

TecnoRampa™



CERTIFIED COMPANY



Mechanical edge of dock leveler

USER MANUAL

tecnorampa.us

□ table of contents

	SUBJECT	PAGE
1	SEE SHIPPING NOTICE	2
2	OWNER'S PURCHASE RECORD	2
3	INTRODUCTION	3
	3.1 WARRANTY	3
	3.2 EXCLUSION OF WARRANTY	3
	3.3 OWNER'S LIABILITY	3
4	SAFETY WARNINGS	4
	4.1 IDENTIFICATION OF COLORS ON SAFETY SIGNS AND SAFETY MESSAGES	4
5	SAFE PRACTICES	5
6	PIT INSTALLATION REQUIREMENTS	6
7	INSTALLATION	9
8	MODE OF OPERATION	12
	8.1 FUNCTIONAL DESCRIPTION	12
	8.2 OPERATING INSTRUCTIONS	13
9	EQUIPMENT MAINTENANCE	15
	9.1 PREVENTIVE MAINTENANCE	15
	9.2 CHECKLIST OF INSPECTION PROCEDURES PRIOR TO OPERATING THE MINIDOCK	16
	9.3 TROUBLESHOOTING GUIDE	17
	9.4 MECHANICAL MINIDOCK ADJUSTMENTS	18
	9.4.1 ADJUSTING THE LOCKING ROD SCREW	19
	9.4.2 ILIP LIMITING SCREW ADJUSTMENT	20
	9.4.3 DECREASE LIP LOWERING SPEED	21
10	PARTS INVENTORY	22
	10.1 EXPLOSION OF MECHANICAL MINIDOCK PARTS	23
	10.2 MECHANICAL MINIDOCK PARTS LIST	24
	10.3 SPARE PARTS	25
	10.4 LOCATION OF WARNING AND SAFETY LABELS	26

□ 1. See shipping notice

CHECK SHIPPING BEFORE INSTALLATION

The Mecanic Platform Edge Leveler (Minidock) has been carefully inspected at the manufacturing plant prior to shipment. To ensure that no damage has occurred during shipment, the minidock should be inspected upon receipt for shipping damage and to ensure proper operation. Damage due to shipping damage should be noted on the signed copy of the shipping document. The carrier must be notified of any damage within 48 hours of delivery.

NOTE

IF ANY DAMAGE IS DETECTED IN THE EQUIPMENT RECEIVED, YOU SHOULD CONTACT THE MANUFACTURER FOR VALIDATION.

□ 2. Owner's purchase record

OWNER'S PURCHASE REGISTRATION

DEALER:

DATE OF SERVICE:

OWNER:

NUMBER OF UNITS:

ORDER NUMBER:

YEAR BUILT:

SERIAL NUMBER:

MODEL:

TECNORAMPA has a complete line of platform levelers, parking ramps, freight elevators and accessories. In accordance with the policy of continuous improvement in its product line, specifications and operating instructions are subject to change/modification without prior notification.

Descriptions and illustrations included in our operating instructions are not binding. Please contact Tecnorampa for the latest product information, or visit our website <https://www.tecnorampa.com.mx/> for the most current product information.

3. Introduction

▶ 3.1 WARRANTY

Tecnorampa warrants by and for the sole benefit of the original purchaser of the manufactured platform leveler that the Product will be free from defects in materials and workmanship, subject to the following express provisions: Base Warranty: all products are warranted for a base period of 2 years (“Base Warranty Period”) from the earlier of the date of installation approved by Tecnorampa or the sixtieth (60th) day after the date of shipment.

Mainspring Warranty: All mainsprings are warranted to cover the cost of replacement parts only for a period of (2) years. Parts and Assembly Warranty:

All spare or replacement parts are warranted to cover the cost of replacement parts and freight only for forty-five (45) days from the date of shipment.

▶ 3.2 WARRANTY DISCLAIMER

The foregoing warranties apply in lieu of any other warranties, whether express or implied, including, but not limited to, any implied warranty or merchantability for a particular purpose.

This Limited Warranty shall be null and void (i) if a Product is altered or modified from its original condition as installed or delivered at or from the factory, (ii) to the extent the defect in the Product is the direct result of improper installation, operation beyond the capability or not in accordance with Tecnorampa’s instructions, careless or negligent use, or failure to maintain the Product as recommended by Tecnorampa or (iii) if the original purchaser fails to notify Tecnorampa of the defect within sixty (60) days after the defect is discovered.

In no event shall Tecnorampa be liable to anyone, including third parties, for special, indirect, collateral, punitive, incidental or consequential damages, even if Tecnorampa has been advised of the possibility of such damages. Such excluded damages include, but are not limited to, loss of goodwill, loss of profits, loss of use, business interruption or other similar indirect financial loss.

▶ 3.3 OWNER’S RESPONSIBILITY

The owner must recognize the inherent danger of the interface between the transport vehicle and the leveler. The owner must train and instruct operators in the safe use of the platform dock leveler. Inspection procedures and periodic maintenance procedures recommended by the manufacturer must be followed.

The owner must ensure that all safety labels and instructions are posted on the leveler and are legible to the operator or maintenance personnel for whom these warnings are intended, as well as ensure that the appropriate operating and maintenance manuals are provided to the users.

Levelers that are structurally damaged or have suffered a loss of support under load, which may occur when a transport vehicle is removed under the platform leveler, should be removed from service, inspected by an authorized representative of the manufacturer and repaired as necessary before being returned to service.

When a transport vehicle is positioned for loading and unloading, there must be a contact surface of at least 4” (100mm) between the leading edge of the lip of the leveler and the edge of the floor of the loading vehicle. When a vehicle is being driven on and off the transport vehicle during the loading and unloading operation through the platform leveler, the brakes of the transport vehicle must be applied and the wheels must be chocked with an appropriate wheel chock or using a vehicle restraint system.

During the loading and unloading operation, do not exceed 6.5 km/h when driving over the leveler.

The leveler should never be used outside its vertical working range or vertical lifting range or outside the rated capacity established by the manufacturer.

4. Safety warnings

Improper operation can cause accidents. Do not take chances with incorrect or damaged equipment. Read and understand the procedures for safe operation and maintenance described in this manual. Do not hesitate to ask for help.

Stay alert! Follow safety rules, regulations and procedures. Avoid accidents by recognizing dangerous procedures or situations before they occur.

Safety signs and messages are placed in this manual to provide instructions and identify specific areas where potential hazards exist and special precautions should be taken. Knowing and understanding the meaning of these instructions, signs and messages can prevent and avoid damage to equipment, death or serious injury to yourself or others.

4.1 COLOR IDENTIFICATION OF SAFETY SIGNS AND SAFETY MESSAGES

This manual includes color-coded safety messages to identify instructions and specify areas where potential hazards exist.



This is the safety alert symbol. It is used to alert you to potential personal injury hazards. Obey all safety messages containing this symbol to avoid possible serious or fatal injury. The following is the color code established in this manual for safety messages.



DANGER

THIS MESSAGE INDICATES AN IMMINENT DANGER SITUATION WHICH, IF NOT AVOIDED, WILL RESULT IN DEATH OR SERIOUS HARM.



WARNING

THIS MESSAGE INDICATES A POTENTIALLY HAZARDOUS SITUATION WHICH, IF NOT AVOIDED, COULD RESULT IN DEATH OR SERIOUS INJURY.



CAUTION

THIS MESSAGE INDICATES A POTENTIALLY HAZARDOUS SITUATION WHICH, IF NOT AVOIDED, MAY RESULT IN MINOR OR MODERATE INJURY.



IMPORTANT

THIS MESSAGE IS USED WHEN SPECIAL PRECAUTIONS ARE IN PLACE AND MUST BE TAKEN TO ENSURE CORRECT ACTION OR TO PREVENT DAMAGE OR MALFUNCTION OF THE EQUIPMENT AND/OR A COMPONENT.

□ 5. Safe practices

The following is intended to be a quick reference to some of the important procedures that should be followed when using the Platform Edge Leveler (MINIDOCK). It is not intended to cover, nor does it suggest that it does, all procedures that must be followed to ensure safe operation. Operators should be aware of and comply with all workplace safety regulations that may apply to the operation of the minidock.



WARNING

1. Do not install, operate and/or service this leveler unless you have been trained and authorized to do so.
2. Do not install, operate and/or service this leveler until you have read and understand all safety information and instructions contained in this manual.
3. Do not operate this leveler until you have verified its condition. Report the need for repairs to your supervisor immediately and do not operate the leveler until repairs are made. Negligence can turn a minor repair into a major service problem and make the leveler unsafe.
4. Do not work under or around the leveler being installed without first placing adequate barriers to prevent vehicle traffic from entering the work area.
5. All electrical wiring, connections, repairs and troubleshooting must be performed by qualified service personnel.
6. All wiring connections and repairs must be made to comply with all applicable codes. Before performing any electrical work, make sure the power is disconnected and properly tagged and/or locked out.
7. Before performing any maintenance, secure the platform leveler properly.
8. Do not load the leveler beyond the capacity shown on the leveler serial nameplate.
9. Stand clear of the platform leveler and the vehicle when the vehicle is backing up or leaving the platform area.
10. Secure the vehicle by chocking the vehicle wheels or using a vehicle restraint system before operating the platform leveler.
11. Do not use or move the platform leveler if someone is under, in front of, and/or on the platform leveler.
12. Keep hands and feet away from the platform leveler attachment points at all times. Never use your hands to lift the platform ramp and/or the edge of the vehicle or to put the platform leveler away.
13. Do not drive over the leveler unless the edge is firmly in contact on the vehicle platform and has a minimum projection of 4" (100 mm) onto the vehicle platform.
14. Do not exceed the stated weight of the leveler when in use.
15. Do not drive over the edges of the leveler and/or the platform bumpers (bumpers are not structural).
16. Do not leave equipment or materials unattended on the leveler.
17. Do not leave the leveler unattended in the deployed position.
18. Do not use a forklift or other material handling equipment to lower the platform leveler.
19. Never attempt to make repairs. Refer to a qualified repair technician.
20. Use safety equipment as required.
21. Practical workplace guidance for the safe use of this product may restrict the use of any substance that may compromise or impair safe operational use.

This manual is intended to be readily available. Keep it near the leveler as a reference for anyone who may operate or repair it. If the leveler you are operating is not equipped with a manual, ask to obtain one and locate it near the leveler.

6. Pit installation requirements



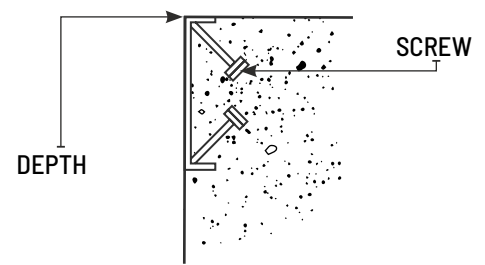
IMPORTANT

READ THE ENTIRE INSTALLATION AND OPERATION MANUAL BEFORE INSTALLING OR OPERATING THE MINIDOCK.
DO NOT INSTALL THE MINIDOCK ON ANY SURFACE OTHER THAN CONCRETE, CONFIRMING THAT IT MEETS THE MINIMUM SPECIFICATIONS.
THE MATERIAL AND PREPARATION OF THE LOADING DOCK PIT IS THE RESPONSIBILITY OF THE OWNER. IT IS NOT SUPPLIED BY TECNORAMPA.

PIT STRUCTURE

8-Inch U-Channel Installation

- Must be poured with pier concrete, 250cm/cm² concrete.
- Minimum 6" of structural channel.
- Weld anchors to U-channel every 12" minimum 7/8 x 6" Length



OPTIONAL INSTALLATION OF APPROACH RAMP

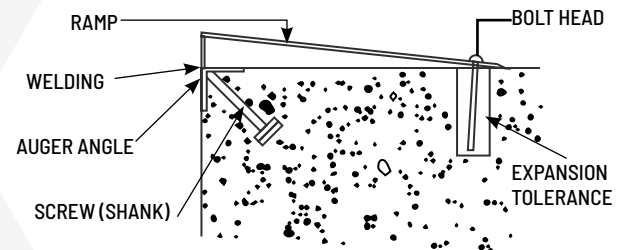
Approach Ramp Layout

As illustrated on the Ramp. The Edge should be on the outside of the ramp at the edge of the side exit of the edge angle.

The weld on the ramp should pass through the rim angle.

Drill 3/4" diameter holes using the ramp as a template. Insert 5/8" expansion. Install and tighten 3/4" x 4-3/4" tapping head.

Weld ramp to rim angle as illustrated using 1/4" x 5" welds on 9" centers.



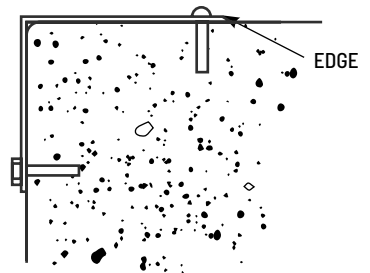
4" X 1/4" STRUCTURAL ANGLE

One-piece corner plate

Minimum angle thickness should be 1/4". With anchors every 12".
To concrete

At the top of the Angle use the Drill and 7/8" drill bit and drill holes to install 3/4" x 4-3/4" concrete anchors every 12".

On the faceplate -use the Drill with 7/8" diameter drill bit and drill holes 4" deep. Insert 3/4" x 4-3/4" long concrete anchors and tighten.



ANGULAR SHAPED PLATES IN TWO PIECES

Two-piece angle plate

Minimum plate thickness 1/4". On top plate 13" wide, and on front plate 10" wide.

Place top plate on top of existing base, with front edge flush with face of pier.

Use the Drill with 3/4" diameter drill bit, making deep borings using the plate as a template.

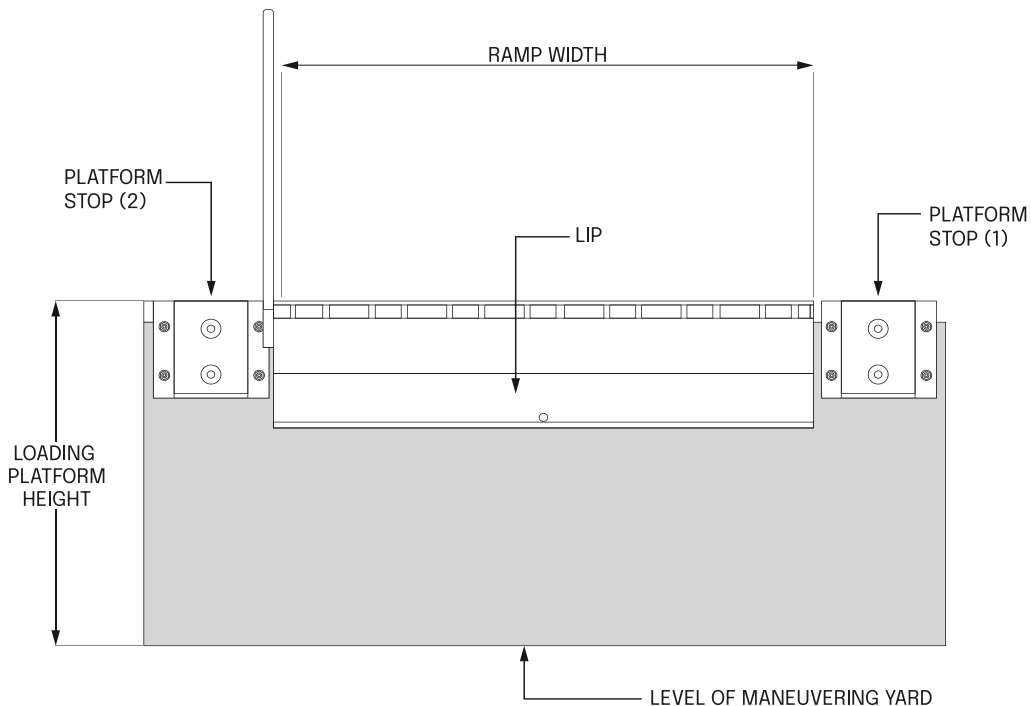
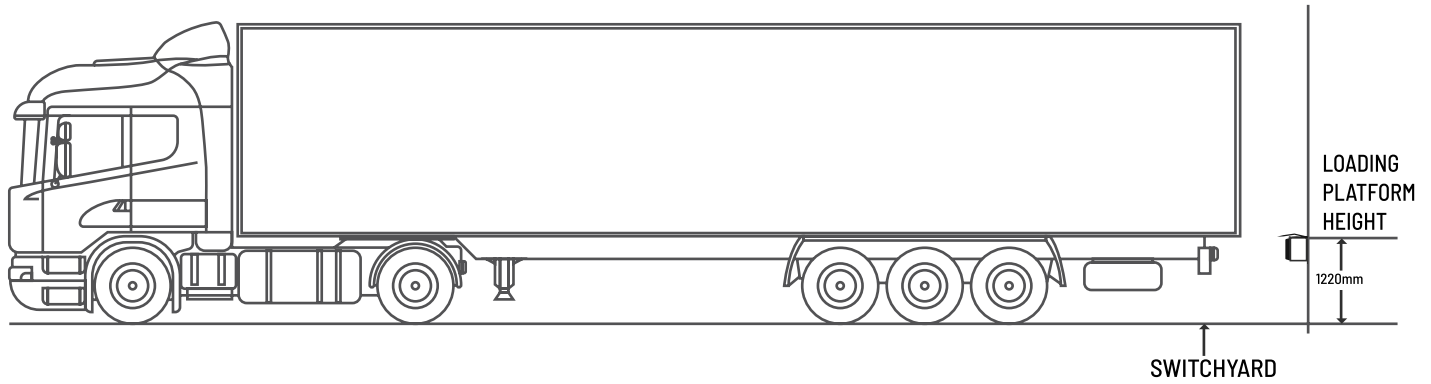
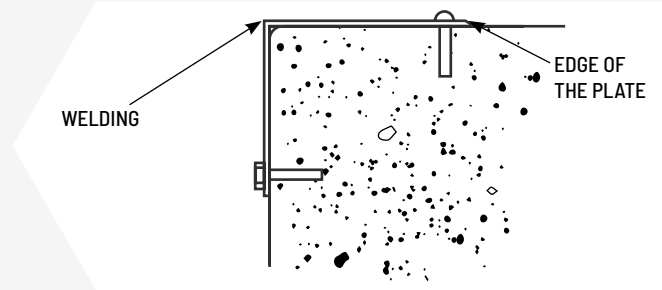
Insert 3/4" x 4.750" expansion bolts. Install and tighten and bolt.

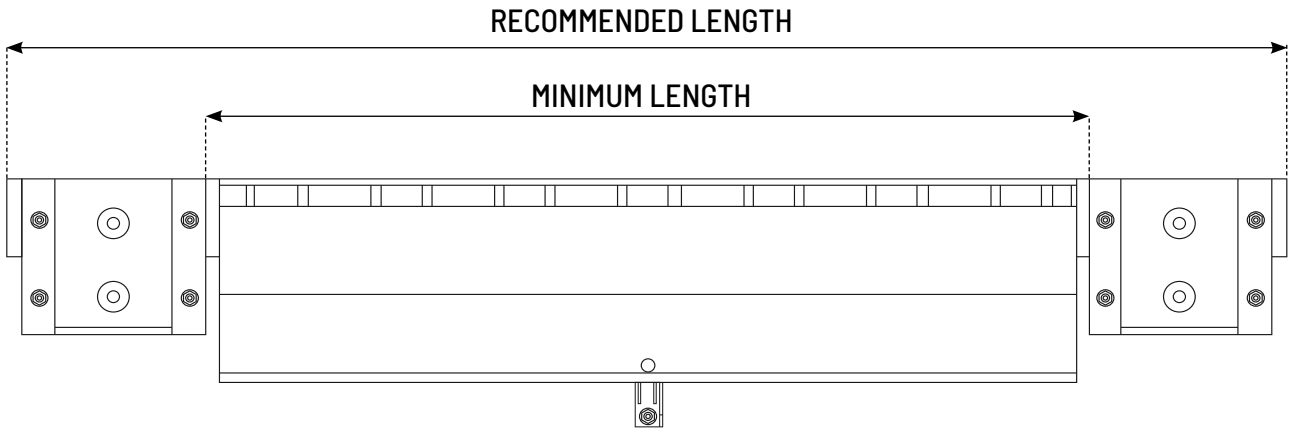
Place the faceplate in position as shown. Attach the top edge for welding to the top plate.

Drill 3/4" diameter x 4" holes using the plate as a template. Insert

3/4" x 4-3/4" long concrete plug anchors and tighten.

Weld the two plates together as illustrated. Long 1/4" x 5" welds on 9" centers.



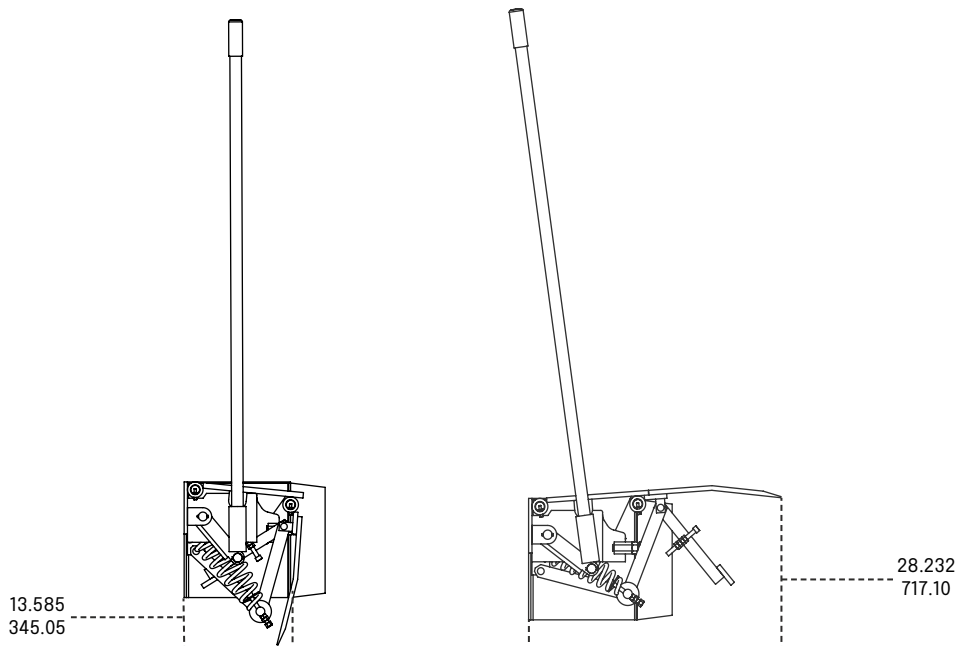


	MODEL OF MINIDOCK	
	MDH3066	MDH3072
RECOMMENDED LENGTH	68 IN	74 IN
MINIMUM LENGTH	101 IN	107 IN

MINIDOCK TECHNICAL SPECIFICATIONS

	MODEL OF MINIDOCK	
	MDM3066	MDM3072
RATED CAPACITY	30,000 LBS	30,000 LBS
RATED DIMENSIONS	66 IN	72 IN
PLATFORM DIMENSIONS	66" X 13.6" (1676.4MM X 345MM)	72" X 13.6" (1676.4MM X 345MM)
LEVELING	0 TO +12" WITH RESPECT TO PLATFORM LEVEL	+/- 12" WITH RESPECT TO PLATFORM LEVEL
STANDARD LIP	14-3/4"	14-3/4"
OPERATION SYSTEM	MECHANICAL	MECHANICAL
FINISH	LEAD GREY/YELLOW	LEAD GREY/YELLOW

▶ SECTION VIEWS



7. Installation



WARNING

DO NOT INSTALL, OPERATE AND/OR REPAIR THIS LEVELER UNTIL YOU HAVE READ AND UNDERSTAND ALL SAFETY INFORMATION AND INSTRUCTIONS CONTAINED HEREIN AND ON THE LEVELER. DO NOT WORK UNDER OR AROUND THE LEVELER BEING INSTALLED WITHOUT FIRST PLACING ADEQUATE BARRIERS TO PREVENT VEHICULAR TRAFFIC FROM ENTERING THE WORK AREA. KEEP HANDS AND FEET AWAY FROM THE PLATFORM LEVELER ATTACHMENT POINTS.

▶ MECHANICAL INSTALLATION ON PLATFORM EDGE

- 1 Inspect the curb angle of the loading platform and verify that it is firmly embedded and anchored in the concrete. If there is no curb angle report it to the personnel in charge and do not proceed with the installation until the necessary modifications have been made.



WARNING

THE LEVELER MUST BE WELDED TO A STEEL ANGLE SECURELY. DO NOT ATTEMPT TO USE BOLTS OR ANCHORS ALONE TO SECURE THE SIDEWALK LEVELER TO THE CONCRETE. USE CARE WHEN REMOVING THE STRAPS SECURING THE LEVELER. KEEP HANDS AWAY FROM THE ATTACHMENT POINTS AND WEAR APPROPRIATE SAFETY CLOTHING: GOGGLES, GLOVES AND WORK BOOTS.

- 2 Remove the straps holding the leveler and discard all shipping material.



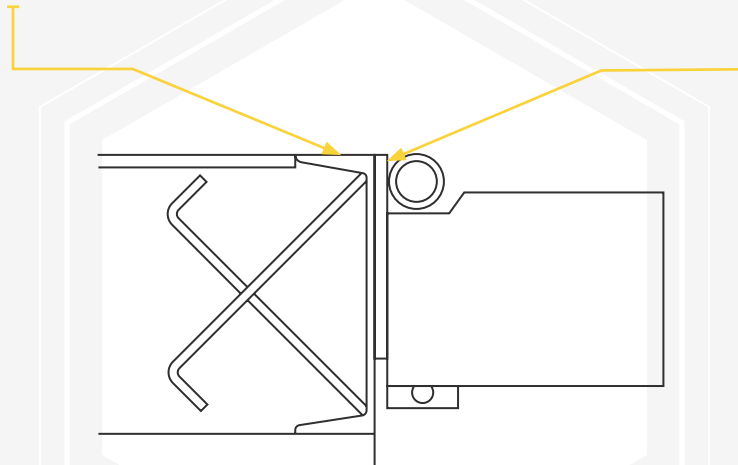
WARNING

USE CAUTION WHEN LIFTING OR MOVING THE LEVELER. DO NOT ATTEMPT TO LIFT WITHOUT PROPER LIFTING EQUIPMENT THAT IS CAPABLE OF LIFTING AT LEAST 600 POUNDS.

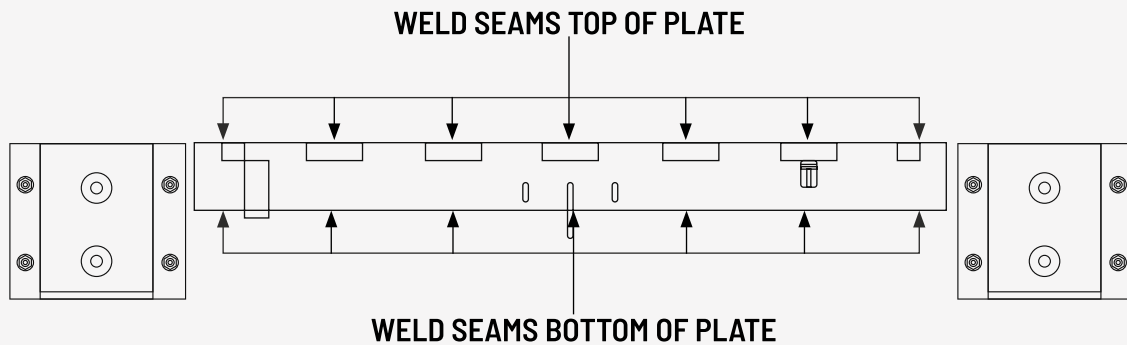
- 3 Position the rear frame so that the top of the frame is flush with the level of the top of the curb angle. Make sure the top of the frame is parallel to the top of the curb angle.

PLATFORM EDGE PROFILE

MINIDOCK BACK PLATE

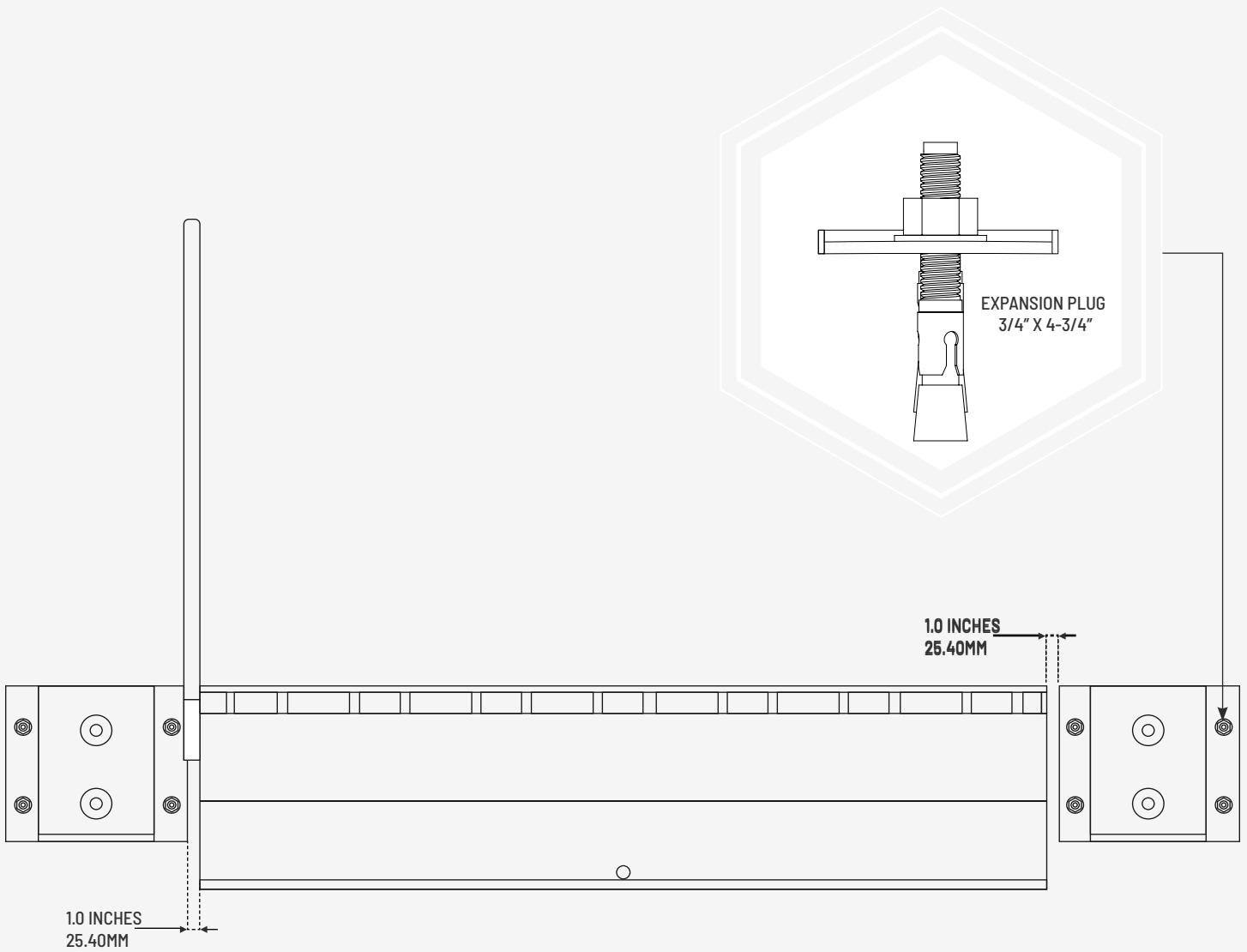


- 4** Welding application to attach minidock.
- Tack welded the top of the rear frame securely to the curb angle.
 - Make sure the rear frame is firmly against the curb angle, and tack weld the bottom of the rear frame to the curb profile.
 - Finish welding the top of the back frame to the curb angle. Weld 1/4" x 4-1/2" (6mm x 115mm) long welds on both ends of the back frame. Repeat 1/4" welds on 10.25" (260mm) centers along the entire length of the rear frame.
 - Apply the same weld to the bottom of the rear frame at the curb angle. Weld 1/4" x 4-1/2" (6mm x 115mm) long welds at both ends of the bottom of the rear frame. Repeat 1/4" welds on 10.25" (260mm) centers along the entire length of the rear frame.
 - Vertical weld both ends of back frame to curb angle, complete length of vertical contact.



WELDING POINTS TOP SIDE OF PLATE
7018 SOLDER APPLIED WITH DIMENSIONS OF 1/4" X 4-1/2" WITH 10-1/4" CENTER-TO-CENTER SPACING.
WELDING POINTS BOTTOM SIDE OF PLATE
7018 SOLDER APPLIED WITH DIMENSIONS OF 1/4" X 4-1/2" WITH 10-1/4" CENTER-TO-CENTER SPACING.
EXTERNAL PLATE WELDING POINTS
7018 SOLDER APPLIED WITH 1/4" DIMENSIONS OVER THE ENTIRE VERTICAL CONTACT LENGTH

- 5** Placement of sockets and/or weld on bumpers after back plate weld attachment is completed.
- Position the left stop bracket (on the driveway in front of the dock leveler) so that there is a 1" (25 mm) clearance between the side of the bracket and the deck plate, and the bracket is level with the top of the curb angle. Weld all horizontal and vertical contact areas between the bracket and the curb angle and plug the mounting holes that overlap the curb angle with weld. Install 3/4" X 4-3/4" cleat anchors in the concrete in the mounting holes that are not welded.
 - Position the right stop bracket so that there is a 1" (25 mm) clearance between the bracket and the dock leveler cover plate. Weld all horizontal and vertical contact areas between bracket, curb angle and mounting holes. Install 3/4" X 4-3/4" concrete cleat anchors in the mounting holes that are not welded.



6 Installation survey.

Clean the entire work area and apply touch-up paint where required.
Ensure that all concrete anchors have been secured.

7 Test operate the unit through several complete cycles of operation.

Refer to: 8 HOW TO OPERATE. If problems are observed, refer to section 9.4 MINIDOCK SETTINGS.

8 Leave these instructions for use by the owner.



8. Form of operation



WARNING

DO NOT OPERATE THIS LEVELER UNTIL YOU HAVE CHECKED ITS CONDITION. REPORT THE NEED FOR MINIDOCK REPAIRS TO YOUR SUPERVISOR IMMEDIATELY AND DO NOT OPERATE THE LEVELER UNTIL REPAIRS ARE MADE. PREVENTION CAN CAUSE A MINOR REPAIR AND AVOID BECOMING A MAJOR SERVICE PROBLEM AND MAKING THE LEVELER UNSAFE.

BEFORE OPERATING THE PLATFORM LEVELER, ALWAYS IMMOBILIZE THE TRUCK WITH A WHEEL RESTRAINT OR WHEEL CHOCKS.

DO NOT OPERATE THE PLATFORM LEVELER IF ANYONE IS STANDING ON OR IN FRONT OF IT.

DO NOT MANUALLY RAISE THE LIP OF THE LEVELER.

ALWAYS KEEP HANDS AND FEET AWAY FROM MOVING PARTS.

AFTER SERVICING THE TRUCK, ALWAYS RETURN THE LEVELER TO THE SAFE POSITION ON THE PLATFORM LEVEL, WITH THE LIP HELD IN THE APPROPRIATE LOCKS.

DO NOT DRIVE OVER THE LEVELER UNLESS THE LIP IS FIRMLY IN CONTACT ON THE VEHICLE BED AND HAS A MINIMUM PROJECTION OF 4" (100 MM) ON THE VEHICLE BED.

DO NOT OPERATE THE LEVELER ABOVE ITS RATED CAPACITY.

DO NOT EXCEED 3 MPH (4.8 KM/H) WHEN DRIVING ON THE LEVELER.

DO NOT DRIVE OVER THE EDGES OF THE LEVELER AND/OR THE PLATFORM BUMPERS (BUMPERS ARE NOT STRUCTURAL).

8.1 FUNCTIONAL DESCRIPTION

- The hydraulic platform edge leveler (minidock) is intended for use as a bridge located between a loading platform and the upper surface of the rear deck of a vehicle.
- The platform plate is hinged, the vertically hanging lip plate is flush with the floor surface and is permanently mounted on the outer edge of the loading platform.
- The rear deck surface of a vehicle must be parked and locked in place against the platform stops which are integral components of the minidock.
- The minidock is operated by pressing the start button on the control box. The platform plate is swung up into a vertical position and subsequently the lip plate is also deployed to a vertical position. Once the control box button is released the lip plate and platform will lower to rest on the rear deck of the cargo vehicle in a horizontal position.
- A bridge is now formed which is supported at the end of the building by the platform floor and at the end of the vehicle.
- No other means of support is provided when in this position.
- The minidock is restored to its original stored position by the operator before the vehicle is allowed to exit.

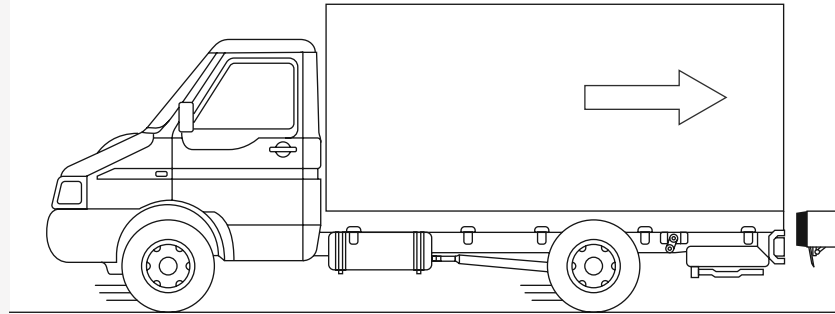


▶ 8.2 OPERATING INSTRUCTIONS

Operation (Contact the supervisor for assistance).
MINIDOCK is available for use.

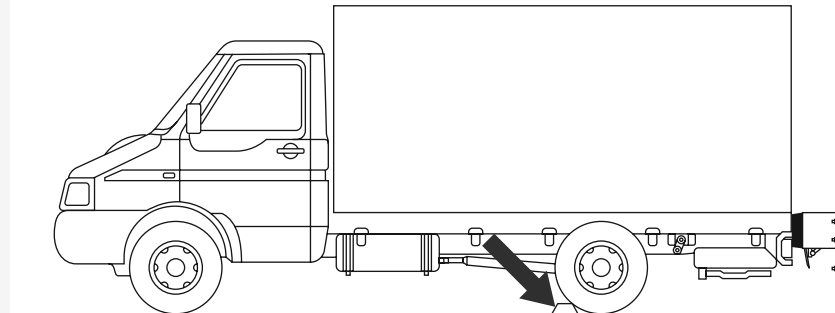
1.

The vehicle driver reverses the vehicle into position firmly against the platform stop extensions.



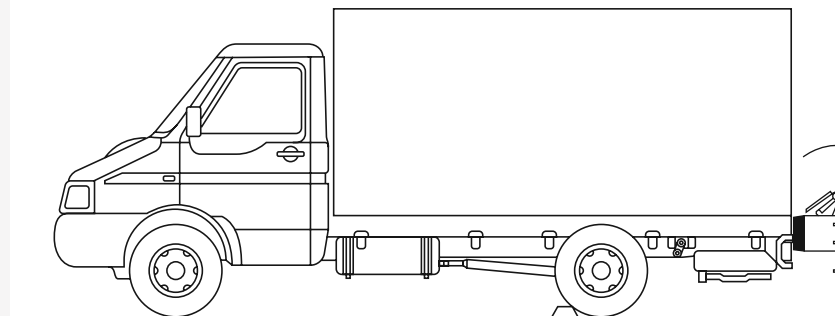
2.

The minidock operator ensures that the vehicle is securely locked (using a vehicle restraint system and/or a tappet wheel) to prevent forward creep.



3.

The operator pulls the grab handle all the way back to rotate the controller to its bottom. The platform plate is past the vertical position and the lip plate is near horizontal.

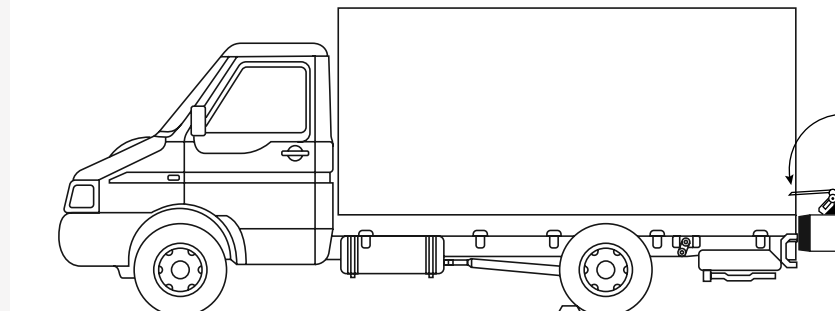


WARNING

DO NOT ATTEMPT TO OPERATE THE MINIDOCK WITHOUT USING THE GRAB HANDLE.

4.

The operator pushes the grab handle forward to rotate the platform plate back to its original position. During this step, the lip plate will remain horizontal and extend until it comes to rest on the floor of the transport vehicle.

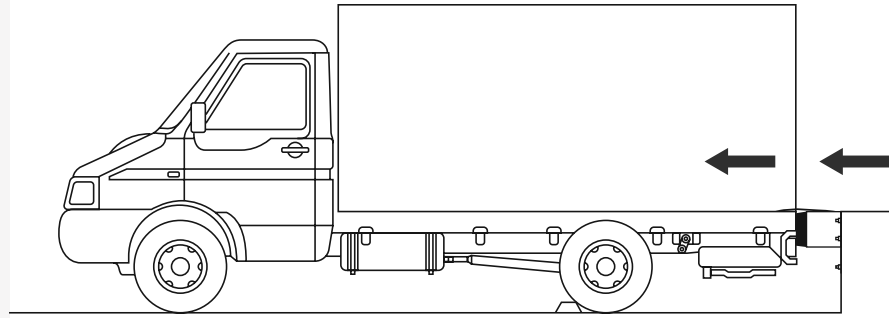


WARNING

THE LIP PLATE SHOULD OVERLAP THE CONVEYOR VEHICLE AND THE LOAD CARRIER BY A MINIMUM OF 4" FULL WIDTH.

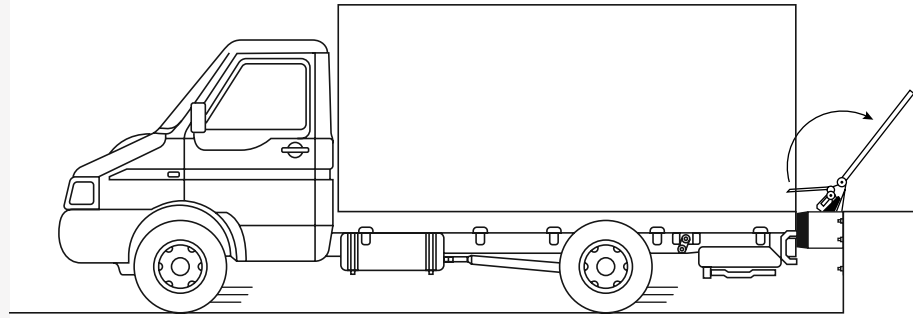
5.

When the lip plate is in full contact with the loading vehicle, the loading/unloading operation can be completed.



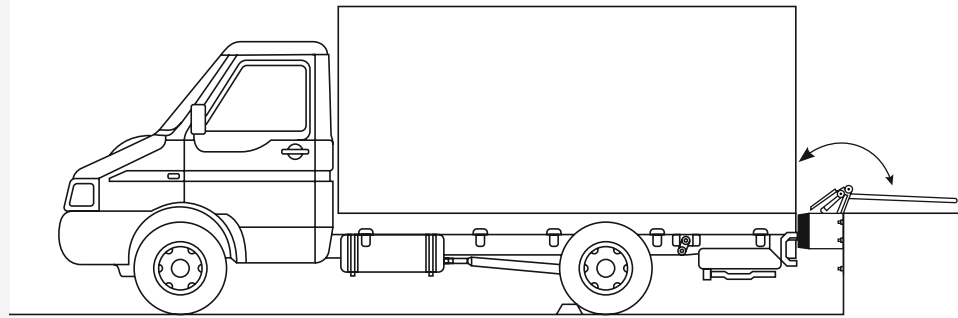
6.

When traffic through the minidock has ceased the operator should return the leveler to its stored position.



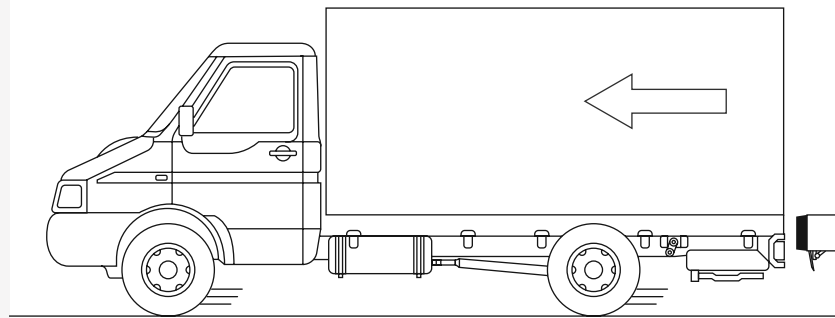
7.

The operator lifts the platform plate, by pulling back on the grab handle, just enough to release the lip from the surface of the conveyor vehicle cargo bed. When the lip is tilted down to a hanging position, the unit is allowed to return to the stored position.



8.

The grab handle is returned to the stored position. The loading vehicle can then leave the platform.



WARNING

THE VEHICLE SHOULD NEVER BE ALLOWED TO LEAVE WITH THE LIP PLATE RESTING ON THE CARGO BED.

9. Equipment maintenance



DANGER

Before installation/maintenance/adjustment, place suitable barriers to prevent unauthorized personnel and vehicle traffic from entering the work area.



DANGER

Before carrying out any adjustment work, place the maintenance baton in position.



WARNING

All repairs and maintenance work must be performed only by trained and authorized personnel.

▶ 9.1 PREVENTIVE MAINTENANCE

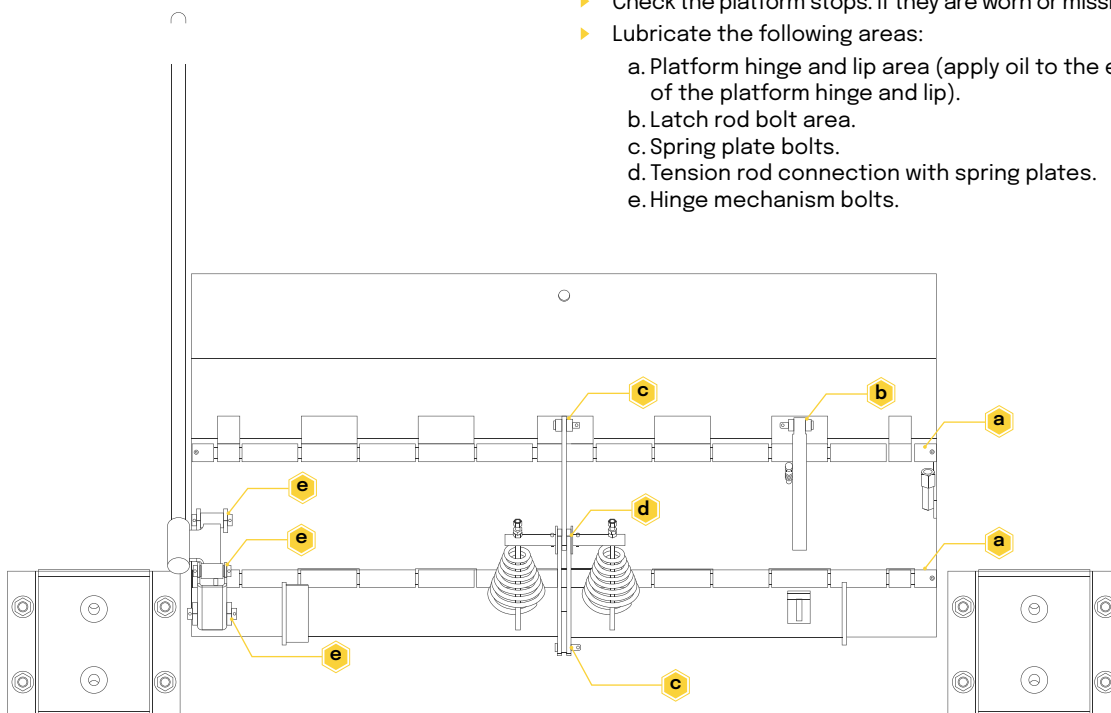
Regular maintenance and care of equipment is very important for cost and operational efficiency and most importantly, operator safety. Faulty equipment is a potential source of danger to the operator and other personnel working near it. As with all quality equipment, keep the equipment in good operating condition by following the recommended maintenance schedule.

Every 10 days of operation check the following points:

- ▶ Check for debris on the lip hinge. Clean as necessary.
- ▶ Check for debris in the rear hinge area of the minidock to ensure proper operation. Clean as necessary.
- ▶ Check that the bolts have their cotter pin or slotted pin in place. Do not operate the minidock if any of the bolts are not secured. Replace them if necessary.
- ▶ Check that the walk stops are present.

Every three months or every 250 hours of operation:

- ▶ Check all minidock for proper operation.
- ▶ Inspect the following items for damage/abnormal w
 - Check welding for flaws or fatigue. Pay special attention to hinges, clevises and the minidock back plate attached to the platform.
 - Lip and platform hinge bolts.
 - Inspect spring plates and hinged cane base for bending or bumping.
 - Inspect the latch bar for bent or banged out.
- ▶ Check all warning labels and signs. Replace as necessary.
- ▶ Check the platform stops. If they are worn or missing replace them.
- ▶ Lubricate the following areas:
 - a. Platform hinge and lip area (apply oil to the entire length of the platform hinge and lip).
 - b. Latch rod bolt area.
 - c. Spring plate bolts.
 - d. Tension rod connection with spring plates.
 - e. Hinge mechanism bolts.



▶ 9.2 CHECKLIST OF INSPECTION PROCEDURES BEFORE OPERATING THE RAMP



WARNING

All repairs and maintenance work must be performed ONLY by trained and authorized personnel.



DANGER

Prior to installation/maintenance/adjustment, place adequate barriers to prevent unauthorized personnel and vehicular traffic from entering the work area. Before performing any adjustment work place the maintenance rod in position.

HIDRAULIC DOCK LEVELER

Serial number _____

Platform # _____

Date _____

Instructions:

Use the [✓] mark in the appropriate box of each inspection point to indicate that it is in optimal condition for use.

Use the [x] mark in the appropriate box of each inspection point to indicate that it is not in optimal condition.

Every day (Can be performed by owner or assistant):

- Check for material debris in the rear hinge area of the leveler and between the sides and edge angles to ensure smooth operation.
- Verify that the platform dock leveler operates smoothly.
- Check that the platform stops are present.
- Check the platform for irregularities such as cracks in the concrete.
- Verify that the work area around the platform is clear. Eliminate any potential tripping hazards.
- Verify the interior and exterior lighting system and external signage is present and legible (if equipped).
- Check that wheel chocks or vehicle restraint system are in good working condition.

Explain the failures briefly in the space provided below:

Name of person in charge of Inspection



WARNING

Do not attempt to perform installation, repair, maintenance or adjustment work. Such work should be performed ONLY by trained and authorized personnel. Contact your local distributor for assistance.

PROBLEM	POSSIBLE CAUSE	PROBLEM SOLUTION
The Minidock requires more effort than usual when lifting into position.	<ol style="list-style-type: none"> 1. Adjustment of tension springs required. 2. Foreign material could be jammed in the platform plate hinge. 3. Platform bumpers may be damaged or missing, allowing the truck to contact and stop the lip. 	<ol style="list-style-type: none"> 1. Adjust the minidock tension springs according to the procedure in section 9.4.3. 2. Inspect the platform plate hinge, remove any material that could affect the operation. 3. Replace damaged or missing platform stops.
When pulling the grab handle upward to raise the minidock into position, the lip does not remain horizontal when the platform plate is pushed forward. The lip does not deploy into the vehicle bed.	<ol style="list-style-type: none"> 1. The locking bar did not swing into position on the fixed block. 2. Latching of the locking bar in the mounting bracket. 3. Lip lock bar may be broken, bent or missing. 4. Foreign material could be jammed in the lip hinges. 	<ol style="list-style-type: none"> 1. The lip limiting screw or the locking bar limiting screw may require adjustment. Refer to section 9.4. 2. The lock bar should swing freely. Inspect the bar and lubricate or straighten as necessary. 3. Inspect the lock bar and straighten or replace as necessary. 4. Inspect the lip hinges and remove any material that prevents the lip from functioning.
The locking bar does not swing down to the release position when the unit is lowered into the vehicle bed.	<ol style="list-style-type: none"> 1. There could be foreign material jammed in the fork of the locking bar. 	<ol style="list-style-type: none"> 1. Visually inspect and remove any foreign material that could prevent the locking rod from swinging freely. Lubricate or straighten as necessary.
The lip remains partially extended after the vehicle drives away.	<ol style="list-style-type: none"> 1. There could be foreign material preventing the hinge from functioning properly. 2. The long hinge pin may be bent, preventing the hinge from operating. 	<ol style="list-style-type: none"> 1. Visually inspect and remove any foreign material that may prevent the hinge from swinging freely. 2. Inspect the long hinge pin and straighten or replace as necessary.
The lip hits the rear of the vehicle first.	<ol style="list-style-type: none"> 1. Lip limiting screw may require adjustment. 2. The platform bumpers may be damaged or missing, allowing the truck to contact and stop the lip. 	<ol style="list-style-type: none"> 1. Visually inspect and remove any foreign material that may prevent the hinge from swinging freely. 2. Inspect the long hinge pin and straighten or replace as necessary.

▶ 9.4 HYDRAULIC MINIDOCK SETTINGS

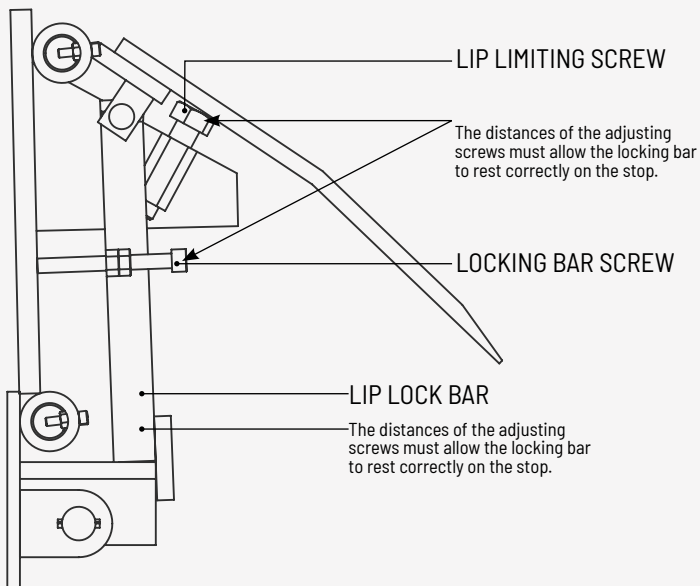
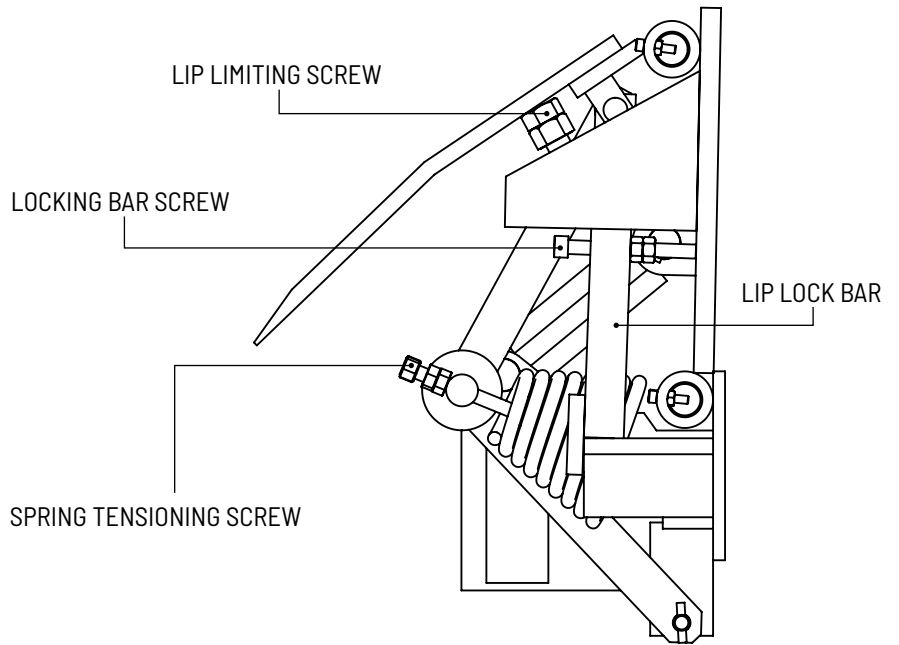


WARNING

Do not attempt to perform installation, repair, maintenance or adjustment work. Such work should be performed **ONLY** by trained and authorized personnel.

Contact your local distributor for assistance.

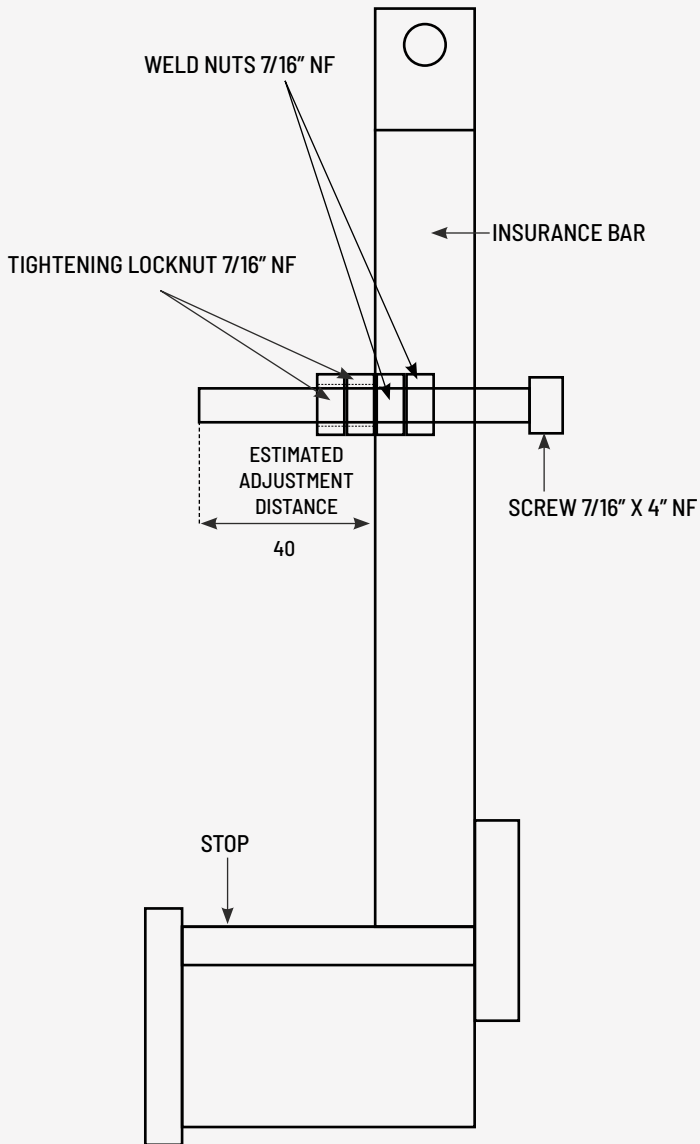
The mechanical Minidock must be adjusted in the parts listed below to ensure proper operation. All Minidocks are factory set to function properly, but due to wear and tear or problems arising from other causes may require adjustments to some of the components shown. Follow the instructions below to make adjustments to the Minidock mechanism.



CANE STOP

It should be considered that the locking bar screw and the lip limiting screw work together, so when making a large adjustment change in either of them, care should be taken that the mechanism works correctly or if it requires readjustment of both parts.

▶ 9.4.1 ADJUSTING THE LOCKING ROD SCREW



If when the Minidock is operated with the operating lever the lip does not remain horizontal to rest on the cargo vehicle bed it is likely that the locking bar is not engaging at the stop.

If, when the Minidock is fully raised with the grab handle, the locking bar is separated from the stop, the adjustment distance of the screw must be reduced. To correct this problem loosen the 7/16" NF jam nut and turn the bolt 2 turns counterclockwise. Check the operation of the Minidock with this adjustment, if necessary continue to make two turn adjustments to the screw until the required operation is achieved. When the desired setting is achieved, retighten the locknut to lock the adjustment position of the screw.

If, when the Minidock is fully raised with the grip handle, the locking bar remains above the stop, the screw adjustment distance must be increased. To increase this distance loosen the 7/16" NF jam nut and turn the screw 2 turns clockwise. Check the operation of the Minidock with this adjustment, if necessary continue to make two turn adjustments to the screw until the required operation is achieved. When the desired setting is achieved, retighten the locknut to lock the adjustment position of the screw.



▶ 9.4.2 LIP LIMITING SCREW ADJUSTMENT

If when the Minidock is operated with the operating lever the lip does not remain horizontal to rest on the cargo vehicle bed it is likely that the locking bar is not engaging the stop.

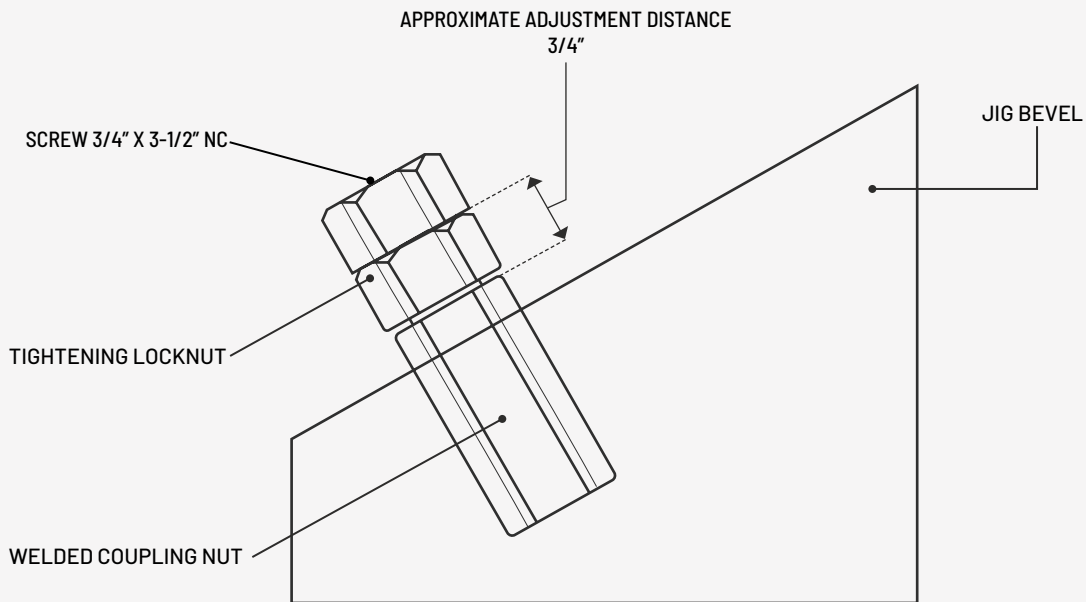
If, when the Minidock is fully raised with the grab handle, the locking bar remains below the level of the stop, the adjustment distance of the bolt must be increased. To do this, loosen the locknut and turn the 3/4" x 3-1/2" bolt counterclockwise one turn. Check the operation of the minidock and if necessary continue to make one turn adjustments to the screw. Once the desired adjustment is achieved, retighten the jam nut to lock the adjustment position of the screw.



IMPORTANT

WHENEVER YOU MAKE THIS ADJUSTMENT ON THE SCREW, MAKE SURE THAT THE LIP DOES NOT EXCEED THE LEVEL OF THE STOP WHILE THE OPENING MOVEMENT IS BEING MADE. IF THIS HAPPENS IT COULD COLLIDE WITH THE REAR OF THE LOADING VEHICLE AND PREVENT THE MINIDOCK FROM WORKING PROPERLY.

If, when the Minidock is fully raised with the grip handle, the rod is above the level of the stop, the adjustment distance of the screw must be decreased. To do this, loosen the lock nut and turn the 3/4" x 3-1/2" bolt clockwise one turn. Check the operation of the minidock and if necessary continue to make one turn adjustments to the screw. Once the desired adjustment is achieved, retighten the jam nut to lock the adjustment position of the screw.



▶ 9.4.3 ADJUSTMENT OF SPRING TENSIONING SCREW

If, when actuating the Minidock with the operating lever, more effort is required to bring it to the vertical raised position, it may be necessary to adjust the spring tension.

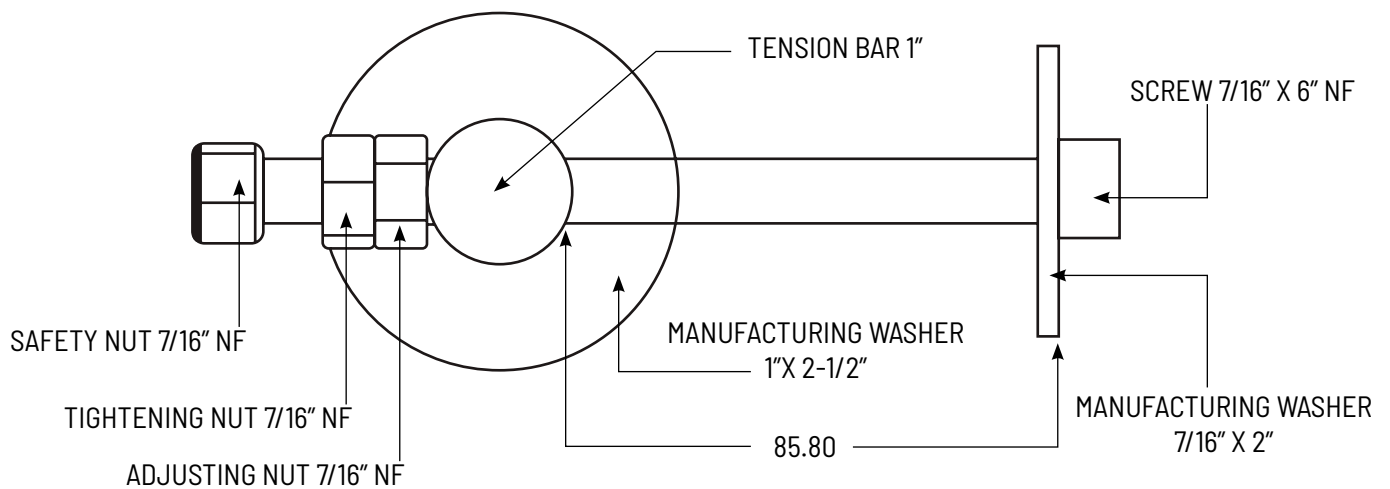
To decrease the force required to operate the Minidock, the tension of the two Minidock springs must be increased. To do this loosen the tightening nut and turn the adjusting nut two turns clockwise. Check the operation of the minidock and if necessary continue to make one turn adjustments to the nut. Once the desired adjustment is achieved, retighten the tightening nut to lock the adjustment position of the screw.



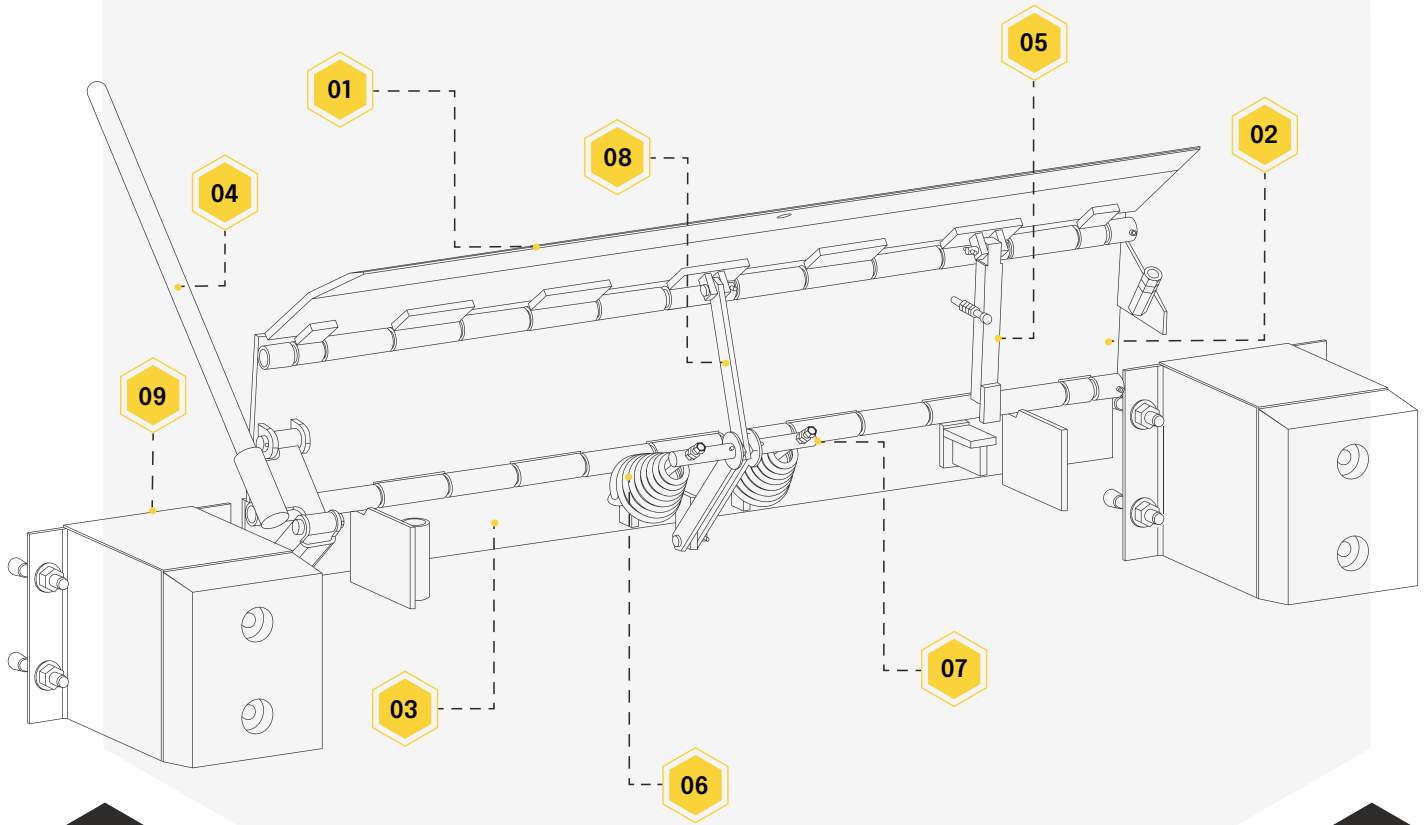
IMPORTANT

INCREASE THE TENSION ON BOTH SPRINGS EQUALLY.
INCREASE SPRING TENSION ONLY ENOUGH TO PROVIDE THE USUAL LEVEL OF LIFTING EFFORT. OVER TENSIONING THE SPRINGS MAY DECREASE THEIR LIFE TIME AND AFFECT PERFORMANCE DURING LIP LIFTING.

RECOMMENDED ADJUSTMENT DISTANCES

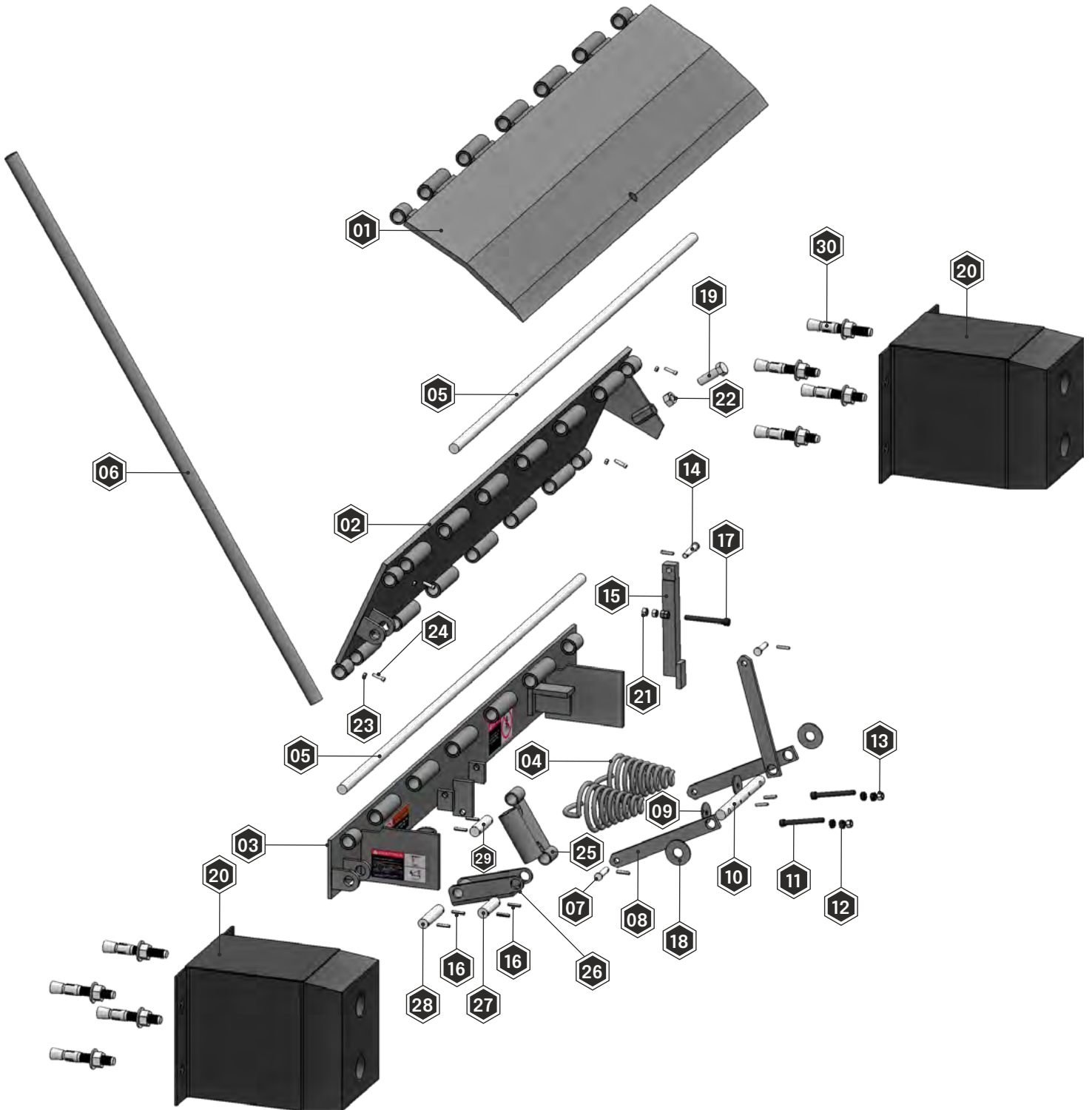


10. Inventory of parts



NO.	DESCRIPTION
01-	Lip
02-	Platform plate
03-	Rear plate
04-	Grab Handle
05-	Locking Bar
06-	Tension Spring for Minidock
07-	Tension Bar
08-	Spring Plate
09-	Minidock Platform Stop

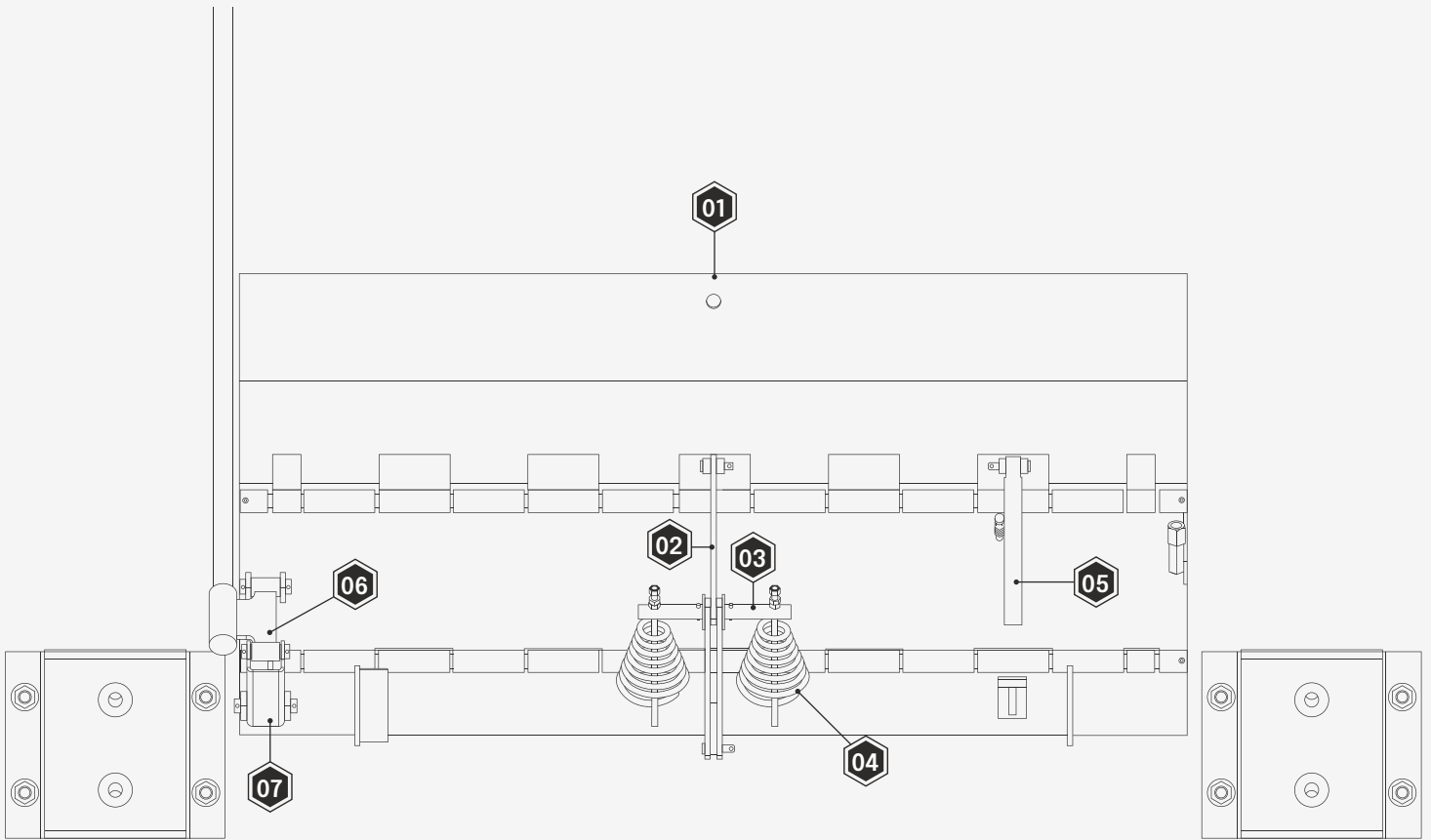
▶ 10.1 EXPLOSION OF MECHANICAL MINIDOCK PARTS



▶ 10.2 MECHANICAL LEVELER PARTS LIST

ITEM	PART NAME	QUANTITY		CODE	
				MDM3066	MDM3072
01	Lip Plate	1	PART	MDM-PLLA-66	MDM-PLLA-72
02	Platform Plate	1	PART	MDM-PTF-66	MDM-PTF-72
03	Back Plate	1	PART	MDM-PLTR-66	MDM-PLTR-72
04	Tension Spring	2	PART		MPR1017
05	Long Bolt	2	PART	MDH-PER-66	MDH-PER-72
06	Grip Handle	1	PART		MDM-MNJ
07	Spring Mechanism Bolt	2	PART		MDM-PER-01
08	Spring Plate	3	PART		MDM-PLRS
09	2" Spring Washer	2	PART		MDM-RNDN
10	Tension Bar	1	PART		MDM-BRTEN
11	7/16" x 6" NF Allen Screw	2	PART		MPTOR1455
12	Hex Nut 7/16 NF	4	PART		MPTOR1456
13	Lock Nut 7/16 NF	2	PART		MPTOR1457
14	Lock Bar Bolt	1	PART		MDM-PER-02
15	Lock Bar	1	PART		MDM-BRSG
16	1/4" x 1-1/2" Slotted Bolt	5	PART		MPTOR1376
17	Allen Screw 7/16" x 4" NF	1	PART		MPTOR1491
18	2-1/2" Washer for Tension Bar	2	PART		MDM-RNDN
19	Triangular Bevel Stud	1	PART		MDM-ESPR
20	Bumper - Platform Bumper	2	PART		MDM-BMPR
21	Hex Nut 7/16"- NF	2	PART		MPTOR1456
22	Hex Nut 3/4" -10	2	PART		MPTOR1263
23	Hex Nut 1/4" NC	4	PART		MPTOR1345
24	1/4" x 1" NC Allen Screw	4	PART		MPTOR1122
25	Handle Base - Link	1	PART		MDM- BME
26	Mechanism Link 2	1	PART		MDM-E2M
27	Bolt 1 - Hinge	1	PART		MDM-PER03
28	Bolt 2 - Hinge	1	PART		MDM-PER04
29	Bolt 3 - Hinge	1	PART		MDM-PER05
30	Expansion Plug 3/4" x 4-3/4	8	PART		MPTOR1110

▶ 10.3 SPARE PARTS



ELEMENT NUMBER	DESCRIPTION	MDH3066	MDH3072
01	Lip Plate	MDM-PLLA-66	RNM-PLLA-72
02	Spring Plate		MDM-PLRS
03	Tension Bar		MDM-BRTEN
04	Tension Springs		MPR1017
05	Lock Bar		MDM-BRSG
06	Handle Base Link		MDM-BME
07	Mechanism Link 2		MDM-E2M

▶ 10.4 SAFETY LABELS

CODE	DESCRIPTION	QTY	PICTURE
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CAL1129

WARNING DECAL

004



CAL1122

DANGER DECAL

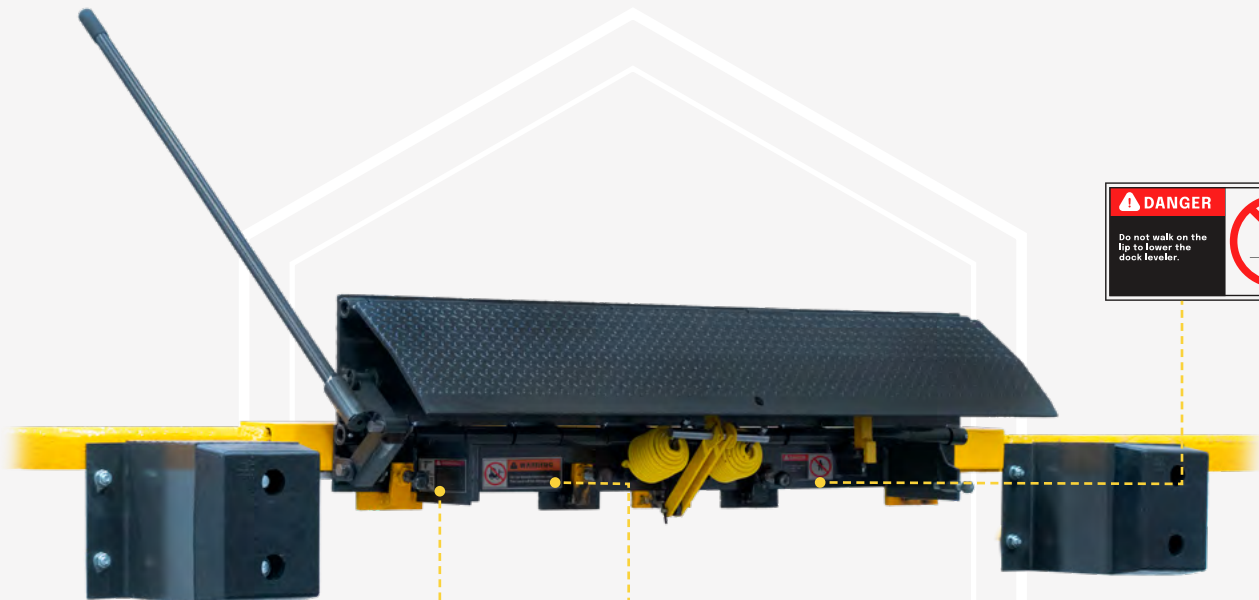
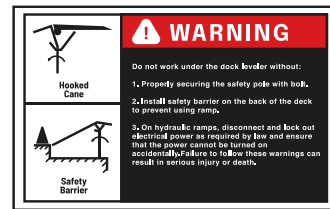
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CAL1012

SECURITY BAR WARNING STICKER

001





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