AIR TECHNICAL INDUSTRIES

Making the job easier.

V-MASTER FLOOR 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

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.

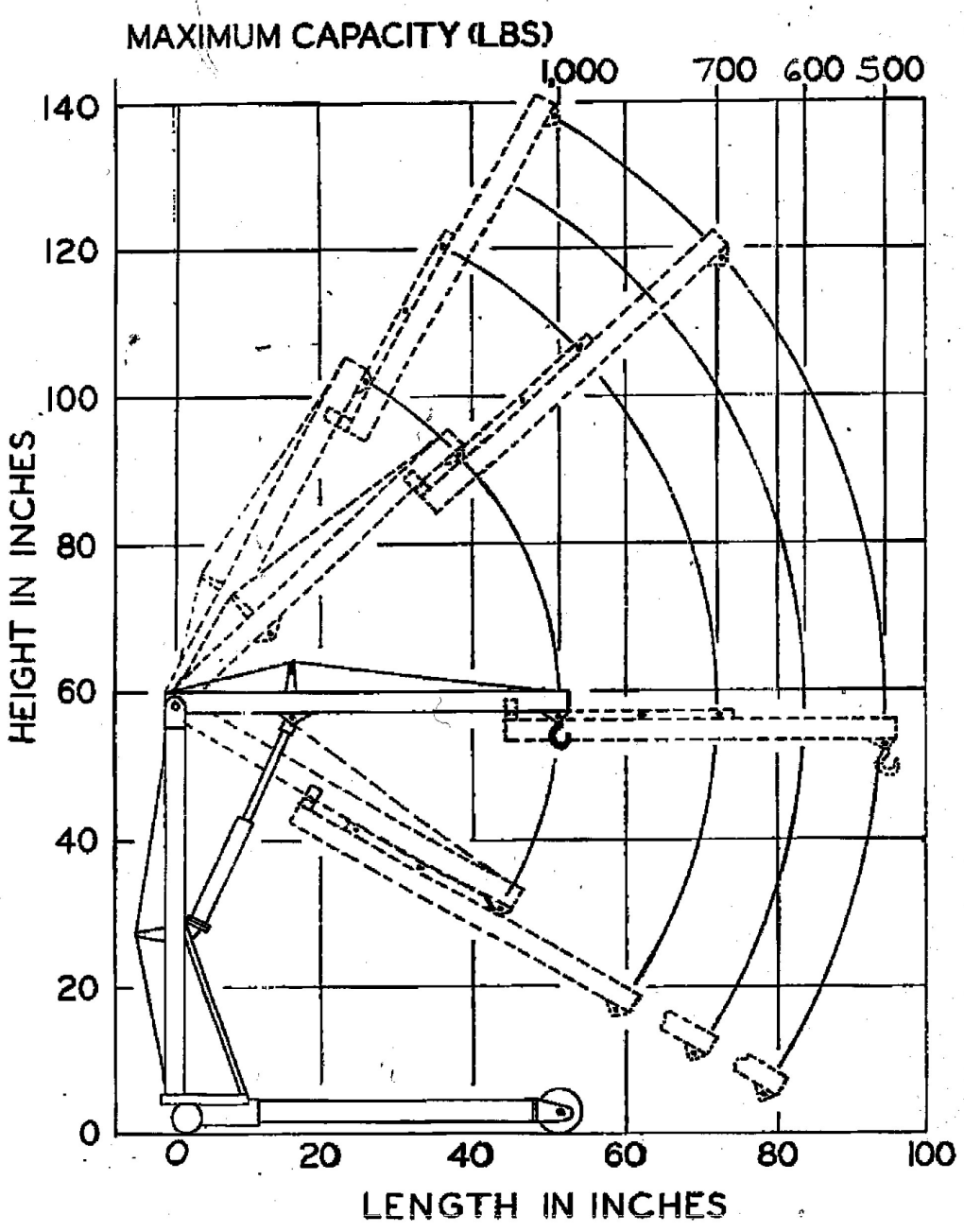
- Do not overload the crane.
- Ensure that all safety devices are operational and in place.

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.

V-MASTER

PORTABLE HYDRAULIC FLOOR CRANE



GENERAL OPERATING INSTRUCTIONS - MAINTENANCE INSTRUCTIONS

FOR YOUR "V"-MASTER PORTABLE HYDRAULIC FLOOR CRANE.

VM-1000 VM-1000-N VM-1000-W

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1) BEFORE OPERATION OF THE V-MASTER, MAKE SURE THAT THE HYDRAULIC RELEASE VALVE IS TIGHTENED SNUGLY. (LOCATED ON LIFTING CYLINDER - PART # 48)

2) TO RAISE THE BOOM, ACTUATE THE HYDRAULIC CYLINDER BY MOVING THE PUMP HANDLE UP AND DOWN.

   TO LOWER THE BOOM, OPEN THE HYDRAULIC RELEASE VALVE (LOCATED ON LIFTING CYLINDER - PART # 48) BY TURNING IN A COUNTER-CLOCKWISE DIRECTION. WHEN THE BOOM IS LOWERED TO THE DESIRED POSITION, CLOSE THE HYDRAULIC RELEASE VALVE (CLOCKWISE) UNTIL SNUG.

3) TO ATTACH THE EXTENSION BOOM (PART # VM-EB-8 WHICH IS AN OPTION AND MAY NOT APPLY TO ALL APPLICATIONS) REMOVE THE LIFTING HOOK FROM THE MAIN BOOM AND INSTALL ON THE EXTENSION BOOM. POSITION THE EXTENSION BOOM UNDER THE MAIN BOOM AND ALIGN THE HOLES AT THE DESIRED BOOM LENGTH AND SECURE THE BOLT AND NUT.

4) ADD THE NECESSARY COUNTERWEIGHTS WHEN THE CRANE IS TO BE LOADED TO FULL CAPACITY WITH THE EXTENSION BOOM.
   NOTE: WHEN THE BOOM IS FULLY EXTENDED, THE ACTUAL CAPACITY SHOULD NOT BE EXCEEDED, AS IT IS REDUCED TO 50% OF ITS RATED CAPACITY.

MAINTENANCE INSTRUCTIONS

1) REGULARLY GREASE WHEEL BEARINGS AND LUBRICATE ALL PIVOTING POINTS. NOTE: THE RIGID WHEEL MUST BE REMOVED IN ORDER TO BE LUBRICATED.

2) CHECK BOLTS AND PIVOTING POINTS. TIGHTEN, IF NECESSARY.

VM-1000 MAINTENANCE INSTRUCTIONS

BASIC UNIT

1) OIL WHEEL AND CASTER BEARINGS EVERY 60 DAYS.

2) CHECK FOR LOOSE NUTS AND BOLTS EVERY 30 DAYS.

3) CLEAN AND PAINT UNIT TO PREVENT RUST AS REQUIRED.

POWER PACK

1) CHARGE AND CHECK WATER LEVEL IN THE BATTERY AS REQUIRED (IF EQUIPPED).

2) CHECK OIL LEVEL IN RESERVOIR EVERY 30 DAYS (ADD OIL IF NEEDED - #10 WT. NON FOAMING HYDRAULIC).

3) CHANGE OIL ONE A YEAR OR MORE FREQUENTLY IF USED IN A DUSTY ENVIRONMENT.

OPERATING INSTRUCTIONS

A) TO RAISE BOOM:

1) SET FLOOR LOCK IF REQUIRED.
2) CLOSE LOWERING VALVE CLOCKWISE ON BOTTOM OF PUMP.
3) PLACE PUMP HANDLE IN SOCKET AND PUMP.

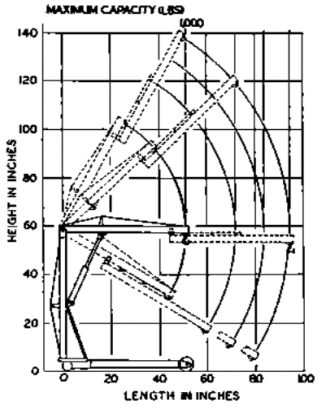
B) TO LOWER BOOM:

1) TURN LOWERING VALVE COUNTER-CLOCKWISE TO OPEN VALVE.

NOTE: BOOM LOWERING SPEED IS CONTROLLED BY THE AMOUNT THE VALVE IS OPENED.

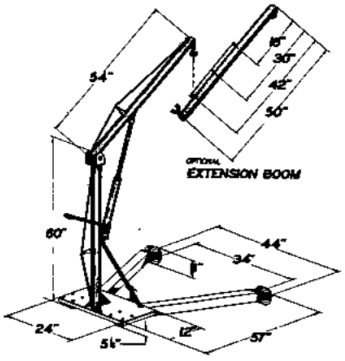
COUNTERWEIGHTS

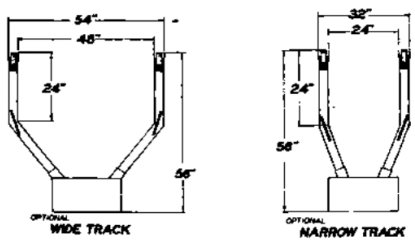
COUNTERWEIGHTS MUST BE ADDED AND FASTENED SECURELY TO THE BASE OF THE V-MASTER WHEN UNIT IS LOADED TO THE MAXIMUM CAPACITY AT THE EXTENSION OF BOOM AS INDICATED IN DIAGRAM.



SPECIFICATIONS

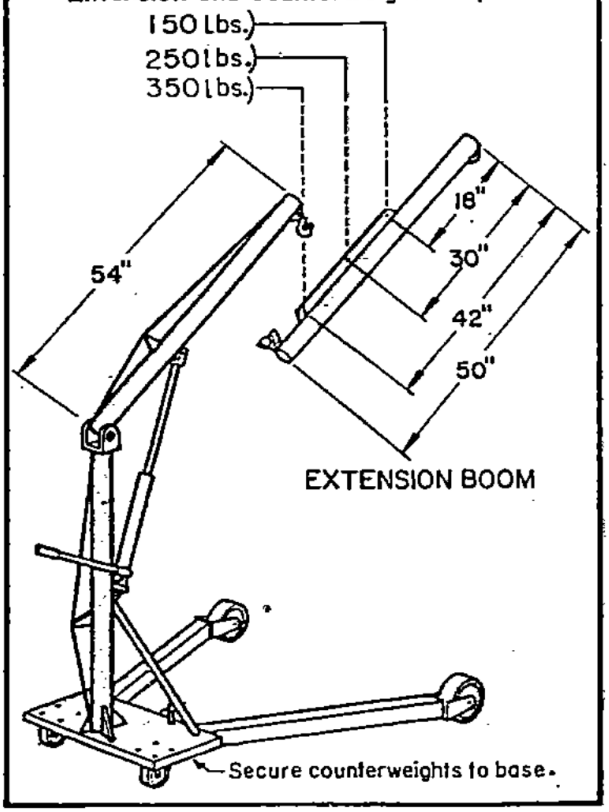
CAPACITY: 1000 lbs.
HYDRAULIC CYLINDER: Heavy duty, 3000 lbs.
MAXIMUM LIFT HEIGHT: 8'
(11' with extension boom)
REACH: 4' (7' with extension boom)
FLOOR-TO-HOOK HEIGHT,
BOOM LOWERED: 32"
MAST HEIGHT: 58"
BOOM LENGTH: 54" (96" with extension boom)
OVERALL WIDTH: 44" (standard wheelbase)
WIDTH INSIDE WHEELBASE: 34"
(standard wheelbase)
OVERALL LENGTH: 57"
SHIPPING WEIGHT: 150 lbs. (approx.)





AN 8' EXTENSION BOOM (VM-EB-8) provides long reach to work over machinery and for many other applications. It has adjustment for boom lengths of 6, 7, or 8'. Counterweights of approximately 100 lb./ft. of boom extension, should be secured to the base of the V-Master when loaded to maximum capacities indicated.

Extension and Counterweights required

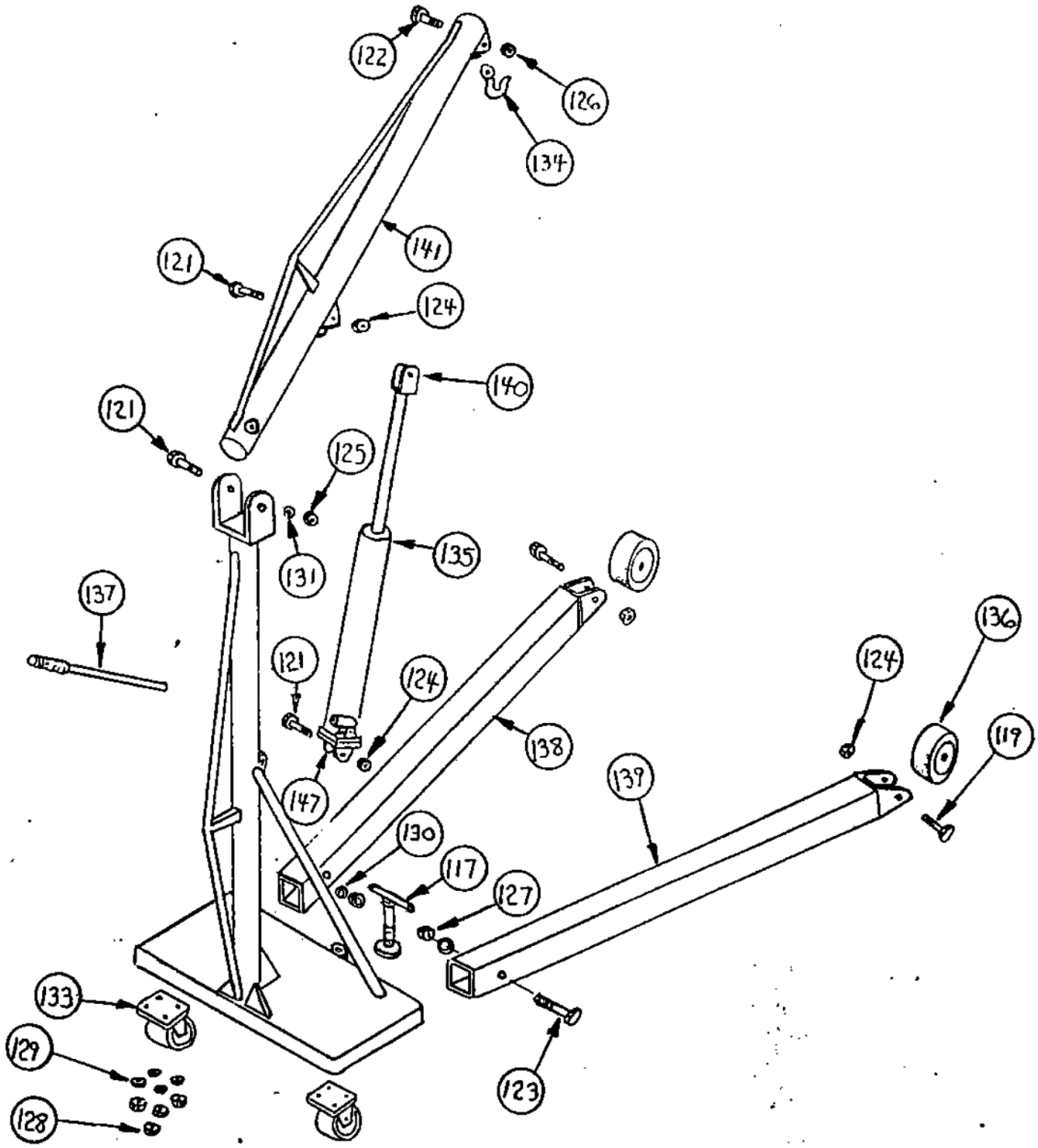


AIR TECHNICAL INDUSTRIES

V-MASTER

Parts List for V-Master

Bubble	Part #	QTY	SBMDL	Description
		1		
117	M5NONSTOCK00	1		Floor lock – consult factory
	M5EBVM08FT00		EB8	8' Extension Boom attachment
	PCHW0800P		C-1	MANUAL WINCH, 800 lbs
	PH02MFCVO	1		1/4” FLOW CONTROL VALVE
	PHFV00000	1		1/4” FAUCET VALVE (LOWERING VALVE)
	DAYTON, MODEL: 3VJ63, PT#-01004		PEC-1	110V ELEC WINCH, 1000# CAPACITY
134	PCEH2000A	1		1-TON EYE HOOK W/ LATCH KIT
133	PWSC04020	2		Rear wheels, 4" DIA X 2" W SWIVEL CASTER W/ PHENOLIC WHEEL
136	PWPHW0602	2		Front wheels, 6" DIA X 2" WIDE PHENOLIC
135	PHHJHF3T0	1		3-TON BOTTLE JACK, 19 1/4" STROKE, CLEVIS BOTTOM (units mfg after 2010)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Warranty and Service

Air Technical Industries warrants that its products shall be free from defects in materials and workmanship under normal and ordinary usage when owned by the original purchaser for a period of twelve months from the date such 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 will provide replacement parts free of charge. Any unauthorized repairs on said products will render the warranty null and void. By accepting product delivery, purchaser agrees to the terms of this warranty. Due to their 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.

AT NO TIME WILL A CASH REFUND BE ISSUED. CREDITS ISSUED MAY ONLY BE APPLIED TOWARDS THE PURCHASE OF NEW EQUIPMENT.

Service is available in many cases through local Dealers and Service Centers in the USA; please contact Air Technical Industries Customer Service for appropriate contacts and arrangements.

For locations outside of the USA, Air Technical Industries Customer Service will work with the customer over the phone, email, and/or facsimile to resolve any usage or equipment problems and make available parts and information to assist the customer's technical staff to effect needed changes. In most situations, issues can be resolved in this manner. In some instances, where major damage has been encountered, the unit will need to be returned to Air Technical Industries for inspection, correction, and re-certification to new condition. Please contact Air Technical Industries Customer Service for details and any charges that may apply.

ATI Customer Service and Parts – (440) 951-5191 (ext. 327)

USE THESE HANDY ORDER BLANKS TODAY

FAX TO **1-440-953-9237**

OR CALL TOLL FREE:

1-888-857-6272

Air Technical Industries
Making the job easier.

7501 CLOVER AVENUE
MENTOR, OH 44060

☐ I am charging $_____ to my:

VISA MasterCard

BILL TO_____

NAME _____

ADDRESS_____

CITY_____ STATE____ ZIP_____

ORDER NO._____ PHONE_____

SHIP TO_____ NAME_____

ADDRESS_____

CARD NO. ☐☐☐☐ ☐☐☐☐ ☐☐☐☐ ☐☐☐☐

☐ Ship open account. We are rated in Dunn & Bradstreet. EXP. DATE ☐☐☐☐

☐ Enclosed is full amount. TOTAL

QTY.	MODEL	DESCRIPTION (please print clearly)	PRICE EACH	TOTAL PRICE

All foreign payments must be in U.S. funds.

AMOUNT FOR GOODS	
SALES TAX (OHIO ONLY)	
POSTAGE OR FREIGHT	
TOTAL AMOUNT OF ORDER	
AMOUNT ENCLOSED	

Ship via_____

All prices are F.O.B. factory unless marked otherwise.

Prices subject to change without notice.

FAX TO ATI: 440-953-9237

I NEED A QUOTE FOR THE FOLLOWING PARTS:

☐ _____	☐ _____	☐ _____
☐ _____	☐ _____	☐ _____
☐ _____	☐ _____	☐ _____
☐	☐	☐

Table Model # _____ Serial Number _____

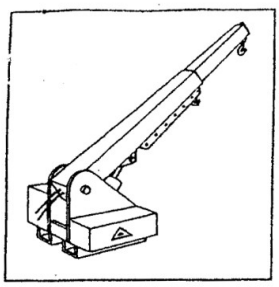
COMPANY_____

NAME_____ TITLE_____

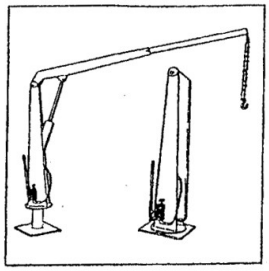
ADDRESS_____

CITY_____ STATE_____ ZIP_____

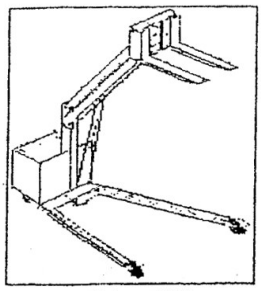
PHONE_____ FAX_____



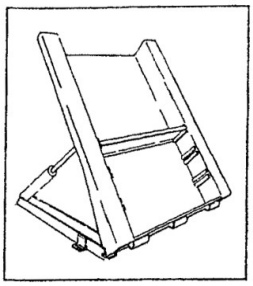
JibMaster



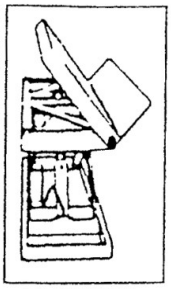
Truck mounted Foldable Crane



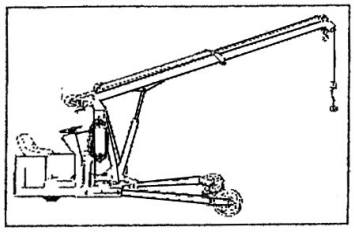
Universal Lift



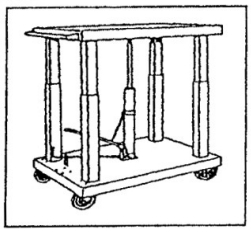
Zero-Low Crate Positioners



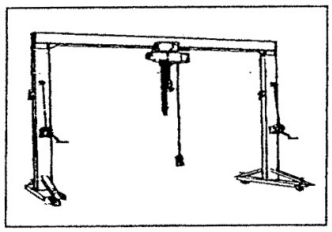
Lift & Tilt Tables



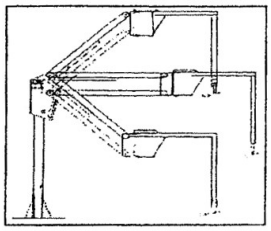
Port-O-Giant



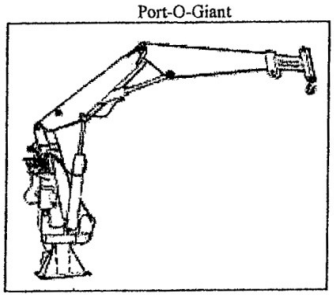
Post Tables



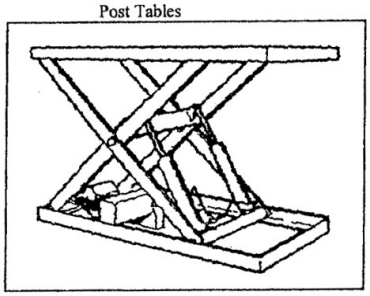
Gantry Cranes



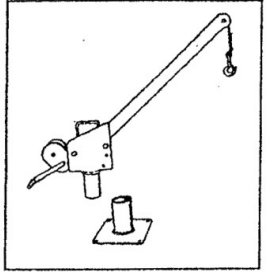
Articularm Manipulator



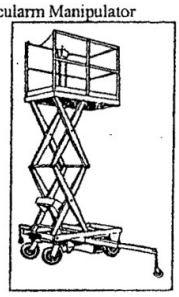
Knuckle Cranes



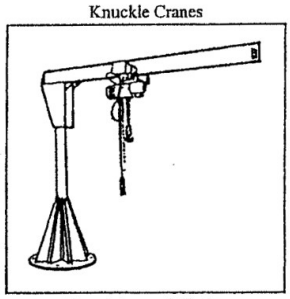
Scissor Lift Tables



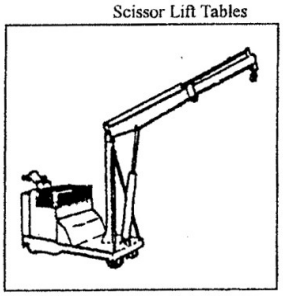
Truck Mounted Pick-Up Crane



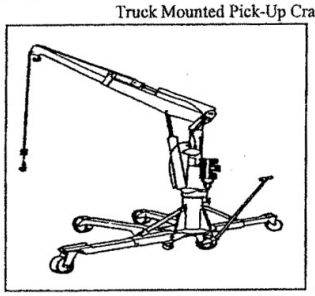
Maintenance Lifts



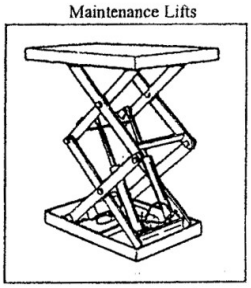
Floor Mounted Jib Cranes



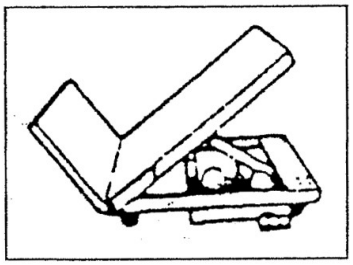
Reversible Boom Crane



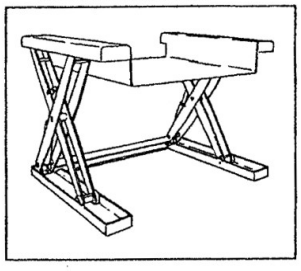
Super Master



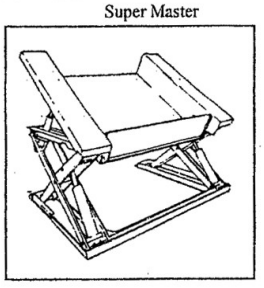
Double Scissor Lift Table



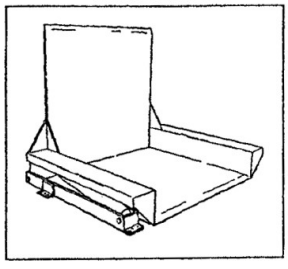
Crate Positioner



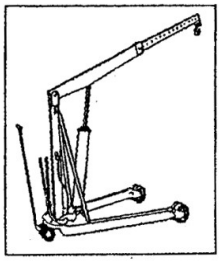
Zero-Low Lift Table



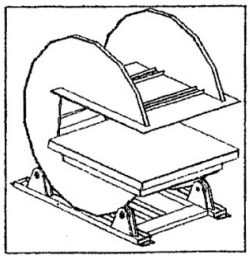
Zero-Low Lift & Tilt



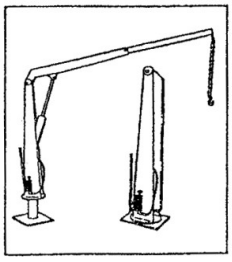
Zero-Low Up-Ender/Positioner



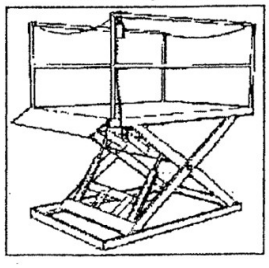
Husky Master



Upender-Inverter



Truck Mounted Foldable Crane



Magic Dock Scissor Lift