

Mechanical Edge of Dock
BBLE Series
&

Contractor Edge of Dock
BEDE Series

OWNERS MANUAL

INSTALLATION – OPERATION
SERVICE – REPAIR PARTS



BEACON INDUSTRIES, INC.

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WARNING

DO NOT install, operate or service product unless you have read and understand the Safety Procedures, Warnings, Installation and Operating instructions contained in this manual. Failure to do so could result in serious injury and/or death.



THIS IS THE SAFETY ALERT SYMBOL. IT IS USED TO ALERT YOU TO POTENTIAL PERSONAL INJURY HAZARDS. OBEY ALL SAFETY MESSAGES THAT FOLLOW THIS SYMBOL TO AVOID POSSIBLE INJURY AND/OR DEATH.



WARNING

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



KEEP THIS MANUAL AND ALL SAFETY PROCEDURES IN A SECURE LOCATION WITH EASY ACCESS.



WARNING! READ AND UNDERSTAND THIS ENTIRE MANUAL PRIOR TO OPERATING.



WARNING! A DOCK LEVELER CAN BE A POTENTIAL THREAT TO PERSONS AND PROPERTY, IF NOT USED PROPERLY. SAFE OPERATION IS THE RESPONSIBILITY OF THE OPERATOR.



WARNING! DO NOT ENTER THE AREA IN FRONT OF OR BELOW THE DOCK LEVELER. SERIOUS PERSONAL INJURY AND/OR DEATH MAY RESULT.



WARNING! DO NOT ATTEMPT TO INSTALL, MAKE REPAIRS OR ADJUSTMENTS. ONLY A TRAINED AND AUTHORIZED SERVICE TECHNICIAN SHOULD PERFORM REPAIRS OR ADJUSTMENTS. ONLY A QUALIFIED CONTRACTOR/SUB-CONTRACTOR SHOULD PERFORM THE INSTALLATION PROCESS. CONTACT YOUR LOCAL BEACON DEALER FOR ASSISTANCE.

Safety Procedures



WARNING: Read and understand all safety practices and operating instructions before installing, operating or servicing the dock leveler. Failure to follow the safety practices and operating instructions may result in property damage, serious bodily injury and/or death.

If you do not understand the safety procedures or the instructions, ask your supervisor to explain the safety procedures and/or teach you how to use the dock leveler.



CAUTION: The installer and/or operator **MUST** be very familiar with the operation, function and various parts of the BEACON Edge of Dock Leveler **PRIOR** to installation and/or operation. If this is not the case, it is **IMPERATIVE** that the installer and/or operator read, and fully understand, the entire contents of this manual. **Be certain to read and understand all warning and caution statements contained in this manual prior to any installation, operation or servicing of this unit.**

- 1 Do not operate this equipment while under the influence of drugs or alcohol.
- 2 Do not stand in the driveway between the dock leveler and a truck backing or pulling away.
- 3 Be sure the truck wheels are chocked, or the truck is held in place by a restraining device, before attempting to load or unload the truck.
- 4 Do not use the dock leveler if it looks broken or does not seem to operate correctly. Tell your supervisor immediately.
- 5 Do not operate the leveler with equipment, material or people on the platform and/or lip or in front of the leveler.
- 6 Be certain that equipment, material and/or people are not on the dock leveler before allowing a truck to back in or pull out.
- 7 Keep clear of the dock leveler when it is moving. Never place your hands, arms, feet or legs in the position where a moving dock leveler or a moving load could cause injury. **If in doubt, do not do it!**
- 8 If the dock leveler is not working properly, using the operation instructions in this manual, **do not use the dock leveler.** Contact your authorized BEACON representative.
- 9 Never attempt to work under the dock leveler, for service or repair, without proper placement of safety bracing.
- 10 Damage to the dock leveler, personal injury or death can result from abuse and/or negligent use of this equipment.
- 11 If you have any questions, or if a malfunction occurs which is not understood, ask your supervisor to contact your authorized BEACON representative for assistance **PRIOR** to attempting any corrective measures.

SECTION 1

INSTALLATION INSTRUCTIONS RECEIVING AND HANDLING

RECEIVING:



WARNING

WARNING! Use caution when unbanding the EOD Leveler. Keep hands clear of pinch points and wear appropriate safety attire - Glasses, Gloves, and Work Boots.

Check for possible damage or missing parts immediately upon receipt of unit. Note any damage on receiving papers.

Prepare any claims against carrier if necessary.

NOTE: Damage noticed after receipt must be reported to carrier within 15 days.

Notify Beacon of any damaged or missing parts

HANDLING:



WARNING

WARNING! Use caution when lifting or moving the EOD Leveler. DO NOT ATTEMPT to lift without suitable hoisting equipment capable of lifting as much as 600 lbs.

Unit is easily handled for installation by hooking a heavy chain to each buttonhead rivet (EDE) or hooking the chain to the center plate (BLE).

INSTALLATION INSTRUCTIONS INSTALLATION

GENERAL INFORMATION:



WARNING

DO NOT EXCEED DOCK LEVELER CAPACITY. OVER LOADING DOCK LEVELER COULD RESULT IN SERIOUS INJURY OR DEATH.

Edge of Dock Levelers are designed to service trailers 5" above to 5" below dock level.

The dock levelers are shipped banded without tension on spring. Adjustment should be accomplished when installed.

Prior to installation, clean the dock face and dock area.

All prepunched holes are 13/16" diameter. Use 4" to 6" x 3/4" anchor bolts.

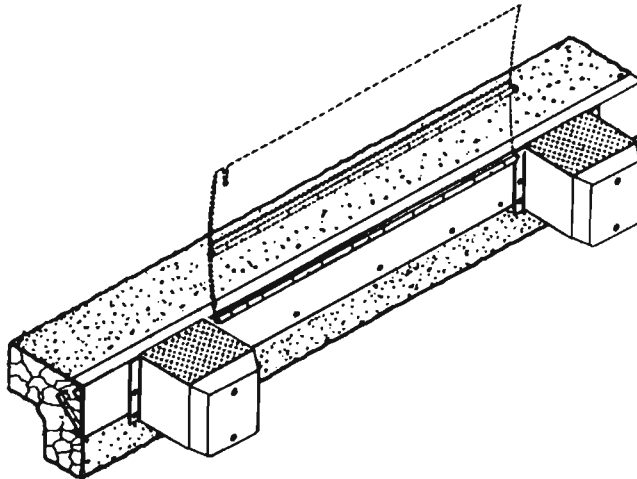


WARNING: Before you start to install the leveler, use proper safety signs and barriers to separate the work area from the remainder of the dock.

SECTION 1

INSTALLATION INSTRUCTIONS INSTALLATION

Illustration: 1



WELD ON—NEW CONSTRUCTION

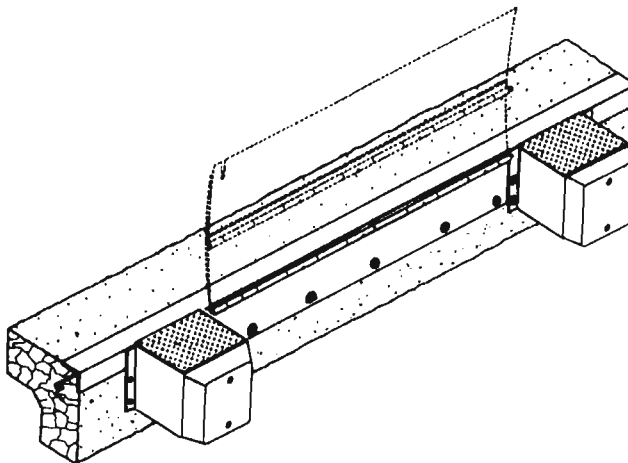
Use when dock edge vertical steel is 8" or wider. At dock edge, mark the center of chosen leveler location. Mark dock edge 33" either side of center (36" for 72" models; 39" for 78" models; 42" for 84" models).

Locate leveler with top of rear hinge flush with top of dock. This will place top of base plate approx. 1/4" below dock surface.

Tack weld ends of base plate to dock face steel, the top edge of base plate being 1/4" below dock. Tack weld both bump blocks at left and right ends of leveler allowing 1/4" space for weld between base plate ends and bump block.

Continuous Weld bump blocks and base plate along top and all vertical edges while holding leveler firmly against dock. Spot weld all prepunched holes along the bottom of the baseplate.

Illustration: 2



WELD ON/BOLT ON—EXISTING CONSTRUCTION

Use when dock edge steel is securely anchored, but not adequate for weld-on method.

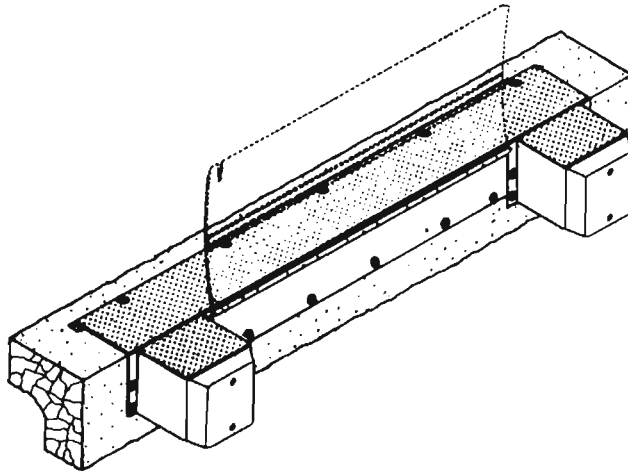
Complete all steps of instruction under "Weld On—New Construction."

Bolt leveler and bump blocks to dock face using all 13/16" prepunched holes furnished.

SECTION 1

INSTALLATION INSTRUCTIONS INSTALLATION

Illustration: 3



WARNING

All anchor bolts must be installed in accordance with the manufacturer's instruction. Improper installation may result in serious personal injury or death.

DO NOT install anchor bolts in cracks of expansion joints in concrete. Installation in cracks or expansion joints may cause the anchors to come loose and pull out. Use of improperly installed anchor bolts may result in serious personal injury and/or death.

BOLT ON + APPROACH PLATE — EXISTING CONSTRUCTION

Use when dock edge has no steel, or steel is poorly anchored, and dock face is adequate for bolting. Mark and drill holes for dock leveler centered 6-1/4" below dock edge; base plate to be raised 1/8" above dock edge for welding to approach plate. Install two (2) anchor bolts in end holes, position leveler on bolts and partially tighten nuts to hold leveler secure.

Place approach plate in position on floor, front edge being 1/8" behind base plate. Mark floor along rear edge of approach plate.

Slide plate forward 2", tack weld to leveler and use as a guide for cutting groove in floor along entire width (long dimension) of approach plate. Groove to be 2" wide and 1/8" deeper than thickness of approach plate.

Break plate loose from leveler. Position approach plate in groove and tack weld to leveler base plate. Drill holes in floor using plate holes as guide. Install anchor bolts in plate (See General Information page 1). Weld and grind bolt heads to approach plate to a smooth dome shape. **Continuous weld** approach plate to top of base plate. Complete bolting phase of unit.

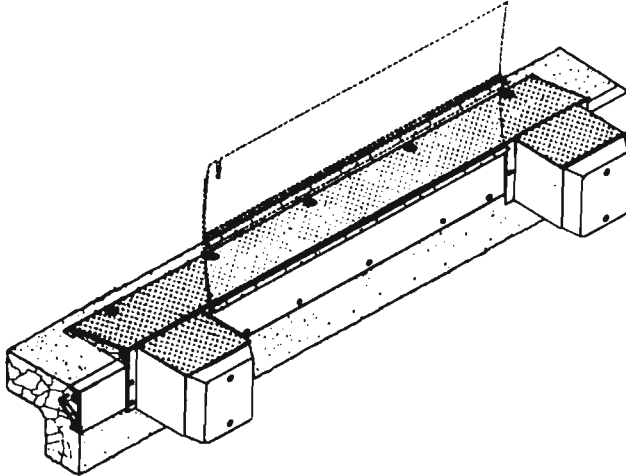
NOTE:

All anchor bolts lengths must suit local codes and conditions. Type and depth of concrete will determine type and length of anchor bolts required.

SECTION 1

INSTALLATION INSTRUCTIONS INSTALLATION

Illustration: 4



WELD ON AND RAISE APPROACH PLATE

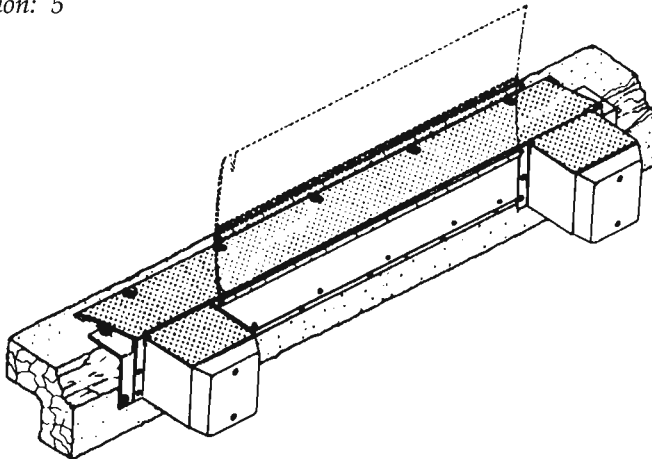
Use when dock edge is sound but height is less than adequate (bolting may also be required). At dock edge, mark the center of chosen leveler location. Mark dock edge 33" either side of center (36" for 72" models).

Raise leveler and bump blocks to desired height (3" max.), and weld back of base plate to dock edge steel. Tack weld both bump blocks at left and right ends of leveler allowing 1/4" space for weld between base plate ends and bump block.

Cut groove in floor, position approach plate at top edge of base plate and tack weld to unit and bump blocks. (See *Illustration 3* for details.)

Complete bolting phase of installation, then **continuous weld** all points of contact between leveler, dock steel and approach plate.

Illustration: 5



FORMED ANGLE-WELD ON—RAISED APPROACH PLATE

Use when dock edge is badly crumbled and dock edge is slightly low.

Unit must be raised approximately 2" in this application!

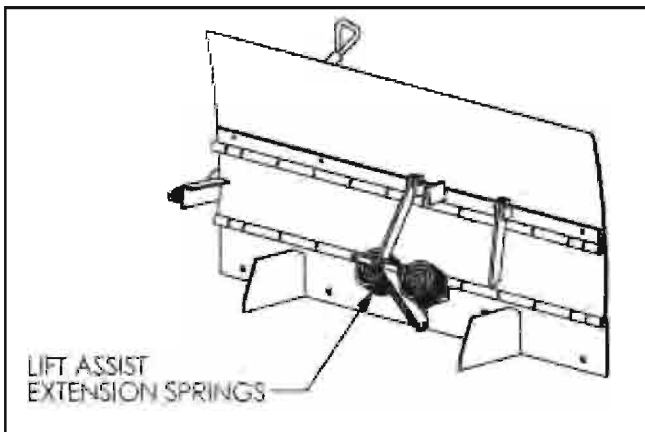
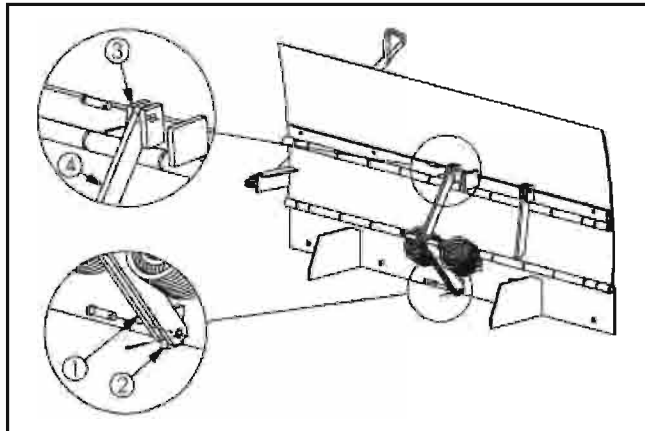
Position formed angle at desired location, mark holes, remove angle, drill holes and install angle. Install unit and approach plate according to methods described for "Existing Construction" (See *Illustrations 3 & 4*).

SECTION 1

WARNING

WARNING! DO NOT allow lip and ramp to fall free. Allowing dock leveler to fall free could result in dock leveler coming free from dock or damaging linkage resulting in property damage, serious injury and/or death.

SECTION 2



INSTALLATION INSTRUCTIONS INSTALLATION

BARLIFT MODELS

After installation of EOD and Bumpers is completed, remove bolt from lifting bar, insert bar into bracket (handle facing forward) and reattach bolt.

MAINTENANCE

ASSEMBLY

Units are shipped with lip linkages disconnected. These Linkages must be fully assembled before use.

To connect the lip linkages, first remove the clevis pin from the lower lip linkages (Item 1). Locate the lower linkages on each side of the base plate tab (Item 2). Reassemble the clevis pin and cotter pin. Bend the cotter pin to hold securely in place.

Next, remove the clevis pin from the lip plate tabs (Item 3). Insert the center link (Item 4) between the lip plate tabs, and reassemble the clevis pin and cotter pin. Bend the cotter pin to hold securely in place.

ADJUSTING SPRING TENSION FOR LIFT ASSIST

Units are shipped with no tension on the lift assist springs. Once the lever is installed and assembled, tension on the springs can be increased.

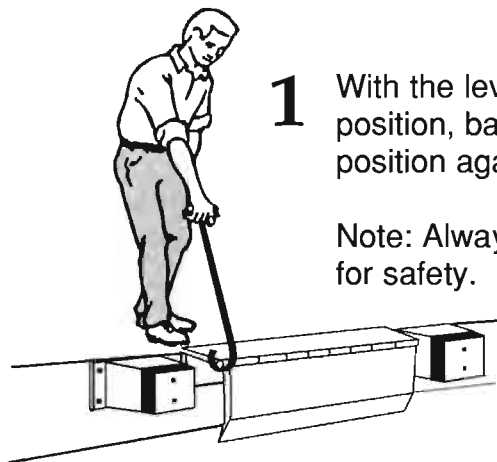
To increase tension on the lift assist springs, tighten the bolt and locknut extending through the center of each extension spring. Be sure to adjust the springs evenly by maintaining the same length of bolt exposure on each spring.

Warning: Do not over tighten the extension springs. Over-tightening the springs may cause the dock leveler to float or bounce during use, creating a dangerous operating condition.

SECTION 3

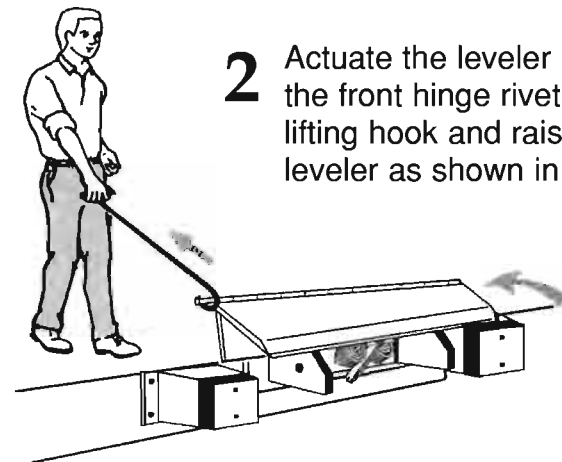
OPERATING INSTRUCTIONS

BEDE Series

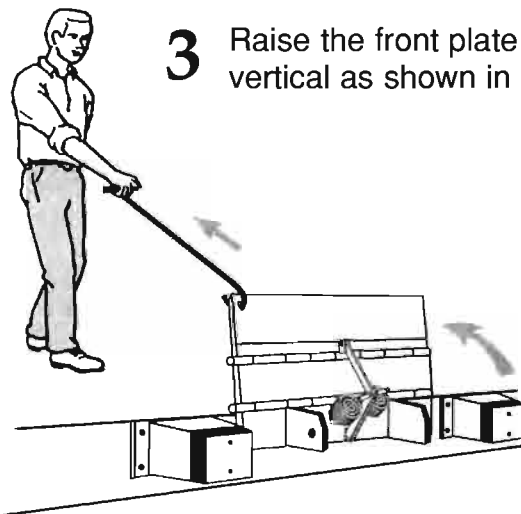


- 1** With the leveler in the stored position, back the truck into position against the bumpers.

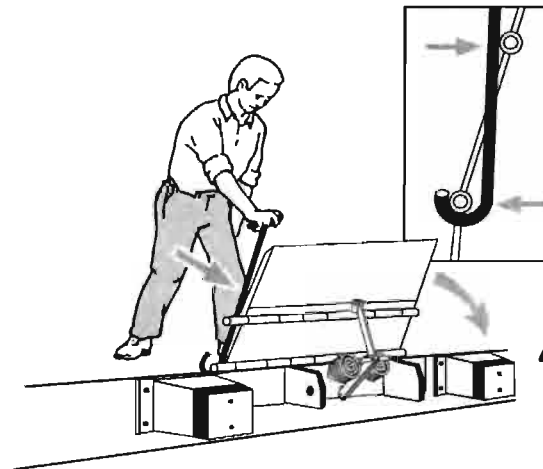
Note: Always chock the wheels for safety.



- 2** Actuate the leveler by hooking the front hinge rivet with the lifting hook and raising the leveler as shown in Fig. 2.



- 3** Raise the front plate (lip) to vertical as shown in Fig. 3.



- 4** Place the lifting hook against concrete dock face and push the leveler into the truck as shown in Fig. 4.

- 5** When the truck departs the leveler automatically returns to the stored position.

SECTION 3

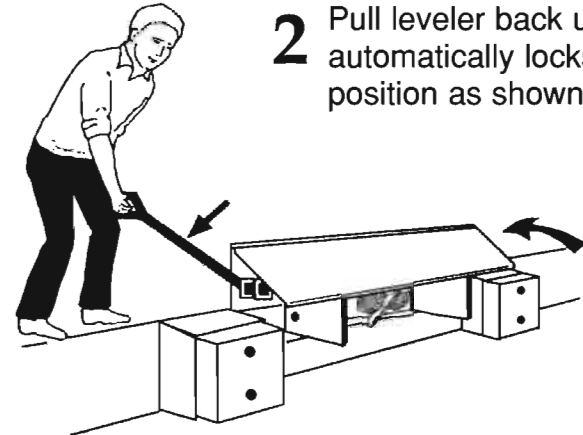
OPERATING INSTRUCTIONS

BBLE Series



- 1** After the truck has backed into position against the bumpers, lift bar from the stored position on the right hand side below the deck, as shown in Fig. 1.

Note: Always chock the wheels for safety.

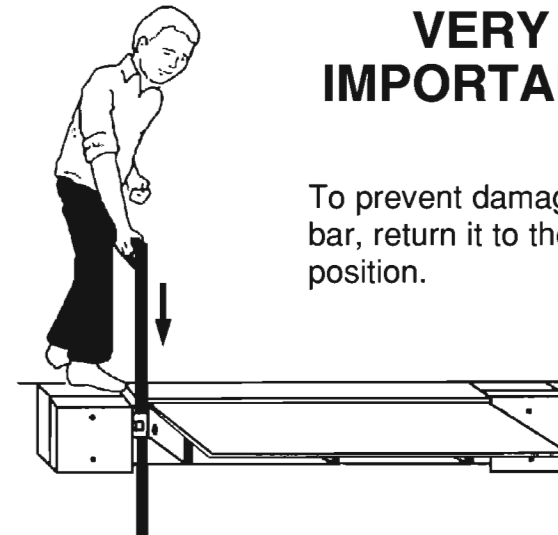


- 2** Pull leveler back until it automatically locks in raised position as shown in Fig. 2.



- 3** Using the bar as a lever, push the bar forward, allowing the lip to ride out onto the truck bed, as shown in Fig. 3.

VERY IMPORTANT!

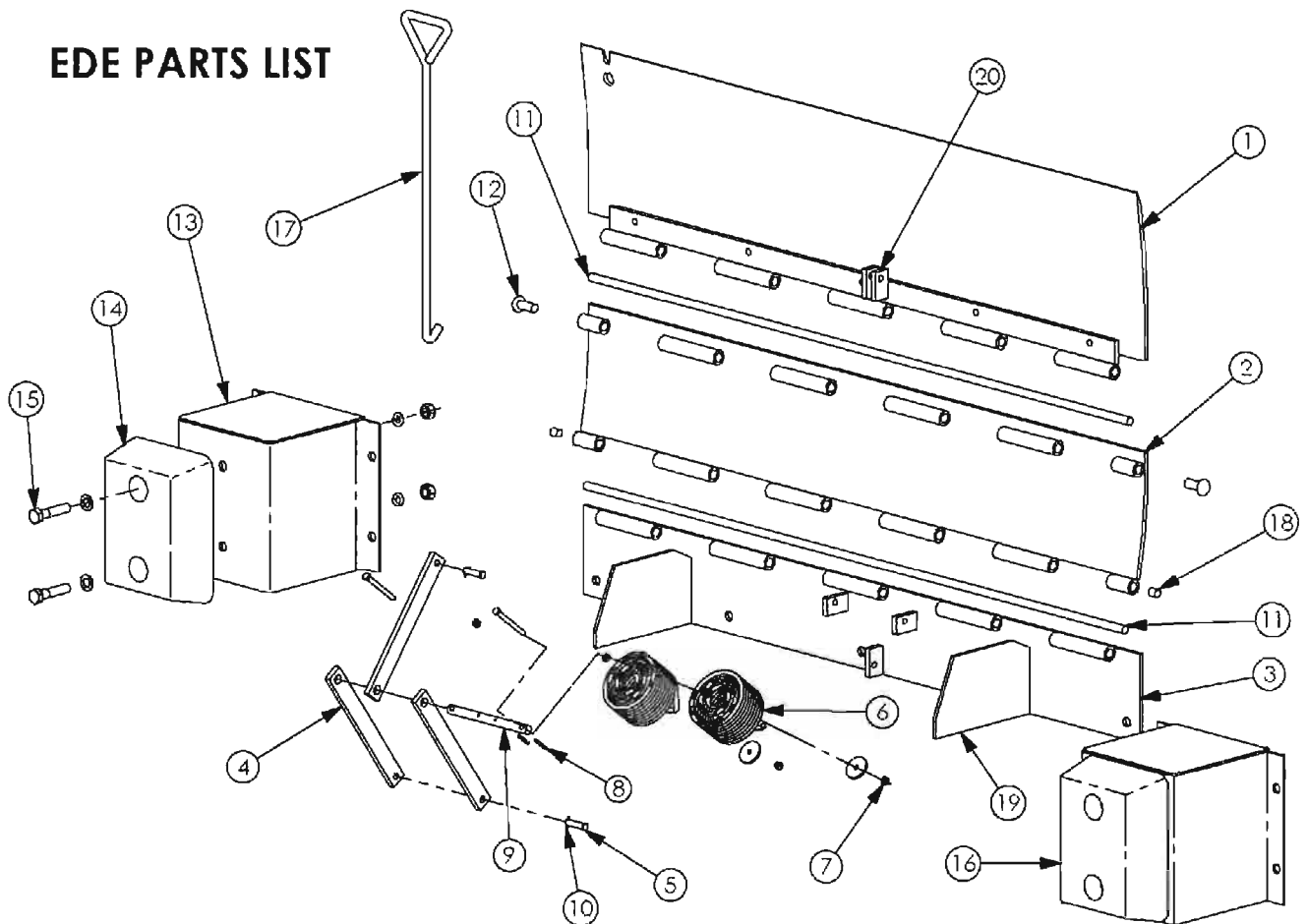


To prevent damage to the bar, return it to the stored position.

SECTION 4**PARTS LISTS****BEDE Series**

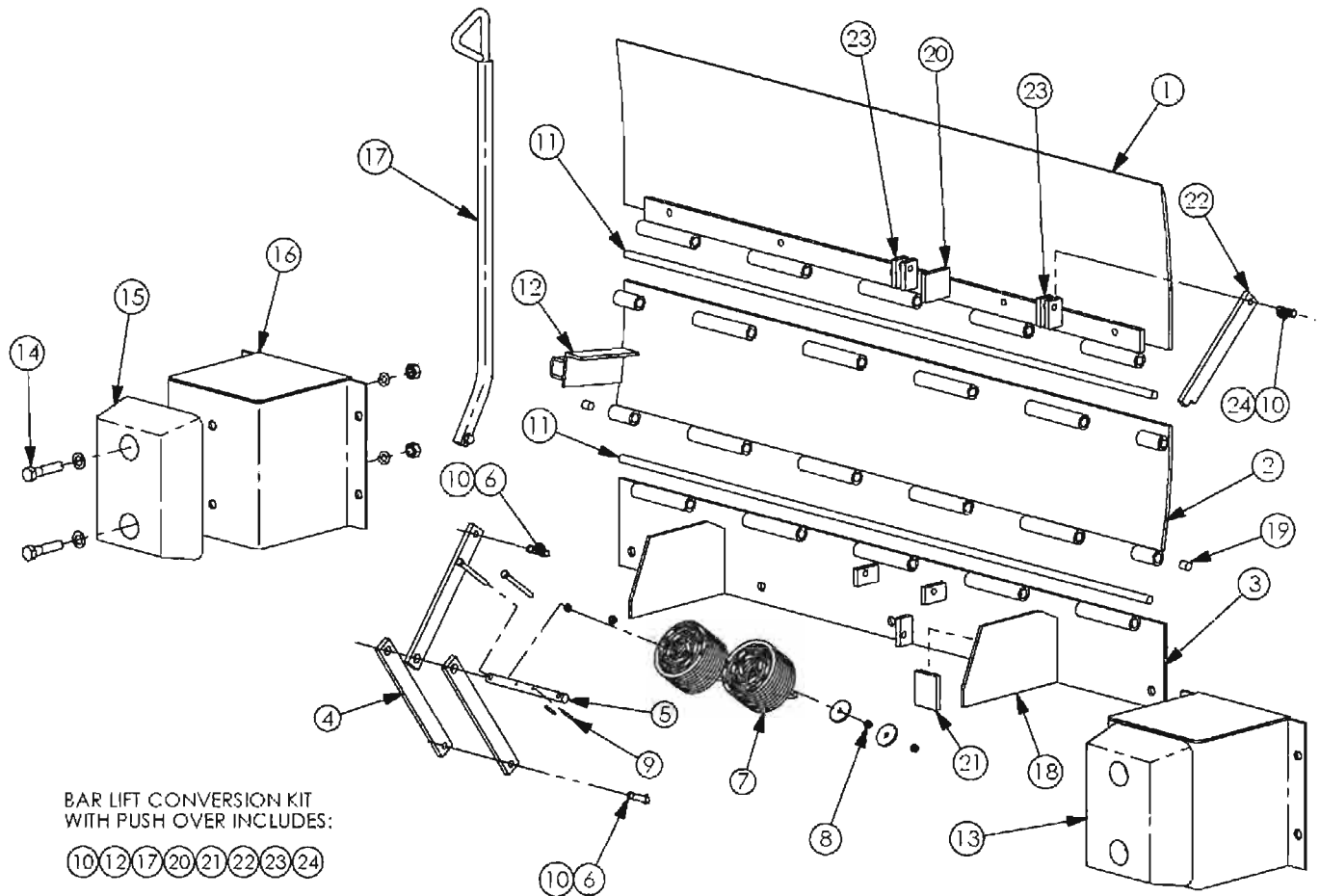
ITEM NO.	DESCRIPTION	PART NUMBERS			
		EDE6620	EDE6625	EDE7220	EDE7225
1	LIP PLATE ASSEMBLY	2047	2047	2007	2007
2	CENTER PLATE ASSEMBLY	0153	2023	0183	2008
3	BASE PLATE ASSEMBLY	2060	2067	2065	2068
4	LINKAGE - LIP	2014	2014	2014	2014
5	PIN - CLEVIS 1/2" X 2"	A37	A37	A37	A37
6	SPRING - LIFT ASSIST	9616	9616	9616	9616
7	SPRING ADJUSTMENT HARDWARE SET	2087	2087	2087	2087
8	SPRING PIN - SLOTTED 3/16" X 1 1/2"	9632	9632	9632	9632
9	BAR - SPRING ATTACHMENT BLE	2015	2015	2015	2015
10	COTTER KEY 1/8" X 1"	0235	0235	0235	0235
11	HINGE PIN	0115	0115	0189	0189
12	RIVET 3/4" X 1 3/4"	0188	0188	0188	0188
13	BUMP BLOCK, STEEL WITH COVER	9270	9270	9270	9270
14	MOLDED BUMPER, 2 HOLE (4X10X13)	9243	9243	9243	9243
15	BUMP BLOCK HARDWARE SET, 2 HOLE	1787	1787	1787	1787
16	PUMP BLOCK ASSY, 2 HOLE	1771	1771	1771	1771
17	LIFTING HOOK	0141	0141	0141	0141
18	PLUG - END TUBE	1751	1751	1751	1751
19	GUSSET	0107	0107	0107	0107
20	LIP TAB	2010	2010	2010	2010

EDE PARTS LIST



ITEM NO.	DESCRIPTION	PART NUMBERS			
		BLE6620	BLE6625	BLE7220	BLE7225
1	LIP PLATE ASSY	2047	2047	2007	2007
2	CENTER PLATE ASSY	0153	2023	0183	2008
3	BASE PLATE ASSY	2049	2066	2022	20089
4	LINKAGE - LIP BLE	2014	2014	2014	2014
5	BAR - SPRING ATTACHMENT BLE	2015	2015	2015	2015
6	PIN - CLEVIS 1/2" X 2"	A37	A37	A37	A37
7	SPRING - LIFT ASSIST	9616	9616	9616	9616
8	SPRING ADJUSTMENT HARDWARE SET	2087	2087	2087	2087
9	SPRING PIN - SLOTTED 3/16" X 1 1/2"	9632	9632	9632	9632
10	COTTER KEY 1/8" X 1"	0235	0235	0235	0235
11	HINGE PIN	0115	0115	0189	0189
12	BAR LIFT HOLDER ASSY, BLE	2012	2012	2012	2012
13	BUMP BLOCK ASSY 2 HOLE	1771	171	1771	1771
14	BUMP BLOCK HARDWARE SET, 2 HOLE	1787	1787	1787	1787
15	MOLDED BUMPER, 2 HOLE (4X10X13)	9243	9243	9243	9243
16	BUMP BLOCK, STEEL WITH COVER	9270	9270	9270	9270
17	HANDLE ASSY BLE	2006	2006	2006	2006
18	GUSSET	0107	0107	0107	0107
19	PLUG - END TUBE	1751	1751	1751	1751
20	LIP STOP TAB	0503	0503	0503	0503
21	LIP RELEASE TAB	1017	0503	0503	0503
22	LIP KICKOUT BAR	2017	2017	2017	2017
23	LIP LINKAGE TABS	2010	2010	2010	2010
24	LIP KICKOUT PIN	0193	0193	0193	0193

BBLE Series



**Beacon Industries, Inc. BBLE, BBL, BEDE &
BED Edge of Dock Leveler Limited Warranty**

Beacon Industries, Inc. warrants that this BBLE, BBL, BEDE & BED Series Manual Edge of Dock -Dock Leveler will be free from defects in design, materials and workmanship on all structural parts for a period of exactly two (2) years from date of shipment. All claims for breach of this warranty must be made within thirty (30) days after the defect is or can, with reasonable care, be detected and in no event more than two (2) years after shipment. This warranty is extended to the original purchaser of this product and is non transferable.

In order to be entitled to the benefits of this warranty, the unit must have been properly installed, maintained, operated within its capacity, and not otherwise abused. Sixty (60) day periodic maintenance and adjustment is the sole responsibility of the owner.

This warranty is Beacon's exclusive expressed warranty.

Beacon expressly disclaims all implied warranties including the implied warranties of merchantability and fitness.

In the event of any defects covered by this warranty, Beacon will remedy such defects by repairing or replacing any defective equipment or parts, bearing all of the costs for parts, from Beacon to site. This shall be the exclusive remedy for all claims whether based on contract, negligence, or strict liability. **Beacon shall not, in any event, be liable for any loss of the use of any equipment or incidental or consequential damages of any kind.**

Maintenance and validation by original purchaser is required to keep Warranty in effect. In order to keep this Warranty in effect, the original purchaser must do two things:

First: The original purchaser must have the Manual Edge of Dock -Dock Leveler maintained and serviced as prescribed in the Owner's Manual.

Second: The original purchaser must present the seller with a maintenance schedule to show that the Manual Edge of Dock -Dock Leveler has been maintained and serviced in accordance with the Beacon's Owner's Manual. The validated maintenance schedule must be submitted whenever a claim is made under this Warranty.

Items not covered by Warranty. The seller does not cover:

(i) Defects, damage or deterioration due to normal use, wear and tear or exposure; (ii) normal maintenance services; (iii) the replacement of service items, i.e., fluid; (iv) damage or defects due to misuse, water damage, electrical power supply surges, improper installation, alteration, negligence or accident; and (v) damage or defects due to the repair of the Manual Edge Of Dock -Dock Leveler by someone other than an authorized dealer or the installation of parts other than genuine Beacon part.

**Beacon Industries, Inc. BBLE, BBL, BEDE & BED
Edge of Dock Leveler Limited Warranty Con't**

No other warranties made. This Warranty is in lieu of all other express or implied warranties of the Beacon Manual Edge of Dock-Dock Leveler, the manufacturer and the selling dealer, including any implied warranty of merchantability or fitness for any particular purpose. Neither Beacon Industries, Inc. assumes, or authorizes any person to assume, on its behalf, any other obligation or liability.

Some states do not allow the exclusion on limitation of implied warranties or liability for incidental or consequential damages, so the above limitations or exclusions may not apply to you.

The Beacon BBLE, BBL, BEDE & BED products meet or exceed Federal Occupational Safety and Health Act Standards, Commercial Standards 202-56, and American Society of Mechanical Engineers Specifications ANSI MH14.1-84.

This Warranty and, any and all claims that may arise shall be construed according to the laws of the State of Missouri, USA.

Limited Warranty Document No.: BBLE, BBL, BEDE & BED-92717