

Hydraulic Dock Leveler
Edge Mount Series
Model "EH"
20,000 & 30,000 lbs. Capacity

Operation and Maintenance Manual

This manual applies to EH series dock levelers manufactured on or after 2014/08/01 with serial number(s) 29300 and greater.

P/N: 49-0068 Rev. N

NORDOCK INC.

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Preface

PLEASE READ AND UNDERSTAND THIS MANUAL COMPLETELY

This manual gives detailed information and instruction on how to operate and maintain your equipment correctly. Failure to do so could result in personal injury, and/or equipment damage. Please consider this manual a permanent part of the unit and keep it with the dock leveler for reference whenever needed.

If you have any questions about this manual, the dock leveler, its' components, or our products and services, please call us at 1-866-885-4276 and we will be happy to assist you. With proper care and maintenance, this dock leveler is designed to work effectively and efficiently for many years to come.

Problems, Errors and Omissions

This manual has been prepared with the utmost care and attention to detail as to ensure accurate parts and service information should the need arise. Nordock Incorporated believes this manual will provide the operators of this unit all the necessary information required to operate and maintain it for many years. If you believe there is an error, if you have a problem following the guidelines, or if there is information that you feel is missing from this manual, please contact us at the above number so we may attend to the issue immediately.

Dock Identification

It is very important that in order to provide the best possible service from Nordock Inc., please include the model, serial number and capacity of the dock leveler whenever you contact us. Below is the same serial number decal that will be found on the left side frame rail (standing on the dock, facing the lip). Please fill in the information from the decal on the dock leveler to this area. This will ensure you are shipped the correct parts.

NORDOCK [®]	
DESCRIPTION	XX XX XX000 LBS
SERIAL #:	XXXX
866-885-4276 ~ WWW.NORDOCKINC.COM	
MADE IN CANADA	

Copyright

This manual is copyright to Nordock Incorporated. All information, text, drawings, and technical data contained herein are for reference only. No part of this manual may be copied, altered, or stored on electronic media, and cannot be revealed to others for the purpose of competition.

Warranty

Nordock Inc. expressly warrants that all of its manufactured product shall remain free of defects in material and workmanship under normal use for a period of one-year from the date of delivery to the purchaser. The purchaser must maintain and operate the product in accordance with proper procedures. In the event the product proves defective in material or workmanship, Nordock Inc. will at its option either:

1. Replace the product or the defective portion thereof without charge to the purchaser; or,
2. Alter or repair the product on site or elsewhere, as Nordock Inc. may deem advisable, without charge to the purchaser.

The warranty stated herein is that offered by Nordock Inc. and expressly disclaims all implied warranties including those of merchantability and fitness. This warranty does not cover any failure caused by improper installation, misapplication, overloading, abuse, negligence, or failure to maintain and protect the equipment from vehicle impact. Nordock Inc. or its representative assume no responsibility or liability for any incidental or consequential damages of any kind including loss of use of any equipment, damage or failure resulting from the use of unauthorized replacement parts or equipment modification, or damages resulting from the misuse of the equipment.

Nordock Inc. warranties extend only to the product itself. Nordock Inc. disclaims all liability of any kind arising out of the workmanship, methods and materials used by the installer or premature product wear, product failure, property damage or bodily injury arising from improper installation.

These warranties as stated herein are the exclusive remedies for all claims.



Safety



WARNING

The operators of this unit must read these safety practices before installing, operating or servicing the dock leveler. Failure to follow these safety practices may result in bodily injury, property damage or death.

Read and follow the operating instructions contained in this manual before operating the dock leveler. If you do not understand the instructions, contact your supervisor for explanation and instruction on the safe operation of this unit. The following guidelines are to be used in conjunction with all laws, governances and codes in effect where the dock leveler is installed.

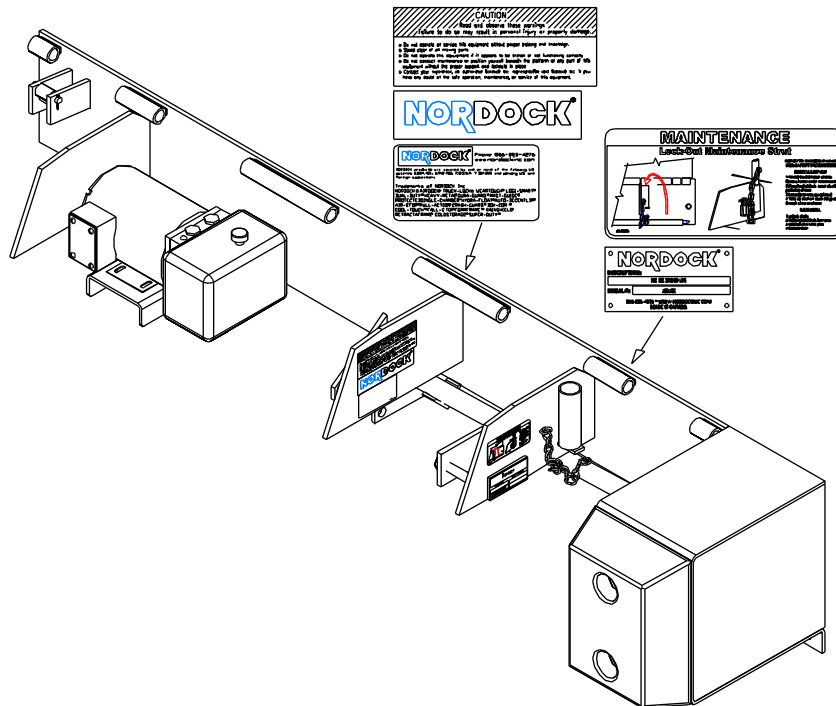
1. Inspect the dock leveler to ensure that all parts are undamaged and in good working order. If the dock leveler does not appear to function properly, or if it looks damaged, **DO NOT USE THE DOCK LEVELER**. Disconnect the power supply, lock out the control panel and report it immediately to your supervisor and safety representative.
2. Be sure that the tires of the truck are properly chocked, or that the truck is properly locked in place by a functioning restraining device before loading or unloading.
3. Do not stand on the dock leveler when it is in motion. Stand on the floor behind the rear hinge of the dock as the deck rises. Ensure no one is near the deck or lip; the lip will extend as the deck lowers, and will fold quickly.
4. Do not operate the dock leveler with equipment, material, or people on the ramp or lip. **Never use a fork truck or any type of material handling equipment to lower the ramp.**
5. Keep hands and feet clear of hinges at all times. Do not attempt to raise the deck or lip manually. If the dock leveler fails to operate using the procedures contained in this manual, **DO NOT USE THE DOCK LEVELER**. Disconnect the power supply, lock out the control panel and report it immediately to your supervisor and safety representative. Contact Nordock Inc. or an authorized service representative for service.
6. Whenever any maintenance or repair is to be performed on the dock leveler, barricade the area around the dock, and place clear signage on the perimeter that the dock is not to be operated.
7. Always make sure the dock maintenance support stand is in place before performing maintenance. Disconnect the power and lock out the control panel before working on the dock.
8. Any work to be performed on the electrical system must be carried out by a qualified electrician.

9. Any work to be performed on the hydraulic system must be carried out by a qualified hydraulic technician or specialist.
10. Ensure the dock leveler is clear of all material, equipment, or people before the chocks are removed, and the truck released from the restraint. After loading or unloading, make sure the dock is returned to the proper stored position.

If you have any questions, contact your supervisor or your local Nordock Incorporated representative.

Labels

The labels and decals on the dock leveler must be kept in clean, legible condition at all times. The following shows the decals and their placement on the dock leveler. Please check their condition on a daily basis, and replace them immediately if they become unreadable. The replacement decal kit (P/N 42-0392) is available by contacting your local Nordock representative or by calling 1-866-885-4276.

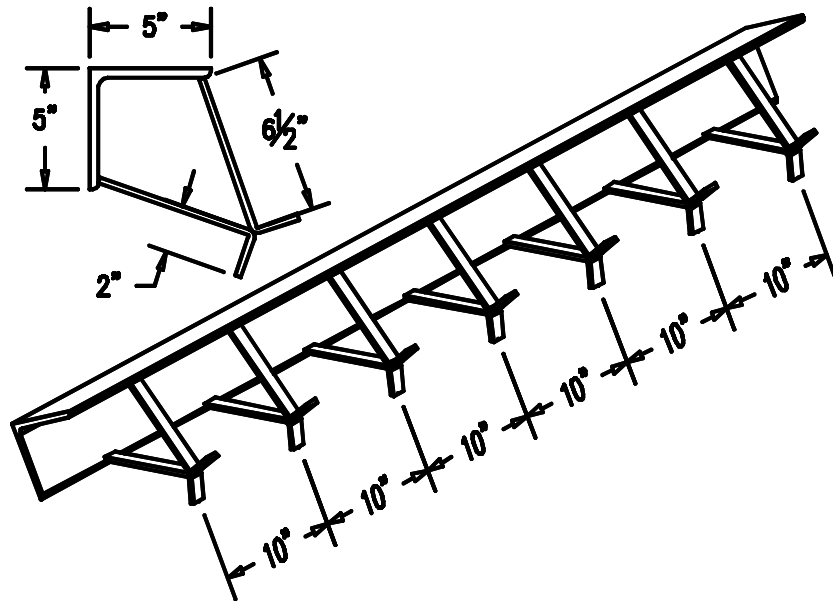


Installation

New Construction

When installing the dock leveler in new construction, there are certain minimum requirements that must be followed to ensure proper mounting. Failure to meet these requirements may cause improper operation, dock failure, or personal injury. Nordock Inc. will assume no liability or warranty for damage caused by improper installation.

The base angle that will mount to the back plate of the dock leveler must be centered in the door opening and fully embedded in concrete using 5" x 5" x 3/8" angle, with anchors spaced 10" apart from the center of the angle to the outermost edges of the mounting angle:



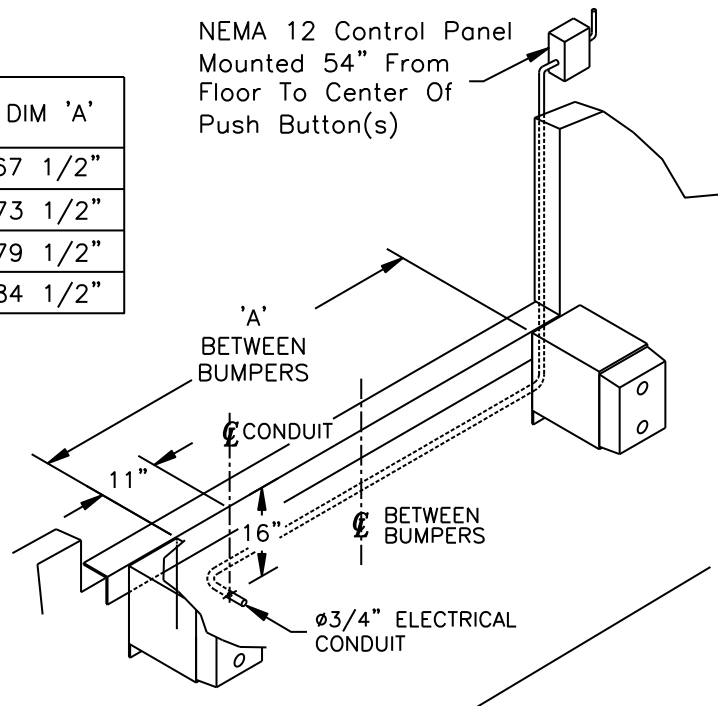
Existing Building:

If the dock leveler is to be installed in an existing building, the base angle and surrounding concrete must be in good condition. Excessive rust, poor concrete condition, or if the mounting angle is pulling away from the concrete constitutes substandard conditions, which must be rectified before the dock leveler can be installed. Nordock Inc. will assume no liability or warranty for damage caused by improper installation.

Electrical Installation

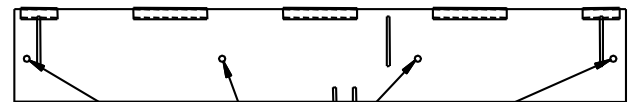
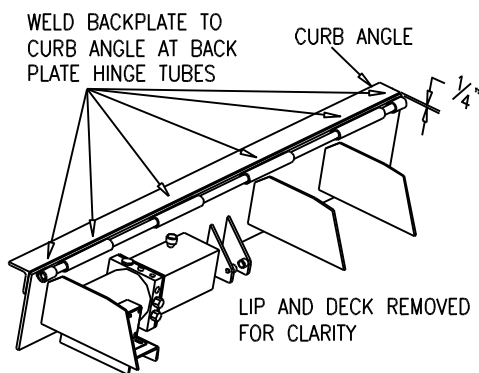
Mount and wire control box as shown on next page.

DECK WIDTH	DIM 'A'
66"	67 1/2"
72"	73 1/2"
78"	79 1/2"
83"	84 1/2"



Dock Leveler Installation

1. Lift the dock leveler into position centered in the door opening, leaving the back plate 1/4" below the mounting angle. Ensure the unit is level.
2. Tack-weld the sides of the angle to hold the unit in place. Then stitch weld the back plate to the mounting angle the full length of the back plate hinge tubes as shown below:



DRILL AND ANCHOR USING
 5/8" X 4 1/2" CONCRETE ANCHORS
 4 PLACES - 78" & 83" WIDE UNITS
 3 PLACES - 66" & 72" WIDE UNITS

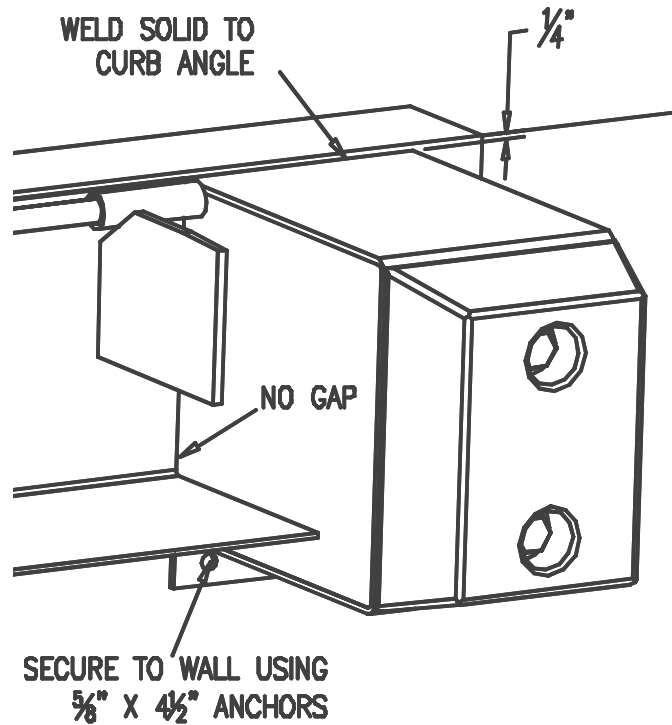
3. Drill and anchor the dock leveler to the concrete wall using 5/8" x 4 1/2" wedge anchor bolts (not supplied).
4. Lower the lip and deck to their parked position. The dock may now be wired according to the wiring diagram.

Bumper Installation:

The bumpers should be mounted directly beside the back plate. In the use of bumper box extensions (non-pit applications), the top of the box should be 1/4" below the curb angle, and welded solid; the bottom should be fastened to the wall using 5/8" x 4 1/2" wedge anchors (not supplied).

Install bumper so that it is 1/4" below floor level for proper securing, and against the edge of the pit or dock base.

Whenever possible, weld the bumper to the pit curb angle, and use 5/8 X 4 1/2" wedge anchors in the mounting holes.



Operation



WARNING

Before operating or maintaining the dock leveler, read and follow the safety practices contained in this manual. Failure to follow the guidelines in this manual and those in effect in the workplace can result in serious bodily harm and equipment damage.

Standard Operation

1. Push and hold the 'RAISE' button on the control panel to raise the deck and lip. Release the button when the lip has risen approximately halfway. The lip does not have to extend fully to properly contact the truck bed.
2. Proceed with loading or unloading.
3. To return the dock leveler to the stored position, push the 'RAISE' button until the lip clears the bed. Do not allow the lip to re-extend, as it will rest on the truck again.
4. Ensure the deck has properly stored and is resting on the deck stops.

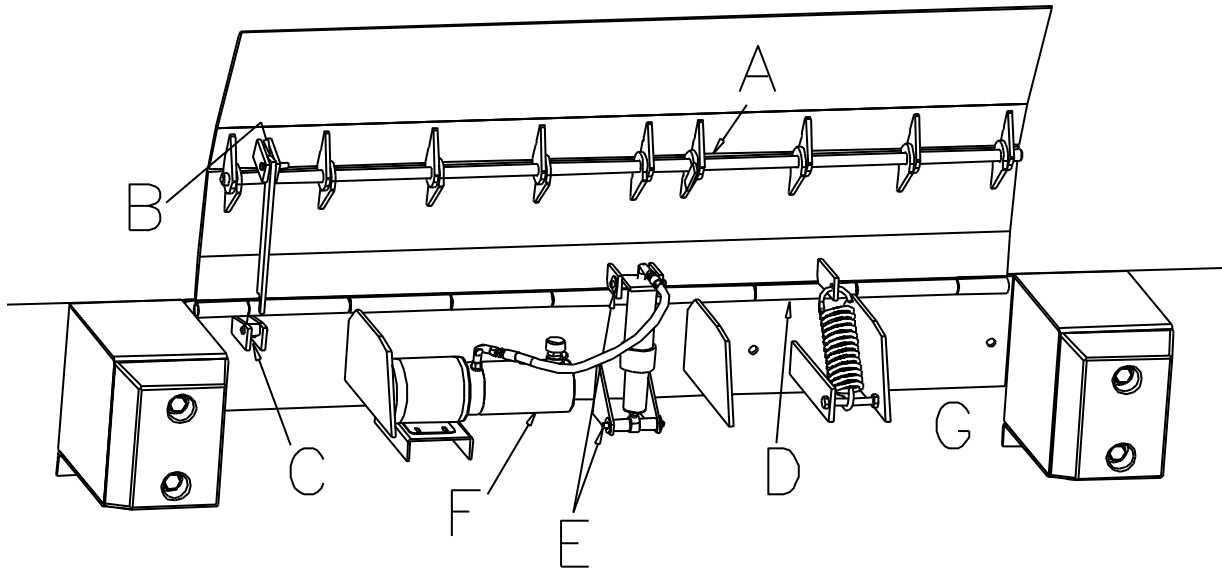
Maintenance and Lubrication



WARNING

Before operating or maintaining the dock leveler, read and follow the safety practices contained in this manual. Failure to follow the guidelines in this manual and those in effect in the workplace can result in serious bodily harm and equipment damage.

Use the following chart and diagram below for the recommended lubrication types and locations. Acceptable grease and oil can be found on the next page.



Item	Lubrication	Adjustment	Cleaning
-A- Lip Hinge	Every 90 days Use grease	None	Remove debris as required
- B - Lip Actuator	Every 90 days Using light oil	None	Remove debris as required
-C- Actuator Roller	Every 90 days Using light oil	None	Remove debris as required
- D - Deck Hinge	Every 90 days Use grease	None	Remove debris as required
- E - Cylinder Pins	Every 90 days Use light oil	None	Remove debris as required
- F - Hydraulic Oil Reservoir	Check level daily Change oil yearly	None	Remove and clean strainer and magnet yearly
-G- Base Plate Area	None	None	Every 90 Days or as required to remove debris

Acceptable Lubricants and Oils

Hydraulic

Oils used in the hydraulic system must meet minimum ISO grade **32** standard. E.G.:

COMMERCIAL OIL Multi-Vis MV32
 EXXON UNIVIS HVI 26
 TEXACO AW 32
 U.S.OIL CO. Zinc Free (#32) Anti-wear hydraulic oil
 SHELL TELLUS T32

Grease

Grease used for hinges must meet a minimum EP-2 grade. E.G.:

CHEVRON DURA-LITH EP-2

Light Oil

Light oils used should have good penetration and adhesion qualities.

NOTE: Biodegradable fluids are available for use in the dock leveler. Please consult Nordock for information and instruction.

Hydraulic Adjustment (to be completed by a trained technician only):

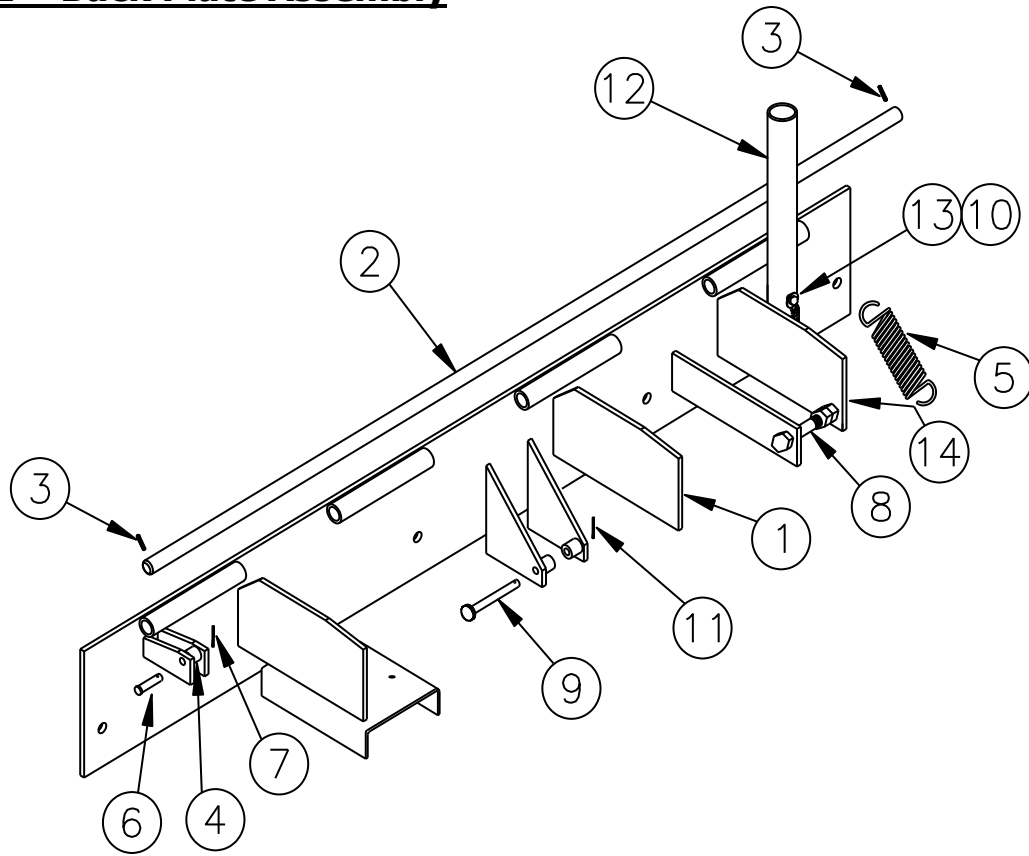
Item	Name	Function	Adjustment Increment
11	Pressure Relief Valve -remove red cap	Controls maximum pressure (preset at 2100 psi.) Turn counter-clockwise to lower pressure.	1/8 Turn
12	Flow Control Valve -loosen lock nut	Controls downward speed of deck. Turn clockwise (tighten) to slow downward speed.	1/8 Turn

Parts and Service Tables

Item Number/ Section	Description
1	Base Assembly
2	Deck Assembly
3	Lip Assembly
4	Cylinders
5	Hydraulic Pumps
6	Hydraulic Hoses
7	Control Panels

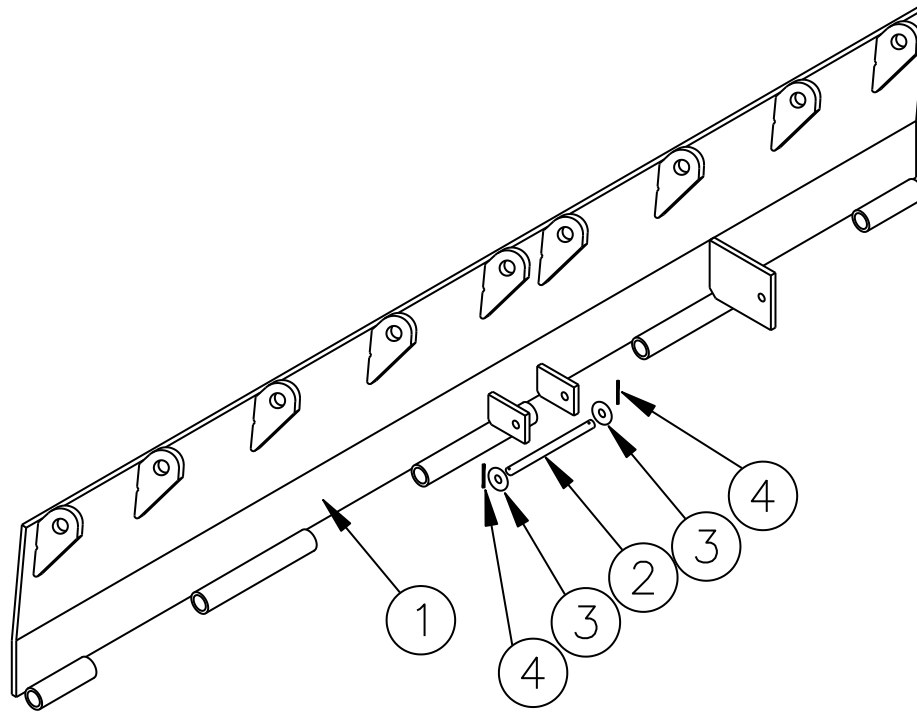
Note: Not all parts and weldments are noted in this manual. Only those that are serviceable and /or replaceable will be listed. For additional information on those parts not included in this manual, please contact Nordock. Remember to make note of the model and serial number of the unit for accurate parts and service.

Section 1 – Back Plate Assembly



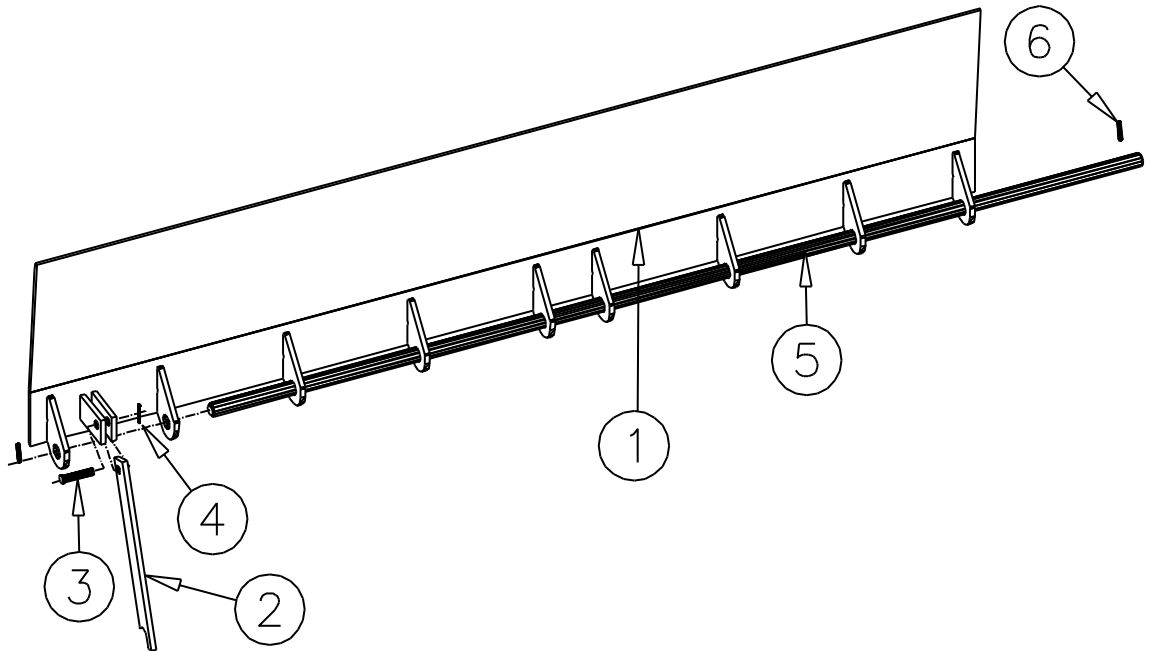
Item	Qty.	Description / Model	P/N	Note
1	1	Back Plate Weldment 20, 30K 66" 72" 78" 83"	42-0760 42-0742 42-0761 42-0762	
2	1	Hinge Rod 66" 72" 78" 83"	43-0302 43-0154 43-0155 43-0156	
3	2	Spring Pin, 1/4" x 2"	13-0555	
4	1	Roller	43-0821	
5	1	Spring, 3" Dia. x 9" overall	21-0017	
6	1	Clevis Pin, 1/2" x 2 1/2"	13-1099	
7	1	Cotter Pin, 1/8" x 1 1/2"	13-0397	
8	1	Bolt, 5/8"-11 Hex Head x 4" Long, thread full length	13-0302	
9	1	Pin, EH, Cylinder, Bottom, 3/4" Dia.	42-2901	
10	2	Washer, 1/4" Fender, Plated	13-0271	
11	1	Cotter Pin, 3/16" x 1 3/4"	13-0304	
12	1	Maintenance Strut	43-1232	
13	1	Screw, Tek, 1/4"	13-2359	
14	1	Decal, Lock out Tag out	43-1287	

Section 2 – Deck Assembly



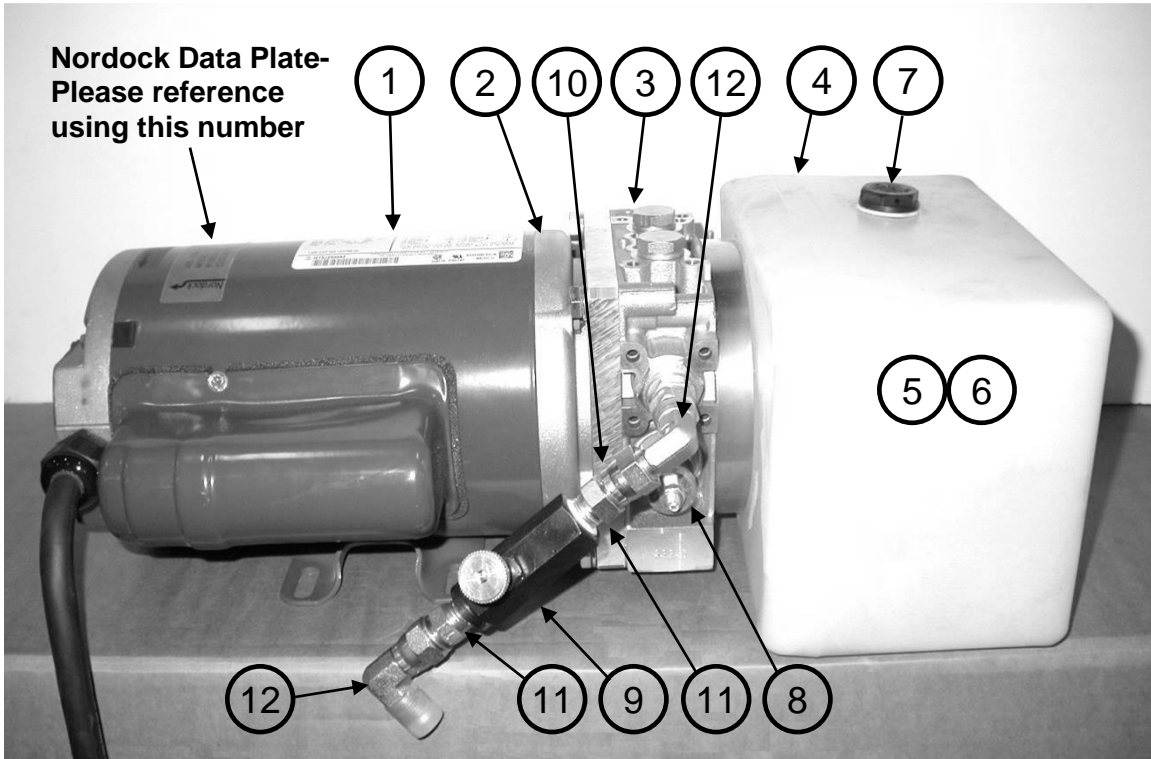
Item	Qty.	Description / Model			P/N	Note
1	1	Deck Weldment	20K	66"	42-0771	
				72"	42-0740	
				78"	42-0773	
				83"	42-0774	
		30K	66"	42-0767		
			72"	42-0766		
			78"	42-0768		
			83"	42-0769		
2	1	Pin, EH, Cylinder, Top, 1/2" Dia.			43-0309	
3	2	Cotter Pin, 1/8" x 1"			13-0171	
4	2	Washer, 1/2"			13-0267	

Section 3 – Lip Assembly



Item	Qty.	Description / Model				P/N	Note	
1	1	Lip Weldment	20K	16"	66"	42-0591		
					72"	42-0566		
					78"	42-0592		
					83"	42-0593		
				18"	66"	42-0594		
					72"	42-0595		
			30K	16"	78"	42-0596		
					83"	42-0597		
					18"	66"		42-0598
						72"		42-0551
				78"	42-0599			
					83"	42-0600		
2	1	Lip Extension Arm			43-0171			
3	1	Clevis Pin, 5/8" x 1 3/4"			13-0288			
4	1	Cotter Pin, 1/8" x 1"			13-0171			
5	1	Lip Hinge Rod		66"	43-0303			
				72"	43-0148			
				78"	43-0149			
				83"	43-0150			
6	2	Spring Pin, 1/4" x 2"			13-0555			

Section 4 - Power Pack and Related Hydraulic Components



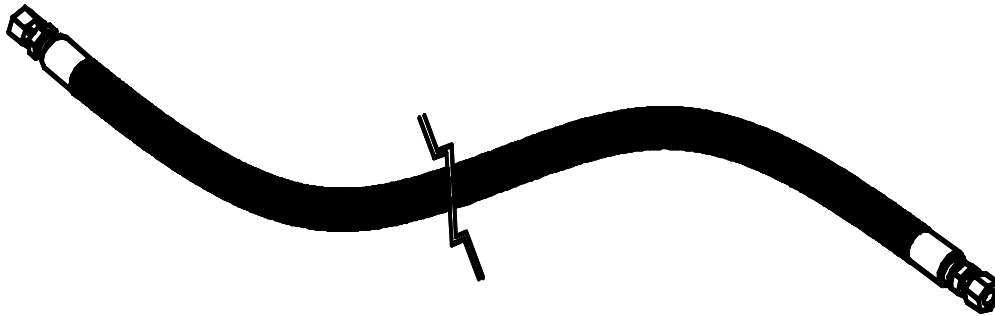
Item	Qty.	Description / Model		P/N	Note
		Complete Power Pack Assembly (Pts 1-11 below)	115 / 230 V 1 Ph. 208 / 230 / 460 V 3 Ph. 575 V 3 Ph.	13-3447 13-3448 13-3449	
Power Pack Components:					
1	1	Drive Motor	115 / 230 v. 1 PH 230 / 460 v. 3 PH 575 v. 3 Ph		1
2	1	Motor Coupler	Standard Duty		
3	1	Manifold Assembly	Standard Duty		
4	1	Hydraulic Oil Reservoir Kit		13-3598	
5	1	Pump Assembly (Inside Tank)			
6	1	Oil Pickup Screen and Tube (Inside Tank)			
7	1	Cap, Filler/ Vent			
8	1	Pressure Relief Valve Cartridge			
9	1	Flow Control Valve, 1/4" NPT		13-1020	
10	1	Hydraulic Fitting, 1/4 (4) MNPT x 9/16 (6) FJIC Swivel		13-3518	
11	2	Hydraulic Fitting, 9/16 (6) MJIC x 1/4 (4) MNPT		13-0100	
12	2	Hydraulic Fitting, 90° 9/16 (6) FJIC x 9/16 (6) MJIC		13-0494	

Note 1 – Consult factory when ordering individual power pack components.

Section 5 – Hydraulic Cylinder

Description / Model	P/N	Note
Seal Kit, Dia. 2"	C3-0020	
Cylinder, 2" Bore, 4 3/4" Stroke	C1-0070	

Section 6 – Hydraulic Lines and Fittings



Description / Model	P/N	Note
Deck Lift, 34" long, 1 End Str., 1 End 90°	42-0816	

Section 7 – Bumpers and Boxes

Item	Qty.	Description / Model	P/N	Note
Standard				
1	2	Bumper, Molded 4" x 10"	21-0005	
2	2	Bumper Box, 10" x 14" x 13 1/2" long	61-0013	
3	4	Nut, 5/8" NC-11, plated, (for molded bumper only)	13-0289	
4	4	Washer, 5/8" flat, plated, (for molded bumper only)	13-0952	
5	2	Optional Bumper, Laminated, 4 1/2" x 10" long, FF-410-8	61-0027	
Optional 20" Laminated type:				
4	2	Bumper, Laminated, 4 1/2" x 20" long, FF-420-8	61-0042	
5	2	Bumper Box, 10" x 14" x 20 1/2" long	61-0096	
Optional 20" Steel Face or Spring type:				
6	2	Steel Spring Bumper, L and R	61-0012	
7	2	Steel Face Bumper, 5" x 20" long, FFS-520-8	61-0069	
8	2	Bumper Box, 10" x 13" x 20 1/2" long	61-0125	

Section 8 – Control Panels

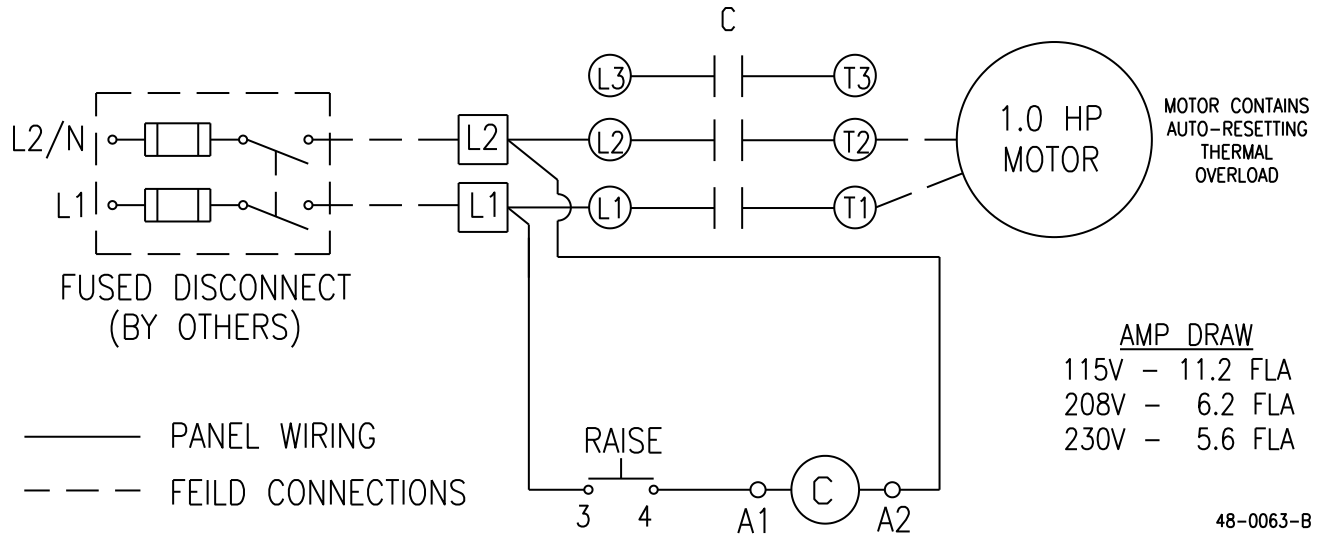
Volts	Phase	Description / Style	Control Panel	Wiring Diagram	Note
115	1	Standard Panel / Single Pushbutton	13-3767	48-0063	
208/230	1	Standard Panel / Single Pushbutton	13-3768	48-0063	
208/230	3	Standard Panel / Single Pushbutton	13-3769	48-0062	
460	3	Standard Panel / Single Pushbutton	13-3770	48-0062	
575	3	Standard Panel / Single Pushbutton	13-3771	48-0062	

Wiring Diagrams

The following wiring diagrams are specific to this dock leveler. It may be wired in conjunction with other systems used with the dock leveler. Please consult Nordock Inc. or a qualified electrician before performing any work on the control panel or its components.

Single Phase 1 Button 110v-220v – Starter Only

42-0063-B



3 Phase 1 Button 208v-575v – Starter Only

42-0062-B

