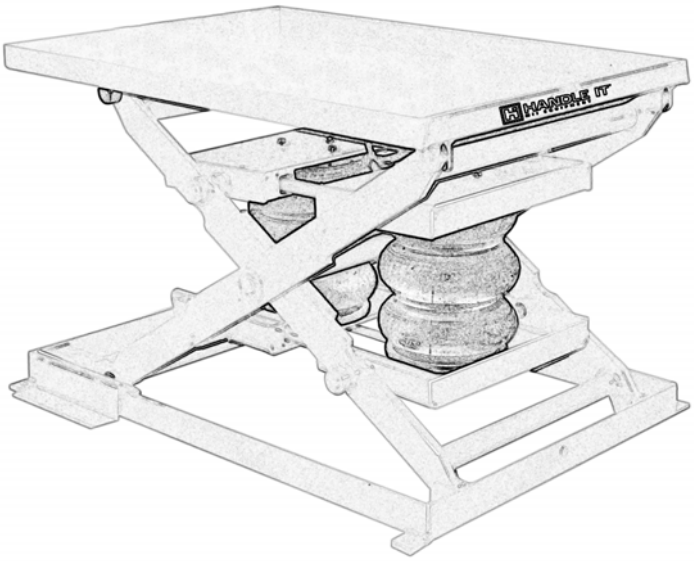
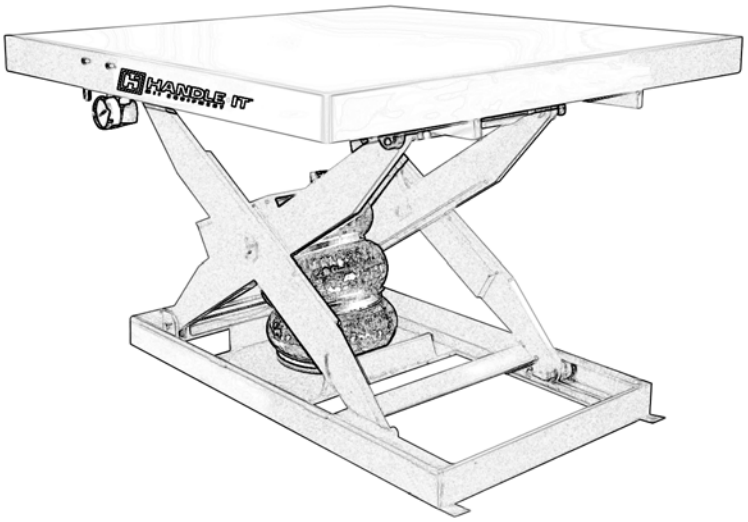
HANDLE·IT™
MII EQUIPMENT

Pneumatic Lift Table Manual





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Installation, Operation, And Service Manual For Handle-It Pneumatic Scissor Lift

Introduction

This manual attempts to provide all of the information necessary for the safe and proper installation, operation and maintenance of Handle-It Scissor Lifts.

The Scissor Lift has a nameplate, which provides the load capacity ratings, serial number, SK number and date of manufacturing. Please refer to these numbers when ordering parts or requesting further information.

Safety

Handle-It Pneumatic Scissor Lifts are very powerful lifts capable of doing large amounts of work. They contain scissor legs that are pneumatically actuated and are capable of causing serious injury or damage if adequate precautions are not taken. Do not install or operate this Scissor Lift without carefully reading this manual.

- Do not perform any repair or work on Scissor Lifts with the platform in raised position.
- Do not perform any repair or maintenance work with the lift in an open position unless the lift is properly safety locked with a maintenance bar.
- All personnel must stand clear of the machine when platform is in motion.
- Do not work under table without securing lift.
- Do not put hands or feet under platform.
- Do not stand, sit or climb on the Scissor Lift.
- Do not use on soft, uneven or unstable surfaces.
- Do not exceed load capacity.
- Do not place load on moving lift.

Handle-It Pneumatic Scissor Lifts can be equipped with safety skirts that allow protecting personnel from possible injuries. To get an access to all pneumatic components and scissor legs the skirts can be strapped up (see photo).

Installation

Inspection

Upon receipt of the Pneumatic Scissor Lift inspect the equipment completely to determine if there is any shipment damage and the Scissor Lift is complete. *Do not use* the Scissor Lift if there appears to be any damage. With the Scissor Lift in down position check the following:

1. Signs of damage especially to the Airstroke Actuator™ and pneumatic components.
2. Check connections and nuts/bolts for tightness
3. Check the base frame for flatness.
4. Inspect for any bent or damaged metal parts.

Installing

1. Make sure that the floor in the installation area is flat, stable and free from dirt and surface defects.
2. Place the Scissor Lift in exact operating position.

> **Caution:** When moving the Pneumatic Scissor Lift it should be picked up by the base frame only. The use of a strap sling is suggested. If the lift has lifting eyebolts, attach a chain spreader and raise the lift from a centre position. Be sure the eyebolts are secured in place with locking nuts prior to lifting.

3. Make sure that the complete base of the lift is in contact with the floor. In order to provide complete contact with the floor, the base maybe shimmed or grouted.
4. Handle-It Lift recommends lagging the lift down with hold down brackets provided.

Pneumatic Section

Pneumatic Scissor lifts are designed for normal factory environments. Consult the factory for unusual applications.

> **Caution:** Only qualified authorized service personnel should perform all pneumatic connections.

1. The lift requires a minimum of 80 PSI, 15 CFM and clean dry air to function correctly.
2. Be certain that supply line is turned off and residual air has been purged from the line.
3. Open the air supply and check the entire circuit for leaks. Repair as needed.

Testing the lift with no load

1. Before testing the Scissor Lift clear the area of any loose material. Be sure the Scissor Lift has no obstruction above it or on any side. Using the controls provided, briefly operate the Scissor Lift (5-10 Sec). If the Scissor Lift begins to rise with a humming sound and functions properly continue to the full upright position.

   Caution: If the Scissor Lift does not rise immediately or there is any operational problem, stop it immediately. Before continuing, refer to the troubleshooting section and correct the problem.

2. After raising the Scissor Lift completely, lower the Scissor Lift. It should move slowly and smoothly. If the Scissor Lift operates properly, raise and lower the Scissor Lift and stop at different levels to get a good perspective on the Scissor Lift's operations and movements.

Operation

Method of operation

Handle-It Pneumatic Scissor Lifts are provided with a control valve that controls the flow of air to the Airstroke Acuator™. As the actuator is pressurized, the scissor legs are forced apart causing the tabletop to rise. As air is released from the bag, the legs collapse and the top is lowered. A factory pre-set flow control ensures a smooth descent at controlled speed.

> **Warning:** *Do not* maintain the control valve in the open position if the Scissor Lift does not move or has reached its up or down limits. This may cause damage to the pneumatic system.

Operating Procedures

In order to operate the Scissor Lift, follow these operating procedures.

1. Read and understand all the instructions before operating.
2. Load the Scissor Lift correctly. Refer to attached nameplate for load capacity information.
   a. Do not load the Scissor Lift while it is moving.
   b. Do not exceed the maximum rated load.
   c. Place load in the center of table.
   d. If the load is unstable or may become unstable, fasten it into position.
3. Operate the lift.
   a. To raise the lift, activate the hand control valve to the "up" position. Hold the valve open until the lift reaches its desired extension. The valve is spring loaded and will return to center (closed) when the lever is released.
   b. To lower the lift, activate the hand control valve to the down position. Hold the valve open until the lift descends to the desired height or the lift reaches its fully lowered position. Release the valve.
4. Wait till the Scissor Lift has come to a complete stop before unloading the Scissor Lift.
5. Stand clear of the Scissor Lift when operating it in order to avoid injury.

Do not stand, sit or climb onto the Scissor Lift.
If the Scissor Lift fails to move or exhibits strange movement or sound, stop immediately.
Do not operate the Scissor Lift until it has been checked and repaired.
Do not load or unload a moving lift

Maintenance

Generally the Handle-It Scissor Lift will require little maintenance. However routine maintenance and inspection will minimise costly repairs or hazardous conditions.

> **Warning:** Never go under, or service a Scissor Lift with a load on the table or the platform in up position. If the pneumatic system requires repairs, shut off and lock out the air supply. Purge the system of any pressure before beginning any repairs.

Maintenance bar

The Handle-It Lift Pneumatic Scissor Lifts are designed to be maintained and serviced in a raised position. Maintenance bar is provided for safety locking the lift in a raised position.

Installation

1. Completely remove any load from the lift platform.
2. Raise the lift to its full height.
3. Engage a maintenance bar.
4. Lower the lift until the rollers come in contact with the maintenance bar.
5. Check that the maintenance bar is securely in place.
6. Release all air pressure from the lift. The maintenance bar is now supporting the lift.

Removal

1. Raise the lift to its full height.
2. Flip out the maintenance bar.
3. Lower the lift.

Routine Inspection And Maintenance

All routine inspection maintenance should be performed on a weekly basis.

1. With the lift unloaded and in its fully raised position, check the pneumatics system for leaks.
2. Check all fittings, lines and components for escaping air.
3. In addition to listening for an audible hissing, perform a soap bubble test.
4. If a leak exist, repair immediately.

    a. Check Airstroke Actuator™ for any signs of wear, chafing, nicks, splits, etc. Replace if necessary.
    b. Check rollers for signs of wear. Replace if damaged. Clear roller track of any debris.
    c. Tighten all visible nuts and bolts.
    d. Bearings on all lifts are permanently lubricated and do not require servicing.

Troubleshooting Maintenance

Pneumatic Scissor Lift moving slowly or not at all

1. Check for obstructions.
2. Check for incoming air supply.
3. Check circuit for air leaks - loose connection, damaged hose, etc. Listen for air escaping.
4. Is lift overloaded? Check capacity.
5. Check hand control valve and regulator for sticking or jamming - repair or replace.