

KEEP FOR FUTURE REFERENCE

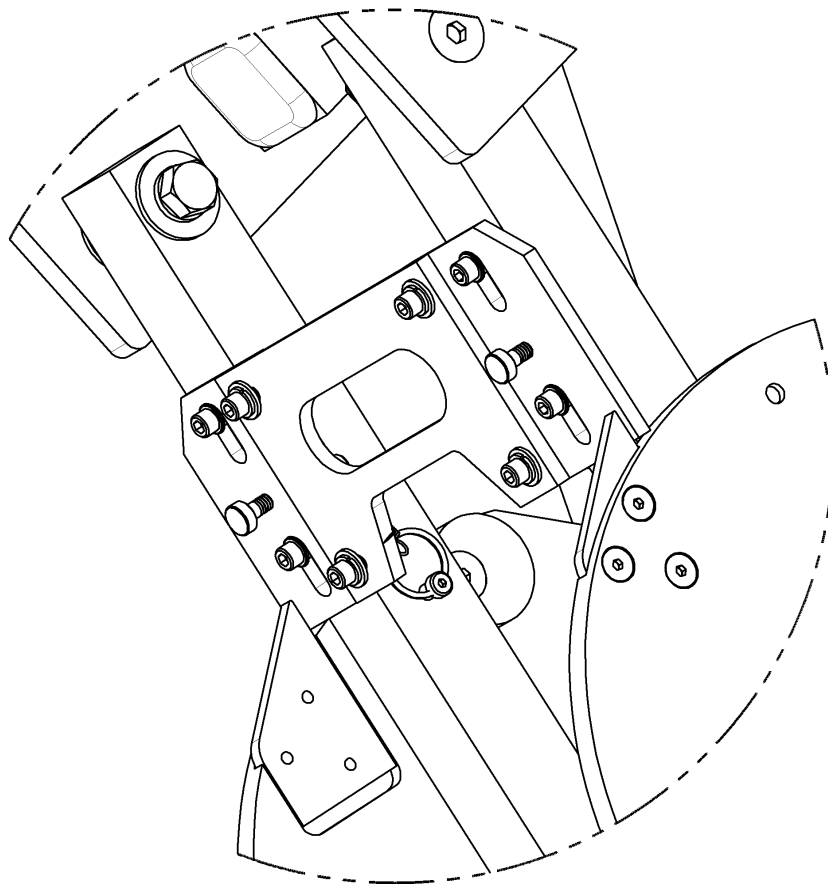


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INSTRUCTIONS

International Version

STOCK NUMBER: 59418



MRTA8 TILT LOCK



***READ ALL INSTRUCTIONS AND WARNINGS
BEFORE USING THIS PRODUCT***



DESIGNED FOR THE MATERIALS HANDLING PROFESSIONAL

SPECIFICATIONS

Stock Number: 59418

Description: The Tilt Lock provides added security by preventing loads from tilting due to wind pressure or unforeseen events. This is particularly useful when using the vacuum lifter to install windows in multi-story buildings and for similar applications, where the lifter's operator would not be able to maintain load orientation using the control handles. In such instances, the Tilt Lock can be engaged while a crane moves the load into position and disengaged whenever the operator is ready to tilt the load.

Option Weight: 4 lbs [2 kg]

Note: Make sure to add the weight of all options to the Lifter Weight when you are selecting appropriate hoisting equipment (see ASSEMBLY in MRTA8 lifter's instruction manual).

WARNINGS



Powr-Grip is pleased to offer the most reliable materials handling products available. Despite the high degree of security provided by the Tilt Lock, certain precautions must be observed to protect the lifter operator and others.



Never use a Tilt Lock that is damaged, malfunctioning, or missing parts.

Always position the vacuum lifter correctly on the load prior to lifting (see OPERATION: TO APPLY THE PADS TO A LOAD in MRTA8 lifter's instruction manual).

Never allow people to ride on the lifter or the load being lifted.

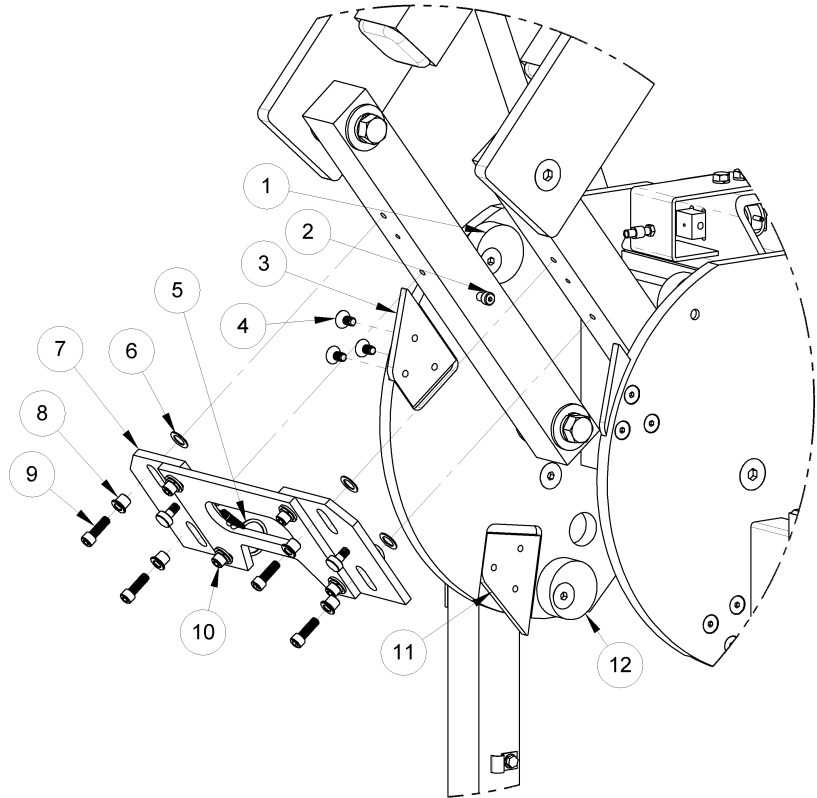
Never lift a load higher than necessary or leave suspended loads unattended.

Never lift a load over people.

Never make any modifications to the Tilt Lock (see LIMITED WARRANTY)

INSTALLATION

- 1) TILT STOP CAM (vertical/existing)
- 2) 1/4" DIA. X 5/16" SHOULDER SCREW
- 3) TILT LOCK RAMP PLATE (vertical)
- 4) 1/4-20 X 1/2" FLAT-HEAD SCREW
- 5) SPRING W/MOUNTING RING
- 6) 3/8" ID FLAT WASHER
- 7) TILT LOCK CATCH PLATE
- 8/9) 3/8" DIA X 5/16" SHOULDER SCREW¹
- 10) 1/4-20 X 3/4" SOCKET-HEAD SCREW
- 11) TILT LOCK RAMP PLATE (horizontal)
- 12) TILT STOP CAM (horizontal/existing)



Note: All screws not assembled with a lock washer should be installed with a thread locking compound, to prevent them from loosening.

- 1) Identify all the components shown and make sure all are included with the Tilt Lock (except those already existing).
- 2) Position all four tilt lock ramp plates (#3 & #11) in the appropriate orientations, as shown. Then insert and tighten the 1/4-20 x 1/2" flat head screws (#4—three per plate). Note: Vertical and horizontal ramp plates are identical.
- 3) Insert and tighten two 1/4" dia. x 5/16" shoulder screws (#2) in the tilt linkage bars, as shown.
- 4) Insert the 3/8" dia. x 5/16" shoulder screw (#8/9) through the slot in the tilt lock catch plate (#7), as shown.

Place a 3/8" ID flat washer (#6) over the protruding part of the shoulder screw, to lie flat against the tilt lock catch plate as shown.

Align the shoulder screw and thread it into the corresponding threaded hole in the tilt linkage. Then tighten the screw securely.

Repeat these steps to install and tighten the remaining three screws/flat washers that mount the tilt lock catch plates onto the tilt linkage.

Note: In order for all four screws to properly align with the holes in the tilt linkage, the next step may be required. Otherwise, proceed to step 6.

¹ Originally designed as two separate parts (see illustration), these have now been combined into one shoulder screw.

5) If either of the tilt lock plate slots do not align with the tilt linkage, the width of the tilt lock plate assembly may be adjusted, as follows:

Loosen the four 1/4-20 x 3/4" socket-head screws (#10), to allow the individual sections of the lock plate assembly to slide with respect to each other.

Adjust the width of the tilt lock plate assembly as needed to install all four mounting screws/washers, as described in step 4.

Then tighten the 1/4-20 x 3/4" socket-head screws (#10) securely in the tilt lock plate assembly.

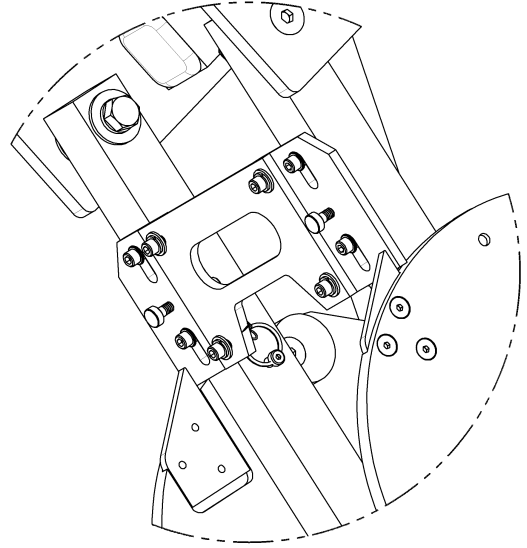
6) Stretch the springs (#5) slightly and slip their mounting rings over the 1/4" dia. x 5/16" shoulder screws (#2) installed in step 3.

7) Apply grease to the tilt lock ramp plates (#3 & #11) where they contact the tilt lock catch plates (#7). Then tilt the pad frame to the horizontal and vertical positions, to ensure that the catch plates slide freely on the ramp plates and securely engage behind them, as shown.

If the catch plates do not fit securely behind the ramp plates, adjust the tilt stop cams (#1 & #12), as follows:

Loosen the retaining screw and rotate a cam as needed to increase or decrease the distance the pad frame can move before coming to a stop.

Note that two cams limit vertical movement and two cams limit horizontal movement. Make sure both vertical cams contact the tilt linkage bars simultaneously, and likewise for both horizontal cams.



OPERATION

ABOUT THE TILT LOCK

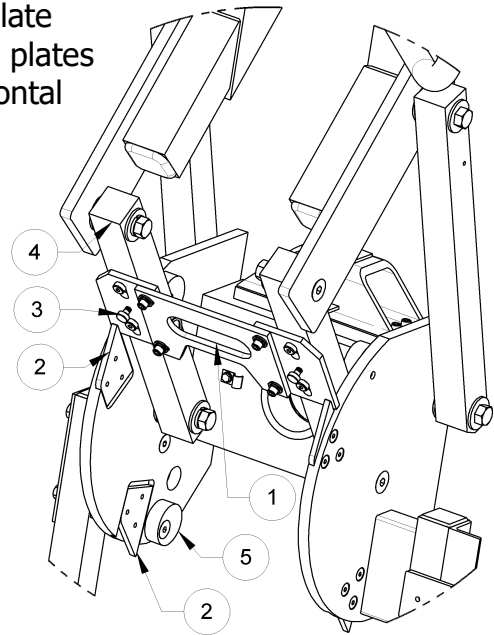
Although the tilt linkage normally holds a balanced load in position, the Tilt Lock can be used to prevent tilt motion due to wind loads or other unexpected forces. The Tilt Lock should only be needed if the operator cannot maintain control of the load using the control handle or other appropriate means (such as when using the lifter to install glass in multi-story buildings). The Tilt Lock is a secondary safety device and does not eliminate the need to load the lifter correctly (see OPERATION: TO APPLY THE PADS TO A LOAD in MRTA8 lifter's instruction manual).

Caution: Failure to load lifter correctly may damage Tilt Lock or other lifter components.

The Tilt Lock can be set to engage automatically when the pad frame reaches the vertical or horizontal position, or it can be deactivated, depending on the application.

TO USE THE TILT LOCK

To allow automatic locking, make sure the lock handle/catch plate assembly (#1) is set to slide up and lock behind the lock ramp plates (#2) when the pad frame moves to either the vertical or horizontal position. If not, pull outward on the round knobs of the two spring plungers (#3) and turn them 90° to release the handle/catch plate assembly. Make sure that the catch plates slide freely along the bars of the tilt linkage (#4) before you attempt to tilt the pad frame. If the catch plates do not lock behind the ramp plates or if the pad frame exhibits excessive play in either the vertical or the horizontal orientation, the stop cams (#5) for the tilt linkage may require adjustment (see INSTALLATION step 7). Once the Tilt Lock is set to the automatic mode, simply pull on the lock handle to disengage the lock.



TO DEACTIVATE THE TILT LOCK

Make sure the lock handle/catch plate assembly (#1) is secured so that it *cannot* lock behind the ramp plates (#2). If otherwise, turn the round knobs of the spring plungers (#3) 90° and then slide the lock handle/catch plate assembly upward until the spring plungers engage. Make sure that the catch plates do not slide along the bars of the tilt linkage (#4).

- 1) LOCK HANDLE/CATCH PLATES
- 2) LOCK RAMP PLATE
- 3) SPRING PLUNGER
- 4) TILT LINKAGE
- 5) TILT STOP CAM

MAINTENANCE

When performing inspections and tests as directed in the MRTA8 lifter's instruction manual, be sure to include all parts of the Tilt Lock whenever applicable.

REPLACEMENT PARTS LIST

Stock No.	Description (with # from INSTALLATION illustration)	Qty.
66464	1/4-20 Thread x 3/8" Long Locking Spring Plunger with Round Knob	2
65027	0.3125" OD x 1.5" Long Extension Spring (#5)	2
16069	1.1" OD x 0.932" ID x 0.11" Thick Split Ring (#5)	2
12822MM	3/8" ID x 5/8" OD Flat Washer (#6)	4
10899	3/8" Dia. x 5/16" Long x 1/4-20 Thread Socket-Head Shoulder Screw (#8/9)	4
10896	1/4" Dia. x 5/16" Long x 10-32 Thread Socket-Head Shoulder Screw (#2)	4
10664	1/4-20 x 3/4" Socket-Head Cap Screw (#10)	4
10522	1/4-20 x 1/2" Flat-Head Socket Cap Screw (#4)	12

***SERVICE ONLY WITH IDENTICAL REPLACEMENT PARTS
SUPPLIED BY OR APPROVED BY WOOD'S POWR-GRIP CO., INC.***

LIMITED WARRANTY

Powr-Grip products 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 a period of one year from the date of purchase.

If a problem develops during the warranty period, follow the instructions hereafter to obtain warranty service. If inspection shows that the problem is due to defective workmanship or materials, Powr-Grip will repair the product without charge.

WARRANTY DOES NOT APPLY WHEN:

Modifications have been made to the product after leaving the factory.

Rubber portions have been cut or scratched during use.

Repairs are required due to abnormal wear and tear.

The product has been damaged, misused, or neglected.

If a problem is not covered under warranty, Powr-Grip will notify the customer of costs prior to repair. If the customer agrees to pay all repair costs and to receive the repaired product on a C.O.D. basis, Powr-Grip then will proceed with repairs.

TO OBTAIN REPAIRS OR WARRANTY SERVICE

For purchases in *North America*:

Contact the Technical Service Department at Wood's Powr-Grip Co. When factory service is required, ship the complete product--prepaid--along with your name, address and phone number to the street address hereafter.

For purchases in *all other localities*:

Contact your dealer or the Technical Service Department at Wood's Powr-Grip Co. for assistance.

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