AIR TECHNICAL INDUSTRIES

Making the job easier.

TRUCK MOUNTED PICK UP CRANE

Parts and Service Manual



Air Technical Industries
7501 Clover Avenue
Mentor, Ohio 44060
Phone: 440-951-5191
Fax: 440-953-9237
www.airtechnical.com

MODELS: PU-500, PU-1000

Responsibilities of Owners/Users

Deflection

It is the responsibility of the user/purchaser to advise the manufacturer where deflection may be critical to the application.

Inspection and Maintenance

The crane shall be inspected and maintained in proper working order in accordance with the manufacturer's operating/maintenance manual and safe operating practices.

Only trained personnel and authorized personnel shall be permitted to perform maintenance/service operations on the crane.

Maintenance/service personnel shall have:

- Read and/or have explained and understood, the manufacturer's operating/maintenance manual, and all safety rules and labels, prior to performing any maintenance/service operations on the equipment.
- Full time unlimited access to the manufacturer's operating/maintenance manual.

Removal from Service

Any crane not in safe operating condition such as, but not limited to, excessive leakage, missing rollers, pins, or fasteners, any bent or cracked structural members, cut or frayed electric, hydraulic, or air lines, damaged or malfunctioning controls or safety devices, etc. shall be removed from service until it is repaired to the original manufacturer's standards.

Repairs

All repairs shall be made by qualified personnel in conformance with the manufacturer's instructions.

Operators

Only trained personnel and authorized personnel shall be permitted to operate the crane.

Before Operation

Before using the crane, the operator shall have:

- Read and/or have explained, and understood, the manufacturer's operating instructions and safety rules.
- Inspected the crane for proper operation and condition. Any suspect item shall be carefully examined and a determination made by a qualified person as to whether it constitutes a hazard. All items not in conformance with the manufacturer's specification shall be corrected before further use of the crane.

During Operation

The crane shall only be used in accordance with the manufacturer's operating/maintenance manual.

- Do not overload the crane.
- Ensure that all safety devices are operational and in place.

Modifications or Alterations

Modifications or alterations of equipment shall be made only with written permission from the original manufacturer. These changes shall be in conformance with all applicable provisions of applicable standards and shall be as safe as the equipment was before modification. These changes shall also satisfy all safety recommendations of the original equipment manufacturer for the particular application of the crane.

Parts List for PU-500/1000

(Please see drawing #5 later in this manual)

Bubble	Part #		Description
11	M5PUHOOD0000		Standard 3-Position hood
13	M5PUBOOM0000		Standard 4 ft boom
10	M5PUBASE0000		Standard base plate
75A			Mechanical winch
75B			Electric winch
75C			Battery winch
	M5PUME200000		2 ft mast extension
	M5PUME300000		3 ft mast extension
	M5PUME400000		4 ft mast extension
	M5PUME500000		5 ft mast extension
76	PTPULLY3S		3” dia x 3/4” w x 1/2” bore, steel cable roller w/ bearing

SPECIFICATIONS

CAPACITY

PU-500	500#
PU-1000	1000#

BOOM LENGTH 48”

HOOK HEIGHT

LOW SETTING	8”
MID SETTING	26”
HIGH SETTING	40”

BASE SIZE 12” X 12”

* USE GRADE 8 BOLTS FOR INSTALLATION

INSTALLATION & OPERATION

The unit should be installed over the chassis of the truck and fastened down with the number and size bolt indicated in the base plate. If the chassis is not strong enough, it should be fish plated and reinforced. Depending upon the weight and size of truck that the unit is to be installed on, there should be outriggers required for maximum safety in preventing the truck from being overturned. Also to hold the truck in level position, the unit is built to work with the mast near to vertical position.

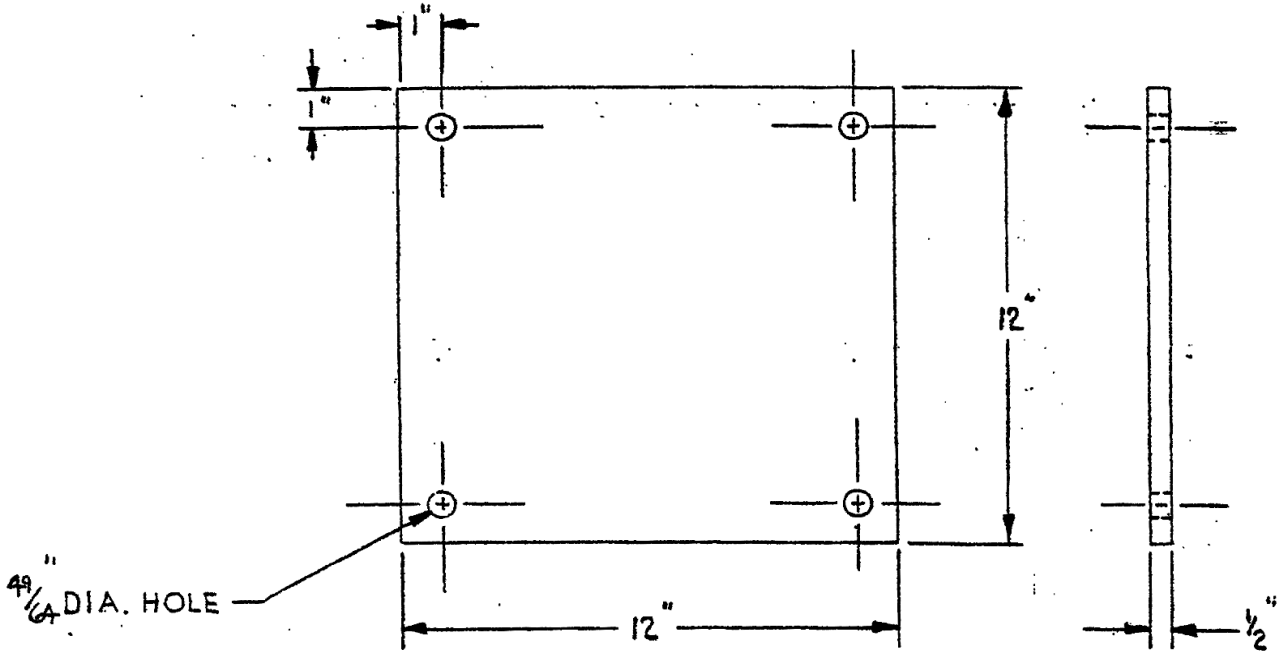
If the unit is battery operated, it is necessary to bring one (1) positive wire at least 00 size to the crane. The system is 12 volts DC and requires a minimum of 150 amps. It is suggested that the battery should be about 250 to 500 amps for good, efficient operation.

Now the crane is ready to operate. Before the unit is put into operation the rotational safety lock should be unlocked.

The environment should be clear of high tension electric wires or personnel to prevent being hit by the boom while swinging.

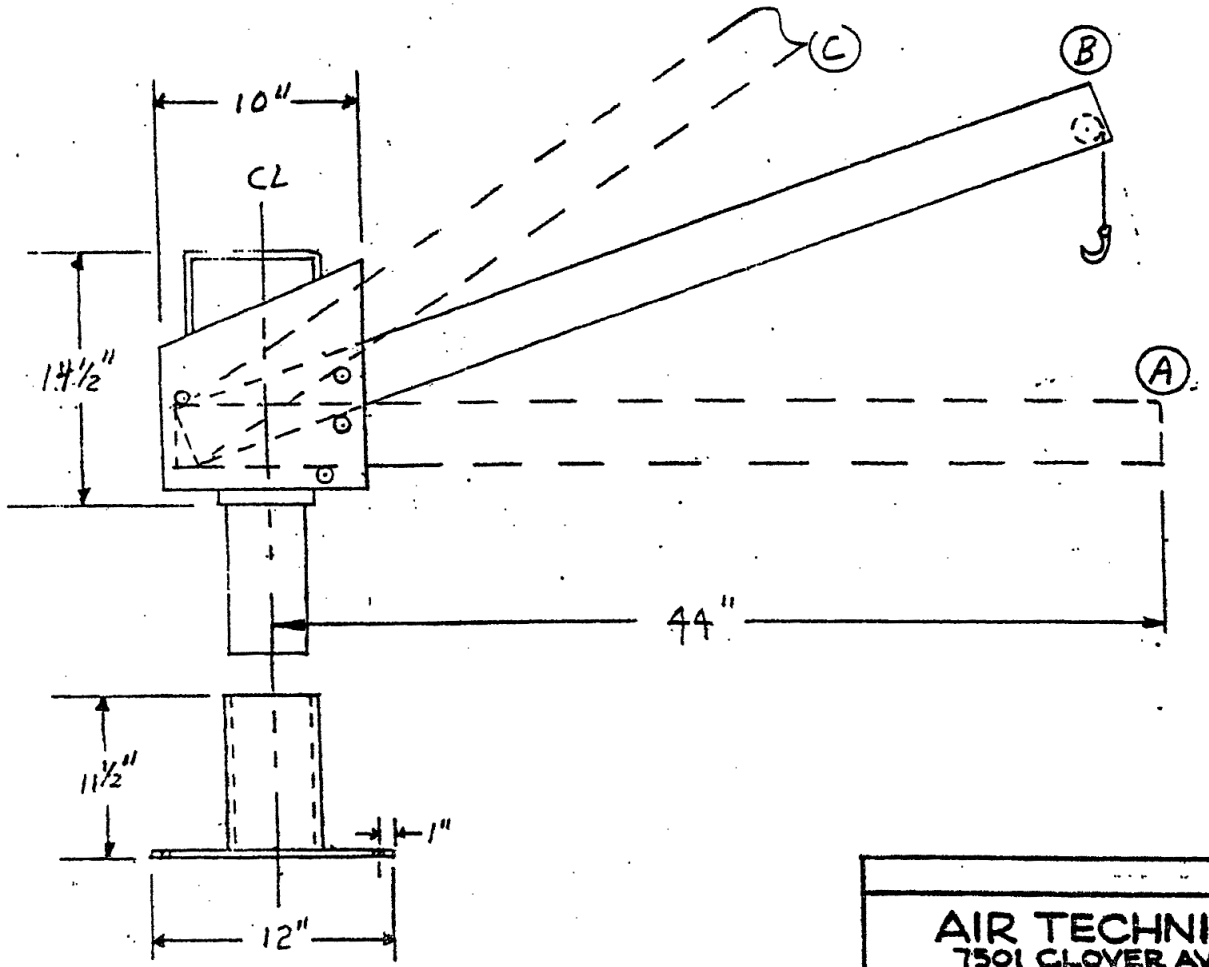
PREVENTATIVE MAINTENANCE

All bolts, nuts, fasteners and cable clamps should be re tightened after several hours of operation for maximum safety and endurance.



AIR TECHNICAL INDUSTRIES
7501 CLOVER AVE · MENTOR OHIO

TITLE PU 500/1000 BASE PLATE			
PART Nº		MATERIAL 1/2" PLATE	
DRAWN MILLER	DATE 3-22-76	SCALE 1/4"	
APPROVED			



HOOK TO FLOOR HT.

A	8"
B	26"
C	40"

AIR TECHNICAL INDUSTRIES
7501 CLOVER AVE · MENTOR OHIO

TITLE PU 500 & 1000

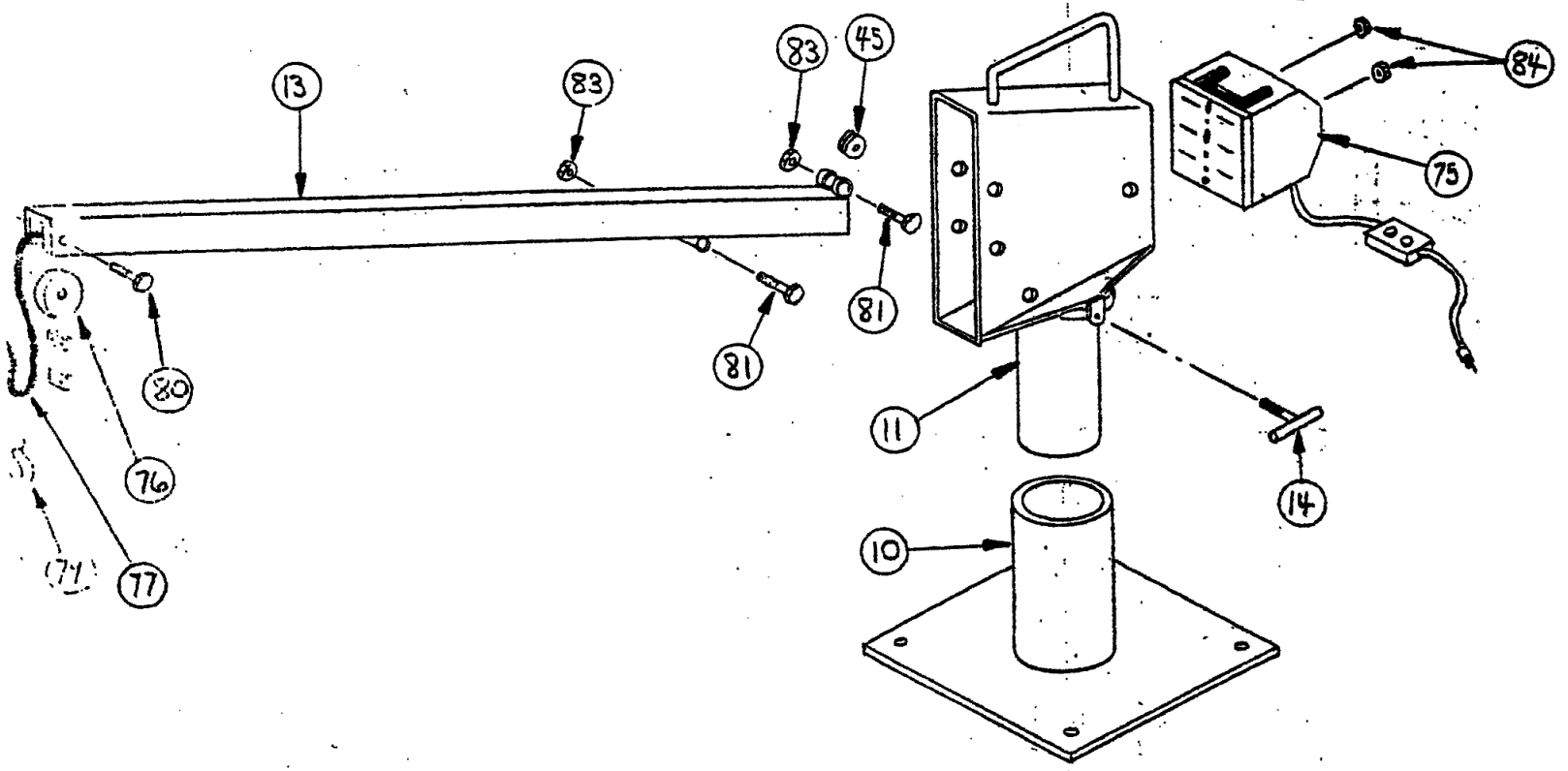
BASIC DIMENSIONS

PART NO

DRAWN RS | DATE | SCALE ⅛"

APPROVED

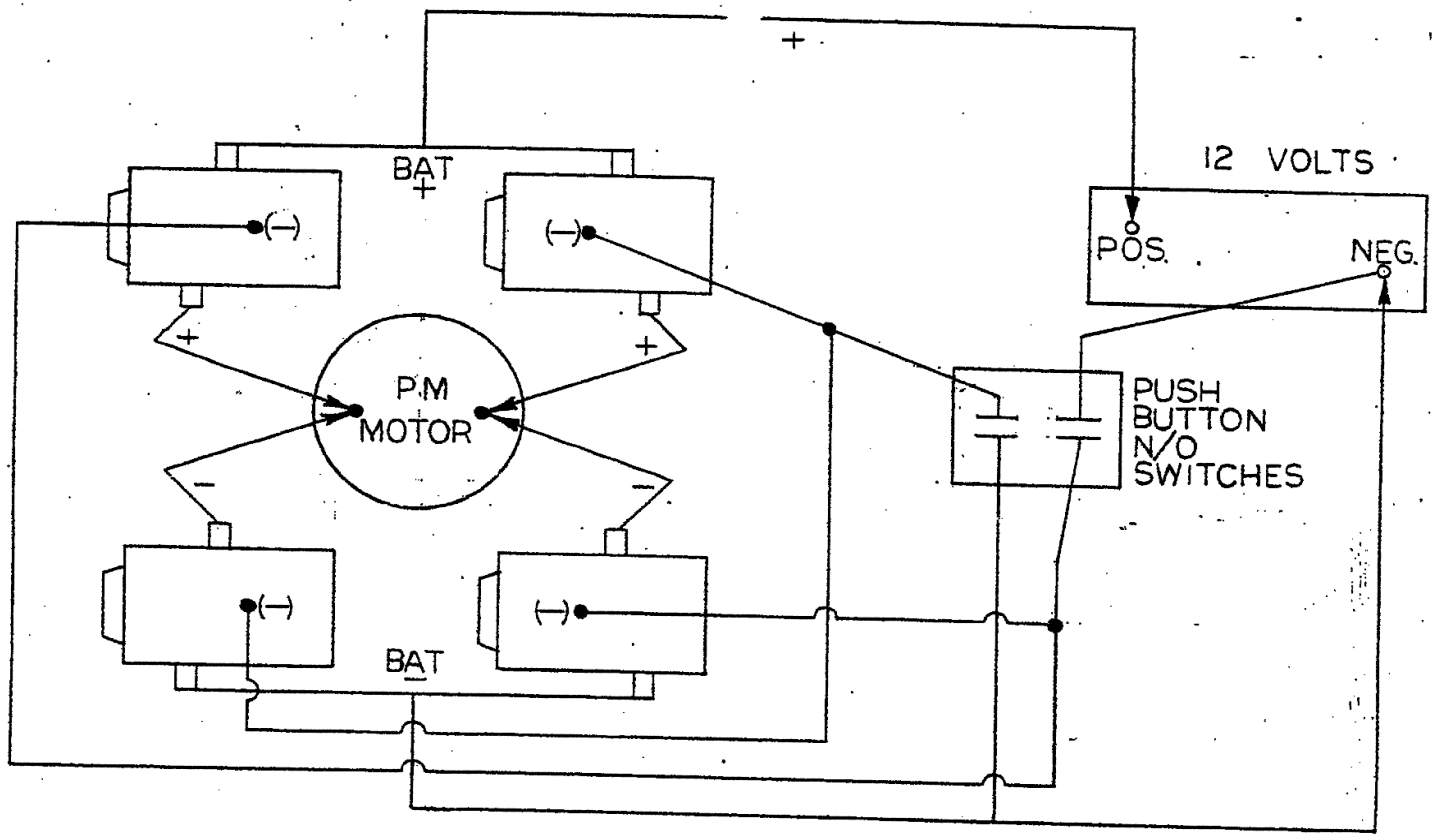
5



AIR TECHNICAL INDUSTRIES
7501 CLOVER AVE · MENTOR OHIO

TITLE PU-1000-E ELECTRIC PICK-UP CRANE

PART NO		MATERIAL
DRAWN MILLER	DATE 3-24-76	SCALE 1/8



AIR TECHNICAL INDUSTRIES
7501 CLOVER AVE. ● MENTOR, OHIO

TITLE WIRING DIAGRAM		
PU1000 PB REMOTE CONTROL		
PART No.	MATERIAL	
DRAWN M.G.S.	DATE 3–1	SCALE
APPROVED		

AIR TECHNICAL INDUSTRIES TERMS OF WARRANTY ACKNOWLEDGEMENT

Air Technical Industries warrants that its products shall be free from defects in material and workmanship under normal and ordinary usage when owned by the original purchaser for a period of twelve months from the date the products are shipped from Air Technical Industries. Hydraulic and electrical components are warranted for 90 days. The customer must cease use of the product pending Air Technical Industries' substantiation of any warranty claim. In the event that a product defect shall occur during the warranty period, Air Technical Industries shall provide replacement parts free of charge. Any unauthorized repairs on said products will render the warranty null and void. Labor to replace defective components is not included in the warranty; nor is any downtime or rental charges. By accepting product delivery, purchaser agrees to the terms of this warranty. Unless otherwise agreed upon in writing, Air Technical Industries makes no other warranties expressed or implied, which extends beyond the description of the goods. Due to their unique design and construction, Air Technical Industries' products are not crated. Contact us for specific crating charges. No product can be returned unless or until a Return Authorization Form is submitted with required signature of the customer. The following schedule of charges will apply for return of standard units:

Less than 2 weeks:	25% restocking fee plus shipping charges
More than 2 weeks – up to 90 days:	40% restocking fee plus shipping charges

No returns will be accepted after 90 days.

RETURN GOODS AUTHORIZATION POLICY

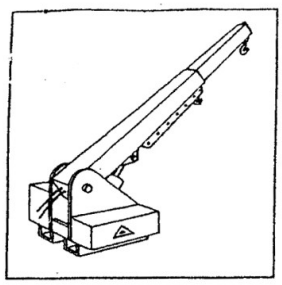
It is Air Technical Industries' policy that any and all eligible returns must have a return goods authorization on file before any return will be accepted or credit will be issued. A return goods authorization form may be obtained by calling our customer service department. Any parts or products must be returned and inspected to validate any warranty or defect claim prior to any credit being issued. Any items returned without authorization on file will not be issued a credit as no claim has been established. Modified or specially coated units are not returnable.

To establish a valid claim the customer must use the following procedure:

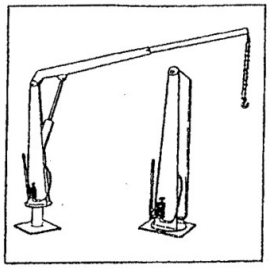
- Call Air Technical Industries customer service department for a Return Goods Authorization form
- Sign and return by fax a copy for Air Technical Industries file.
- Use this form as a packing slip for return shipment
- Return all parts or products for inspection to validate claim.

RETURN AND CREDIT POLICY

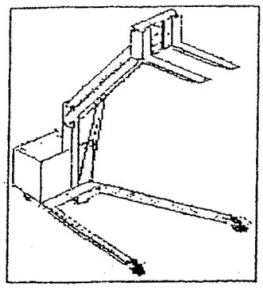
It is Air Technical Industries' policy that any and all returns or warranty claims once established to our satisfaction as a valid claim will be issued a <u>CREDIT</u> on the customer's account. This credit can be used within 1 year from the date of Credit Memo towards the purchase of new products, replacement parts, and/or service. <u>At no time will a cash refund be issued</u>. If a credit is issued under special circumstances, that credit can only be used as specified in a written agreement made between Air Technical Industries and the customer. This agreement must be made at the time the claim is established.



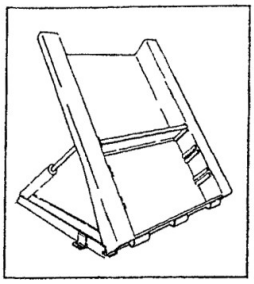
JibMaster



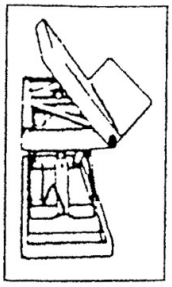
Truck mounted Foldable Crane



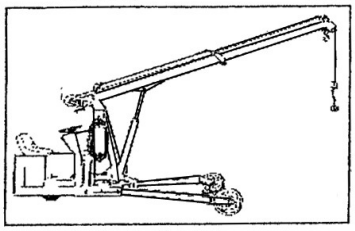
Universal Lift



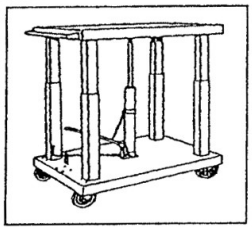
Zero-Low Crate Positioners



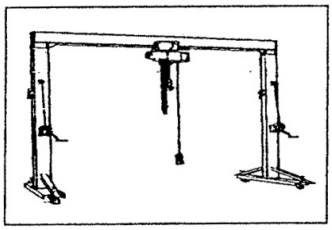
Lift & Tilt Tables



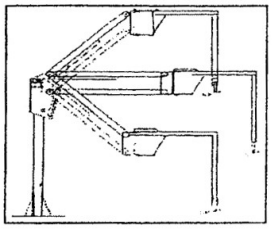
Port-O-Giant



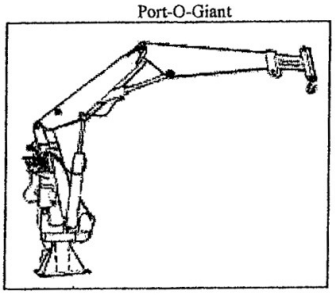
Post Tables



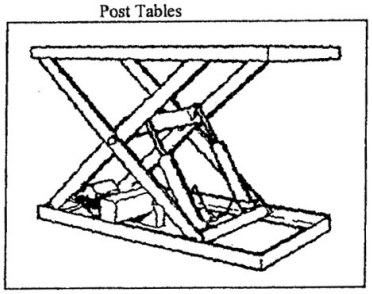
Gantry Cranes



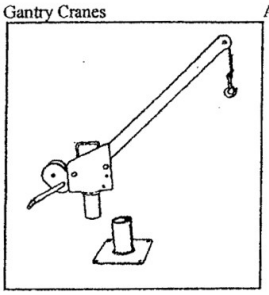
Articularm Manipulator



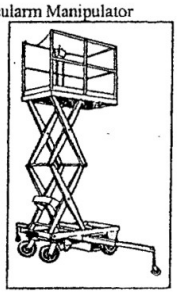
Knuckle Cranes



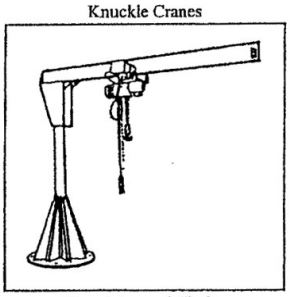
Scissor Lift Tables



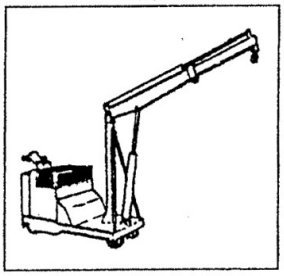
Truck Mounted Pick-Up Crane



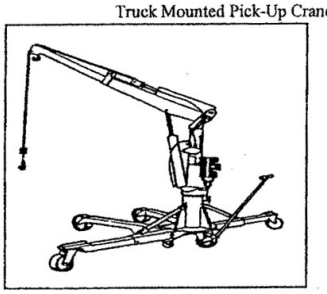
Maintenance Lifts



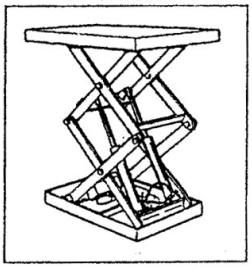
Floor Mounted Jib Cranes



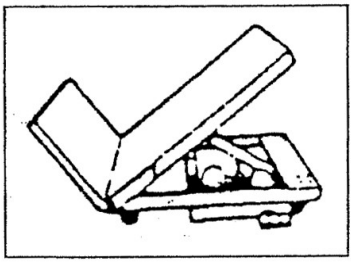
Reversible Boom Crane



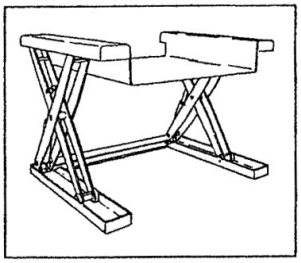
Super Master



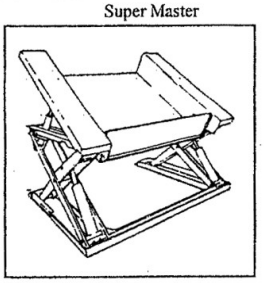
Double Scissor Lift Table



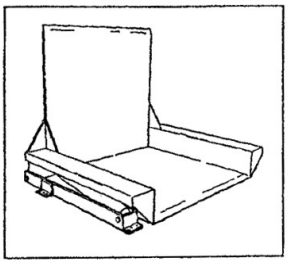
Crate Positioner



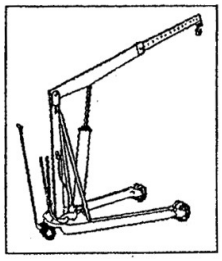
Zero-Low Lift Table



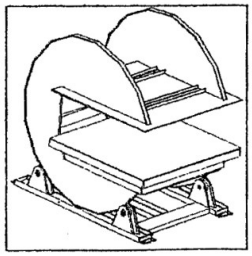
Zero-Low Lift & Tilt



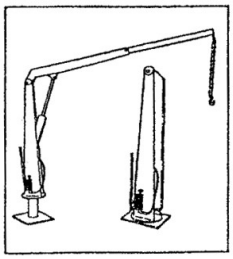
Zero-Low Up-Ender/Positioner



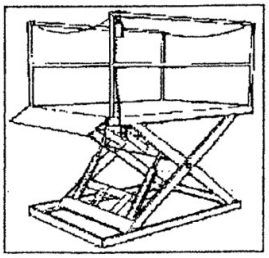
Husky Master



Upender-Inverter



Truck Mounted Foldable Crane



Magic Dock Scissor Lift