



Contact details:

[www.quattrolifts.com](http://www.quattrolifts.com)

Provisional Patent Application No. 2014901497

Covered by one or more of the following  
Patent Application Nos.:

CN 201580027430.5

EP 15782271

US 15/306397

AU 2016905169

Covered by European RCD No. 002 552 539

# QUATTROLIFTS EXPRESS 200-440CW

With Side Shift & Removable Winch

## Operation, Safety and Maintenance Instructions



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

**CONTENTS**

**Page**

Overview .....	3
Working Limits of the Quattrolifts Express 200-440CW .....	3
Disclaimer .....	4
Limited Warranty .....	4
Quattrolifts Express 200-440CW – Picture and Components ...	5
Important safety precautions.....	6
Personal Protective Equipment .....	6
Selecting the WLL of the Express 200-440 CW .....	6
Important safety precautions.....	7
Important safety precautions.....	8
Using the Quattrolifts Express 200-440CW to lift Glass .....	9
Transporting glass with the Express 200-440CW .....	10
Rotating Glass with the Express 200-440CW .....	11
Releasing Glass from the Express 200-440CW .....	11
Indexing glass with the Express to move through doorways .....	12
Side Shifting Glass with the Express 200-440CW .....	12
Routine Maintenance of the Express 200-440CW .....	13
Employer—Employee Agreement .....	14
Pre-Use Checklist of the Express 200-440CW .....	15
Quattrolifts Contact details .....	Back Cover

<b>PRE-USE CHECK OF THE QUATTROLIFTS EXPRESS 200-440CW - Make multiple copies</b>			
<b>IMPORTANT: CHECK THE FOLLOWING ITEMS BEFORE EACH USE</b>			
Please place a tick against each <i>item</i> to check and make comments where necessary regarding corrective action.			
<b>DO NOT USE THE MACHINE IF ANY OF THE FOLLOWING ITEMS ARE DAMAGED</b>	<b>OK</b>	<b>Not OK</b>	<b>Comments</b>
<b>Vacuum cups</b> - the rubber cup edges for damage (cut or bent) & the filter is in place			
<b>Vacuum cups</b> - Attach the Express 200-440CW vacuum cups to glass that is on a dolly and test that the cups maintain vacuum for at least 15 minutes without losing vacuum.			
<b>Vacuum cups</b> - the arms holding the cups (for weld fractures or dents)			
<b>Wheels</b> - ensure there is no damage to the rear wheels and the front wheels are in good working order.			
<b>Winch</b> - Unwind the cable and make sure that the cable is firmly attached to the winch drum.			
<b>Winch</b> - Inspect the cable for damage or fraying then rewind the cable back onto the winch drum with the cable under hand held tension			
<b>Winch</b> - Handle (general inspection for damage), Grease gears			
<b>Sliding head</b> - Head slides up and down easily when winding the winch.			
<b>Rotating Head</b> - Check that the locking pin slides in and out easily.			
<b>Side Indexing Head</b> - Check that the locking pin slides in and out easily.			
<b>Side Shift</b> - The bolts are tight and side shifts works without resistance			

## EMPLOYER TO COMPLETE WITH EACH EMPLOYEE LIKELY TO USE THE EXPRESS 200-440CW

Prior to allowing any employee to use the Express 200-440CW, you and the employee should sign and file a copy of this page to help ensure that the Express 200-440CW is used and maintained as outlined in the **Quattrolifts Express 200-440CW Operating Procedure**.

The Express 200-440CW will only be used and maintained as stated in the "Quattrolifts Express 200-440CW Operating Procedure"

If you or your employees are unsure of any facet of the use of the Express 200-440CW contact your distributor or Quattrolifts directly or via their website for further information.

I \_\_\_\_\_  
(Employee's Name)

have read and understand the "Quattrolifts Express 200-440CW Operating Procedures" and will use the Express 200-440CW as stated in the "Quattrolifts Express 200-440CW Operating Procedures"

\_\_\_\_\_  
Employer to Sign

\_\_\_\_\_  
Employee to Sign

\_\_\_\_\_  
Date

## OVERVIEW

The Quattrolifts Express 200-440CW, 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 and three people when the glass weighs above 150kg (no greater than 440lbs) when the ground is smooth and the glass is stable on the Express 200-440CW. If the ground is uneven we would recommend an extra person to assist with moving the glass.

The Express 200-440CW 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 200-440CW. The appropriate procedures **MUST** be read and understood before using the Express 200-440CW in any situation.

**As a minimum, the employer must initially allocate at least two people when using the Express 200-440CW until they both feel confident with its use.**

## WORKING LIMITS OF THE EXPRESS 200-440CW

The Express 200-440CW...

- Requires trained people for its safe operation
- The glass to be lifted must be dry and clean
- Should only be used on grounds that are smooth and free from debris
- Can lift laminated glass up to 360 cm (144 inches) high. Lifting glass in excess of these dimensions may cause the Express 200-440CW to become unstable and may cause the glass and machine to tip.
- Requires the operators to select the WLL (working load limit) of the machine based on the load to be lifted and the working environment
- Will lift 100kg (220lbs) with the machine in the retracted set-up
- Will lift 150kg (330lbs) with the machine in the middle set-up position
- Will lift 200kg (440lbs) with the machine in the most extended set-up position
- One person can operate the Express 200-440 CWA if the glass weighs less than 80kg (175 lbs ) and the ground is smooth.
- Can lift 200kg (440lbs) using a minimum of two people depending on the results of a risk assessment completed or the task being performed.
- The metric weight of glass can be calculated by using this formula:  $WEIGHT (KG) = Width (mtr) \times Length ( mtr) \times Thickness (mm) \times 2.5$

## DISCLAIMER

The Express 200-440CW MUST be used in accordance with these Operating Procedures. Prior to the use of the Quattrolifts Express 200-440CW all operators MUST read carefully and understand the Quattrolifts Express 200-440CW Operating Procedures. Prior to performing a task with the Express 200-440CW conduct an appropriate Risk Assessment. Quattrolifts will not be liable for any personal injury or property damage if the Express 200-440CW is not used strictly in accordance with the procedures as set out in this Manual.

**Perform a “PRE-USE CHECK OF THE QUATTROLIFT EXPRESS 200-440CW” as directed on page 15 before using the Express 200-440CW daily. If you identify any problems notify your distributor immediately.**

## LIMITED WARRANTY

The Quattrolifts Express 200-440CW 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 200-440CW 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 EXPRESS 200-440CW PERFORMED BY AN ACCREDITED REPAIRER

CONTACT YOUR RETAILER – The Express 200-440CW 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 200-440CW failing and causing an injury.

The following items MUST be checked:

### Frame

- Inspect the frame 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
- Grease winch gears

### Sliding head

- Head slides up and down easily when winding the winch

### Rotating & Indexing Head

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

### Side Shift

- Inspect the chromed bar for damage from the linear bearings
- Slide the head under load to identify if the linear bearings function
- Inspect all welds and bolts are tight

## INDEXING THE GLASS TO MOVE THROUGH DOORWAYS

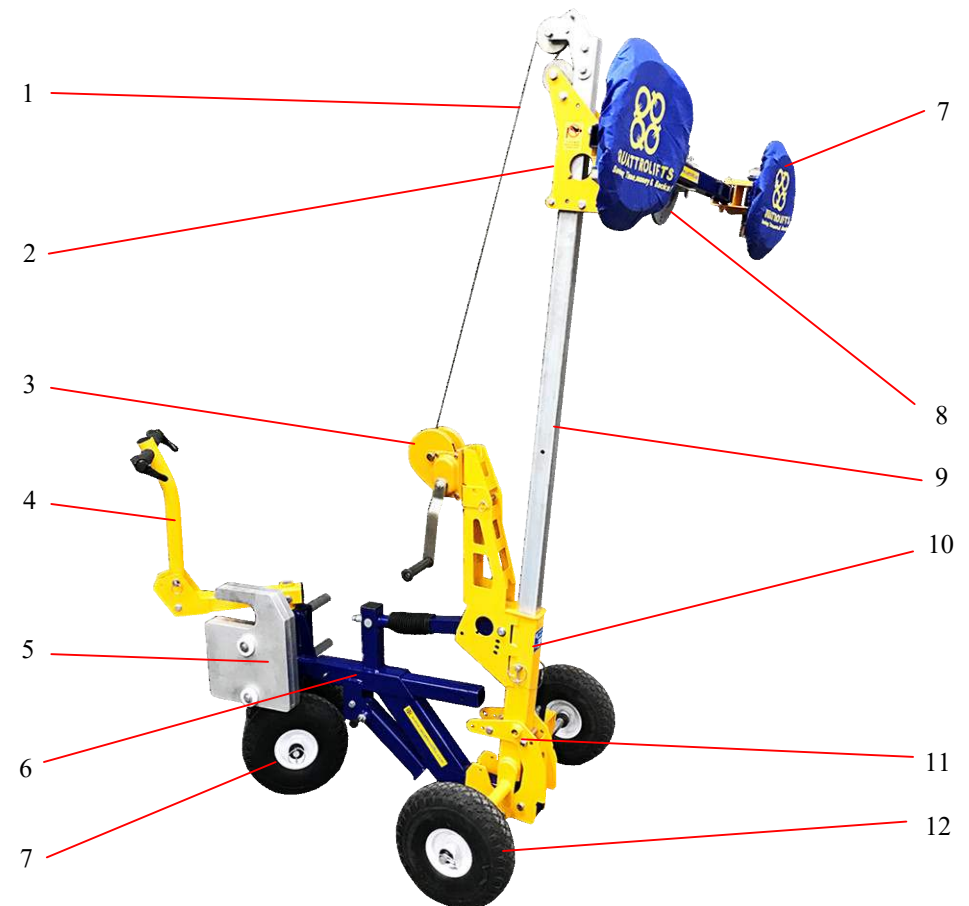
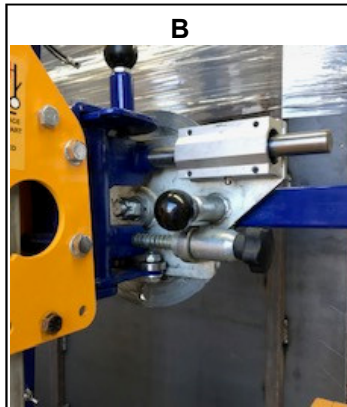
- To index the glass, ensure that the Express 200-440CW is attached to the middle of the glass.
- Ensure that the ground is level and does not cause the Express 200-440CW to be unstable.
- Using the winch wind the glass up sufficiently to allow the glass to index without the lower edge striking the rear 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
- The glass can now be indexed until it rests against the hand grip.



**NOTE:** if the Express 200-440CW 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.

## SIDE SHIFTING GLASS WITH THE EXPRESS 200-440CW

- Operator can wind the side shift hand knob to move the glass left or right about 120mm



## LEGEND

- |                                |   |
|--------------------------------|---|
| 1. Winch cable (5mm) & guard   | 8. Vacuum cups & load arm   |
| 2. Sliding head                | 9. Side Shift, Side indexing pin, rotating head (with spring locking pin) on other side |
| 3. Winch                       | 10. Adjustable mast   |
| 4. Steering handle             | 11. Base  |
| 5. Counterweights (150kg)      | 12. Mast locking pins   |
| 6. Working Load Limit selector | 13. Solid 300mm / 13" wheels  |
| 7. Rear wheels (solid)         |   |

## IMPORTANT SAFETY PRECAUTIONS

- Do not lift any glass or material that the vacuum cups cannot attach to securely. The glass to be lifted must be dry and clean
- DO NOT USE THE EXPRESS 200-440CW 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:

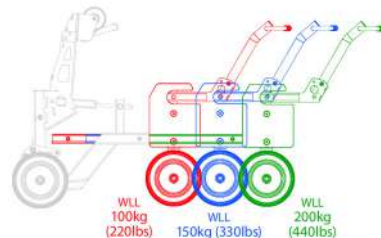
**Safety glasses; Safety Helmet, Glaziers Gloves; Safety shoes; Wrist cuffs.**

## SELECTING THE WORKING LOAD LIMIT (WLL) OF THE EXPRESS 200-440 CW

The WLL is determined by the location of the rear counterweights. Do not change the WLL set up with glass on the machine and use two people to make this adjustment.

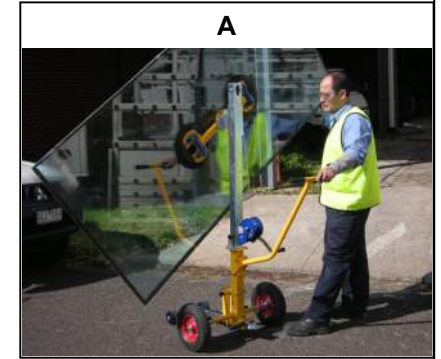
The Express 200-440 CW will lift:

- 100kg (220lbs) with the machine in the retracted set-up (red position on diagram)
- 150kg (330lbs) with the machine in the middle set-up (blue position)
- 200kg (440lbs) with the machine in the most extended set-up (green position)



## ROTATING GLASS WITH THE EXPRESS 200-440CW

- Ensure that the ground is level and does not cause the Express 200-440CW to be unstable.
- To rotate the glass, ensure that the Express 200-440CW is attached to the middle of the glass.
- 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 or in front 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 automatically locks back into position every 90 degrees.

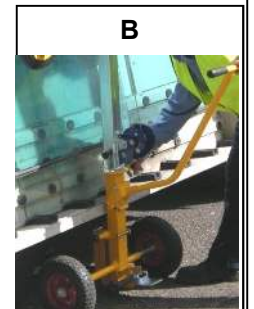


**NOTE:** if the Express 200-440CW is not attached to the middle of the glass, then safely place the glass down and re-attach the cups in the middle of the glass or use a second and third operator if required, to assist with rotation.

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

## RELEASING GLASS FROM THE EXPRESS 200-440CW

- Move the Express 200-440CW 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 tilted onto the rack or dolly.
- Once the Express 200-440CW has safely released the glass, it can be moved away.



## 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 DRY AND 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 to be lifted must be dry, 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.

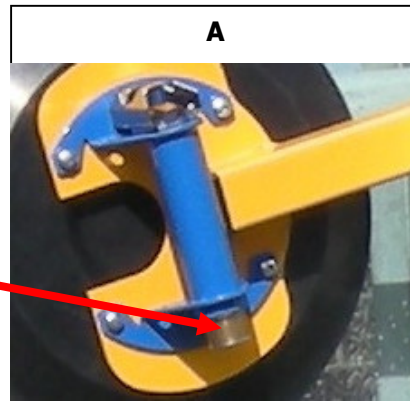
### WORKING POSITION

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.

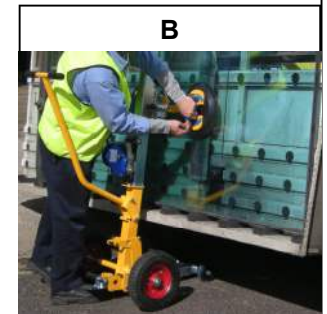
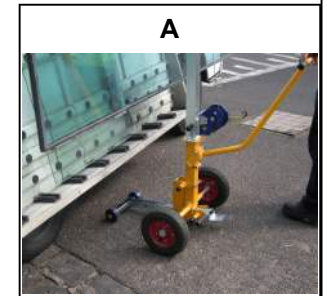
### VACUUM CUPS

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 QUATTROLIFTS 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 dry and clean of dust so the vacuum cups will attach securely
- 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.**