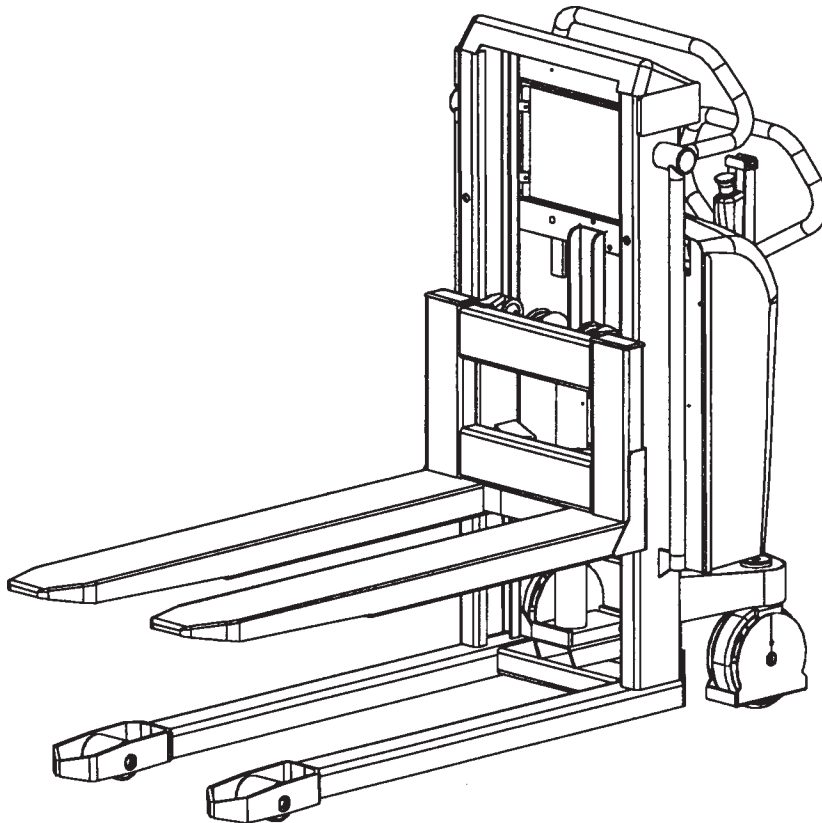




SOUTHWORTH
Maintenance Manual
& Operator Instructions

PML Transpositioner



Model # _____

Serial # _____

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

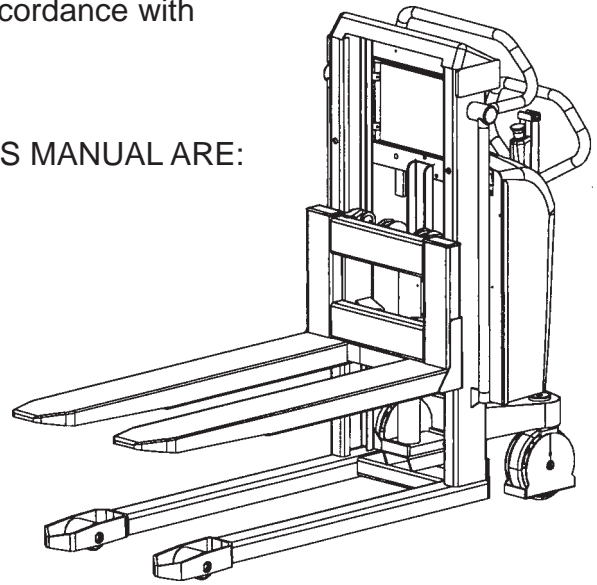
Revised November 2006

The PML Transpositioner 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*

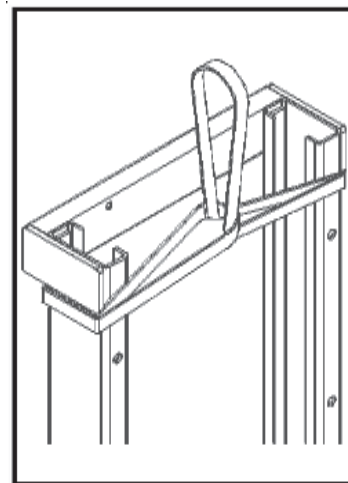
Therefore please read this Owner's Manual carefully!



Unpacking the PML Transpositioner

Lifting procedure

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



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Introduction

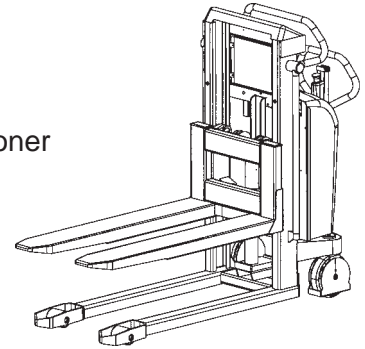
This manual contains instructions on the safe and proper installation, use, and maintenance of a PML Transpositioner unit. Be sure that this manual is available to the people who install, use, or service the unit. Be sure that all personnel read this manual before they install, use, or service the unit.

PML Transpositioner 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 PML Transpositioner. 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 product 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 PML Transpositioner.

The PML Transpositioner 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 PML Transpositioner is of paramount concern to Southworth. The PML Transpositioner 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 PML Transpositioner, 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:

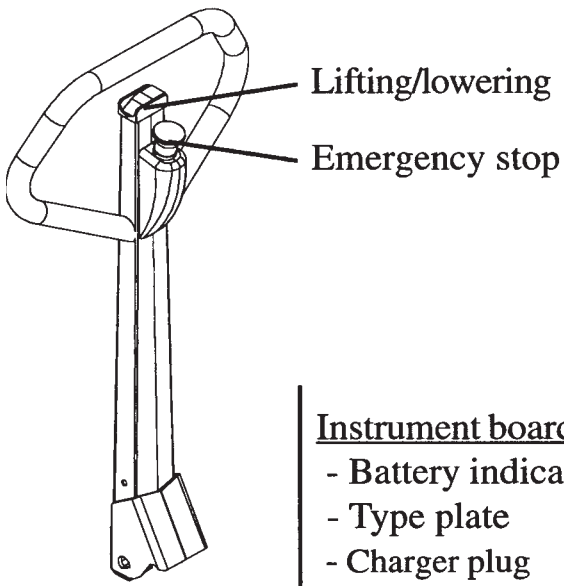
DANGER – Immediate hazard which will result in severe personal injury or death.

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.

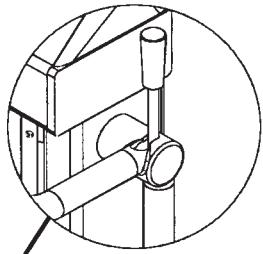
Please read and follow this instruction manual, including all safety instructions and precautions, carefully and completely.

NOTE: To ensure premature wear does not occur to the brake arm, pull up and push forward to release the brake, or pull up and pull back to set the brake.

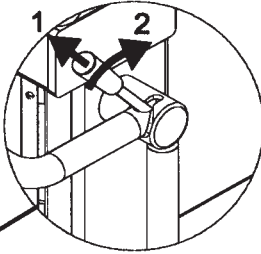


- Instrument board:**
- Battery indicator
 - Type plate
 - Charger plug (internal or external charger)
 - Plug for extra equipment, 12V, max. 15Amp

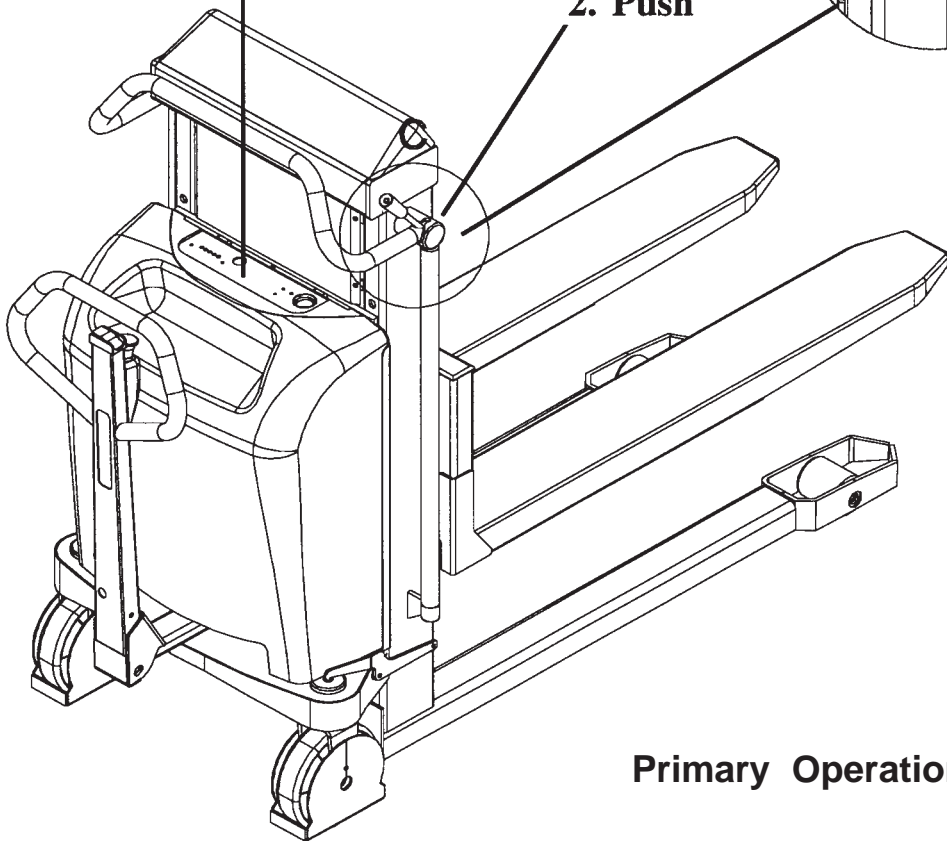
Released position



Braked position

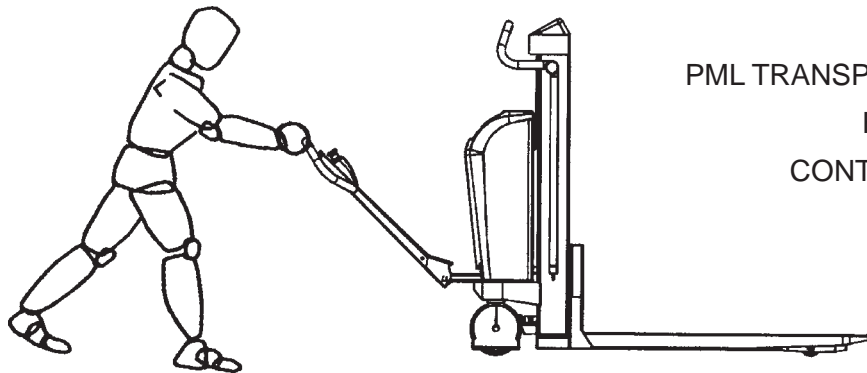


To release:
1. Pull
2. Push



Primary Operation Functions

How to operate the PML Tranpositioner

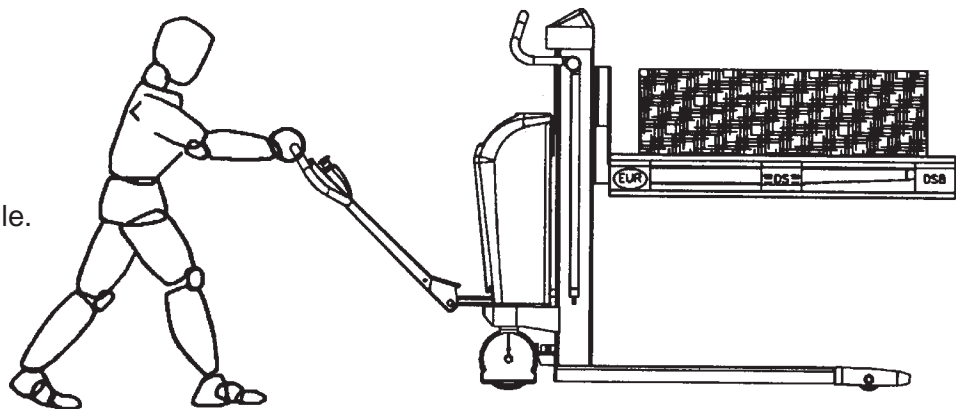


PML TRANSPOSITIONER APPLICATION
FOR SKID OR
CONTAINER HANDLING.



For proper operation,
stand behind the handle.

Push/pull - raise/lower



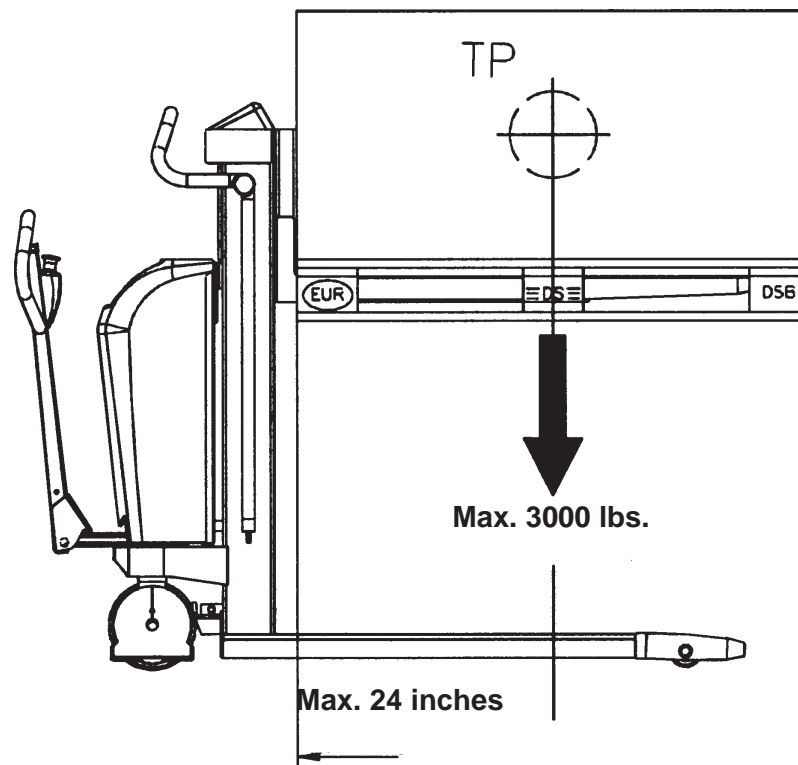
Optimum safety

Avoid overloads

The maximum load must not be exceeded. Remember, that the PML Transpositioner 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.

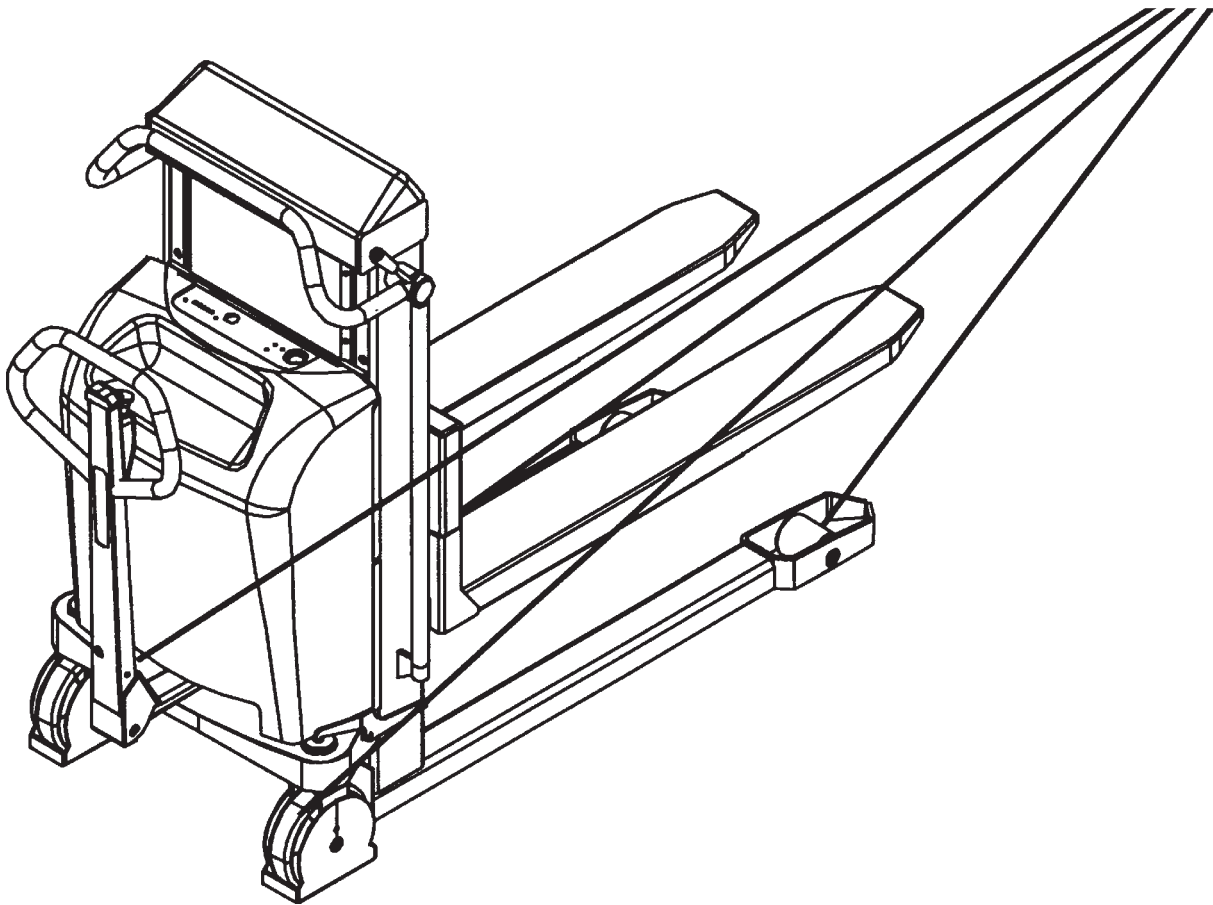
Avoid offset loads

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.



WARNING:

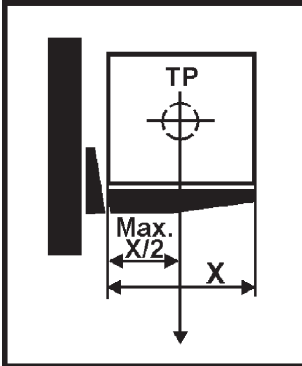
**ATTENTION
MOVING PARTS**



Operator Precautions



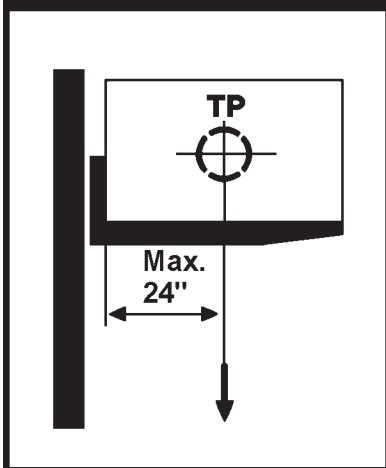
Max. 2750 lbs.



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 Transpositioner 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.

Max. 2750 lbs.



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

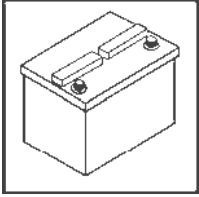
The battery indicator shows the battery charge in %. The most accurate reading can be obtained, when the battery has not been used for 5-10 minutes.

- 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

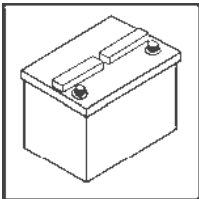
Charger should be grounded or have an insulated case to reduce risk of electric shock. If the charger is equipped with an electric cord having an equipment-grounding conductor and grounding plug (three prong plug). The plug must be plugged into an outlet that is properly installed and grounded in accordance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



BATTERY CHARGING

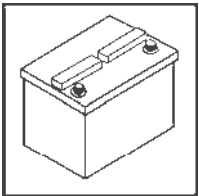
Charging must be performed with the charger that is provided and prewired into the machine. During charging, the temperature in the battery must not exceed 120° F. Charging simultaneously with truck operation is not recommended. Plug the charger into a 115V outlet. Charge until the battery gauge indicator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



WARNINGS AND INFORMATION ON BATTERY

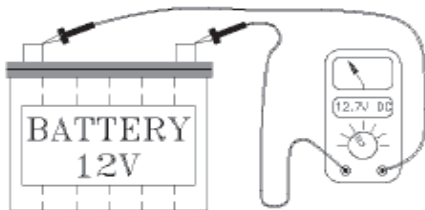
Avoid the use of open flame batteries. At temperatures around the freezing point, battery capacity is reduced by 30%. The battery terminals, connections and wiring should be clean and free of corrosion. When cleaning any of these components wear a face shield or other suitable protective eyewear.

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**

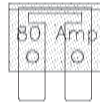
Telephone 1-800-743-1000 or Fax 207-797-4734

E-mail: service@SouthworthProducts.com

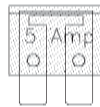


FUSES - replacement

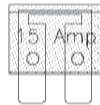
There are four fuses in the electrical circuit.



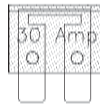
80 Amp fuse in the main supply from battery



5 Amp fuse in the control current circuit

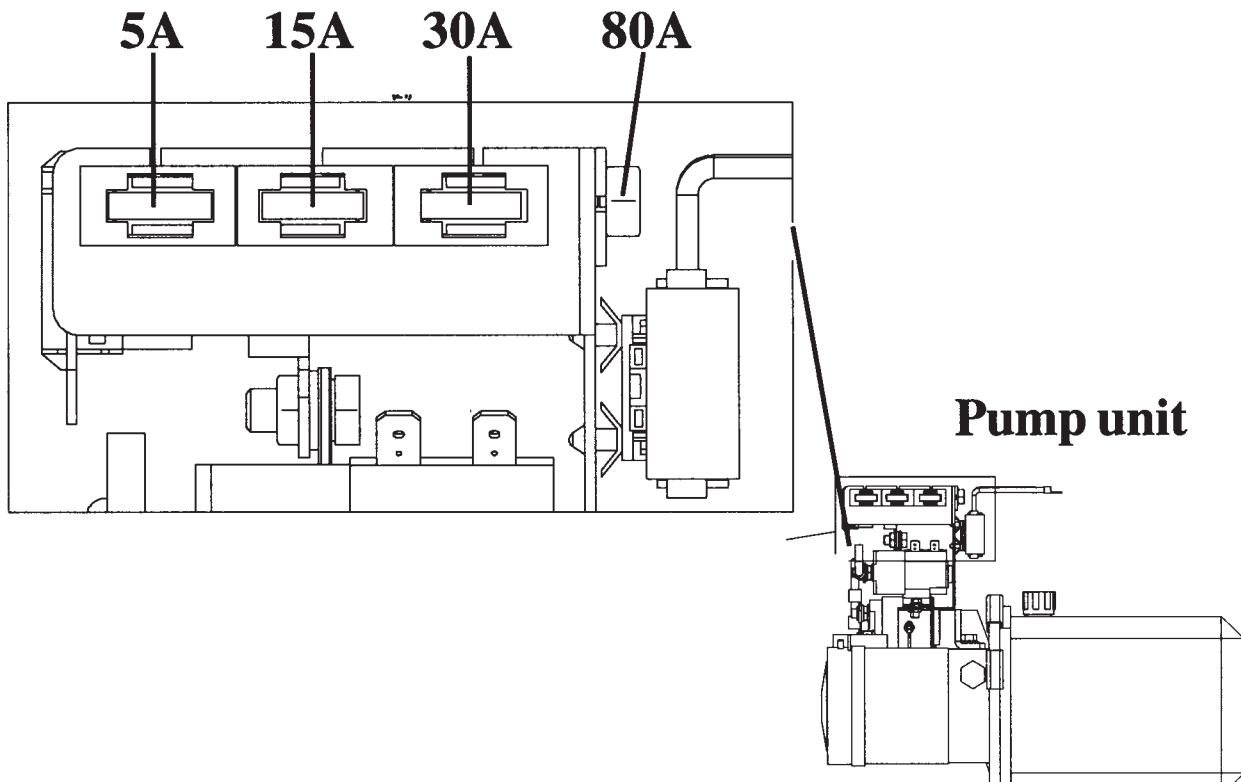


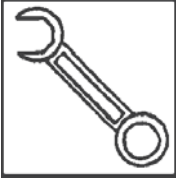
15 Amp fuse
(plug for extra equipment on the instrument board)



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 Transpositioner.

"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 PML Transpositioner 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:

- 1) Metric Allen Wrench Set
- 2) Metric Socket Set/Wrench Set
- 3) 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.

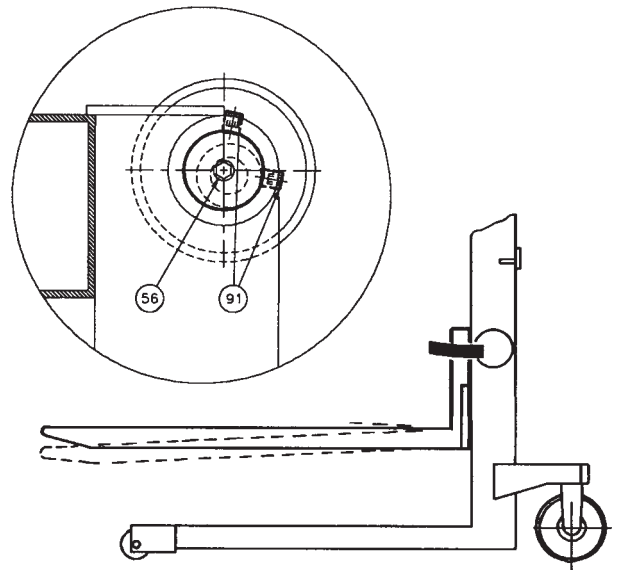
Fork adjustment



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:

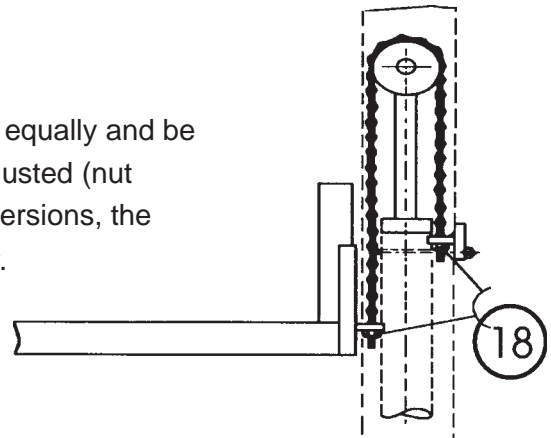
1. Loosen screws pos. 91 (key width 3/16 of an inch).
2. Pin (pos. 56) can now be turned to give the necessary adjustment (key width 5/16 of an inch).
3. To ensure the same load on all rollers, adjustment must be made on both sides.



Adjustment of lifting chain



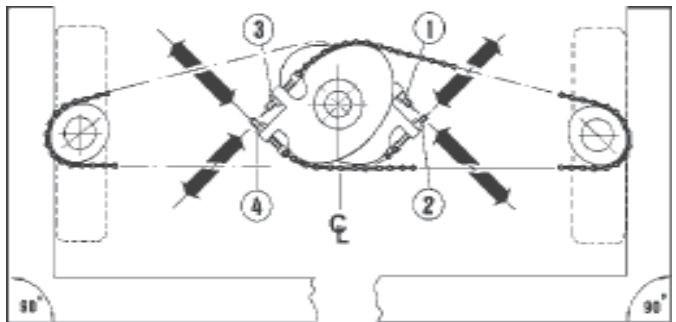
The chains shall be adjusted, so that they lift equally and be equally tight. The nuts (pos. 18) are to be adjusted (nut M12, key width 3/4 of an inch). On straddle versions, the chains are to keep the forks clear of the floor.



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

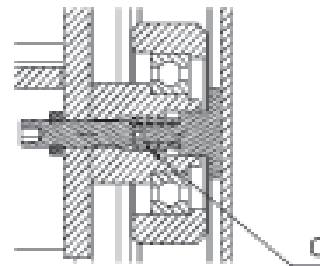
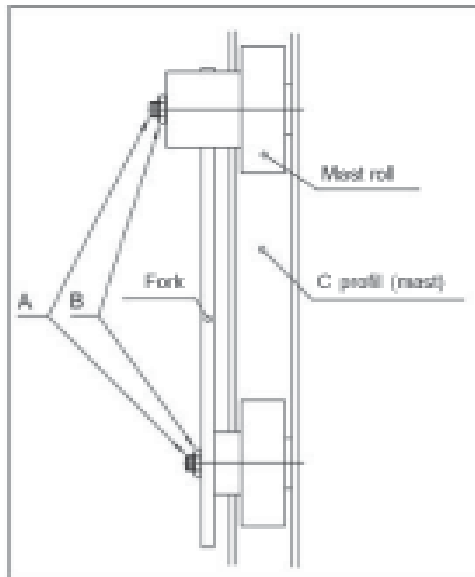
With a load of 110 - 220 lbs, the forks must be raised and lowered to top and bottom position 2-3 times.

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

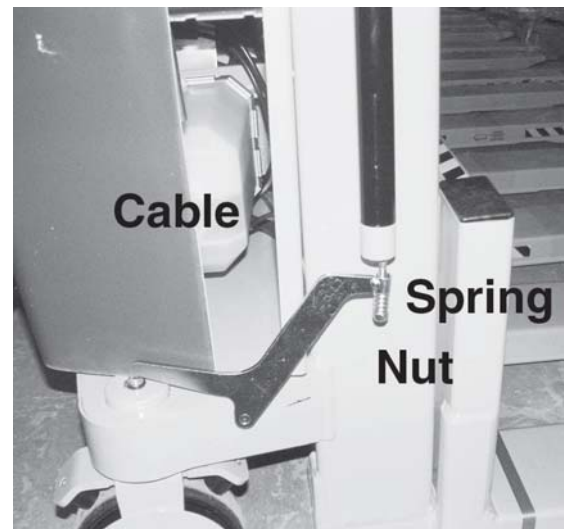
(Cable and Arm adjust should be looked at first.)



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.

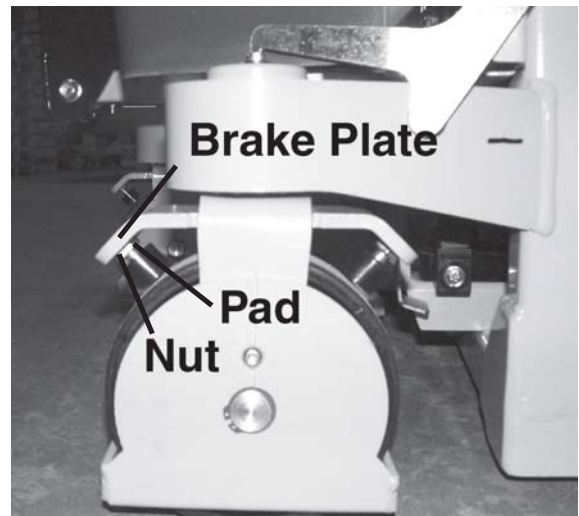




Pad Adjustment:

1. Loosen the nut (under side of the brake plate) on the brake pad shaft.
2. Turnt the brake pad counter clockwise untill he pad is approximately 1/8" away from the caster.
3. Tighten the nut against brake plate to hold in place.

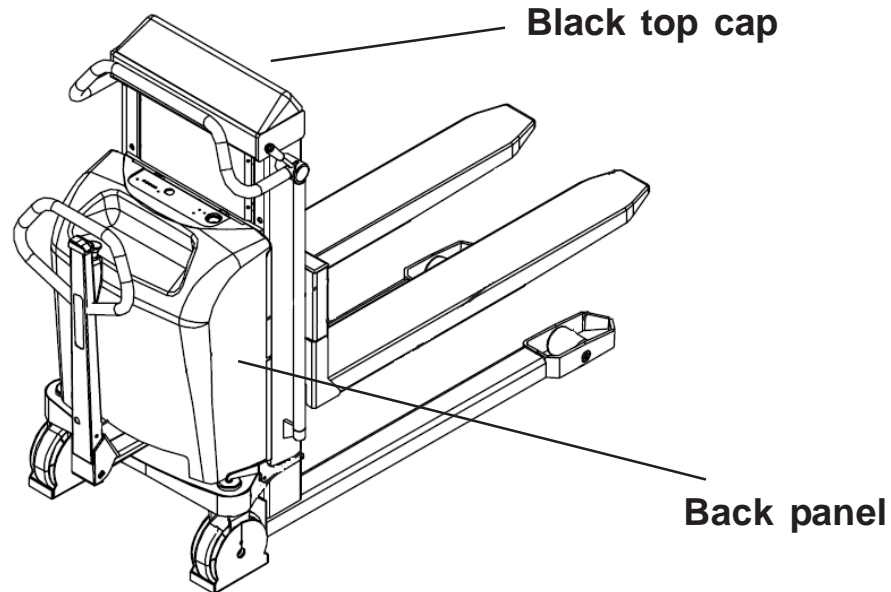
-- Both pads should be adjusted equally.



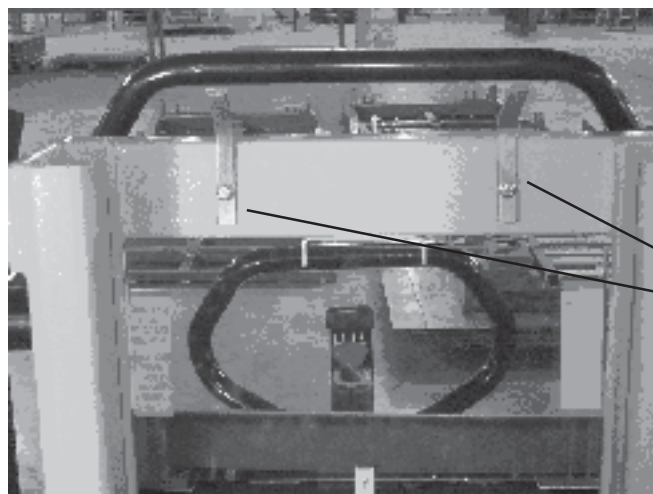


The black top cap installation

The black top cap will be inside the Pallet Mobile Lifter for shipping Purposes.



1. Remove the black top cap from the inside the back panel of the Pallet Mobile Lifter.
2. You will need to make sure the mounting brackets are turned to the up position.



3. The top cap will then need to be attached to the mounting brackets using the supplied screws.

Cleaning

When cleaning the PML Transpositioner, 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 PML Transpositioner is used every day, adjustments and the replacement of worn parts might be necessary.

If a fault appears during daily operation of the PML Transpositioner, 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 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

www.SouthworthProducts.com

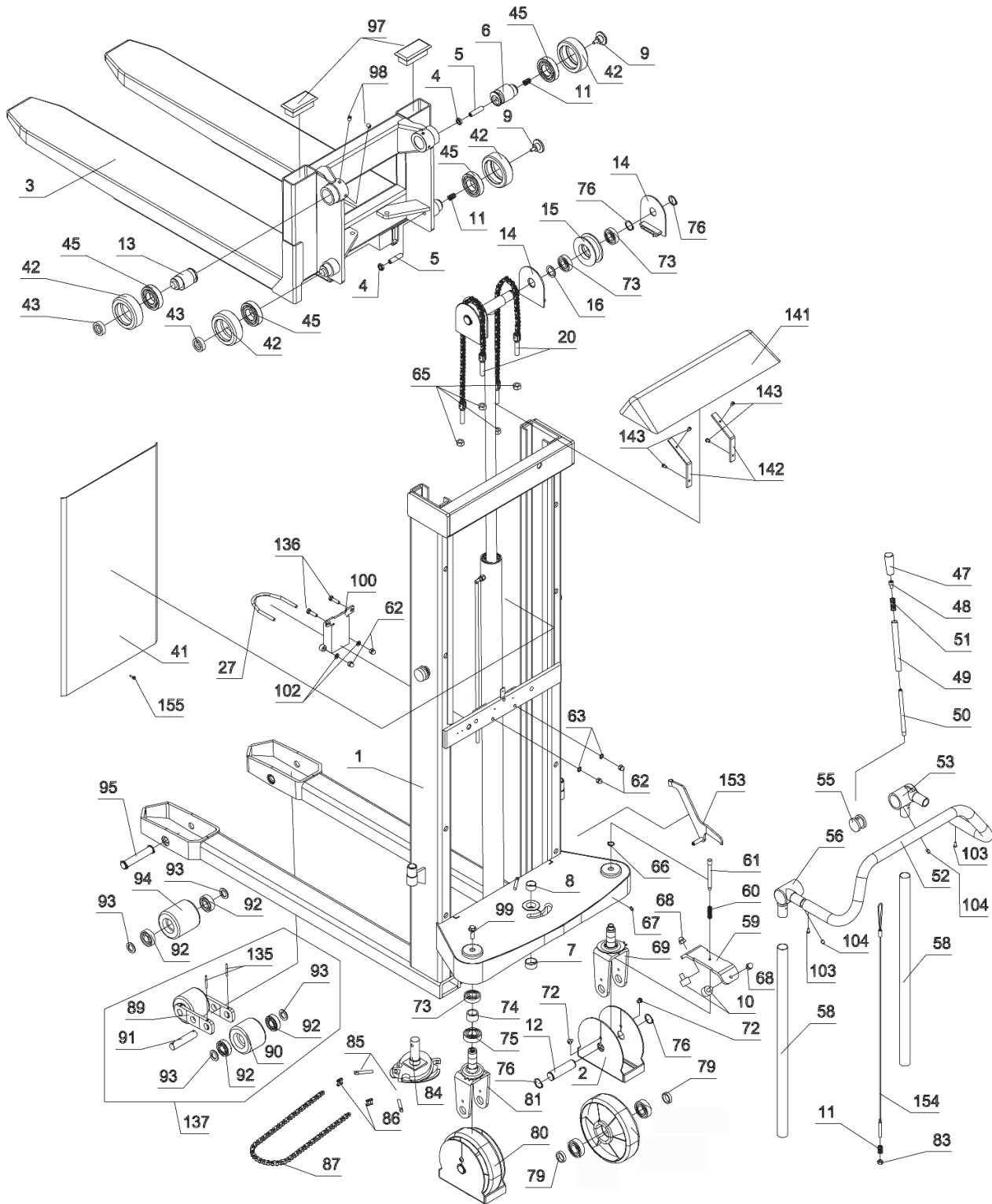
Recommended Spare Parts for the PML Transpositioner

Cylinder Kit	Call Parts Dept.
Solenoid Valve	#984740
Starter Switch	#984805
5 AMP Fuse	#982102
15 AMP Fuse	#982115
30 AMP Fuse	#982123
80 AMP Fuse	#982128
Tilting Switch with Holder	#982075
Emergency Stop Switch	#982190

Break down of additional parts on pages 21 through 27.

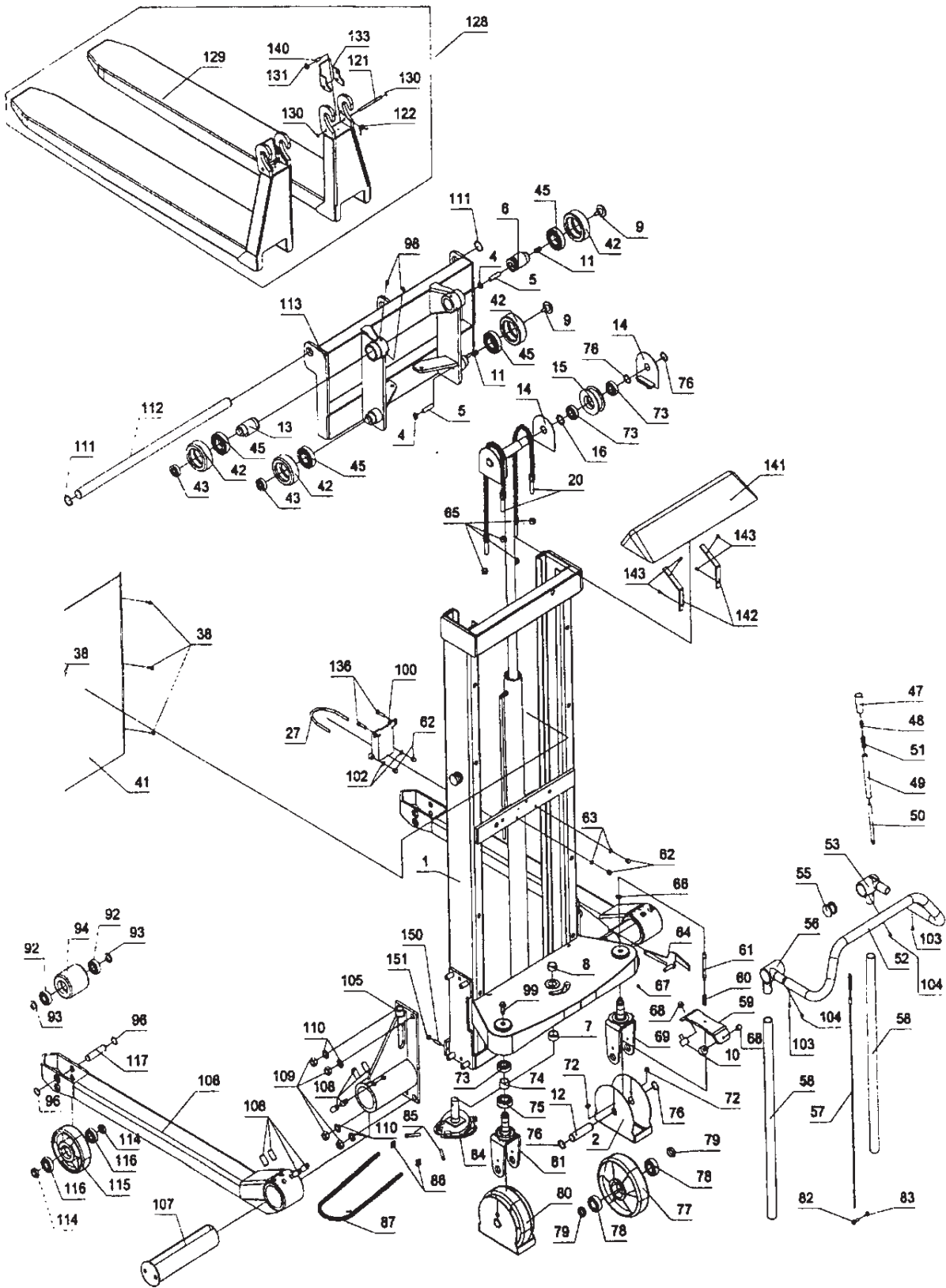
PML-30ME

Chassis



Key#.	Part no.	Part Description	Qty.	Key#.	Part no.	Part Description	Qty.
1	420041-D	Chassis LL 560x1150 B	1	68	920082	Top nut	2
2	420094	Foot protector	2	69	420097	Wheel fork brake wide	1
3	305058-4	Fork Bracket 560x1150	1	72	919811	Screw	4
4	920122	Counter nut	2	73	946053	Ball bearing	6
5	910250	Pointed screw	2	74	400647	Spacer pipe	2
6	420151	Eccentric roller for spring	1	75	946253	Ball bearing	2
7	948305	Bushing	1	76	933250	Locking ring	8
8	948316	Bushing	1	79	400618	Spacer pipe	4
9	420153	Tap for fork bracket	2	80	300060L	Steering wheel polyurethane with bearing	2
10	405113	Rubber for handle	2				
11	958144	Compression spring	2	81	420015	Revolvable wheel fork	1
12	401484	Wheel axle	2	83	921080	Lock nut	1
13	402826	Eccentric roller	1	84	420095	Steering arm tap, wide	1
14	402263	Cover for chain roller	4	85	400605	Chain adjuster	4
15	402325	Chain roller	2	86	951001	Chain connector	4
16	926250	Washer	2	87	400846	Steer. wheel chain	2
20	401240	Lifting chain cpl. 1200	2	92	946242	Ball bearing	4
27	400874	Clamp	1	93	400159	Spacer pipe	6
41	420241	Cover	1	94	402502	Fork wheel polyuretan	2
42	401936	Mast roll	4	95	401932	Wheel axle	2
43	400173	Nylon roll	2	97	993150	Cover	2
45	946273	Ball bearing	4	98	910012	Pointed screw	4
47	994026	Handle	1	99	916120	Screw	1
48	912825	Screw	1	100	402766	Adjust. fittings	1
49	420186	Brake pin	1			LF/ELF 1400	
50	420115	Brake handle	1	102	924080	Washer	4
51	958035	Compression spring	1	103	919512	Screw	2
52	420108	Pull grip	1	104	910810	Pointed screw	2
53	420112	Washer right	1	136	915830	Screw	2
55	420110	Washer for handle brake	1	141	401241	Plastic top cap for	1
56	420113	Washer left	1			LL1001	
58	420227	Side pipe	2	142	420148	Holder for top cap	2
59	402277	Brake strap	1	143	919610	Screw	4
60	958128	Compression spring	1	153	420231	Brake arm	1
61	420125	Dowel brake	1	154	420233	Brake wire	1
62	920080	Top nut	4	155	916414	Screw	1
63	925080	Spring washer	2	156	924080	Washer	2
65	921120	Lock nut	4				
66	933160	Locking ring	1				
67	933100	Locking ring	1				

LL 1001 MS Chassis

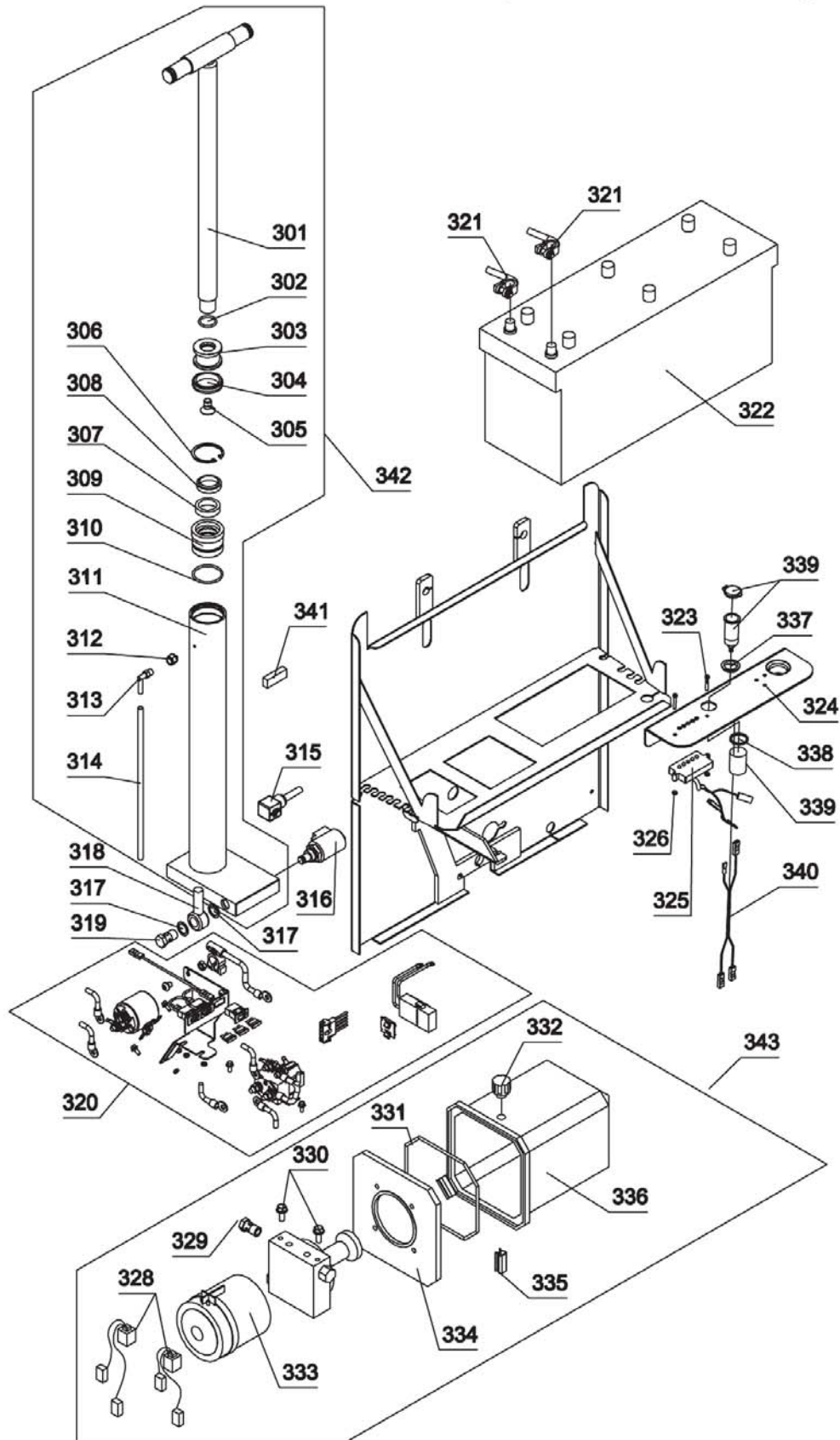


Key#.	Part no.	Part Description	Qty.	Key#.	Part no.	Part Description	Qty.
1	420050-A	Chassis LL 680x600 S	1	60	958128	Compression spring	1
	420050-B	Chassis LL 680x600 S	1	61	420125	Dowel brake	1
	420050-D	Chassis LL 680x1150 S	1	62	920080	Top nut	4
	420050-E	Chassis LL 680x1520 S	1	63	925080	Spring washer	4
	420051-A	Chassis LL 680x600 B	1	64	420012	Brake arm narrow	1
	420051-B	Chassis LL 680x800 B	1	65	921120	Lock nut	4
	420051-D	Chassis LL 680x1150 B	1	66	933160	Locking ring	2
	420051-E	Chassis LL 680x1520 B	1	67	933100	Locking ring	1
2	420037	Foot protector	2	68	920082	Top nut	2
3	920122	Counter nut	2	69	420017	Wheel fork brake wide	1
4	910250	Pointed screw	2	72	919811	Screw	4
5	420151	Eccentric roller for spring	1	73	946053	Ball bearing	6
6	948305	Bushing	1	74	400647	Spacer pipe	2
7	948316	Bushing	1	75	946253	Ball bearing	2
8	420153	Tap for fork bracket	2	76	933250	Locking ring	9
9	405113	Rubber for handle	2	77	300046	Steering wheel, nylon	2
10	958144	Compression spring	2		300047	Steering wheel, vulkollan	2
11	401484	Wheel axle	2		300049	Steering wheel, vulkollan	2
12	402826	Eccentric roller	1		300051	Steering wheel, steel	2
13	402263	Cover for chain roller	4		4039031	Steering wheel, nylon white	2
14	402325	Chain roller	2		403863	Steering wheel, poly	2
15	926250	Washer	2	78	946253	Ball bearing	2
20	402928	Lifting chain cpl. 1200	2	79	400618	Spacer pipe	4
27	400874	Clamp	1	80	300046L	Steering wheel, nylon w/bearing	2
38	916612	Screw	10		300047L	Steering wheel, vulkollan w/bearing	2
41	420170	Cover 1200/2050	1		403863L	Steering wheel, poly w/bearing	2
42	401936	Mast roll	6	81	420015	Revolvable wheel fork	1
43	400173	Nylon roll	4		420016	Wheel fork left narrow	1
45	946273	Ball bearing	6	82	420183	Wire bolt	1
47	994026	Handle	1	83	921080	Lock nut	3
48	912825	Screw	1	84	420018	Steering arm tap, narrow	1
49	420186	Brake pin	1	85	400605	Chain adjuster	4
50	420115	Brake handle	1	86	951001	Chain connector	4
51	958035	Compression spring	1	87	400846	Steering wheel chain, short	2
52	420108	Pull grip	1	92	946243	Ball bearing	2
53	420093	Washer right	1	93	400159	Spacer pipe	6
55	420110	Washer for handle brake	1	94	300040	Fork wheel, nylon	1
56	420092	Washer left	1		3000401	Fork wheel, nylon white	1
57	420098	Brake wire	1		300041	Fork wheel, vulkollan	1
58	420109	Side pipe	2		300037	Fork wheel, poly	1
59	402277	Brake strap	1		300038L	Fork wheel, steel w/ bearings	1

SOUTHWORTH

Key#.	Part no.	Part Description	Qty.	Key#.	Part no.	Part Description	Qty.
96	932220	Lock ring	6	114	402868	Spacer pipe	2
98	910012	Pointed screw	4	115	400713L	Steering wheel, nylon w/bearing	1
99	916120	Screw	1		400757L	Steering wheel, vulkollan w/bearing	1
100	402766	Adjust. fittings, LF/ELF 1400	1		401578L	Steering wheel, poly w/bearing	1
102	924080	Washer	4	116	946243	Ball bearing	2
103	919512	Screw	2	117	402846	Wheel axle	2
104	910810	Pointed screw	2	121	420317	Axle for lock fitting	2
105	420213	Bracket straddle legs, short	2	122	958551	Torsion spring	2
	420209	Bracket straddle legs, long	2	128	16704	Set of wrap-over forks 1150	1
106	420210-1	Straddle legs cpl., short	2		16714	Set of bar forks 1150	1
	420210-2	Straddle legs cpl., medium	2		16724	Set of chisel forks 1150	1
	420210-3	Straddle legs cpl., long	2		16734	Set of drum forks 1150	1
107	420211-1	Middle piece straddle	2	129	420312-5	Adjustable wrap-over fork 1150	1
	420211-2	Middle piece straddle	2		420327-5	Adjustable bar fork 1150	1
	420211-3	Middle piece straddle	2		420329-5	Adjustable chisel fork 1150	1
	420211-4	Middle piece straddle	2		401591	Adjustable drum fork 1150	1
108	910635	Pointed screw	16	130	933080	Locking ring	4
109	921161	Lock nut	8	131	920100	Counter nut	2
110	924016	Washer	8	133	420303	Hook lock	1
111	933300	Locking ring	2	136	915860	Screw	2
112	101331	Shear axle	1	140	929021	Ball bolt	2
113	402857	Fork bracket	1	141	401241	Plastic top cap for LL1001	1
	402857	Fork bracket	1	142	420148	Holder for top cap LL1001	2
	402858	Fork bracket	1	143	919610	Screw	4
	402861	Drum attachment	1	150	910830	Pointed screw	2
	402862	Drum attachment	1	151	922080	Nut	2

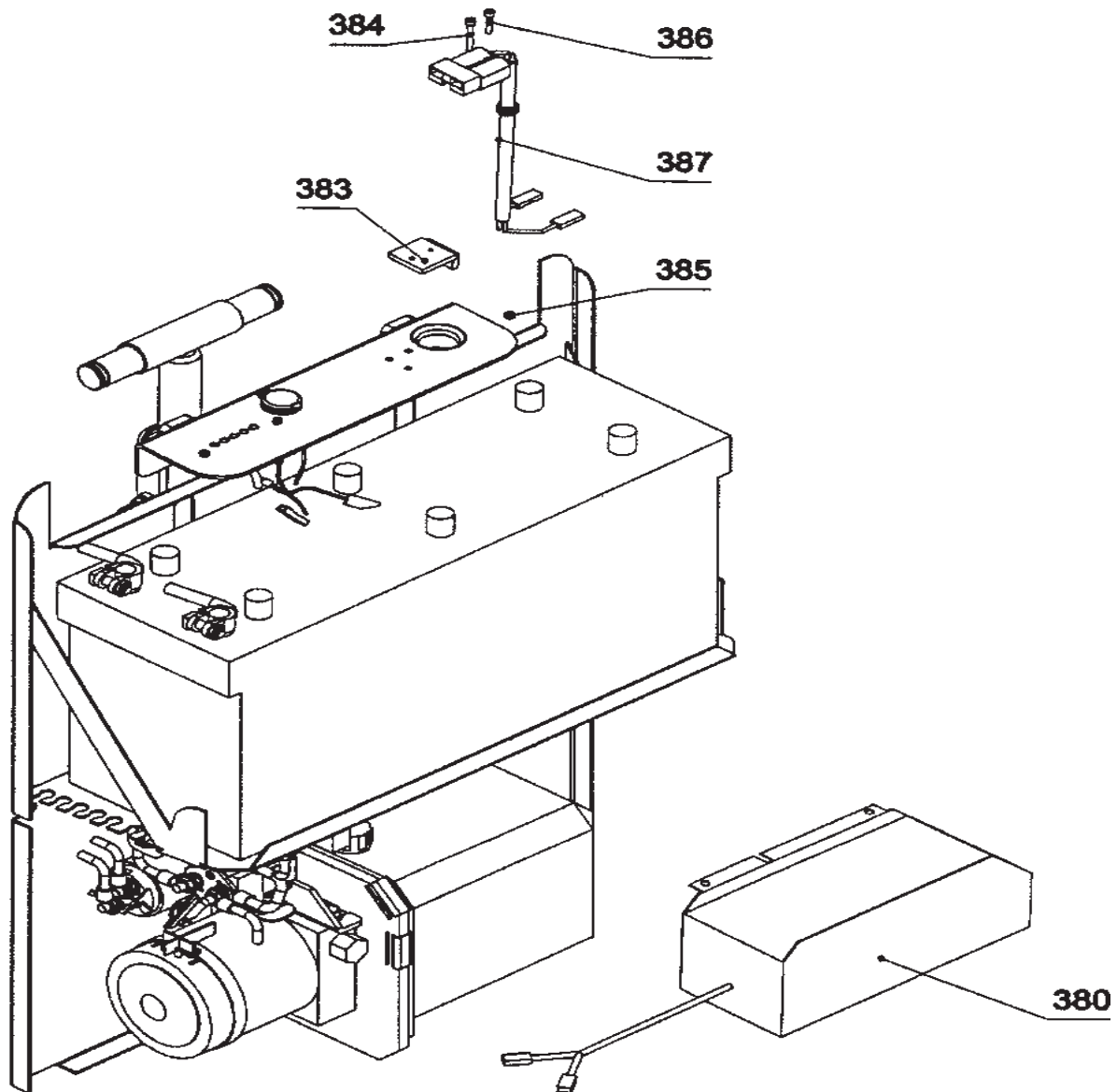
PML-30-ME Electric Hydraulic Pump



SOUTHWORTH

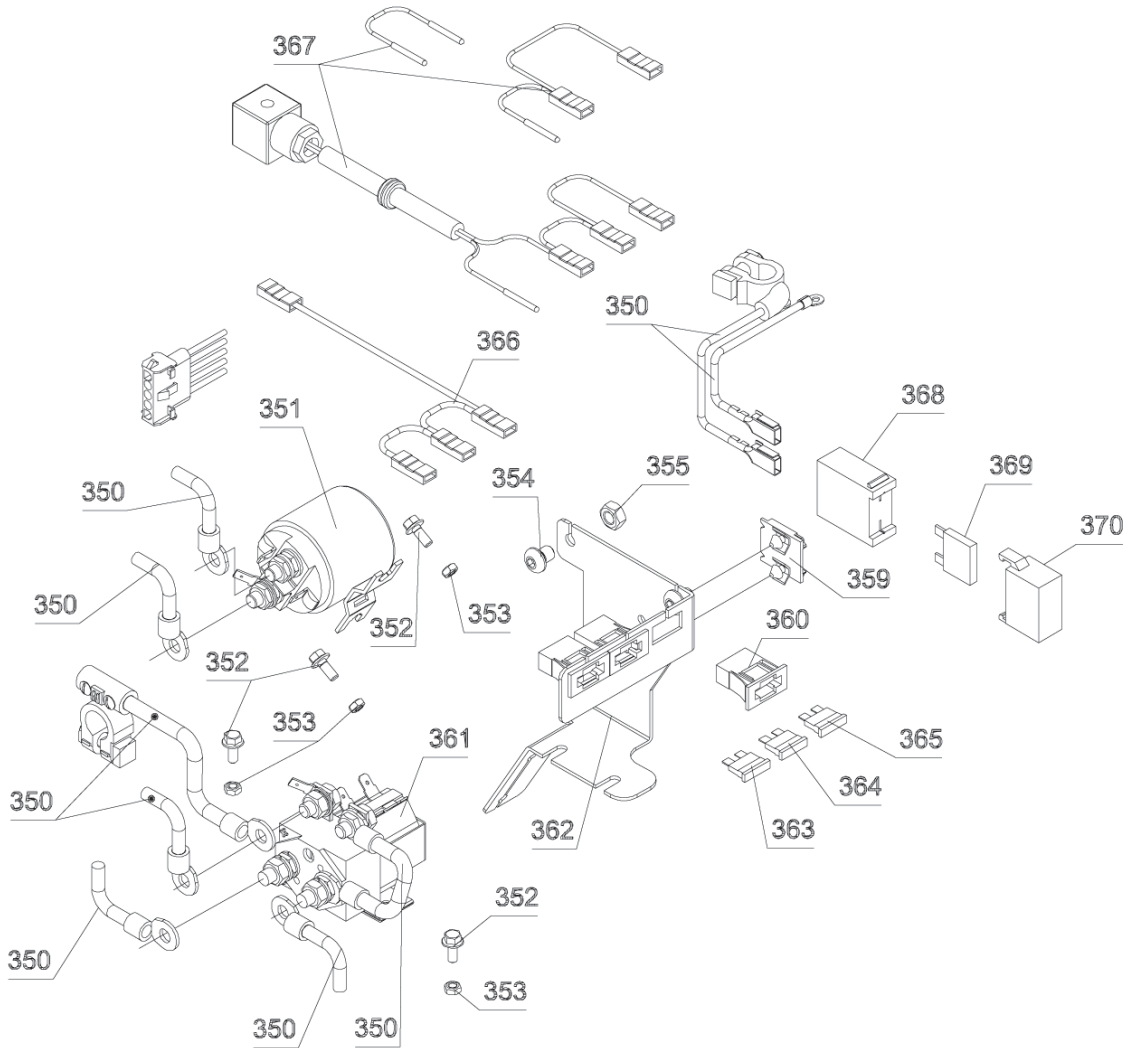
Key#.	Part no.	Parts Description	Qty.	Key#.	Part no.	Part Description	Qty.
301	402326	Piston rod 1170/1200	1	324	420099	Instrument board	1
302	900240*	O-ring	1	325	150005	Battery indicator	1
303	400479	Piston	1	326	921040	Nut	2
304	907050*	Sleeve	1	328	984811	Set of Brushes	1
305	911220	Screw	1			Hpi-Motor 1.1 Kw	
306	934520	Locking ring	1	329	971146	Banjo bolt	1
307	901301*	Sleeve	1	330	916820	Screw	2
308	908300*	Scraper ring	1	331	984604	O-ring	1
309	400478	Top section	1	332	984810	Filler cab	1
310	900440*	O-ring	1	333	984801	Motor 12 V	1
311	420451-1	Cylinder housing 1170/1200	1	334	984602	Flange f. tank	1
312	973137	Flush bushing	1	335	984605	Clips for Oil Tank ELF/LL	12
313	975114	Angular nipple	1	336	984601	Oil tank	1
314	970904	Overflow hose 1170/1200	1	337	420195	Isolator for universal plug	1
315	150004	Set of wires	1	338	420196	Washer for universal plug	1
316	984740	Solenoid valve	1	339	982158	Universal plug	1
317	905180	Copper washer	2	340	150007	Cable universal plug	1
318	970923	Hy-hose	1	341	400873	Clamp Plate	1
319	984840	Flow valvet	2	342		Cylinder cpl. LL	1
320		See relays and fuses		343		Hy-pump cpl.	1
321	150002	Set of wires cpl.	2			Gasket set for cylinder	
322	C141E	Battery	1			All parts marked with* included	
323	913420	Screw	2			Gasket set f. hy-pump (pos. 343)	

PML-30-ME Charger



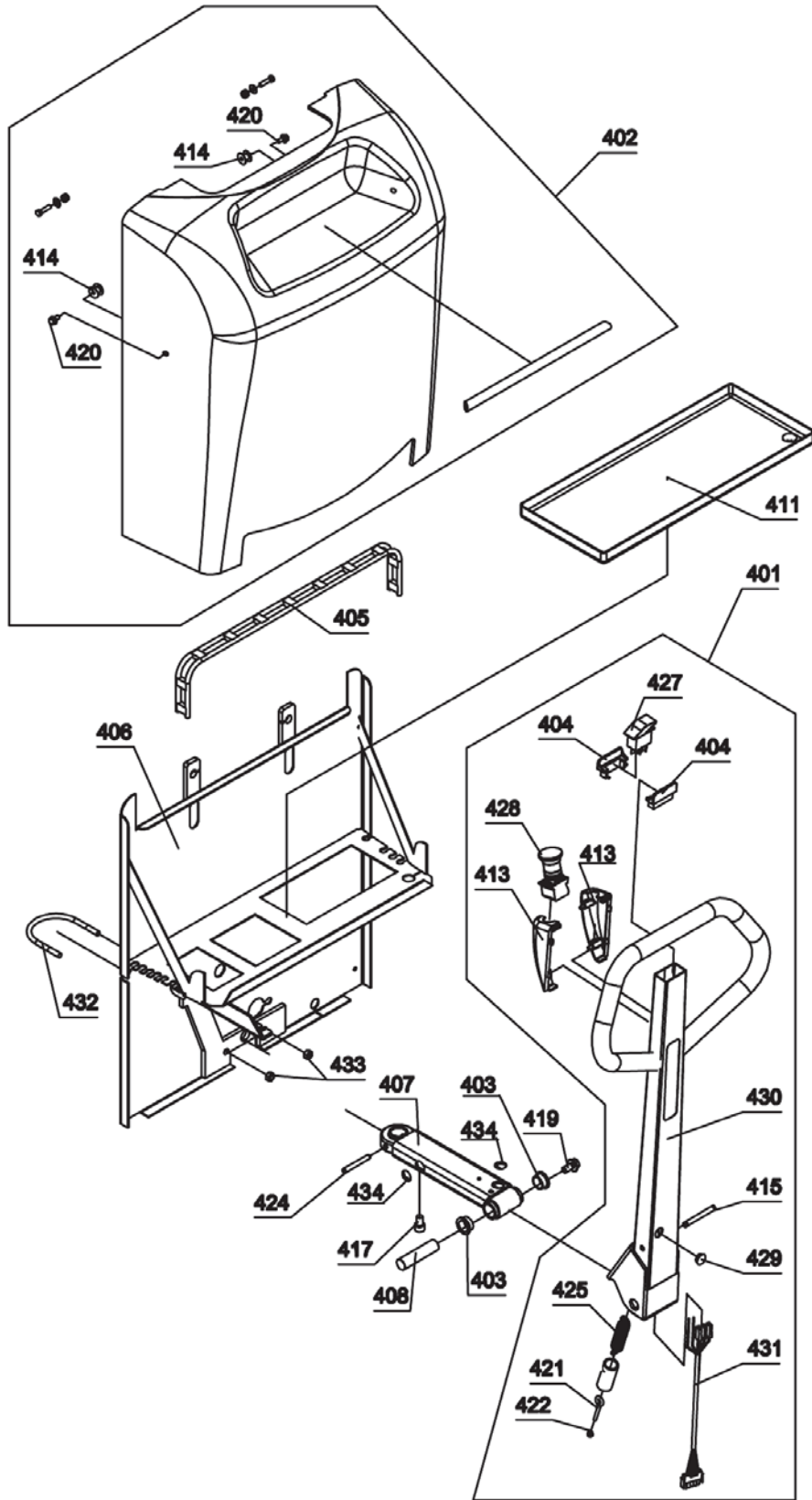
Key#	Part no.	Parts Description	Qty.
380	60020790R	Charger 12V, with cable	1
383	420188	Holder for charging plug	1
384	912430	Screw	1
385	921040	Lock nut	1
386	912420	Screw	1
387	150006	Charging cable, external	1

PML-30-ME Relay and Fuses



Key#	Part no.	Parts Description	Qty.
350	150002	Set of cables, 80 Ampfuse	6
351	984805	Starter switch	1
352	913512	Screw	4
353	921050	Nut Mutter	4
354	919811	Screw	2
355	921080	Nut	2
359	982112-1	Mounting plate - fuse	1
360	982111	Fuseholder	3
361	982097	Relay for closing/opening	1
362	420187	Relay plate	1
363	982102	Fuse 5 Amp	1
364	982115	Fuse 15 Amp	1
365	982123	Fuse 30 Amp	1
366	150000	Set of cables, 3 fuses	1
367	150004	Set of cables, relay/Hirsmann	1
368	982160-1	30 Amp Fuse holder	
369	982128	Amp Maxi Fuse 80 Amp	
370	982160-2	Plastic fittings, fuse holder	

PML-30-ME Steering gear



Key#	Part no.	Part Description	Qty.
401	420039	Handle	1
402	420036	Cover cpl.	1
403	400276	Bushing	2
404	402356	Contact carrier	2
405	403124	Rubber strap for battery	1
406	420011	Pump chassis	1
407	420038	Control lever	1
408	420149	Handle axle ELF	1
409	420150	Cover	1
410	420168	Pipe for battery cover	1
411	420189	Case for battery	1
413	420191	Holder emergency stop	1
414	420193	Holder battery cover	2
415	420315	Transverse pin f. spring	1
416	420316	Plastic hose for spring	1
417	912116	Screw	1
418	915625	Screw	2
419	916120	Screw	1
420	916612	Screw	2
421	919540	Eye bolt	1
422	921050	Lock nut	1
423	924060	Washer	2
424	931860	Tubular pin	1
425	958213	Spring	1
426	980220	Cable lead-in	2
427	982075	Tilting switch	1
428	982190	Emergency stop switch	1
429	993066	Rubber plug	1
430	420033	Handle ELF	1
431	150001	Handle cable ELF/LLE	1
432	400874	Clamp	1
433	921080	Lock nut	2
434	530020	Cable lead-in	2

SECTION TWO



OPERATOR INSTRUCTIONS

for the

PML Transpositioner

OPERATING SAFETY RULES AND PRACTICES

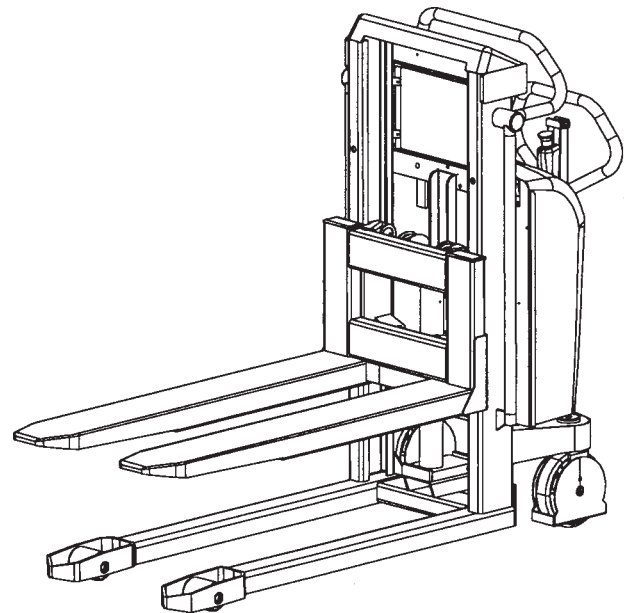
Operator Responsibility

Safe operation is the responsibility of the operator.

Operators shall develop safe working habits and also be aware of hazardous 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 Transpositioner. Operators must be familiar with the operation and function of all controls before operating the Transpositioner.

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

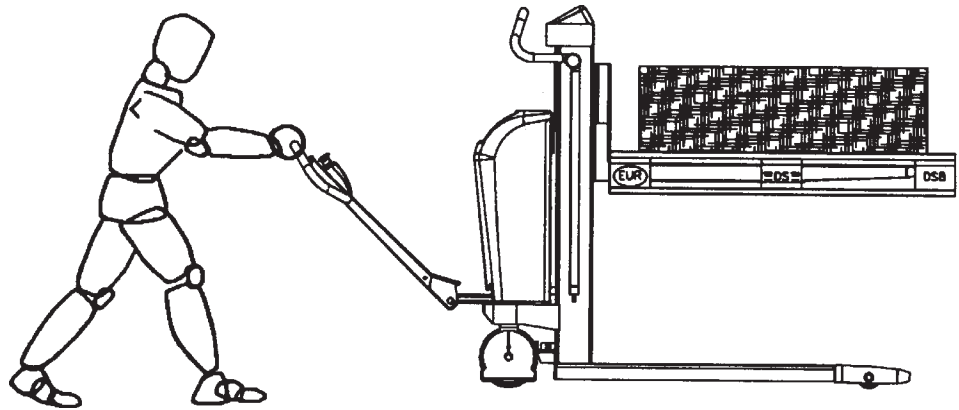


OPERATOR INSTRUCTIONS

Southworth PML TRANSPOSITIONER

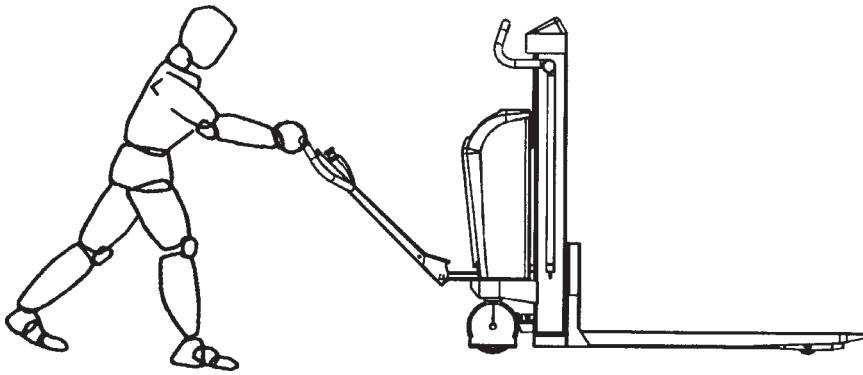
Operating the PML Transpositioner:

1. Stand behind the black handle bars of the machine, this is the correct position for operating the PML Transpositioner. (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.)



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

3. If the Emergency Stop button is depressed, release it (twist counter-clockwise)
4. Release the wheel lock.
5. Push or pull the PML Transpositioner 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 PML Transpositioner.
8. Push the Transpositioner as far into the container as possible (the container should be against the mast of the Transpositioner).
9. To raise or lower the forks, push the designated button on the handle. Depress the left 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 PML Transpositioner 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 Transpositioner 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 Transpositioner under control at all times.
14. When the Transpositioner is located into position and stopped, engage the wheel lock.



Loading the Transpositioner

Handle only stable and safely arranged loads, containers, hampers or baskets that are within the capacity of the PML Transpositioner. 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.

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

Operator Care of the Transpositioner

At the beginning of each shift or before operating the Transpositioner check its condition, giving special attention to the following:

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

If the Transpositioner 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 PML Transpositioner shall not be operated until it has been restored to safe operating condition.

If you have questions please contact:
Southworth Technical Service Department
at 1-800-743-1000 or
Service@SouthworthProducts.com

GENERAL SAFETY PRACTICES

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

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 Transpositioner in a set position on a level surface. It is not intended to be a dynamic brake to slow down or stop a moving Transpositioner.

Stability

The Transpositioner 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 house-keeping 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 Transpositioner 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 Transpositioner.

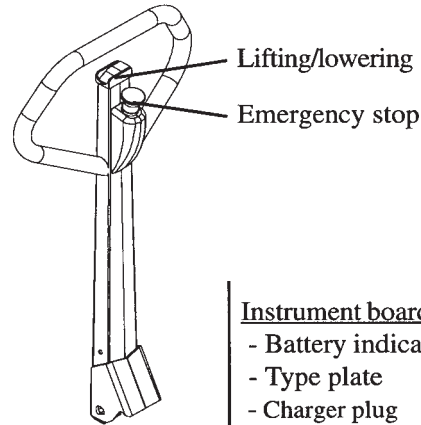
Floors and Floor Conditions

Areas of use for the Transpositioner 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

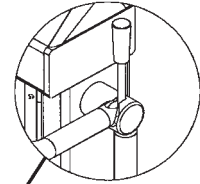
The Transpositioner is not intended to be used for elevating personnel at any time, under any conditions. Personnel should never sit, stand or ride on any part of the Transpositioner.



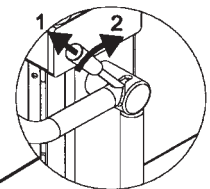
Instrument board:

- Battery indicator
- Type plate
- Charger plug (internal or external charger)
- Plug for extra equipment, 12V, max. 15Amp

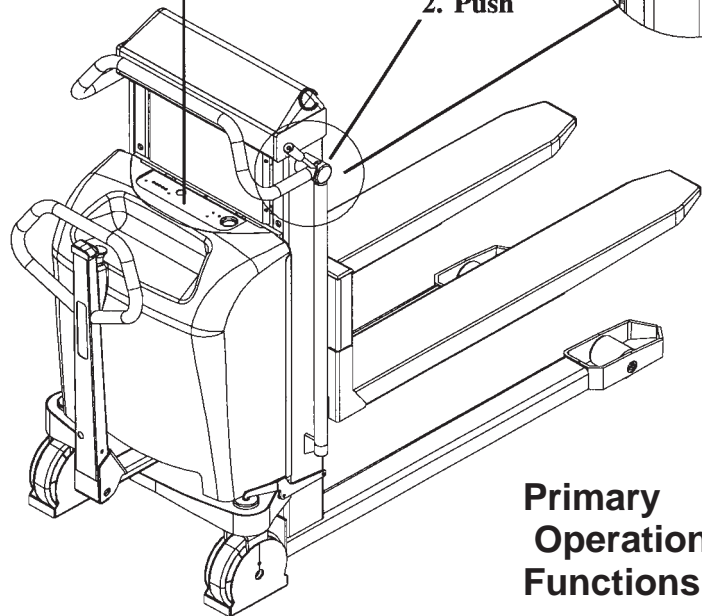
Released position



Braked position



To release:
1. Pull
2. Push



**Primary
Operation
Functions**

2 YEAR WARRANTY

Southworth Products Corp warrants this product to be free from defects in material or workmanship for a period of 2 years of single shift usage from date of shipment, providing claim is made in writing within that time period. This warranty shall not cover modified designs for special applications, 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, there are no other warranties, express or implied, including the warranties of merchantability and fitness for a particular purpose, all of which are hereby excluded.

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, 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 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, Maine.



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