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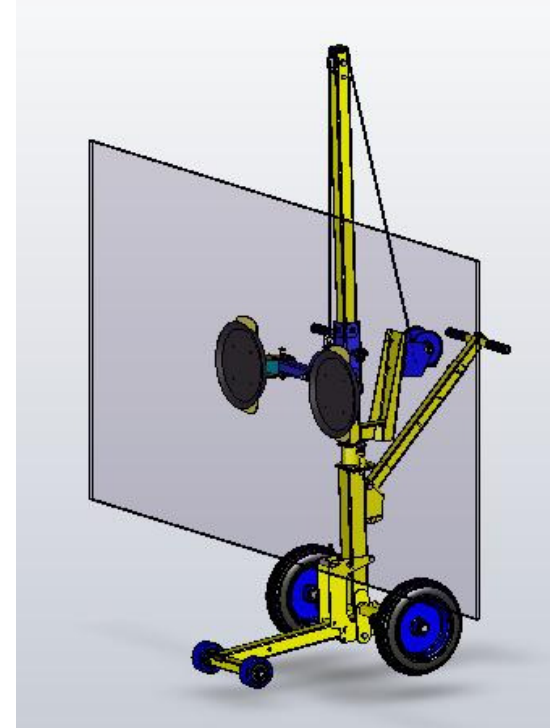
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QUATTROLIFTS **EXPRESS** Operating Procedures

Operation, Safety and Maintenance Instructions



**READ THIS BOOKLET BEFORE USE
KEEP IN A SAFE PLACE**

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PRE-USE CHECK OF THE QUATTROLIFT EXPRESS - Make multiple copies

IMPORTANT: CHECK THE FOLLOWING ITEMS BEFORE EACH USE

Please place a tick against each *item* to check and make comments where necessary regarding corrective action.

DO NOT USE THE MACHINE IF ANY OF THE FOLLOWING ITEMS ARE DAMAGED	OK	Not OK	Comments
Vacuum cups - the rubber cup edges for damage (cut or bent) & the filter is in place			
Vacuum cups - Attach the Express vacuum cups to glass that is on a dolly and test that the cups maintain vacuum for at least 15 minutes without losing vacuum.			
Vacuum cups - the arms holding the cups (for weld fractures or dents)			
Wheels - ensure there is sufficient air pressure in the rear wheels and the front wheels are in good working order.			
Winch - Unwind the cable and make sure that the cable is firmly attached to the winch drum.			
Winch - Inspect the cable for damage or fraying then rewind the cable back onto the winch drum with the cable under hand held tension			
Winch - Handle (general inspection for damage)			
Sliding head - Head slides up and down easily when winding the winch and head lock secures head			
Sliding Head Lock —Ensure hand knob prevents the sliding head from moving under load			
Rotating Head - Check that the locking pin slides in and out easily.			
Mask Lock - With the mast lock released ensure that the mast locks in the upright position			
Wheels —Check each wheel is inflated to maximum air pressure listed on tyre wall			
Wheel Locks — Ensure hand knobs on wheel axles allow for lateral adjustment of the wheels			

EMPLOYER TO COMPLETE WITH EACH EMPLOYEE LIKELY TO USE THE EXPRESS

Prior to allowing any employee to use the Express, you and the employee should sign and file a copy of this page to help ensure that the Express is used and maintained as outlined in the **Quattrolifts Express Operating Procedure**.

The Express will only be used and maintained as stated in the "Quattrolifts Express Operating Procedure"

If you or your employees are unsure of any facet of the use of the Express contact your distributor or Quattrolifts directly or via their website for further information.

I _____
(Employee's Name)

have read and understand the "Quattrolifts Express Operating Procedures" and will use the Express as stated in the "Quattrolifts Express Operating Procedures"

Employer to Sign

Employee to Sign

Date

OVERVIEW

The Quattrolifts Express, with the 2 vacuum cups in operation, is designed to assist glaziers handle glass weighing up to 80kg (175 lbs) for one person and 150kg (330lbs) for two people when the ground is smooth and the glass is stable on the Express. If the ground is uneven we would recommend an extra person to assist with moving the glass.

The Express can be used to load and unload glass onto glass dollies, trucks and vans.

After the operators have been trained and are competent in its use, the functions listed in this manual can be performed using the Quattrolifts Express. The appropriate procedures **MUST** be read and understood before using the Express in any situation.

As a minimum, the employer must initially allocate at least two people when using the Express until they both feel confident with its use.

WORKING LIMITS OF THE EXPRESS

The Express...

- Requires trained people for its safe operation
- One person can operate the Express if the glass weighs less than 80kg (175 lbs) and the ground is smooth.
- Can lift 150kg (330lbs) using a minimum of two people. The metric weight of glass can be calculated by using this formula: $\text{WEIGHT (KG)} = \text{Width (mtr)} \times \text{Length (mtr)} \times \text{Thickness (mm)} \times 2.5$
- Can lift laminated glass up to 250 cm (100 inches) high. Lifting glass in excess of these dimensions may cause the Express to become unstable and may cause the glass and machine to tip.

DISCLAIMER

The Express MUST be used in accordance with these Operating Procedures. Prior to the use of the Quattrolifts Express all operators MUST read carefully and understand the Quattrolifts Express Operating Procedures. Prior to performing a task with the Express conduct an appropriate Risk Assessment. Quattrolifts will not be liable for any personal injury or property damage if the Express is not used strictly in accordance with the procedures as set out in this Manual.

Perform a “PRE-USE CHECK OF THE QUATTROLIFT EXPRESS” as directed on page 15 before using the Express daily. If you identify any problems notify your distributor immediately.

LIMITED WARRANTY

The Quattrolifts Express and its associated components (referred to as the “Product”) are carefully constructed, thoroughly inspected at various stages of production, and individually tested. They are warranted to be free from defects in workmanship and materials for one year from the date of purchase. If a problem develops during the warranty period, the complete product and/or component must be returned to the Quattrolifts Distributor (*at customers expense*). If inspection shows that the problem is due to defective workmanship or materials, the product will be repaired or replaced without charge and returned at the expense of Quattrolifts.

WARRANTY WILL ONLY APPLY WHEN:

The Product is operated in strict accordance with “Quattrolifts Operating Procedure”. The Product is serviced and maintained as recommended in the “Quattrolifts Express Operating Procedure” and that the appropriate service records are maintained.

WARRANTY DOES NOT APPLY WHEN:

- 2.1 Repairs are required due to abnormal wear and tear.
- 2.2 The product has been abused, misused or neglected.
- 2.3 Alterations have been made to the Product.

WARRANTY DOES NOT APPLY TO:

- 3.1 The vacuum lifters and cables.
- 3.2 Any defect which is caused by any modifications made to the Product without the written consent of Quattrolifts.

A problem not covered under warranty (*see items 2 and 3*) will be corrected automatically, unless the customer includes a written request for notification of costs prior to repair. Otherwise the customer assumes all responsibility for repair costs and agrees to receive the repaired Product on a ‘fee-for-service’ basis.

TO OBTAIN WARRANTY SERVICE: Call your Distributor and notify them of the defect

ROUTINE MAINTENANCE OF THE QUATTROLIFT EXPRESS PERFORMED BY AN ACCREDITED REPAIRER

CONTACT YOUR RETAILER – The Express should be inspected every 6 months to ensure all critical components are in good working order and is safe to use. Failure to check these items could result in the Express failing and causing an injury.

The following items MUST be checked:

Frame and Mast

- Inspect the frame and mast for weld fractures or rust or dents
- All bolts and nuts are in place and in good condition
- Pulley is in good condition

Vacuum cups

- the cup edges for damage (i.e. cut or bent)
- the arm holding the vacuum cups (for weld fractures or dents)
- Ensure that the pins securing the vacuum cups are in good working order

Wheels

- the wheels for damage (cut or worn)

Winch

- While pulling on the cable unwind the winch handle and inspect the cable for fraying or damage
- Handle (general inspection for damage)
- Winch winds easily

Sliding head

- Head slides up and down easily when winding the winch

Rotating Head

- Inspect the frame for weld fractures or rust or dents
- Test the locking pin to ensure it works well when rotating a load

INDEXING THE GLASS TO MOVE THROUGH DOORWAYS

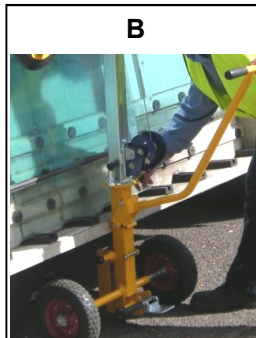
- To index the glass, ensure that the Express is attached to the middle of the glass.
- Ensure that the ground is level and does not cause the Express to be unstable.
- Slide the lower leg forward and ensure that the Express is stable and can stand unaided.
- Using the winch wind the glass up sufficiently to allow the glass to index without the lower edge striking the rear wheel.
- The operators **MUST** stand behind the glass when indexing the glass and **NEVER** in the same plane of the glass (should the vacuum cups release, the glass will fall).
- With one hand on the edge of the glass, lift the index locking pin and slowly index the glass about 5 degrees
- Place one hand on the Express hand grip (at the T bar) to stabilise the Express.
- The glass can now be indexed until it rests against the hand grip.



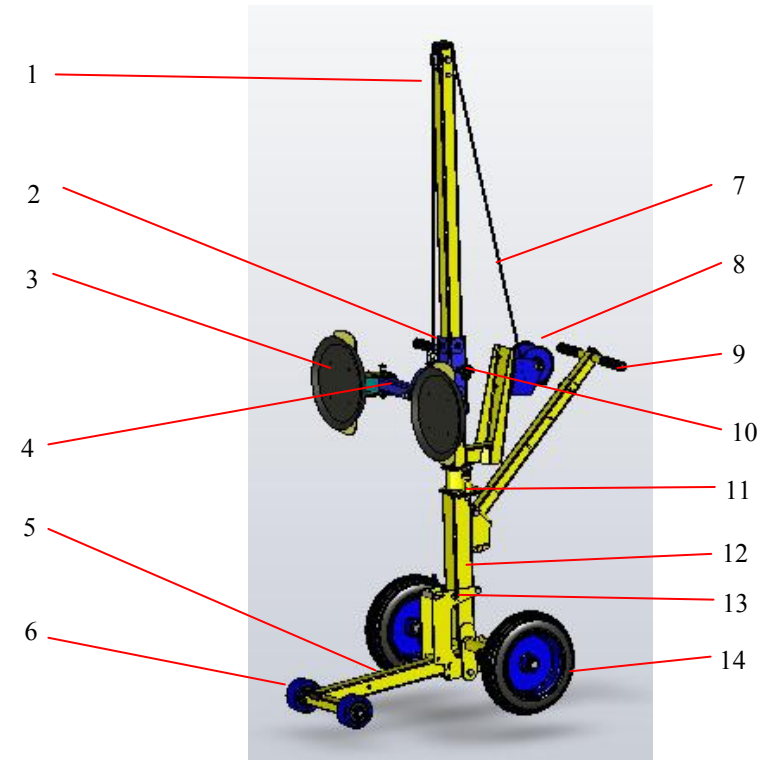
NOTE: if the Express is not attached to the middle of the glass, then safely place the glass down and re-attach the cups in the middle of the glass or use a second and third operator if required, to assist with rotation.

RELEASING GLASS FROM THE EXPRESS

- Move the Express to the dolly or truck ledge.
- Ensure that the lower edge of the glass is directly above the ledge and using the winch start to lower the glass down (see photo B).
- Once the glass is resting on the truck or dolly ledge and the winch cable is off tension, then the glass can be released.
- Once the glass edge rests on the ledge, the vacuum cups can be released and the glass can be tiled onto the rack or dolly.
- Once the Express has safely released the glass, it can be moved away.



EXPRESS COMPONENTS



LEGEND

- | | |
|---|---|
| 1. Top mast & pulley | 7. Winch cable |
| 2. Sliding head with glass indexing hand grip | 8. Winch |
| 3. Vacuum cups | 9. T handlebar with hand grips |
| 4. Rotating Head (with spring loaded locking pin on other side) | 10. Sliding head lock |
| 5. Lower sliding leg | 11. Index locking pin |
| 6. Front wheels | 12. Lower mast |
| | 13. Mast lock (on other side of lower mast) |
| | 14. Rear wheels |

IMPORTANT SAFETY PRECAUTIONS

- Do not lift any glass or material that the vacuum cups cannot attach to securely.
- DO NOT USE THE EXPRESS OVER GROUNDS THAT ARE SOFT OR CAUSE THE EXPRESS WHEELS TO SINK OR MAKE THE EXPRESS AND GLASS UNSTABLE.
- All operators of the Express must read and understand these Operating Procedures carefully. The EXPRESS MUST ONLY BE USED BY TRAINED USERS.
- Operators of the Express must not wear loose clothing and MUST have long hair tied back or under a cap.
- Ensure that there is sufficient lighting for operators of the Express to use the machine safely.
- DO NOT USE THE EXPRESS TO LIFT GLASS THAT IS UNSTABLE OR MAY BREAK potentially injuring a person.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

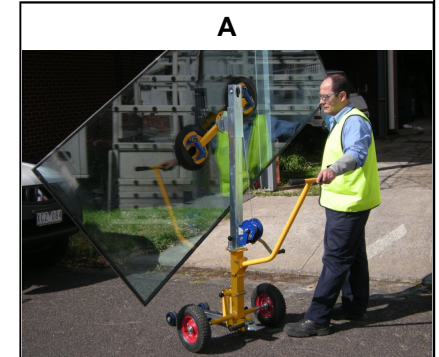
Consult with your employer to identify what PPE you must wear when handling and installing glass using the Quattrolifts Express.

As a minimum all users must wear:

Safety glasses; Safety Helmet, Glaziers Gloves; Safety shoes; Wrist cuffs.

ROTATING GLASS WITH THE EXPRESS

- To rotate the glass, ensure that the Express is attached to the middle of the glass.
- Ensure that the ground is level and does not cause the Express to be unstable.
- Slide the lower leg forward and ensure that the Express is stable and can stand unaided.
- Using the winch wind the glass up sufficiently to allow the glass to rotate without the lower edge striking the ground.
- The operators MUST stand behind the glass when rotating the glass and NEVER in the same plane of the glass (should the vacuum cups release, the glass will fall).
- With one hand on the edge of the glass, lift the glass edge slightly to release the pressure on the Rotating Head locking pin.
- Release the Rotating Head pin and slowly rotate the glass ensuring that the lower edge will strike the ground.
- The locking pin will automatically lock back into position every 90 degrees.



NOTE: if the Express is not attached to the middle of the glass, then safely place the glass down and re-attach the cups in the middle of the glass or use a second and third operator if required, to assist with rotation.

**DO NOT LET THE GLASS ROTATE FREELY
OUT OF CONTROL**

TRANSPORTING GLASS WITH THE EXPRESS

- Once the glass has been lifted off the glass edge, using the T handle bar, tilt the Express back until the glass is balanced
- The Express can be moved with the front wheels suspended (as seen in Photo A)



- The Express can also be moved with all 4 wheels on the ground (see photo B)

IMPORTANT SAFETY PRECAUTIONS

GLASS OVERHANG

The amount of allowable overhang of glass once the vacuum cups are attached to the glass will depend on the glass thickness and whether the glass has been damaged. Always thoroughly check the glass edges for chips or damage that may cause the glass to break as it is being handled by the Express

If the glass is not damaged then the maximum overhang from the edge of the glass to the nearest vacuum cup edge is 125 cm (50 inches) see photo E – this distance MUST NOT exceed 125 cm (50 inches).

DO NOT USE THE EXPRESS TO LIFT GLASS THAT IS UNSTABLE OR MAY BREAK.

MAKE SURE THAT THE GLASS IS CLEAN BEFORE ATTACHING THE EXPRESS VACUUM CUPS



Before moving or handling glass with the Express ensure that:

- the ground is clear of debris that may make the Express unstable
- the area is clear of pedestrians
- a risk assessment is completed to reduce the risk of an injury
- the glass is clean and safe to lift
- the glass has been inspected and is stable and safe to lift
- the environment is NOT WINDY
- there are no overhead power lines or electrical cables

IMPORTANT SAFETY PRECAUTIONS

We at Quattrolifts have worked extensively to ensure that the risk of injury from using the Express is minimised. The Express should always be used and maintained (see page 15 for daily checks and page 13 for routine maintenance) as indicated in this MANUAL.

All people using the Express MUST wear their Personal Protective Equipment (PPE) - see page 6.

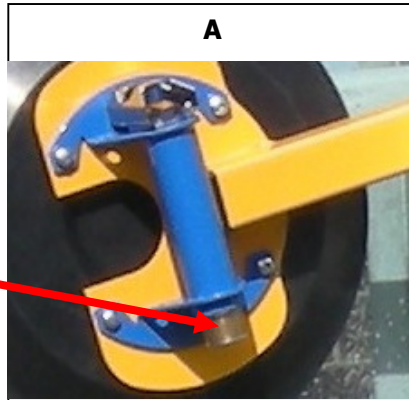
WORKING POSITION

When operating the Express, the operators MUST stand behind or next to the glass and NEVER stand in the same plane.

By standing behind the glass the operators are in a safer position should the vacuum cups release and the glass fall.

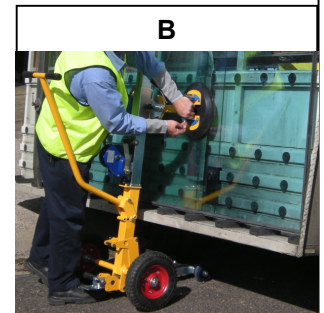
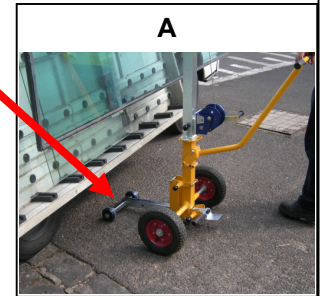
VACUUM CUPS

When operating the EXPRESS regularly check that the vacuum cups have maintained vacuum by ensuring that the plunger is in the depressed position and the red line is NOT visible. (see photo A).



USING THE QUATTROLIFT EXPRESS TO LIFT GLASS

- Use two people to move glass weighing more than 80kg (175 lbs) or if the ground is unstable.
- Make sure the glass is clean of dust so the vacuum cups will attach securely
- Slide the lower sliding leg forward as seen in photo A
- Move the Express to the glass and wind the winch up or down to position the centre of the Rotating Head onto the middle of the glass.
- Push the mast forward until both vacuum cups create a seal on the glass
- Secure both vacuum cups to the glass and ensure that the vacuum is maintained (see photo B).
- The operator then can slowly wind the winch to lift the glass.
- Once the glass is securely attached to the Express, the Express can be moved.



The EXPRESS is NOT to be used on grounds that are soft and uneven that may cause the Express to lose stability.