

# OWNER'S MANUAL

## MODEL BP-Mobile Lifting Jib

Serial number \_\_\_\_\_

Assembly Instructions.....	2	Labeled Photograph & Parts List .....	5
Operation Instructions .....	2	Product Specifications & Hazard Id Labels.....	6
Routine Maintenance & Safety Checks .....	3-4	Warranty .....	7

### **WARNING**

Improper assembly, use, or maintenance may result in serious personal injury or even death. All persons who might assemble, use, or maintain this product must be familiar with the directions provided and hazards identified in this manual.

- Failure to read and understand the content of this manual before using or servicing the crane is a misuse of the product.
- Fully lower the extension arm and remove the load from the load hook before leaving the crane unattended and before performing any work on the crane.
- DO NOT lift, support, or transport personnel with the crane.
- Inform all persons to clear the area where the crane will be used including the travel path if the crane must be moved from one location to another. Instruct any person(s) assisting the operator to maintain safe separation from extension arm when it is loaded or rotated. Never allow any person to get underneath a load or to contact any part of a suspended load.
- Ensure that all primary and stored potential energy sources are removed (released or disconnected and locked out) or restrained (blocked) in accordance with OSHA guidelines BEFORE working on this equipment.
- All labels affixed to the product must be readable and undamaged.
- Always watch the extension arm and any suspended load carefully while operating and moving the crane.
- ONLY use the crane on compacted, improved surfaces.
- DO NOT use brake fluid or jack oils in the hydraulic system. If oil is needed, use an anti-wear hydraulic oil with a viscosity grade of 150 SUS at 100°F, (ISO 32 cSt @ 40°C), or Dexron transmission fluid.
- Contact the manufacturer for any needed MSDS information.
- DO NOT modify the product IN ANY WAY without the express, written authorization of Vestil. Unauthorized modifications void the warranty.
- Maintenance and repairs must only be performed by designated, authorized personnel.



### WHEN ORDERING REPLACEMENT PARTS:

We take pride in using quality parts on the equipment we manufacture. We are not responsible for equipment problems resulting from the use of unapproved replacement parts.

To order replacement or spare parts for this equipment, contact the factory.

In any communication with the factory please be prepared to provide the machine's serial number, which is indicated on the machine dataplate.

### RECEIVING INSTRUCTIONS

It is possible that this product could incur damage during transit.

Inspect the unit closely when it arrives. *If you see evidence of damage or rough handling to either the packaging or to the product when it is being unloaded, immediately make a note of it on the Bill Of Lading!*

It is important that you remove the product's packaging upon its arrival to ensure that there is no concealed damage or to enable a timely claim with the carrier for freight damage.

Also verify that the product and its specifications are as ordered.

## ASSEMBLY INSTRUCTIONS

Fill the ballast tank (see page 5) with sand or concrete, which will act as a counterweight to balance the crane while lifting a load. Use sand (or sand bags) or concrete as the ballast material.

**Note:** BP-Jib-2 models require no less than 1,850 lbs. of ballast; BP-Jib-4 models require no less than 3,650 lbs. Ballast tank is not water tight.

## OPERATION INSTRUCTIONS - BP-JIB-X

Only qualified, designated crane operators should use this device. The operating instructions in this manual are meant to supplement safe crane and hoist operation practices included in your training program.

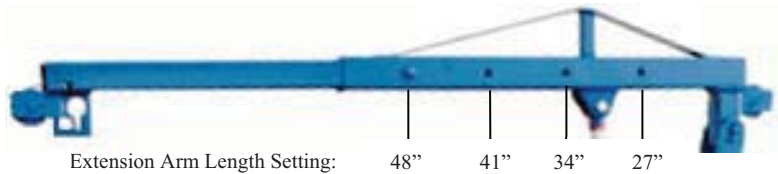
BP-Jib model cantilever cranes are designed for indoor use, and are suitable for most non-classified industrial and commercial locations. Use the crane to lift and transport ONLY stable, evenly-distributed, non-hazardous loads.

### PROPER LOADING:

#### **WARNING**

Do not exceed the load ratings! Injury to personnel or permanent damage to the floor crane or other property could result. Rated load varies according to the length of the extension arm as follows:

Extension Arm Length (inches)	Rated Load by Model	
	BP-Jib-2	BP-Jib-4
27	2,000	4,000
34	1,600	3,200
41	1,300	2,600
48	1,100	2,200



Rated load data also appears on the capacity label adhered to the side of the extension arm. (See "PRODUCT SPECIFICATIONS & HAZARD IDENTIFICATION LABELS" on p. 6). The label indicates the net capacity of the floor crane when handling a static (stable, non-shifting) load that has a horizontal center of gravity directly under the lifting hook. DO NOT apply any side loads (pull load to the side) to a suspended object.

DO NOT move the crane more rapidly than ~3 feet per second while unloaded; DO NOT exceed a rate of ~1½ feet per second while using the crane to transfer a suspended load.

**Note:** All operators must be qualified, i.e. trained, and designated by their employer to use the floor crane. This is essential, because operators must tailor the rigging to each load.

- The floor crane must be on a sound, level and dry surface. Lock the swivel wheels before attempting to pick up a load.
- The load must be rest on a stable, solid surface. Attach the load to the load hook via a rigging method that will position the load's center of gravity in line with, i.e. directly below, the load hook.

**Note:** The addition of rigging and/or any after-market equipment to the floor crane must be added to the weight of the load to determine the net weight of load. The net weight must be less than or equal to the rated load of the crane.

### OPERATION:

#### **WARNING**

To mitigate the possibility of serious personal injuries or death during operation:

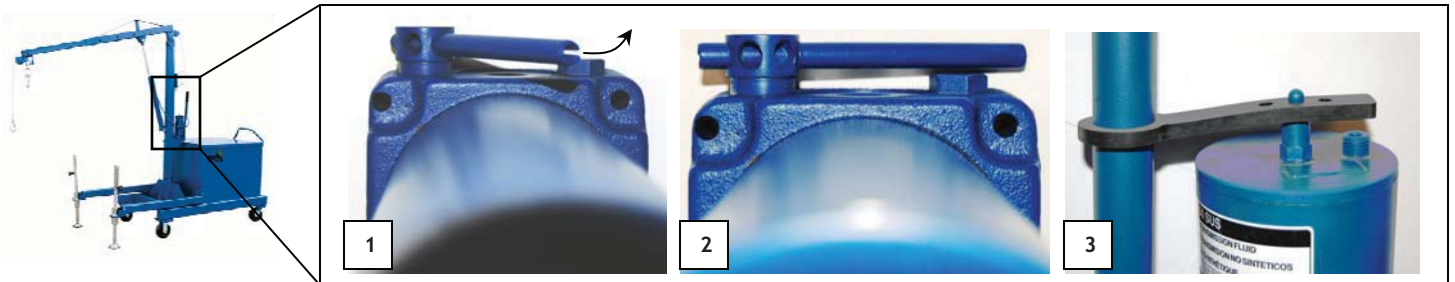
- Keep all personnel clear of the machine when it is in operation. Be certain no part of any person or object is under any part of the lifting boom or the suspended load at any time and particularly before lowering it. Instruct all persons to clear remain at a safe distance during operation.
- Always carefully watch the lifting boom and any load hanging from it when the floor crane is being operated.
- DO NOT use the floor crane if: 1) you observe any damage to the base frame or hear unusual noise during operation; 2) if you observe any warping or deformation of the (horizontal) crane extension arm, the vertical crane support, the load hook or chain, or the auxiliary hook or cable; 3) wheel damage or uneven wearing of one or more wheels; or 4) the pump malfunctions or emits unusual sounds. Notify your supervisor and authorized maintenance personnel if you notice anything out of the ordinary.

### Outriggers and stabilizing jacks

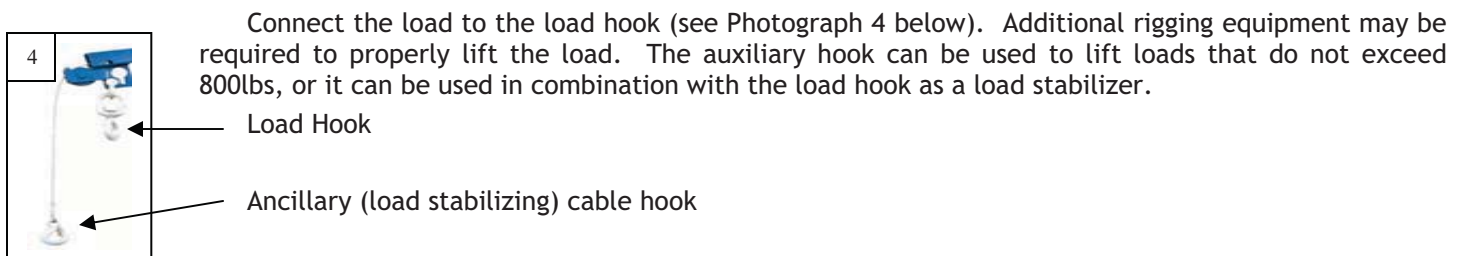
The outriggers rotate freely around clevis pins. After manually positioning the crane in the desired location, pivot the outrigger arms away from each other. Deploy the leveling jacks by rotating the height adjustment handle of each jack in the clockwise direction. (See Item #11 on p. 5).

## Manually Operated Hydraulic Pump

The floor crane is equipped with a hand-operated hydraulic pump, which has a lowering valve lever on one side (see photographs 1 & 2 on next page). With the lowering lever in the closed position (Photo 1; rotated clockwise, which orients it horizontally), you can extend the cylinder that attaches to the lifting boom and thus cause the load hook to elevate by alternately pushing and pulling on the pump's handle. Rotating the lowering lever clockwise (Photo 2) will release the pressure in the cylinder and thereby allow the lifting extension arm and the load hook to lower. The farther the lever is rotated clockwise, the faster the boom will lower. Fully closing the lowering valve, by rotating it counterclockwise, at any time will allow the lifting boom, and therefore the load hook, to hold position indefinitely. The pump handle can be secured to the top of the pump with the rubber handle keeper attached to the pump. To secure the handle in the stored position, press one of the openings in the handle keeper over the knob on the top of the pump's reservoir. (See photo 3).



## Load hook and auxiliary hook connections



## ROUTINE MAINTENANCE & SAFETY CHECKS

### **WARNING**

*Improper maintenance or repair may make the crane unsafe to use, which could result in serious personal injuries or death. DO NOT attempt to repair or maintain the crane UNLESS you are qualified and authorized to do so by your employer.*

- Identify all potential hazards and comply with applicable safety procedures before beginning work.
- Fully lower the lifting boom and unload the crane BEFORE beginning maintenance/repairs.
- Only qualified, authorized maintenance personnel trained to understand mechanical devices and the associated hydraulic components should attempt troubleshooting and repair of this equipment.

### (A) Inspect daily for:

- 1.) Oil leaks
- 2.) Pinched or chafed hoses
- 3.) Damage or structural deformation to the structural members, the cylinder brackets, the lifting boom and load hook, the load hook's safety latch, etc.
- 4.) Unusual noise or binding, or evidence thereof.
- 5.) Proper functioning of the hand pump.

### (B) Inspect monthly for:

- 1.) The oil level. Oil should be within  $\frac{3}{4}$ " of the top of the reservoir's fill hole with the lifting boom in the fully lowered position. See below for the hydraulic oil specification.
- 2.) Worn or damaged hydraulic hose.
- 3.) Integrity of the retaining hardware on all rollers and pins.
- 4.) Looseness, wear, or damage to the casters' bearings, mounting hardware, or surface material.
- 5.) Unusual noises or movement during operation.
- 6.) All the information/safety/warning labels being in place and in good condition.
- 7.) The need to clean off dirt and debris.

(C) Yearly inspection

Change the oil if it darkens, becomes gritty, or turns a milky color (indicating the presence of water). Replace with anti-wear hydraulic oil of viscosity grade 150 SUS at 100°F, (ISO 32 at 40°C). Ex: AW 32 or HO 150 hydraulic oil, or a non-synthetic transmission fluid. You may use a synthetic transmission fluid if you flush the system with the synthetic fluid before filling the reservoir.

### **HYDRAULIC HAND PUMP**

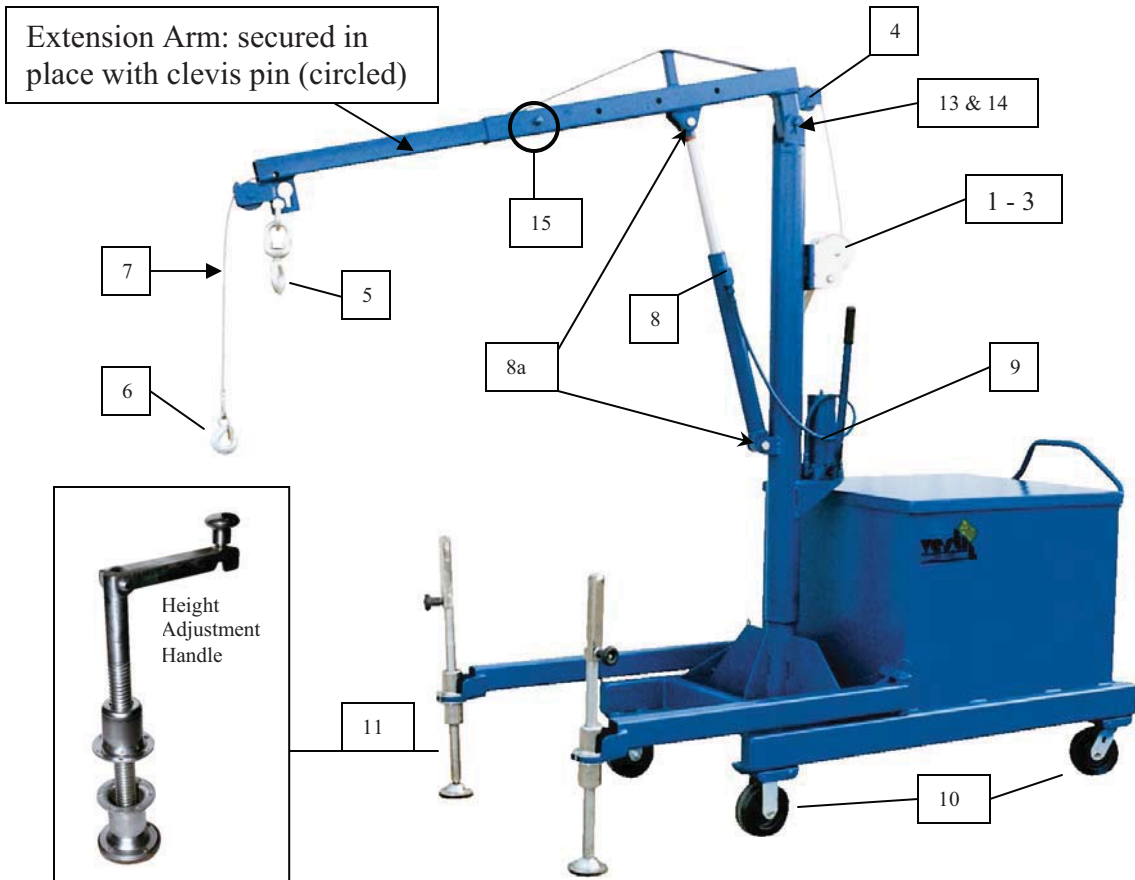
Consult the Operation Instructions page for a description of the hand pump's operation.

**WARNING** Only qualified individuals trained to understand mechanical devices and their associated hydraulic components should attempt troubleshooting and repair of this equipment.

Identify all potential hazards and comply with safety regulations, standards, and procedures applicable in the location where the crane is used before beginning work. Fully lower the lifting boom and ensure that the hydraulic system pressure has been reduced to zero before attempting to work on the hydraulic system.

**NOTICE** Do not use brake fluid or jack oils in the hydraulic system. If oil is needed, use an anti-wear hydraulic oil with a viscosity of 150 SUS at 100°F (ISO 32 @ 40°C), or non-synthetic transmission fluid.

## LABELED PHOTOGRAPH AND PARTS LIST



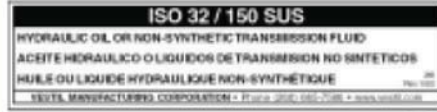
Item Number	Part Number	Description	Quantity
1	21-042-002	Winch	1
2	11103	3/8" – 16 x 3/4" z-plated Bolt	3
3	37026	3/8" – 16 Lock Washer	3
4	06-527-001	Pulley	2
5	08-145-001	2 ton load hook	1
6	N/A	1 ton cable hook	1
7	BP-JIB-2-CBL	3/16in. x 17ft. Cable	1
8	99-021-004	Cylinder: BP-Jib-2	1
	99-021-923	BP-Jib-4	1
8a	N/A	Cylinder Clevis pins: BP-Jib-2	2
		BP-Jib-4	2
9	HP-121-DA-65	Hand Pump	1
	11013	1/4" - 20 x 2-1/2" Z-plated Bolt	2
	37018	1/4" – 20 Nylock Nut	2
10	N/A	Caster	4
		Caster pin	4
11	LJ-17	Leveling Jack	2
	11007	1/4" – 20 x 1-1/4" z-plated Bolt	12
	37018	1/4" – 20 Nylock Nut	12
	33004	1/4" z-plated Flat Washer	12
12	N/A	1/2" x 1" Clevis Pin (pulleys)	2
13	11324	Pivot Arm: 5/8" – 11 x 5-1/2" z-plated Bolt	1
14	37036	5/8" – 11 Nylock Nut	1
15	N/A	Extension Arm Clevis Pin	1

## PRODUCT SPECIFICATIONS & HAZARD IDENTIFICATION LABELS

**NOTE:** Periodically inspect and clean the labels affixed to the product to maintain legibility from a reasonable, safe viewing distance, as recommended by ANSI Z535.4 (section 10.21). Contact the manufacturer for replacement labels.

The product will bear each of the labels in the locations shown below.

CAPACITY AT ARM LENGTH	MODEL BP-JI -2 (POUNDS)	MODEL BP-JIB-4 (POUNDS)
27"	2,000	4,000
34"	1,600	3,200
41"	1,300	2,600
48"	1,100	2,200



**On Pump 206**



**On Pump 260**

**In House Label  
Both Sides**



**586**

**LOCATE OUTRIGGERS  
AND ENGAGE LEVELING  
JACKS  
Before Lifting Load**



**287**