

# INSTRUCTION MANUAL FOR



**LIFT CONTROL**



# CRAIN

**No. 280 H.D. Air Lifter**

## SAFETY FIRST:

The Air Lifter is designed for moving furniture and appliances **ONLY!** Maximum weight for a load to be lifted must be no greater than 800 lbs.

The Air Lifter is for use on flat, level floors **ONLY!** Do not use on inclines, stairs or ramps. Do not ride or stand on the lifter plates or any load being lifted by the plates. Keep all body parts out from underneath the load at all times.

Avoid electric shock! **DO NOT USE** in wet or damp environments. The Air Lifter comes with a 3 prong grounded plug. Do not remove the ground pole from the plug. Use the Air Lifter with appropriate 3 prong power cords and receptacles.

## ASSEMBLY:

When attaching or disconnecting hoses, grab the solid plastic fitting, not the hose itself (Figure 1). Pulling the hose will cause damage. **NEVER** pull the Air Lifter by a hose! The Air Lifter includes the following:

T-Connector - "A"

T-Connector to Lift Control Hose - "B"

Air Plate to T-Connector Hose (2) - "C"

Air Plates (2) - "D"

Plastic Carpet Adaptor Glides (4) - "E"

2 HP Motor and Strap - "F"

Lift Control Valve - "G"

Carrying Bag - not shown

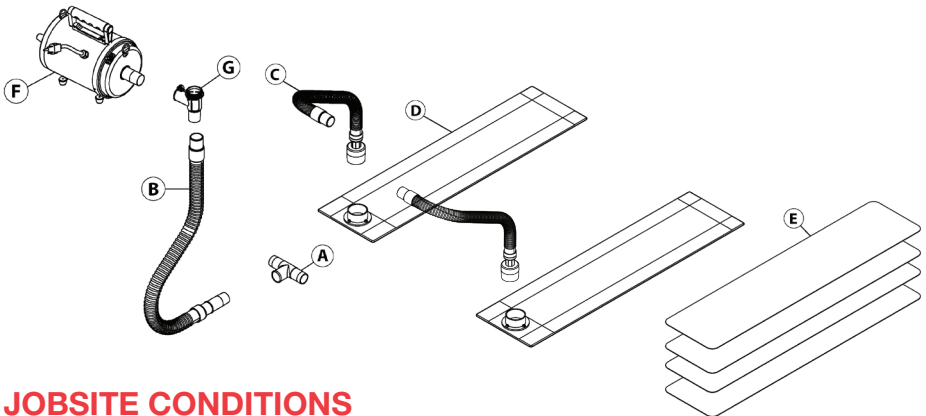


Figure 1



Figure 2

Assemble as shown below. Make sure all fittings are snug. Check that the strap is connected to the motor (Figure 2).



## JOBSITE CONDITIONS

Before moving any appliance or furniture **ALWAYS BEWARE OF THE FOLLOWING:**

Remove any items that may be on top of the load or inside of the appliance.

All electrical, gas or water connections to the appliance must be shut off and removed from the appliance. Check for hoses or wiring attached to the bottom of the appliance. These may not contact the air plates.

Check the load to be moved for any delicate features that may contact the air plates as a result of the lifting action. For appliances, check for delicate drip pans, covers, grills or ornamentation. Remove these prior to lifting or damage may occur.

When starting the blower, the load will rise. Check that there is a minimum of 3 inches clearance between the top of the load and any cabinetry or other items above the load (Figure 3).

If the clearance is less than 3 inches, you can control the height that the load will rise using the lift control valve (Figure 4). Turn the knob on top of the lift control valve counterclockwise until it hits its stop at fully open. When you turn on the motor, the load will rise only a minimal amount. Turn the knob clockwise gradually and only the amount necessary to partially inflate the plates and eventually move the load. Keep hands away from any clearance areas or movement of the load could pinch and cause injury.

### POSITIONING THE AIR PLATES

The gap between the floor and the bottom of the load must be a minimum of 1/4". If the gap is insufficient, see tilting procedure (next page).

Slide the air plates under the load, and check the gap between the top of each plate and the bottom of the load. If the gap is less than 1 1/4", the load may be lifted without any extra blocking to make up the gap. (See Figure 5.)

If the gap is greater than 1 1/4", you may need to place wood blocks on top of the plates for each corner of the load before sliding the plate under (see Figure 6).

When properly positioned, the air plates should be as far apart as possible, but no closer than 1" to any breakable parts of the appliance. For stability, the air plates should project out the backside of the load (see Figure 6).

If a plate gets stuck as you slide it under the load, try rearranging the plates in a "V" Entry Approach under the load (Figure 7), or entering them from the opposite side (Figure 8).

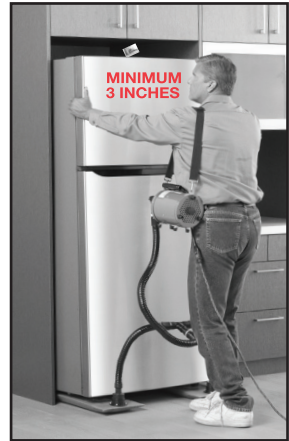


Figure 3



Figure 4

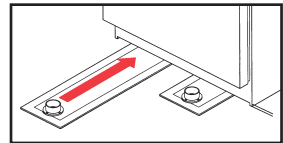


Figure 5

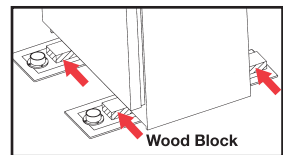


Figure 6

Figure 7  
"V" Entry  
Approach

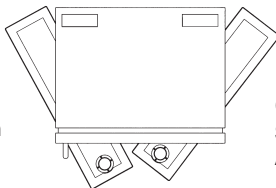
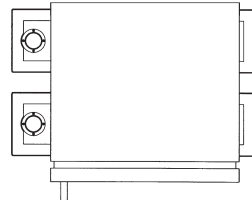


Figure 8  
Opposite  
Side Entry  
Approach



## TILTING PROCEDURE

If the gap between the floor and the bottom of the load is less than  $\frac{1}{4}$ ", check whether the load can be safely tilted back about  $\frac{1}{2}$ ". If so, tilt back and place an about  $\frac{1}{2}$ " shim under the front corners to create the needed gap (see Figure 9).

After the load is moved, it is necessary to replace the shims under the corners, or else you will not be able to remove the air plates when the blower is turned off.

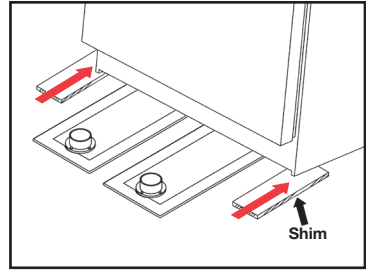


Figure 9

## MOVING THE LOAD

Strap the motor over your shoulder. Make sure the on/off switch on the motor is readily accessible.

Place one hand on the appliance and turn the blower on. The air plates will inflate quickly and forcefully. BE PREPARED!

Move the appliance slowly and steadily to the desired position. DO NOT ROCK or push out of balance. Maintain the load in a level, controlled fashion AT ALL TIMES (see Figures 10 & 11).

Keep hands away from any clearance areas between the load and walls or cabinets, or movement of the load can pinch and cause injury.



Figure 10



Figure 11

## SPECIAL SITUATIONS - LEVELLING THE LOAD

If the floating appliance is lower in the rear than the front, stepping on the front of the inflated air plates near the hose connections will force more air to the rear. It may also be necessary to step on the plates in order to position the load as closely as possible to the back wall (see Figure 12).

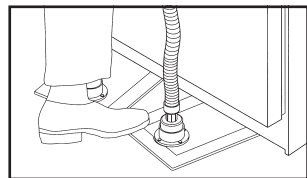


Figure 12

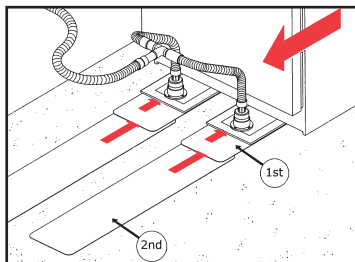
## MOVING APPLIANCES OVER CARPET

When moving a load over carpeted floor or any porous surface, use the plastic carpet adapters. The adapters should also be used when the floor is rough or dirty. This protects the air plates from damage.

If you are **STARTING** on a floor that requires carpet adapters, slide an adapter underneath each air plate before positioning it underneath the load.

Next, take the two extra carpet adapters and tuck them 3-4 inches under the first pair, in the direction you want to move.

Turn on the blower and start moving the load. Once you have moved the load fully over the second pair of carpet adapters, stop and remove the first pair. This process may be repeated until you have reached the desired location (see Figure 13).



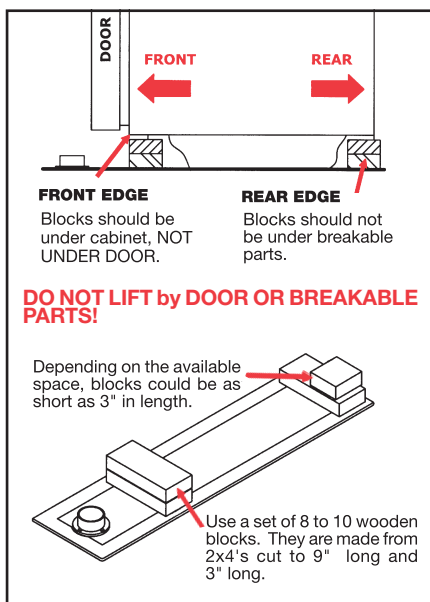
**Figure 13**

## MOVING SUB-ZERO® APPLIANCES

Sub-Zero® Refrigerators and many other appliances may not have adequate frame supports built in to the base. In such cases, certain areas at the front and the rear edges of the cabinet itself may provide the sturdiest support for lifting.

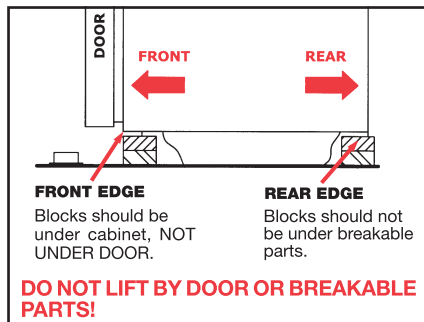
Remove all drip pans, grills and base covers. Determine the best points for lifting. Note especially any delicate hoses or electrical wiring. Any such hoses or wiring must be kept out from under the lifting pressure of the plates.

Once the best points for lifting have been determined, create a custom set of wooden blocks that will support the appliance as necessary. These are to be placed on top of the air plate, and then the air plate can be slid under the appliance (see Figure 14).



**Figure 14**

In the case of a Sub-Zero® refrigerator, for the front edge of the cabinet, the best surface for lifting may be the flat area of the cabinet just behind the door. Be careful however to prevent the wooden blocks from contacting the door, or any other breakable parts, such as the base cover or drip pan supports, as this can cause major damage to the appliance (see Figure 15).



**Figure 15**

At the rear edge, best surface for lifting may be at the back of the cabinet. Do not situate any blocks underneath the back side cover or drip pan supports; or any exposed hoses or wiring (see Figure 15).

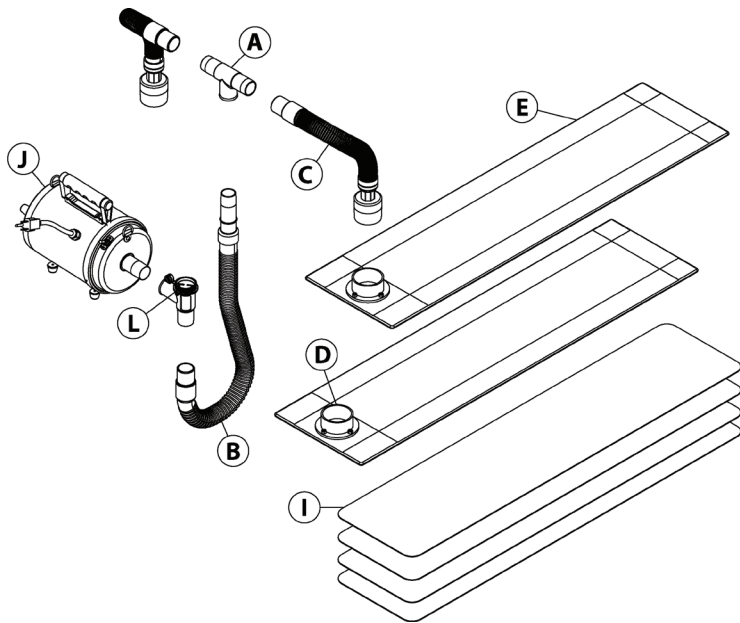
At the rear edge, the available space may be limited. You may need to use a narrower block (no narrower than 3") on top of a wider base block (9") (see Figure 14).

**DANGER:** In most cases, the blocking supports used on top of the air plates should be level (at the same height relative to each other). Otherwise, as the load lifts, it will not be level, and the load may tip over. Check that desired lift points are level.

**DANGER:** Sub-Zero® appliances are very heavy. Move appliances slowly and in a controlled manner at all times.

**DANGER:** Sub-Zero® appliances may be very top-heavy, and may fall over under certain circumstances. Move the appliance slowly, and do not move over ramps or stairs.

**REPLACEMENT PARTS AVAILABLE**



**No. 280 AIR LIFTER**

Order No.	Description	Order No.	Description
1280-A	T-Adapter	1280-I	Plastic Pad Set (4)
1280-B	3' Flexible Hose	1280-J	Blower Complete
1280-C	15" Flexible Hose	1280-K	Brushes (2 - not shown)
1280-D	Replacement Flange	1280-L	Lift Control Valve
1280-E	Air Plate Complete (1 only)	1280-M	Blower Strap with Spring Hooks (not shown)

## **CR·AIN** GUARANTEE

This 280 H.D. Air Lifter is guaranteed to be free of defects in workmanship or quality of materials for a period of ONE YEAR.

Any parts of tools found defective subject to the guarantee will be replaced at no charge. Credit in full or part cannot be extended by the distributor. New tools will not be given as replacements for those pending a warranty adjustment.

All merchandise returned subject to this warranty must be accompanied with same. All merchandise returned must be F.O.B. Milpitas, California, and must be in complete assembled units. No consideration will be given to unassembled parts. All disputes will be up to the consideration of the CR·AIN CUTTER CO., INC. and their decision will be final.

Please fill out and mail this card to validate your CR·AIN guarantee.

NAME

ADDRESS

CITY

STATE

ZIP

**TOOL PURCHASED:  
#280 H.D. Air Lifter**

PURCHASED FROM:

DATE PURCHASED:

PLEASE CHECK:

☐ INDIVIDUAL FLOORING INSTALLER

☐ WORKROOM

☐ FLOORING DEALER

☐ INSTALLATION CONTRACTOR

☐ OTHER

PLACE  
STAMP  
HERE

**Crain Cutter Co., Inc.**  
**1155 Wrigley Way**  
**Milpitas, CA 95035-5426**