

This Inspection & Maintenance Manual has been produced by Lakeside Industries Ltd and is intended to be used in conjunction with ALTO HD Aluminium Access products. Planned preventative maintenance is essential for the longevity of the product and the safety of the user. By using the guidance contained in this manual, your ALTO HD Tower System will be maintained to a high standard which will be cost effective and safe for use. The ALTO range of products has been designed to need very little maintenance. Warranty will be negated by repairs carried out other than those undertaken by the manufacturer - Lakeside Industries Ltd - or a repair agent authorised by Lakeside Industries Ltd.

We recommend that all components are thoroughly inspected before and after use. This document is designed to assist the user in carrying out that inspection properly and thoroughly. Where the equipment forms part of a hire fleet, the equipment should be inspected as detailed below by the hire company on return from each hire contract.

As with all construction industry equipment – and in particular items relating to working at height, it is vital that only fault free, undamaged items are deployed in accordance with the assembly guide to preserve the integrity of the structure, the safety of the users and those around them.

The ALTO HD Tower System components have been subjected to rigorous testing to determine and prove their reliability, safety & capacity. The construction & facilities management industries where this equipment is typically deployed can be demanding environments and there are occasions in which damage occurs – either through accident or misuse. Serious misuse through significant overloading or use for inappropriate tasks can impair the

integrity of components. It is vital that equipment is inspected post use properly so that remedial action can be taken. Equipment that has been misused may be unsafe and should not be used. No liability will be accepted in relation to equipment that shows signs of misuse.

Any product or component which fails any of the inspections set out in this document must be withdrawn from use and quarantined for further inspection, repair or replacement as appropriate.

ALTO HD Tower System equipment should not be modified in any way and should only be repaired by the manufacturer - Lakeside Industries Ltd - or by authorised agents, If it is suspected that equipment has been modified or repaired by any other provider, the equipment should be quarantined and returned to Lakeside Industries Ltd for free inspection. No liability will be accepted in relation to equipment that has been subjected to unauthorised modification or repair.

## Adjustable legs, base jacks & wheels



### Wheels

- Check castor wheel is secure in jack stem assembly
- Check that the brake mechanism is not damaged and works in both the on & off mode
- Check that the axle bolt is secure and not loose
- Check that the wheel is not damaged and turns freely



### Adjustable Legs

- Check that threads are not damaged & leg is straight
- Check weld at base is intact and undamaged
- Clean and lightly apply a penetrating lubricant to the threaded stem and all moving parts
- Fully threaded legs must have a "break" approx. 150mm from the top to prevent casting being removed



### Castings - adj. collar & base jack assy

- Check the spinning operation of the locating collar & spring action locking pin
- Check for damage and cracks in the casting
- Check swivel base is not damaged and pivots freely
- Clean and lightly apply a penetrating lubricant to the all moving parts

## Frames



### General

- Remove any concrete or other substances adhering to the frame
- Check for squareness and for the straightness of frame - left-to-right and top-to-bottom
- Check all welds are sound and intact
- Check in particular for any dents, creases or crushes



### Uprights & Conical head fittings

- Check for any damage to uprights
- Check the head fittings are undamaged & the condition of the pegs on the head fittings
- Check the weld where the upright meets the casting
- Check the locating holes in the base of the upright
- Check in particular for any dents, creases or crushes



### Rungs & Ladder Frames

- Check for any damage to horizontal rungs
- Check all locating pegs/screws on horizontals
- Check ladder rungs are not damaged and secure
- Check vertical ladder stiles are straight, not damaged and welds are intact
- Check in particular for any dents, creases or crushes

## Frames (AGR Version)



### Locking Mechanism

- Check locking casting is free to move up/down into the lock/unlock positions
- Check there is no damage to bolt head
- Grease or oil must **not** be used



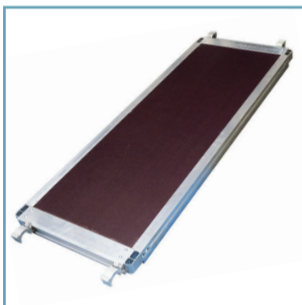
### Uprights

- Check there is no damage to slot & it's the correct shape
- Check for damage on the surface of tube around the area of movement
- Check the inner section of frame vertical upright for damage

The locking casting requires no extra maintenance, providing that the frame and mechanism has been used as described in relevant assembly manual, and is inspected on each occasion it is returned from use.

All AGR-version frames should also be inspected for damage or issues in exactly the same way as the standard frame procedures detailed in the inspection manual.

## Platforms



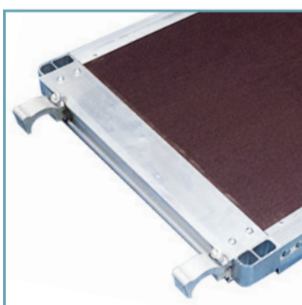
### General

- Check for distortion in all directions
- Check for damage to plywood and securing rivets
- Check for any damage to hooks
- Check all 4 side box sections are straight with no dents or damage
- Check all fastenings/rivets are tight and secure



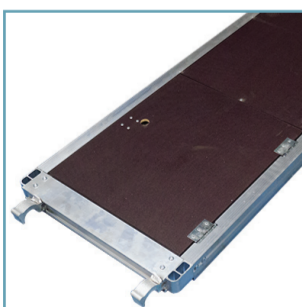
### MK1 Version

- Check that the gravity latches are fitted and operate correctly
- Check corner castings are intact and undamaged
- Make sure that the centre tie rod is fitted and is not damaged or corroded (2.7m long versions only)



### MK2 & 3 Version

- Check corners for evidence of damage by looking through the openings in the extrusion for evidence of twist/tear
- Check wind latches are straight and move freely but not loose so they will stay in position
- Make sure that the centre tie rod is fitted and is not damaged or corroded (2.7m long versions only)



### Trap Platform

- Check the lid operates correctly and that there is no damage to the hinges or latches
- Check the latch locks the door when closed & is in good condition/moves freely (mk2 & 3 only)

Whilst HD platforms are durable & long-lived items of equipment, we recommend that platforms without latches and/or side opening trapdoors, be returned for upgrading to take advantage of these safety features



### Stair Trap Platform

- Check that the trap door is not distorted/damaged and operates correctly and closes in the correct position
- Check that there is no damage/corrosion to the hinges or the restraining chain

## Braces



### Hooks

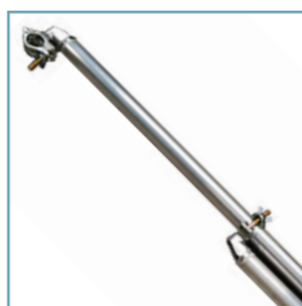
- Check hooks to ensure that there is no distortion/cracking
- Ensure that the latch bolt & nut are in good condition and operate freely
- Remove all concrete or other substances adhering to the hook.
- lightly apply a penetrating lubricant to the pins/springs



### Tubes

- Check that the brace tube is not bent, damaged or distorted and that there are no dents greater than 5mm
- Remove all concrete or other substances adhering to the tube

## Stabilisers



### Tubes

- Remove all concrete and other substances adhering to the stabiliser
- Ensure that the tube is not bent, damaged or distorted and there are no dents greater than 5mm



### Clamps

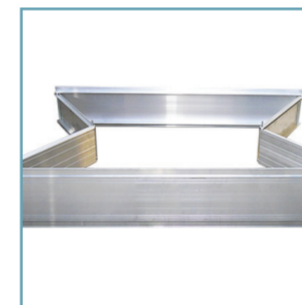
- Check that the bolts, wing nuts and swivel couplers are secure, operate freely and are not corroded
- Check that the castings are not damaged



### Foot

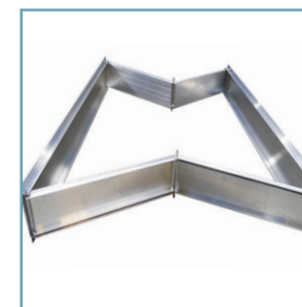
- Check that the castings are not damaged.
- Check that there is no local damage to the tee foot
- Check rubber pad is in good condition and still fixed to the tee section aluminium.

## Toeboards



### Sides

- Remove any concrete or other substances adhering to the toeboard
- Ensure there is no damage to the sides and they are both straight



### Hinged Ends

- Check that all pins and fastenings are intact & secured and that the toeboard opens and closes correctly
- Remove all concrete or other substances adhering to the ends.

## Advanced Guardrail Unit



### Frame

- Remove all concrete/substances adhering to the frame
- Check squareness/straightness of frame uprights
- Frames should connect & lock into position without issue
- Check all welds are sound
- Check that the brace tube is not bent, damaged or distorted and that there are no dents greater than 5mm



### Hooks

- Check hooks to ensure there is no distortion or cracking
- Ensure all pins/nuts/plates are secure & in good condition
- Check the lock mechanism moves freely, parks correctly on the side plate & fully extends into the locked position

## Stair Ladder Units



### General

- Check that the pin/spring assy is working correctly
- Check there is no damage to the hooks, tread & stiles.
- Remove substances adhering to the stair ladder unit.
- Check for distortion or bend over the length of the unit
- Check that all welds are intact & no cracks can be seen
- All fastenings are tight.