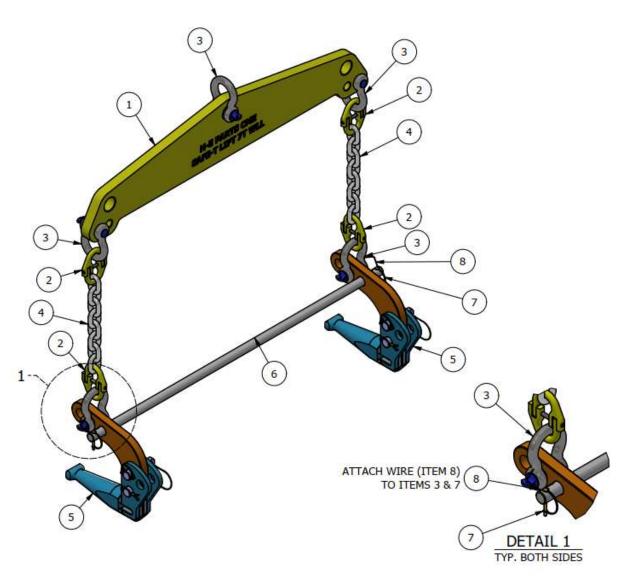


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7T WLL Safe-T Lift® (c/w Cross Bar) Jaw Liner Installation and Removal Manual Pilbara Minerals Pilgangoora NLO



Revision	Description	Prepared By	Reviewed By	Approved By	Approval Date
0	Issued for Internal Review	M.Baker	D.Ford	D.Ford	11/02/2025



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All brand names, model names or marks are owned by their respective manufacturers. H-E Parts International Crushing Solutions has no affiliation with the original equipment manufacturer. These terms are used for identification purposes only and are not intended to indicate affiliation with or approval by the OEM. All parts are manufactured by, for and warranted by H-E Parts International Crushing Solutions and are not manufactured by, purchased from or warranted by the original equipment manufacturer.



1.0 Purpose

The H-E Parts International Crushing Solutions (HEPICS) Safe-T Lift® assembly is designed for use with HEPICS jaw liners, cast with purpose-built lifting holes.

Safe-T Lift® assemblies are only suitable for use with HEPICS jaw liners that contain the correct lifting holes. If in doubt, contact HEPICS for clarification.

This manual is relevant to **7T WLL** HEPICS Safe-T Lift® assemblies however several sizes exist to accommodate different load ratings. The user should always ensure that the load rating for the assembly being used is suitable for the jaw liner being lifted. The tool is designed and supplied to eliminate the requirement to weld lifting lugs to install, rotate and remove H-E Parts Jaw Liners. However, qualified and competent personnel should be aware of how this tooling operates prior to use.

2.0 Load Ratings and Certification

Regulatory requirements specify that all lifting gear must be tested and certified at a minimum of every twelve months.

The **3.5T WLL** load rating for each Safe-T Lift® hook is stamped on the item and the **7T WLL** load rating for the Safe-T Lift® assembly is stamped on the spreader beam. Validity of the test certification should be monitored by relevant site safety personnel and the items re-tested as required.

HEPICS can arrange re-certification on lifting assemblies by returning them to HEPICS when required, otherwise the responsibility lies with the customer/client only.

3.0 Storage

The assembly should be stored in a dry location and off the ground to prevent damage. A purpose-built rack that allows the assembly to hang from the centre lifting hole is recommended for this purpose.

4.0 Job Safety Analysis (JSA) and Regulatory Requirements

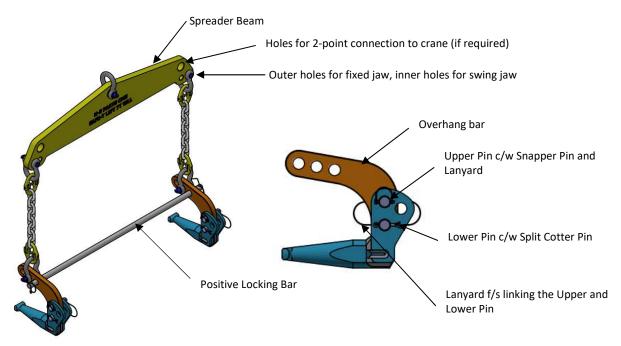
Before commencing any work, a Job Safety Analysis should be performed that complies with regulatory and site requirements along with the completion of the Safe-T Lift® Check Sheet which is provided in Section Error! Reference source not found. of this document.

As site conditions vary, the instructions outlined in this document should be used as guidelines only and should not take precedence to any job specific conditions identified in the JSA.

This manual details the specific use of the Safe-T Lift® assembly only. It is assumed that the user has read and understood this Installation and Removal Manual and is suitably trained and qualified in standard lifting practices and regulatory requirements governing these.



5.0 Description of Components



6.0 Pre-use Inspection

Before using the assembly, please ensure the Check Sheet (refer Section 12.0) has been completed. Before every lift, the following checks should be performed as a minimum. Additional checks may be required to comply with site-specific or regulatory requirements:

- Check that the configuration of the assembly is correct.
- Inspect all components for visible signs of wear, damage or overload. Chains and off-the-shelf lifting components such as hammerlocks should be checked in accordance with standard inspection practices.
- Inspect the Safe-T Lift® hooks for visible signs of damage. In particular, check for damage around the 'T' section of the Safe-T Lift®.
- If any deficiencies are identified with the Safe-T Lift® or chain assemblies, the lifting device must not
 be used until the issues are rectified and the repaired assembly load tested to applicable regulatory
 requirements.
- Pre-use inspection / In-Field Checks include site-measured dimensions of the lifting holes on the jaw liners. H-E Parts has provided a Go/No-Go Gauge (see Figure 1) and dimensional check criteria (see Figure 2). If the holes do not meet these specifications, the device must not be used until clearance is given by H-E Parts.



Figure 1: Go/No-Go Gauge

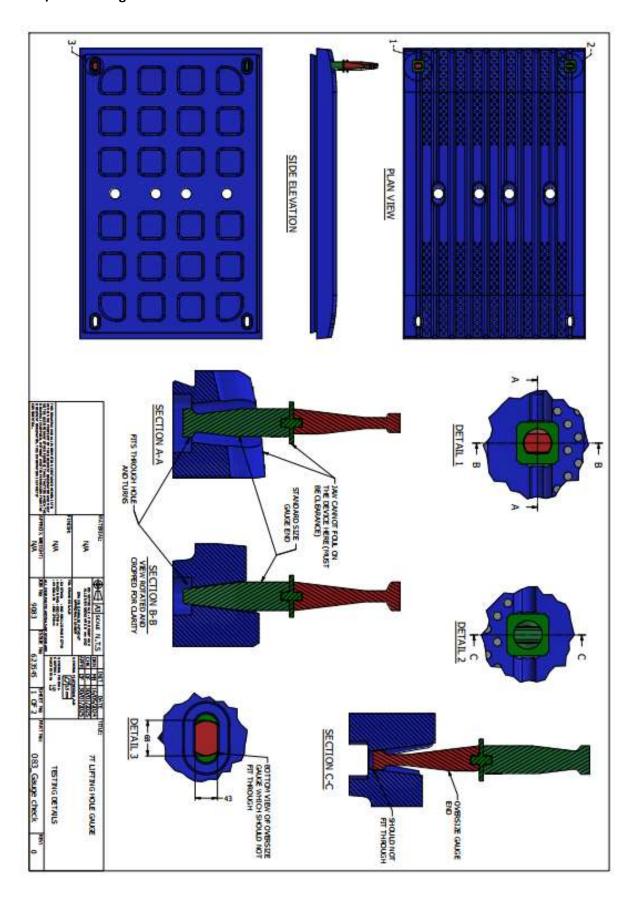






Figure 2: Lifting Hole Parameter Checks

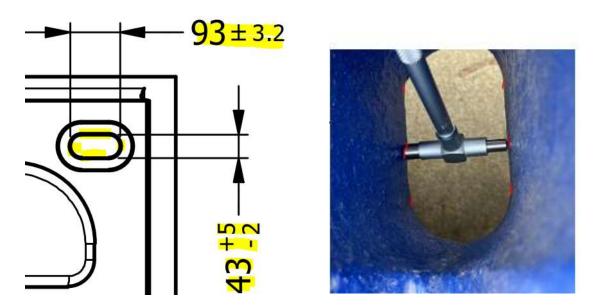
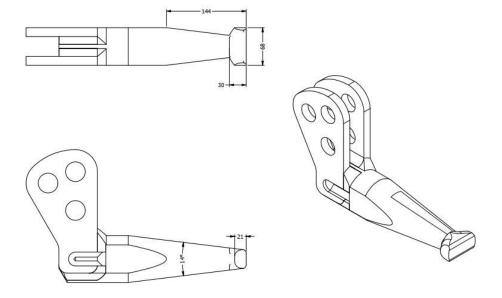


Figure 3: General Sizing of the 7T Device (3.5T Hooks) are as follows





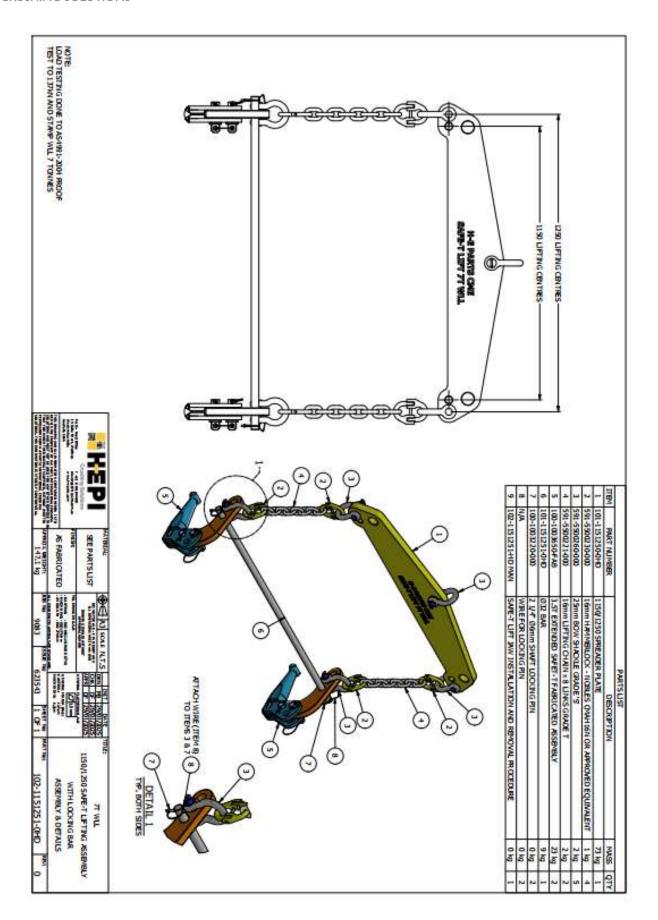
7.0 Spreader Beam & Locking Bar

Safe-T Lift® assemblies are manufactured to suit specific jaw liners in operation at a particular site with each spreader beam designed to include two sets of holes on the lower side. Generally, the outer holes on the beam are for the fixed jaw liners and the inner holes are for the swing jaw liners, as identified in Section 5.0

In this assembly, a Positive Locking Bar is included with the Safe-T-Lift device. This prevents the two Safe-T-Lift Hooks from rolling during a lift. Please refer to the details within this Manual & reach out to H-E Parts if any questions remain, prior to use.



CRUSHING SOLUTIONS





8.0 Installing Jaw Liners

Before installing the new liners, ensure the crusher cavity is clear, existing liners are removed and that all relevant seating surfaces are cleaned.

New jaw liners are lifted into the crusher by using the **7T WLL** lifting assembly as follows:

1. With the jaw liner teeth facing upwards and the liner lying flat on the ground, remove the locking pin and pull the overhang bar backwards. Insert the Safe-T Lift® hooks into the lifting hole at 90 degrees to the liner teeth as shown below:



Note: Photo displayed is for illustration purposes only.

2. Turn the Safe-T Lift® 90 degrees so that the end of the Safe-T Lift® faces the outer end of the jaw liner, and re-insert the locking pin as shown below.



These holes allow the jaw liner to hang at different angles to facilitate liner installation.

Typically, the front hole will allow the jaw liner to hang vertically.

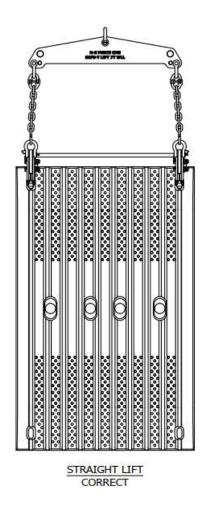
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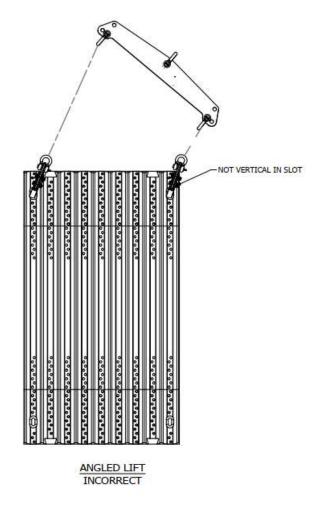
- 3. Insert the second hook on the other side of the jaw liner in a similar manner.
- 4. Ensure that all chains and lifting components are not twisted and are suitable for lifting, and that the spreader beam is attached to a suitably rated lifting hook and crane.
- 5. Allow the crane to take up the slack in the chains before lifting the jaw liner off the ground.
- 6. Ensure that the Safe-T Lift® hooks are still parallel with the liner teeth during the lifting operation.

Note: The jaw liner should hang vertically (or at the jaw face angle) as shown below. If the angle is not correct, the jaw liner should be lowered to the ground, and the angle changed by using a different combination of holes on the Safe-T Lift® arrangement.



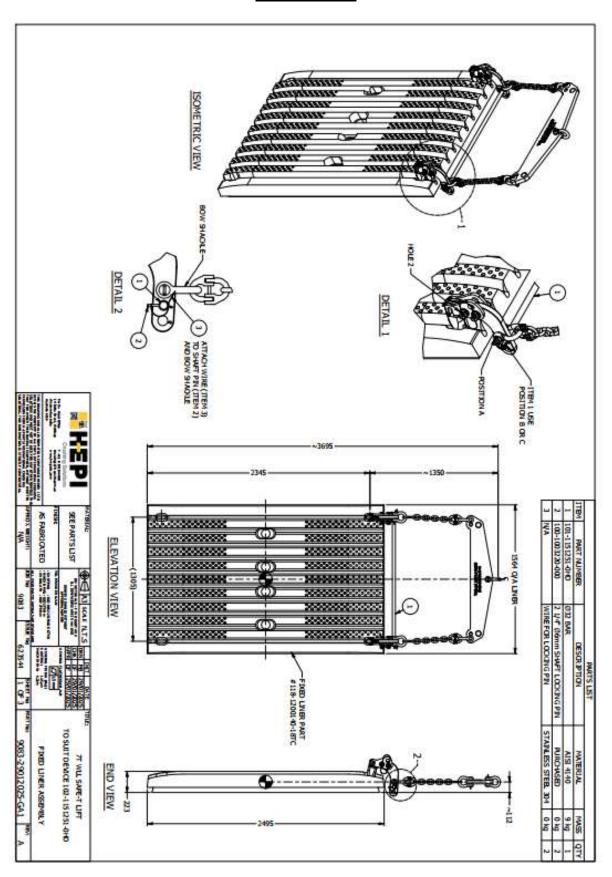
When lifting liners from the ground, ensure the lift is a vertical lift, pictured below as 'CORRECT". If the lift is not vertical (i.e., the chains are not hanging centrally over the liner), there is a risk that the liner may unexpectedly shift when the crane takes up the weight (Load-Shift Risk). Therefore, a 4m exclusion zone must be established and maintained, or as determined by the Competent Person/Rigger responsible for the lift and accepting the associated risk.





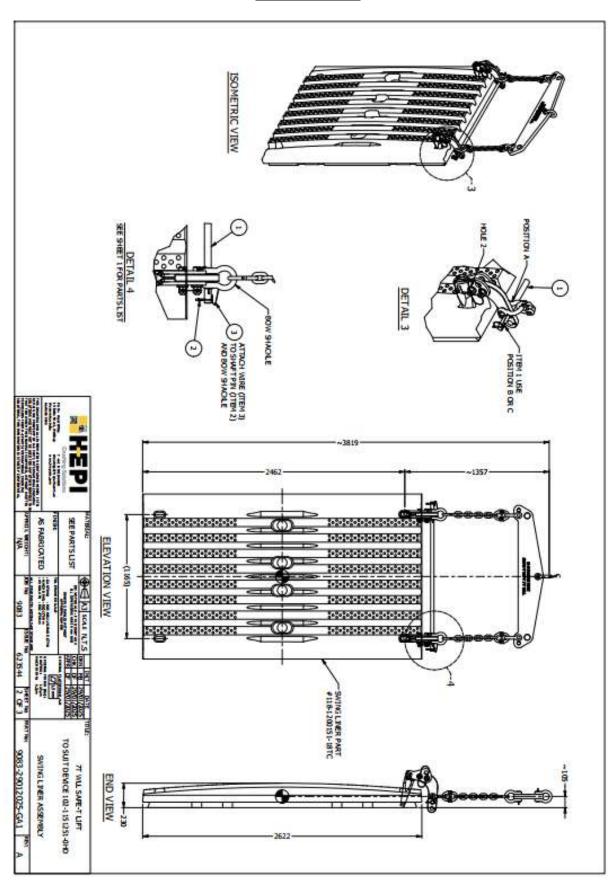


Fixed Jaw Liner

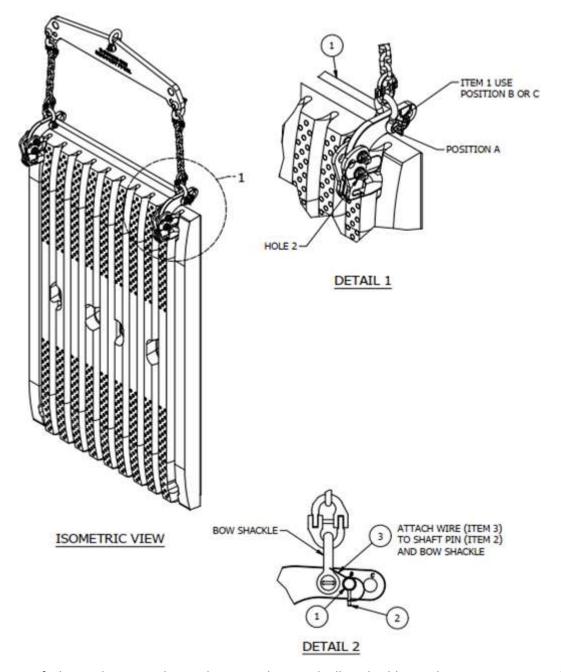




Swing Jaw Liner







- 7. Lift the jaw liner into the crusher, complying with all applicable regulatory requirements for lifting.
- 8. Locate the jaw liner onto the seating wedge(s) of the crusher whilst ensuring that the jaw liner seating surface is in full contact with the lower wedge as per the OEM instructions for installing jaw liners.

 Note: Do not enter the crushing chamber prior to Step 9 being completed.
- 9. Install a platform into the crushing chamber to hold the jaw liners against the jaw faces and to act as a work platform (if required).
- 10. Install the jaw bolts and jaw wedges as per the OEM's recommended procedure.
- 11. When the jaw liner is securely in place, the Safe-T Lift® hooks may be removed by reversing the procedure as outlined in steps 1-3 in a similar manner.



12. Insert rags or foam rubber into the lifting holes to reduce the risk of ore filling these holes. Blocked lifting holes are a safety concern and increases difficulty when reinstalling Safe-T Lift® hooks during the removal process of jaw liners.



9.0 Removing Jaw Liners

Removing jaw liners can be done by reversing the installation procedure (see Section 8.0), with a few additional checks required:

- 1. Install a safe work platform into the crushing chamber.
- 2. Before removing jaw bolts or wedges, clean any ore from between the jaw liner and crusher wall or cheek plates that may prevent the liner from being lifted out easily.

Note: Safe-T Lift® assemblies are not designed to assist with the removal of jammed liners and should not be used in such operations.

- 3. Remove the rags or foam from the lifting holes and clean thoroughly.
- 4. Check the lifting holes for damage and ensure that there is sufficient material remaining in the jaw liner to allow a safe lift.

Note: All HEPICS jaw liners are designed with a minimum thickness of 45mm from the bottom of the liner teeth to the recess of the lifting hole. If the tooth profile is still visible adjacent to the lifting hole, sufficient material is available to safely perform the lift. If the tooth profile is not visible, an Engineering evaluation should be performed to ensure that the lift can be done safely.

- 5. The jaw liner should be checked for damage to ensure that no cracking is present.
- 6. Inspect the Safe-T Lift® assembly as described in Section 6.0.
- 7. Remove the jaw bolts and/or wedges as per the OEM recommendations.
- 8. Install the Safe-T Lift® hooks into the lifting holes as described in Section 8.0.
- 9. Allow the crane to take up the slack in the chain whilst ensuring that the jaw liners are not jammed and that the chains are vertical before the lift.

Note: Safe-T Lift® assemblies are designed for the chains to be in the vertical orientation only.

- 10. Remove the platform from the crushing chamber and lift the jaw liner from the crusher.
- 11. When laying the jaw liner onto the ground, care should be taken to ensure that the Safe-T Lift® spreader beam remains above the top end of the jaw to prevent the hooks from turning.

10.0 Removing Jaw Liners where Lifting Holes are not suitable

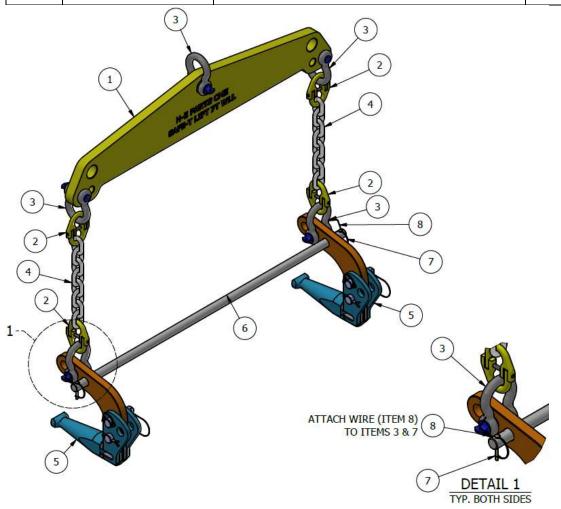
The Safe-T Lift® assembly is only suitable for use with HEPICS jaw liners that have been manufactured with lifting holes to suit the Safe-T Lift® hooks. If the lifting holes (or lifting assembly) are not suitable for use, an alternative lifting arrangement must be used. Where site requirements allow, the jaw liners may be removed by welding suitably rated lifting lugs to the jaw liner. For HEPICS jaw liners, contact HEPICS for details of consumables to be used and required welding practices before proceeding.



11.0 Parts List

For ordering purposes, a parts list and **7T WLL** lifting assembly is shown below:

ITEM	PART NUMBER	DESCRIPTION	MASS	QTY
1	101-1151250-0HD	1150/1250 SPREADER PLATE	73 kg	1
2	591-5500230-000	16mm HAMMERLOCK - NOBLES CMAH16N OR		4
		APPROVED EQUIVALENT		
3	591-5500260-00	25mm BOW SHACKLE GRADE 'S'		5
4	591-5500221-000	16mm LIFTING CHAIN x 8 LINKS GRADE T	2 kg	2
5	100-1003650-FAB	3.5T EXTENDED SAFET-T FABRICATED ASSEMBLY	23 kg	2
6	101-1151251-0HD	Ø32 BAR	9 kg	1
7	100-1003220-000	2 1/4" Ø6mm SHAFT LOCKING PIN	0 kg	2
8	N/A	WIRE FOR LOCKING PIN	0 kg	2
9	102-1151251-HD MAN	SAFE-T LIFT JAW INSTALLATION AND REMOVAL	0 kg	1
		PROCEDURE		





			Yes	No	N/A
1	Ensure installatio	n and removal manual has been review	ed		
2	Check compliance	e of Safe-T Lift® assembly including the I	oad rating		
3	Ensure Safe-T Lift	® assembly has been stored correctly			
4	Has a JHA/JSA been completed for the task that is about to be undertaken				
5	Carry out pre-use	e inspection:			
	a) Ensure the load of the liners to be	d rating of Safe-T Lift® assembly is greate e lifted	er than the weight		
	b) Check load tes	t certification of the Safe-T Lift $^{ exttt{@}}$ assemb	ly		
	c) Visually inspec	t 'T' Section of Safe-T Lift® for signs of	wear, damage or		
	d) Visually inspe	ct remaining components for signs of	wear, damage or		
	overload				
	e) Ensure all pins are in the correct locations as per Section 5.0				
f) Ensure pivot pins are fitted with suitable locking pins					
	g) Ensure locking pins are in good working order				
	h) Ensure lanyard is used to link both pins as described in Section 5.0				
	i) Any other defe	cts/damage or wear detected			
6	Check Safe-T Lift [®]	assembly is rigged correctly to suit des	ired lift		
7	Ensure all relevant personnel understand the correct installation and removal methodology as outlined in this manual				
omm	ents:				
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Site:	Print name:	Sign:	Date:
Site:	Print Name:	Sign:	Date:
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By signing this document, I accept the responsibility of the lift, as a trained & competent Rigger. If I don't feel comfortable to complete the task safely, I will stop the job and raise with my supervisor.

If there any questions related to this Device, please contact sales@h-eparts.com.au