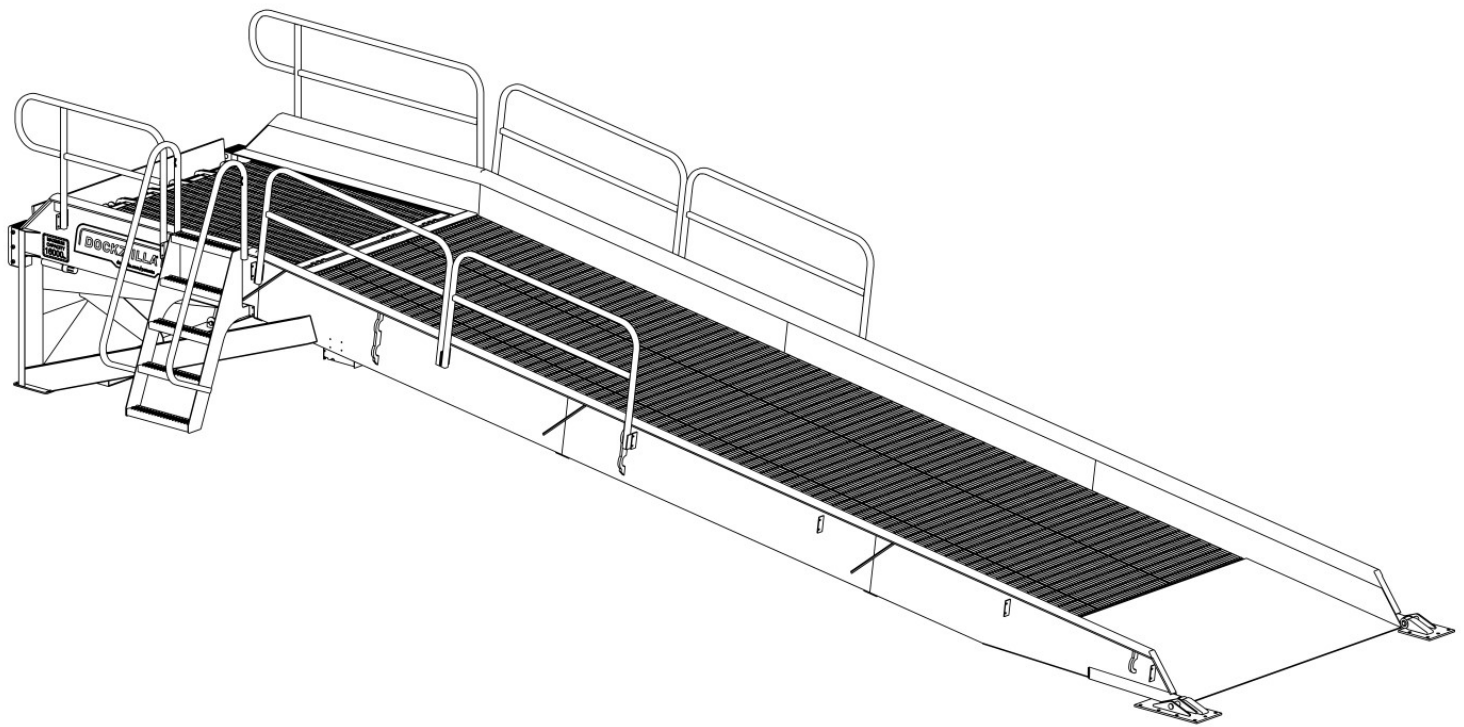




PORTABLE LOADING DOCK WITH CHEESEGRATER OWNER'S MANUAL



This manual applies to Portable Loading Docks manufactured beginning October 2023 with the serial numbers 23-1076001 and higher.

⚠ WARNING

Do not install, operate or service this product unless you have read and understand the Safety Practices, Warnings, Installation and Operating Instructions contained in this User's Manual. Failure to do so could result in death or serious injury.

NOTES

TABLE OF CONTENTS

INTRODUCTION.....	3
OWNER RESPONSIBILITY.....	4
SAFETY WARNING DEFINITIONS.....	4
PRODUCT SAFETY WARNINGS.....	5
FEATURES.....	5
SETUP.....	6
OFFLOADING PROCEDURE.....	6
MOVING THE RAMP.....	8
INSTALLATION.....	9
OPERATION INSTRUCTION.....	11
LOADING AND UNLOADING.....	11
STORING THE LEVELER.....	12
MAINTENANCE.....	13
MAINTENANCE STRUT INSTALLATION.....	13
MAINTENANCE STRUT REMOVAL.....	13
LOCKOUT / TAGOUT PROCEDURE – AC.....	14
LOCKOUT / TAGOUT PROCEDURE – DC.....	14
DAILY MAINTENANCE.....	15
QUARTERLY MAINTENANCE.....	15
TROUBLESHOOTING AND ADJUSTMENT.....	16
REPLACEMENT PARTS.....	17
HYDRAULICS.....	19
AC POWER UNIT (HPU1AC).....	19
DC POWER UNIT (HPU1DC).....	21
STANDARD WARRANTY.....	23

INTRODUCTION

The Portable Loading Dock is designed to provide a safe workplace for workers in shipping and receiving dock areas. This loading dock features laminated bumpers, handrails, ships ladder, 13" tall side curbs, and our patented 8x7 Cheesegrater™ Leveler. The leveler power supply can be either hardwired or solar powered. The loading dock is designed to be impactable with a high-strength steel frame and bolt-down base plates.

WARRANTY

See Back of Owner's Manual.

IMPORTANT

Read and understand contents of this manual prior to installation or operation of this equipment.

CAPACITY

Model	Length	Width	Capacity	Ramp Weight
DFC3809616H	38 ft.	96 in.	16,000 lbs. (7,250 kg)	9,900 lbs.
DFC3809616D	38 ft.	96 in.		10,050 lbs.
DFC3809622H	38 ft.	96 in.	22,000 lbs. (10,000 kg)	10,650 lbs.
DFC3809622D	38 ft.	96 in.		10,800 lbs.
DFC3809632H	38 ft.	96 in.	32,000 lbs. (14,500 kg)	13,050 lbs.
DFC3809632D	38 ft.	96 in.		13,200 lbs.
DFC3811416H	38 ft.	114 in.	16,000 lbs. (7,250 kg)	11,150 lbs.
DFC3811416D	38 ft.	114 in.		11,300 lbs.
DFC3811422H	38 ft.	114 in.	22,000 lbs. (10,000 kg)	12,000 lbs.
DFC3811422D	38 ft.	114 in.		12,150 lbs.
DFC3811432H	38 ft.	114 in.	32,000 lbs. (14,500 kg)	14,900 lbs.
DFC3811432D	38 ft.	114 in.		15,050 lbs.



WARNING
NEVER exceed rated capacity



DANGER
NEVER exceed rated lifting capacity of offloading equipment.

OWNER RESPONSIBILITY

1. The owner should recognize the inherent danger of the interface between dock and transport vehicle. The owner should, therefore, train and instruct operators in the safe use of dock equipment in accordance with the information provided below. The manufacturer shall provide to the initial purchaser, and make the following information readily available to the owner:

- Installation instructions
- Recommended initial and periodic inspections procedures.
- Maintenance procedures
- Operating instructions
- Descriptions or specifications for replaceable or repairable parts

2. It shall be the responsibility of the owner to verify that the material listed in this section has been received and that it is made available for the instruction and training of personnel entrusted with the use or maintenance of the dock equipment.

3. When a transport vehicle is parked at a loading dock, it is important that the vehicle is relatively perpendicular to the dock face and in close contact with at least one of the dock bumpers

4. Nameplates, cautions, instructions, and posted warnings shall not be obscured from the view of operating or maintenance personnel for whom such warnings are intended.

5. Manufacturer's recommended periodic maintenance and inspection procedures in effect at date of shipment shall be followed, and written records of the performance of these procedures should be kept.

6. Dock equipment that is structurally damaged shall be removed from service, inspected by a manufacturer's authorized representative, and repaired as needed before being placed back in service.

7. The manufacturer shall make available replacement nameplates, caution/instruction labels, and operating/maintenance manuals upon request of the owner. The owner shall see that all nameplates, caution/instruction markings or labels are in place and legible, and that the appropriate operating/maintenance manuals are provided to users.

8. Modifications or alterations of dock equipment shall be made only with written permission of the original manufacturer. These changes shall also satisfy all safety recommendations of the original equipment manufacturer for the particular application of the dock equipment.

9. When industrial trucks are driven on and off transport vehicles during the loading and unloading process, the brakes on the transport vehicle shall be applied and wheel chocks or a positive restraining device shall be engaged.

SAFETY WARNING DEFINITIONS

DANGER

DANGER statements indicate an imminently hazardous situation. Failure to follow the listed instructions will result in serious injury or death!

CAUTION

CAUTION statements indicate a potentially hazardous situation. Failure to follow the listed instructions may result in minor to moderate injury or property damage!

WARNING

WARNING statements indicate a potentially hazardous situation. Failure to follow the listed instructions may result in serious injury or death!

NOTICE

NOTICE statements are used to indicate procedures that must be followed to avoid equipment or property damage.

PRODUCT SAFETY WARNINGS

⚠ DANGER

ALWAYS communicate with the transport vehicle driver to ensure an understanding of the loading or unloading procedure

⚠ CAUTION

Follow the maintenance schedule to ensure that there are no broken parts that might cause injury to workers or damage to the equipment.

⚠ WARNING

NEVER perform maintenance without barricading the work area to warn that work is being done.

NEVER exceed the rated load capacity

If a malfunction occurs contact Dockzilla Co. or local representative and discontinue use of dock to grade ramp until the issue has been resolved.

FEATURES

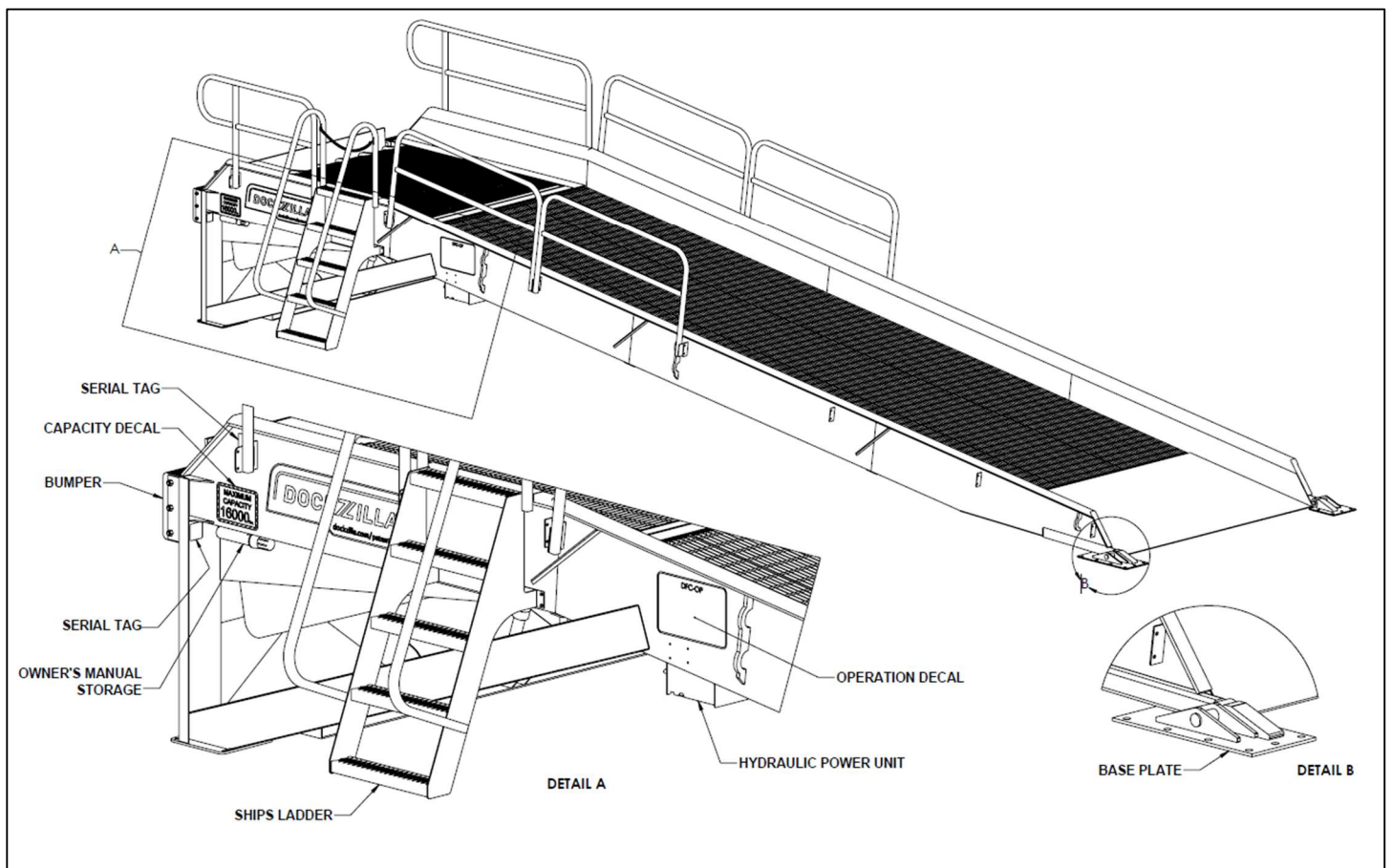


Figure 1: Portable Loading Dock Features

SETUP

TOOLS REQUIRED

- Crane, Telescopic Handler, or two forklifts
- Rotary Hammer and 3/4" concrete bit (minimum 8" long)
- 7/16", 9/16", 1-1/8" wrenches or wrench and socket

OFFLOADING PROCEDURE

Note: Read complete installation instructions before offloading the ramp.

1. If possible, drive and park truck/trailer near the final location of the ramp.
2. Inspect all equipment for any freight damage and verify all components have arrived.
3. Remove all chains and straps that are securing the loading dock to the trailer.
4. Remove pallets and any other items off the loading dock.
5. Lift the Portable Loading Dock from the trailer using one of the following methods:



NEVER exceed the rated capacity of lifting equipment.

NEVER lift loading dock with any objects sitting on the ramp or platform.

Model	Length	Width	Capacity	Ramp Weight
DFC3809616H	38 ft.	96 in.	16,000 lbs. (7,250 kg)	9,900 lbs.
DFC3809616D	38 ft.	96 in.		10,050 lbs.
DFC3809622H	38 ft.	96 in.	22,000 lbs. (10,000 kg)	10,650 lbs.
DFC3809622D	38 ft.	96 in.		10,800 lbs.
DFC3809632H	38 ft.	96 in.	32,000 lbs. (14,500 kg)	13,050 lbs.
DFC3809632D	38 ft.	96 in.		13,200 lbs.
DFC3811416H	38 ft.	114 in.	16,000 lbs. (7,250 kg)	11,150 lbs.
DFC3811416D	38 ft.	114 in.		11,300 lbs.
DFC3811422H	38 ft.	114 in.	22,000 lbs. (10,000 kg)	12,000 lbs.
DFC3811422D	38 ft.	114 in.		12,150 lbs.
DFC3811432H	38 ft.	114 in.	32,000 lbs. (14,500 kg)	14,900 lbs.
DFC3811432D	38 ft.	114 in.		15,050 lbs.

- a. **CRANE (PREFERRED):** Attach chains on the four lift points located on the sides of the loading dock (Figure 2a). Slowly lift the loading dock from the trailer, move it to the desired location, and carefully place it on the ground.

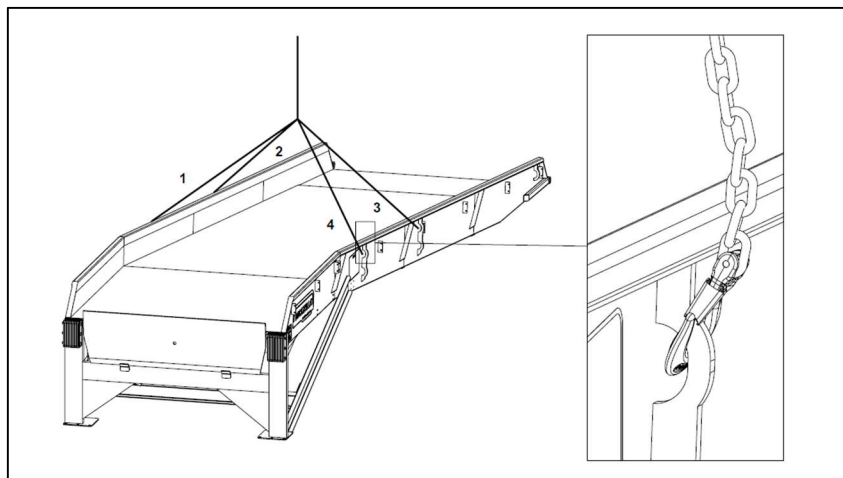


Figure 2a: Offloading with a Crane

- b. **TELESCOPIC HANDLER:** Fully insert forks on either side of “FORKS HERE” tab so that the full width of the ramp is fully supported, **10’ forks required**. Slowly lift ramp and verify that the load is stable. Carefully move ramp to desired location and place it on the ground.

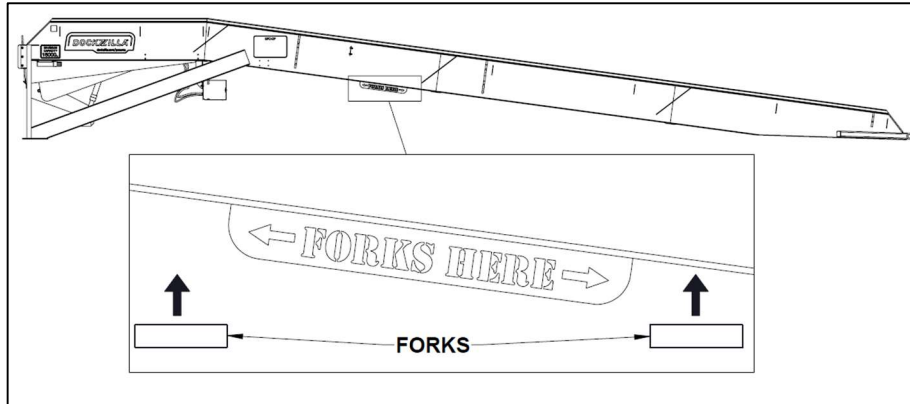


Figure 2b: Offloading with a Telehandler

WARNING Forks **MUST** be 10’ long. Properly rated fork extensions are acceptable.

NOTICE Bar grating is **NOT** a lifting surface. Pressing forks against the underside of the grating will cause damage.

- c. **TWO FORKLIFTS:** Position a forklift on either side of the loading dock. Fully insert forks on either side of the “FORKS HERE” tab so that the full width of the ramp is fully supported. Simultaneously lift the ramp just high enough so there is no contact with the trailer and verify the stability of the load. Once the ramp is no longer in contact with the trailer, drive the trailer forward until there is enough space to lower the ramp to the ground. To move the loading dock into its final position after it has been removed from the trailer, lift the dock from the front and rear of the ramp. To do this, one forklift must lift underneath the front cross beam, and the other forklift must lift the rear using the lifting loops and a chain (see Figure 3). **DO NOT** lift the rear of the loading dock beneath the base ramp, this will cause damage to the ramp.

WARNING **DO NOT** attempt to move forklifts in any direction while unloading the ramp from the trailer with two forklifts. Only raise and lower forks while handling the ramp in this manner.

There **MUST** be clear communication between the forklift operators and the transport vehicle driver at all times.

NOTICE Bar grating is **NOT** a lifting surface. Pressing forks against the underside of the grating will cause damage.

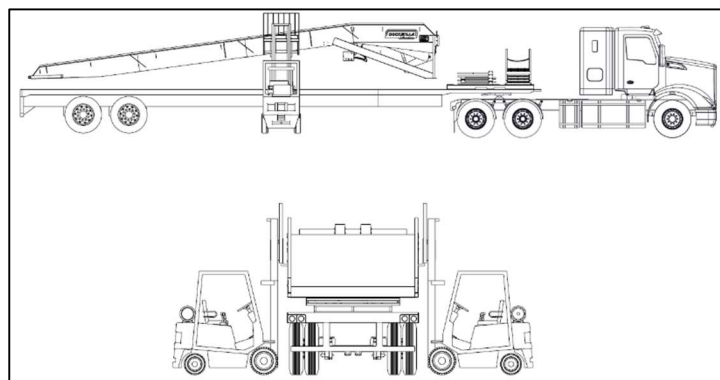


Figure 2c: Offloading with two forklifts

MOVING THE RAMP

In addition to using a crane or telehandler as detailed in the Offloading Procedure, using two forklifts to move the ramp once it is offloaded can be accomplished by doing the following:

1. Position a forklift at the front and rear ends of the ramp as shown in Figure 3.
2. Place forks underneath the cross beam between the adjustable legs to lift the front of the ramp.
3. Use a chain hooked to the lifting loops on either side of the ramp to lift the rear end of the ramp.
 - a. Chain should be approximately 2' longer than the width of the ramp.
 - b. NEVER lift from underneath the edge of the base ramp.

Simultaneously lift the ramp and slowly move it to the desired location

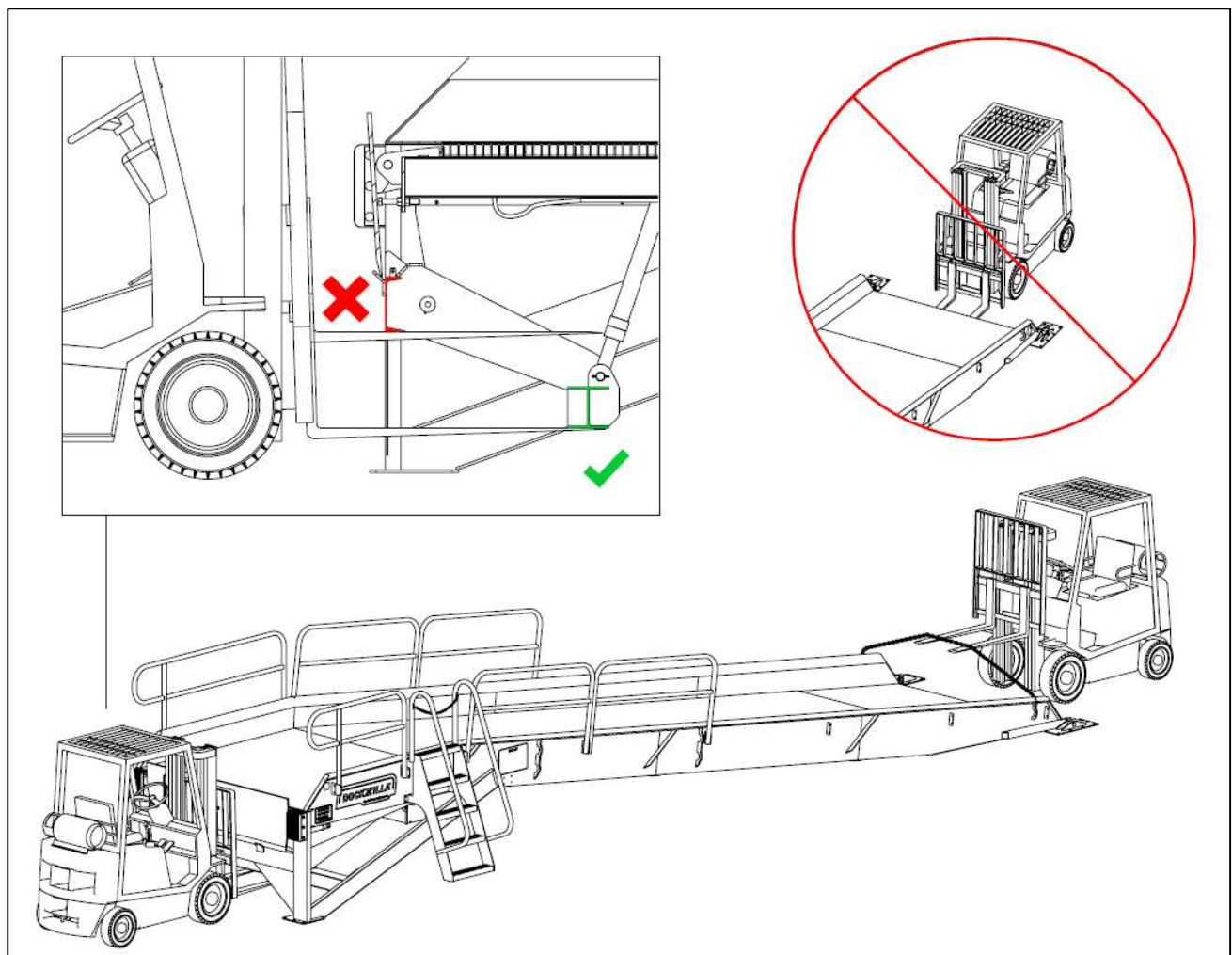


DO NOT lift ramp from beneath the base ramp. A chain must be used to move the loading dock.

DO NOT lift ramp from beneath front cross channel. Lift ramp from beneath the deck cylinder beam.

There MUST be clear communication between the forklift operators at all times.

Ensure the area is clear of personnel before moving the loading dock.



INSTALLATION

1. Install footpads by sliding them into the spools at the base of the ramp before setting the ramp on the ground.
 - a. If the ramp is already on the ground, use the lifting loops near the base to lift the ramp and slide the footpads on. **DO NOT** lift from beneath the base ramp.
2. Once the loading dock set on the ground in the desired location, anchor footpads using $\text{\O}3/4"$ x 6" anchor screws.
3. Install handrails using the provided $3/8"$ hardware ($9/16"$ wrench). Adjacent handrails will share the same hardware.
4. With the handrails installed, hook the ships ladder over the ramp girder and attach it to the side of the ramp using self-drilling screws.

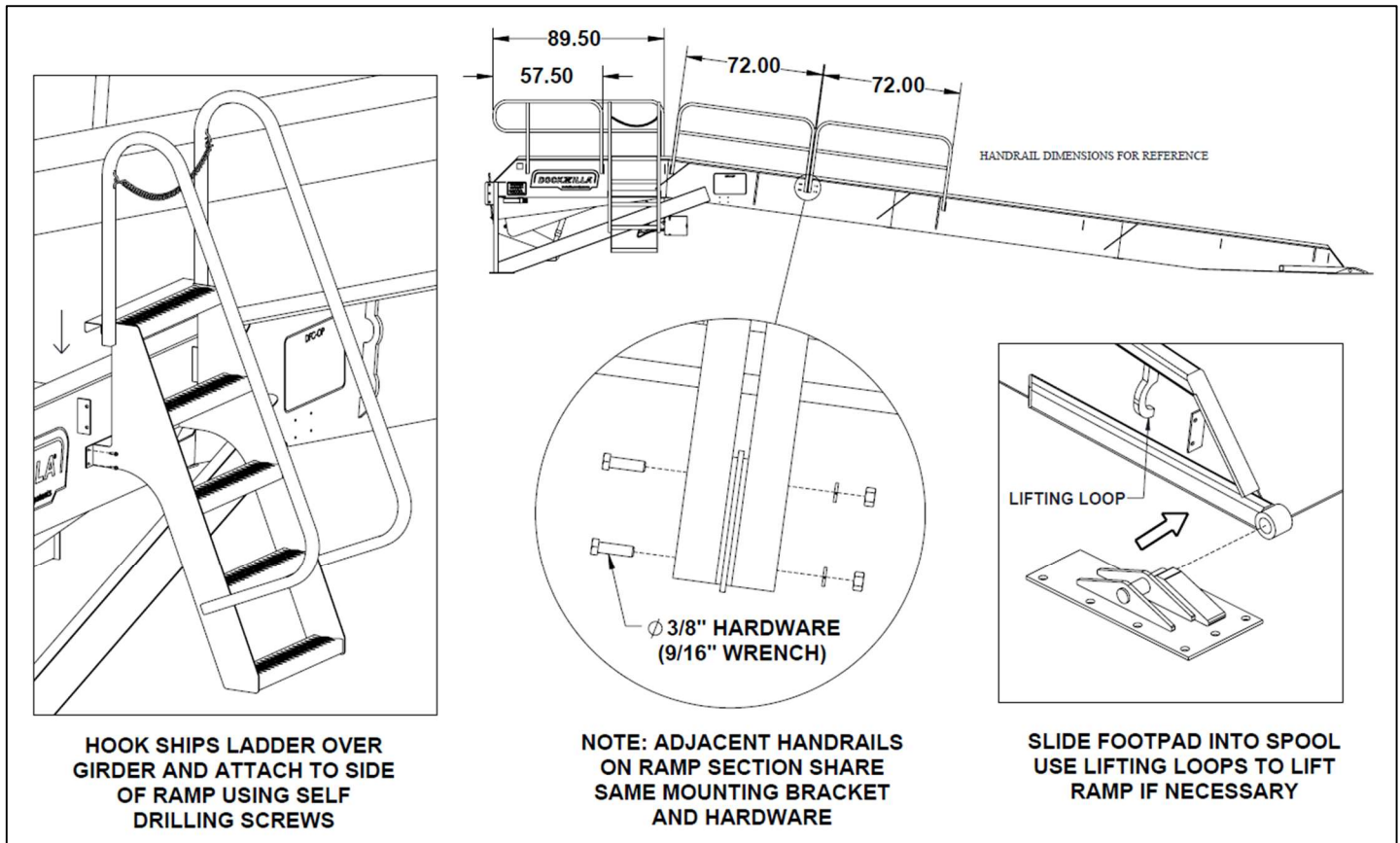


Figure 4. Installing the loading dock

SOLAR PANEL INSTALLATION (DC POWER UNIT RAMPS ONLY)

1. Mount the solar panel mast to the outer holes of the handrail bracket as shown using 3/8" hardware provided.
2. Attach the solar panel mounting plate to the mast using 1/4" hardware provided.
 - a. Mount the plate such that the solar panel receives direct sunlight. If located in the northern hemisphere, it is usually best to mount the solar panel facing south.

NOTICE *If solar panel does not receive adequate sunlight the system may lose power and will need to be charged by other means.*

3. Attach the solar panel to the mounting plate using 1/4" hardware provided.
4. Locate the power unit underneath the ramp and remove the cover.
5. Mount the solar charger controller box to the outside of the box using the #8 self-drilling screws provided.
6. Connect the charge controller to the battery.
7. Connect cabling between the solar panel and controller.
8. **Press and hold the button on the controller to toggle between battery types. Release the button to select a battery type.**
 - a. **Select the AGM battery type.**

NOTICE *If the wrong mode is selected, the battery may be damaged or not charged.*

9. See solar charger user's manual for operation, maintenance, and troubleshooting procedures.

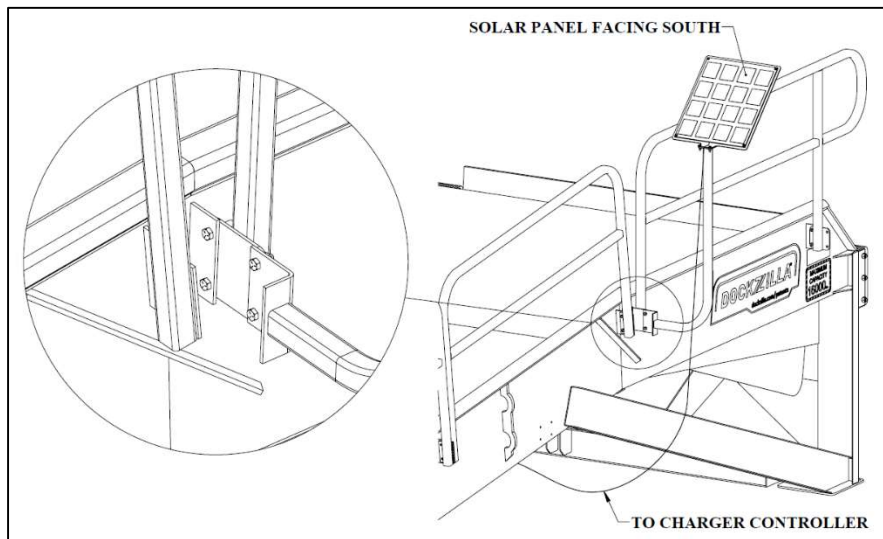


Figure 5: Solar Panel Mast Installation

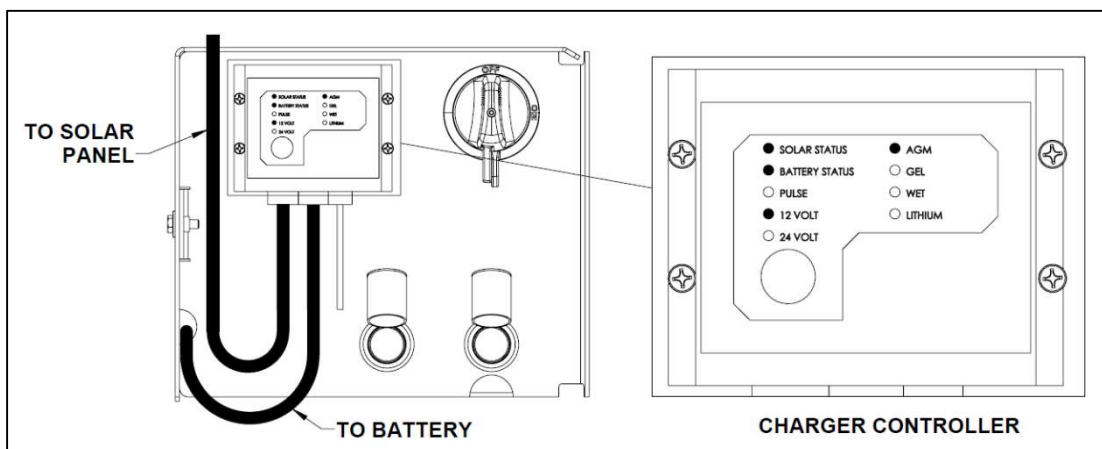


Figure 6: Solar Charger Controller Detail

OPERATION INSTRUCTION

⚠ WARNING

Before use, the loading dock must be cleared of any debris, snow, or ice build up. Do not use salt.

NEVER operate with anyone standing on or in front of the dock leveler.

DO NOT operate the leveler until the truck/trailer is parked against the bumpers and the truck/trailer has been secured.

NEVER enter a truck/trailer until its brakes are set, air has been dumped from the air ride suspension (if applicable), and the truck/trailer is securely held in place by a vehicle restraint or wheel chocks per OSHA regulations.

DO NOT drive on dock leveler or lip until it is fully extended and supported by the vehicle bed.

NEVER release the vehicle restraint or remove the wheel chocks until loading/unloading is complete, the leveler lip has been stored.

LOADING AND UNLOADING

1. Restrain the vehicle per OSHA standards with wheel chocks or a mechanical restraint before loading or unloading the vehicle.
2. Press the RAISE button until the leveler is fully raised and the lip is fully extended (Figure 8).
3. When the lip is fully extended, release the RAISE button to lower the leveler onto the truck bed (Figure 9). Verify the lip is in full contact with the truck bed before loading/unloading.

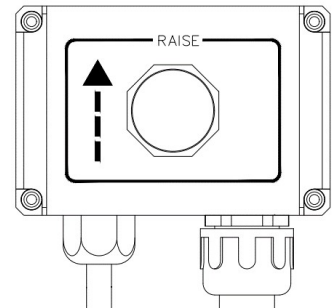


Figure 7: Control Box

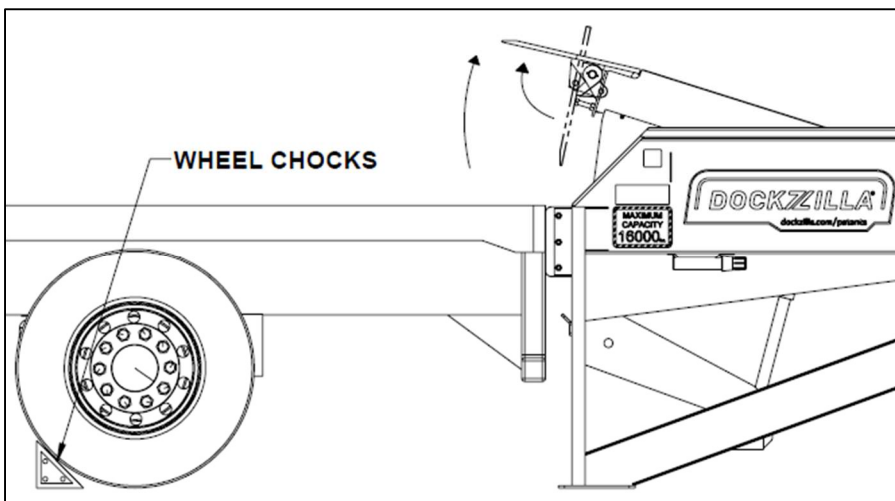


Figure 8: Activating the Leveler

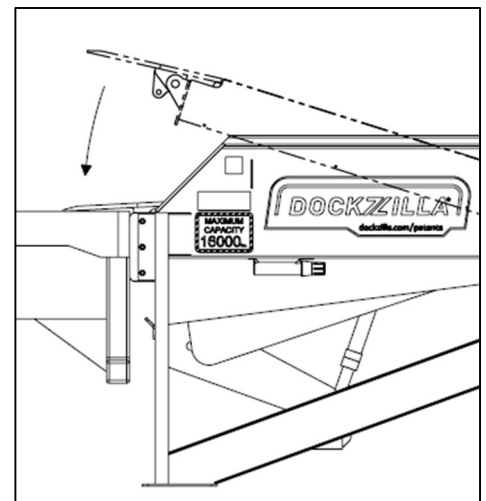


Figure 9: Lowering the Leveler

STORING THE LEVELER

1. Press the RAISE button until lip is fully pendent (Figure 10).
 - a. If necessary, slowly pulse the RAISE button until the lip is fully pendent.
2. When the leveler deck is fully raised and the lip begins to extend, release the RAISE button, and the leveler will lower into its stored position (Figure 11).
 - a. If the vehicle pulls away when lip is still engaged, the leveler will float to the lowest position and the lip will hang pendent.

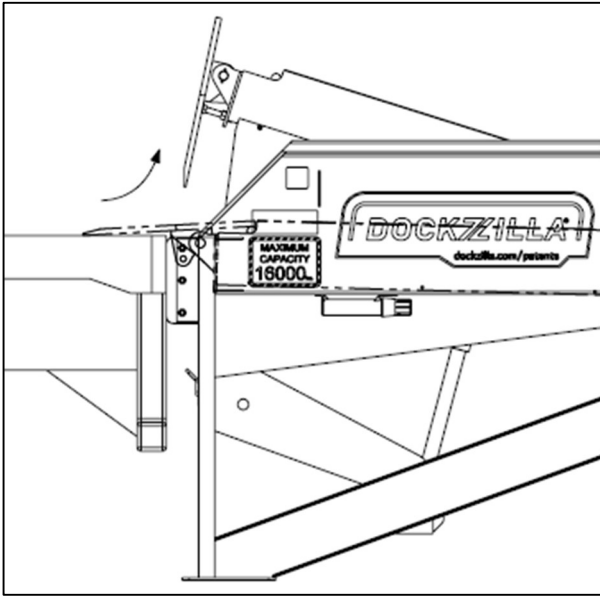


Figure 10: Raising Leveler from Trailer

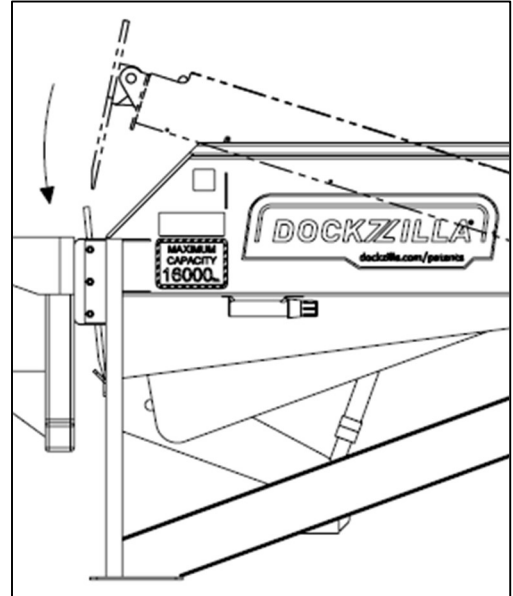


Figure 11: Storing Leveler

MAINTENANCE

⚠ WARNING

DO NOT install maintenance strut with 1 person. Installation of the maintenance strut requires 2 people. The maintenance strut is required whenever accessing the area beneath the platform.

MAINTENANCE STRUT INSTALLATION

1. Press the RAISE button to fully raise the leveler platform. The RAISE button will remain pressed until step 4 is complete. See Figure 12a.

⚠ DANGER

DO NOT stand directly in front of the lip when raising the leveler platform. Stand to the side of the leveler.

2. Insert the narrower end of maintenance strut into the hole in the lip.
3. Place the other end of the maintenance strut on the peg located on the leveler frame.
 - a. Align the hole at the bottom of the maintenance strut with the hole in the peg.
4. After verifying that the bottom of the maintenance strut is seated properly and is approximately vertical, release the RAISE button. The platform will lower and will be supported by the maintenance strut.
5. Install safety pin through peg to hold strut in place (Figure 12b).

MAINTENANCE STRUT REMOVAL

1. Press the RAISE button to fully raise the leveler platform. The RAISE button will remain pressed until step 2 is complete.

⚠ DANGER

DO NOT stand directly in front of the lip when raising the leveler platform. Stand to the side of the leveler.

2. Remove the safety pin holding the strut in place and remove the strut from the leveler frame.
3. After verifying nothing is in the way of the leveler platform, release the RAISE button and lower the leveler into its stored position.

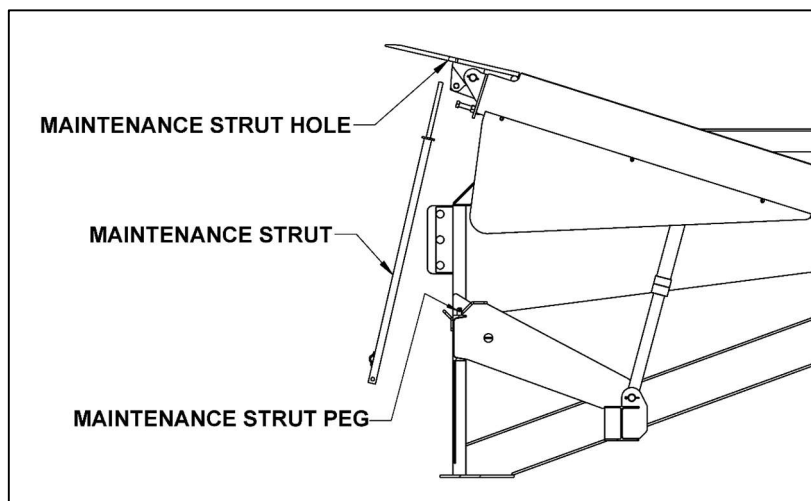


Figure 12a: Inserting the Maintenance Strut

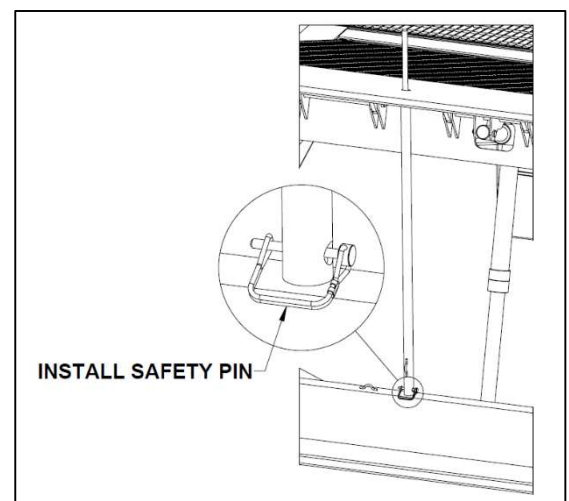


Figure 12b: Installing the Safety Pin

WARNING

ARC FLASH & SHOCK HAZARD. Appropriate personal protective equipment required. Reference NFPA 70e to fully cut power to equipment and comply with OSHA 1910.147.

LOCKOUT / TAGOUT PROCEDURE – AC

1. Raise platform and set the maintenance strut as instructed.
2. Unplug control box from wall outlet or shut power off at disconnect and follow OSHA 1910.147 lockout / tagout procedure to secure.

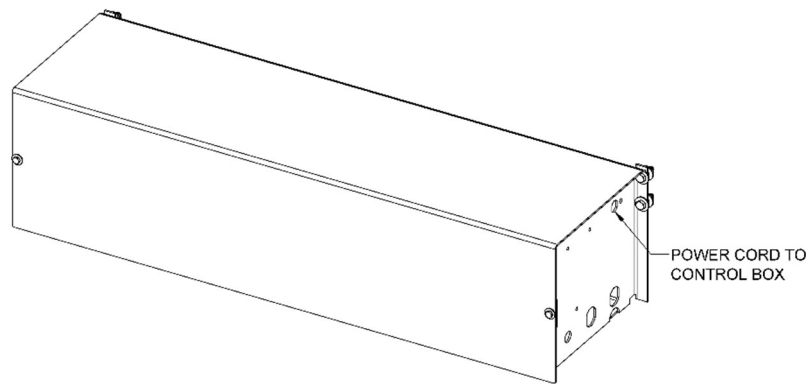


Figure 13: HPU1AC, AC Power Unit

LOCKOUT / TAGOUT PROCEDURE – DC

WARNING

STORED ENERGY. The DC hydraulic power unit enclosure contains a battery. The lockout switch located on the side of the enclosure must be locked and tagged to comply with OSHA 1910.147.

1. Raise platform and set the maintenance strut as instructed.
2. Turn the lockout switch on the side of the power unit (Figure 14) to the off position and follow OSHA 1910.147 lockout / tagout procedure to secure.

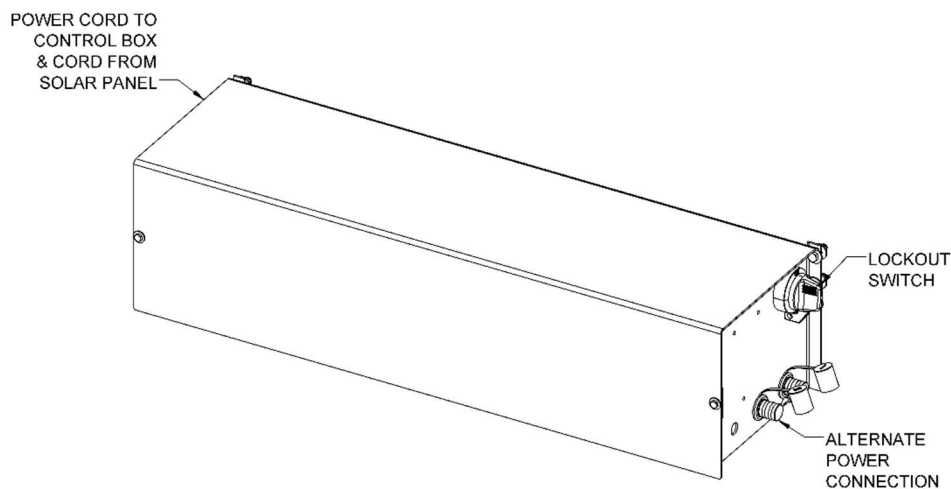


Figure 14: HPU1DC, DC Power Unit

DAILY MAINTENANCE

1. During normal operation, inspect and report any damaged parts or erratic operation. If there are any broken or worn parts, repair as needed.
2. Remove any debris on or around the leveler.

QUARTERLY MAINTENANCE

1. Perform all daily maintenance.
2. Clean under leveler.
3. Inspect pins and moving parts.
4. Lubricate leveler with SAE 30 oil (Figure 13).
5. Inspect hydraulic system. If fluid level is low, refill and inspect hoses and fittings for damage or leaks.
6. Inspect bumpers and replace damaged/missing bumpers.
7. Check for any loose fasteners. Retighten as needed. Replace any damaged or broken fasteners with SAE Grade 5 (or higher) fasteners of the same diameter.
8. Inspect leveler for structural damages, cracked welds, bent structural members, etc. If an issue is found, discontinue use until the issue is resolved.

⚠ DANGER

Lockout/Tagout electrical power according to OSHA regulations before performing any work on unit.

⚠ WARNING

Post safety warnings and barricade work area, at dock level and at ground level, to prevent unauthorized use of the dock position.

Maintenance strut must be properly installed before performing any work under the leveler.

NOTICE

Maintenance may be required more frequently on levelers exposed to harsh environments (extreme climates, corrosive chemicals, frequency of usage exceeding 8 trucks a day, etc.). Consult Dockzilla Co. if these conditions exist to determine accelerated maintenance requirements.

DO NOT USE SALT. If necessary, use a non-corrosive ice melt product such as Ossian Select® Liquid De-Icer.

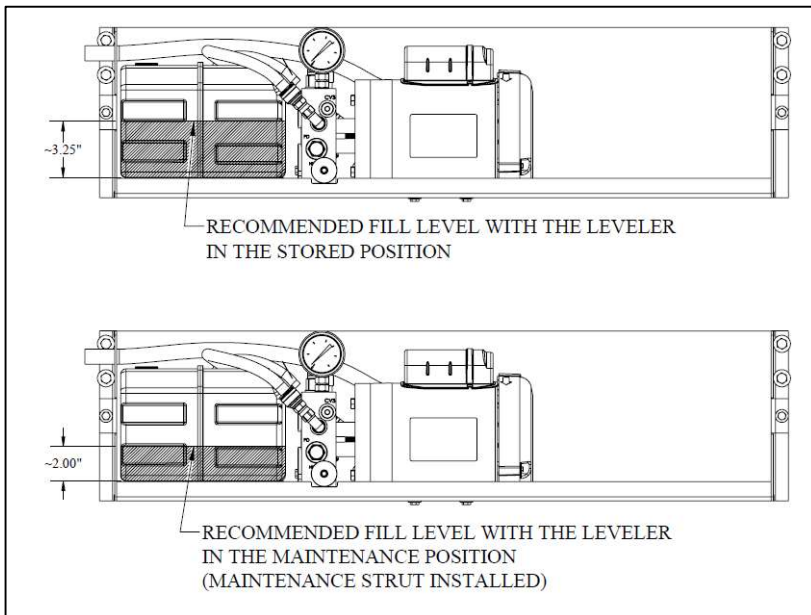


Figure 15a: Reservoir Fill Levels (based on leveler position)

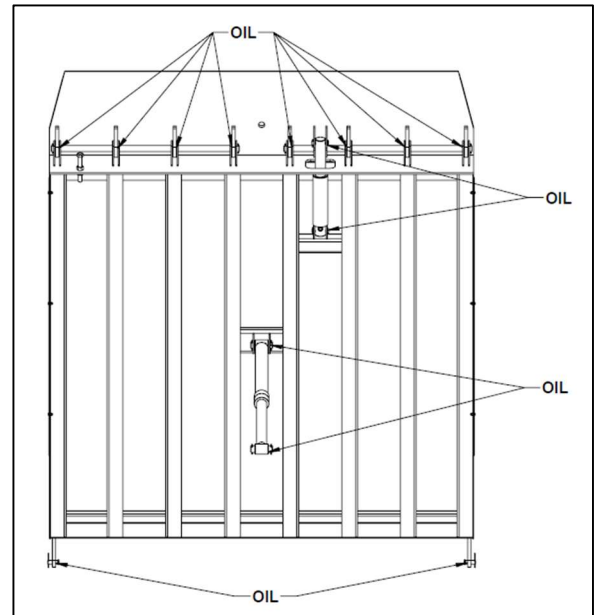
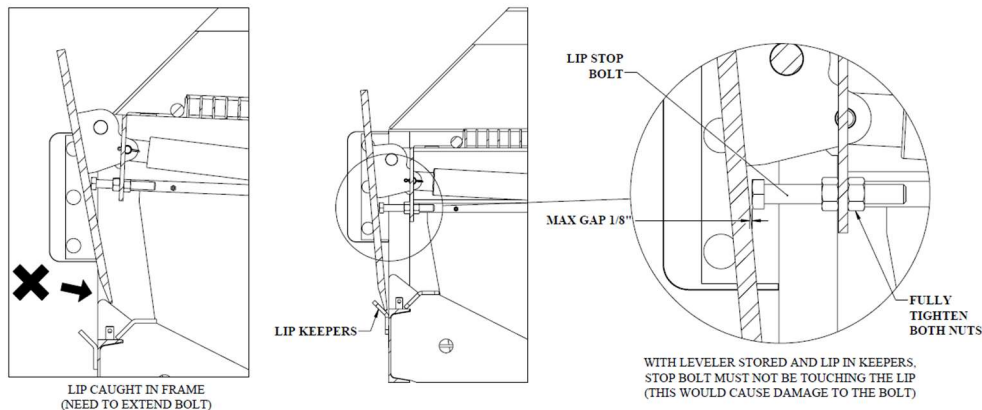


Figure 15b: Lubrication Points

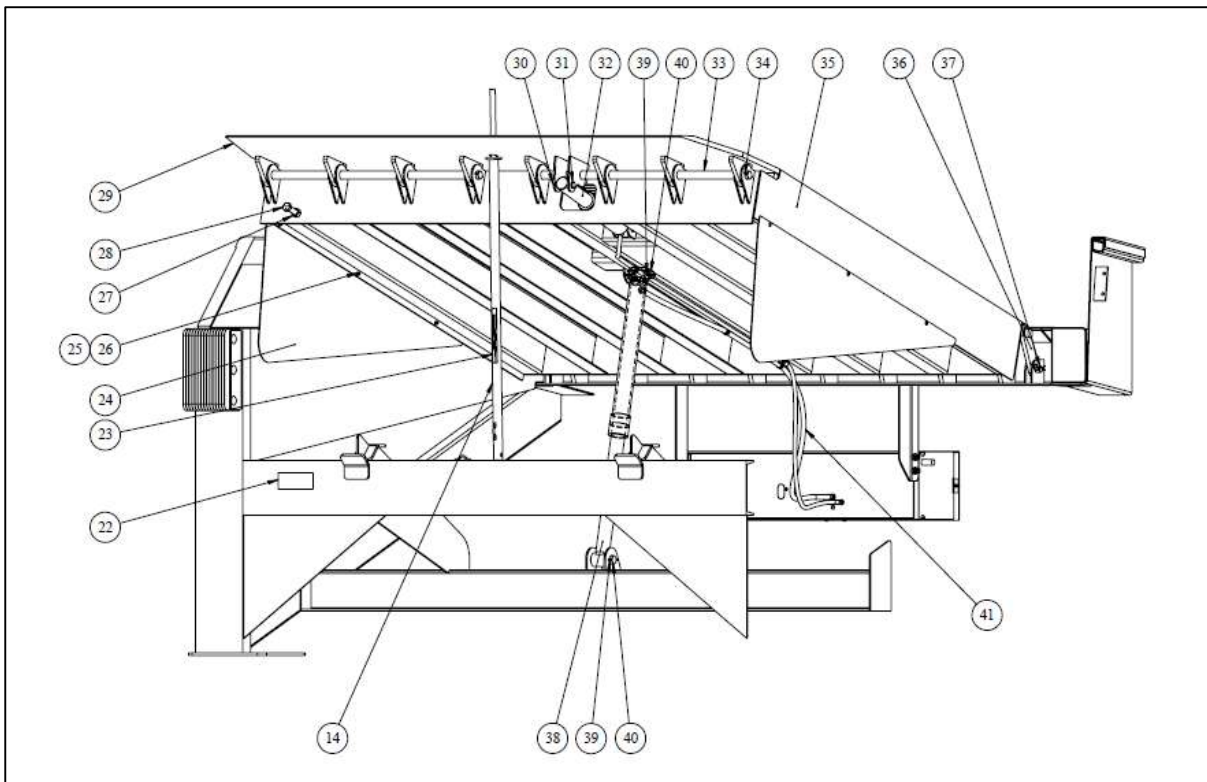
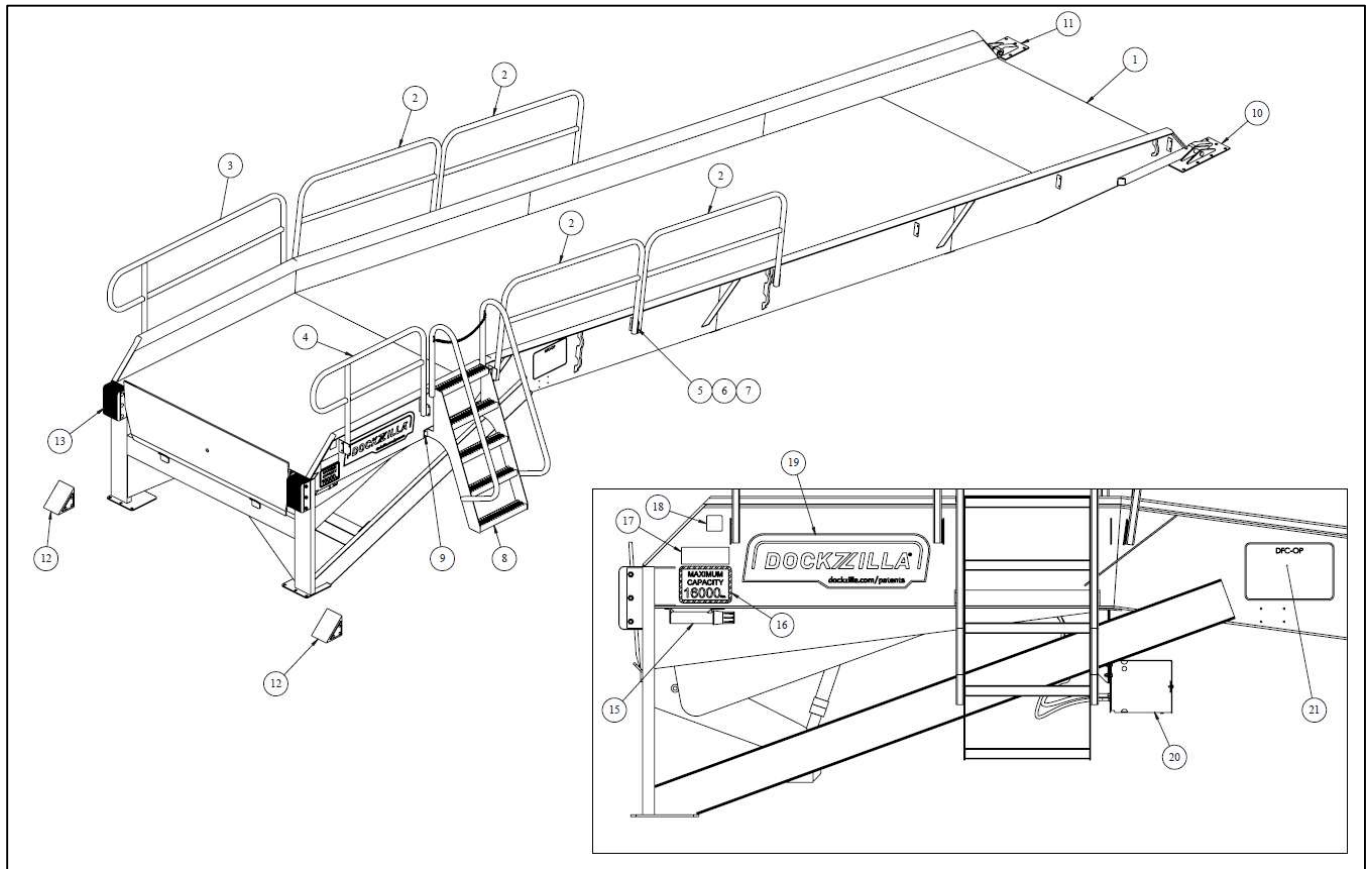
TROUBLESHOOTING AND ADJUSTMENT

Symptom	Probable Causes	Remedy
Leveler platform does not rise	<ul style="list-style-type: none"> a. Power disconnected b. Motor mis-wired c. Debris on or around leveler d. Hydraulic fluid low e. <i>DC unit only</i>: Dead battery 	<ul style="list-style-type: none"> a. Check that power is connected & that disconnect, circuit breaker, or fuses are not tripped b. Check wiring diagram & fix c. Remove any lodged debris d. Check oil level & refill if needed e. <i>DC unit only</i>: Charge battery. If battery does not hold a charge, replace.
Leveler runs continuously	Pushbutton, contact block, or motor contactor is damaged	Repair/replace components
Leveler lip extends slowly and/or does not extend	<ul style="list-style-type: none"> a. Debris on lip hinge b. Lip jammed or bent c. Hydraulic fluid low 	<ol style="list-style-type: none"> 1. Remove debris from hinge 2. Un-jam & lubricate per maintenance procedures or replace lip 3. Check oil level & refill if needed
Leveler platform does not lower	<ul style="list-style-type: none"> a. Downspeed needle valve is closed b. Debris on/around leveler 	<ul style="list-style-type: none"> a. With maintenance strut in place, slowly open downspeed needle valve & test for proper downspeed b. Remove any lodged debris
Leveler platform raises slowly	<ul style="list-style-type: none"> a. Weight on platform b. Hydraulic fluid low c. Power unit/pump/motor failure d. <i>DC unit only</i>: Low battery 	<ul style="list-style-type: none"> a. Remove weight from platform b. Check oil level & refill if needed c. Replace power unit assembly d. <i>DC unit only</i>: Charge battery
Leveler lip does not store properly	<ul style="list-style-type: none"> a. Lip-stop bolt not adjusted properly b. Debris on lip hinge c. Damaged lip supports 	<ul style="list-style-type: none"> a. Verify lip-stop bolt is properly adjusted (see below) b. Remove debris c. Repair/replace lip supports
Ramp surface uneven or not providing enough traction	Grating worn out	Note: Grating is a wear-item that can be replaced by a qualified technician Contact Dockzilla for replacement

THE LIP STOP BOLT IS USED TO PREVENT THE LIP FROM FOLDING IN TOO FAR AND CATCHING ON THE INSIDE OF THE LEVELER FRAME. WHEN PROPERLY ADJUSTED THE BOLT WILL PREVENT THE LIP FROM GETTING CAUGHT AND PUSH IT INTO THE LIP KEEPERS.



REPLACEMENT PARTS



ITEM	DESCRIPTION	QTY	PART NUMBER
1	Ramp	1	Contact Dockzilla
2	Handrail 72L	4	HRR38.5T72L14SC
3	Handrail with extension 72L	1	DZ1370-72.00
4	Handrail with extension 40L	1	DZ1370-40.00
5	Bolt Hex Head 0.38-16 x 1.25L ZP (Handrails)	20	-
6	Washer Split Lock 0.38 ZP (Handrails)	20	-
7	Nut Hex Head 0.38-16 ZP (Handrails)	20	-
8	Standard "Curb-hook" Ships Ladder	1	DZ1180
9	Self-Drilling Screw Hex Head 0.25 x 1.00L ZP (Ships Ladder)	4	-
10	Impactable Base Plate Weldment (Left)	1	DZ1299-L
11	Impactable Base Plate Weldment (Right)	1	DZ1299-R
12	Wheel Chock with 15' Chain	2	LE 5049
13	Laminated Bumper	2	B4512-11-P2
14	Maintenance Strut 44"	1	DZ1570-44
15	Owner's Manual Storage Canister	1	CAN-22
15.1	Owner's Manual for Portable Loading Dock	1	OWN-DFC
16	Capacity Decal (##,000 lbs)	2	LE 5499-##
17	Safety Label – Danger/Safety Instructions	2	DZ1880-1
18	Dockzilla Serial Tag	2	LE 1234
19	Dockzilla Patent Decal	2	LE 3974
20	Hydraulic Power Unit (AC or DC)		
20.1	AC Power Unit (All DFC38XXXXXA units, see serial tag)	1	HPU1AC (see page 19)
20.2	DC Power Unit (All DFC38XXXXXD units, see serial tag)	1	HPU1DC (see page 21)
20.3	JAX Enviroguard ISO 15 Hydraulic Fluid		
21	Operation Decal for Portable Loading Dock	1	DFC-OP
22	Safety Label – Danger Crush Hazard (Front Header)	1	DZ1880-3
23	Safety Label – Danger Crush Hazard (Maintenance Strut)	1	DZ1880-2
24	Leveler Toe Guard	2	DZ1336
25	Carriage Bolt 0.25-20 x 0.75L GRADE 5 ZP (Toe Guard)	6	-
26	Nut Nylock 0.25-20 GRADE 5 ZP (Toe Guard)	6	-
27	Nut Hex Head 0.75-10 GRADE 5 ZP (Lip Stop)	2	-
28	Bolt Hex Head 0.75-10 x 5.50L GRADE 5 ZP (Lip Stop)	1	-
29	Lip Weldment	1	Contact Dockzilla
30	Cotter Pin .13 x 1.25L ZP	2	-
31	Headed Clevis Pin 0.75 x 3.00L	2	94380A744
32	Cylinder 2.00" Bore x 6.00" Stroke Single Acting	1	LE 5731
33	Pin Ø1.25" x 36.75L ZP	2	CP20A-36.75
34	Roll Pin Ø0.25 x 2.00L ZP	4	-
35	Deck Weldment	1	Contact Dockzilla
36	Leveler Retaining Link	2	DZ1938
37	Headed Clevis Pin 0.75 x 1.75L w/hairpin	2	98306A987
38	Cylinder 2.00" Bore x 19.75" Stroke Single Acting	1	LE 5420
39	Cotter Pin 0.19 x 2.00L ZP	4	
40	Pin Ø x 4.25L ZP	2	CP20A-4.25
41	8x7 Leveler Hose Kit	1	DZ1700HK

HYDRAULICS

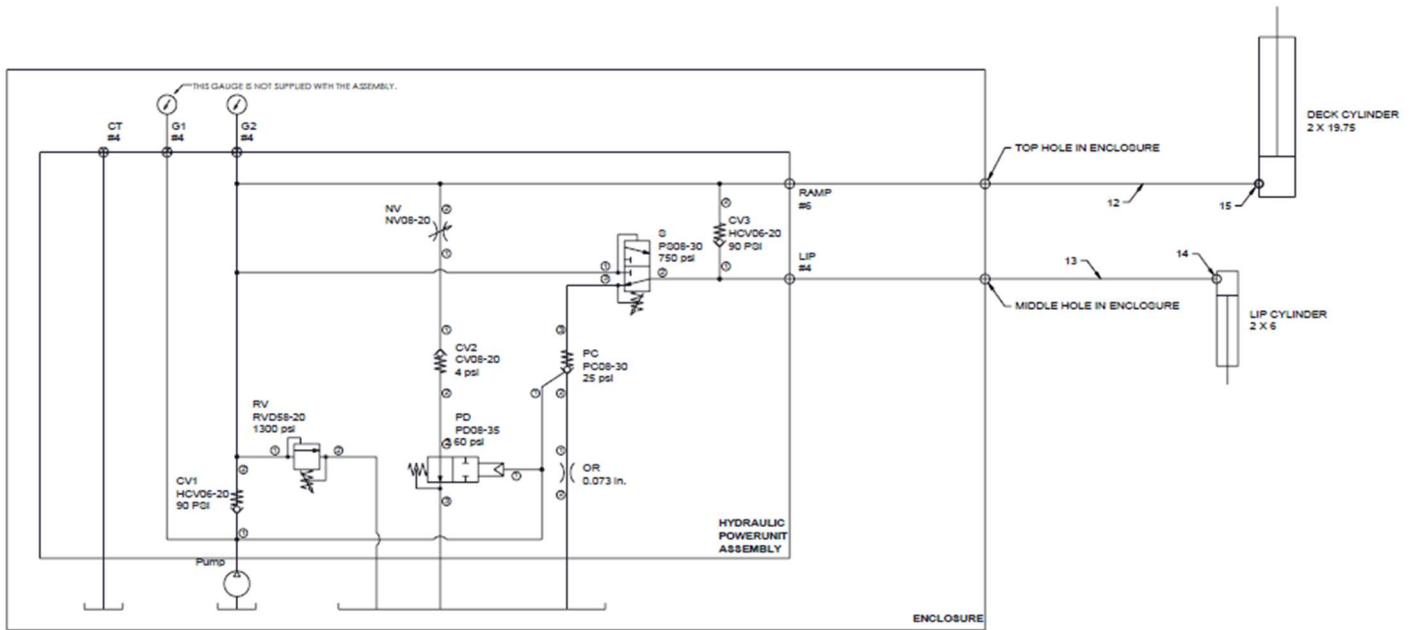


Figure 16: Hydraulic Schematic

AC POWER UNIT (HPU1AC)

WIRING SCHEMATIC

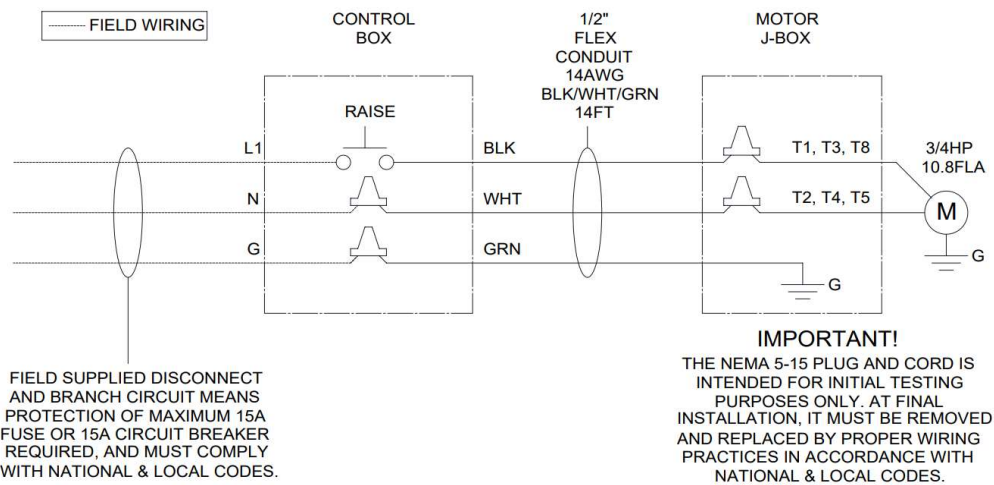


Figure 17: HPU1AC Wiring Schematic

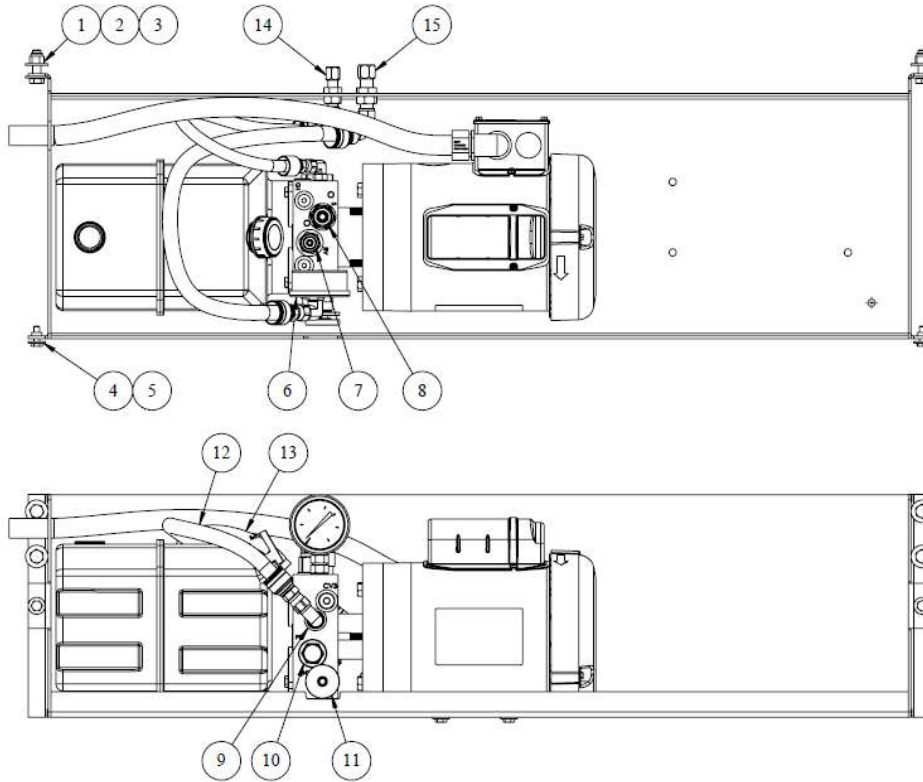


Figure 18: HPU1AC Replacement Parts

HPU1AC REPLACEMENT PARTS

ITEM	DESCRIPTION	QTY	PART NUMBER
1	Bolt, Hex Head, 0.375"- 16 x 1.25" L, Zinc Plated	4	
2	Nut, Hex, 0.375"- 16 HHCS Lock Nut, Zinc Plated	4	
3	Washer, Flat, 0.375"	8	
4	Bolt, 0.25"- 20 x 0.75" L, Grade 8	2	
5	Washer, Flat, 0.25"	2	
6	25", Stem Mount, 3000 PSI	1	CF-1P-210-A-SAE
7	#08 Relief, Direct Acting, 1300 Psi	1	RVD58-20A-0-N-30/13.00
8	PS08-30A-0-N-13/07.50	1	PS08-30A-0-N-13/07.50
9	SAE # 6 Male To #6 Male JIC Elbow	1	6801-06-06-4
10	#8 Piloted Two-Way N.O. 60 Psi	1	PD08-35-0-N-60
11	#8 Needle Valve	1	NV08-20B-0-N
12	6 FJIC Hose Assembly	1	PS-063906-00200-AM06FJ0-AM06FJ2-000A
13	4 FJIC Hose Assembly	1	PS-063904-00160-AM04FJ0-AM04FJ2-000A
14	4 Male JIC Bulkhead with Lock Nut	1	2700-04-04-LN
15	6 Male JIC 5.0GPM Velocity Fuse	1	28001-806-5.0

DC POWER UNIT (HPU1DC)

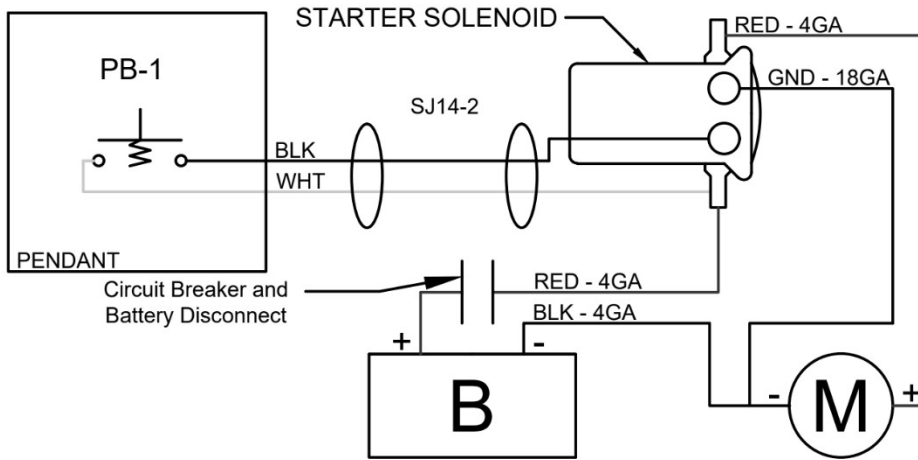


Figure 19: HPU1DC Wiring Schematic

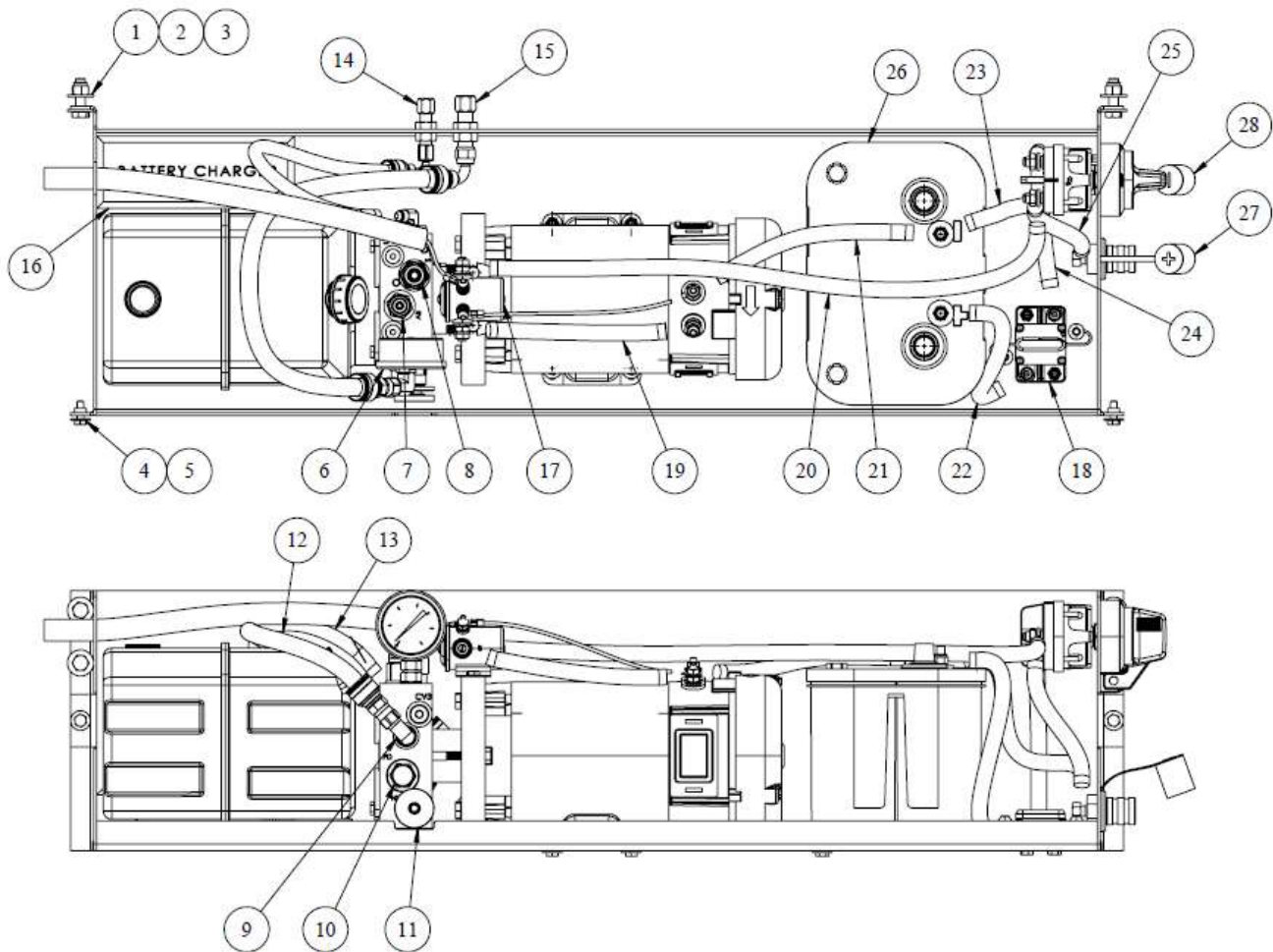


Figure 20: HPU1DC Replacement Parts

HPU1DC REPLACEMENT PARTS

ITEM	DESCRIPTION	QTY	PART NUMBER
1	Bolt, Hex Head, 0.375"- 16 x 1.25" L, Zinc Plated	4	
2	Nut, Hex, 0.375"- 16 HHCS Lock Nut, Zinc Plated	4	
3	Washer, Flat, 0.375"	8	
4	Bolt, 0.25"- 20 x 0.75" L, Grade 8	2	
5	Washer, Flat, 0.25"	2	
6	25", Stem Mount, 3000 PSI	1	CF-1P-210-A-SAE
7	#08 Relief, Direct Acting, 1300 Psi	1	RVD58-20A-0-N-30/13.00
8	PS08-30A-0-N-13/07.50	1	PS08-30A-0-N-13/07.50
9	SAE # 6 Male To #6 Male JIC Elbow	1	6801-06-06-4
10	#8 Piloted Two-Way N.O. 60 Psi	1	PD08-35-0-N-60
11	#8 Needle Valve	1	NV08-20B-0-N
12	6 FJIC Hose Assembly	1	PS-063906-00200-AM06FJ0-AM06FJ2-000A
13	4 FJIC Hose Assembly	1	PS-063904-00160-AM04FJ0-AM04FJ2-000A
14	4 Male JIC Bulkhead with Lock Nut	1	2700-04-04-LN
15	6 Male JIC 5.0GPM Velocity Fuse	1	28001-806-5.0
16	12V Battery Maintenance Charger Desulfator	1	XC100-P
17	12V Metal Dc Contactor 125A	1	974-1215-011-09
18	DC Circuit Breaker, 70a 1/4"Stud	1	184070F-01-1
19	Red Battery Cord 9" 4GA 3/8" Lugs	1	S4RD-9IN-38
20	Red Battery Cord 24" 4GA 3/8" Lugs	1	S4RD-24IN-38
21	Black Battery Cord 12" 4GA 3/8" Lugs	1	S4BK-12IN-38
22	Red Battery Cord 12" 4GA 3/8" Lugs	1	S4RD-12IN-38
23	Black Battery Cord 12" 4GA 3/8" Lugs	1	S4BK-12IN-38
24	Red Battery Cord 15" 4GA 3/8" Lugs	1	S4RD-15IN-38
25	Red Battery Cord 9" 4GA 3/8" Lugs	1	S4RD-9IN-38
26	Optima Blue Type Marine Battery D34M	1	OPT-D34M
27	Positive Stud Jumper 0.375-16 UNC Stud	1	46210-02
28	Negative Stud Jumper 0.375-16 UNC Stud	1	46210-03

LE 6080-25 (SOLAR PANEL KIT) REPLACEMENT PARTS

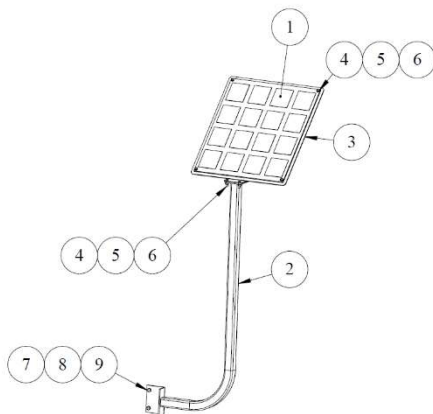


Figure 21: Solar Kit Replacement Parts

ITEM	DESCRIPTION	QTY	PART NUMBER
1	Solar Charger/Maintainer, 25W	1	SP-25 (735X790)
2	Solar Panel Mast	1	LE 5756
3	Solar Panel Mount Plate	1	LE 5906
4	Bolt, 0.25"- 20 x 1.00" L, Grade 5 ZP	6	
5	Washer, Flat, Ø0.25"	8	
6	Nylock Nut, 0.25"-20 UNC, Grade 5 ZP	6	
7	Bolt, 0.38"- 16 x 1.25" L, Grade 5 ZP	2	
8	Washer, Flat, Ø0.38"	2	
9	Nut, Hex, 0.38"- 16, Grade 5 ZP	2	
10	Self-drilling Screw, #8 x 0.50" L ZP	4	
*Item 10 used to mount controller box to power unit enclosure.			

STANDARD WARRANTY

Dockzilla Co. warrants that its products will be free from defects in design, materials, and workmanship for a period of 365 days from the date of shipment. All claims for breach of this warranty must be made within 30 days after defect is or can, with reasonable care, be detected and in no event no more than 30 days after the warranty has expired. In order to be entitled to the benefits of this warranty, the products must have been properly installed, maintained, and operated within their rated capacities and/or specified design parameters, and not otherwise abused. Periodic lubrication and adjustment is the sole responsibility of the owner. This warranty is Dockzilla Co. exclusive warranty. DOCKZILLA CO. EXPRESSLY DISCLAIMS ALL IMPLIED WARRANTIES, INCLUDING THE IMPLIED WARRANTIES OF MECHANICALITY AND FITNESS. Non-standard warranties, if any, must be specified to Dockzilla Co. in writing.

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