

SECTION 1

INSTALLATION INSTRUCTIONS RECEIVING AND HANDLING

RECEIVING:

WARNING

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

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

Prepare any claims against carrier if necessary.

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

HANDLING:

WARNING

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

Unit is easily handled for installation by hooking a heavy chain to each buttonhead rivet.

INSTALLATION INSTRUCTIONS INSTALLATION

GENERAL INFORMATION:

WARNING

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

Pioneer Edge of Dock Levelers are designed to service trailers 5" above to 5" below dock level. (Optional 17" Lip Models will service trailers 3" above to 5" below dock).

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

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



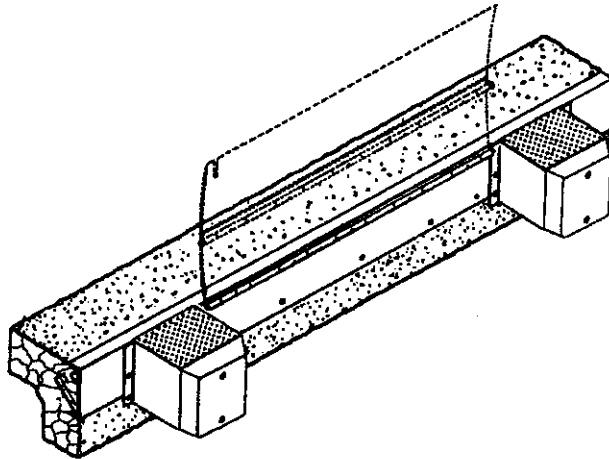
WARNING: Before you start to install the leveler, use proper safety signs and barriers to separate the work area from the remainder of the dock.



SECTION 1

INSTALLATION INSTRUCTIONS INSTALLATION

Illustration: 1



WELD ON—NEW CONSTRUCTION

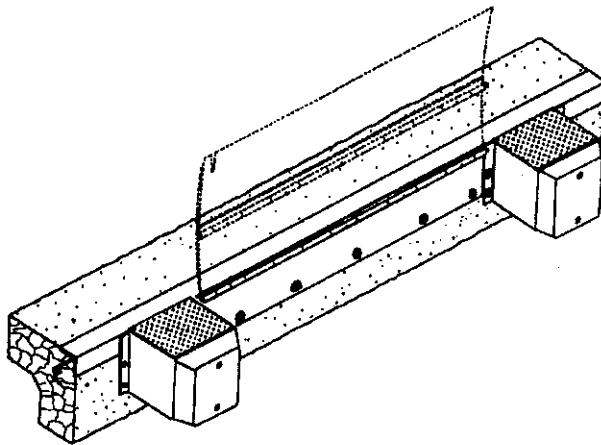
Use when dock edge vertical steel is 8" or wider. At dock edge, mark the center of chosen leveler location. Mark dock edge 33" either side of center (36" for 72" models; 39" for 78" models; 42" for 84" models).

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

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

Continuous weld bump blocks and base plate along top and all vertical edges while holding leveler firmly against dock. Spot weld in prepunched holes.

Illustration: 2



WELD ON/BOLT ON—EXISTING CONSTRUCTION

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

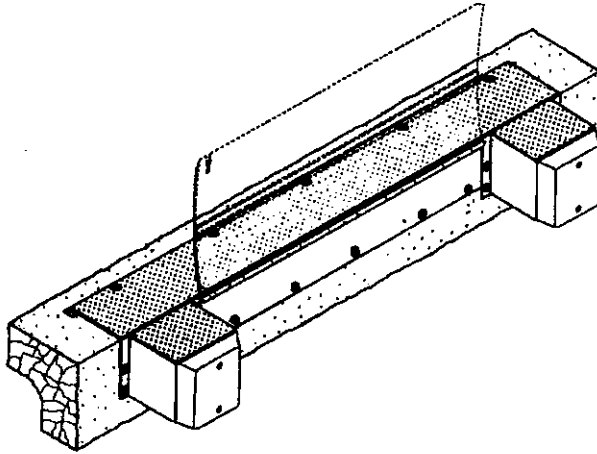
Complete all steps of instruction under "Weld On—New Construction."

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

SECTION 1

INSTALLATION INSTRUCTIONS INSTALLATION

Illustration: 3



WARNING

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

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

BOLT ON + APPROACH PLATE — EXISTING CONSTRUCTION

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

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

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

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

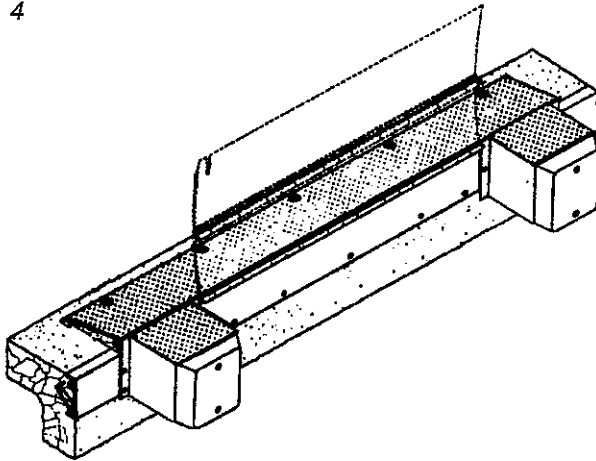
NOTE:

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

SECTION 1

INSTALLATION INSTRUCTIONS INSTALLATION

Illustration: 4



WELD ON AND RAISED APPROACH PLATE

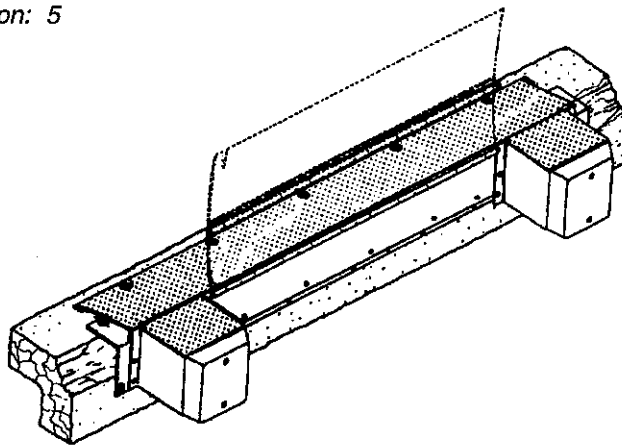
Use when dock edge is sound but height is less than adequate (bolting may also be required). At dock edge, mark the center of chosen leveler location. Mark dock edge 33" either side of center (36" for 72" models; 39" for 78" models; 42" for 84" models).

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

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

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

Illustration: 5



FORMED ANGLE-WELD ON—RAISED APPROACH PLATE

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

Unit must be raised approximately 2" in this application!

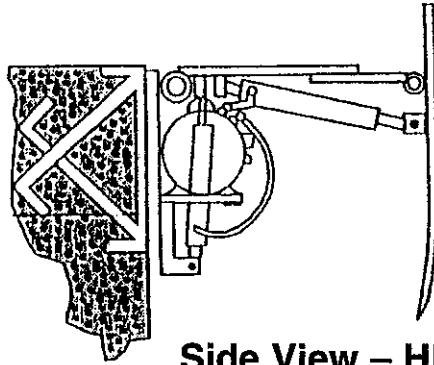
Position formed angle at desired location, mark holes, remove angle, drill holes and install angle. Install unit and approach plate according to methods described for "Existing Construction" (See Illustrations 3 & 4).

**Bumper must be at 48" height min. to top of bumper.
Both Applications.**

SECTION 1

INSTALLATION INSTRUCTIONS INSTALLATION

Illustration: 6



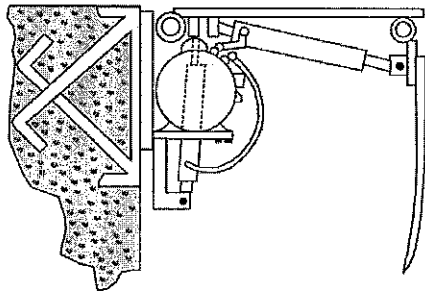
Side View – HPO Series

Units are shipped filled with aircraft hydraulic fluid. Check fluid level upon installation.

IMPORTANT! Replace plug cap with breather cap provided. **DAMAGE COULD OCCUR!**

SECTION 1

INSTALLATION INSTRUCTIONS HYDRAULIC



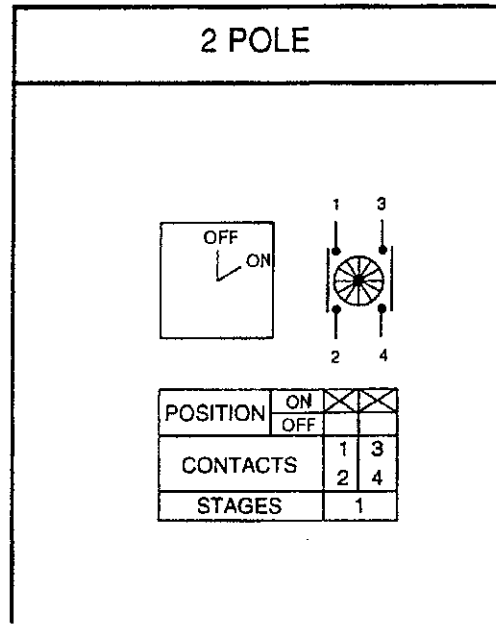
Side View – HED Series

Units are shipped filled with aircraft hydraulic fluid. Check fluid level upon installation.

IMPORTANT! Replace plug cap with breather cap provided. **DAMAGE COULD OCCUR!**

SECTION 1

INSTALLATION INSTRUCTIONS ELECTRIC



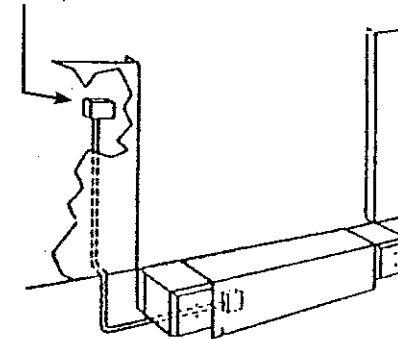
Motor may be wired for 120V/1 phase, 240V, 1 phase or 208/240/460V 3 phase. (Please specify when ordering.)

N.E.M.A. approved switch shipped with each unit.

Install conduit and wiring as per electrical schematic instructions.

Conduit may be run externally for existing construction installation.

Switch provided with each unit



SECTION 1

TEST OPERATION

Test operate unit:


Insure breather cap is in place of plug in reservoir.

Depress button (or turn switch) to raise unit. As unit raises, lip will extend. When lip extends, release button (switch). Unit will lower to truck bed. IF A VEHICLE IS NOT PRESENT, RESET LEVELER BY MANUALLY LIFTING LIP.

ENSURE UNIT RESTS ON SUPPORT GUSSETS IN STORED POSITION. NO WEIGHT SHOULD BE RESTING ON HYDRAULIC CYLINDER SHAFT.

Section 2

MAINTENANCE

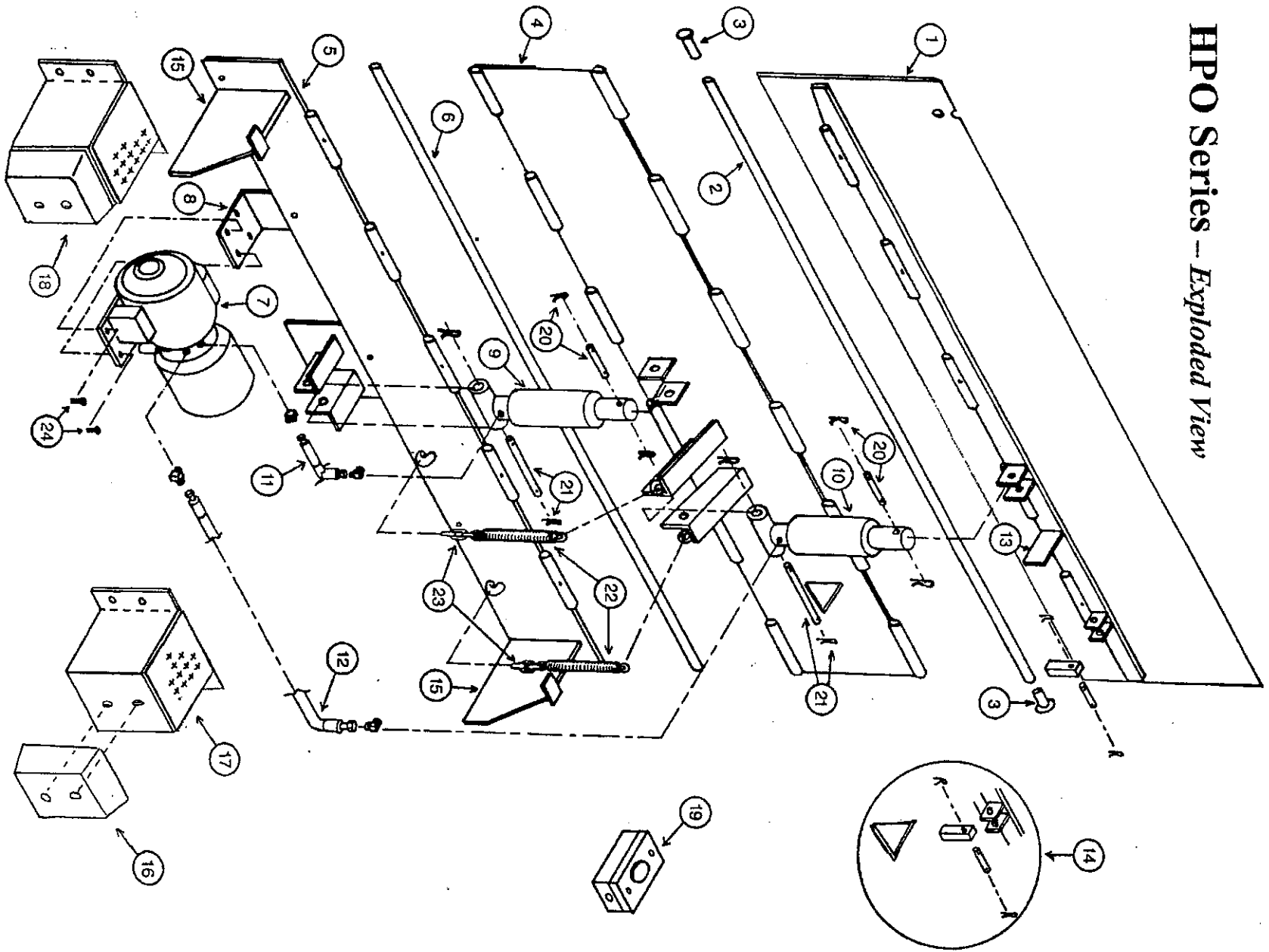
<p>WEEKLY MAINTENANCE</p> <p style="text-align: center;">CAUTION: ALWAYS BRACE LEVELER SECURELY AND SAFELY WHEN MAINTENANCE IS REQUIRED.</p>	<p>Check unit for leaks.</p> <p>Check unit for physical damage. -Cracks in tubes and welds</p> <p>Check installation</p>
<p>MONTHLY MAINTENANCE</p>	<p>Check fluid levels</p>
<p>YEARLY MAINTENANCE</p>	<p>Lubricate hinges and all other moving parts.</p> <p>Check rubber bumpers.</p>
<p>5 YEAR MAINTENANCE</p>	<p>Replace hydraulic fluid.</p> <p>HYDRAULIC FLUID: Use aircraft fluid or Dextron III for normal operation.</p> <p>For extremely cold regions fluid can be replaced by an arctic grade (or aircraft) hydraulic fluid. Check local distributors for availability.</p>
<p> WARNING</p> <p>WARNING! DO NOT allow lip and ramp to fall free. Allowing dock leveler to fall free could result in dock leveler coming free from dock or damaging linkage resulting in property damage, serious injury and/or death.</p>	

Hydraulic Edge-Of-Dock Models

HED & HPO

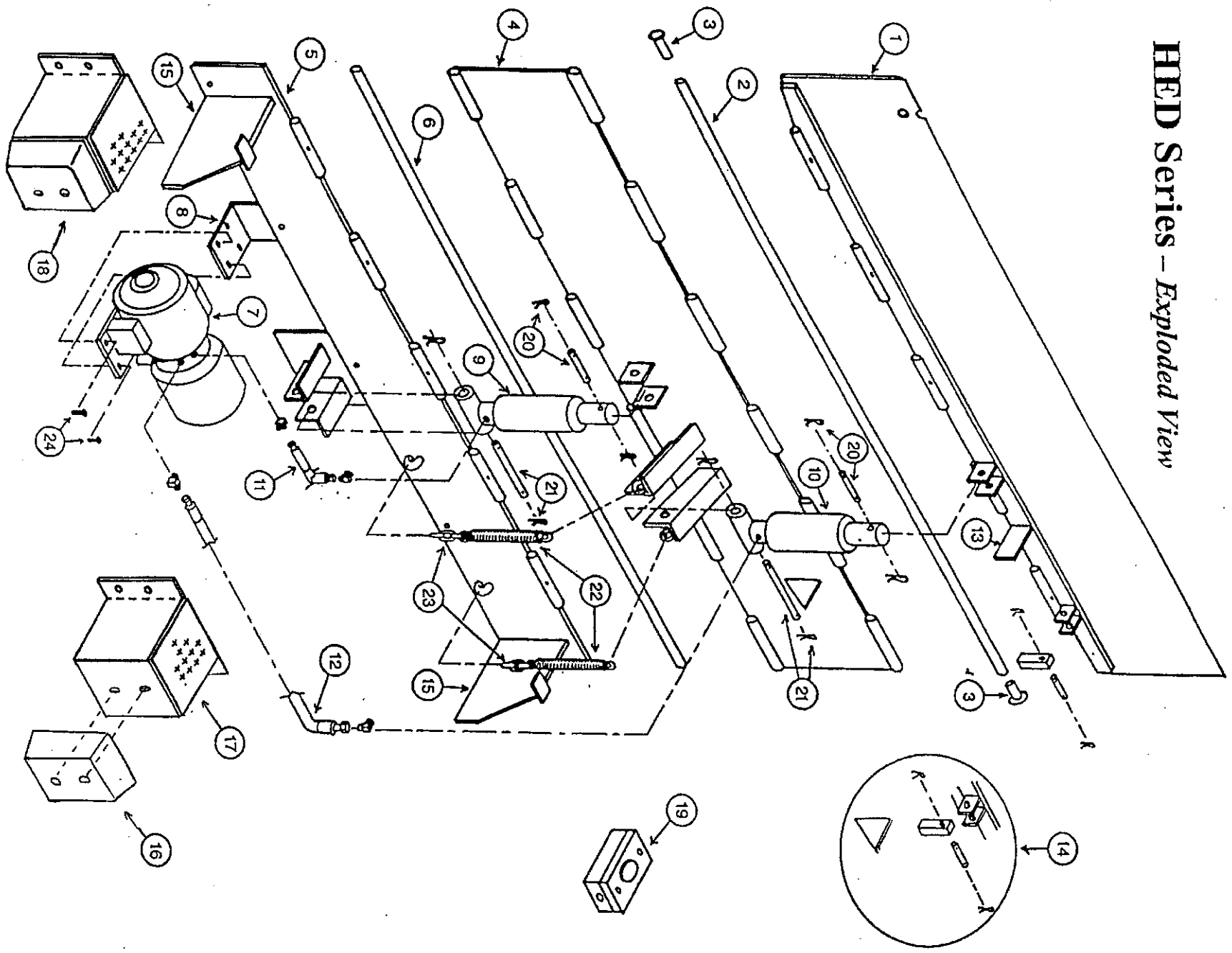
Item #	Part Description
1	Lip Plate Assembly
2	Lip Hinge Pin
3	Rivet (2 ea. Req)
4	Center Plate Assembly
5	Base Plate Assembly
6	Base Hinge Pin
7	Hydraulic Motor, Pump and Reservoir
8	Motor Mounting Plate
9	Cylinder – C1
10	Cylinder – C2
11	Hydraulic Hose, C1 – 24½”
12	Hydraulic Hose, C2 – 30”
13	Lip Stop Tab
14	Lip Lock Assembly
15	Gussets (2 ea. Req.)
16	Molded Cord Rubber
17	Bump Block Steel Assembly
18	Bump Block Assembly
19	18” Bump Block Assembly is Optional Control Box
20	Cylinder Pin W/ Keys Upper
21	Cylinder Pin W/ Keys Lower
22	Lip Return Spring (2 ea. Req.)
23	Lip Return Chain (2 ea. Req.)
24	Bolt Assembly – Motor Mounting (4 ea. Req.)

HPO Series – Exploded View



Loading Dock Equipment - Hydraulic Edge of Dock Levelers

HED Series - Exploded View



Loading Dock Equipment - Hydraulic Edge of Dock Levelers

Section 3**OPERATING INSTRUCTIONS**

Step 1	<p>With leveler in stored position, back truck into position against the bumpers.</p> <p>CAUTION: ALWAYS CHOCK TRUCK WHEELS AND ENGAGE TRAILER RESTRAINT BEFORE LOADING AND UNLOADING.</p>
Step 2	<p>Remove end load, if any, from truck with leveler in stored position.</p>
Step 3	<p>Raise leveler by applying pressure to (turning) the wall mounted switch.</p> <p>Release button (switch) when both sections of leveler are fully raised. Unit will automatically lower to truck floor.</p> <p>When truck departs, unit will return to stored position.</p>
Step 4	<p>Unit may be recycled with truck in position against the bumpers.</p> <ol style="list-style-type: none">1. Apply pressure to (turn) the wall switch. Center plate section of unit will raise off the truck floor.2. Release the button (switch) as soon as the leading edge of the lip plate section clears the rear edge of the truck. The unit will tuck itself and return to the stored position.

Section 4**TROUBLESHOOTING**

Lip not returning to stored position	<ol style="list-style-type: none">1. Lip lock not disengaging - check for debris, lubricate if needed.2. Visually check lip cylinder for damage.
Unit not descending.	<ol style="list-style-type: none">1. Check pullover chain/spring to ensure they are connected.2. Shuttle valve not properly adjusted.
Unit descending too slowly or quickly.	<ol style="list-style-type: none">1. Adjust descend valve<ul style="list-style-type: none">• clockwise slows descend• counter clockwise accelerates descend.
Unit not raising (motor running)	<ol style="list-style-type: none">1. Visual check of hydraulic fluid tank. Should be 1/2 to 3/4 full.2. Viscosity of fluid has failed.<ul style="list-style-type: none">• Change to an arctic temperature type to prevent motor/pump burnout.3. Consult factory.
Unit not raising (motor not running)	<ol style="list-style-type: none">1. Check electrical hook up - voltage, phase, and wiring.2. Motor/pump damaged - requires replacement.