



ATTENTION: *

VERY IMPORTANT

Before unloading and unpacking the machine, read section 5 of this manual for unloading and unpacking instructions.

Failure to do so may result in the forfeiture of the warranty.

ORION PACKAGING INC.

L-55/7S

OWNER'S MANUAL

**ORION PACKAGING INC.
2270 Industrial
Laval, Quebec
H7S-1P9**

**Telephone: (514) 667-9769
Fax: (514) 667-6320**

ORION PACKAGING INC.

NOTICE

In order to acquire more information about custom make features of the machine; and to provide quicker service, the following information is required when making an inquiry for a machine:

- 1) Serial Number
- 2) Model Number
- 3) Subassembly-Part Location

ORION PACKAGING INC.

DISTRIBUTOR PRICE LIST - EFFECTIVE JULY 30, 1991

ORION MODEL L 55/7S

Spiral Semi-Automatic Heavy Duty Low Profile With Surrounding Table

Maximum Load Size 56"W x 56"L x 82"H (Recommended)
62"W x 62"L x 86"H (Theoretical)*

Weight Capacity 6,000 lbs. dynamic, 30,000 lbs. static

Utilities 115/1/60 20 Amp Electrical Service

Turntable 66" Diameter 3/8" Steel Plate
9 Cam Followers Support System
Self Lubricating System with Reservoir
3 1/16" Height Floor to Top of Turntable

Turntable Drive 0-12 RPM Variable Turntable Speed
1/2 HP DC Drive Motor
#50 Roller Chain Drive with Chain Tensioner
Electronic Soft Start
Positive Alignment Feature

Control Feature Electronic Film Force Control
Separate Top and Bottom Wrap Selectors
Variable Speed Film Carriage Control
Auto-Height Photocell w/ON/OFF Switch
Film Carriage Raise/Lower Switch
Turntable Jog Push Button
Spiral Up or Up/Down Cycles
Current Overload Protection
NEMA 12 Electrical Enclosure

Film Delivery 20" Orion Multistretch Power Prestretch
Electronic Film Tension Control
End of Cycle Film Release
Full Authority Film Dancer Bar
#40 Chain/Sprocket/Belt Stretch Ratio Control
1/2 HP DC/SCR Film Drive

Film Carriage Drive #50 Roller Chain Carriage Lift
1/2 HP Elevator Drive Motor
Variable Speed SCR Control
Precision Cam Follower Tracking

Structural
Features

Steel Surrounding Base Frame
Forklift Portable Base Design
All Structural Steel Construction
Film Roping Bar
8" x 18 lb/Ft "H" Channel Mast

Estimated Shipping Weight 2200 lbs.

* Theoretical is based upon removal of roping bar, and reflects the maximum film web height attainable.

Optional two types of the ramps:

1. 71"W x 76"L - weight 470 lbs.
2. 48"W x 64"L - weight 270 lbs.

ORION PACKAGING INC.
~~DISTRIBUTOR PRICE LIST -- EFFECTIVE NOVEMBER 1, 1989~~

SEMI-AUTOMATIC MACHINE OPTIONS

FILM CARRIAGE OPTIONS

- Double #60 Chain Carriage Lift.....
- 20" Multistretch Retrofit Carriage.....
(For Installation on Existing Machines)
- 30" Multistretch Retrofit Carriage.....
(For Installation on Existing Machines)
- 30" Multistretch Carriage Upgrade from 20".....
on H66/55/44 and L66/55/66.
- 30" Multistretch Carriage Upgrade from 20".....
on M66/55/44.
- 30" Econostretch Carriage Upgrade on 77
Series from 20".

ELECTRONIC SCALE PACKAGE OPTION

Includes Heavy Duty Load Cells Incorporated.....
into the Machine or Conveyor Frame, Protected
from Lateral Shock, and a Digital Display of
Load Weight, with RS-232C Port, Gross, Net
Tare, Zero.

NOTE: On L-77 and L-66 models, scale option
reduces machine capacity to 2500 lbs.,
unless base reinforcement option is
ordered.

Base Reinforcement on L-77 or L-66 models,.....
when 4000 lbs capacity is desired with
scale package.

ORION PACKAGING INC.
~~DISTRIBUTOR PRICE LIST - EFFECTIVE NOVEMBER 1, 1989~~

SEMI-AUTOMATIC MACHINE OPTIONS

PNEUMATIC TOP PLATENS

36" circular platen with 24" stroke.....
36" circular platen with 36" stroke.....

48" x 48" square platen with homing.....
device, and 36" stroke
48" x 48" square platen with homing.....
device, and 48" stroke

TRANSFORMER

To accept 430/60 or 575/60.....
For each additional conveyor section.....

DUAL TURNTABLE OPTION

L66.....
H66.....
L55/44.....
H55/44.....
L55S/44S.....

NOTE: Dual Turntable options includes second
turntable with all drive components &
controls, second auto-height photocell,
and table selector switch.

NOTE: When a ring gear/pinion gear turntable
drive is required, the cost of 2 ring
gear options must be added to the dual
turntable option price.

RING GEAR/PINION GEAR TURNTABLE DRIVE

H66....(20" DIA.).....
H55....(25" DIA.).....
H44....(33" DIA.).....

Central lubrication point for ring gear.....

ORION PACKAGING INC.
~~DISTRIBUTOR PRICE LIST - EFFECTIVE NOVEMBER 1, 1989~~

SEMI-AUTOMATIC MACHINE OPTIONS

PROGRAMMABLE LOGIC CONTROLLER OPTIONS

66/55 Series - Allen Bradley SLC-100.....
44 Series - Allen Bradley SLC-150.....
EEPROM ordered with machine.....
EEPROM ordered after shipping of the machine.....

CYCLE COUNTER (inside control panel).....

TURNTABLE OPTIONS

0-12 RPM Variable Speed Turntable Drive for.....
L/H 77 Models
0-12 RPM Variable Speed Turntable Drive with.....
Positive Alignment Feature for L/H 77 Models
10,000 lb Capacity (H55/44).....
8,000 lb Capacity (L55/44).....
10,000 lb Capacity (L55/44).....
Anti-Skid Surface.....
72" dia. round, 3/8" with 4" skirt (H55/44).....
72" dia. round, 1/2" (L44/44S, L55/55S).....
72" dia. round, 1/2" (L66).....
72" dia. round, 3/8" (L66).....
60" dia. round, 1/2" (L66/55/44).....
Reinforced Concentric Rings.....
Remote Pull Switch.....
Filler Plate (H77/66).....
Filler Plate (H55/44).....

ORION PACKAGING INC.
DISTRIBUTOR PRICE LIST -- EFFECTIVE NOVEMBER 1, 1989

SEMI-AUTOMATIC MACHINE OPTIONS

COLD TEMPERATURE OPTIONS (-20 F)

Heated Control Enclosure, Silicon Rubber Wiring.....
and Special Lubricant in Reducers

CONVEYOR OPTIONS

IDLER ROLLER (NON-DRIVEN)

72" Dia. idler roller turntable for H66/55/44.....
(On H-66, requires ring gear option and
max. wt. 2,500 lbs) Rollers are 3.5" Dia.
on 4.5" centers, with manual brake.

72" Dia. idler roller turntable for L55S/44S.....
Rollers are 3.5" Dia. on 4.5" centers, with
manual brake.

Pneumatic Roller Brake for "L" Series.....

Pneumatic Roller Brake for "H" Series.....

5' Length CONTOURED Idler Roller Conveyor,.....
3.5" Dia. Rollers on 4.5" Centers, 50" Wide
Roller Face.

5' Length STRAIGHT Idler Roller Conveyor,.....
3.5" dia. rollers on 4.5" centers,
50" wide roller face.

POWERED ROLLER

55 STYLE (Powered Roller Turntable)

76" Dia. powered roller TURNTABLE, Rollers.....
rollers 3.5" dia. on 4.5" centers, all full
length driven. Includes 1/2 hp AC drive,
adjustable speed. Wall tubing 1/8"
(H55/44 only - requires ring gear option)

ORION PACKAGING INC.
DISTRIBUTOR PRICE LIST - EFFECTIVE NOVEMBER 1, 1989

SEMI-AUTOMATIC MACHINE OPTIONS

44 STYLE (Powered Roller Turntable)

76" Dia. Powered Roller TURNTABLE, Rollers.....
3.5" Dia. on 4.5" Centers, All Full Length
Driven. Includes 1/2 hp DC Drive, Adjust-
able Speed. Wall Tubing 3/16", Cast Iron
Pillow Blocks. (NOTE: H55/44 only, requires
RING GEAR OPTION)

55 STYLE (CONTOURED Powered Roller Conveyor)

5' Length CONTOURED Powered Roller Conveyor,.....
3.5" Dia. Rollers on 4.5" Centers, 50"
Effective Width; All Full Length Rollers
Driven. Includes 1/2 hp AC Drive, Non-
Reversing. Wall tubing 1/8"

44 STYLE (CONTOURED Powered Roller Conveyor)

5' Length CONTOURED Powered Roller Conveyor,.....
3.5" Dia. Rollers on 4.5" Centers, 52"
Effective Width, All Full Length Rollers
Driven, Cast Iron Pillow Blocks.
Includes 1/2 hp DC Drive, Variable
Speed, with Soft Start.

Automatic Sequencing, Logic and Photocell.....
For Powered Conveyor (Per Section) - Includes
Photocell PLC Input and Output/Program.

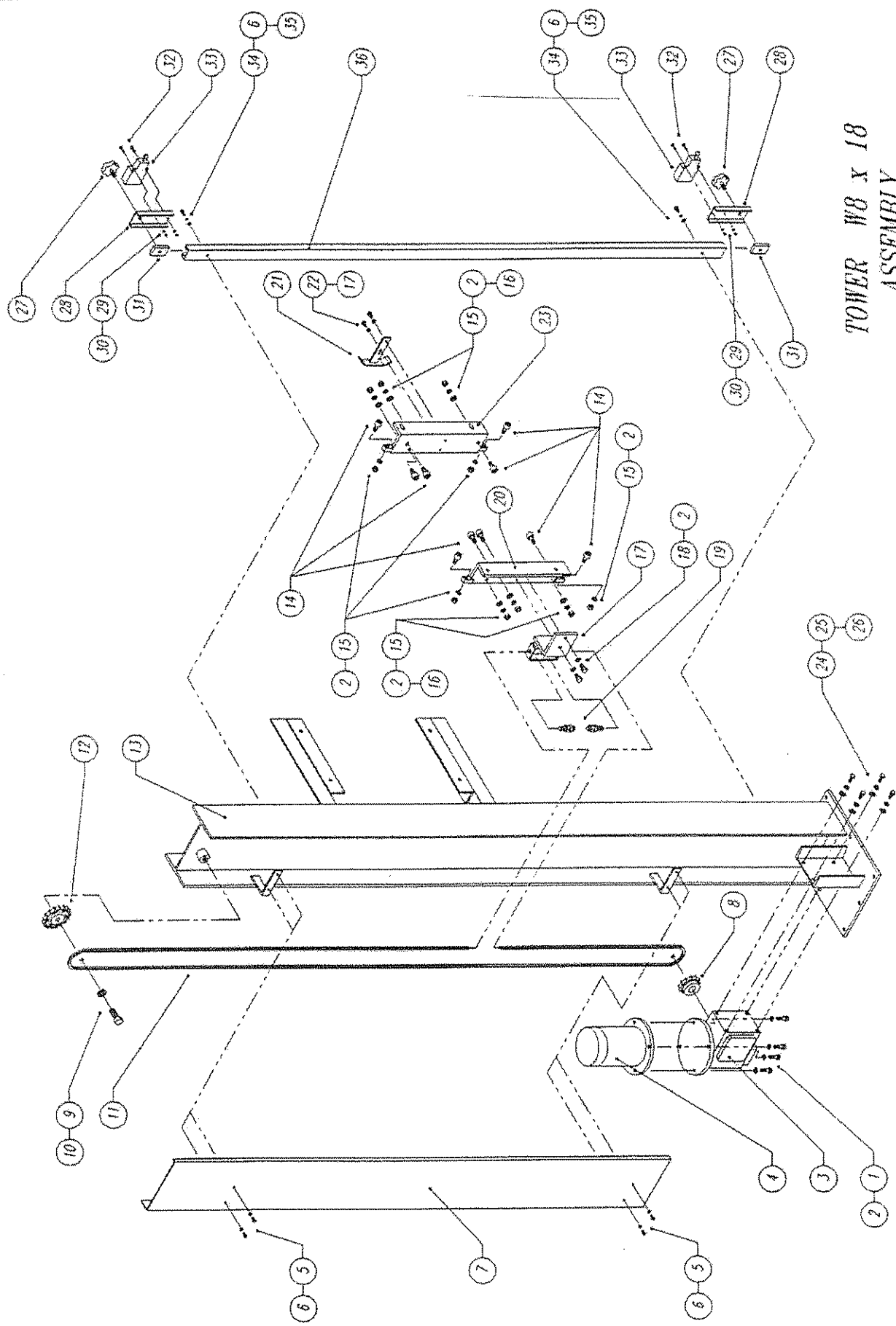
Turntable Mechanical Home Position Lock.....
(Pneumatic, Positive Lock)

PART LIST

FOR TOWER W8 x 18 ASSEMBLY

updated April-07-92

ORION NO.	PART NO.	DESCRIPTION	Q-TY
1.	010293	HEX HEAD SCREW	4
2.	011390	SPRING WASHER	16
3.	010344	REDUCER	1
4.	010059	ELECTR. MOTOR f/ L-66 & H-66	1
	010036	ELECTR. MOTOR f/ L-55/7s, H-55 & FA-55	1
5.	012049	PAN PHILL	3
6.	011393	SPRING WASHER	7
7.	012734	TOWER CHAIN COVER	1
8.	010343	SPROCKET	1
9.	010329	HEX HEAD SCREW	1
10.	012721	SPRING WASHER	1
11.	010009	CHAIN	1
12.	010008	IDLER SPROCKET	1
13.	012738	TOWER	1
14.	010067	CAM FOLLOWER	10
15.	012582	HEX NUT	10
16.	010948	FLAT WASHER	6
17.	011142	CHAIN TENSIONER	1
18.	012274	HEX HEAD SCREW	2
19.	010387	CHAIN TENSION SCREW	2
20.	010386	LEFT CARRIAGE HOLDER	1
21.	012739	LIMIT SWITCH ACTUATOR	1
22.	012722	HEX HEAD SCREW	2
23.	010339	RIGHT CARRIAGE HOLDER	1
24.	012723	HEX HEAD SCREW	4
25.	012724	SPRING WASHER	4
26.	012725	FLAT WASHER	4
27.	010092	KNOB	2
28.	010087	LIMIT SWITCH HOLDER	2
29.	012726	HEX NUT	2
30.	012743	SPRING WASHER	4
31.	011153	CHANNEL GUIDE	2
32.	012690	PAN PHILL	4
33.	010123	LIMIT SWITCH	2
34.	010257	SOCKET HEAD CAP SCREW	4
35.	012221	FLAT WASHER	2
36.	010335	LIMIT SWITCH CHANNEL	1



**TOWER W8 x 18
ASSEMBLY**

FOR H-66, L-66, L-55/7S & 1A-55

UPDATED APR-08-92

PART LIST

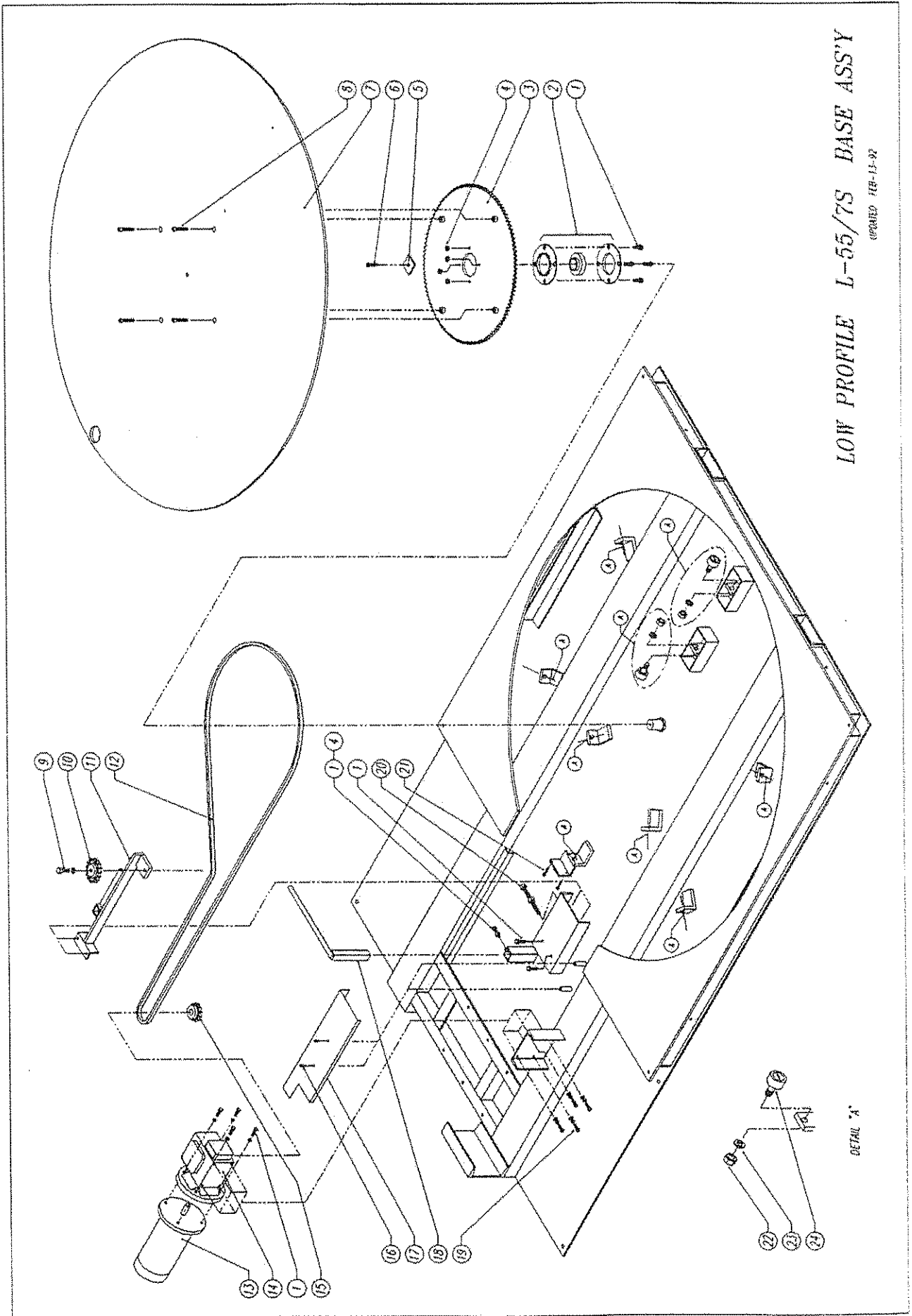
FOR LOW PROFILE L-55/7S BASE ASS'Y

updated Feb-14-92

ORION NO.	PART NO.	DESCRIPTION	Q-TY
1.	010293	HEX HEAD SCREW	11
2.	010007	CENTRAL BEARING UNIT	1
3.	010006	TURNTABLE SPROCKET	1
4.	012477	HEX NUT	5
5.	010898	PLATE	1
6.	012591	FLAT SOCKET CAP SCREW	1
7.	012597	TURNTABLE DISK	1
8.	010319	SOCKET HEAD CAP SCREW	4
9.	010329	HEX HEAD SCREW	1
10.	010008	IDLER SPROCKET	1
11.	012667	CHAIN TENSIONER	1
12.	010009	CHAIN	1
13.	010036	ELECTR. MOTOR	1
14.	010093	REDUCER	1
15.	010435	SPROCKET	1
16.	012049	PAN PHILL	2
17.	012599	CHAIN GUARD	1
18.	012594	ROPING BAR	1
19.	010382	HEX HEAD SCREW	4
20.	010233	CHAIN TENSION SCREW	1
21.	012481	PAN PHILL	2
22.	011322	HEX NUT	9
23.	012601	LOCK WASHER	9
24.	012598	CAM FOLLOWER	9

LOW PROFILE L-55/7S BASE ASS'Y

REVISED FEB-13-92



DETAIL 'A'

STANDARD CARRIAGE ASS'Y - PART LIST

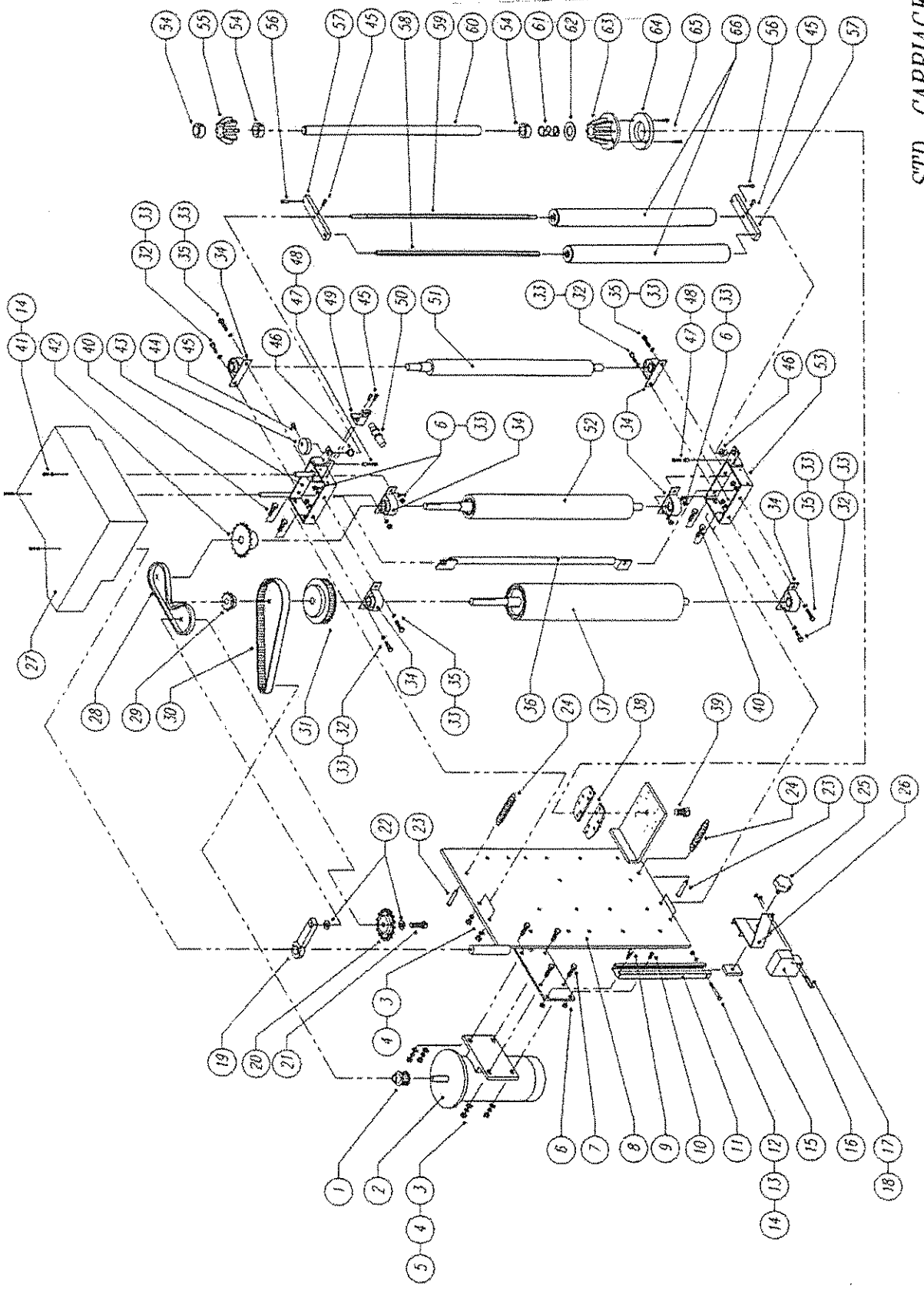
updated May-28-92

ORION			
NO.	PART NO.	DESCRIPTION	Q-TY
1.	011283	TIMING BELT PULLEY	1
2.	010059	ELECTR. MOTOR, FOR H,L-66	1
	010036	ELECTR. MOTOR, FOR H,L-55,44	1
3.	011128	HEX NUT	8
4.	011390	SPRING WASHER	8
5.	010948	FLAT WASHER	4
6.	012751	HEX NUT	10
7.	012752	HEX HEAD SCREW	4
8.	010825	BACK PLATE F/20" FILM	1
	011430	BACK PLATE F/30" FILM	1
9.	010382	HEX HEAD SCREW	1
10.	012693	FLAT SOCKET CAP SCREW	1
11.	011152	PHOTOCELL CHANNEL F/20" FILM	1
	011432	PHOTOCELL CHANNEL F/30" FILM	1
12.	012753	HEX HEAD SHOULDER SCREW	1
13.	012689	HEX NUT	1
14.	011393	SPRING WASHER	4
15.	011153	CHANNEL GUIDE	1
16.	011495	PHOTOCELL	1
17.	012754	PAN PHILL SCREW	2
18.	012726	HEX NUT	2
19.	011142	CHAIN TENSIONER	1
20.	011297	IDLER SPROCKET	1
21.	012482	HEX HEAD SCREW	1
22.	012584	FLAT WASHER	2
23.	012755	CLEVIS PIN	2
24.	010047	TENSION SPRING	2
25.	010092	KNOB	1
26.	012090	PHOTOCELL BRACKET	1
	012091	PHOTOCELL BRACKET F/R.H. ASS'Y	1
27.	011755	CARRIAGE COVER	1
28.	010583	CHAIN	1
29.	010975	DRIVE SPROCKET	1
30.	011151	TIMING BELT	1
31.	011003	PULLEY	1
32.	012723	HEX HEAD SCREW	4
33.	012725	FLAT WASHER	16
34.	010157	PILLOW BLOCK BEARING	6
35.	012757	HEX HEAD SCREW	4
36.	011412	SAFETY BAR F/20" FILM	1
	011413	SAFETY BAR F/30" FILM	1
37.	011406	RUBBER ROLLER 4" DIA. F/20" FILM	1
	011407	RUBBER ROLLER 4" DIA. F/30" FILM	1
38.	010049	BRAKE PADS	2
39.	012758	HEX HEAD SCREW	1
40.	010293	HEX HEAD SCREW	4

41.	012049	PAN PHILL SCREW	3
42.	011454	DRIVE SPROCKET	1
43.	011369	TOP BRACKET	1
44.	011477	PROXIMITY SENSOR CAM	1
45.	010257	SOCKET HEAD CAP SCREW	5
46.	010058	BRONZE BUSHING	2
47.	010286	SOCKET HEAD SHOULDER CAP SCREW	2
48.	010946	PLASTIC HOSE	2
49.	011476	PROXIMITY SENSOR BRACKET	1
50.	011470	PROXIMITY SENSOR	1
51.	011410	PRESSURE ROLLER F/20" FILM	1
	011411	PRESSURE ROLLER F/30" FILM	1
52.	011408	RUBBER ROLLER 2.66"DIA. F/20" FILM	1
	011409	RUBBER ROLLER 2.66"DIA. F/30" FILM	1
53.	011416	BOTTOM BRACKET	1
54.	010052	COLLAR	3
55.	010051	TOP SPOOL	1
56.	012756	CLEVIS PIN	2
57.	011370	LEVER	2
58.	011419	SHORT SHAFT F/20" FILM	1
	011420	SHORT SHAFT F/30" FILM	1
59.	011421	LONG SHAFT F/20" FILM	1
	011422	LONG SHAFT F/30" FILM	1
60.	010050	MANDREL SHAFT F/20" FILM	1
	011436	MANDREL SHAFT F/30" FILM	1
61.	010891	COMPRESSION SPRING	1
62.	010199	FLAT WASHER	1
63.	010838	BOTTOM SPOOL	1
64.	010887	MANDREL BRAKE DISK	1
65.	010886	SPIKE	2
66.	011371	DANCER ROLLER F/20" FILM	2
	011431	DANCER ROLLER F/30" FILM	2

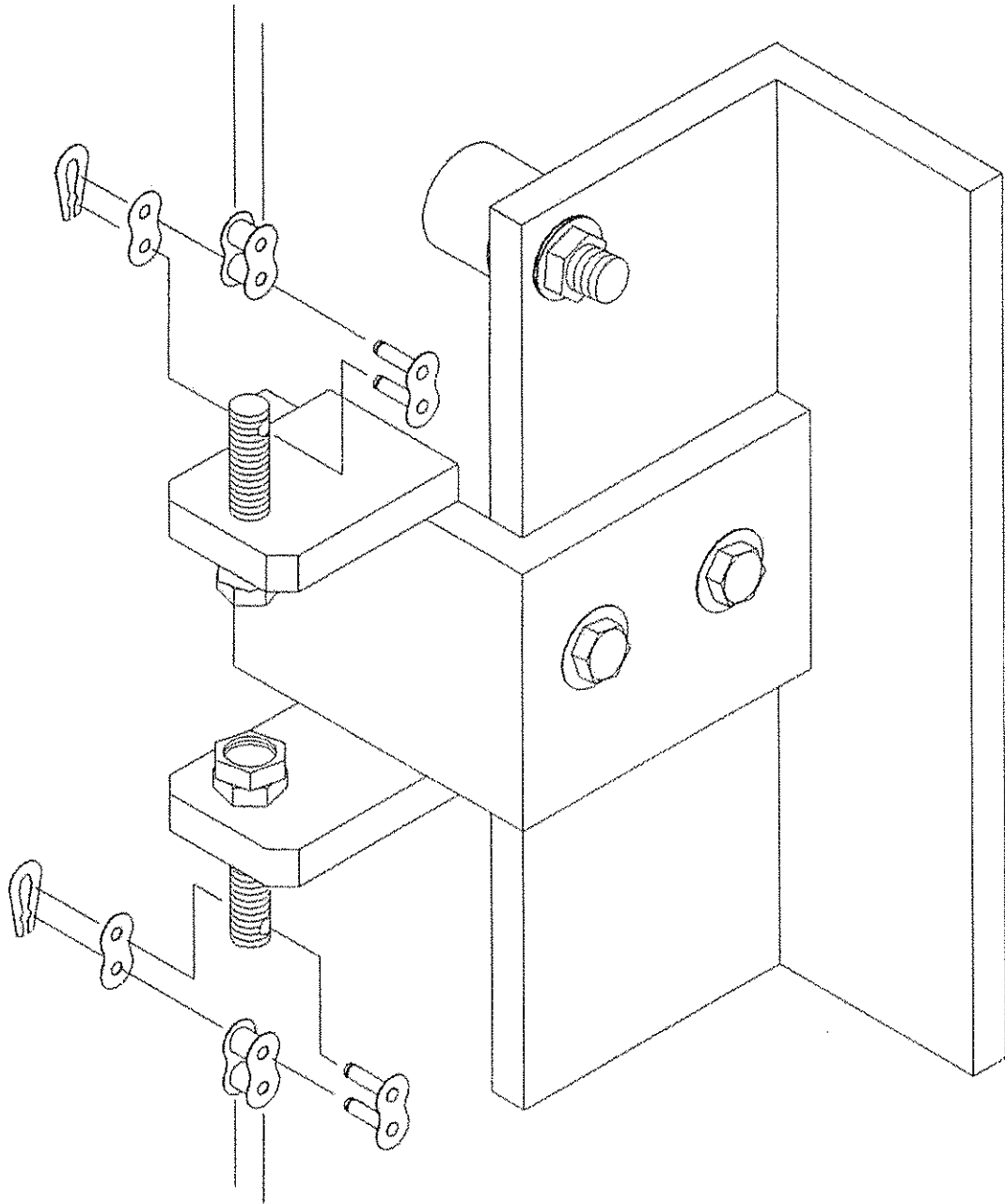
STD. CARRIAGE ASSEMBLY

UPDATED MAY-29-92



ATTENTION:

**WHEN MOUNTING THE CARRIAGE LIFT CHAIN,
PLEASE MAKE SURE, THAT THE CONNECTING
LINK'S PIN IS INSERTED FROM THE TOWER SIDE**



CHAIN TENSIONER ASS'Y



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 fork 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 restraining bolts holding the ramp on the turntable.

CAUTION: When cutting the stretchwrap material covering the machine, care must be taken not to cut any 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 housing, 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).

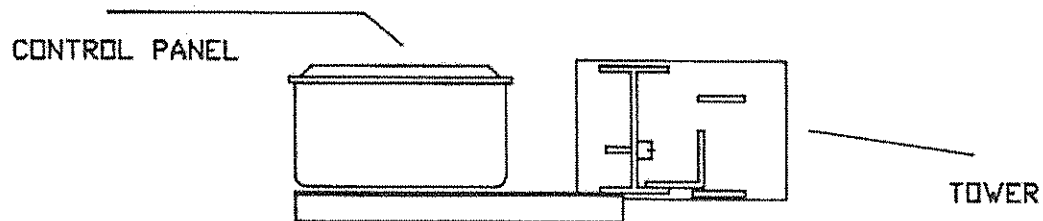
An electrical diagram is provided in the panel box. Only a qualified electrical technician or an Orion representative should effect any repairs on the machines.

Before operating the machine the oil pockets underneath the table should be checked and filled if any oil is missing.

NEW, TWO POSITION CONTROL PANEL MOUNT

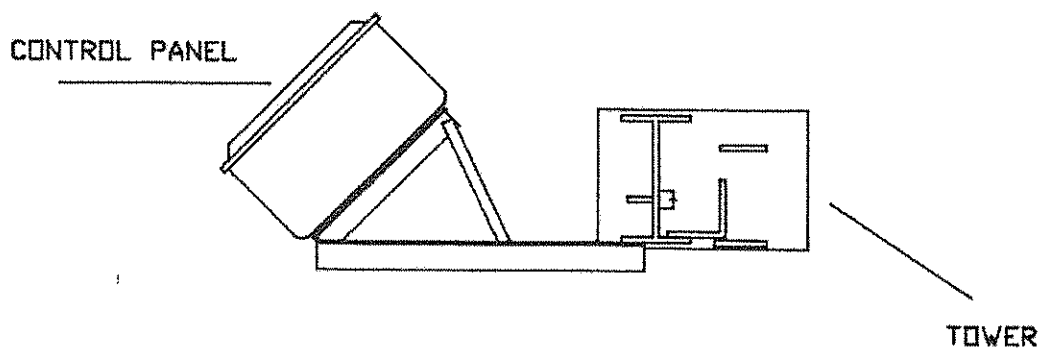
In order to facilitate access and manipulation, the Control Panel can be mounted in two positions:

- 1.- On the angle brackets aligned to the Tower.

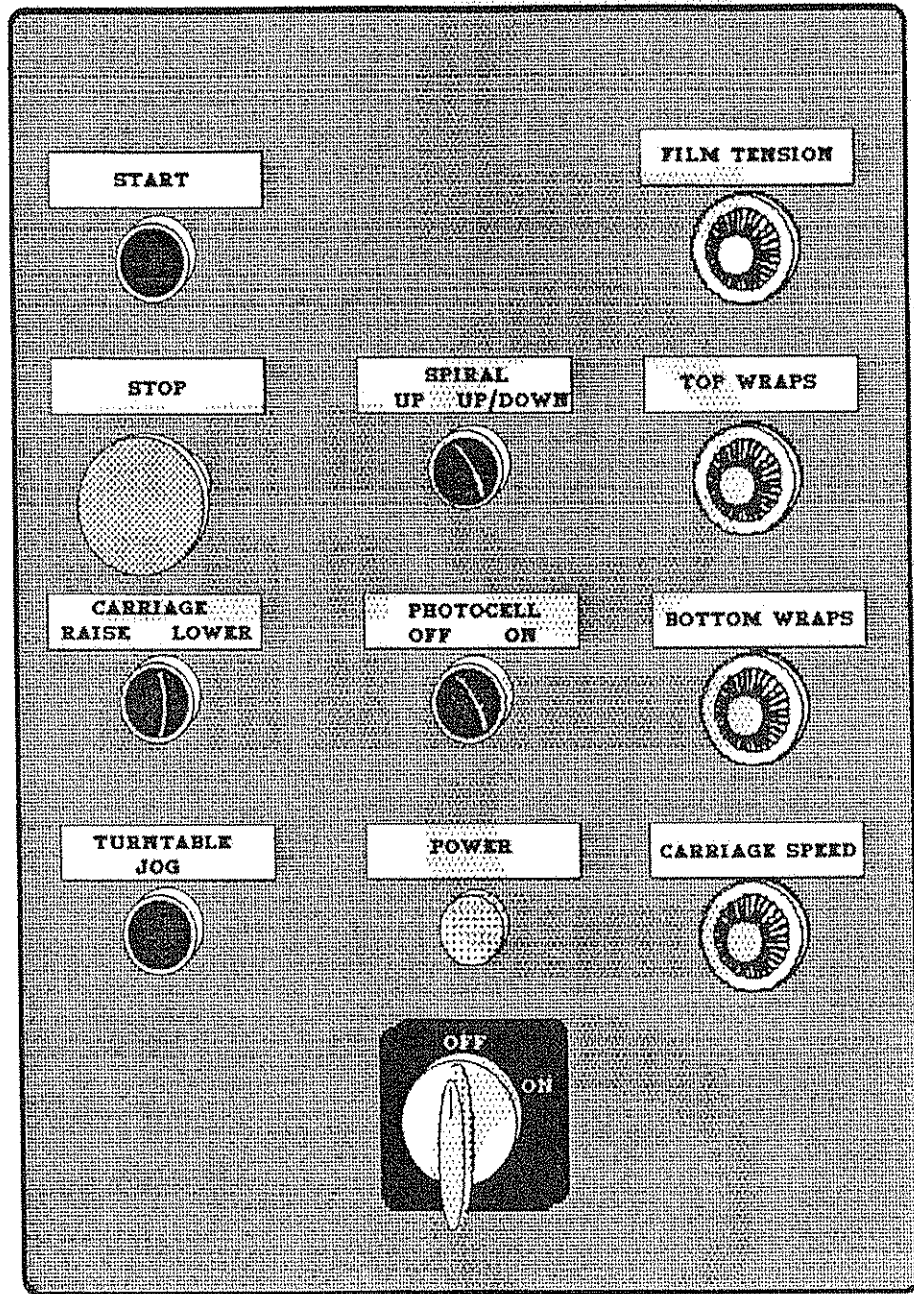


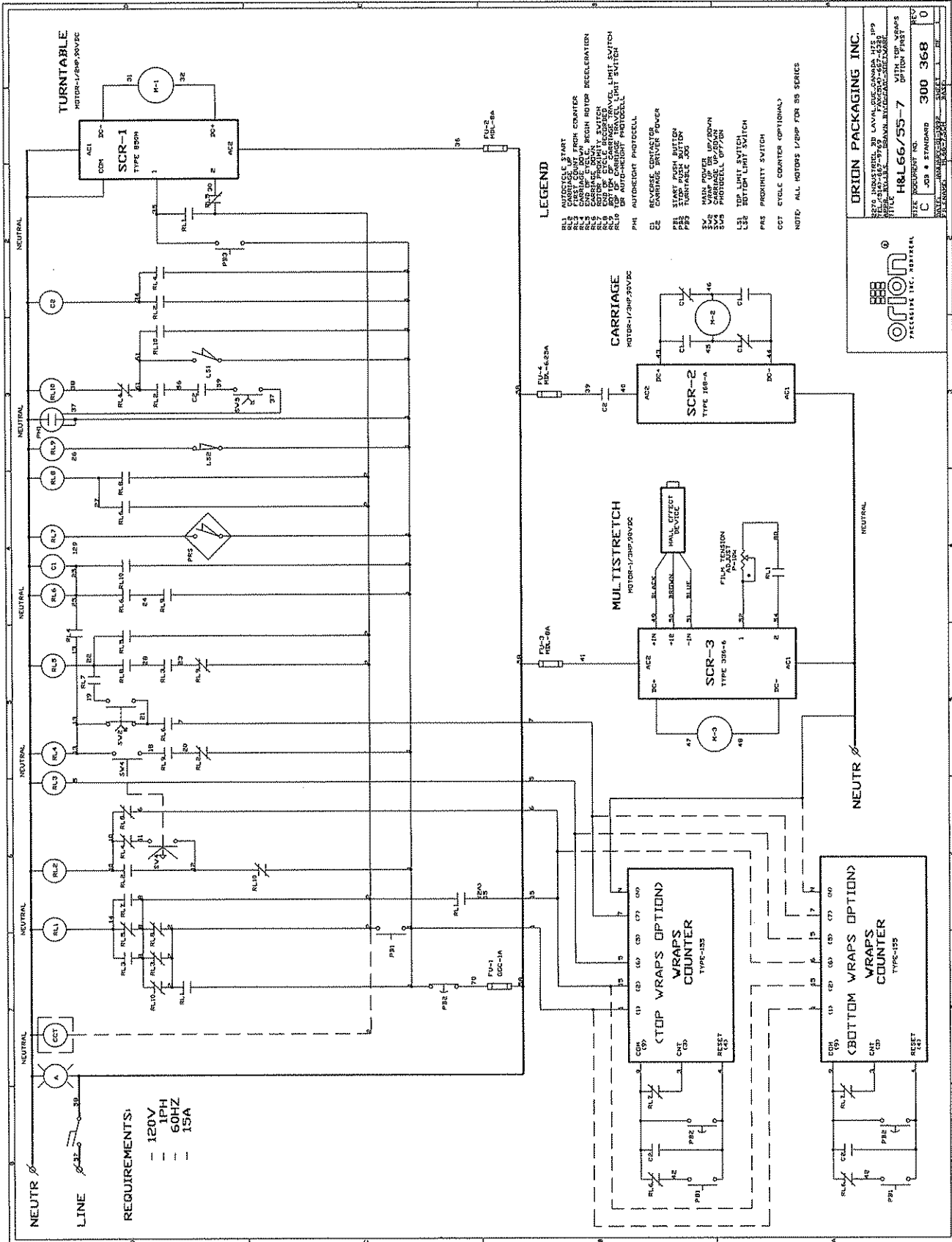
- 2.- with the position bar (installed between upper angles), Control Panel can be rotated forward/ to the side.

(Additional screw attached to the tower's foot).



MACHINE CONTROL





REQUIREMENTS:
 - 120V
 - 1PH
 - 60HZ
 - 15A

LEGEND

- RL1 AUTOCYCLE START
- RL2 FIRST STOP FROM COUNTER
- RL3 COUNTER STOP
- RL4 COUNTER STOP - BEGIN ROTOR RECELERATION
- RL5 COUNTER STOP - END ROTOR RECELERATION
- RL6 COUNTER STOP - LIMIT SWITCH
- RL7 STOP OF COUNTER
- RL8 STOP OF COUNTER
- RL9 STOP OF COUNTER
- RL10 STOP OF COUNTER
- PH1 AUTOWEIGHT PHOTOCELL
- CE1 REVERSE SERVICE POWER
- CE2 FORWARD SERVICE POWER
- PE1 START PUSH BUTTON
- PE2 STOP PUSH BUTTON
- PE3 TURNTABLE JOG
- SW1 MAIN POWER
- SW2 CARRIAGE UP JOG
- SW3 CARRIAGE DOWN JOG
- SW4 PHOTOCELL UP/7/0/1
- L1 TOP LIMIT SWITCH
- L2 BOTTOM LIMIT SWITCH
- PRS PROXIMITY SWITCH
- CCT CYCLE COUNTER (OPTIONAL)

NOTE: ALL MOTORS 1/2HP FOR S3 SERIES

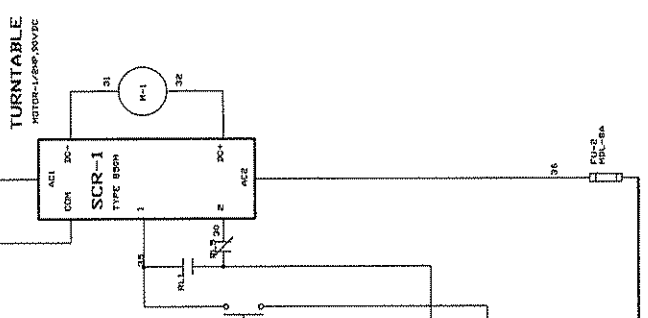
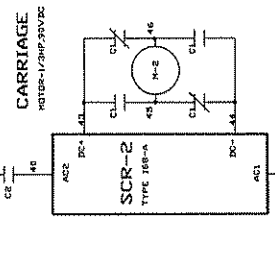
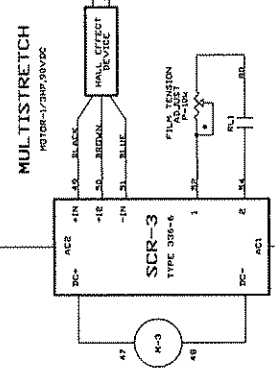
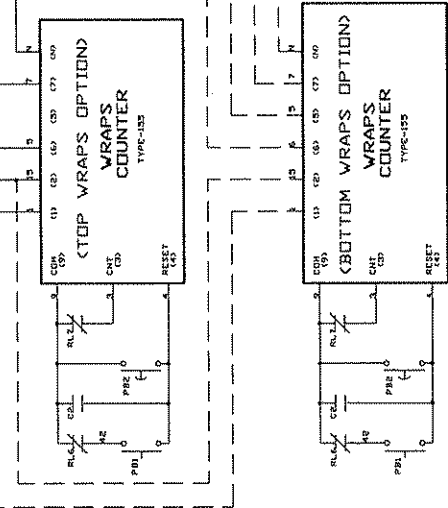
ORION PACKAGING INC.

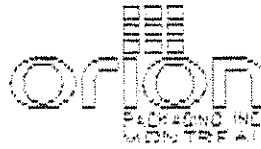
388
ORION
 PRECISION INC. MATERIAL

REV 1
 DATE 10/25/53
 DRAWN: J. W. BROWN
 CHECKED: J. W. BROWN
 APPROVED: J. W. BROWN

H&L66/55-7

SIZE: 300 368 0
 JOB # STANDARD
 PART # 300 368 0
 QUANTITY 1





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. At this point the cycle may be stopped at any time by pressing the Stop button.

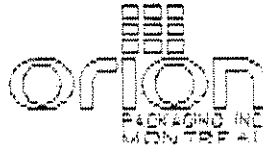
NOTE: if the Stop button is pressed in the middle of the cycle, the carriage and turntable must be returned back to their home positions before restarting the cycle.

6.3 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.



6.4 Turntable Jog Switch

This switch is a pushbutton switch that rotates the turntable clockwise (as viewed from the top) when held depressed. When the switch is released the turntable will stop turning.

6.5 Carriage Control Switch

The Carriage Control switch is a three position switch with a bistable action and has the following settings,

RAISE - Raises the carriage until the top limit switch on the tower is activated or until the photoswitch senses that the top of the load has been reached.

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 directions.

6.6 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. The photoswitch's position on the track can be adjusted in order to make the carriage pass the top of the load and overlap the top.

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

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.

The film tension is controlled through the dancer bar system. Occasionally the feedback potentiometer may need some adjustment. The adjustment of the feedback potentiometer can be performed while there is film on the carriage. The bottom screw on the potentiometer coupling must first be loosened. Once the screw is loosened the potentiometer shaft must be turned until the prestretch motor just begins to hum but does not rotate, at which point the screw can be tightened. NOTE: the condition in which the motor hums but doesn't turn must be maintained even after the screw is tightened, if not, the adjustment procedure must be repeated.

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.

7.4 Turntable Speed Adjustments

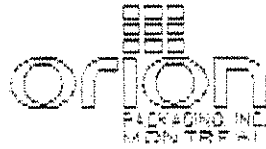
The turntable speed may be changed by adjusting the controls on the 750 or 850 board inside the panel. The controls on the board regulate the steady-state speed, the jog speed, and the acceleration and deceleration of the turntable. The controls are labeled on the board and listed below:

ZERO - The zero adjustment controls the deadband voltage for the turntable motor; it should be adjusted so that the motor just begins to hum but does not turn.

PRESET 1 - The preset 1 controls the working speed of the turntable.

PRESET 2 - The preset 2 controls the jog speed of the turntable.

DN - The DN adjustment regulates the rate of deceleration of the turntable for when it reaches the en



of the cycle.

UF - The UF adjustment regulates the rate of acceleration of the turntable for the beginning of the cycle.

IRC - The IRC needs only adjustment if there is a very large range of load weight; for most applications it will not need to be adjusted but if adjustment is necessary, contact your Orion representative.

CL - The CL is factory set and needs no further adjustment.



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.

Manufacturer	Lubricant
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. Replace-



ment 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. 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 do not need 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.



8.5 Ring Gear Maintenance

If the stretchwrapper has the optional ring gear turntable drive and support system, this maintenance routine must be performed.

The ring gear is located under the turntable and should be lubricated at fixed intervals. This should be carried out by injecting grease into all the lubrication nipples in succession until a collar of fresh grease appears around the perimeter of both sealing rings. The bearing should be rotated slowly during lubrication.

The relubrication interval depends on the operating conditions. For bearings exposed to an aggressive environment, relubrication should occur every 50 operating hours. Normally, relubrication should occur every 100 to 200 hours of operation. The gear teeth should also be relubricated. Lubricants of different manufacturers recommended for the ring gear are shown below.

Manufacturer	Raceway Grease	Gearteeth Oil
BP	Energrease LS 2	Energol WRL
Castrol	Spherol AP 2	Grippa 33 S
ESSO	Eacon 2	Suret Fluid 30
Gulf	Crown Grease No.2	Lubcote No.2
Mobil	Mobilux 2	Mobiltec E
SHELL	Alvania Grease R 2	Cardium Compound C/Fluid C
Texaco	Glissando FT 2	Crater 2 X Fluid
Valvoline	LB-2	FGC

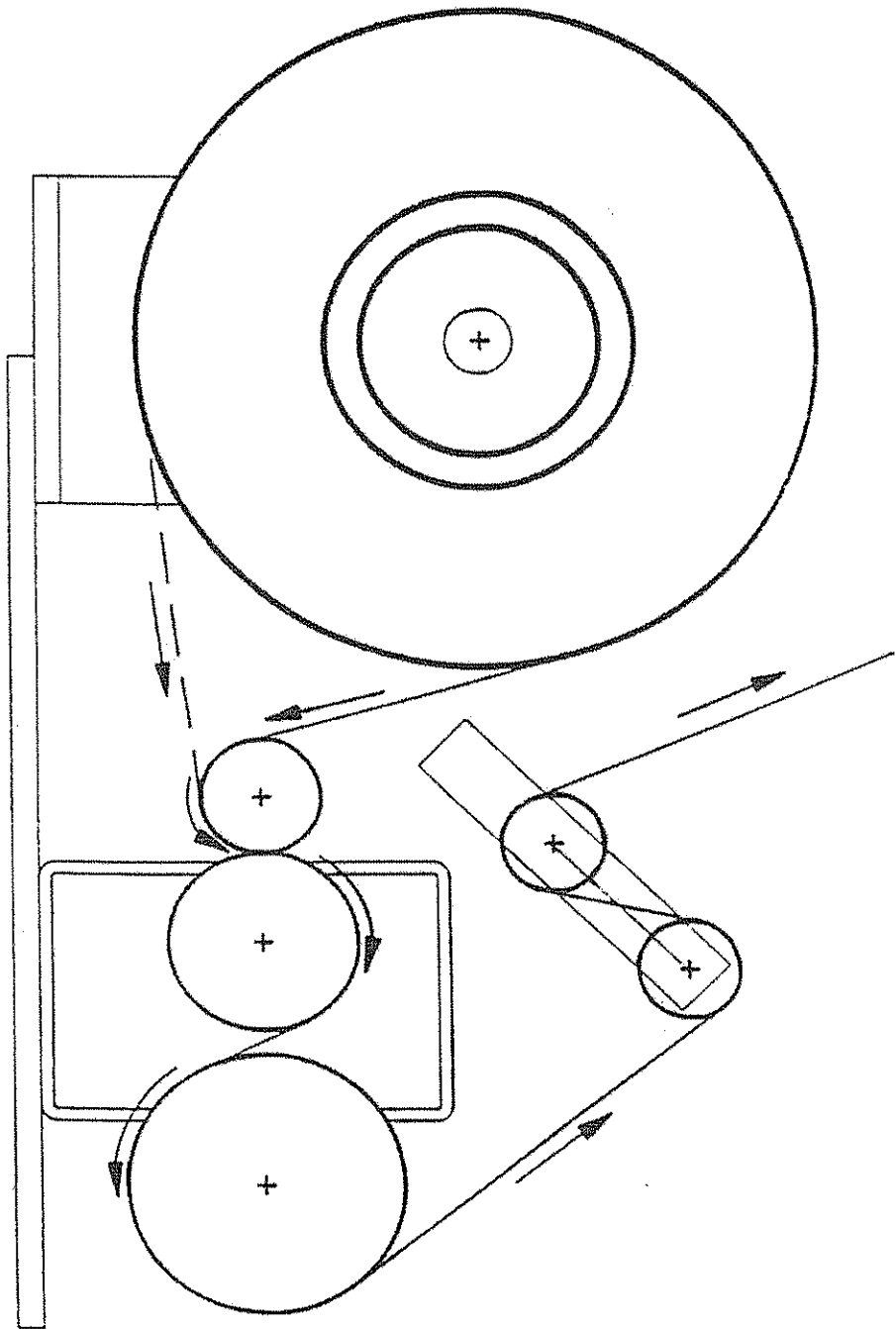
APPENDIX

ORION PACKAGING INC.

NOTICE

The manual covers standard features of the machine. Certain machine options may not be covered fully by this manual due to their unique application.

FILM FEED PATTERN for the
STANDARD CARRIAGE



WARNING: DISCONNECT POWER BEFORE FEEDING FILM

	168-4	168-A	336-6	750 MX	850 M	850 C	155-3	850 D
L-77, H-77		X					X	X
M-77		X				X	X	
M-67		X	X				X	X
M-67 PA		X	X		X		X	
M-67 DEMO		X	X		X		X	
M-66, L-66, H-66		X	X		X		X	
M-57		X	X				X	X
M-55, L-55, H-55		X	X		X		X	
M-44, L-44, H-44	X		X	X			X	
*M-44, *L-44, *H-44	X		X	X				

* - PROCESSOR

PA - POSITIVE ALIGNMENT

DEMO - DEMO PACKAGE

336-6 - REPLACES 336-4

ELECTRICAL BOARDS' CHART
FOR ORION STRETCHWRAPPERS

MOTOR CONTROL BOARD CALIBRATION INSTRUCTIONS
FOR 750-MX BOARD

The 750-MX Motor Control Board is a multi-purpose DC/SCR drive that is used in several different types of applications in Orion wrapping equipment. The following calibration instructions apply to all possible types of machinery, but it will be important to note specific reference to your particular model Orion machine for best calibration results. The instructions are in the suggested order of adjustment and are intended to be made after installation of the board in the control enclosure. Please refer to the attached sketch of the board for identification of the adjustment points.

Important Note: The 750-MX Motor Control Board is a dual voltage capability board. It is imperative that you set the board for the voltage of your application prior to installation, calibration, or use of board. Set the 90V/180V jumper pin to the proper position for the motor that your Orion machine turntable or tower drive utilizes. Next, you must also set the 115V/230V jumper pins to the proper position. (If your turntable or tower drive motor is 90V, the proper position for the 115V/230V pins is on the 115V posts. Conversely, if your turntable or tower drive motor is 180V, the proper position for the 115V/230V pins is on the 230V posts.)

Zero Setting: (Pot #4) The zero potentiometer establishes the "zero" point for many of the other settings on the board, and as such, it is important that it be set first. First, turn Preset 2 (Jog Speed, Pot #2) fully counterclockwise (CCW) until you hear the faint clicking indicating full CCW. Then turn the Preset 2 Pot 1 turn clockwise (CW). Then, with power applied and the machine in "Manual" (if applicable), activate the turntable or tower jog pushbutton or selector switch. While activating the jog switch, turn the "Zero" pot CW until the tower or turntable just moves, and then turn Zero CW until movement stops. Note: On fully automatic models, it will be necessary to remove power from the machine, and push the turntable or tower away from home position slightly, to allow activation of the jog speed.

Accel: (Pot #5) This pot controls the soft start feature of the turntable or tower drive. For an initial setting, turn the accel pot fully CCW, and then 1/4 turn CW. For a softer start of the turntable or tower, turn the accel pot further CW. For a quicker start of the turntable or tower, turn the accel pot CCW.

Preset 1: (Pot #2) This pot controls the turntable or tower low speed. For best calibration results, it is recommended that you cause the machine to remain in the low speed mode while you make this adjustment. On semi-automatic models with a control panel selector switch for High/Low speed, simply place the switch in the low speed position, and start the machine, adjusting the speed while the machine is running. On fully automatic models, set the film carriage "up" speed control to the "0" (minimum) position, and start a wrap cycle. This will prevent the film carriage from reaching the top of the load, at which time the PLC would normally switch to high speed. Then, adjust the Preset 1 pot to achieve the low speed that you desire for the turntable or tower, turning CW to increase speed, or CCW to decrease speed. The normal setting for low speed is 10 RPM.

Preset 2: (Pot #1) This pot controls the turntable or tower jog speed. Simply activate the turntable or tower jog control, adjusting the jog speed as the tower or turntable rotates. The desired jog speed is 2-3 RPM. CW increases jog speed, while CCW decreases jog speed. (See note in "Zero Setting" paragraph above)

Preset 3: (Pot #3) This pot controls the turntable or tower high speed. For best calibration results, it is recommended that you cause the machine to remain in the high speed mode while you make this adjustment. On semi-automatic models with a control panel selector switch for High/Low speed, simply place the switch in the high speed position, and start the machine, adjusting the speed while the machine is running. On fully automatic models, start a wrap cycle and set the film carriage speed control to the "0" (minimum) position. This will prevent the film carriage from reaching the bottom of the load, at which time the PLC would normally switch to jog speed. Then, adjust the Preset 3 pot to achieve the high speed that you desire for the turntable or tower, turning CW to increase speed, or CCW to decrease speed.

Deceleration #1,2: (Pot #6) The deceleration 1,2 pot controls the transition time that the board provides when it is switched to jog speed at the end of the cycle. Start with the decel 1,2 pot set fully CCW. Then, cycling the machine, observe the transition to jog speed at the end of the cycle, prior to the stop of turntable or tower at home position. Gradually increase the Dec 1,2 pot setting (CW) until the turntable or tower only jogs approximately 1/8 to 1/4 turn before reaching home position.

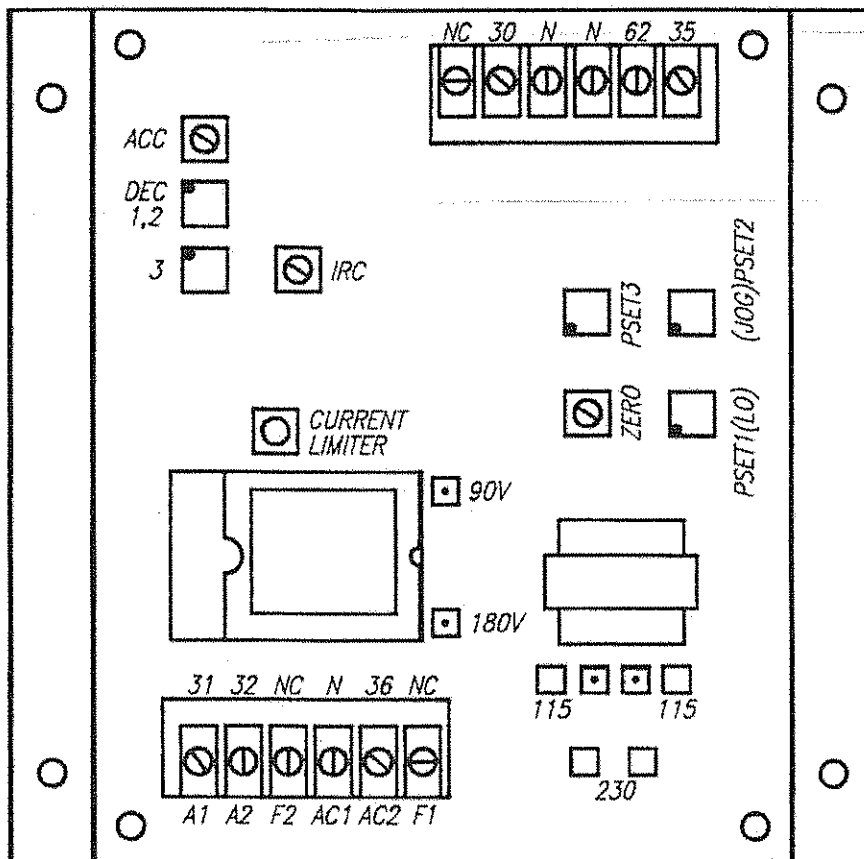
Important Note: On high speed Orion models (30 RPM turntable or tower drives, with turntable or tower brake) the deceleration control is not used, and must be set to minimum, or fully CCW.

Deceleration #3: (Pot #7) The deceleration 3 pot controls the transition time when the board is switched from high speed to jog speed at the end of the cycle, on relay logic semi-automatic models only. With the control panel turntable/tower speed high/low speed selector switch in the "high" speed position, cycle the machine, and adjust the Dec 3 pot as above, starting from minimum (fully CCW).

Important Note: On high speed Orion models (30 RPM turntable or tower drives, with turntable or tower brake) the deceleration control is not used, and must be set to minimum, or fully CCW.

Current Limit: (Pot #9) The current limit pot controls the torque (Amps) that the board allows to the motor. This control should be set using an amprobe to limit the amps flowing to the motor nameplate rating, under full load. However, the setting may be temporarily set approximately, using a 2 HP maximum as a guideline.

Example - If the turntable or tower drive of your Orion machine is 1 HP, set the current limit pot to a 1/2 CW position.



ZERO: TURNABLE DEADBAND ADJUSTMENT.
 PSET1: LOW SPEED ADJUSTMENT.
 PSET2: JOG SPEED ADJUSTMENT.
 PSET3: HIGH SPEED ADJUSTMENT.
 IRC: LOAD RANGE ADJUSTMENT.
 ACC: ACCELERATION ADJUSTMENT.
 DEC1,2: LOW SPEED DECELERATION ADJUSTMENT.
 DEC3: HIGH SPEED DECELERATION ADJUSTMENT.
 CURRENT LIMITER: CURRENT LIMITER ADJUSTMENT.

35: SPEED CONTROL (JOG)	F1(NC): FIELD CONTROL.
62: SPEED CONTROL (FAST)	AC2(36): AC INPUT.
N: NEUTRAL	AC1(N): NEUTRAL.
30: SPEED CONTROL (MEDIUM)	F2(NC): FIELD CONTROL.
NC: NOT CONNECTED	A2(32): ARMATURE CONTROL.
	A1(31): ARMATURE CONTROL.

750 MX REV-1 BOARD

TURNTABLE MOTOR CONTROL 850 M BOARD ADJUSTMENT
66 AND 55 SERIES EQUIPMENT

Older revision 850 M boards feature five potentiometers, while newer revision boards feature four. In any case, they will be marked A, D, 1 and 2 (with an additional pot marked T on older boards).

The pot marked A is the acceleration or electronic soft start feature. Clockwise adjustment of this potentiometer softens the start and lengthens the time required for the turntable to reach its preset turntable speed.

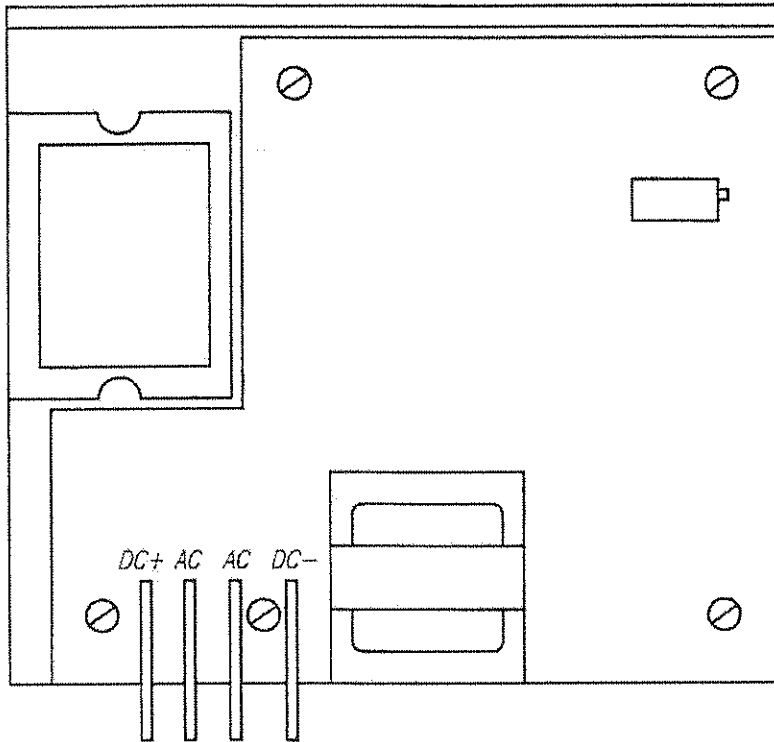
The pot marked 1 is the turntable jog speed, and should be set for approximately 2 RPM. Please note that this setting should be made with a load on turntable.

The pot marked 2 is the control pot for the running speed of the turntable during the wrap cycle once acceleration is complete. This speed can be as high as 12 RPM; however, you should note that if it is set too high, you may see chopping of the current to the turntable drive motor which will cause pulsating half speed operation of the turntable drive itself. If this is seen, please decrease the setting of pot 2, until it goes away.

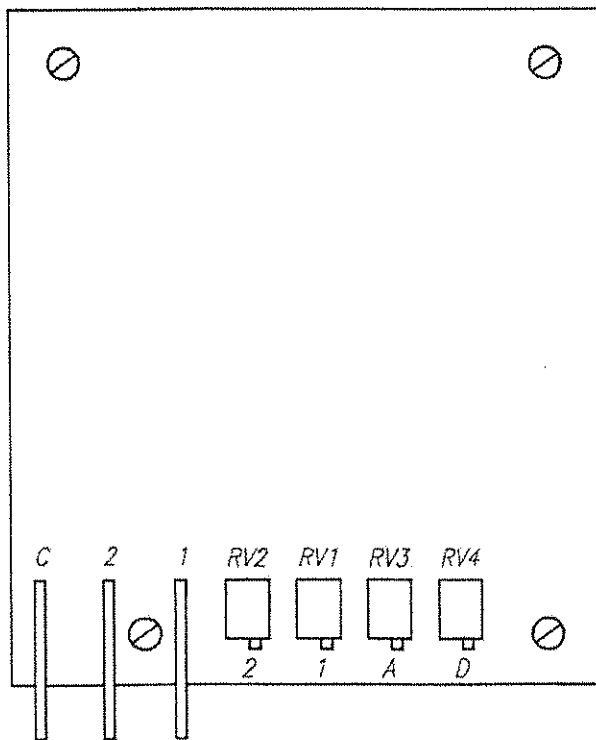
The pot marked D is the deceleration control. It is a critical setting because our machine logic requires that we decelerate from speed 2 to speed 1 during the course of the final revolution of the turntable before shutoff. Thus, the deceleration control is important in that if deceleration time is too short, we will prematurely reach jog speed (speed 1) and jog an excessive amount of time to the home position before shutoff.

Conversely, if the deceleration time is set too long, the turntable will not settle to the jog speed and thus will be going too fast to align properly and momentum will take turntable beyond home position.

Any time the wrap speed is changed, you will need to make a corresponding change in the setting of the pot marked D for deceleration. Pot D is adjusted clockwise to shorten deceleration time.



DC+: ARMATURE CONTROL
 AC: AC INPUT
 AC: AC INPUT
 DC-: ARMATURE CONTROL

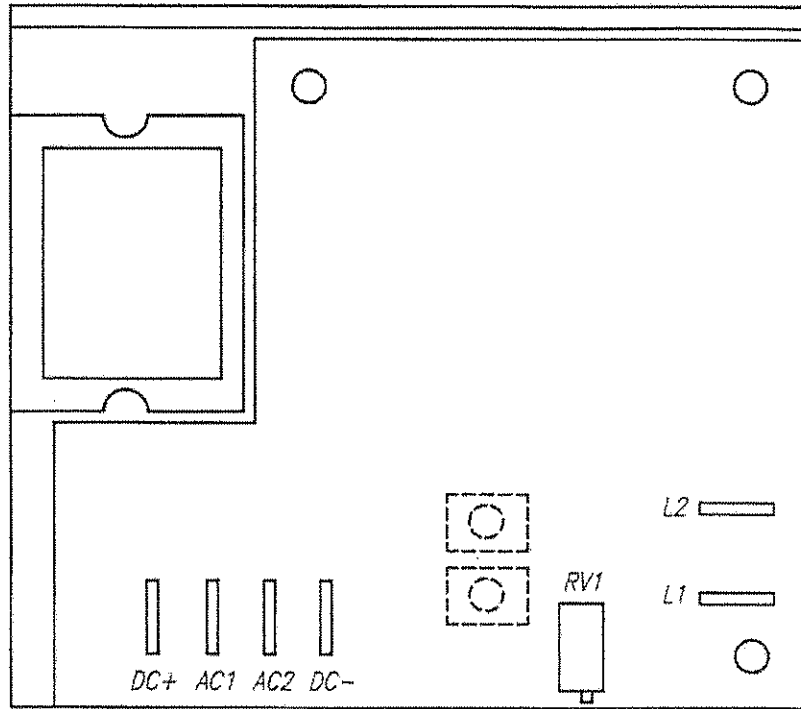


C: COMMON
 2: SPEED CONTROL (HIGH)
 1: SPEED CONTROL (LOW)

POTENTIOMETERS:

2: HIGH SPEED ADJUSTMENT
 1: LOW SPEED ADJUSTMENT
 A: ACCELERATION ADJUSTMENT
 D: DECELERATION ADJUSTMENT

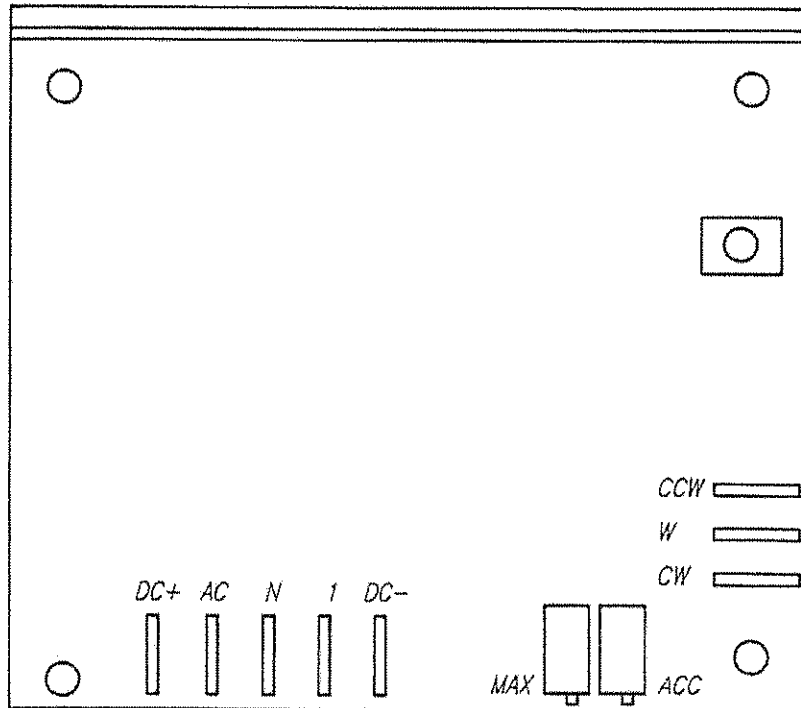
850M 2 SPEED DC
 MOTOR CONTROL BOARD



DC+: ARMATURE CONTROL.
 AC1: AC INPUT.
 AC2: AC INPUT.
 DC-: ARMATURE CONTROL.

RV1: MOTOR SPEED ADJUSTMENT.
 L1: AC CONTROL.
 L2: AC CONTROL.

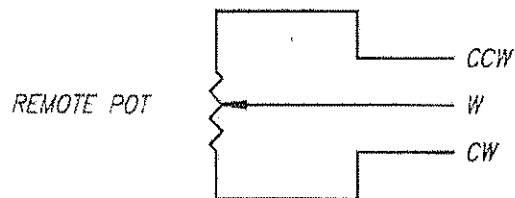
850C SINGLE SPEED DC
 MOTOR CONTROL BOARD



DC+: ARMATURE CONTROL.
 AC: AC INPUT.
 N: NEUTRAL.
 I: CONTROL.
 DC-: ARMATURE CONTROL.

POTENTIOMETERS:

MAX: MOTOR SPEED ADJUSTMENT.
 ACC: ACCELERATION ADJUSTMENT.



850D SINGLE SPEED DC
 MOTOR CONTROL BOARD

TURNTABLE 850D MOTOR CONTROL (for H&L77)

Acceleration: (ACC Pot) The ACC pot controls the soft start feature of the 850D Board.

For an initial setting, turn the ACC pot fully counter clock wise (untill a clicking sound is heard), and then approximately 11 turns or revolutions clock wise. For a smoother start of the turntable, turn the ACC pot further CW. For a quicker start, turn the ACC pot CCW.

Speed Control: (MAX Pot) The MAX pot controls the turntable running speed during the wrap cycles. This speed is set at 10 r.p.m.

For an initial setting, the remote pot located on the front panel should be set to maximum, (i.e. fully CW). Using the pot on the board marked MAX set the turntable speed to achieve 10 r.p.m. A CW turn will increase the speed, CCW will decrease the speed.

In order to compensate for unstable and various load sizes, the 850D board features a remote Turntable Speed adjustment which is located on the front panel. This pot is provided to reduce the wrapping speed during a wrap function.
cycle

Since the 850D is a single speed board, the jog function will jog the turntable at 10 r.p.m.

NOTE: It is recommended that Turtable Speed be reduced when jogging unstable loads.

MULTISTRETCH 850D MOTOR CONTROL (for H&L77)

Acceleration: (ACC Pot) The ACC pot controls the soft start feature of the 850D Board.

For an initial setting, turn the ACC pot fully counter clock wise (untill a clicking sound is heard), and then approximately 8 turns or revolutions clock wise. For a softer start on the Multistretch motor, turn the ACC pot further CW. For a sharper response, turn the ACC pot CCW.

Note: If acceleration time is too low, an excessive amount of film will be ejected prior to the turntable achieving maximum speed.

Speed Control: (MAX Pot) The MAX pot controls the running speed of the Multistretch motor during the wrap cycles or any time dancer bars are deliberately moved.

For an initial setting, (w/turntable not running) the Film Tension remote pot located on the front panel should be set to minimum (i.e. fully CCW). Using the pot on the board marked MAX, set the Multistretch speed to achieve stable condition, (i.e. a smooth continious release of film). A CW turn will increase the speed, CCW will decrease the speed.

This board also features a Film Tension adjustment which is located on the front panel.

Note: If speed is too high dancer bars will jolt back and forth which in turn will switch the motor off and on. This will cause the film to be released unevenly.

CONVEYOR 850D MOTOR CONTROL

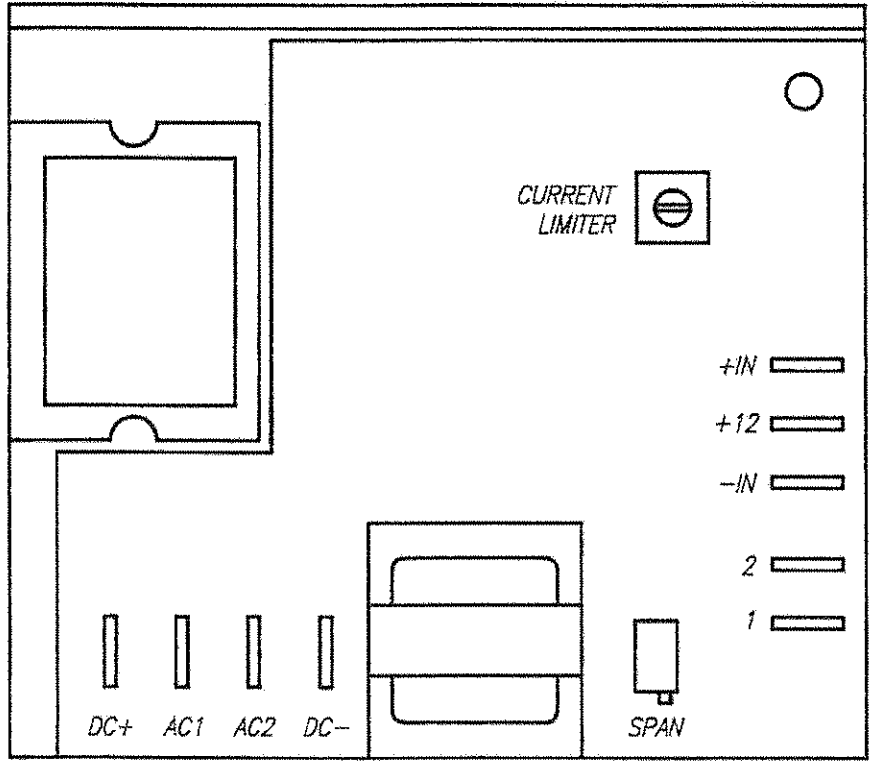
Acceleration: (ACC Pot) The ACC pot controls the soft start feature of the 850D Board.

For an initial setting, turn the ACC pot fully counter clock wise (untill a clicking sound is heard), and then approximately 12 to 15 turns or revolutions clock wise. For a smoother start of the conveyor, turn the ACC pot further CW. For a quicker start, turn the ACC pot CCW.

Speed Control: (MAX Pot) The MAX pot controls the conveyor running speed.

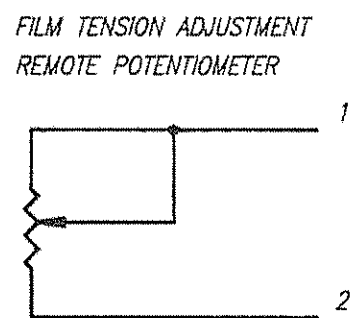
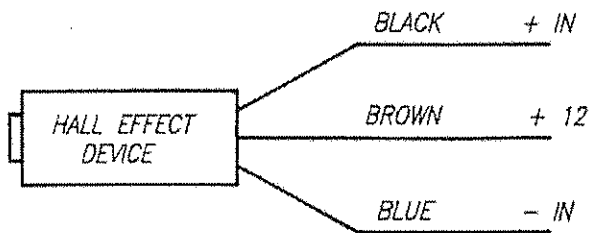
The conveyor running speed should be set with the aid of tachometer. A clock wise turn will increase the speed, a counter clock wise turn will decrease the speed.

NOTE: Inputs W and CW are shorted in conveyor motor control.

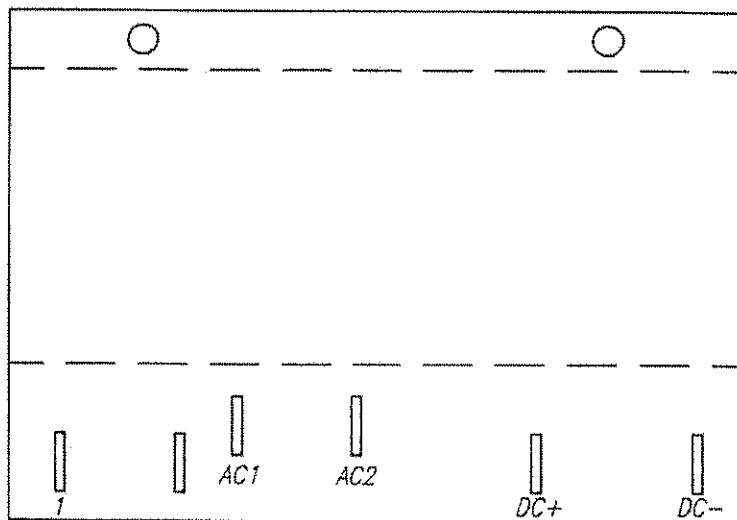
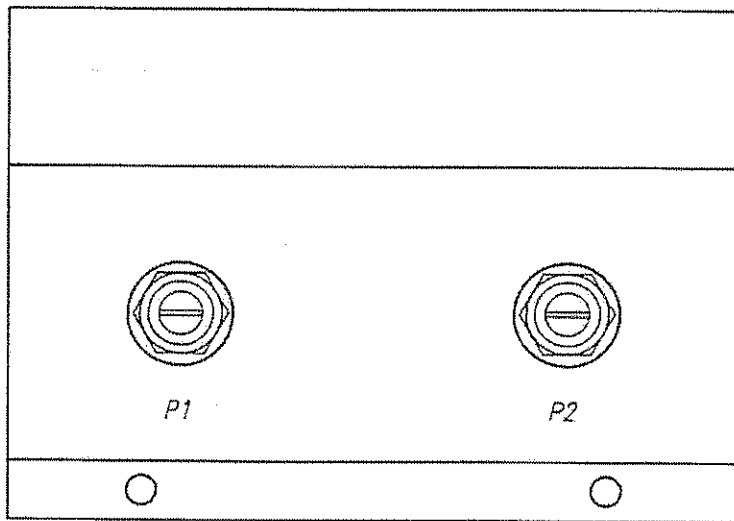


DC+: ARMATURE CONTROL
 AC1: AC INPUT
 AC2: AC INPUT
 DC-: ARMATURE CONTROL

POTENTIOMER
 SPAN: HALL EFFECT SENSITIVITY CONTROL

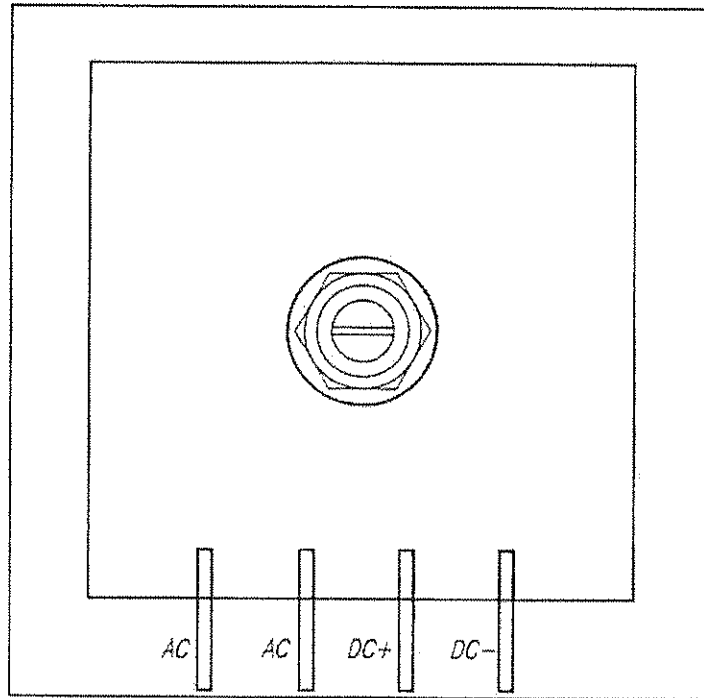


336-6
 MULTISTRETCH BOARD



1 : PLC CONTROL
 AC1: AC INPUT
 AC2: AC INPUT
 DC+: ARMATURE CONTROL
 DC-: ARMATURE CONTROL
 POTS: SPEED ADJUSTEMENT.

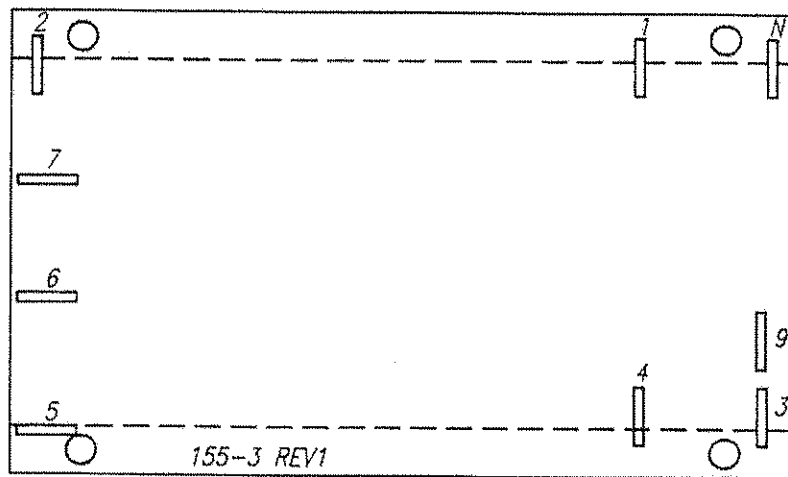
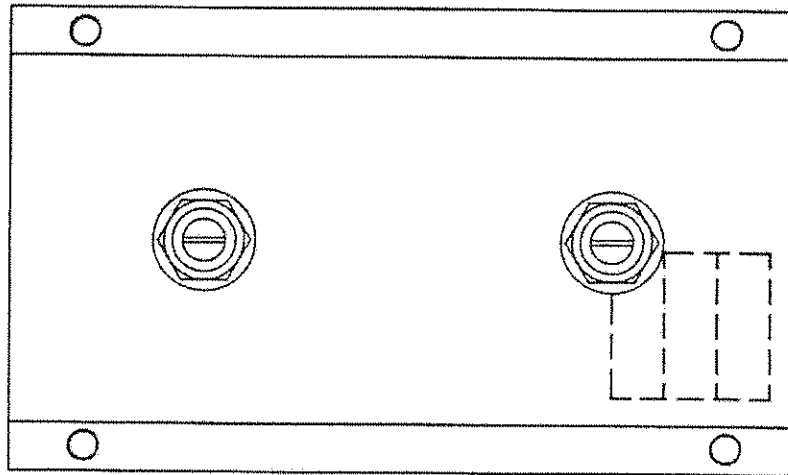
168-4 CARRIAGE
 DOUBLE SPEED BOARD



AC: AC INPUT
AC: AC INPUT
DC+: ARMATURE CONTROL
DC-: ARMATURE CONTROL

168-A

CARRIAGE SINGLE SPEED BOARD



- | | |
|---------------|---------------|
| 1: AC INPUT | 7: OUTPUT B/W |
| 2: AC INPUT | 8: N/A |
| 3: COUNT | 9: COMMON |
| 4: RESET | N: NEUTRAL |
| 5: OUTPUT | |
| 6: OUTPUT T/W | |

155-3
COUNTER BOARD