

---

# Electric hydraulic lock leveler

## Installation and operation manual

---

### **WARNING!**

DO NOT INSTALL, OPERATE OR SERVICE THIS PRODUCT UNLESS YOU HAVE READ AND FULLY UNDERSTAND THE ENTIRE CONTENTS OF THIS MANUAL. FAILURE TO DO SO MAY RESULT IN PROPERTY DAMAGE, BODILY INJURY OR DEATH.

---

## CONTENTS

|   |    |
|---|----|
| SAFETY PRINCIPLE.....                       | 3  |
| TRANSPORT.....                              | 4  |
| PIT INSPECTION                              |    |
| DOCK LEVELER INSTALLATION INSTRUCTIONS..... | 5  |
| ELECTRICAL AND HYDRAULIC INSTALLATION.....  | 11 |
| SAFETY OPERATING INSTRUCTIONS.....          | 12 |
| MAINTENANCE.....                            | 14 |
| DOCK GENERAL ASSEMBLY COMPONENTS.....       | 15 |



## Safety Principle

### WARNING !

PLEASE READ AND UNDERSTAND WHAT MENTIONED FOR THE SAFETY INSTRUCTION BEFORE INSTALLATION TO AVOID UNNECESSARY DAMAGE.

Contact **SUNCOME** for any inquiries of the door via email:  
[cindy@suncomedoor.cn](mailto:cindy@suncomedoor.cn) or [service@suncome.com](mailto:service@suncome.com)

### Remark:

1. Do not operate the dockleveler when there is someone or object on it ;
2. Do not operate the docklever when someone in front of it except for the person who is charge of the maintenance of the dockleveler with safety equipment.
3. Please keep the safety distance when it "UP"and "Down".
4. Do not put your hands in the hinge all time.Also, do not try to move the main and lip board by hands.
5. Do not permit to operate the dock leveler when it damaged or non-working and then inform the person who in charge to repair it.
6. Do not stand between the dock leveler and vehicle while revising.
7. Make sure the non-movement of the vehicle when it is in loading and unloading.
8. Please make sure the lip already linked and contacted with the vehicle when the forklift and pallet on it.
9. Please operate the dock lever and reset it when the loading &unloading finished.
10. Make the vehicle drive away when all things/objects removed on the dockleveler and reset it to the origin place.
11. Do not attempt to use forklift and other equipments lowered the docklever.



## Maintenance and Repair

- Please set up the isolation stripe/belt around the working area.
- Do not operate the dock leveler when there is someone under it except they are doing some repairing work with suitable safety protection measures.
- Confirm no person or objects under it for repairing work.
- All the electrical work need to be done with certification of technician and fit for local field standard.

Warning for checking work of control box with electricity. Do not put hands or conductive material link to the power supply caused by the damage and dead.

## Transport

1. Please check the way from vehicle and pit whether is ok or not.
2. Use forklift and crane to load the dockleveler and put it on the floor and avoid the dangerous.
3. Pay more attention to the location of the unloading point/ (Figure-1)and make sure it is ok for Motor and Hydraulic Pipe under the docklever's main board.

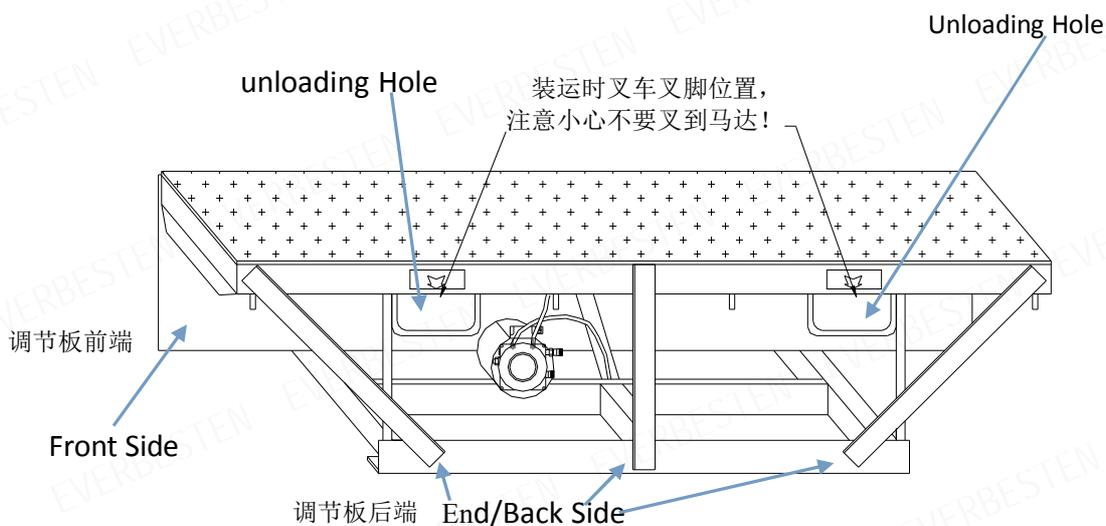


Figure -1

---

## Pit Checking

Please checking the pit size based on the drawing provided by Suncome. Make sure of it is correct for installation whatever for size and form included the power supply linked with the control box or not, wires or voltage, phrase, space for control box installation position and so on.

## Dock leveler Installation

### Warning !

Please put and set the belt and warning area for working,maintenance,repairing it.

1. Installate the control box and link the wire to power supply. Normally, the position is at 1300mm above the concrete platform floor. (Figure-2).

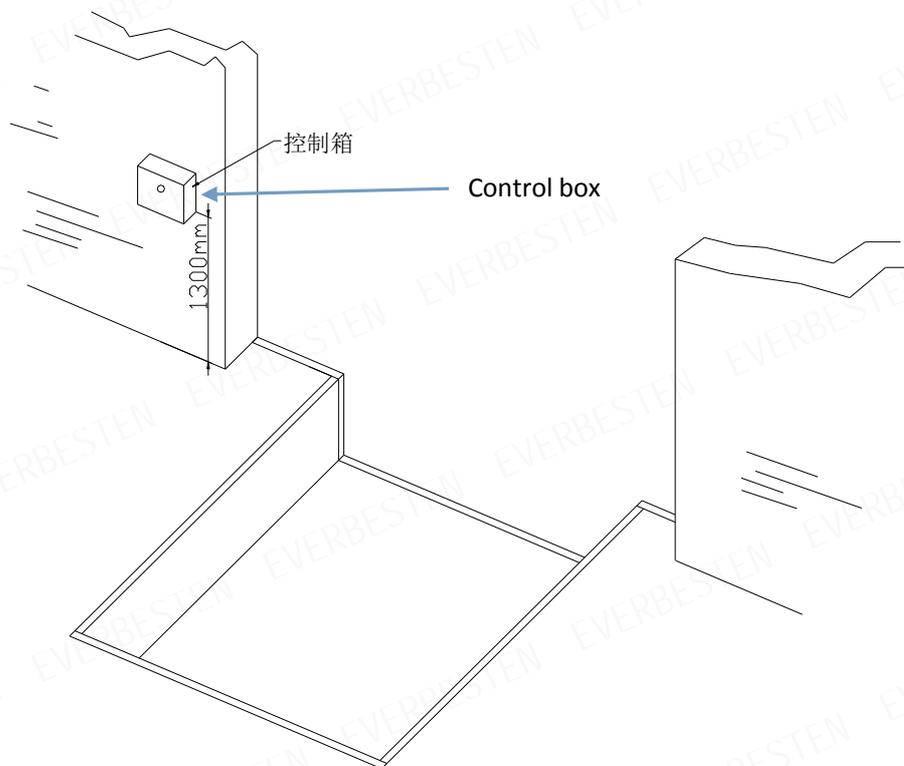


Figure-2

2. Use forklift lift the dockleveler from the front end and deliver it to the position/pit where for installation. (如图-3)。

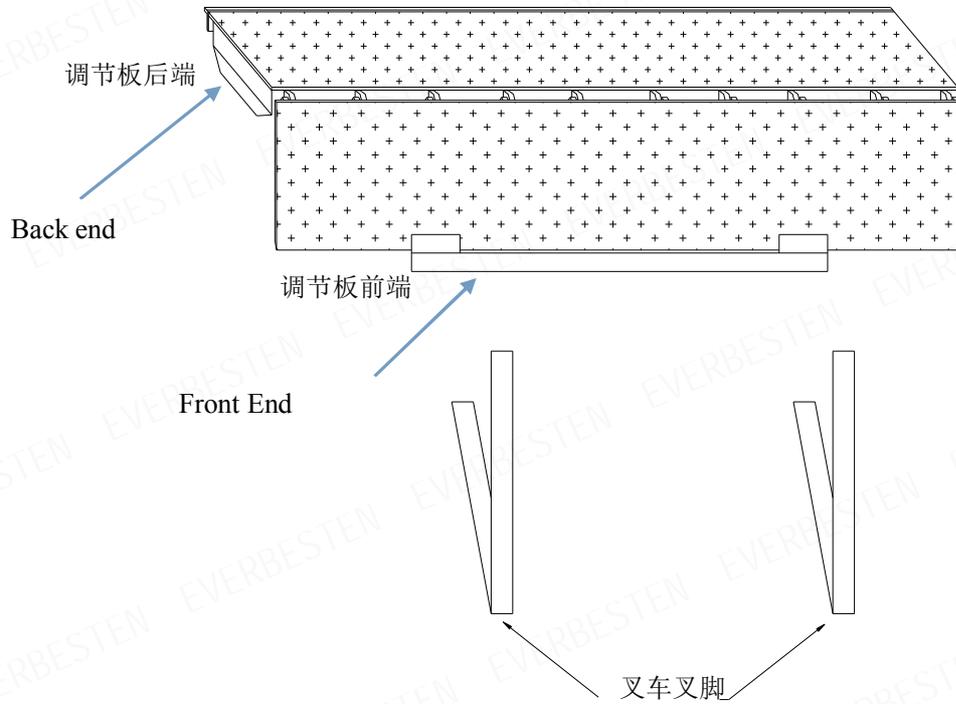


Figure-3

- 3. There has 400-500mm space at the "Back End" for wire-linking.(Figure-4) .
- 4. Put the wires together.

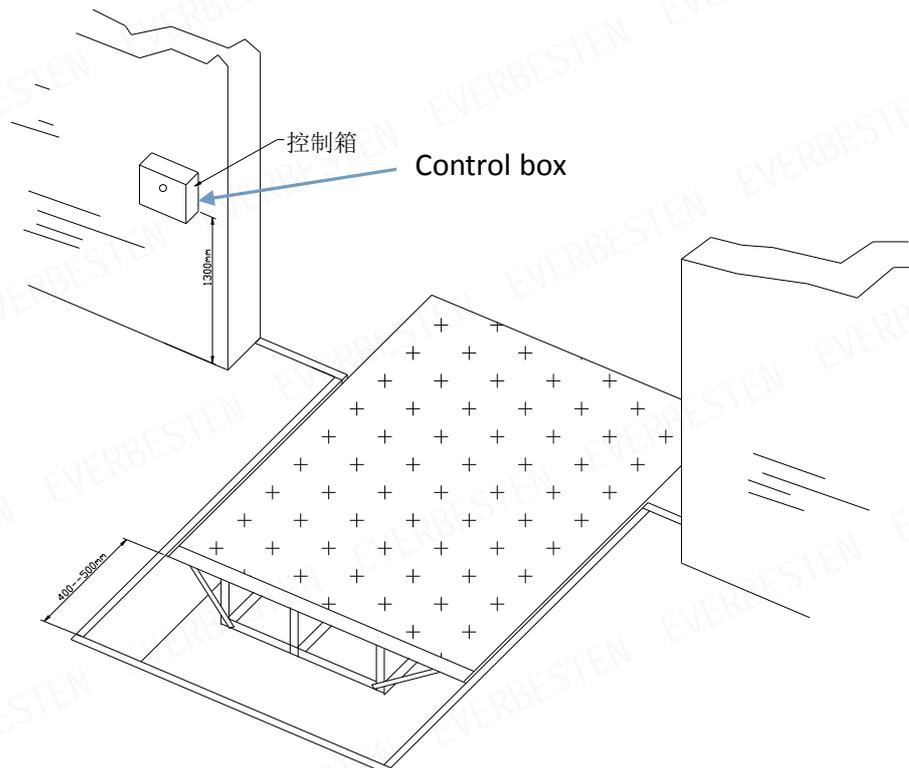


Figure -4

5. Please put two steel pad on the Front and Back End. Please ensure the dockleveler position is horizontal and correct.
6. Weld the angle iron and Front End Pad together. Make sure of welding point firm and elegant.
7. Weld the angle iron and Back End Pad together. Make sure of welding point firm and elegant. (Figure-5)

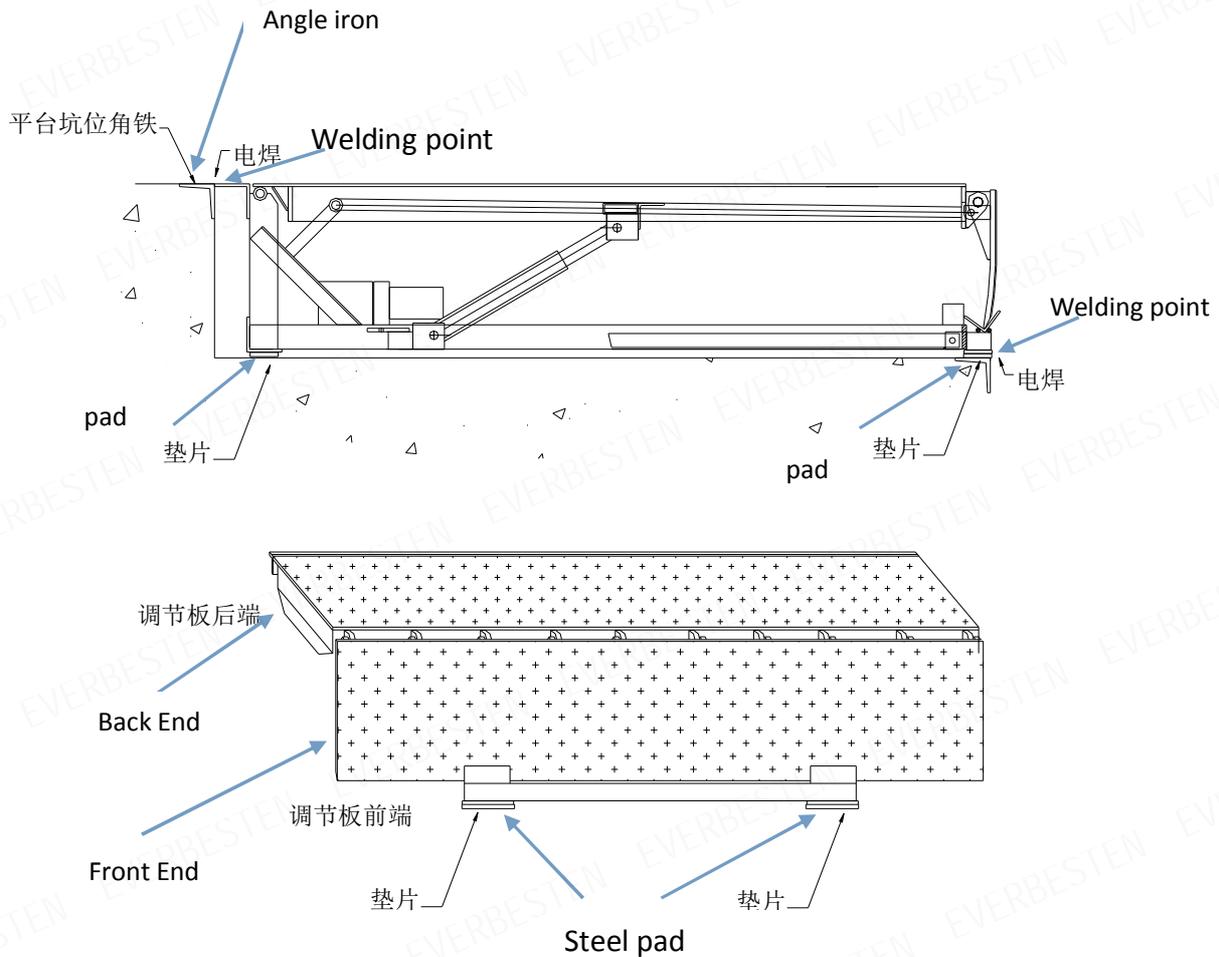


Figure-5

8. Release the fixation fasteners for transportation.
9. Press the "Up" push button when the power supply is ok (please check the power supply or change the phase position if the dockleveler can not rise up in 20-30 seconds.)
10. Lift the dockleveler to the top position by the stand bar and release the push button.
11. Put the pad of the main hydro-cylinder when entering the internal of the docklever.
12. Welding the base plate and pad of Back End together.
13. Welding the pad of main hydro-cylinder and base plate together. (Figure-6)

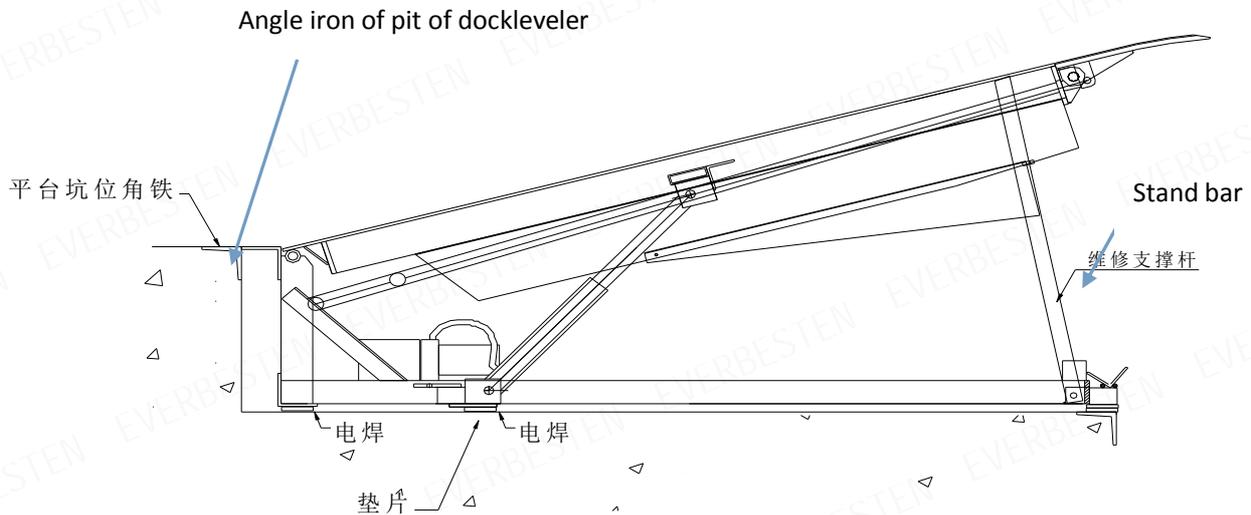


Figure-6

### Installation of the bumper

14. Welding the inner side with angle iron together. Make sure of it firm and elegance.
15. Welding the top position of outer side with angle iron of pit together.
16. Expansion bolts (14-16mm) drilled at the bottom position of the bumper. (Figure-7)
17. Anti-rusty paint covered with all the welding points.
18. Push "Up" button and rise up the dock leveler and reset the stand bar to the origin position.
19. Release the push button, and set it at the horizontal position.

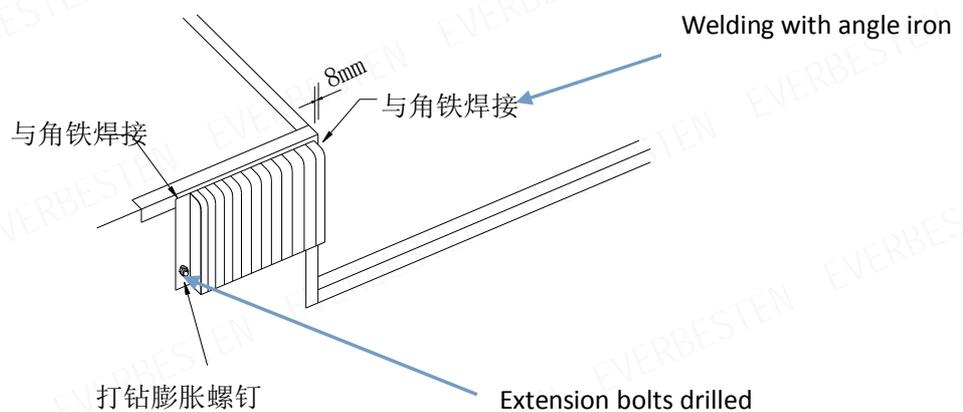


Figure-7

## Electricity Part

Warning! All electrical work must be performed by trained and authorized personnel. Be careful if it is required to inspect the charged control box. Keep hands or conductive material clear of the control box. Failure to do so may result in property damage, bodily shock, injury or death.

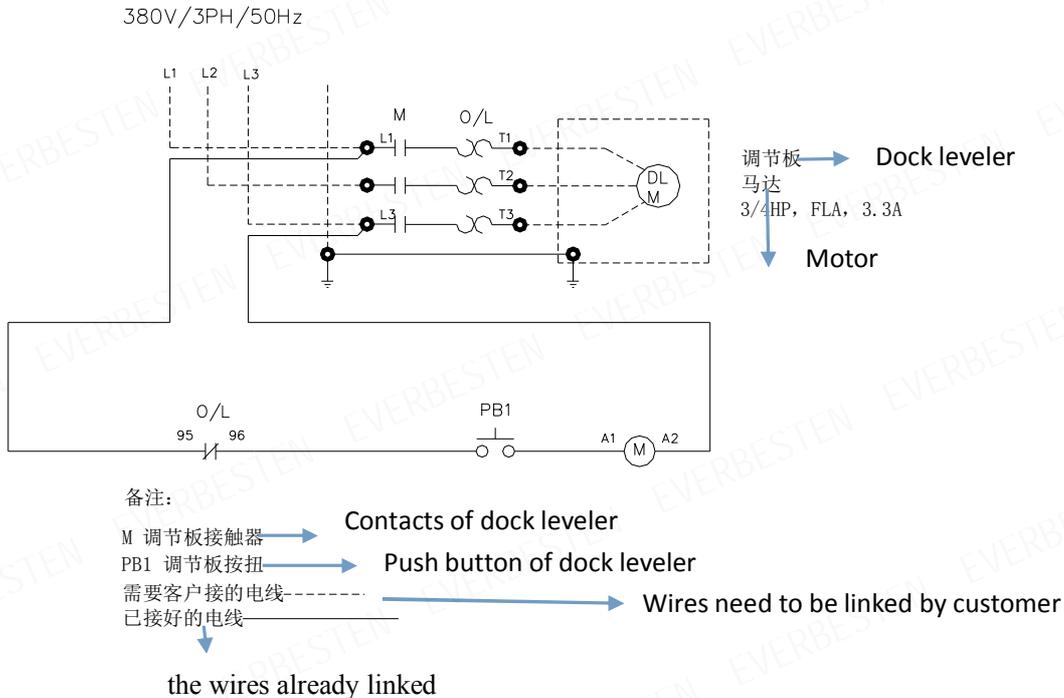


Figure-8

## HYDRUALIC INSTALLATION PART

### WARNING!

Only the trained and authorized service personnel shall operate or maintain this unit. All the hydraulic circuit and valve have already adjusted well before the factory.

A is the main cylinder interface.

B is the lip cylinder interface

G is 90bar adjustable hydraulically controlled direction valve.

E is 50-210bar relief valve.

D is throttle-valve can control the descend speed of the main plate.(Figure-9)

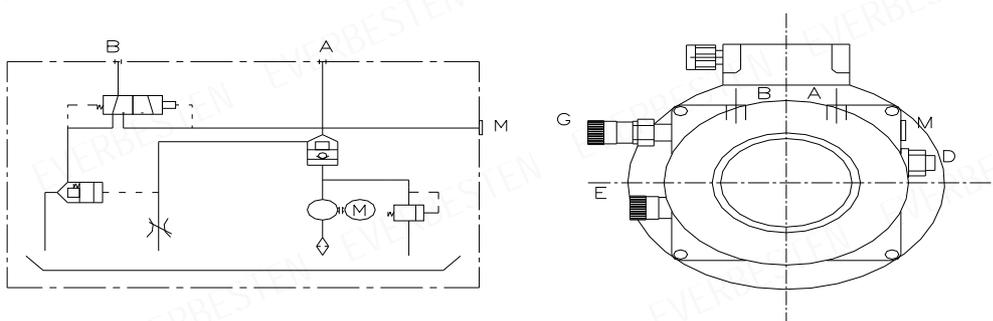


Figure-9

## OPERATING INSTRUCTION

### 1.0 Operating steps

1.1 Before operating the dock leveler, ensure that the transport vehicle is parked steadily and the lip is securely on the truck bed.

1.2 If the vehicle is filled with cargo, remove them by forklift, thus keeping the loading space for the lip.

1.3 Raise the dock leveler by pushing the 'UP' button. If the button is still being pressed while the dock is in its fully raised position, the lip will then deploy. (picture 2)

1.4 When the lip has fully retracted, release the 'UP' button. The dock then descend with the deployed lip on the vehicle load bed. When the dock has fully deployed on the load bed, loading and unloading may commence.

1.5 Once all work is completed, press the button till the dock leveler raise higher 100-200mm than the dock bed the lip will retract. The dock leveler returns to its original stored position. (picture 4)

### 2.0 Safety Regulations

2.1 NEVER stand on the dock leveler when the transport vehicle is backing.

2.2 Ensure that the transport vehicle is parked until it is parked against the dock bumpers and the wheels are chocked before operation.

2.3 NEVER use the dock leveler when anything is un-normal.

2.4 Keep hands and feet clear of the pinch/gap of the dock leveler.

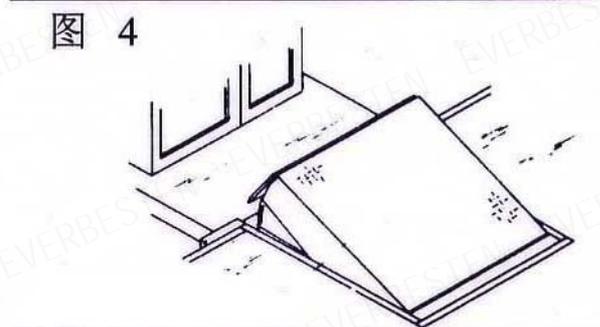
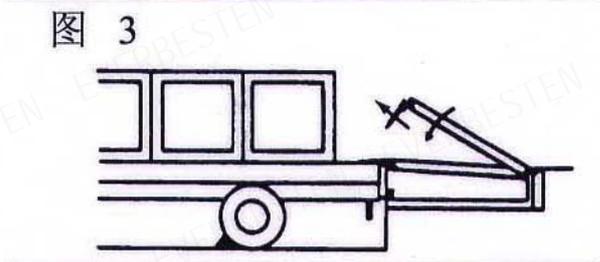
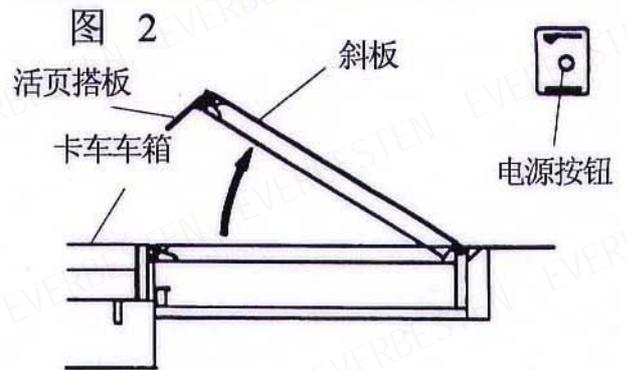
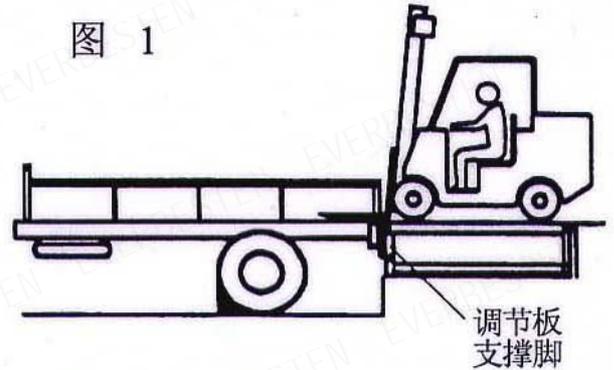
2.5 DO NOT place any machinery and cargo on the dock leveler during operation.

2.6 NEVER try to lift or move any part of the dock leveler manually.

2.7 NEVER use any forklift or machinery to press the dock leveler

2.8 The Maintenance instruction must be in place before commencing maintenance procedures.

2.9 After loading/unloading the cargo, return the dock leveler to the stored position by press and hold the 'UP' button. The dock will raise and the lip will retract. When the lip has fully retracted,



release the 'UP' button. The dock leveler will fall back to the stored position with the lip resting in the lip keepers.

2.10 NEVER remove the wheel chocks until loading/ unloading is finished and the truck driver has been given permission to depart.

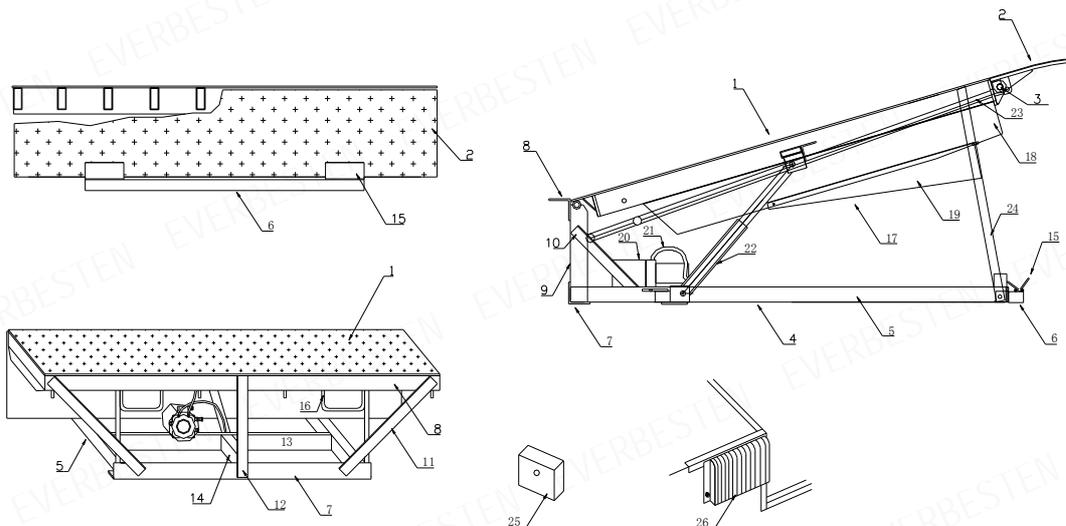
## REGULAR MAINTENANCE

|                  | <b>HYDRAULIC OIL RESERVOIR</b>             | <b>LIP CYLINDER</b>    | <b>BRACKTER JOINT</b> | <b>LIP HINGE ASSEMBLY</b> | <b>RAMP JOINT</b> | <b>PIT</b>    |
|------------------|--|------------------------|-----------------------|---------------------------|-------------------|---------------|
| <b>LUBRICATE</b> | Drain, Flush & Change Once Per Year        | Every 90 Days (Grease) | Every 90 Days         | Every 90 Days             | Every 90 Days     | No Required   |
| <b>ADJUST</b>    | No Required                                | No Required            | No Required           | No Required               | No Required       | No Required   |
| <b>CLEAN</b>     | Clean the cover and filter when add grease | As Needed              | As Needed             | As Needed                 | As Needed         | Every 90 Days |

\*Remark:

Suggest the 46# anti-wear hydraulic oil.

## DOCK GENERAL ASSEMBLY COMPONENTS/spare parts



| ITEM | QTY | MODEL             | DESCRIPTION  | PART NO. |
|------|-----|-------------------|--|----------|
| 1    | 1   |                   | MAIN PLATE   |          |
|      |     | LH6x8             | 6'x 8'   | 713-318  |
|      |     | LH6.5x8           | 6.5'x 8'   | 713-325  |
|      |     | LH7x8             | 7'x 8'   | 713-332  |
|      |     | LH6x10            | 6'x 10'  | 713-319  |
|      |     | LH6.5x10          | 6.5'x 10'  | 713-326  |
|      |     | LH7x10            | 7'x 10'  | 713-333  |
| 2    | 1   |                   | LIP  |          |
|      |     | LH6x8 /LH6x10     | 16" x 6'w  | 711-851  |
|      |     | LH6.5x8/ LH6.5x10 | 16" x 6.5'w  | 711-869  |
|      |     | LH7x8/ LH7x10     | 16" x 7'w  | 711-887  |
| 3    | 2   |                   | LIP PIVOT POINT  |          |
|      |     | LH6x8 /LH6x10     | 16" x 6'w  | 712-957  |
|      |     | LH6.5x8/ LH6.5x10 | 16" x 6.5'w  | 712-958  |
|      |     | LH7x8/ LH7x10     | 16" x 7'w  | 712-959  |
| 4    |     |                   | SUPPORT (includes 5、 6、 7、<br>8、 9、 10、 11、 12、 13、 14、<br>15、 16) |          |
|      |     | LH6x8             | 6'x 8'   | 712-763  |
|      |     | LH6.5x8           | 6.5'x 8'   | 712-767  |
|      |     | LH7x8             | 7'x 8'   | 712-770  |
|      |     | LH6x10            | 6'x 10'  | 712-886  |
|      |     | LH6.5x10          | 6.5'x 10'  | 712-823  |
|      |     | LH7x10            | 7'x 10'  | 712-879  |
| 5    | 2   |                   | SIDE BRACKTER  |          |
| 6    | 1   |                   | FRONT BRACKTER   |          |
| 7    | 1   |                   | BOTTOM BRACKTER  |          |
| 8    | 1   |                   | TOP SUPPORT  |          |
| 9    | 2   |                   | VERTICLE SUPPORT   |          |
| 10   | 2   |                   | SIDE SUPPORT   |          |
| 11   | 2   |                   | BACK BRACING   |          |
| 12   | 1   |                   | BACK VERTICLE SUPPORT  |          |
| 13   | 1   |                   | CYLINDER SUPPORT   |          |

|    |   |  |                           |         |
|----|---|--|---------------------------|---------|
| 14 | 1 |  | CYLINDER BRACKTER SUPPORT |         |
| 15 | 2 |  | V BUMPER                  |         |
| 16 | 2 |  | U PIN                     |         |
| 17 | 2 |  | PANEL (INCLUDES 16、 17)   | 155-550 |
| 18 | 2 |  | UP PANEL                  | 155-554 |
| 19 | 2 |  | BOTTOM PANEL              | 155-555 |
| 20 | 1 |  | MOTOR                     | 808-919 |
| 21 | 1 |  | HOPE                      | 708-939 |
| 22 | 1 |  | CYLINDER                  | 713-251 |
| 23 | 1 |  | LIP CYLINDER              | 713-252 |
| 24 | 1 |  | MAINTAINING SUPPORT       | 713-308 |
| 25 | 1 |  | CONTRAL BOX               | 908-906 |
| 26 | 2 |  | BUMPER                    | 700-045 |
|    |   |  |                           |         |