

ORION PACKAGING
L44
STANDARD, LOW PROFILE,
STRETCHWRAPPER

OWNER'S MANUAL



100 Crescent Drive
Collierville, TN 38017

PACKAGING SYSTEMS, INC.
A PRO MACH OPERATING PARTNER

(800) 333-6556
(901) 888-4170

TABLE OF CONTENTS

1.	L44 SPECIFICATIONS1
2.	STANDARD FEATURES2
3.	OPTIONS3
4.	PARTS LISTS4
	4.1 Tower Parts List4
	4.2 Carriage Parts List.6
	4.3 Base And Turntable Parts List.9
5.	MACHINE INSPECTION AND INSTALLATION	11
	5.1 Inspection Upon arrival.	11
	5.2 Installation	12
6.	MACHINE CONTROLS.	13
	6.1 Power Switch	14
	6.2 Start And Stop Switches.	14
	6.3 Top Cover Switch	14
	6.4 Spiral Wrap Switch	15
	6.5 Reinforce Wrap/Table Jog Switch.	15
	6.6 Carriage control switch.	16
	6.7 Table Speed Control Switch	16
	6.8 Photocell Switch	17
7.	CYCLE CONTROL SWITCHES.	18
	7.1 Film Tension	18
	7.2 Top And Bottom Wraps	18
	7.3 Carriage Speed	19
8.	MACHINE MAINTENANCE	20

8.1	Speed Reducer Maintenance.	20
8.2	Motor Maintenance.	21
8.3	Chain Maintenance.	21
8.4	Cam Follower Maintenance	21
APPENDIX.	23

1. L44 SPECIFICATIONS

Power requirements: 110 VAC, single phase, 60 Hz, 15 A

Machine floor space requirements: 60" x 115"

Distance from floor to top of table: 3 7/8 inches.

Turntable diameter: 60"

Turntable drive: 3/4 hp, 90 VDC, TEFC, SCR controlled soft start and stop,
ANSI #50 chain.

Carriage elevator drive: 1/2 hp, 90 VDC, TEFC, SCR controlled variable speed,
35 fpm max, ANSI #50 chain.

Multistretch delivery system: 1/2 hp, 90 VDC, TEFC, SCR controlled force to
load compensation by a dancer bar.

Maximum static load: 30 000 lbs.

Maximum dynamic load: 6 000 lbs.

Minimum load: 350 lbs.

Maximum pallet and load dimensions: 80" x 80" x 96"(h)

Machine dimensions: 60" x 115" x 92"(h)

Machine weight: 2450 lbs.

2. STANDARD FEATURES

The standard L44 stretchwrapper comes with Multistretch powered prestretch film delivery system accomodating up to 30" film without changing the film mandrel. It works with an active dancer system with quick response that regulates the prestretch feed in order to keep a constant film tension.

The master control panel features are,

- Film tension selector,
- Individual count selectors for top and botom wraps,
- Individual selectors for elevator up and down speed control,
- Electric eye OFF/ON,
- Top cover pause selector,
- Spiral up - up/down,
- Reinforce wrap, Turntable jog,
- Raise/Lower elevator control,
- High/Low turntable speed selector,
- Power OFF/ON
- Start,
- Stop,
- Circuit breaker protection.

The turntable has positive alignment and an adjustable speed of up to 16 rpm with an adjustable acceleration and deceleration independent of a high or low speed selection.

The turntable is supported by twelve cam followers, mounted in 1/2 inch steel, each having a maximum static load capacity of 2500 lbs.

3. OPTIONS

The options available for the Standard, Low Profile stretchwrapper are,

- 72" diameter turntable,
- Extended mast,
- Dual turntable,
- Programmable logic controller,
- Heater option for cold environment application,
- Custom design features.

4. PARTS LISTS

4.1 Tower Parts List

The exploded assembly drawing of the Standard Tower is shown on drawing number 200 99. Table 1 has the parts listed in order of part number.

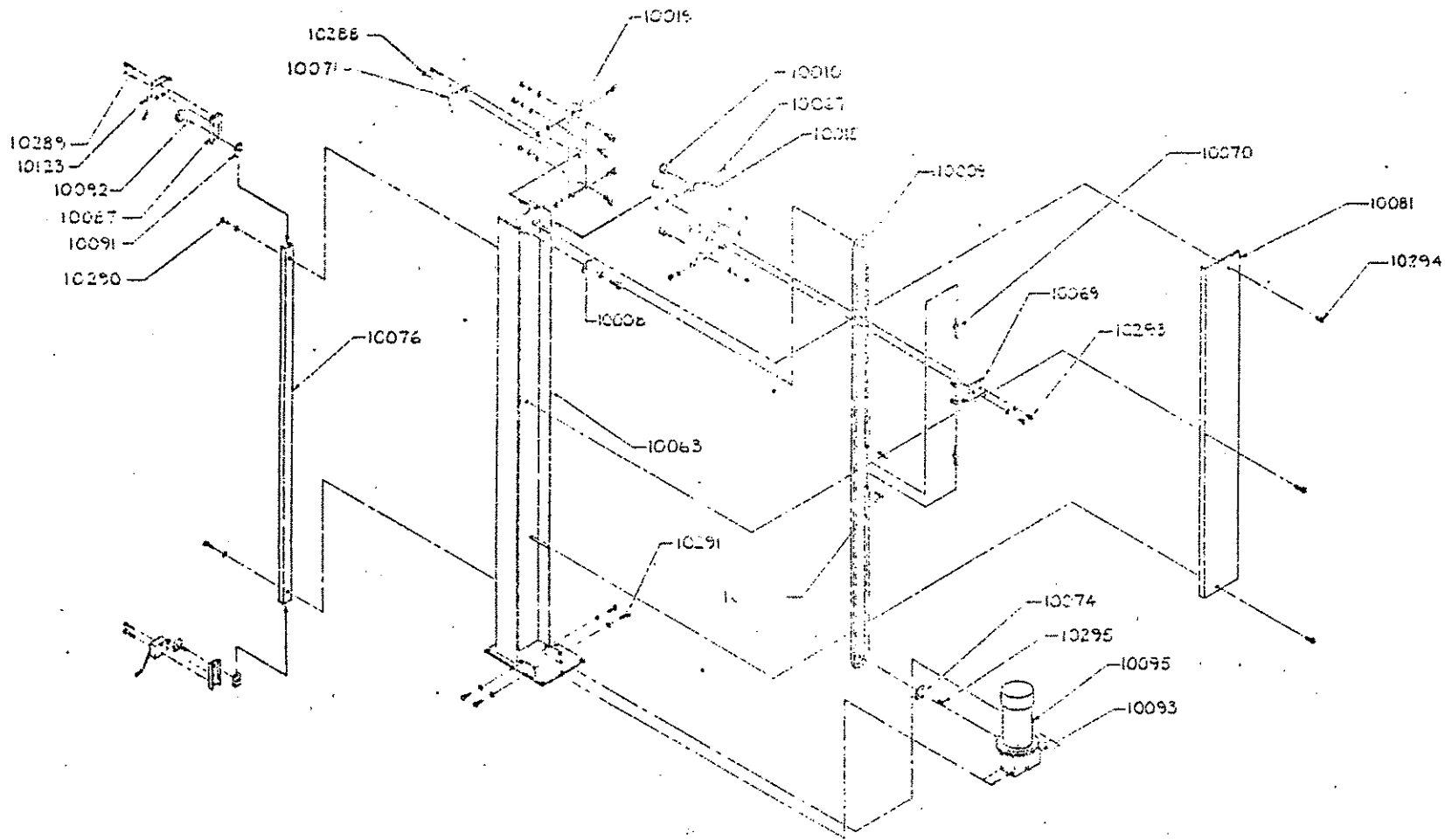
Note: the names given to the parts are generic.

TABLE 1

Tower parts list

Part number	Description	Quantity
10008	Idler sprocket	1
10009	#50 chain	1
10010	Cam follower (1 3/8 inch O.D.)	6
10018	Left carriage holder	1
10019	Right carriage holder	1
10063	Tower	1
10067	Cam follower (1/2 inch O.D.)	4
10069	Chain tensioner	1
10070	Chain tensioning screw	2
10071	Limit switch actuator	1
10074	Drive sprocket	1
10076	Limit switch channel	1
10081	Chain cover	1
10087	Limit switch bracket	3

10091	Channel guide	3
10092	Knob	3
10093	Reducer	1
10095	Elevator motor (1/2 hp, 1750 rpm)	1
10123	Limit switch	3
10288	1/4-20 UNC x 1/2 SHCS	2
10289	Limit switch screw	6
10290	Channel screw (1/4-20 UNC x 1/2 SHCS)	2
10291	Transmission screw (3/8-16 UNC x 1 Hex bolt)	4
10292	Chain tensioner pin	2
10293	3/8-16 UNC x 3/4 Hex bolt	2
10294	Cover screw (1/4-20 UNC x 1/2 SHCS)	3
10295	3/16 inch square key	1



SHEETS PROGRESSIVE MONTREAL	
NO. 1	OF 1
TOWER ASSEMBLY	
REV. 001 15/11/83	

4.2 CARRIAGE PARTS LIST

The exploded assembly drawing of the Standard carriage is shown on drawing number 200 100. Table 2 has the parts listed in order of part number. Note: the names given to the parts are generic.

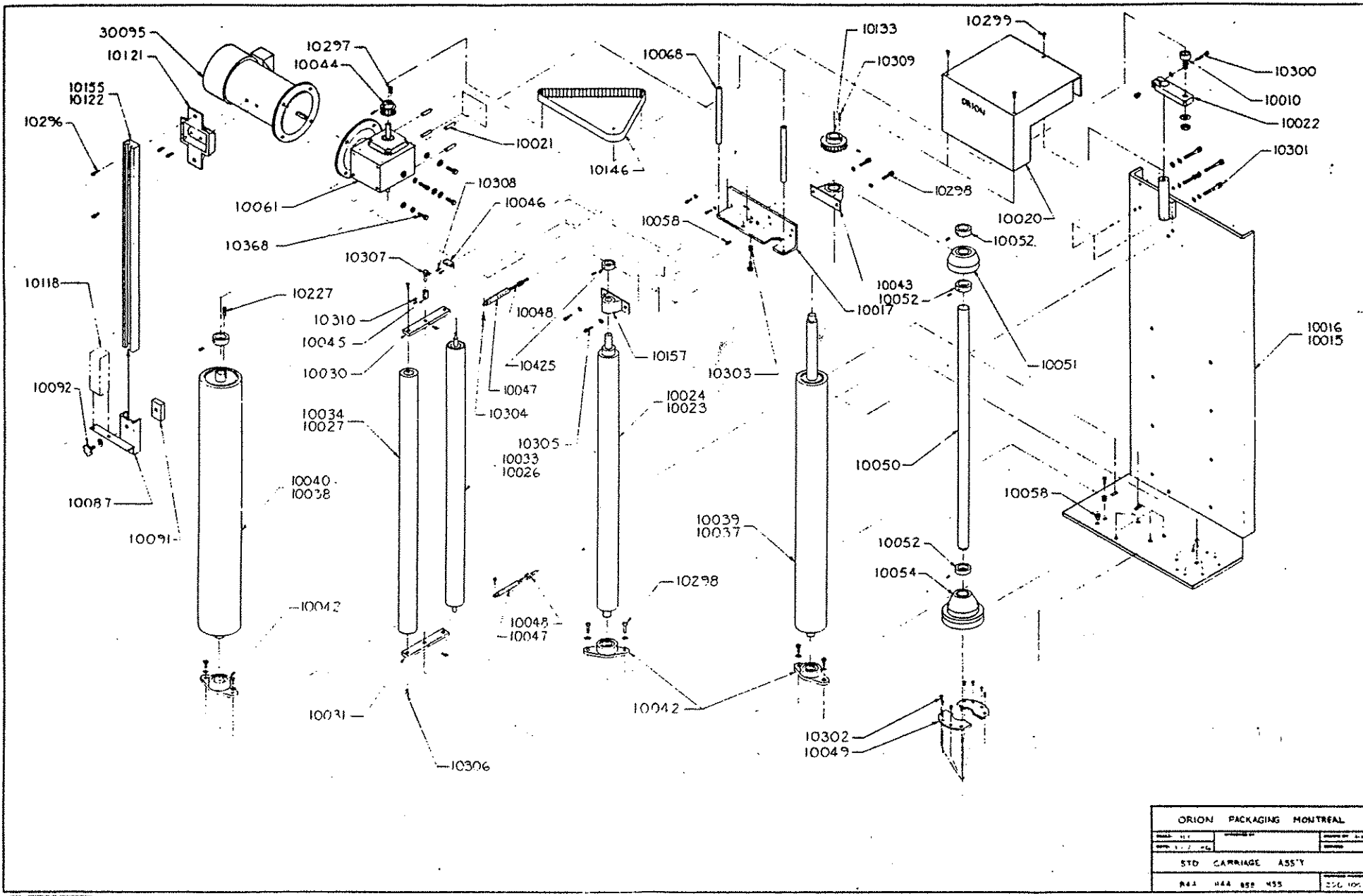
TABLE 2

Carriage parts list

Part number	Description	Quantity
10010	Cam follower (1 3/8 inch O.D.)	1
10015	20" Carriage frame	1
10016	30" Carriage frame.	1
10017	Roller bracket	1
10020	Multistretch mechanism cover	1
10021	Spacer	1
10022	Belt tensioner	1
10023	30" Pressure roller	1
10024	20" Pressure roller	1
10026	30" Center dancer roller	1
10027	30" Roller	1
10030	Top dancer lever	1
10031	Bottom dancer lever	1
10033	20" Center dancer roller	1
10034	20" Roller	1
10037	30" x 3" dia. rubber roller	1
10038	30" x 4" dia. rubber roller	1

10039	20" x 3" dia. rubber roller	1
10040	20" x 4" dia. rubber roller	1
10042	3/4" flanged bearing unit	2
10043	1" Pillow block	1
10044	Prestretch driver pulley	1
10045	Potentiometer coupling	1
10046	Potentiometer bracket	1
10047	Film tension spring	2
10048	Spring adjustment screw	2
10049	Brake pad	2
10050	Film spool mandrel	1
10051	Top mandrel	1
10052	1" Collar	6
10054	Bottom mandrel	1
10058	Bronze bushing	2
10061	Prestretch transmission (5:1 worm & gear)	1
10068	Cover bracket	2
10087	20" Photoswitch bracket (L.P.)	1
10091	Channel guide	1
10092	Knob	1
10118	Photoswitch (H.P.)	1
10121	Channel bracket	1
10122	30" Channel	1
10125	Photoswitch (L.P.)	1
10133	Prestretch driven pulley	1
10146	Timing belt	1
10155	20" Channel	1

10156	30" Photoswitch bracket (H.P.)	1
10157	3/4 inch pillow block	1
10227	3/16 inch square key	1
10296	Channel screw	2
10297	3/16 inch square key	1
10298	3/8-16 UNC x 1 long hex bolt	2
10299	Multistretch cover screw	3
10300	3/8-16 UNC x 2 long SHCS	1
10301	5/16-18 UNC x 2 1/2 long Hex bolt	4
10302	8-32 UNC x 1/2 long BHCS	8
10303	Bumper	2
10304	10-24 UNC x 3/4 long SHCS	2
10305	5/16-18 UNC x 3/4 long SHCS	2
10306	1/4-20 UNC x 3/4 long CHCS	2
10307	Feedback potentiometer	1
10308	10-24 UNC x 1/2 long SHCS	2
10309	1/4" square key	1
10310	10-24 UNC x 1 long SHCS	2
10368	3/8-16 UNC x 1 long hex bolt	4
10425	3/4" collar	1
30095	Prestretch motor (1/2 hp, 1750 rpm)	1



ORION PACKAGING MONTREAL		
Model: 117	Part No: 10001	Rev: 100
STD CARRIAGE ASS'Y		
Rev: 100	Rev: 100	Rev: 100

4.3 Base And Turntable Parts List

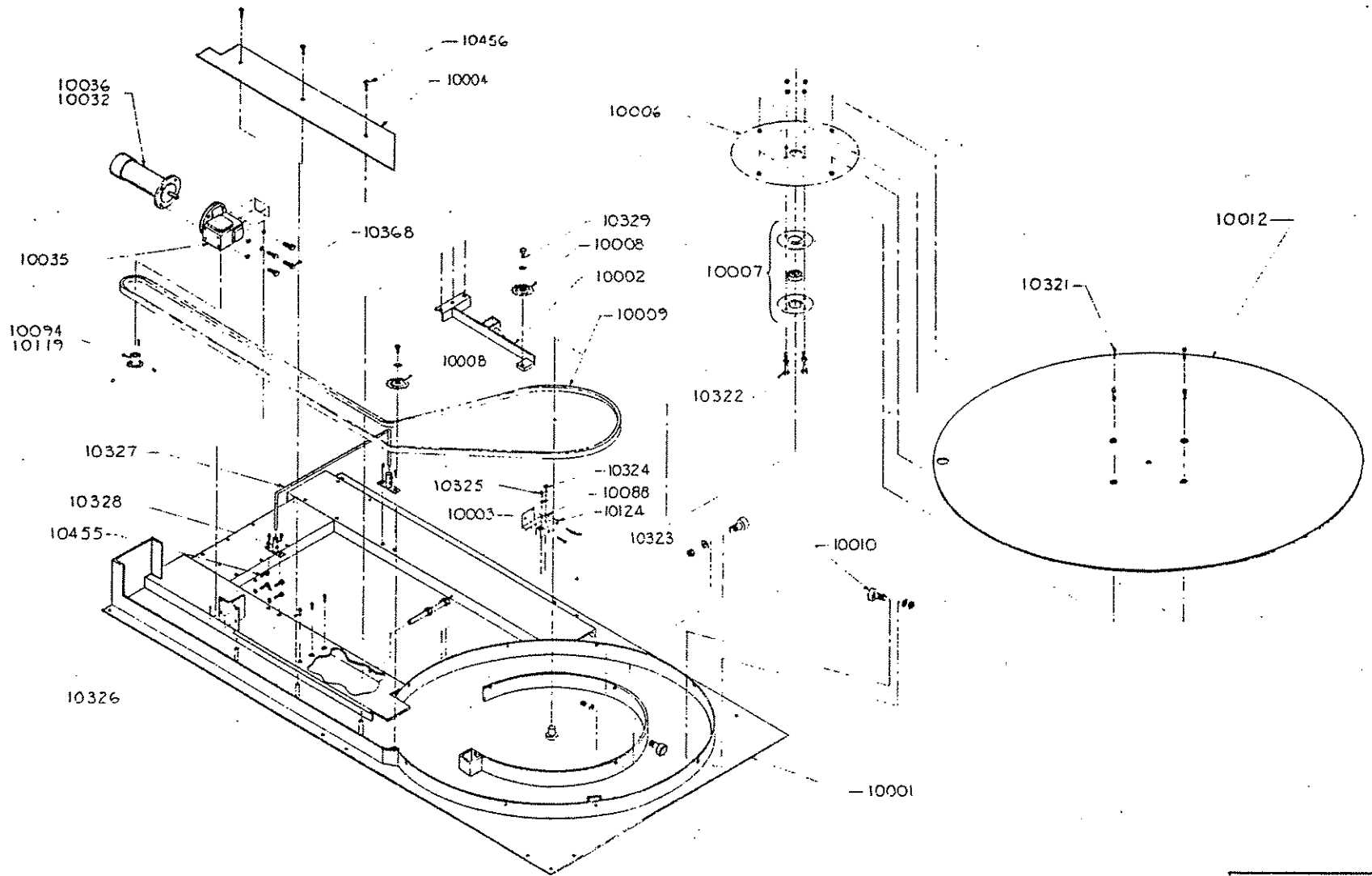
The exploded assembly drawing of the Standard, Low Profile base is shown on drawing number 200 98. Table 3 has the parts listed in order of part number. Note: the names given to the parts are generic.

TABLE 3

Base and turntable parts list

<u>Part number</u>	<u>Description</u>	<u>Quantity</u>
10001	Base	1
10002	Chain tensioner	1
10003	Tensioning screw	1
10004	Chain cover	1
10006	Turntable sprocket	1
10007	Center bearing unit	1
10008	Idler sprocket	2
10009	#50 chain	1
10010	Cam follower	12
10012	Turntable	1
10032	3/4 hp motor (44)	1
10035	Reducer	1
10036	1/2 hp motor (55)	1
10088	Proximity switch bracket	1
10124	Proximity switch	1
10094	Driver sprocket (44)	1
10119	Driver sprocket (55)	1

10321	3/8-16 UNC x 1 1/2 long SHCS	4
10322	3/8-16 UNC x 1 1/2 long hex bolts	4
10323	Proximity switch screw	2
10324	3/8-16 UNC x 1 1/2 long hex bolt	1
10325	3/8-16 UNC x 1 1/2 long hex bolt	1
10326	3/8-16 UNC x 1 long CHCS	3
10327	Roping bar	1
10328	Roping bar stand	2
10329	5/8-11 UNC x 1 1/2 long hex bolt	2
10368	3/8-16 UNC x 1 long hex bolt	4
10455	5/16-18 UNC x 1 long hex bolt	4
10456	10-24 UNC x 1 long CHCS	3



ORION PACKAGING MONTREAL		
REV. 1.1	DATE 01-11-88	DESIGNED BY M.C.
BY 10-11-88		REVISED BY
STE LOW PROFILE BASE ASSY		
A 84		100 48

5. MACHINE INSPECTION AND INSTALLATION

5.1 Inspection Upon Arrival

CAUTION: When unloading the stretchwrapper, care must be taken not to lift it by the turntable. The forks of the forklift should be inserted in the 10 inch slots behind the tower to lift the machine.

Before inspection, all packing and restraining blocks must be removed; these may include the blocks under the carriage and the bolts holding the ramp on the table.

CAUTION: When cutting the stretchwrap material covering the machine, care must be taken not to cut any of the electrical lines.

A visual inspection of all the electrical connections should be performed after unpacking the machine to check for loosened joints or broken connections. Any suspected shipping damage must be reported immediately to the freight carrier.

Items that are vulnerable to damage and must be inspected are the motor and transmission housings and connections at the base of the tower, and on the carriage; the photoswitch on the carriage, and the roping bar and stands.

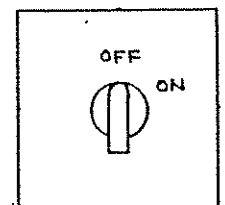
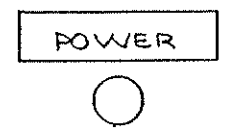
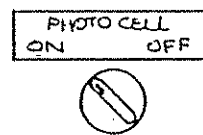
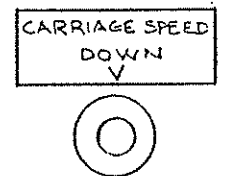
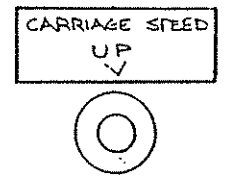
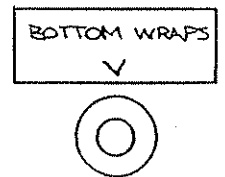
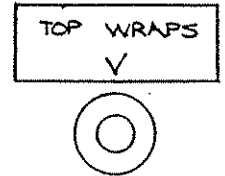
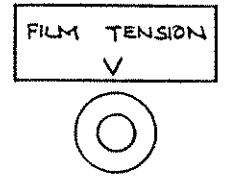
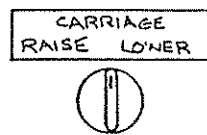
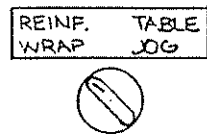
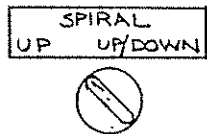
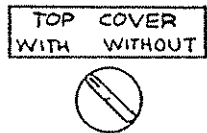
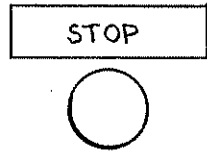
5.2 Machine Installation

After the visual inspection has been performed, the customer is required to provide the electrical power requirements as outlined in the specifications (sections 1, 2, and 3 of this manual).

An electrical diagram is provided in the panel box. Only a qualified electrical technician or an Orion representative should effect any repairs on the machine.

Before operating the machine the oil pockets underneath the table should be checked and filled if any oil is missing (see section 8.4).

6. MACHINE CONTROLS



6.1 Power Switch

The Power Switch has two settings,

ON - Connects a 110 VAC power source to the machine,

OFF - Disconnects the power source.

6.2 Start And Stop Switches

The Start switch is used to start the cycle once the load is on the turntable. The cycle may be stopped at any time by pressing the Stop button.

NOTE: if the Stop button is pressed in the middle of the cycle, the carriage and turntable must be returned back to their home positions by using the jog buttons before restarting the cycle.

6.3 Top Cover Switch

The Top Cover switch has two positions,

WITH - In the WITH position the cycle will stop after one top wrap is completed, allowing the placement of a top sheet on the load, afterwhich the start button may be pressed to resume wrapping.

WITHOUT - In the WITHOUT position the cycle will not pause for the placement of a top cover.

6.4 Spiral Wrap Switch

The Spiral Wrap switch has two positions,

UP - In the UP position the cycle will end after completing the specified number of top wraps, therefore, the machine will only wrap the load once, going up.

UP/DOWN - In the UP/DOWN position the cycle is complete after the load is wrapped in both the up and down directions.

6.5 Reinf. Wrap/Table Jog Switch

This switch has three positions,

middle position - in this position the switch is inactive and the machine will operate normally.

Reinf. Wrap - when the switch is held in this position during operation the carriage will stop rising or descending in order to increase the number of wraps around the chosen section.

Table Jog - when the switch is held in this position the turntable will turn in a clockwise direction as viewed from the top.

6.6 Carriage Control Switch

The Carriage Control switch is a monostable three position switch with the following settings,

RAISE - Raises the carriage until until the top limit switch on the tower is activated.

LOWER - Lowers the carriage until the bottom limit switch on the tower is activated.

The switch is normally in the middle position where the carriage remains stationary. Turning the switch to the RAISE or LOWER position will activate the carriage to move in its respective direction.

Note: when the switch is activated to raise or lower the carriage, the carriage will not stop until either the top or bottom limit switch is activated respectively.

6.7 Table Speed Control Switch

The Table Speed Control switch has two settings,

LOW - The LOW setting may be used for wrapping unstable or very heavy loads that tend to fall apart when wrapped at higher speeds.

HIGH - The HIGH setting may be used for wrapping more stable loads.

Once the up wrap has been wrapped on the low speed setting, unstable loads may also be wrapped on the high speed setting by switching from LOW to HIGH after the top wraps are done.

6.8 Photocell Switch

The Photocell switch has two settings,

ON - When turned ON, the photocell senses whether or not the carriage has reached the top of the load. The carriage will stop and begin the top wraps sequence once the top of the load is reached. The carriage will always stop at the top of the load regardless of its height.

OFF - When turned OFF, the photocell is inoperative and the carriage will stop only once the top limit switch has been activated.

7. CYCLE CONTROLS

7.1 Film Tension

The film tension may be adjusted through the film tension control potentiometer. The pot has a range of tension from 0 to 10, 10 being the highest tension rating. This pot may be adjusted during the cycle.

CAUTION: Light loads may require lower tension settings than heavier loads.

7.2 Carriage Speed

There are two carriage speed controls on the panel,

CARRIAGE SPEED UP,
CARRIAGE SPEED DOWN.

The carriage speed controls can be used to control the amount of overlap the film will have on itself during a wrap. It is recommended to start with a RAPID upward wrap in order to stabilize the load early in the cycle.

The control potentiometers have settings from 0 to 10, the higher settings being the fastest. High settings will mean less film overlap because of faster carriage speed, and low settings will mean more film overlap because of lower carriage speeds.

7.3 Top And Bottom Wraps

There are two multi-position switches which control the number of wraps that may be put at the top and bottom of the load. Each switch has positions going from 1 to 10 corresponding to the number of wraps which may be applied at the top or bottom of the load.

These switches may be set before the cycle begins.

8. MACHINE MAINTENANCE

8.1 Speed Reducer Maintenance

On the reducing transmission, after the first week all external cap screws and plugs should be checked for tightness. It is recommended to change the oil every six months or every 2500 hours of operation, whichever comes first. When adding oil the transmission should never be filled above the oil level mark indicated because leakage and overheating may occur. Below is a list of the type of lubricant that should be used.

<u>Manufacturer</u>	<u>Lubricant</u>
American Oil Co.	American Cyl. Oil No. 196-L
Cities Service Oil Co.	Citgo Cyl. Oil 180-5
Gulf Oil Corp.	Gulf Senate 155
Mobile Oil Corp.	Mobil 600 W Super Cyl. Oil
Phillips Oil Co.	Andes S 180
Texaco Inc.	624-650T Cyl. Oil
Shell Oil Co.	Velvata Oil J82
Union Oil Of Cal.	Red Line Worm Gear Lube 140

Reducing transmissions are found on the carriage, and at the base of the tower.

8.2 Motor Maintenance

An occasional inspection of the brushes should be made in order to establish a wear rate. Replacement brushes should be installed before old brushes wear to 9/16" long, measured on the long side. After replacing brushes run the motor near rated speed for at least 1/2 hour with no load to seat the new brushes. Failure to properly seat the new brushes may cause commutator damage and rapid wear of the new brushes. If the commutator becomes rough, scored, or out of round, a competent motor shop should disassemble the motor and resurface the commutator. With every third brush change, have a competent motor shop resurface the commutator and blow the carbon dust out of the motor.

8.3 Chain Maintenance

To clean and relubricate chains, wipe them with an oily cloth every month. If the environment is very dusty or damp, it may be necessary to clean and relubricate the chains more often.

With time the chains will tend to stretch. A loose elevator chain should be tightened at the chain tensioner as shown on drawing number 200 192. A loose turntable drive chain should be tightened by tightening the 1" dia. screw on the base, next to the turntable.

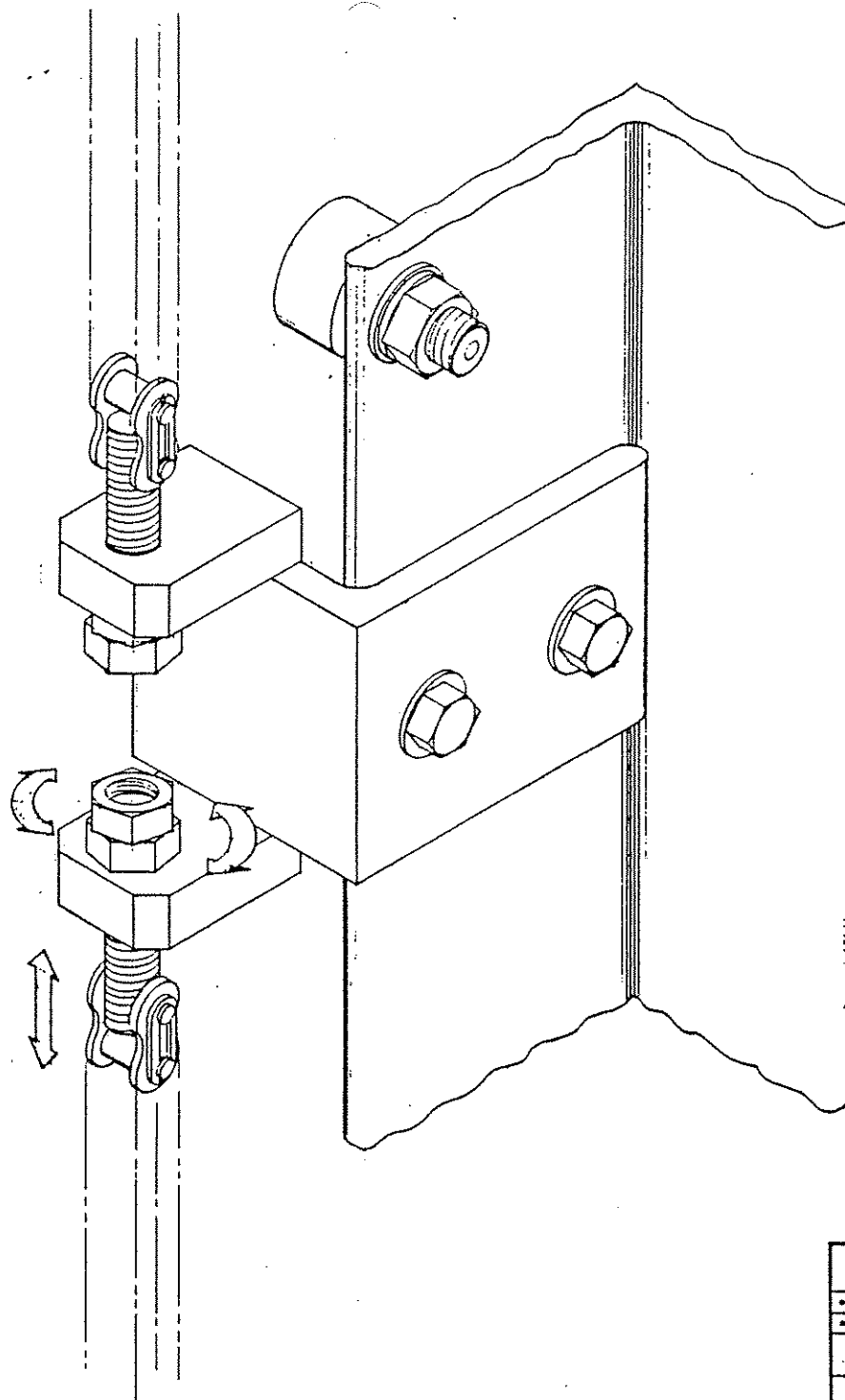
8.4 Cam Follower Maintenance

The cam followers behind the carriage have deep grease pockets and need not frequent relubrication.

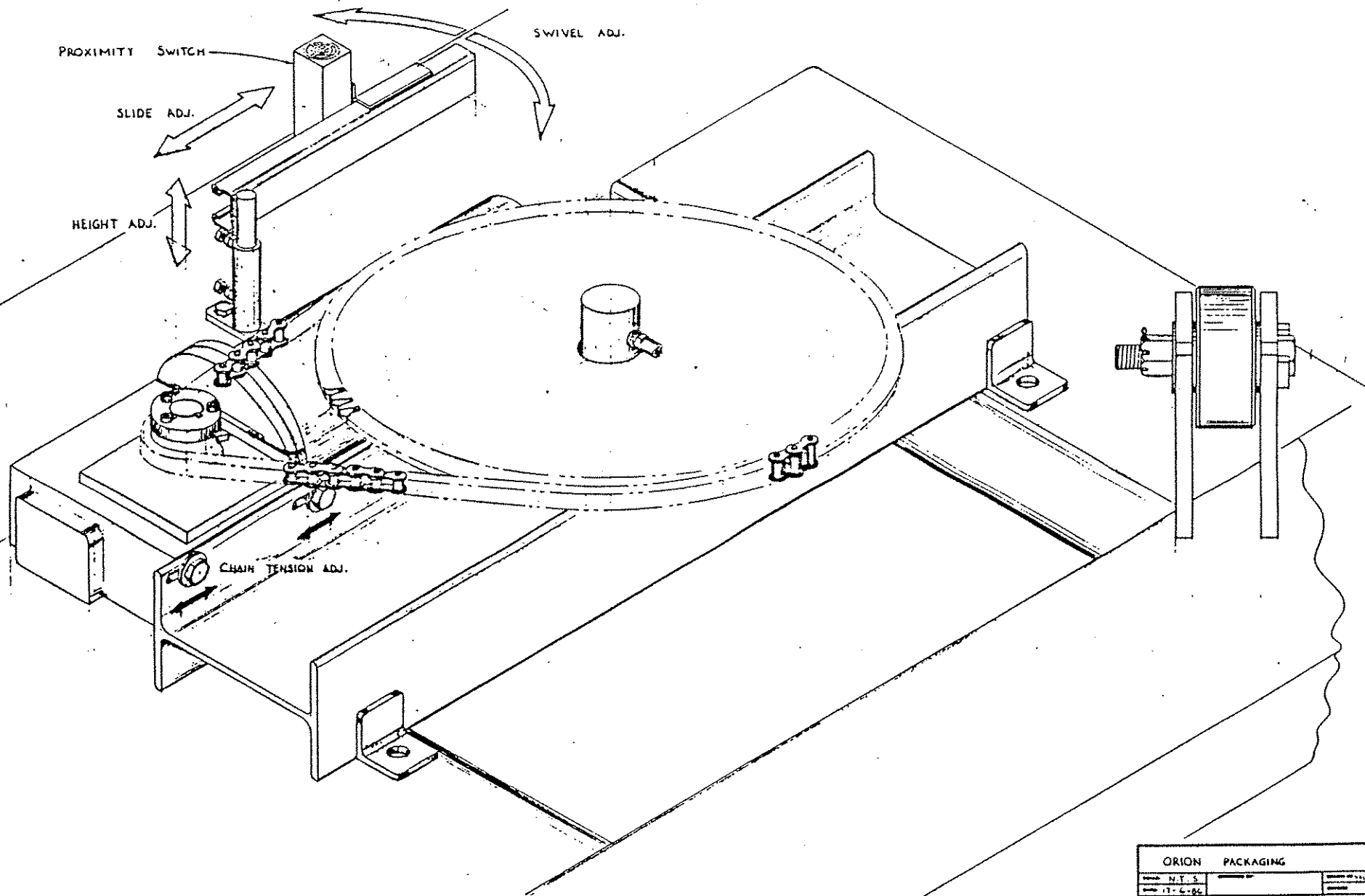
The portion of the tower on which the cam followers roll should be cleaned and regreased every 300 hours of operation. If the machine operates in a dusty or corrosive environment the tower should be relubricated more often.

The cam followers under the turntable are wet with oil in order to keep the track properly lubricated. The oil pockets should be refilled every 200 hours of operation. The two oil pockets are found on the base, underneath the table.

CHAIN TENSION
ADJUSTMENT

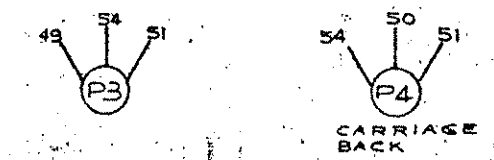
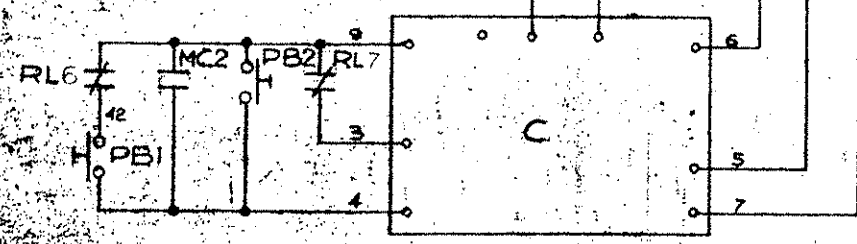
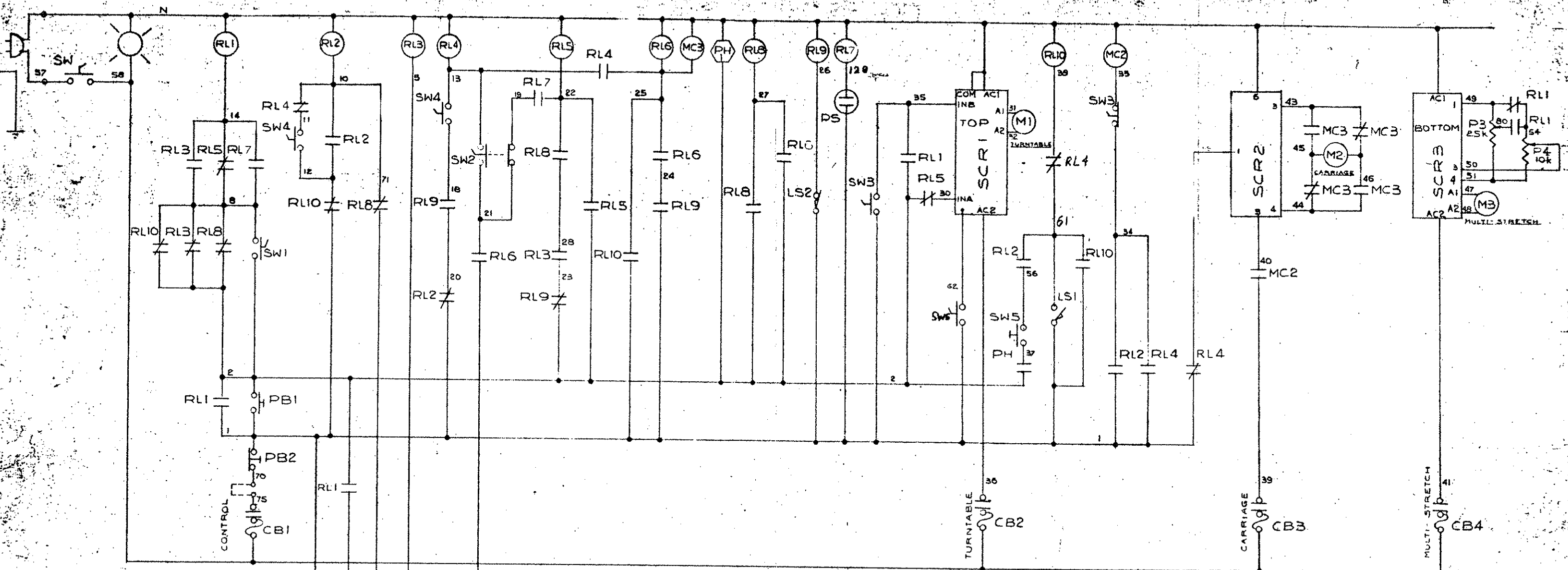


ORION PACKAGING		
SCALE: N.T.S.	APPROVED BY:	DRAWN BY: MLC/STW
DATE: 10-7-86		REVISED:
CHAIN TENSIONER ASS'Y		
DRAWING NUMBER:		200-192



ORION PACKAGING	
Model N.Y.S.	Quantity 12,500
Date 11-6-56	
TURN TABLE ASSEMBLY	
PA-44	200-97

APPENDIX



LS1 - TOP LIMIT SWITCH (CARRIAGE)
 LS2 - BOTTOM LIMIT SWITCH (CARRIAGE)
 PS - PROXIMITY SWITCH
 PH - PHOTOCELL

ORION QUEBEC		
Model 308.84	Approved on	Manufactured by
LEH/44		