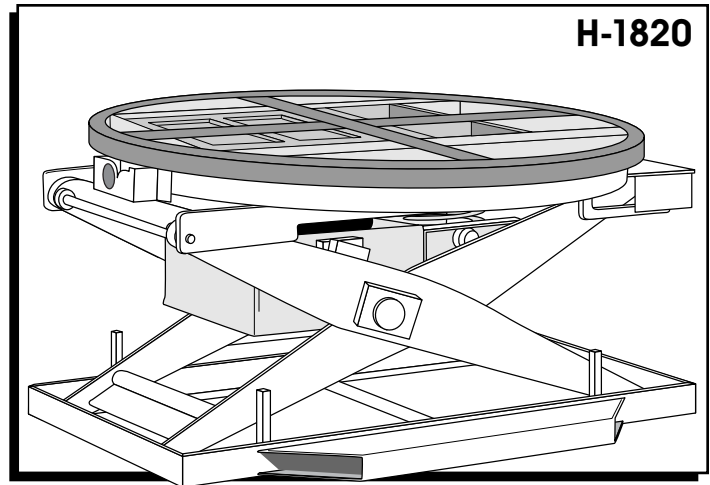


ULINE H-1820 PALLET POSITIONER

1-800-295-5510
uline.com



INTRODUCTION

The H-1820 Pallet Positioner automatically maintains a load at an ideal height for manual loading and unloading.

- Unloading a pallet. Place the palletized load on the unit. The positioner gradually rises as boxes or parts are removed. This automatically maintains the correct working height at the top of the load.
- Loading a Pallet. Place an empty pallet on the unit. The positioner gradually lowers as boxes or parts are added. This keeps the top of the load at the correct height.
- Load or unload complete pallets using a forklift.

Please read this manual carefully before you install or use the H-1820 Pallet Positioner. Familiarize yourself with its safe and proper installation, use and maintenance. If you have any questions, please call Uline customer service at 1-800-295-5510.

SPECIFICATIONS

Load capacity	500 to 4500 lbs.
MAX. Load size	50 x 50 x 72"
Length	45 1/4"
Width (base frame)	36 3/4"
Compressed height	9 1/2"
Extended height	30 1/2"
Air Source	62 PSI
Maximum system air pressure	120 PSI
Safety relief valve setting	125 PSI
Rotating ring, outside diameter	40 5/8"
Rotating ring, inside diameter	40 5/8"
Adjustment for sloping floors	Up to 25° using optional adjustable feet.
Net weight	300-400 lbs.
Operating environment	Indoors
Operating temperature	30-120°F

SAFETY

The H-1820 is designed to be as safe as possible for operators and service workers. However, the positioner is a powerful tool with moving parts and is capable of causing severe injury if proper precautions are not taken. Pay attention to all **WARNING** statements for safe operation.

WARNING! Do not inflate the system to more than 62 PSI in the fully raised position, or 120 PSI at any other position. If the actuation system pressure exceeds 120 PSI under any circumstances, the air actuation system may fail and result in severe injury.

LABELS

Make sure that all safety labels are in place and visible to operators. (See Figure 1). Never paint over the labels. If any labels are missing, please contact Uline customer service at 1-800-295-5510.

- Never sit or ride on the turntable or operate the unit if anyone is on it.
- Never operate the unit if the load is off center. The load could shift and injury or damage to the unit may result.
- Never push the load off the side of the unit. The unit's frame may jump upward.
- As the unit moves, keep away from the "pinch points" where metal parts meet. (See Figure 2).

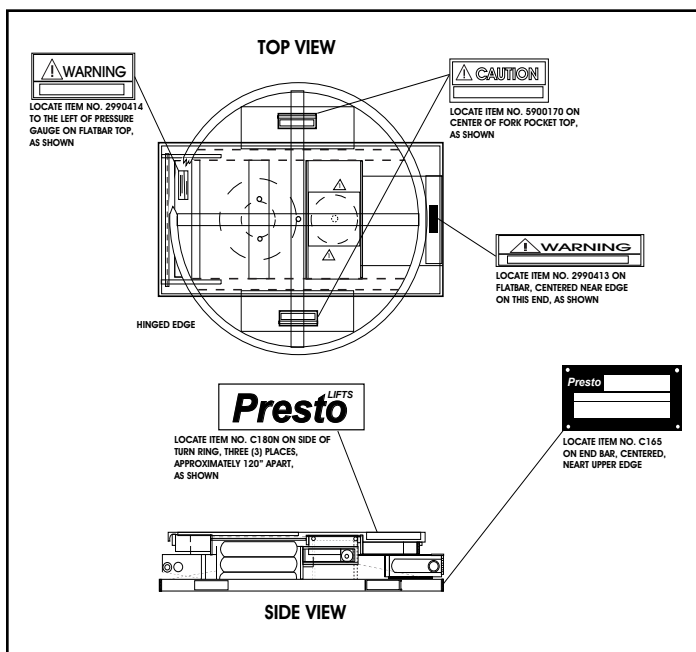


Figure 1- Safety Labels

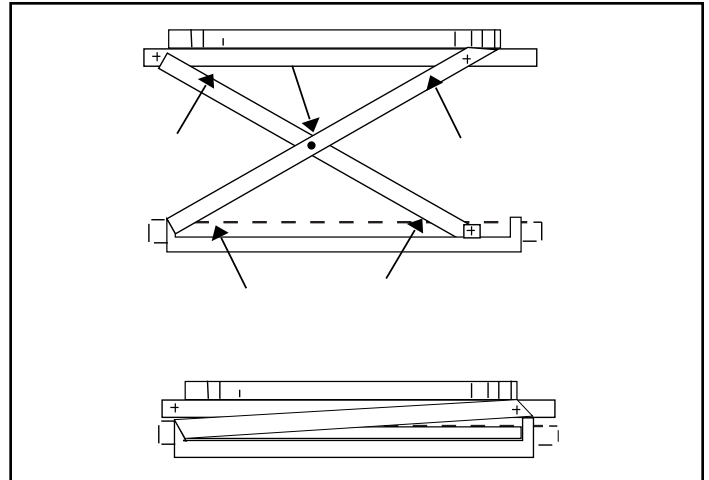


Figure 2 – Pinch Points

- Keep the area around the unit clean. Do not allow any dirt, debris, spilled oil or excess grease to collect. Operator may slip while the unit is operating and injury may result.
- Stay clear of the turntable when it is moving. As the pallet turns, a part of the load may hit you. Never turn the load when anyone is standing beside the unit.
- Do not use this unit with damaged or broken pallets. Broken pallets may have boards or nails hanging down below the main part of the pallet. As the pallet turns, these boards or nails can catch on the frame of the unit. This can cause the pallet to stop turning suddenly and the load to shift. Injury or damage to the unit may result. Boards or nails on the bottom of the pallet should not protrude more than 1/8".

WARNING! Do not use this unit with a load greater than the rated capacity. This includes the weight of the payload and the weight of the pallet. Overloading may cause damage to the positioner.

INSTALLATION INSTRUCTIONS

UNPACKING THE UNIT

WARNING! Sharp edges. Wear safety glasses and gloves when you handle or cut the metal banding holding the unit to the skid.

Before starting installation, check for local codes and ordinances that may apply. It is your responsibility to obtain any necessary permits. Inspect the shipping pallet carefully for any damage to the positioner. If you see signs of damage, notify the shipper immediately. Note any damage on the shipping papers you are asked to sign.

Choose where you want to place the unit. Check the floor surface carefully and make sure that it is free of all loose debris and dirt.

CAUTION! Install the positioner on a smooth, flat surface. If the frame is not supported correctly, stresses may develop in the frame, the positioner may bind or not work easily, wear more quickly and the turntable may not rotate correctly. Injury or damage to the load may result.

Remove the metal banding that secures the unit to the pallet. Remove all packing material. Shift the unit to the floor while supporting the base.

WARNING! The unit is attached to the skid using metal bands under high tension with sharp edges. Wear safety glasses and gloves when handling or cutting the banding.

Check that the frame sits firmly on the floor. The base should be stable and not rock or move. If any part of the frame is more than 1/2" out of level in relation to any other part, install the optional adjustable feet to level the unit.

SET-UP INSTRUCTIONS

The positioner can be set up to handle pallet loads of any weight within the unit's capacity range. Load capacity depends on the initial actuator pressure. Actuator pressure can be set from 6 to 62 PSI for capacities ranging from approximately 500 to 4,500 lbs. Use an air compressor or shop air to pressurize the unit. Maximum air pressure needed is 62 PSI. Once air is added into and held in the air actuation system, a corresponding load capacity has been set. The unit raises or lowers as the load is added or removed, and works as an automatic pallet leveler.

A rule of thumb, remember that the amount of air put into the air actuator should allow the unit lower to its compressed height with a load equal to 75% of the set capacity (load + pallet weight). The Height vs. Load Curve Table (Figure 3) describes the automatic leveling behavior. The Set-Up Reference Table (Figure 4) can be used to estimate the initial pressure to set up the unit for a specific capacity.

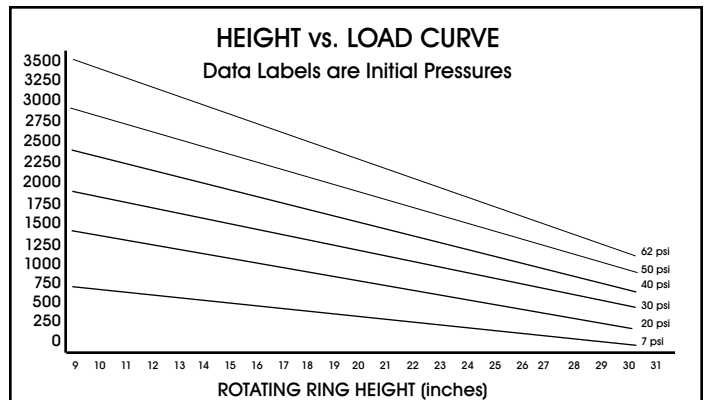


Figure 3- Height vs. Load Curve Table

Capacity (lbs.)	<700	1000	1500	2000	2500	3000	3500	4000	4500
Capacity x75%		750	1125	1500	1875	2250	2625	3000	3375
Initial Pressure (psi)	7	11	18	26	34	42	49	56	62

Figure 4- Set-Up Reference Table

INSTALLATION INSTRUCTIONS (CONTINUED)

1. Use the Set-up Reference Table to find the initial air pressure. For example, if the desired capacity is 3,000 lbs, you will see in the Set-up Reference Table that 75% of that capacity is 2,250 lbs. You will also find the initial air pressure for inflating the air actuator is 42 PSI. If the desired capacity is not listed exactly in the table, use the next higher capacity rating. The initial pressure is just an estimate; pressure can be set a little higher. However, initial pressure should never exceed the 62 PSI maximum.
2. With no load on the unit, use shop air or an air compressor to pressurize the system to the required initial pressure. If shop air is used, set the air regulator to the required initial pressure. The unit is equipped with an air pressure gauge and an air manifold valve including a valve stem, a manual relief knob and a safety relief valve. Add air to the actuator system through the valve stem, and release air from the system by loosening the manual relief valve. (See Figure 5).
3. Gradually load the positioner to 75% of the set-up capacity. In our example, the load including the pallet is 2,250 lbs. Check to see if the unit is compressed. If not, turn the manual relief knob to slowly bleed air out of the system until the platform reaches minimum height. Then close the manual relief knob. The set-up procedure is now complete and the positioner is ready for use.

If a different load is to be handled, or a higher or lower loading/unloading position than the standard set-up is desired; add air into or bleed air from the actuation system to achieve the necessary height.



IMPORTANT! The gauge should never exceed 120 PSI under any circumstances.



NOTE: The actuation system holds air much like an automobile tire and loses small amounts of air over time. Occasionally, you may have to add air to compensate for the loss.

QUICK SET-UP

If the weight of the pallet load to be handled is unknown or cannot be estimated, use this procedure:

With no load on the unit, pressurize the actuation system to 62 PSI. Place about half of the pallet load onto the unit, then use the manual relief knob to slowly bleed air from the system until the pallet reaches a suitable height to continue loading.

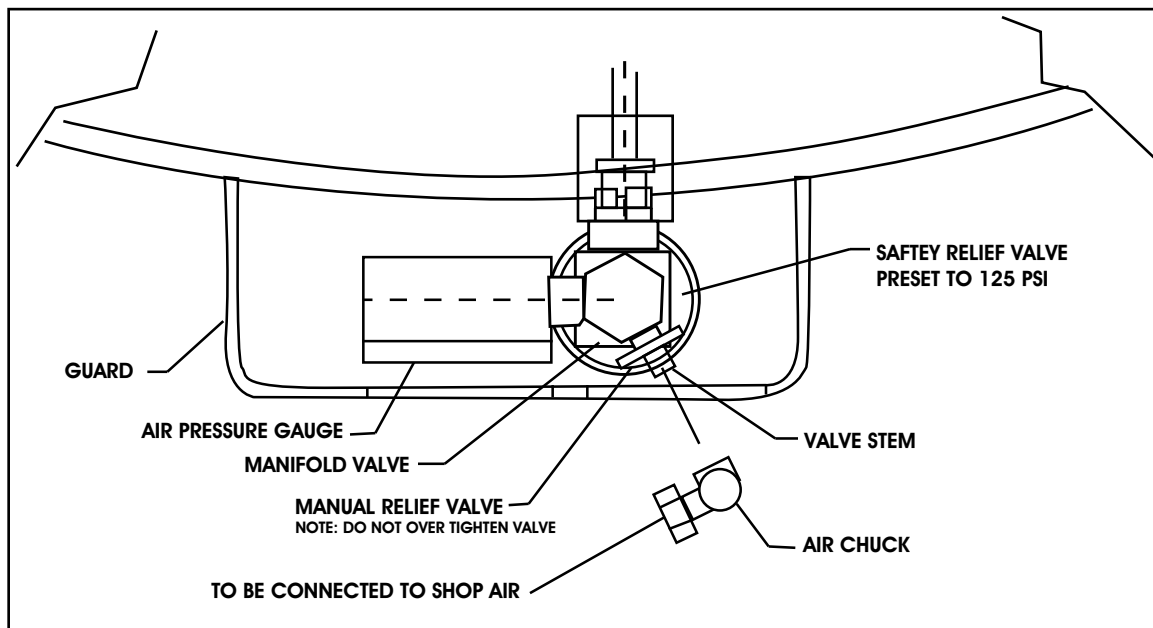


Figure 5 – Air/Valve System

OPERATING INSTRUCTIONS

LOADING MANUALLY

Add boxes or parts until the pallet is full. The positioner will gradually lower the pallet until it reaches the bottom. (See Figure 6).

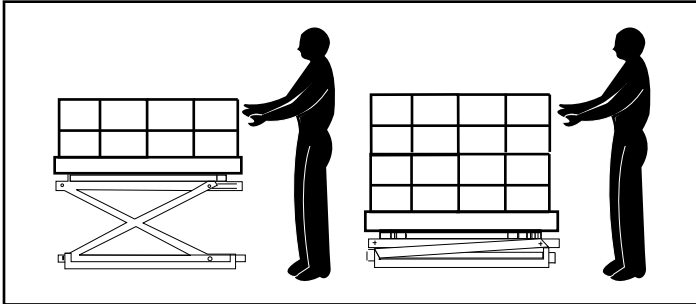


Figure 6- Loading Manually



WARNING! Load and unload the positioner in even layers. Loading or unloading a load on one side may cause the load to tip over and injury or damage to the unit may result. (See Figure 7).

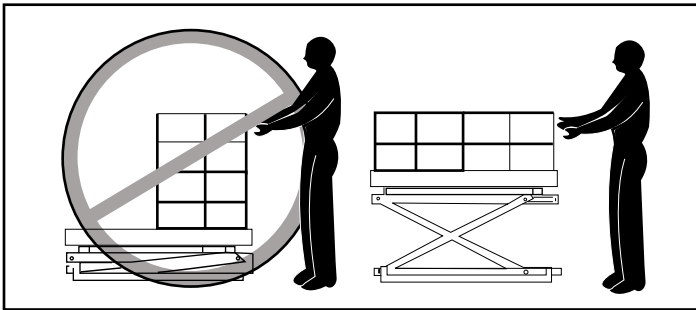


Figure 7- What Not to Do

UNLOADING MANUALLY

Remove boxes or parts until the pallet is empty. Pallet will raise as load is removed. (See Figure 8).

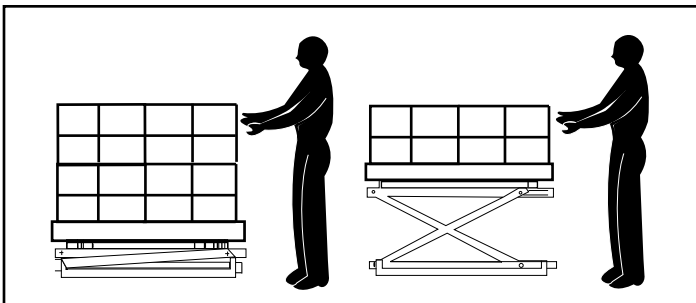


Figure 8- Unloading Manually

LOADING WITH A FORKLIFT



WARNING! Skipping these steps may cause the load to drop suddenly when you remove the forklift. Injury or damage to the unit or load may result.

1. Place the load on the lift, then lower the forklift. Before removing the load, make sure the positioner is carrying the weight, not the forklift. (See Figure 9).

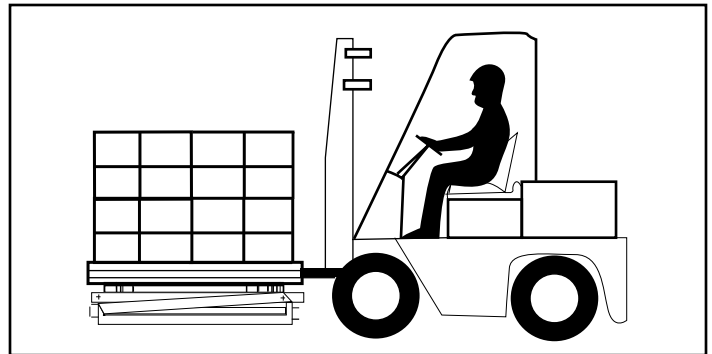


Figure 9- Loading with a Forklift

2. Lower the load until the springs are fully compressed.
3. Make sure the forks are clear of the inside of the pallet.



WARNING! Never drop the load onto the turntable. If you do this while the turntable is moving, the load may shift. Injury or damage to the unit may result.

4. Center the load on the positioner.



WARNING! If the load is off-center, it may shift when the turntable turns. Injury or damage to the unit or load may result.

OPERATING INSTRUCTIONS (CONTINUED)

UNLOADING WITH A FORKLIFT

WARNING! Skipping these steps may cause the unit to jump up suddenly when you remove the pallet. Injury or damage to the unit or load may result.

1. Insert the forks into the pallet, and lift the pallet clear of the top of the unit. (See Figure 10).
2. Make sure the pallet clears the top of the turntable before you move the forklift

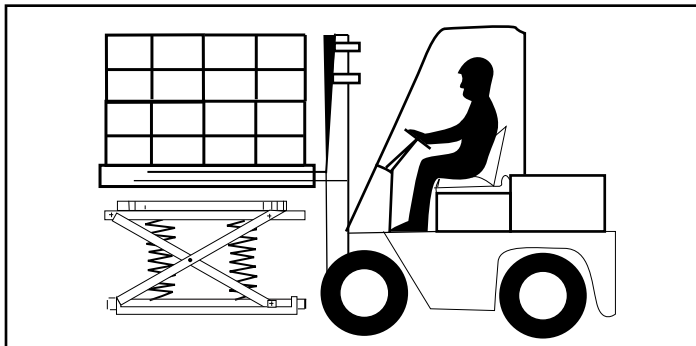


Figure 10- Unloading with a Forklift

MOVING THE POSITIONER

CAUTION! Do not move the positioner while it is loaded. This will damage the base frame of the unit. The pockets on the base frame are designed to support an unloaded unit, but cannot support any extra weight.

3. Remove any load from the top of the unit.
4. Insert the forks into the pockets in the base frame. (See Figure 11).

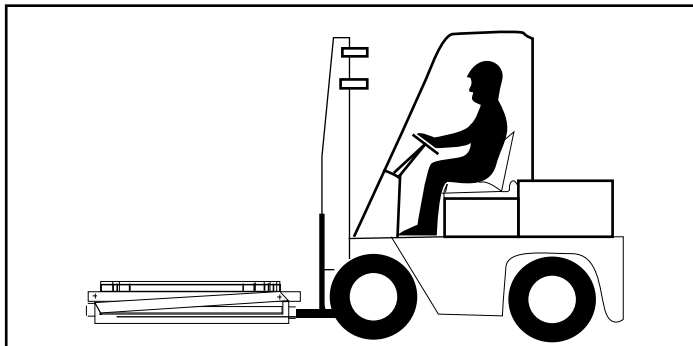


Figure 11- Moving the Positioner

TROUBLESHOOTING

OPERATING ISSUE	CAUSES	RECOMMENDATIONS
The top of the unit rotates away from you.	The frame of the unit may not be level.	Move the unit to a level surface or install the optional adjusting feet.
Excessive "rumble" when operating.	Wear or lack of lubrication to bearings under turntable.	Remove turntable, replace bearings.
Wear on underside of turntable.	Normal condition caused by wear-hardening of metal.	No repair necessary.

MAINTENANCE

Every 90 days

- Apply grease or heavy oil to the pivot shafts.
- Check for loose hardware and signs of excessive wear or binding.
- Check that the unit is located on a firm level surface.
- If the optional adjustable feet are installed, be sure that all four feet are touching the floor and locked in position.

COMPONENT IDENTIFICATION TABLE

DESCRIPTION	QTY.	PART #
AIR MANIFOLD	1	2712085
AIR GAUGE	1	2712084
UPPER & LOWER ROLLERS	6	3030736
CENTER PIVOT BUSHING, OUTER	2	2331027
UPPER HINGE BUSHING	4	2331011
LOWER HINGE BUSHING	2	2331009
CENTER PIVOT BUSHING, INNER	4	2331026
TURNTABLE BUSHING	1	2332314
AIR CHUCK	1	2800021
TURNTABLE BEARINGS	8	2986983

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