# MMS Tote & Platform Lift MMS-20 Service Manual



LIFT PRODUCTS INC PO BOX 349 ELM GROVE WI 53122 262-521-5720 FAX 262-521-5725 Toll Free 877-543-8776

Model: MMS-20

S/N			
Customer			

LIFT PRODUCTS, INC.



# **REGISTRATION INFORMATION**

(To validate your warranty and receive updated service bulletins, please complete this form)

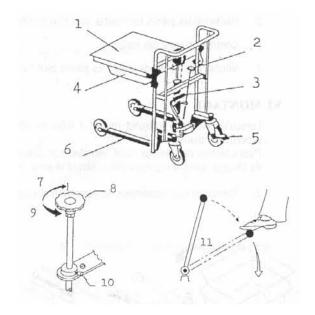
Date Model No	
How did you first hear of Lift Products?	
Magazine Ad (Specify which magazine)	
Recommended by a dealer (Name of Dealer)  Received information in the mail	
Internet	
Other (Please specify)	
What factors caused you to choose Lift Products?	
Describe how and where products are being used?	
Name of person completing this form	
Name of person completing this form	
Title	
Street Address  Given State 77	
City, State, Zip	
Phone Fax No	
Purchased From:	
Name of Dealer	
Street Address City, State, Zip	
Phone NoFax No	

Please fax this form to 262-521-5725.

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#### I NOMENCLATURE OF EACH SECTION



- 1. Table
- 2. Lowering Valve
- 3. Foot Pedal (Pumping Pedal)
- 4. Drawer (Low Profile without Drawer
- 5. Brake
- 6. Chassis
- 7. Lift
- 8. Lowering Valve
- 9. Lower
- 10. Stopper
- 11. Foot Pedal (Pumping Pedal)

#### II ATTENTION

- 1. Use it on a level paved road. If it is driven on a level road, the wheels are not damaged and can be operated lightly.
- 2. Don't overload it beyond the prescribed maximum load.
- 3. When putting a load on the table, don't load it biased, for instance, on one side or at the force end of the table.

#### III OPERATION INSTRUCTIONS

- 1. Raise (Lift) of the table.
  - Tighten the lowering valve (by turning it clockwise), put down the foot pedal and work it. Then the table will lift up.
- 2. Lowering of the table.
  - Loosen the lowering valve (by turning it counter-clockwise), and then the table will lower down.
- 3. Lowering speed of the table can be adjusted according to the degree it is turned.
- 4. Range of lowering speed adjustment.
  - In order to prevent abrupt lowering of the table when loading good, the truck is provided with stopped. When the lowering speed is too quick or too slow, adjust the position of this stopped.

#### IV DAILY CARE

- 1. If the load chain is corroded, it becomes weak and dangerous, so always lubricate it by applying grease.
- 2. Unless oil leaks from the pump. It is not necessary to supply oil for about half a year to one year.
- 3. Usually, when changing oil or replenishing oil, use L-HL68 Hydraulic oil (equivalent to ISO VG68). If temperature is between -15°C -- -5°C, please use L-HL46 Hydraulic oil (equivalent to ISO VG68).

#### V PERIODICAL INSPECTION

- 1. Inspect the chain fixing nut for looseness.
- 2. Check whether the rotating parts are well lubricated or not.
- 3. Inspect the wheels for wear.
- 4. Inspect the screw in each part for looseness.

#### VI HOW TO ASSEMBLE

When assemble "Platform Stacker" do so securely, taking the following step.

When assembling it, two spanners 13 and two spanners 17 are required.

Clamping tools, such as monkey wrenches will do as well.

1. Take the assemblies from the carton box and disassemble them in order of (a), (b), (c), (d), and (e) as follow:

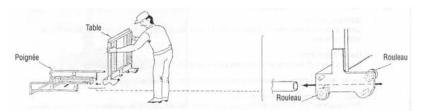


Carton Box (a); Chassis (b); Handle (c); Table (d); Drawer (e); Bolt & Nut

Lay the handle on the floor as shown in the figure below.

2. Put the table into the handle.

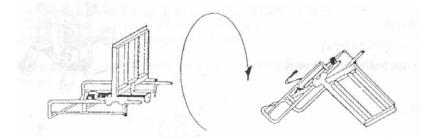
CAUTION! Put it between the two rollers of the table



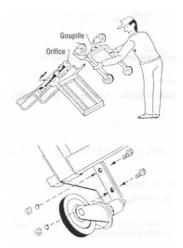
3. Attach the chain. Fasten the unit with the nut tightly.



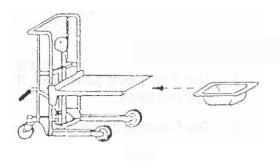
4. After attaching the chain, invert the unit as shown in the Figure below.



5. Fasten the chassis with 4 bolts securely. Put the pin into the hole in the pump.



6. Erect the chassis and put it into the drawer.



#### VII SAFETY INSTRUCTIONS

#### 1. Safety Rules

**WARNING:** Failure to obey the instructions and safety rules in this manual may result in death or serious injury.

#### 1.1 Do Not Operate Unless:

- 1. You learn and practice the principles of safe machine operation contained in this operating manual.
  - Avoid hazardous situations.
  - Always perform a pre-operation inspection.
  - Always perform the function tests prior to use.
  - Inspect the work place.
  - Only use the machine as a material lift.
- 2. You read, understand and obey:
  - Manufacturer's instructions and safety rules.
  - Employer's safety rules and work site regulations.
  - Applicable governmental regulations.

#### 1.2 To Avoid Hazardous Situations

1. Fall Hazard

Do not use a personnel lifting platform or step.

- 2. Tip-Over Hazards
  - Do not overload the winch stacker.
  - Do not raise the load unless the machine is on a firm, level surface.
  - Do not move the machine with a raised load, except for minor positioning.
  - Do not tilt the machine back with a raised load.
  - Do not operate the machine in strong or gusty winds.
  - Prior to use, check the work area for drop-offs, holes, bumps, debris, unstable surfaces or other possible hazardous conditions.
  - Do not subject the machine to horizontal force by raising or lowering a fixed or overhanging load.

- User refers to prEN1005-3 for further guidance.
- If the load exceeds the actual operational capacity, the operator must be assisted by one or more persons.
- The machine can be only used in the light environment of at least 50LUX.

#### 3. Collision Hazards

- Do not lift if the load is not properly centered on the forks.
- Check the work area for overhead obstruction or other possible hazards.
- Do not stand under or allow personnel under the machine when the load is raised.
- Do not lower the load unless the area below is clear of personnel and obstructions.

#### 4. Bodily Injury Hazards

- Do not grasp the cable.
- Keep hands and fingers away from pulleys, the carriage and other potential pinch points.
- Recommended operators to wear safety shoes and gloves.
- Do not put the feet under the forks to avoid any damages when using the machine.

#### 5. Improper Use Hazard

- Never leave a machine unattended with a load.
- Unauthorized personnel may attempt to operate the machine without proper instruction, creating an unsafe situation.

#### 6. Damaged Machine Hazards

- Do not use a damaged or malfunctioning machine.
- Do not use a machine with a worn, frayed, kinked or damaged cable.
- Do not use a machine with less that 4 wraps of cable on the winch drum when the carriage is fully lowered.
- If you see the red mark on the cable, at least 4 wraps are on the winch drum.
- Conduct a thorough pre-operation inspection prior to each use.
- Be sure that all decals are in place and legible.
- Maintain proper lubrication of the winch.

#### 7. Crushing Hazard

• Do not release grasp on the winch handle until the brake is locked.

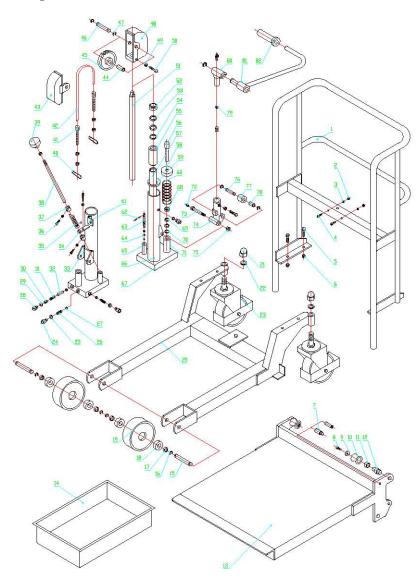
#### 8. Lifting Hazard

• Use proper lifting techniques to load or tip the machine.

#### 9. Other Items

- When pushing the machine on the rough floor the force will be bigger.
- To avoid overloading, the operating force will increase and reach to 400N when reaching to the nominal load.
- Pay attention to the balance of the goods to avoid their turning over when lifting them.
- Do pay attention to avoid the goods turn over towards the back when using the machine on a slope.

# VII Exploded Figure and Parts List



## LIFT TABLE SPARE PARTS LIST FOR MMS-20

NO	DESCRIPTION	QTY	NO	DESCRIPTION	QTY
1	Hand Rack	1	22	Washer	2
2	Nut	2	23	Steering Wheel	2
3	Washer	2	24	Screw	2
4	Nut	2	25	Washer	2
5	Bolt	4	26	Spring	4
6	Nut	4	27	Steel Ball	2
7	Retain Pin	4	28	Bolt	2
8	Bolt	4	29	O-Ring	2
9	Washer	4	30	Screw	1
10	Roller	4	31	Spring	1
11	Bearing	4	32	Pin	1
12	Roller Pin	4	33	Link Plate	1
13	Platform	1	34	Locating Plate	1
14	Drawer	1	35	Spring	1
15	Pin	2	36	Screw	2
16	Retaining Ring	4	37	Locating Ring	2
17	Retaining Ring	4	38	Shaft	1
18	Bearing	4	39	Revolving Ring	1
19	Front Wheel	2	40	Pin	2
20	Chassis	1	41	Chain Bolt	2
21	Nut	2	42	Chain	1

## LIFT TABLE SPARE PARTS LIST FOR MMS-20

NO	DESCRIPTION	QTY	NO	DESCRIPTION	QTY
43	Chain Wheel Cover	1	64	O-Ring	2
44	Bearing	1	65	Pipe	1
45	Chain Wheel	1	66	External Cylinder	1
46	Pin	1	67	Pump Body	1
47	Retaining Ring	2	68	Dustproof Ring	1
48	Chain Wheel Cover	1	69	O-Ring	2
49	Nut	2	70	Retaining Ring	1
50	Bolt	2	71	Pump Bush	1
51	Piston Rod	1	72	Oil Holder	2
52	Dustproof Ring	1	73	Pin	1
53	O-Ring	2	74	Pump Base	1
54	Retaining Ring	1	75	Nut	1
55	Internal Bush	1	76	Pin	1
56	Pump Rod	1	77	Pump Pressure Roll	1
57	Internal Cylinder	1	78	Bearing	1
58	Pump Spring Cover	1	79	Steel Ball	1
59	Sealing Plate	1	80	Bearing Bush	1
60	Pump Spring	1	81	Bar	1
61	Locating Lug	2	82	Rubber Bush	1
62	Cylinder Pin	1			
63	Valve Core	1			