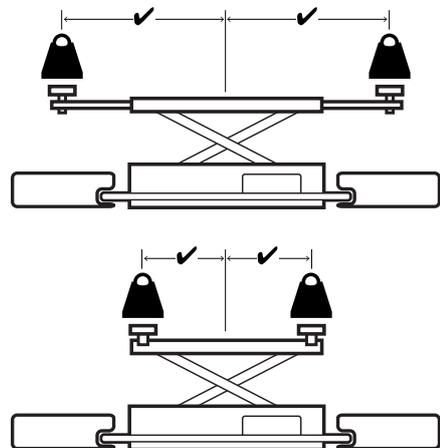
**Failure to comply with these precautions may result in loss of load, damage to unit and/or personal injury**

 **Never use more than one Air Jacking Beam to support load at each end of the hoist. Two units are required for safe lifting of a vehicle.**

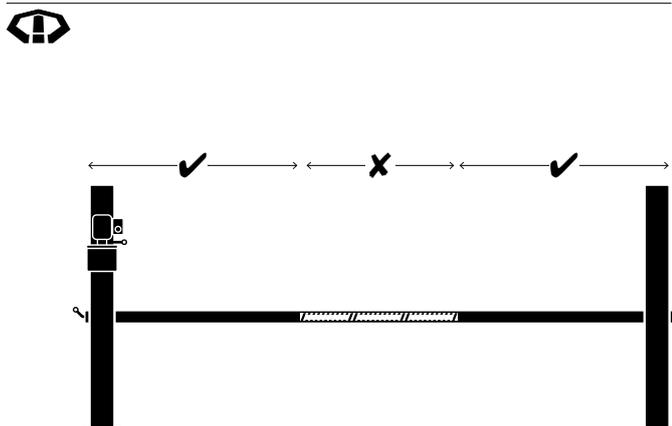
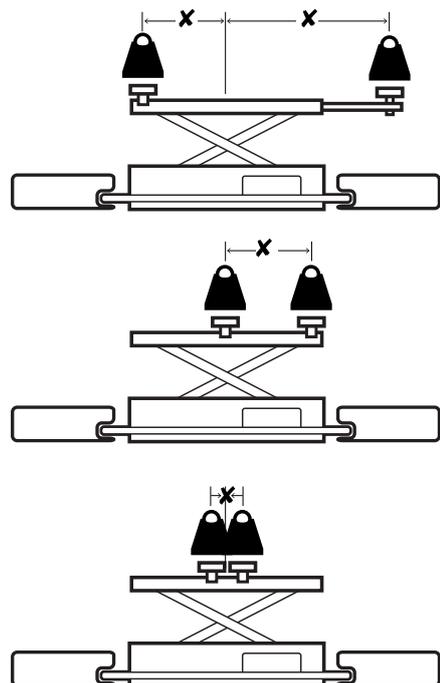


 **Supported load must be balanced equally above the centre of the Air Jacking Beam. Ensure that both sides of the Air Jacking Beam are equally loaded.**

**CORRECT**



**INCORRECT**





## OPERATION

### TO RAISE

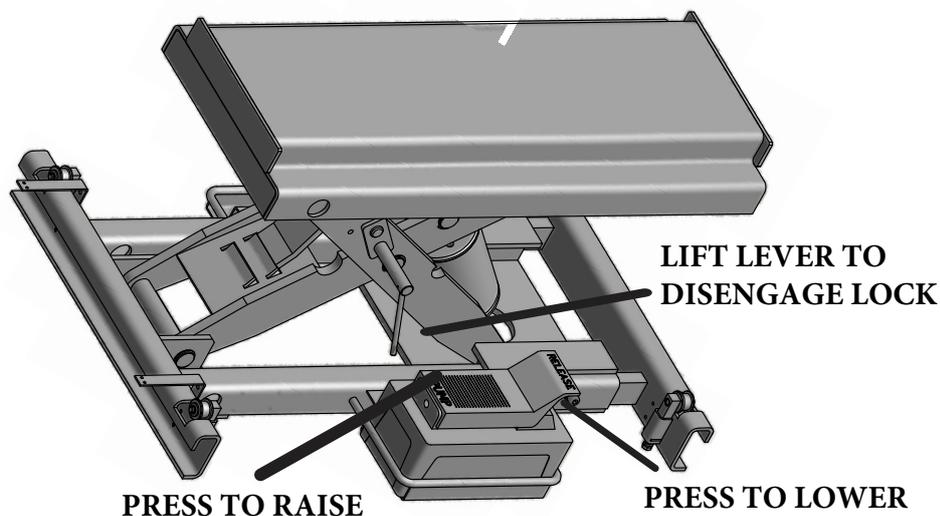
- 1 Raise vehicle to working height and engage hoist load locks.
- 2 Slide each Air Jacking Beam into position to correctly align with the vehicle manufacturer's pick up points.
- 3 Select the appropriate lifting pads and/or blocks and correctly position them on the upper frame of the Air Jacking Beam, or adjust the inbuilt extension arms to ensure the lifting pads contact the appropriate lifting points on the vehicle.
- 4 Connect the air supply (usually via a quick connect fitting) to the Air Jacking Beam.
- 5 Hold down the Control Lever to raise the Air Jacking Beam until the lifting pads almost touch vehicle pick-up points. Release the Control Button to stop.
- 6 Check the correct alignment of the lifting pads and re-position if necessary. Hold down the Control Button to continue raising the Air Jacking Beam until the lifting pads make contact.

### TO HOLD

- 1 Ensure Hold Lock lever is in ON position.  
**Note:** while raising, the Hold Lock lever will move in an anti-clockwise direction before returning to the vertical ON position as it passes the 3 lock positions.
- 2 Release Control Lever and open the Pressure Valve by pressing the release lever. The Jacking Beam will lower until load is held by the lock.
- 3 Close the Pressure Valve by releasing the lever. Check the lock is fully engaged (the Hold Lock lever should remain stationary).

### TO LOWER

- 1 Ensure that vehicle wheels are securely fastened, the Air Jacking Beam is clear of obstructions and the Pressure Valve is closed.
- 2 Hold down the Control Lever to raise the Air Jacking Beam approximately 50 mm.
- 3 Manually hold the Hold Lock lever in the OFF position (requires approximately 25 mm of vertical lift to disengage the lock).
- 4 TO lower, press and hold the release lever. Do not release the Hold Lock lever until the Air Jacking Beam is fully lowered.
- 5 Remove all lifting pads and blocks. Slide the extension arms back into unit before moving the Air Jacking Beam or the vehicle.
- 6 Remove the air supply line to the Air Jacking Beam before lowering the hoist.



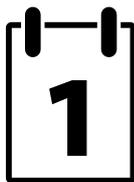


## MAINTENANCE



### DAILY

- Check for hydraulic oil leaks.
- Check operation of unit through full movement range and load lock positions.
- Check for any loose or missing fasteners.



### MONTHLY

- Introduce approximately 5 ml of air tool lubricating oil into the pump air intake port to ensure free movement of internal mechanism.
- Lubricate the moving parts on each shaft as identified on the lubrication chart below with a good quality machine oil.

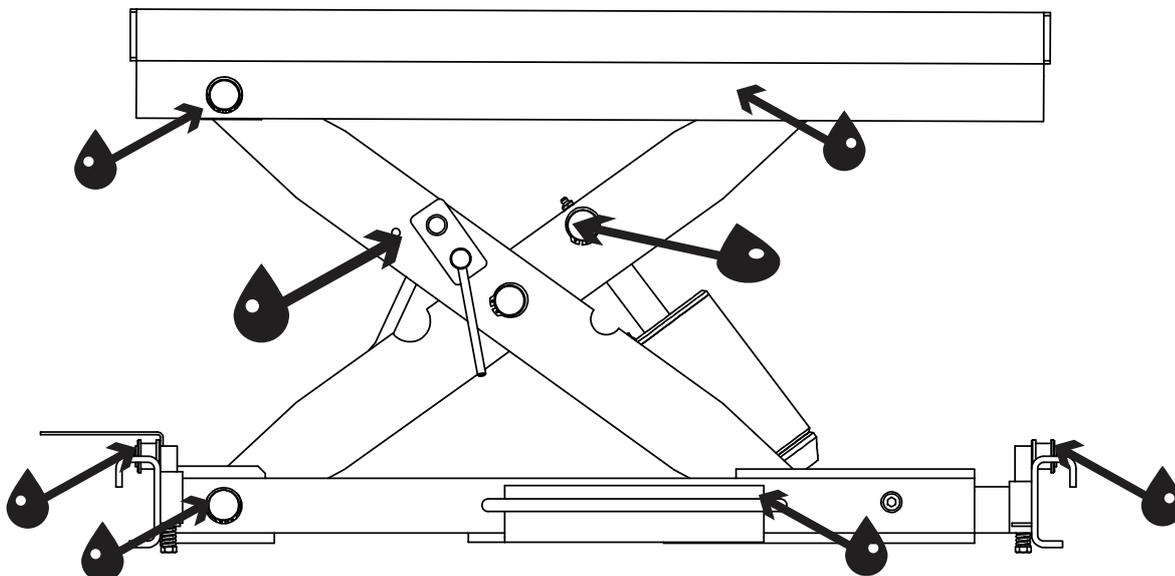


### YEARLY

- Drain the hydraulic pump reservoir and replenish with new hydraulic oil. This operation to be performed by a competent person, ideally as part of overall hoist annual maintenance activity.

Refer to “Hydraulic Oil Replacement” on page 9 for full details.

## LUBRICATION CHART





## TROUBLE SHOOTING

**Q** Pump will not run when Control Button is held down.

**A** Check the air delivery line is properly connected and not obstructed or kinked, and the air supply is turned on. Ensure you are using clean and dry air at the correct pressure rating of 7 Bar.

**Q** Pump runs but Air Jacking Beam does not lift.

**A** Check that the Pressure Valve is fully closed.

**Q** Pump runs but Air Jacking Beam will not lift to full height.

**A** Check for low oil level in the hydraulic pump reservoir and replenish as needed

**Q** Pump stops when load is applied.

**A** Supply air pressure is low, or load exceeds the Air Jacking Beam lift capacity.

**Q** Pump runs but makes a “rattling” noise.

**A** Check for low oil level or trapped air in the hydraulic pump reservoir. Replenish oil as per Hydraulic Oil Replacement instructions. Introduce air tool lubricating oil as per the monthly maintenance schedule.

**Q** Unit makes a “grating” noise when lifting a load.

**A** Lubricate the moving parts as per the monthly maintenance schedule.

**Q** Pump runs but makes a loud “hammering” noise, and the raise speed is slow

**A** Air supply line may be too small. Minimum air supply hose diameter 10 mm (internal) is recommended.



## Oil Changing



Disconnect pressure hose

Remove Allen key screws

To change the hydraulic oil

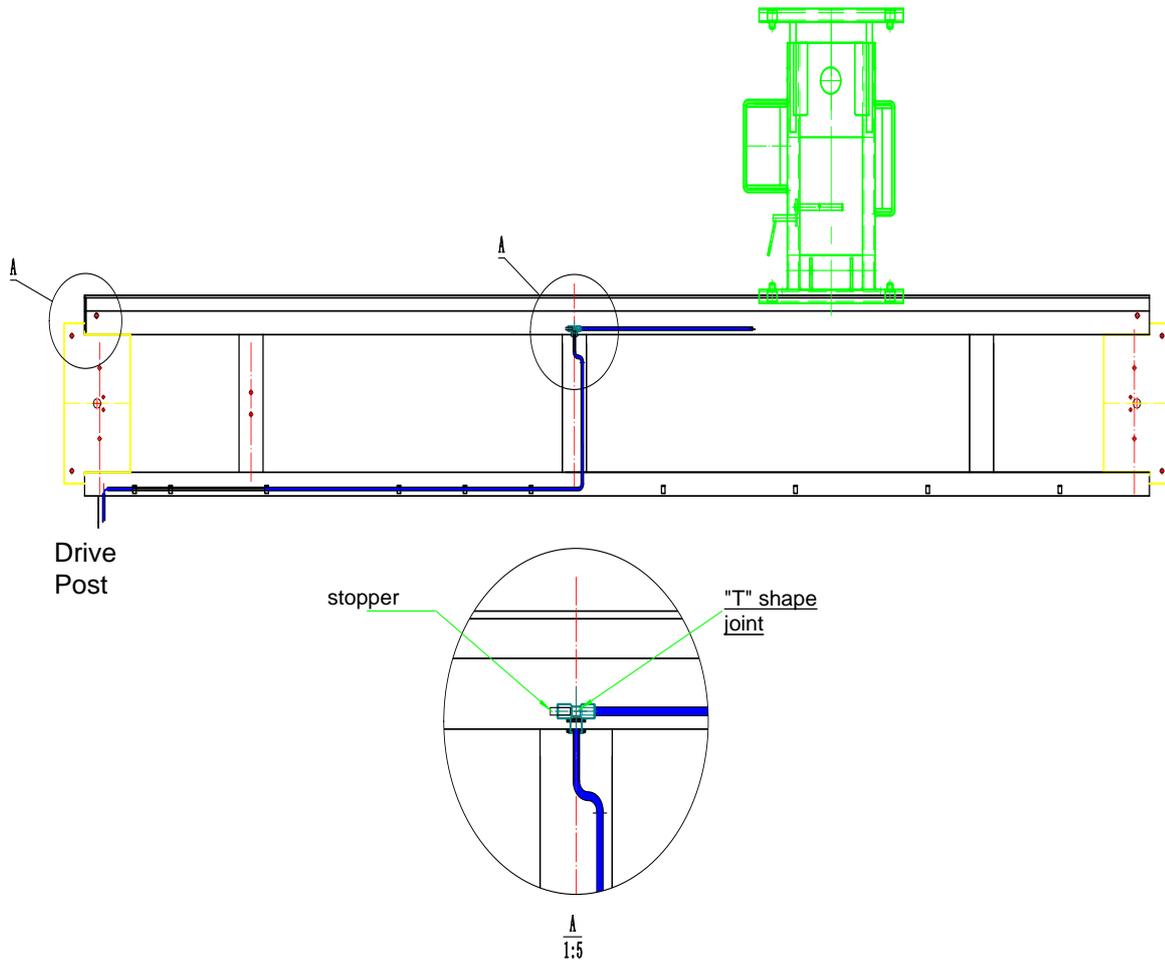
- 1/ Ensure the jacking beam is fully lowered
- 2/ Disconnect the air supply from the pump
- 3/ Disconnect the pressure delivery hose
- 4/ Remove the 6 X 4mm Allen key screws
- 5/ Lift the pump assembly out of the reservoir
- 6/ Empty and clean the reservoir and refill with new 32 grade hydraulic oil
- 7/ Reassemble pump and reservoir
- 8/ Reconnect pressure hose and air supply
- 9/ Operate the jacking beam through 2-3 cycles to expel and air and recheck oil level

## ACCESSORIES

<p><b>PL92-RB</b> RUBBER BLOCK, STANDARD</p>		<p>Solid rubber block for cushioned lifting For use on Rubber Block Nest</p>	<p>Length _____ 150 mm Width _____ 100 mm Height _____ 70 mm</p>
<p><b>PL92-RB-40</b> RUBBER BLOCK, LOW PROFILE</p>		<p>For vehicles with low clearance For use on Rubber Block Nest</p>	<p>Length _____ 150 mm Width _____ 100 mm Height _____ 40 mm</p>



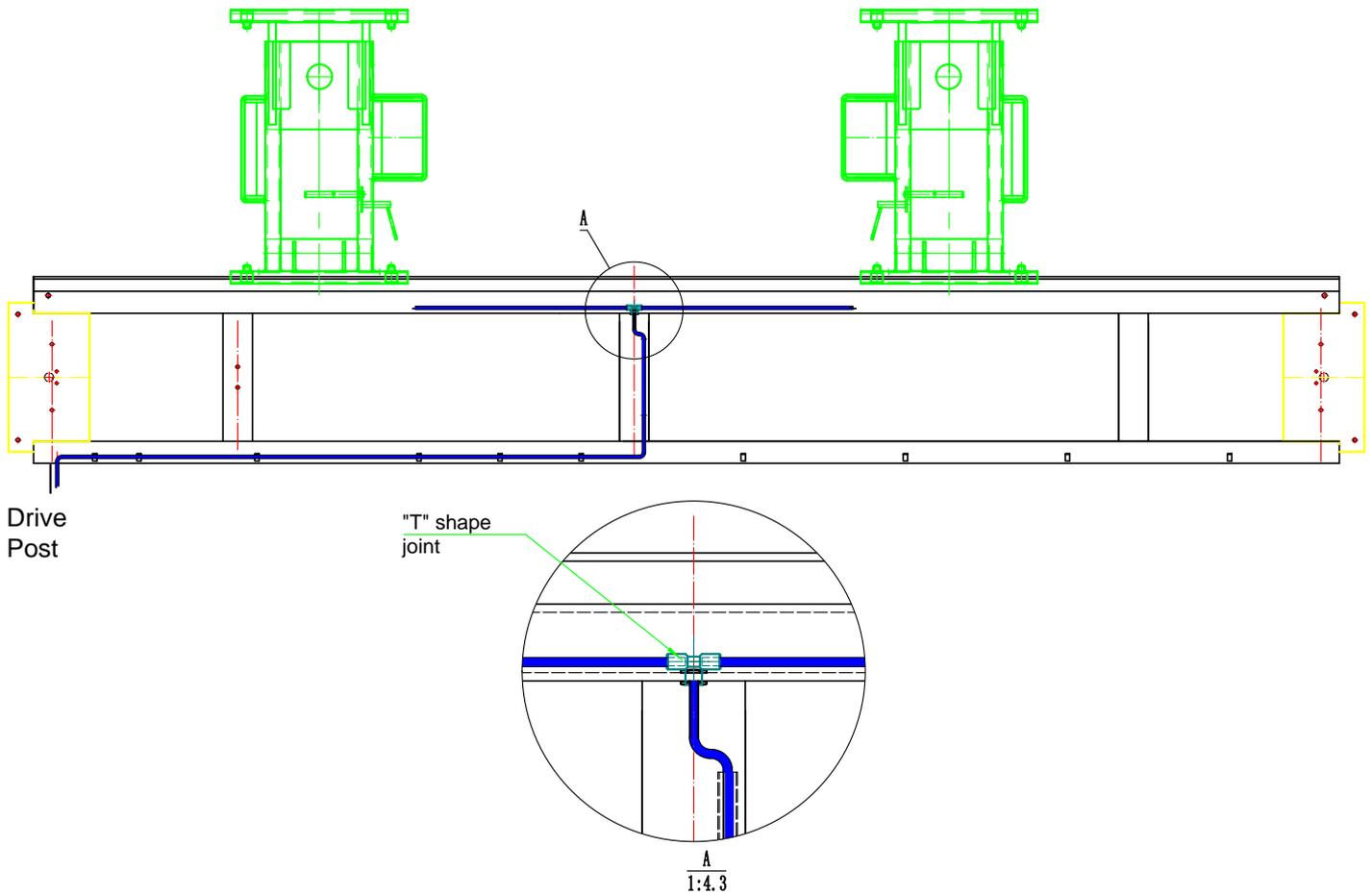
# Air Line for Single Jacking Beam Installation



Remarks: (1) The air line from drive post to "T" shape joint has been installed onto the platform already.



## Air Line for Double Jacking Beam Installation



Remarks: (1) The air line from drive post to "T" shape joint has been installed onto the platform already.



## WARRANTY

All Molnar are built to the highest safety standards.

Our commitment to excellence is backed by our warranty on products and genuine parts – matching our manufacturing excellence with superior service assurance.

Molnar will repair or replace defective product in accordance with our standard Warranty terms and conditions in effect at the time of purchase. Simply contact your local authorised dealer or Molnar Hoists to initiate a warranty claim.

A copy of our complete Warranty Statement is available to download from our website [www.molnarhoists.com.au/warranty](http://www.molnarhoists.com.au/warranty).



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