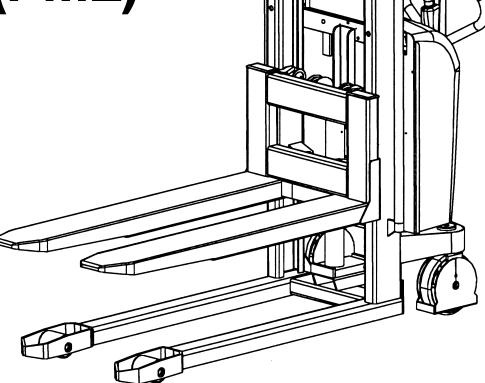


**Maintenance Manual & Operator Instructions** 

U.S. Postal Service Pallet Mobile Lifter (PML)



Model # \_\_\_\_\_

#### SOUTHWORTH PRODUCTS CORP

P.O. Box 1380 • Portland, ME 04104-1380 Telephone: (207) 878-0700 or (800) 743-1000

Fax: (207) 797-4734

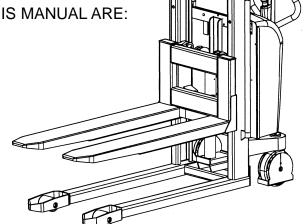
Revised July 2009

The Pallet Mobile Lifter (PML) is manufactured in accordance with ANSI Standard B56.10 and PREN 1757-1.

AMONG THE SUBJECTS DEALT WITH IN THIS MANUAL ARE:

- Proper application
- Physical limitations of the product
- Risks with improper use

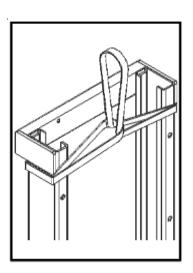
Therefore please read this Owner's Manual carefully!



## Unpacking the Pallet Mobile Lifter (PML)

#### Lifting procedure

When lifting the product, please use a cable sling, with the appropriate lifting device.



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#### Introduction

This manual contains instructions on the safe and proper installation, use, and maintenance of a Pallet Mobile Lifter (PML) unit. Be sure that this manual is available to the people who install, use, or service the unit. Be sure that all personnel read this manual before they install, use, or service the unit.

Pallet Mobile Lifter (PML) units may be used in a wide variety of industrial settings. The instructions in this manual are not necessarily all-inclusive, as Southworth cannot anticipate all conceivable or unique situations. In the interest of safety, please read this whole manual carefully. Please understand the material in this manual before you install, use, or service the Pallet Mobile Lifter (PML). If you have any questions about any of the instructions in this manual, please contact Southworth Products Corp.

Southworth's product warranty is shown on the back cover of this manual. This instruction manual is not intended to be or to create any other warranty, express or implied, including any implied warranty of merchantability or fitness for a particular purpose, all of which are hereby expressly excluded. As set forth more specifically in the prod-

uct warranty, Southworth's obligation under that warranty is limited to the repair or replacement of defective components, which shall be the buyer's sole remedy, and Southworth shall not be liable for any loss, injury, or damage to persons or property, nor for any direct, indirect, or consequential damage of any kind resulting from the Pallet Mobile Lifter (PML).

The Pallet Mobile Lifter (PML) is manufactured in accordance with ANSI Standard B56.10 and PREN 1757-1.

Among the subjects dealt with in this owner's manual are:

- Proper application
- Physical limitations of the product
- Risks with improper use

Please read this Owner's Manual carefully!

#### Safety

The safety of all persons installing, using, servicing, or working near the Pallet Mobile Lifter (PML) is of paramount concern to Southworth. The PML unit is a powerful machine with moving parts, and is capable of causing personal injury if proper precautions are not taken.

Therefore, throughout this manual, Southworth has identified certain hazards which may occur in the use of the Pallet Mobile Lifter (PML), and provided appropriate instructions or precautions which should be taken to avoid these hazards. In some cases, Southworth has also pointed out the consequences which may occur if Southworth's instructions or precautions are not followed. Southworth uses the following system of identifying the severity of the hazards associated with its products:

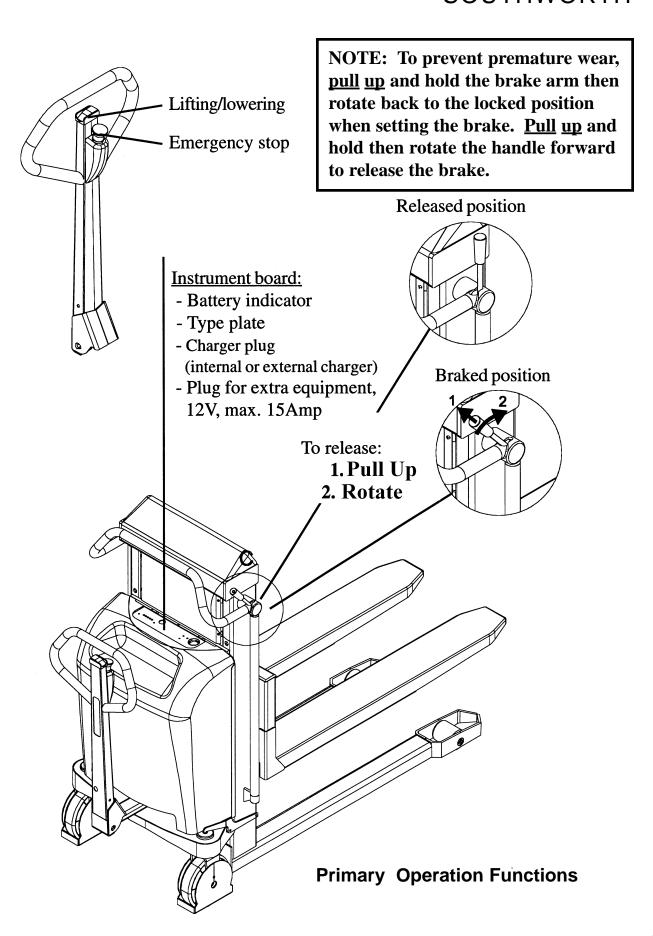
DANGER – Immediate hazard which will result in severe personal injury or death.

WARNING – Hazard or unsafe practice which could result in severe personal injury or death.

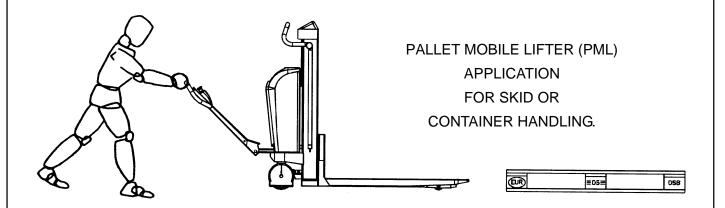
CAUTION – Hazard or unsafe practice which could result in minor personal injury or property damage.

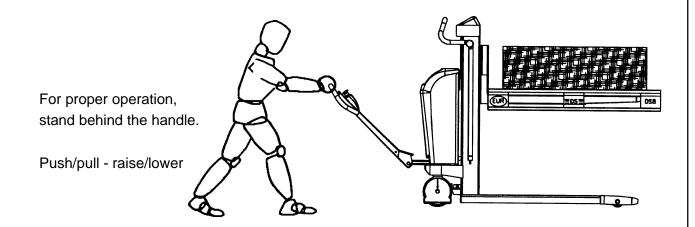
Please read and follow this instruction manual, including all safety instructions and precautions, carefully and completely.

#### SOUTHWORTH<sup>-</sup>



#### How to operate the Pallet Mobile Lifter (PML)





#### Optimum safety

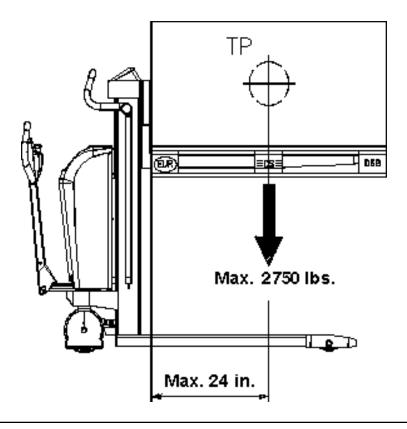
#### Avoid overloads

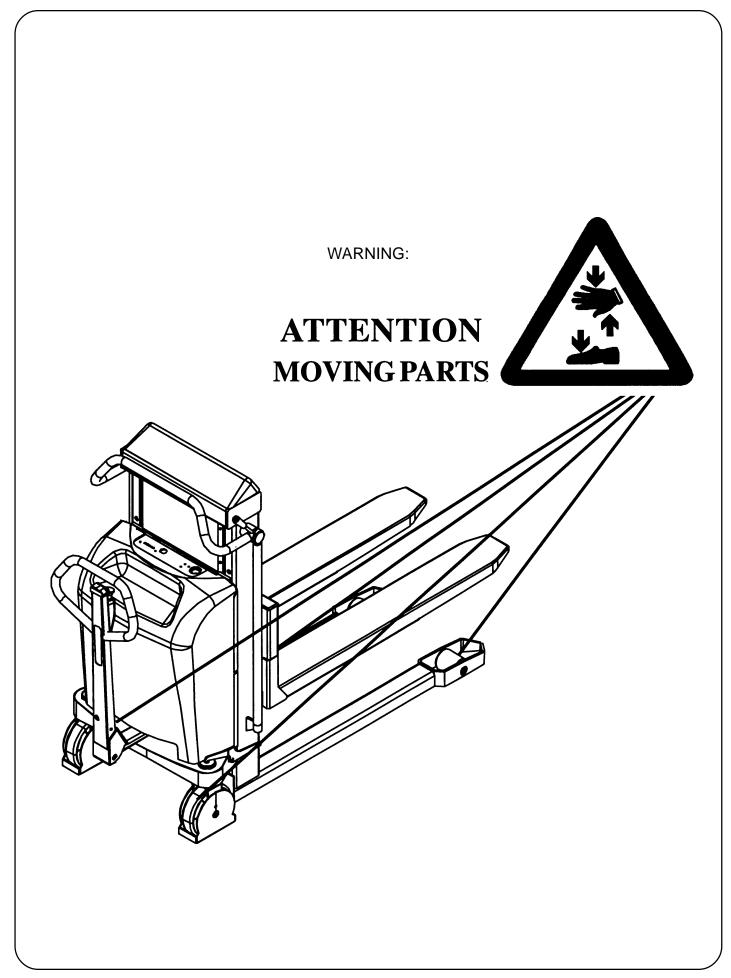
The maximum load must not be exceeded. Remember, that the Pallet Mobile Lifter (PML) is designed for evenly distributed load, - goods on pallets etc. If the forks are point-loaded on one side there is a risk of bending.

#### **Avoid offset loads**

The load must be distributed **evenly** on pallets or similar, - with a maximum distance of 24 in. between centre of gravity and mast front. A greater distance reduces the level of safety and increases the risk of toppling. Goods on pallets, etc. must be properly secured so that they can not fall off during transport, when the truck is lifted, or when the truck must remain elevated for a time.

Note: Ensure that loading and unloading of the Transpositioner is done in even layers. Loading or unloading a load on one side may cause the load to tip over and you may be injured. This can also damage the unit.



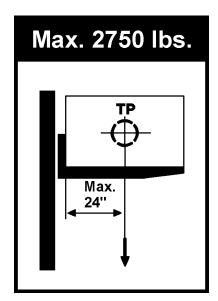




#### **Operator Precautions**

#### CAUTION:

- Never walk under a raised load!
- Before lowering the forks, make certain that no foreign objects can hinder the free lowering of the forks.
- The Pallet Mobile Lifter (PML) is designed for use on even and level floor.
- During transport the forks shall be raised as little as possible.
- Transport with raised forks should be made over the shortest possible distances and at low speed.
- Check that the chains lift equally. They shall be equally tight when the forks are loaded.
- Chains and chain bolts must not be damaged. Chains that have become permanently stretched (max. 2% of original length) must be replaced.

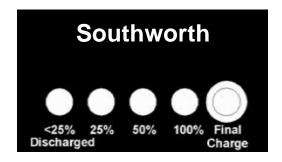


#### **Capacity Label**

The mast lifting capacity and the corresponding center of gravity distance are given by the label on the side of the mast.

Maximum lifting capacity is pre-set on the relief valve of the product.

#### Preparing to charge the battery



#### **BATTERY INDICATOR**

The battery indicator shows the battery charge in %. The most accurate reading can be obtained, when the battery has not been used for 5-10 minutes.

**Red:** Battery capacity: below 25% Discharged

Do not use the product, as the battery can be permanently

damaged.

**Green:** Battery capacity: 25% - 100%

The product is ready for use and need not be charged.

**Yellow:** Charging lamp: Is lit during the last part of the charging.

Final charge: Indicates full charge

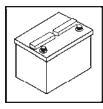
## PRECAUTIONS FOR GROUNDING AND AC POWER CORD CONNECTION

Charger should be grounded or have an insulated case to reduce risk of electric shock. If the charger is equipped with an electric cord having an equipment-grounding conductor and grounding plug (three prong plug). The plug must be plugged into an outlet that is properly installed and grounded in accordance with all local codes and ordinances.

DANGER – Never alter the AC cord or plug provided.

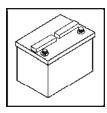
If it will not fit the outlet, have the proper outlet installed by a qualified electrician. Improper connection can result in a risk of an electric shock.

#### SOUTHWORTH



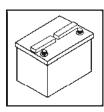
#### **BATTERY CHARGING**

Charging must be performed with the charger that is provided and prewired into the machine. During charging, the temperature in the battery must not exceed 120° F. Charging simultaneously with truck operation is not recommended. Plug the charger into a 115V outlet. Charge until the battery gauge indicator lights show fully charged (approximately 6-8 hours).



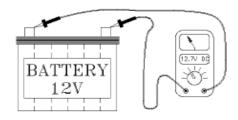
#### WARNINGS AND INFORMATION ON BATTERY

Avoid the use of open flame batteries. At temperatures around the freezing point, battery capacity is reduced by 30%. The battery terminals, connections and wiring should be clean and free of corrosion. When cleaning any of these components wear a face shield or other suitable protective eyewear. Read, understand and follow all battery and battery charger manufacturer's specific precautions while working with and/or charging batteries. The battery used in this machine is an AGM (Absorbed Glass Mat) type and allows safe trouble-free performance. There is no need to add electrolyte. No special handling is required and it is classified as non-hazardous.



#### **BATTERY MAINTENANCE:**

To measure the voltage, use a voltmeter (DC) on the battery poles. The truck must not have been in use for the previous 30 minutes.



Approx. 12.7 V Fully charged Approx. 12.2 V 1/2 charged Approx. 12.0 V 1/4 charged Approx. 11.6 V Discharged

WARNING: IF THESE INSTRUCTIONS ARE NOT CLEAR OR IF THERE ARE ANY QUESTIONS, PLEASE CONTACT SOUTHWORTH PRODUCTS CORP

Telephone 1-800-743-1000 or Fax 207-797-4734 E-mail: service@SouthworthProducts.com



#### **FUSES - replacement**

There are four fuses in the electrical circuit.



80 Amp fuse in the main supply from battery



5 Amp fuse in the control current circuit

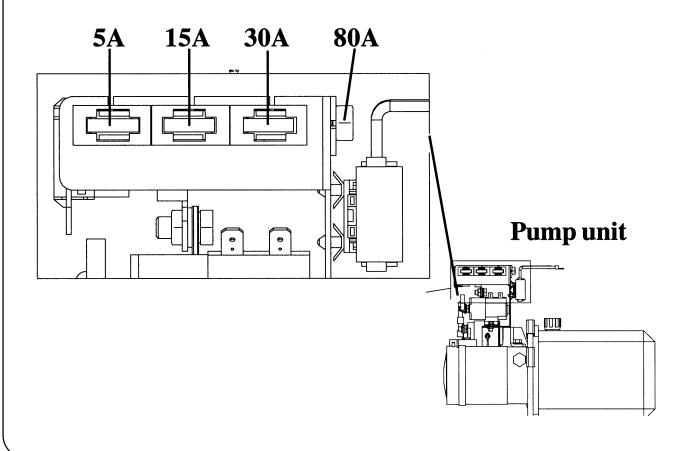


15 Amp fuse (plug for extra equipment on the instrument board)



30 Amp fuse for built-in charger

Do not insert a larger fuse; The fuse acts as a protector for the pump motor.





#### WIRING CONNECTIONS

Many operational problems are caused by poor connections in the electrical circuit. Make sure that the connections are clean and tight. Check connections regularly for damage at insulating caps or bad connections at plugs, etc. Keep all screw/nut connections tight.

Regular inspection and the replacement of worn or defective parts in good time will prolong the life of the Pallet Mobile Lifter (PML).

"Prevention is better than repair", therefore ensure:

- Correct usage
- · Regular cleaning
- Periodic safety inspection
- Regular adjustment



#### Lubrication and hydraulic oil

Under normal operation conditions the Pallet Mobile Lifter (PML) requires no lubrication.

All ball bearings are sealed and lubricated for life, and moving parts have self-lubricating bearings or are treated with molybdenum disulphide grease. The hydraulic system is filled with hydraulic oil of viscosity (class ISO VG 32.) non detergent 10W motor oil. An additive is added to the oil: Wynn's Hydraulic Systems Concentrate.

The concentrate reduces friction and wear and protects against corrosion. Pre-mixed hydraulic oil with additive is available from the dealer. The oil is suitable for use in the temperature range 14° to 120° F. A thinner oil is recommended for temperatures lower than 14° F (if necessary, contact your dealer).

#### **Tools Required for Maintenance:**

Metric Allen Wrench Set
 Metric Socket Set/Wrench Set
 Philips Screw Driver



#### Oil change

#### Draining the oil:

- 1. Bring the unloaded forks down to the lowest position.
- 2. Most of the oil can be drained by loosening the hydraulic hose union and briefly activating the hydraulic pump with the switch.
- 3. The remaining oil can be drained from the oil tank by taking off the twelve clips on the pump and removing the tank.

#### Oil filling:

- 4. Fill oil through the filling hole on the tank.
- 5. Oil quantity: 1.5 quarts. Use 10W non-detergent motor oil.
- 6. Fill oil to the bottom arrow (LogiLift) on the tank.
- 7. Refit the filling cap and bleed the system.

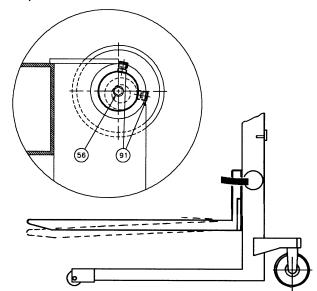
#### Fork adjustment



Two rollers on the fork bracket are mounted on eccentric pins so that they can be adjusted. The adjustable rollers are at the top.

#### Adjustment:

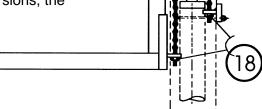
- 1. Loosen screws pos. 91 (key width 3/16 of an inch).
- 2. Pin (pos. 56) can now be turned to give the necessary adjustment (key width 5/16 of an inch).
- 3. To ensure the same load on all rollers, adjustment must be made on both sides.



#### Adjustment of lifting chain



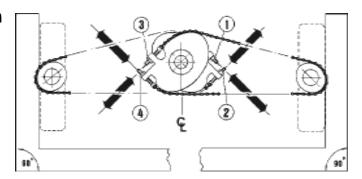
The chains shall be adjusted, so that they lift equally and be equally tight. The nuts (pos. 18) are to be adjusted (nut M12, key width 3/4 of an inch). On straddle versions, the chains are to keep the forks clear of the floor.



#### Adjustment of steering wheel chain



- Set the handle in its middle position.
- Adjust nuts (1, 2, 3 and 4) and bring the wheels into parallel.



#### Bleeding the hydraulic system

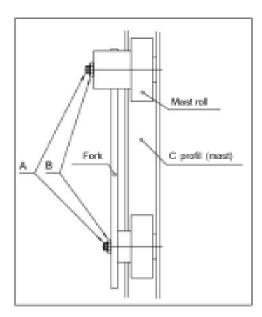
With a load of 110 - 220 lbs, the forks must be raised and lowered to top and bottom position 2-3 times.

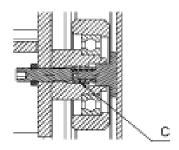
#### Adjustment of side play

(in the mast rolls of the right side of the fork bracket)



- 1. Screw (A) is loosened counter-clockwise, until resistance disappears.
- 2. Turn the screw clockwise, until resistance appears. The following 1.5 to 2.5 turns of the screw will be a tightening of the spring (C).
- 3. When a larger resistance appears, make 0.25 turn counter-clockwise, and the counter nut (B) will be tightened.
- 4. Pump the fork to its top position, and when lowering it has to slide to the bottom. If this is not the case, loosen screw A, make c. 0.5 turn counter-clockwise and repeat point 4.





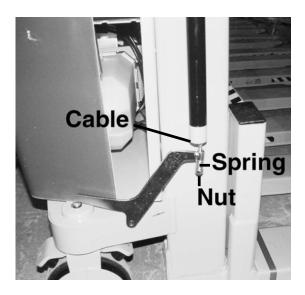
#### **Brake Adjustment**

(Cable and Arm adjust should be looked at first.)



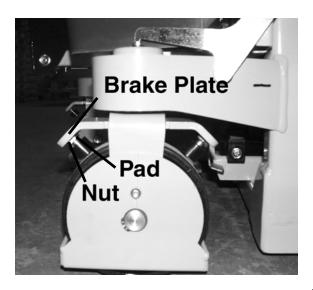
#### Cable and Arm:

- 1. Tighten the adjusting nut at the bottom of the cable and spring to increase the tension on the brake and handle.
  - -- Loosen the nut to decrease tension.



#### **Pad Adjustment:**

- 1. Loosen the nut (under side of the brake plate) on the brake pad shaft.
- 2. Turn the brake pad counter clockwise untilt he pad is approximately 1/8" away from the caster.
- 3. Tighten the nut against brake plate to hold in place.
  - -- Both pads should be adjusted equally.



#### Cleaning

When cleaning the Pallet Mobile Lifter (PML), do not direct the water jet onto bearings and seals, as the grease will be washed out and the life of the equipment shortened.

#### Cleaning of the plastic screen (polycarbonate)

The screen is to be washed with slightly warm water adding a neutral cleaning material, and afterwards washed with clean water.

Use a soft sponge, and a soft cotton cloth. Do not use paper towels.

Never use sharp objects or solvent cleaners when cleaning.

#### **Troubleshooting**

When the Pallet Mobile Lifter (PML) is used every day, adjustments and the replacement of worn parts might be necessary.

If a fault appears during daily operation of the Pallet Mobile Lifter (PML), first check:

> Oil supply Electricity supply Condition of leads and fuses

If faults cannot be traced to these sources, contact Southworth Products Corp's Service Department at 800-743-1000.

#### **Ordering Replacement Parts**

Southworth Product Corp has carefully chosen the components in your unit to be the best available for the purpose. Replacement parts should be identical to the original equipment. Southworth will not be responsible for equipment failures resulting from the use of incorrect replacement parts or from unauthorized modifications to the machine.

Southworth can supply all replacement parts for your Southworth PML Transpositioner. Key parts are identified in this manual.

With your order, please include the model number and the serial number of the unit. You will find these numbers on the name plate.

To order replacement parts, please call the Parts Department at (207) 878-0700. Parts are shipped subject to the following terms:

F.O.B. factory.

Returns only with the approval of our Parts Department. Restocking charges may apply.

Payment net 30 days (except parts covered by warranty).

Freight collect (except parts covered by warranty).

Parts replaced under warranty are on a "charge-credit" basis. We will invoice you when we ship the replacement part, then credit you when you return the assumed substandard part.

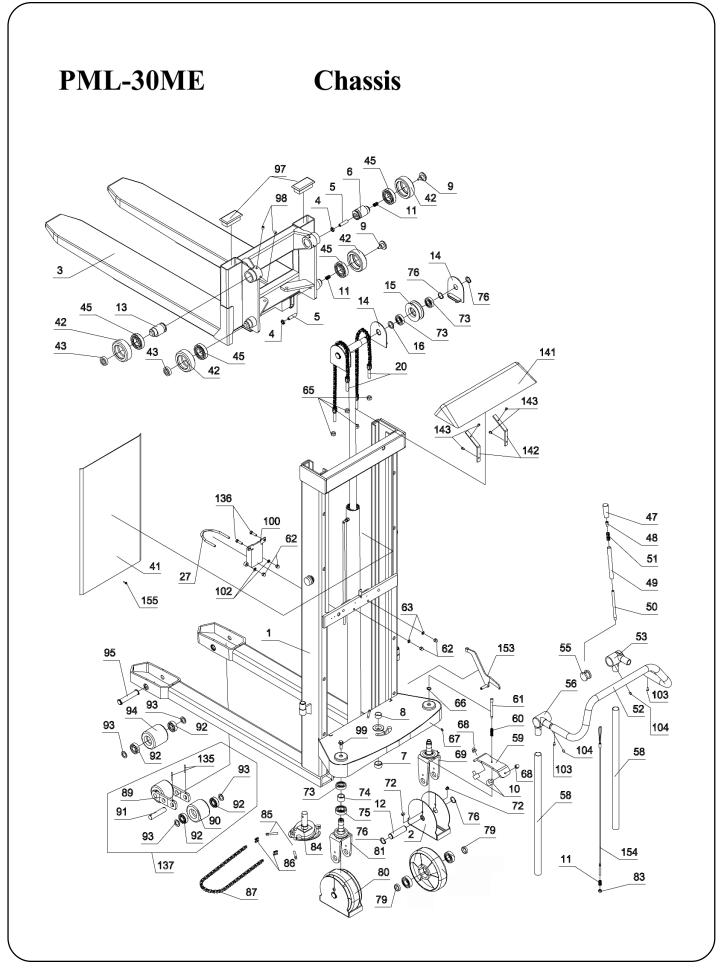
PARTS DEPARTMENT SOUTHWORTH PRODUCTS CORP PO Box 1380 Portland, ME 04104-1380

Telephone: (207) 878-0700 or 1-800-743-1000 Fax: (207) 797-4734

repairparts@SouthworthProducts.com http://blue.usps.gov/purchase/material/pmsc/greensboro

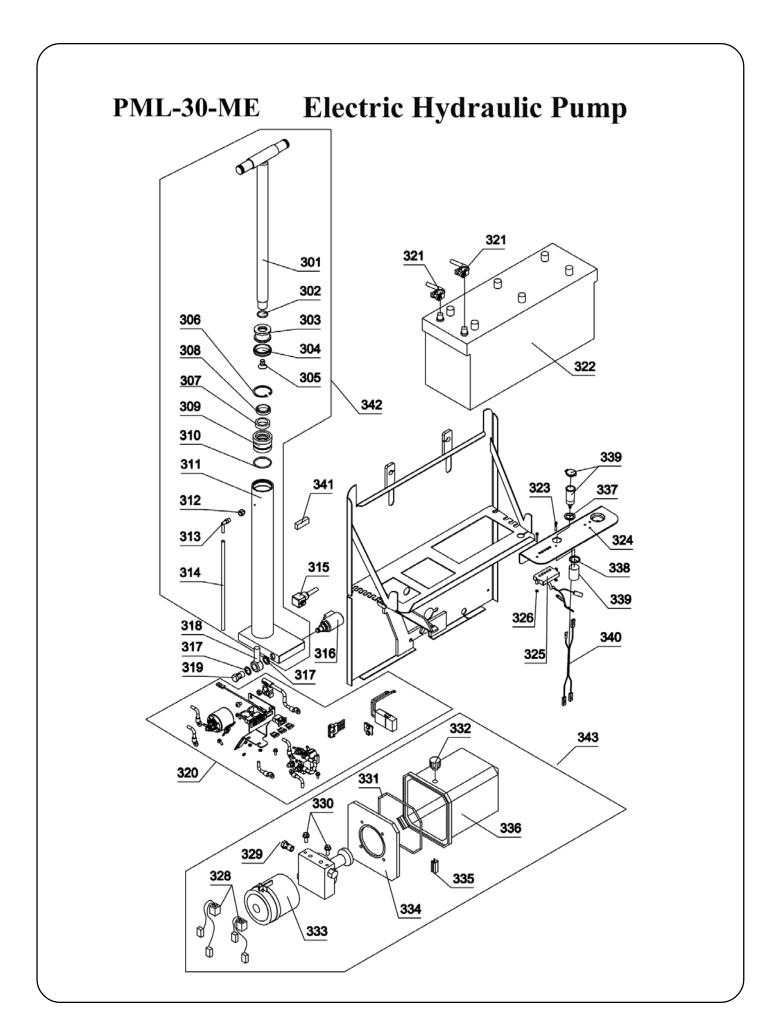
## Recommended Spare Parts for the Pallet Mobile Lifter (PML)

Cylinder Kit Call Parts Dept.
Solenoid Valve Call Parts Dept.
Starter Switch Call Parts Dept.
5 AMP Fuse Call Parts Dept.
15 AMP Fuse Call Parts Dept.
30 AMP Fuse Call Parts Dept.
80 AMP Fuse Call Parts Dept.
Tilting Switch with Holder Call Parts Dept.
Emergency Stop Switch Call Parts Dept.
Break down of additional parts on pages 21 through 27.



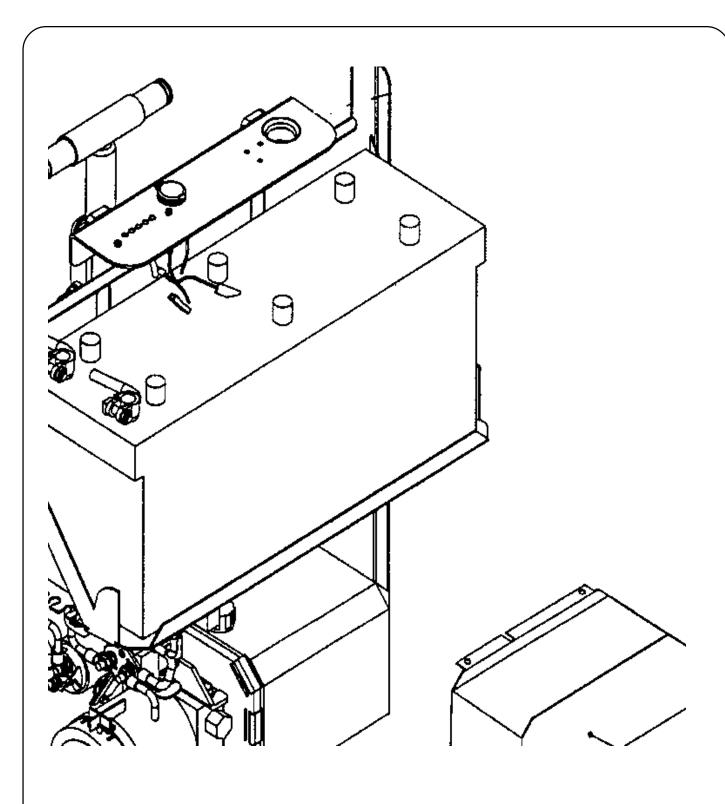
#### SOUTHWORTH

Foot part of the p	<u> </u>	1 2 1 2 2	68 69 72 73 74	Top nut Wheel fork brake wide Screw	2
Fork E Count Fork E F	t Bracket 560x1150 Inter nut Inter screw Inter coller for spring Ining Ining Ining	1 2 2 1	72 73	Wheel fork brake wide Screw	1
County Co	nter nut nted screw entric roller for spring ning ning	2 2 1	73		4
Pointe Eccee Bushi Bushi Bushi Rubbi Comp Comp Comp Comp Comp Comp Comp Comp	nted screw entric roller for spring hing hing	2			4
6 Eccei 7 Bushi 8 Bushi 9 Tap fc 10 Rubbo 11 Comp 12 Whee 13 Eccei 14 Cove 15 Chair 16 Wash 20 Lifting 27 Clamp 41 Covei 42 Mast 43 Nylor 44 Screv 44 Brake 50 Brake 50 Brake 51 Comp 52 Pull g 53 Wash 55 Wash 56 Wash 56 Side p 59 Brake	entric roller for spring hing hing	1	74	Ball bearing	6
7 Bushi 8 Bushi 9 Tap for 10 Rubbo 11 Comp 12 Whee 13 Eccel 14 Cove 15 Chair 16 Wash 20 Lifting 27 Clamp 41 Cover 42 Mast 43 Nylor 45 Ball b 47 Handl 48 Screv 49 Brake 50 Brake 50 Brake 50 Pull g 51 Wash 52 Pull g 53 Wash 55 Wash 56 Wash 56 Side p 59 Brake	hing hing			Spacer pipe	2
8 Bushi 9 Tap fo 10 Rubbe 11 Comp 12 Whee 13 Eccel 14 Cove 15 Chair 16 Wash 20 Lifting 27 Clamp 41 Covel 42 Mast 43 Nylor 45 Ball b 47 Handl 48 Screv 49 Brake 50 Brake 50 Brake 51 Comp 52 Pull g 53 Wash 55 Wash 56 Wash 56 Wash 57 Side p 58 Brake	hing	4	75	Ball bearing	2
9 Tap for 10 Rubbo 11 Comp 12 Whee 13 Eccel 14 Cove 15 Chair 16 Wash 20 Lifting 27 Clamp 41 Cover 42 Mast 43 Nylor 45 Ball b 47 Handl 48 Screw 49 Brake 50 Brake 50 Brake 51 Comp 52 Pull g 53 Wash 55 Wash 56 Wash 56 Side p Brake 59 Brake 59	<u> </u>	1	76	Locking ring	8
10 Rubbo 11 Comp 12 Whee 13 Eccel 14 Cove 15 Chair 16 Wash 20 Lifting 27 Clamp 41 Covel 42 Mast 43 Nylor 45 Ball b 47 Handl 48 Screv 49 Brake 50 Brake 50 Brake 51 Comp 52 Pull g 53 Wash 55 Wash 56 Wash 56 Side p 59 Brake	for fork bracket	1	79	Spacer pipe	4
11 Comp 12 Whee 13 Eccel 14 Cove 15 Chair 16 Wash 20 Lifting 27 Clamp 41 Covel 42 Mast 43 Nylor 44 Ball b 47 Handl 48 Screv 49 Brake 50 Brake 50 Brake 51 Comp 52 Pull g 53 Wash 55 Wash 56 Wash 58 Side p		2	80	Steering wheel polyure-	2
12 Wheel 13 Eccel 14 Cove 15 Chair 16 Wash 20 Lifting 27 Clamp 41 Cover 42 Mast 43 Nylor 45 Ball b 47 Handl 48 Screv 49 Brake 50 Brake 50 Brake 51 Comp 52 Pull g 53 Wash 55 Wash 55 Side p 59 Brake 59	ber for handle	2		thane with bearing	
13 Eccei 14 Cove 15 Chair 16 Wash 20 Lifting 27 Clamp 41 Covei 42 Mast 43 Nylor 45 Ball b 47 Handl 48 Screv 49 Brake 50 Brake 50 Brake 51 Comp 52 Pull g 53 Wash 55 Wash 56 Wash 58 Side p 59 Brake	npression spring	2	81	Revolvable wheel fork	1
14 Cove 15 Chair 16 Wash 20 Lifting 27 Clamp 41 Cove 42 Mast 43 Nylor 45 Ball b 47 Handl 48 Screv 49 Brake 50 Brake 50 Comp 52 Pull g 53 Wash 55 Wash 56 Wash 58 Side p 59 Brake	eel axle	2	83	Lock nut	1
15 Chair 16 Wash 20 Lifting 27 Clamp 41 Cover 42 Mast 43 Nylor 45 Ball b 47 Handl 48 Screv 49 Brake 50 Brake 51 Comp 52 Pull g 53 Wash 55 Wash 56 Wash 58 Side p 59 Brake	entric roller	1	84	Steering arm tap, wide	1
16 Wash 20 Lifting 27 Clamp 41 Cover 42 Mast 43 Nylor 45 Ball b 47 Handl 48 Screv 49 Brake 50 Brake 51 Comp 52 Pull g 53 Wash 55 Wash 56 Wash 58 Side g 59 Brake	er for chain roller	4	85	Chain adjuster	4
20 Lifting 27 Clamp 41 Cover 42 Mast 43 Nylor 45 Ball b 47 Handl 48 Screv 49 Brake 50 Brake 51 Comp 52 Pull g 53 Wash 55 Wash 56 Wash 58 Side p 59 Brake	in roller	2	86	Chain connector	4
Clamp Cover	her	2	87	Steer. wheel chain	2
Clamp Cover	ng chain cpl. 1200	2	92	Ball bearing	4
41 Cover 42 Mast 43 Nylor 45 Ball b 47 Handl 48 Screv 49 Brake 50 Brake 51 Comp 52 Pull g 53 Wash 55 Wash 56 Wash 58 Side p		1	93	Spacer pipe	6
Mast Mylor M	·	1	94	Fork wheel polyuretan	2
Nylor AS Ball b AT Handl AS Screv AS Brake Brake COmp AS Pull g AS Wash Wash AS Side p Brake		4	95	Wheel axle	2
Handler Handle		2	97	Cover	2
Handl Karaman Handl Hand	bearing	4	98	Pointed screw	4
48 Screv 49 Brake 50 Brake 51 Comp 52 Pull g 53 Wash 55 Wash 56 Wash 58 Side p 59 Brake	<u> </u>	1	99	Screw	1
Hermitian Braker		1	100	Adjust. fittings	1
50 Brake 51 Comp 52 Pull g 53 Wash 55 Wash 56 Wash 58 Side p		1		LF/ELF 1400	
51 Comp 52 Pull g 53 Wash 55 Wash 56 Wash 58 Side p 59 Brake	ke handle	1	102	Washer	4
<ul> <li>52 Pull g</li> <li>53 Wash</li> <li>55 Wash</li> <li>56 Wash</li> <li>58 Side g</li> <li>59 Brake</li> </ul>	npression spring	1	103	Screw	2
<ul> <li>53 Wash</li> <li>55 Wash</li> <li>56 Wash</li> <li>58 Side p</li> <li>59 Brake</li> </ul>		1	104	Pointed screw	2
55 Wash 56 Wash 58 Sider 59 Brake	sher right	1	136	Screw	2
56 Wash 58 Side p 59 Brake	sher for handle brake	1	141	Plastic top cap for	1
58 Side p 59 Brake		1		LL1001	•
59 Brake		2	142	Holder for top cap	2
		1	143	Screw	4
OUITE	npression spring	1	153	Brake arm	1
	rel brake	1	154	Brake wire	1
62 Topni		4	155	Screw	1
•	ng washer	2	156	Washer	2
65 Locki	=	4	130	YYUJIICI	2
	king ring	1			
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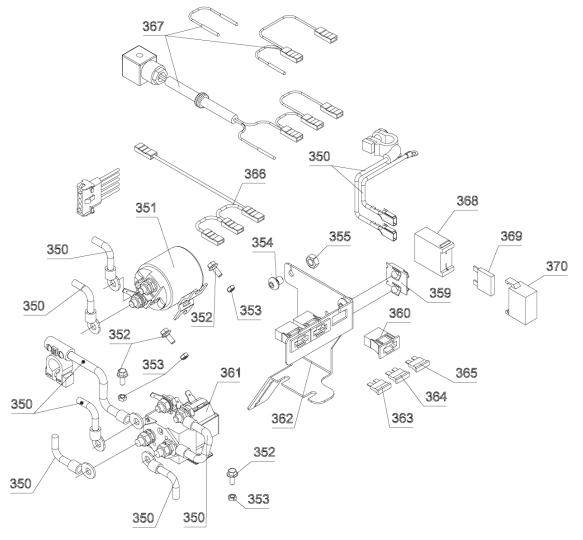
#### SOUTHWORTH

Key#.	Parts Description	Qty.	Key#.	Part Description	Qty.
301	Piston rod 1170/1200	1	324	Instrument board	1
302	O-ring	1	325	Battery indicator	1
303	Piston	1	326	Nut	2
304	Sleeve	1	328	Set of Brushes	1
305	Screw	1		Hpi-Motor 1.1 Kw	
306	Locking ring	1	329	Banjo bolt	1
307	Sleeve	1	330	Screw	2
308	Scraper ring	1	331	O-ring	1
309	Top section	1	332	Filler cab	1
310	O-ring	1	333	Motor 12 V	1
311	Cylinder housing	1	334	Flange f. tank	1
	1170/1200		335	Clips for Oil Tank	12
312	Flush bushing	1		ELF/LL	
313	Angular nipple	1	336	Oil tank	1
314	Overflow hose 1170/1200	1	337	Isolator for universal plug	1
315	Set of wires	1	338	Washer for universal plug	1
316	Solenoid valve	1	339	Universal plug	1
317	Copper washer	2	340	Cable universal plug	1
318	Hy-hose	1	341	Clamp Plate	1
319	Flow valvet	2	342	Cylinder cpl. LL	1
320	See relays and fuses		343	Hy-pump cpl.	1
321	Set of wires cpl.	2	Gasket set for cylinder		
322	Battery	1	All parts marked with* included		
323	Screw	2	Gasket set f. hy-pump (pos. 343)		

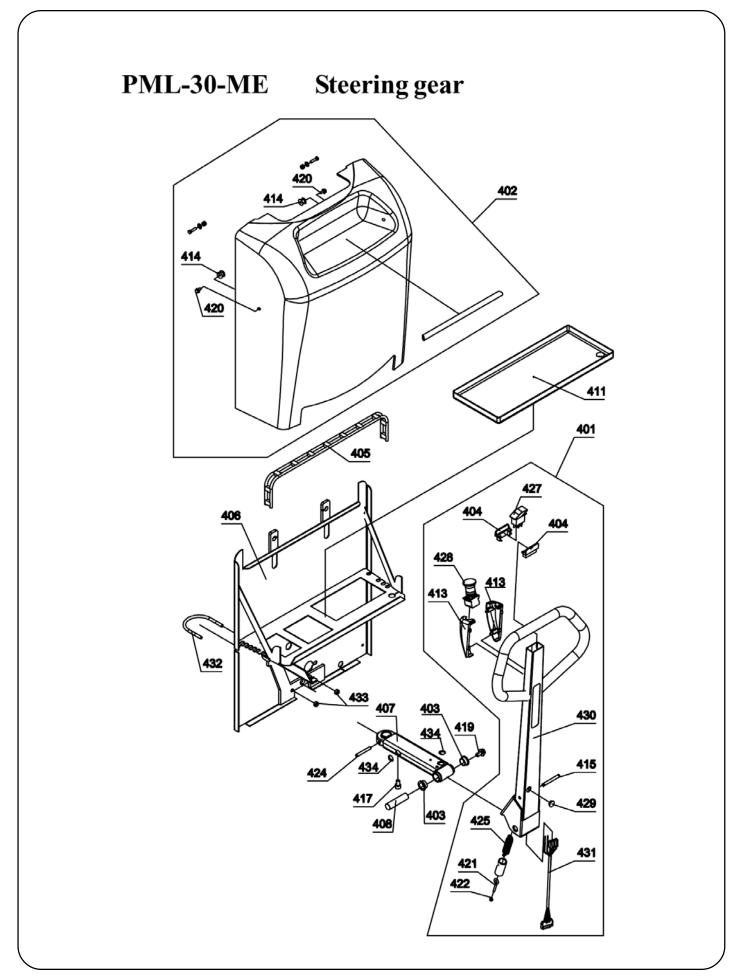


Key#	Parts Description	Qty.
380	Charger 12V 1	

#### PML-30-ME **Relay and Fuses**



Key#	Parts Description	Qty.
350	Set of cables, 80 Ampfuse	6
351	Starter switch	1
352	Screw	4
353	Nut Mutter	4
354	Screw	2
355	Nut	2
359	Mounting plate - fuse	1
360	Fuseholder	3
361	Relay for closing/opening	1
362	Relay plate	1
363	Fuse 5 Amp	1
364	Fuse 15 Amp	1
365	Fuse 30 Amp	1
366	Set of cables, 3 fuses	1
367	Set of cables, relay/Hirsmann	1
368	30 Amp Fuse holder	
369	Amp Maxi Fuse 80 Amp	
370	Plastic fittings, fuse holder	



#### SOUTHWORTH

Key#	Part Dsescription	Qty.
401	Handle	1
402	Cover cpl.	1
403	Bushing	2
404	Contact carrier	2
405	Rubber strap for battery	1
406	Pump chassis	1
407	Control lever	1
408	Handle axle ELF	1
409	Cover	1
410	Pipe for battery cover	1
411	Case for battery	1
413	Holder emergency stop	1
414	Holder battery cover	2
415	Transverse pin f. spring	1
417	Screw	1
418	Screw	2
419	Screw	1
420	Screw	2
421	Eye bolt	1
422	Lock nut	1
423	Washer	2
424	Tubular pin	1
425	Spring	1
426	Cable lead-in	2
427	Tilting switch	1
428	Emergency stop switch	1
429	Rubber plug	1
430	Handle ELF	1
431	Handle cable ELF/LLE	1
432	Clamp	1
433	Lock nut	2
434	Cable lead-in	2

#### **SECTION TWO**



### **OPERATOR INSTRUCTIONS**

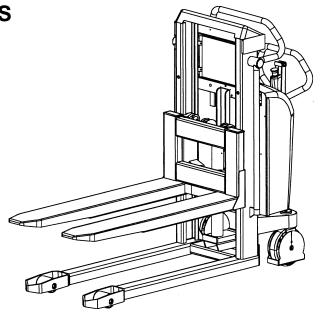
for the

# U.S. Postal Service Pallet Mobile Lifter (PML)

## OPERATING SAFETY RULES AND PRACTICES Operator Responsibility

Safe operation is the responsibility of the operator.

Operators shall develop safe working habits and also be aware of hazard-ous conditions in order to protect themselves, other personnel, the mail, mail handling equipment and the facilities.



Operators shall be familiar with manufacturer's operating instructions and warnings on the Pallet Mobile Lifter (PML). Operators must be familiar with the operation and function of all controls before operating the Pallet Mobile Lifter.

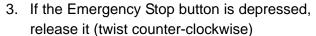
Before operating the Pallet Mobile Lifter operators should read and understood the Owner's Manual. They should also abide by all precautions, rules and safety requirements including those of the USPS.

## **OPERATOR INSTRUCTIONS**

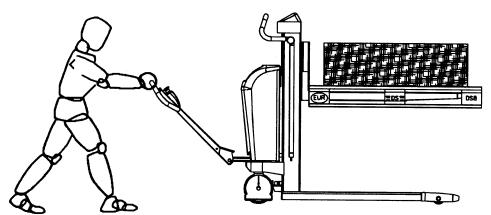
### Southworth Pallet Mobile Lifter (PML)

#### **Operating the Pallet Mobile Lifter (PML):**

- 1. Stand behind the black handle bars of the machine, this is the correct position for operating the Pallet Mobile Lifter (PML). Do not operate from any place other than the operator's position.
- 2. Check the battery indicator to be sure there is at least 25% capacity remaining. (If
  - it is less, re-charging the battery is required.)

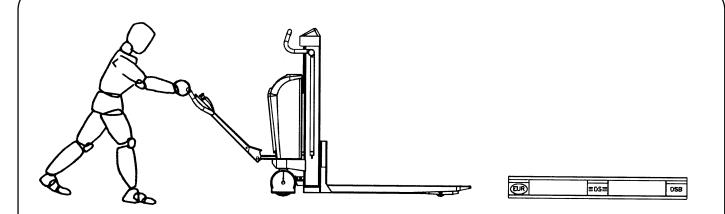


- 4. Release the wheel lock.
- 5. Push or pull the Pallet Mobile Lifter (PML) into position using the handle to steer (keep feet clear).
- 6. Always push or pull using the black handle bars provided. Never put any part of the body into the mast structure, lifting mechanism or carriage.
- 7. When attempting to pick up containers, align forks to the correct width. Approach the container as squarely as possible and go slowly to avoid damaging the container or the Pallet Mobile Lifter (PML).
- 8. Push the Pallet Mobile Lifter (PML) as far into the container as possible -- the container should be against the mast of the Pallet Mobile Lifter.
- 9. To raise or lower the forks, push the designated button on the handle. Depress the left



For proper operation, stand behind the handle. Push/pull - raise/lower.

- button to go down or lower the forks. Depress the right button to go up or raise the forks.
- 10. Raise the container just enough to provide floor clearance for transporting. (Never move the Pallet Mobile Lifter (PML) loaded or empty, with the mast raised any more than a few inches, which is adequate floor clearance.)
- 11. Instruct personnel to stand clear. Do not maneuver the Pallet Mobile Lifter (PML) up to anyone standing in front of an object.
- 12. Exercise particular care at cross-aisles, doorways, and other locations where pedestrians may step into the path of travel.
- 13. Maintain a safe distance from pedestrians and keep the Pallet Mobile Lifter (PML) under control at all times.
- 14. When the Pallet Mobile Lifter (PML) is located into position and stopped, engage the wheel lock.



## Loading the Pallet Mobile Lifter (PML)

Handle only stable and safely arranged loads, containers, hampers or baskets that are within the capacity of the Pallet Mobile Lifter (PML). The capacity is labeled on your machine. If the labels are no longer legible, please call our Service Department for replacements. If you are unsure of the capacity – refer to your owner's manual.

Note: Ensure that loading and unloading of the Transpositioner is done in even layers. Loading or unloading a load on one side may cause the load to tip over and you may be injured. This can also damage the unit.

Make sure you always completely engage the load. The fork length(s) of the Pallet Mobile Lifter (PML) should be at least two-thirds of the load length.

## Operator Care of the Pallet Mobile Lifter (PML)

At the beginning of each shift or before operating the Pallet Mobile Lifter (PML) check its condition, giving special attention to the following:

- a. Wheels and casters are not damaged;
- b. Guards and precautionary labeling are in place and legible;
- c. Battery indicator reading is 25% or more.

If the Pallet Mobile Lifter (PML) is found to be in need of repair or is in any way unsafe, the matter shall be reported immediately to the designated authority and the Pallet Mobile Lifter shall not be operated until it has been restored to safe operating condition.

If you have questions please contact:
Southworth Technical Service Dept. at 1-800-7431000 or Service@SouthworthProducts.com

## GENERAL SAFETY PRACTICES

The Pallet Mobile Lifter (PML) can cause injury if improperly used or maintained. This instruction manual contains broad safety recommendations applicable to typical USPS operations where the Pallet Mobile Lifter (PML) has been provided. Only operators trained to adhere strictly to the operating instructions should be permitted to operate the Pallet Mobile Lifter (PML).

## Nameplates, Markings and Capacity

The operator shall see that all nameplates, precautionary, advisory and instructional markings, including capacity ratings, are in place and legible.

#### **Wheel Lock**

The wheel lock is intended only to hold the Pallet Mobile Lifter (PML) in a set position on a level surface. It is not intended to be a dynamic brake to slow down or stop a moving Pallet Mobile Lifter.

#### **Stability**

The Pallet Mobile Lifter (PML) complies with the stability requirements of the ANSI B56.10 and is very stable when properly operated. Handling containers or loads that exceed the rated capacity, improper operation, faulty maintenance, or poor housekeeping may contribute to a condition of instability.

Some circumstances that may affect stability are surface and floor conditions, speed, load position and the judgment exercised by the operator. The Pallet Mobile Lifter should only be used within the maximum capacity rating as specified on the nameplate.

#### **Guards**

Guards are intended to offer protection to the operator from moving parts, but cannot protect against every possible condition. Therefore, they shouldn't be considered a substitute for good judgment and care in use, loading, unloading and handling the Pallet Mobile Lifter (PML).

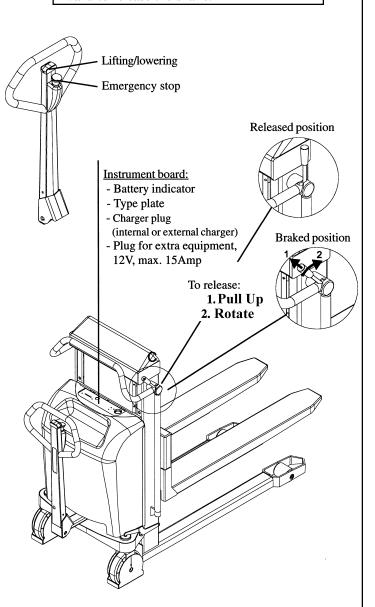
#### Floors and Floor Conditions

Areas of use for the Pallet Mobile Lifter (PML) should be smooth, level, and free of wide gaps or cracks that may damage or catch casters or wheels. Maintain floors to keep them free of debris and any liquids that hinder safe operation. Ramps and inclines shall be avoided in the areas of use.

#### **Elevating Personnel**

The Pallet Mobile Lifter (PML) is <u>not</u> intended to be used for elevating personnel at any time, under any conditions. Personnel should never sit, stand or ride on any part of the Pallet Mobile Lifter.

NOTE: To prevent premature wear, pull up and hold the brake arm then rotate back to the locked position when setting the brake. Pull up and hold then rotate the handle for ward to release the brake.



**Primary Operation Functions** 

#### Warranty

Southworth Products Corp warrants its products to be free from defects in material or workmanship for a period of <u>two (2) years</u> from date of shipment, providing claim is made in writing within that time period. The structural assemblies (bases, legs, platforms) are covered under the parts provision of this warranty for an additional <u>three (3) years</u> and a <u>lifetime</u> warranty on the hydraulic cylinder rod bearings and seals.

This warranty shall not cover failure or defective operation caused by misuse, misapplication, negligence or accident, exceeding recommended capacities, failure to perform required maintenance or altering or repairing, unless alteration is authorized by Southworth Products Corp. Except as set forth herein and including the warranties of merchantability and fitness for the USPS application, there are no other warranties, express or implied.

Southworth Products Corp makes no warranty or representation with respect to the compliance of any product with state or local safety or product standard codes not mentioned in the Contract Number 1CIEQU-04-Q-1541, and any failure to comply with such codes shall not be considered a defect of material or workmanship under this warranty. Southworth Products Corp shall not be liable for any direct or consequential damages arising out of such noncompliance.

Southworth Products Corp's obligation under this warranty is limited to the replacement or repair of defective components at its factory or another location at Southworth Products Corp's discretion. This is the buyer's sole remedy. Except as stated herein, Southworth Products Corp will not be liable for any loss, injury or damage to persons or property, nor for direct, indirect, or consequential damage of any kind, resulting from failure or defective operation of said product.

This warranty may be altered only in writing by Southworth Products Corp, Portland, ME.

Southworth Products Corp is widely acknowledged as the leading maker of hydraulic lifts, tilters and other materials handling equipment. Southworth machines are rugged and reliable, and are designed to provide years of trouble-free service. The designs are based on extensive engineering experience.

These are good reasons for specifying Southworth machines in your plant.



SOUTHWORTH PRODUCTS CORP P.O. Box 1380, Portland, ME 04104-1380 Telephone: 800-743-1000 • 207-878-0700 Fax: 207-797-4734

http://blue.usps.gov/purchase/material/pmsc/greensboro

## SOUTHWORTH We'll Show You How

Southworth is *the* world class supplier of products designed to improve productivity and enhance safety. Our staff has over 400 years of engineering experience. If one of our standard products does not meet your needs, we can design custom equipment



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Telephone 800-743-1000 - Fax 207-797-4734
Email: sales@SouthworthProducts.com