



Hydraulic Dock Leveler Heavy Duty Series Model "NH" 25,000 to 50,000 lbs. Capacity

Operation and Maintenance Manual

This manual applies to dock levelers manufactured on or after September 2018 with Serial Numbers 44064 and greater.

P/N: 49-0169-E

NORDOCK INC.

Website: nordockinc.com ~ Email: sales@nordockinc.com ~ Toll free: 866-885-4276 Nordock Incorporated reserves the right to make changes to specifications without notice or obligation. Nordock products may be covered by various U.S. and foreign patents or pending applications.

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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.

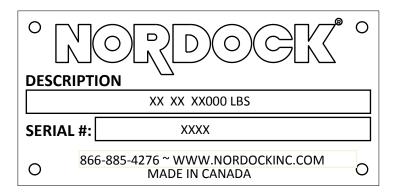
If you have any questions about this manual, the dock leveler, its components, or our products and services, please call us at 1-866-885-4276 and we will be happy to assist you. With proper care and maintenance, this dock leveler is designed to work effectively and efficiently for many years to come.

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 greatly reduce the possibility of improper parts being shipped to you.



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 it's Model NH, HEAVY-DUTY™ Series hydraulic dock leveler 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 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 may deem advisable, without charge to the purchaser.

<u>In addition</u>, Nordock guarantees, under specified guidelines, the structural components* for Ten-Years, the front and rear hinges for Twenty-Years and the hydraulic components* for Five-Years. All structural guarantees are based on the Nordock Application Guide and must be adhered to.

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.

* Structural components include the deck, lip and frame welded assemblies. Hydraulic components include the motor, pump, hydraulic cylinders, hose and fittings.



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.

- Inspect the dock leveler both before the truck arrives, and once it has left 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, disconnect
 the power supply, lock out the control panel and report it immediately to your
 supervisor and safety representative.
- 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. Stay clear of the dock leveler when it is in motion.
- 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 ramp 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.
- Use extreme caution when installing the maintenance/support stand. Stay clear
 of the dock until it has risen fully. Do not stand under the dock after the stand
 has been removed. The lip may fold rapidly, striking the worker.
- 7. Be sure both lip and deck maintenance support stands are in place, the power has been disconnected and the control panel locked out before entering the dock leveler pit area. See also Maintenance Procedure next page.
- 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. After loading or unloading, make sure the dock is returned to the proper stored position. Clear all material, equipment, or people from the dock area, then remove the chocks, store the restraint if applicable before allowing the truck to leave.

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

Maintenance Procedure

⚠ WARNING

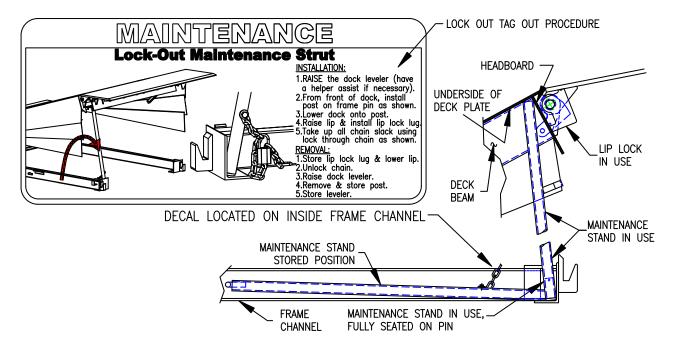
USE EXTREME CAUTION WHEN INSTALLING THE MAINTENANCE STAND

ONLY USE THE PIN PROVIDED TO PROPERLY LOCATE THE MAINTENANCE STAND. SUPPORTING THE LEVELER AT ANY OTHER LOCATION CAN RESULT IN SERIOUS BODILY HARM AND EQUIPMENT DAMAGE.

BE SURE THE POWER HAS BEEN DISCONNECTED, THE CONTROL PANEL IS LOCKED OUT AND BOTH LIP AND DECK MAINTENANCE SUPPORTS ARE IN PLACE BEFORE ENTERING THE DOCK LEVELER PIT AREA.

Before operating or maintaining the dock leveler, read and follow the practices in the Safety Section and all warnings 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.

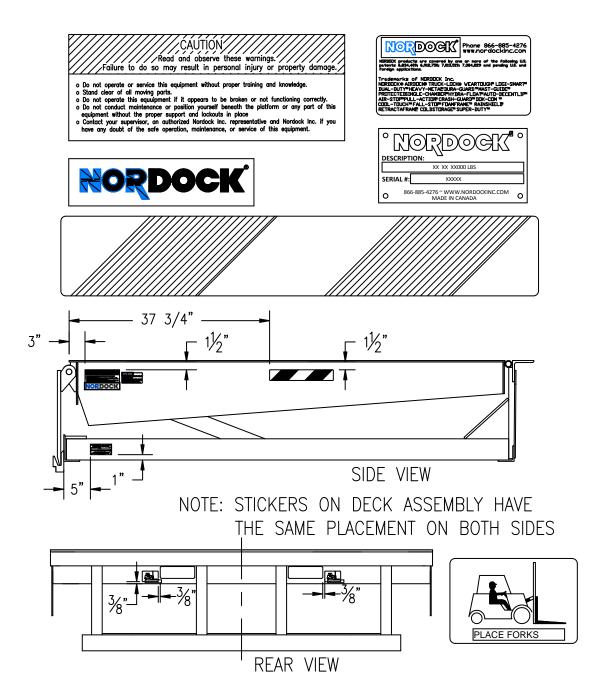
- 1. Raise the dock to its highest position.
- 2. Raise the lip and use the lip lock to hold the lip in the extended position.
- Remove the maintenance stand, located on the frame lower outside left side and position one end onto the adjacent pin (on the frame). The stand will slope toward the rear of the dock, but should be kept vertical left or right.



- 4. Lower the dock onto the stand, making sure the stand supports the deck plate and headboard between the deck beams, as shown. DO NOT support the dock from the bottom of the deck beam.
- 5. After completing work on the dock, unlock and lower the lip. Remove the maintenance stand and return to its stored position. Do not stand under the dock after the support has been removed.

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.



Installation

⚠ WARNING

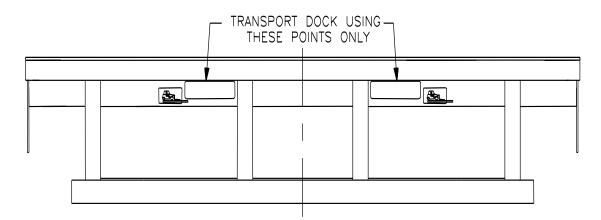
Before operating or maintaining the dock leveler, read and follow the safety practices contained in this manual. Failure to follow the guidelines in this manual and those in effect in the workplace can result in serious bodily harm and equipment damage.

Pit Check

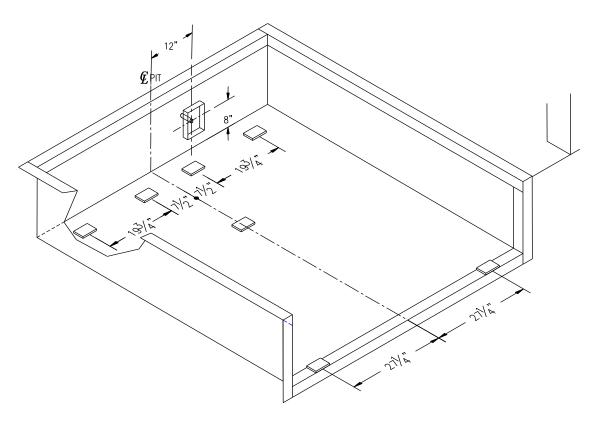
- 1. Check the entire pit area for proper construction according to the certified pit drawings. Ensure the pit walls are square and plumb. If this is a replacement, ensure the steel sections are in good, weld-able condition. Check the electrical service running to the pit and make sure it is the same as the voltage and phase as shown on the wiring diagram in the control panel.
- 2. Complete any pre-wiring procedures <u>before</u> the dock is placed in the pit. Ensure that any cables, plugs or leads are connected to the dock, and that there are correct corresponding leads, receptacles or device boxes with covers in the pit.
- 3. Make sure that any conduit and/or junction boxes do not interfere with the frame uprights. See next page for best rear pit placement.

Dock Installation

Note: When moving the dock leveler in preparation to installation, it is crucial that the unit be moved only using the fork pockets at the rear of the frame.

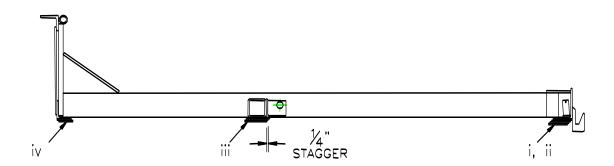


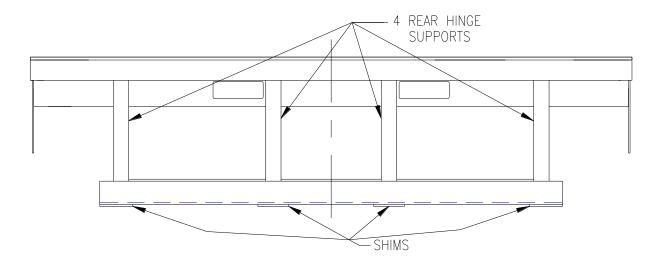
- 1. Have the control panel mounted and wired by a qualified electrician. See electrical diagram inside the control panel. Wires shown as dashed lines are field connections.
- 2. Shims may be placed in the pit prior to the installation of the dock. Make sure shim heights are all the same depth from the edge of the pit area. For best weld, stagger shims at least 1/4". At this time, tack-weld the shims only. See below for correct placement of shims.



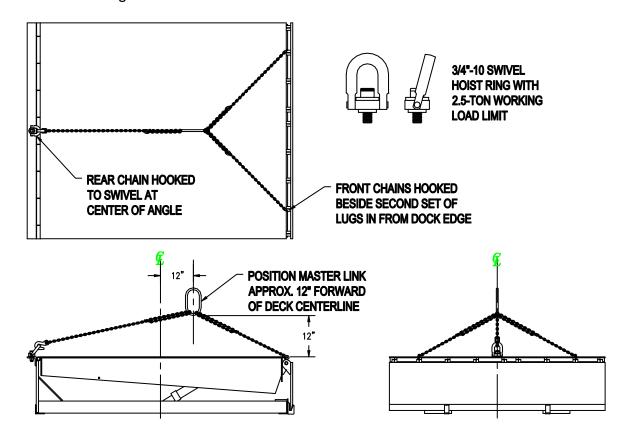
3. Shims must be placed in the following seven areas:

- I. Under both frame rails directly behind the lip keeper lugs. (2 places)
- II. Under the left frame rail, directly below the maintenance stand mounting pin. (can be integral with shim in (I.) above)
- III. Under the cross tube where the cylinder mounts to the frame.
- IV. Under rear frame angle at the uprights connecting to the hinge angle. (4 places)

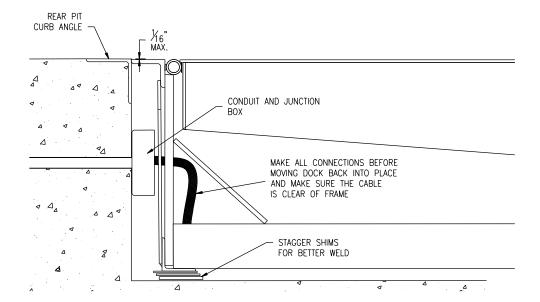




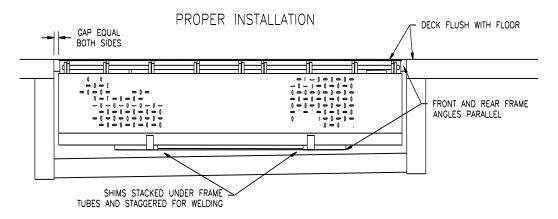
- Remove straps holding electrical cable and if required, attach plug (not included).
 Temporarily strap cable to rear frame upright so that it can be easily reached for connection to pit outlet.
- 5. Attach the lifting chains to the front of dock leveler and a swivel hoisting to the rear of the dock leveler in the 3/4"-10 threaded hole. All chains must be minimum grade 80 and chain hooks have a minimum 1-ton capacity. An endless master link should also be used to assist in the levelling of the dock leveler. Three chains must be used; one hooked at the center of the hinge angle, two hooked on the front deck plate outside the second set of lip lugs from the sides of the deck. Attach the chains so that the master link is approximately 12" forward of the center of the deck, and centered along the width.



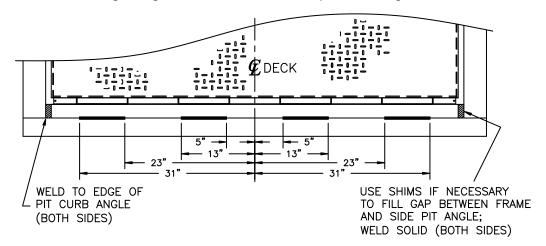
- 6. Lift the deck approximately 6" and check that it is level. Adjust chains accordingly if required. Do not attempt to install the dock if it is not level. Damage to the unit or personal injury may result.
- 7. Place dock into pit. Leave room between the dock leveler and the rear pit wall so that the electrical connections can be made.
- 8. Connect dock leveler to the source connection in the pit area. Ensure that when, the dock leveler is pushed into place that the dock does not crush the cord.
- 9. Move dock so that hinge angle should fit flush and tight to pit angle and be centered between side pit curb angles.
- 10. Remove the transport cables and 'raise' the dock leveler. Install the maintenance support and check the position of the shims. Re-position if necessary. There should be no more than 1/16" in height difference at any point between the pit curb angle and the dock leveler. Tack-weld the hinge angle to the pit curb angle.



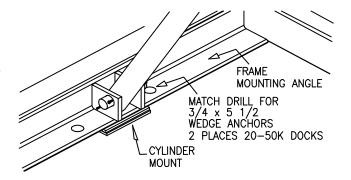
11. Remove the maintenance support and lower the dock to its stored position. Check that the dock is still squarely positioned and level with the pit sides. Add or remove shims as necessary. See also Maintenance Procedure pg. 5 of this manual.

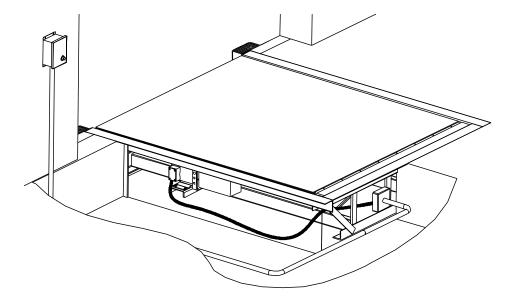


- 12. Raise the deck and re-install the maintenance support. Weld the shims solidly together, and weld the shims to both the frame and the front angle.
- 13. Weld the rear hinge angle to the rear and side pit curb angles as shown below.



14. Match drill the 1" dia. holes on the frame cylinder mounting angle into the pit concrete. Use the 3/4" x 51/2" long wedge type anchors supplied to secure the frame to the pit floor. (2 places 20-50K docks)





Correct installation will ensure consistent, efficient operation for many years to come.

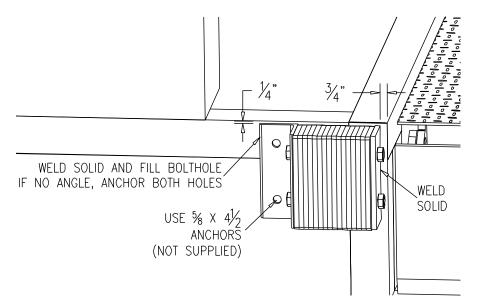
Note: It is the installer's responsibility to complete any paint touch-up and dock area clean up that may be required.

Bumper Install

Bumpers should be installed as follows to prevent damage from trucks backing into the dock leveler.

Install bumper so that it is 1/4" below floor level for proper securing, and 3/4" away from the edge of the pit so that the heads of the bolts will clear the lip as it passes the bumper.

Weld the bumper wherever possible to the pit curb angle, and use 5/8" x 4 1/2" wedge anchors (not supplied) in the angle holes.



Operation

MARNING

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.

Note: If the truck to be serviced is below dock level, please see the additional instructions for <u>Below Dock Control</u> in this section.

Standard (Single Pushbutton) Control Panel

- Push and hold the "RAISE" button. The ramp will rise and the lip will extend once the deck has reached its highest point. Release the button once the lip has extended and the deck will lower and rest on the truck bed.
- 2. Proceed with loading and/or unloading.
- To return the dock leveler to its stored position, push and hold the "RAISE" button until the lip clears the bed. The lip will fold and when the button is released, it will return to its stored position.
- 4. Ensure the lip is seated in the lip keepers before walking or driving on the dock.

Below Dock Control

To lower the ramp, without extending the lip for loading below dock level, substitute item 1 in the preceding instructions with the following:

- 1a. Press the "RAISE" button until the ramp reaches its highest point and the lip extends approximately 2".
- 1b. The ramp will lower below level and rest on the truck bed. Do not walk or drive on the dock until it has completely stopped lowering.

Optional (Lip Extend and/or On/Off Switch) Control Panel

- 1. If equipped, turn the ON/OFF switch to the 'ON' position, and pull the emergency stop pushbutton out.
- 2. Push and hold the "RAISE" button. The ramp will rise and once the lip has cleared the deck of the truck, press the "EXTEND" button to push the lip out. Release the button once the lip has extended and the deck will lower and rest on the truck bed.
- Proceed with loading and/or unloading.
- 4. To return the dock leveler to its stored position, push and hold the "RAISE" button until the lip clears the bed. The lip will fold and when the button is released, it will return to its stored position.

- 5. Ensure the lip is seated in the lip keepers before walking or driving on the dock.
- 6. Push in the "STOP" button and turn the ON/OFF button to the "OFF" position (if equipped).

Below Dock Control

To lower the ramp without extending the lip for loading below dock level, substitute item 2 in the preceding instructions with the following:

- 2a. Press the "RAISE" button until the ramp clears the keepers and the truck bed by approximately 6" and release the button.
- 2b. before the ramp returns to the keepers, press the "EXTEND" button to extend the lip approximately 2" out from its resting position. Release the button and the dock will rest on the below dock supports. Do not walk or drive on the dock until it has completely stopped lowering.

Auto Return

In the event a truck pulls away from the dock before the lip is stored, the auto return feature will raise the ramp for a set time and the lip will store automatically. If this occurs check that the lip has stored properly on the lip store lugs, and it is recommended that all safety practices be reviewed.

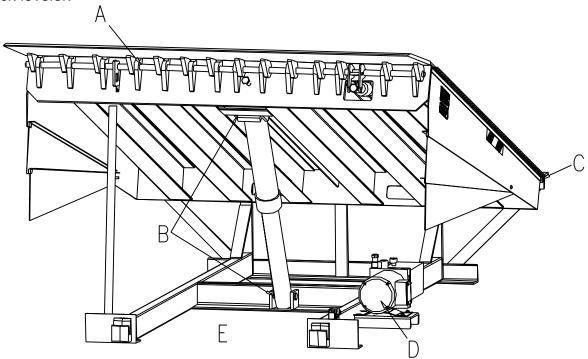
Note: If the dock leveler is equipped with an auto return feature it is necessary to turn the selector button to the "OFF" position to perform the below dock control function. Follow the instructions and turn the selector to "OFF" as the ramp approaches full below dock position. Turn the switch to the "ON" position only when loading or unloading is complete, and all persons, equipment and material are cleared from the dock.

Maintenance and Lubrication

MARNING

Before operating or maintaining the dock leveler, read and follow the safety practices and maintenance procedure 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.

Note: Use only the lubricant grades specified in this manual. Failure to use the materials listed may lead to premature failure, and will void any warranty claims for the dock leveler.



Item	Lubrication	Adjustment	Cleaning
- A -	Every 90 days	None	Remove debris as
Lip Hinge	Using grease		required
- B -	Every 90 days	None	Remove debris as
Cylinder Pivot Pins	Using light oil		required
- C -	Every 90 Days	None	Remove debris as
Dock Hinge	Using light oil		required
- D -	Check level daily	None	Remove and clean strainer
Hydraulic Oil	Change oil yearly		and magnet yearly
Reservoir			
-E -	None	None	Every 90 days or as
Pit Area			required to remove debris

Acceptable Lubricants and Oils

<u>Hydraulic</u>

Oils used in the hydraulic system must meet minimum ISO grade 22 standard. E.G.:

COMMERCIAL OIL MULIT-VIS MV22 MOBIL AERO HFA (49011) EXXON UNIVIS GRADE J13 TEXACO AIRCRAFT OIL #1537BB U.S.OIL CO. #5606 (LOW TEMP) SHELL TELLUS T22

Optional biodegradable oils (Nordock PN 13-0807) are E.G.: Greenland ES Green Plus Forsythe 6282/B2 Power Flo

Grease

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

CHEVRON DURA-LITH EP-2

<u>Light Oil</u>

Light oils used should have good penetration and adhesion qualities.

Hydraulic Adjustment

Note: Power units are set at the factory to optimum performance. Adjustment is rarely necessary and should only be performed by a qualified hydraulic technician.

To make adjustments: Remove the outer cap, as required, and loosen the locknut.

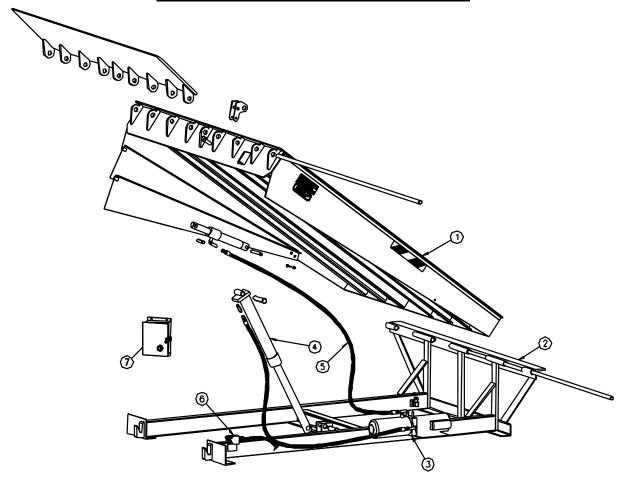
Use the chart below as an adjustment guide.

Item numbers below refer to Parts and Service Section 3 – Power Pack

Item	Name / Function	Adjustment
10	Sequence Valve (Blue Cap)	-Required if lip extends before the deck
	-Sends flow to the lip cylinder when	raises.
	deck is at full height	-Turn adjustment screw clockwise to control
		the lip extend.
		-Adjust in 1/8 turn increments.
11	Pressure Relief Valve (Red Cap)	-Required if having motor stalling problems.
	-controls maximum pressure	-Turn counter-clockwise (loosen) to lower
		relief pressure.
		-Adjust in 1/8 turn increments.
12	Flow Control Valve	-Turn adjustment screw clockwise (tighten)
	-controls downward speed of deck.	to slow speed or turn counter-clockwise
		(loosen) to increase speed.
		-Adjust in 1/8 turn increments.

For all- Retighten locknut and replace cap, if applicable, after adjustment is complete.

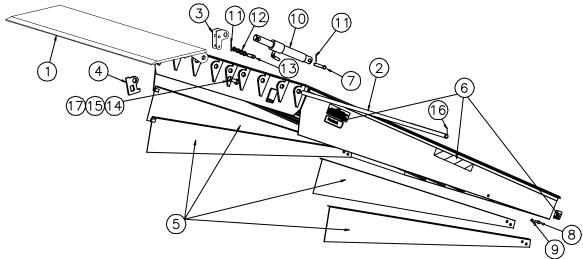
Parts and Service Tables



Item	Description
Number/	
Section	
1	Deck and Lip Assembly
2	Frame Assembly
3	Power Pack and Related Hydraulic Components
4	Hydraulic Cylinders
5	Hydraulic Lines and Fittings
6	Optional Equipment
7	Control Panel

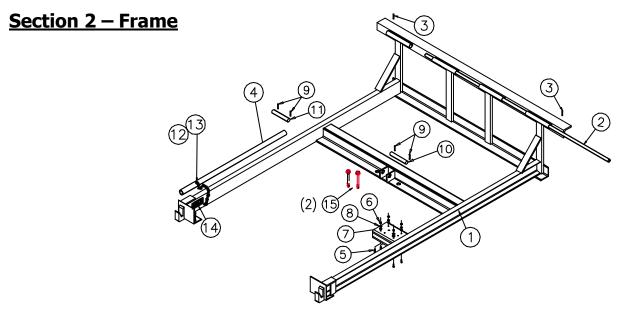
Note: Not all parts and weldments are noted in this manual. Only those that are serviceable and /or replaceable will be listed. For additional information on those parts not included in this manual, please contact Nordock Inc. Remember to make note of the model and serial number of the unit for accurate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

Section 1 - Deck and Lip Assembly



Item	Qty.	Description / Model I							Note
1	1	Lip We	ldment			N, Deck Wi	dth		
		Cap.	Length	6'	6.5'	7'	7'T	70"	
			16"	42-0332	42-0343	42-0355	42-0366	42-0858	
		20-25K	18"	42-0333	42-0344	42-0356	42-0367	42-0859	
			20"	42-0334	42-0345	42-0357	42-0368	42-0860	
			16"	42-0028	42-0346	42-0358	42-0369	42-0883	
		30-40K	18"	42-0335	42-0347	42-0359	42-0370	42-0922	
			20"	42-0336	42-0348	42-0360	42-0371	42-0923	
			16"	42-0337	42-0349	42-0361	42-0372	42-0924	
		45-50K	18"	42-0338	42-0350	42-0362	42-0373	42-0925	
			20"	42-0339	42-0351	42-0363	42-0374	42-0926	
2	1	Hinge Ro	od, 1"	43-0148	43-0149	43-0150	43-0150	43-0465	
								P/N	
3	1	Lip Cam	Weldmei	nt		20-50K		42-0821	
4	1		ty Lock Li					43-0252	
5	1			Skirt Kit –				42-0393	
	1	Telescop	oing Side	Skirt Kit - 8	3'			42-0394	
	1	Telescop	oing Side	Skirt Kit -	10'			42-0395	
6	1	Dock Lev	veler Dec	al Kit				42-0392	1
7	1	Clevis Pi	in, 1/2" x	4 1/2"				13-3672	
			St St Pin					43-1026	
8	2	Bolt, 3/8'	" - 16 UN	C x 1 1/4" (Carriage He	ead		13-0122	
9	2			de 5, Nyloc	:k			13-0707	
10	1	Lip Cylin	der - 1 1/	2"				C1-0009	
		Seal Kit	- 1 1/2"					C3-0025	
11	2	Cotter Pi	in, 1/8" x	1"				13-0171	
12	4	Washer,	1/2" Flat					13-0267	
13	1	Clevis Pi	in, 1/2" x	3 1/2"				13-0399	
			St St Pin					43-1025	
14	1		5/8" Dia. Nut, Bolt x 4" Long 13-0302						
15	1	Nut, Hex	Nut, Hex, 5/8"-11NC, plated 13-0289						
16	2	Roll pin,			<u> </u>	<u> </u>	<u> </u>	13-0555	
17	1	Washer,			<u> </u>	<u> </u>	<u> </u>	13-0657	

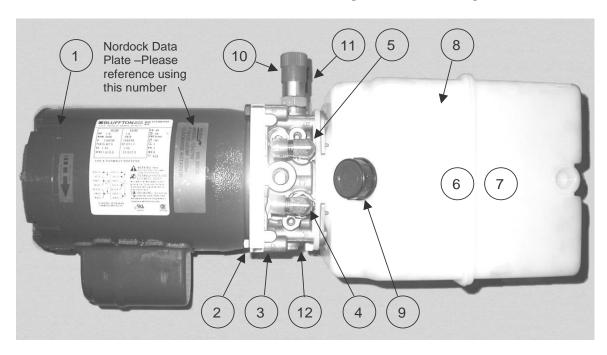
NOTE 1: – For correct decal placement, see safety section..



Item	Qty.	Description / Model							Note
1	1	Opposite Dock Frame P/N - Dock Width							
		Capacity	Length	Depth	6'	6.5'	7'	70"	
			6'	19"	42-1876	42-1879	42-1882	42-1885	
		Frame	O	23"	42-1888	42-1891	42-1894	42-1897	
		Weldment	8'	19"	42-1877	42-1880	42-1883	42-1886	
		20-40K	0	23"	42-1889	42-1892	42-1895	42-1898	
		20-40K	10'	19"	42-1878	42-1881	42-1884		
			10	23	42-1890	42-1893	42-1896		
			6'	19"	42-2455		42-2461		
		Frame	U	23	42-2464	42-2467	42-2470		
		Weldment	8'	19"	42-2456		42-2462		
		45-50K	U	23	42-2465		42-2471		
		45-30K	10'	19"	42-2457		42-2463		
				23	42-2466		42-2472		
2	1	Rear Hinge	Rod		43-0154	43-0155	43-0156	43-0462	
		P/N							
3	2	Spring Pin,	1/4" x 2"					13-0555	
4	1	Maintenand	SA / Sunne	ort Stand		Standard Do		43-0262	
			• •			17" Frame D	ock (36")	43-0600	
5	4	Bolt, Hex, 1						13-0623	
6	4	Nut, 1/4" –						13-0334	
7	4	Washer, 1/4		at				13-0272	
8	4	Washer, 1/4						13-0335	
9	4	Cotter Pin,						13-0992	
10	1	Lower Cylir		nt Pin, 4 ½	" long			43-0312	
		Optional St						43-1028	
11	1							43-0310	
			Optional St St Pin 43-1027						
12	1	Decal, Doc						43-1287	
13	1	Screw, 1/4" -			ead, plated	b		13-0273	
14	1	Washer, 1/4'						13-0271	
15	2	Anchor, We		x 5 ½" long	j, plated			13-4569	

Note 1 – The standard Rear Frame angle width is 3". Widths may vary to suit pit length. Please consult factory when ordering replacement frames.

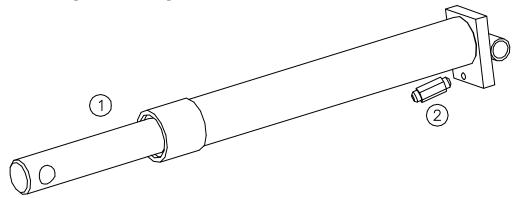
<u>Section 3 – Power Pack and Related Hydraulic Components</u>



Item	Qty.	Description / Model			P/N	Note
		Complete Power Pack	115 /	/ 230 V 1 Ph	13-0790	
		Assembly	230 /	/ 460 V 3 Ph	13-0791	
		(Pts 1-12 below)	575	V 3 Ph	13-0792	
Powe	r Pack	Components:				
1	1	Drive Motor		115 / 230 v. 1 PH		
				230 / 460 v. 3 PH		
				575 v. 3 Ph		
2	1	Motor Coupler		Standard Duty		
3	1	Manifold Assembly Standard Duty				
4	1	Hydraulic Fitting, 90° 3/8" FNPT x #6MJIC, Deck Lift Port				1
5	1	Hydraulic Fitting, 90° 3/8" FN	IPT x 7	#6MJIC, Lip Ext. Port		
6	1	Pump Assembly (Inside Tank	<u>()</u>			
7	1	Oil Pickup Screen and Tube	(Inside	e Tank)		
8	1	Hydraulic Oil Reservoir Kit			13-2824	
9	1	Filler / Vent Cap			13-3596	
10	1	Sequence Valve Cartridge			13-2419	
11	1	Pressure Relief Valve Cartridge			13-3332	
12	1	Flow Control Valve, Adjusting Needle w O-Ring & Nut			13-3341	

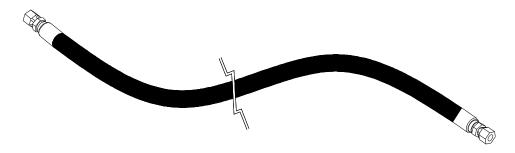
Note 1 – Consult factory when ordering individual power pack components.

Section 4 – Hydraulic Cylinders



Item	Qty.	Description	Dock	Stroke	Closed	P/N	Note
			Length		Length		
1	1	Deck Lift Cylinder, 2" Diameter,	6'	17"	25"	C1-0011	
		20-50K	8'	17"	25"	C1-0011	
			10'	20"	28"	C1-0030	
	1	Seal Kit, 2"	All			C3-0020	
2	1	Velocity Fuse, 3 gpm.		13-0306			

<u>Section 5 – Hydraulic Lines and Fittings</u>

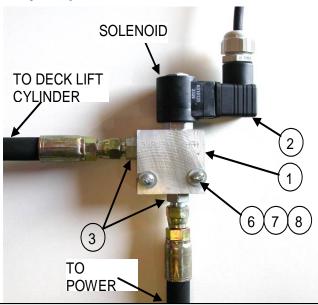


Dock length	Dia.	Description / Model	P/N	Note			
6'	3/8"	Deck Lift Hose Assembly, x 72" long	42-0383				
		Lip Hose Assembly, x 48" long	42-0386	1			
		Hose kit, consisting of 1 each above hoses	13-1678				
8'	3/8"	Deck Lift Hose Assembly, x 75" long	42-0384				
		Lip Hose Assembly, x 54" long	42-0387	1			
		Hose kit, consisting of 1 each above hoses	13-1677				
10'	3/8"	Deck Lift Hose Assembly, x 87" long	42-0385	1			
		Lip Hose Assembly, x 78" long	42-0388				
Optional	Emerge	ency Stop:					
All	3/8"	Hose Assembly, Power Unit to Valve, x 18" long	13-3370				
All	3/8"	Hose Assembly, Deck Lift, x 72" long	42-0383				
Optional	Optional Remote Mount Power Pack, standard length:						
All	3/8"	Hose Assembly, Deck Lift & Lip, x 25'-0" long (2 hoses required per dock, #6 with 1-End Straight, 1-End 90)	13-3667				

Note 1: All hoses are #6 with 2 straight FJIC ends

Section 6 – Optional Equipment

Lip Extend/Emergency Stop Valve:



Item	Qty.	Description / Loca	P/N	Note	
1	1	Solenoid Valve / Rear Frame Brace	Complete Assembly	13-0826	
			Solenoid only, 125V	13-0595	
2	1	Receptacle, solenoid valve, Hershma	13-2371		
3	2	Hydraulic Fitting, Str. #6 JICM / 9/16	13-0609		
4	1	Pushbutton / Control Panel, Lip Exter	nd (not shown)	13-0317	
5	1	Mushroom Pushbutton, / Control Par	nel, Emergency Stop	13-0318	
		Button (not shown)			
6	2	Screw, #10-24 x 1 1/2" long, plated, co	ombo head	13-0274	
7	2	Washer, Lock, #10, plated	13-0948		
8	2	Washer, Flat, #10, plated		13-1956	

Note: See Section 5 for the hydraulic lines required for the Lip Extend/Emergency Stop valve.

Other Options:

Option	Qty.	Description / Location	P/N	Note
Auto	1	Limit Switch / Located on Frame Rail	13-0298	
Return	1	Timer / Control Panel	13-0156	
	1	On / Off Selector / Control Panel	13-0316	
Bumpers	2	Standard Bumper, AF410-11	61-0001	1
Weather	6'	Brush Seal and Mounting Extrusion Kit	61-0025	
Seals	8'	Brush Seal and Mounting Extrusion Kit	61-0024	
	10'	Brush Seal and Mounting Extrusion Kit, (3 pc)	61-0024	
Dock Store	1	Limit Switch / Located on Frame Rail	13-0298	
Remote	1	Wall Mount Bracket	43-0428	
Mount	4	Bolt, Hex, 1/4" – 20 UNC x 1"	13-0623	
Power	4	Nut, 1/4" – 20 UNC, Plated	13-0334	
Pack	4	Washer, 1/4" SAE Flat	13-0272	
	4	Washer, 1/4" Lock	13-0335	

Note 1 – For custom bumper sizes and applications, please contact your nearest Nordock representative or call 1-866-885-4276.

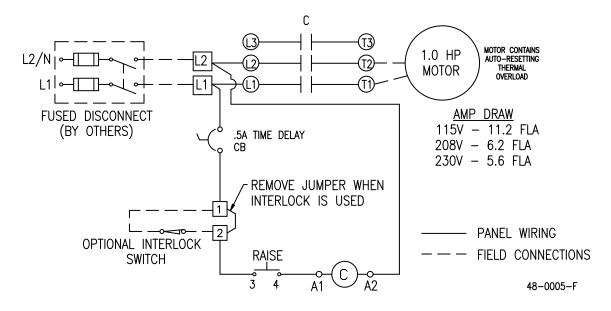
Section 7 – Control Panels

Volts/Ph.	Description / Style	P/N	Note
115/1/60	Standard Panel / Single Pushbutton	48-0027	
	2 Button – Deck Raise and On/Off Switch	13-1980	
	3 Button – Deck Raise, Lip Extend, and Emergency Stop	13-1132	
	4 Button – Deck Raise, On/Off Switch, Lip Extend and Emergency Stop	13-1350	
208/1/60	Standard Panel / Single Pushbutton	48-0012	
	2 Button – Deck Raise and On/Off Switch		
	3 Button – Deck Raise, Lip Extend, and Emergency Stop	13-2625	
	4 Button – Deck Raise, On/Off Switch, Lip Extend and Emergency Stop	13-3017	
230/1/60	Standard Panel / Single Pushbutton	48-0012	
	2 Button – Deck Raise and On/Off Switch	13-3224	
	3 Button – Deck Raise, Lip Extend, and Emergency Stop	13-2626	
	4 Button – Deck Raise, On/Off Switch, Lip Extend and Emergency Stop	13-1982	
208/3/60	Standard Panel / Single Pushbutton	48-0024	
	2 Button – Deck Raise and On/Off Switch	13-1983	
	3 Button – Deck Raise, Lip Extend and Emergency Stop	13-2402	
	4 Button – Deck Raise, On/Off Switch, Lip Extend and Emergency Stop	13-1243	
230/3/60	Standard Panel / Single Pushbutton	48-0024	
	2 Button – Deck Raise and On/Off Switch	13-1983	
	3 Button – Deck Raise, Lip Extend and Emergency Stop	13-2382	
	4 Button – Deck Raise, On/Off Switch, Lip Extend and Emergency Stop	13-3574	
460/3/60	Standard Panel / Single Pushbutton	48-0020	
	2 Button – Deck Raise and On/Off Switch	13-1155	
	3 Button – Deck Raise, Lip Extend and Emergency Stop	13-2500	
	4 Button – Deck Raise, On/Off Switch, Lip Extend and Emergency Stop	13-2426	
575/3/60	Standard Panel / Single Pushbutton	48-0023	
	2 Button – Deck Raise and On/Off Switch	13-1154	
	3 Button – Deck Raise, Lip Extend and Emergency Stop	43-0261	
	4 Button – Deck Raise, On/Off Switch, Lip Extend and Emergency Stop	13-3784	

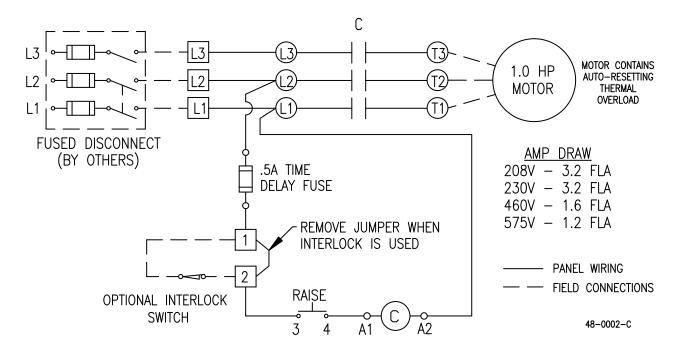
Wiring Diagrams

The following wiring diagrams 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.

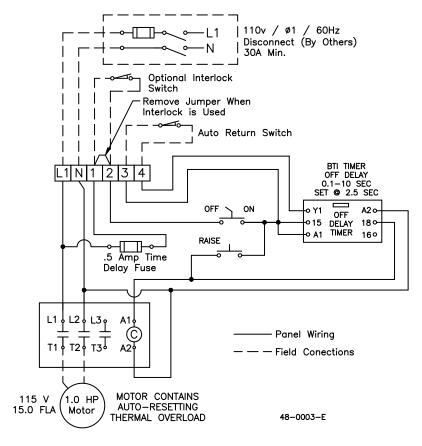
Single Phase 1 Button 110v-220v – Starter Only 48-0005-F



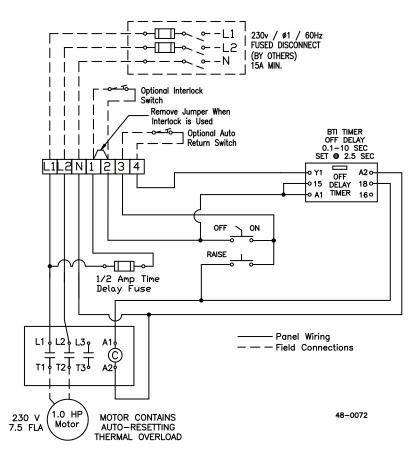
<u>3 Phase 1 Button 208v-575v – Starter Only</u> 48-0002-B



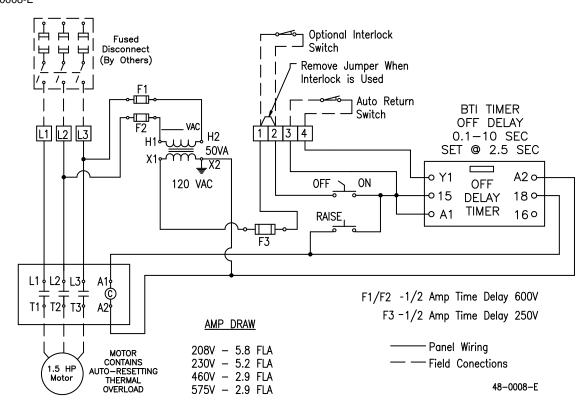
<u>Single Phase 2 Button 110v - Starter and Auto Return</u> 48-0003-E



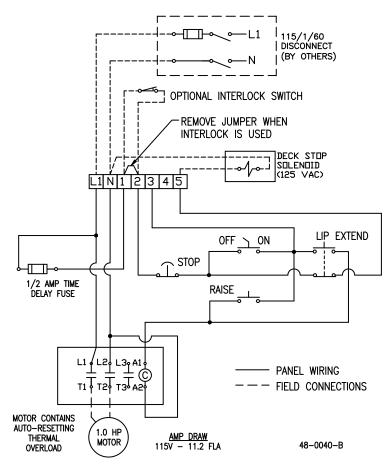
Single Phase 2 Button 220v - Starter and Auto Return 48-0072



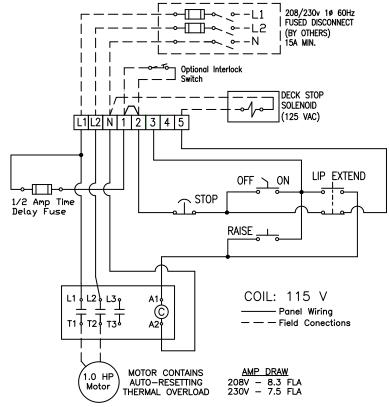
<u>3 Phase 2 Button 208v-575v - Starter and Auto Return</u> 48-0008-E



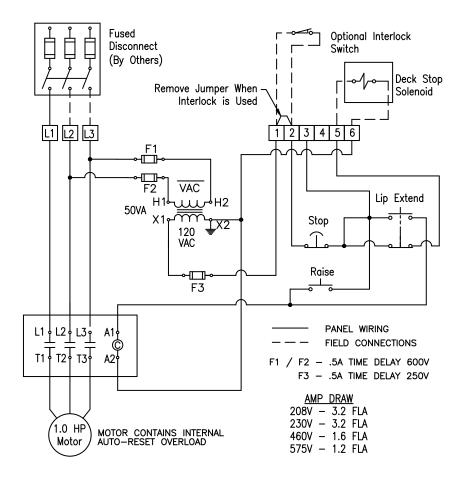
Single Phase 3 Button 115v - Starter, Lip Out and Emergency Stop 48-0040-B



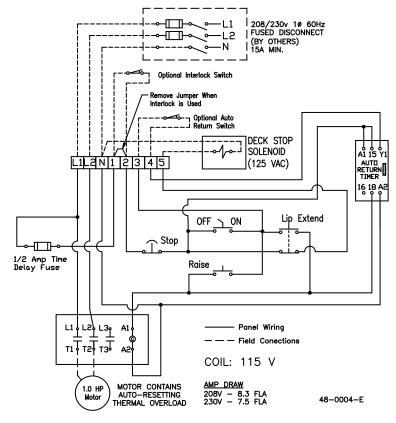
<u>Single Phase 3 Button 220v - Starter, Lip Out and Emergency Stop</u> 48-0014-B



3 Phase 3 Button 208v-575v - Starter, Lip Out and Emergency Stop 48-0022-C



Single Phase 4 Button 220v - Starter, Lip Out, Emergency Stop and Auto Return 48-0004-E



3 Phase 4 Button 208v-575v - Starter, Lip Out, Emergency Stop and Auto Return 48-0019-D

