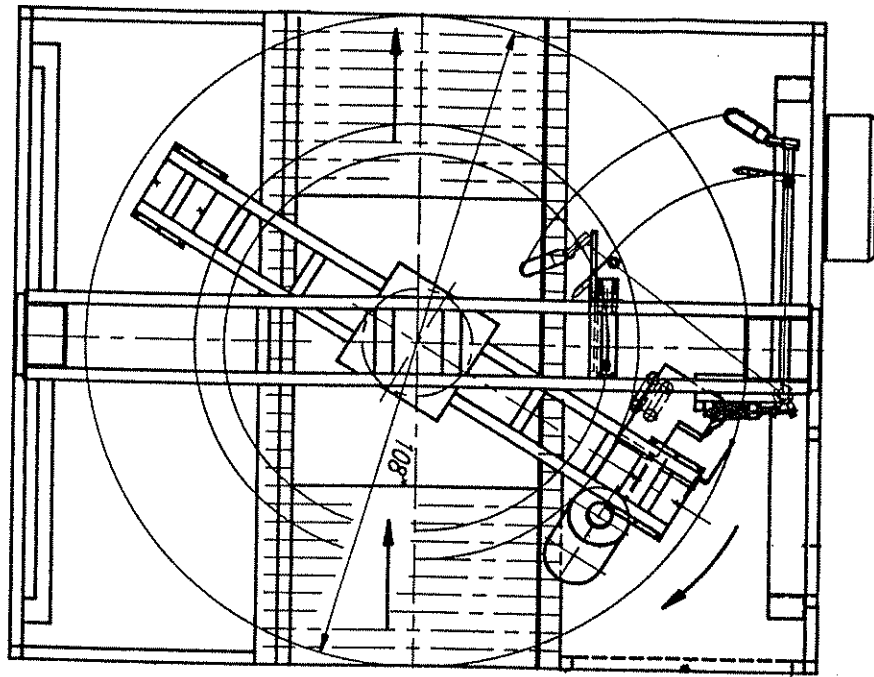
  
**orion**®



**STRETCHWRAPPERS**



# INSTRUCTION MANUAL

FOR ALL INQUIRIES  
PLEASE CONTACT  
OUR LOCAL DISTRIBUTOR

FOR U.S. (ONLY)  
**1-800-333-6556**

Thank you for choosing ORION stretch-wrapping equipment. It is a wise choice which will benefit your company now and in the future.

ORION uses a unique combination of functional, rugged steel structure and sophisticated control systems to offer equipment high in durability and low in maintenance requirements. Our advanced control systems mean that ORION equipment can be operated safely and efficiently without the need for special operator expertise.

Please read this manual carefully and keep it handy. Following these simple operating instructions will insure the safe and efficient performance of this machine while simple maintenance procedures will guarantee a long and productive life of the equipment.

**NOTICE:**

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

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

- 1) **MODEL**
- 2) **SERIAL NUMBER**                   103851
- 3) **SUBASSEMBLY ( see PART LIST )**

**SAFETY:**

ORION'S stretch wrappers should be operated with caution and common sense as any other industrial equipment. To prevent injury and / or electrical shock, careful operation of the machine and awareness of its many automatic functions is required.

Note: All electrical power and compressed air must be disconnected prior to performing any inspection, maintenance or repair work.

**ORION PACKAGING INC.**

**ORION L - 55S****Spiral Semi-Automatic Heavy Duty Low Profile with Surrounding Deck Frame**

<b>Maximum Load Size:</b>	60"W x 60"L x 84"H (Recommended) 66"W x 66"L x 87"H (Theoretical)*
<b>Weight Capacity:</b>	6,000 lbs. Dynamic, 30,000 lbs. Static
<b>Utilities:</b>	115/1/60 20 Amp Service
<b>Turntable:</b>	66" Diameter 3/8" Steel Plate 9 Steel Cam Follower Support System Self Lubricating System with Reservoirs 3 1/8" Height Floor to Top of Turntable
<b>Turntable Drive:</b>	0 - 12 RPM Variable Turntable Speed 1/2 HP DC Drive Motor #50 Roller Chain Drive with Tensioner Electronic Soft Start Positive Alignment Feature
<b>Control Features:</b>	Electronic Film Force Control Separate Top and Bottom Wrap Selectors Variable Speed Film Carriage Control Auto-Height Photocell with On/Off Switch Film Carriage Raise/Lower Switch Turntable Jog Pushbutton Spiral Up or Up/Down Cycles Current Overload Protection NEMA 12 Electrical Enclosure
<b>Film Delivery:</b>	20" Orion MultiStretch Power Prestrech Electronic Film Tension Control End of Cycle Film Force Release Full Authority Film Dancer Bar #40 Chain/Sprocket Ratio Control 1/2 HP DC/SCR Film Drive
<b>Film Carriage Drive:</b>	#50 Roller Chain Carriage Lift 1/2 HP Elevator Drive Motor Variable Speed CR Control Precision Cam Follower Tracking
<b>Structural Features:</b>	Full Steel Surrounding Base Frame Forklift Portable Base Design Cam Follower Turntable Support All Structural Steel Construction Film Roping Bar 8" x 18 lb./ft. "H" Beam

**Estimated Shipping Weight:** 2,200 lbs.

\*THEORETICAL IS BASED UPON REMOVAL OF THE ROPING BAR, AND REFLECTS MAXIMUM FILM WEB HEIGHT ATTAINABLE.

## **MACHINE UNLOADING INSPECTION & INSTALLATION**

### **UNLOADING**

Machine can be easily unloaded and transported by a forklift with a minimum capacity of 2500 lbs.

1. Carefully insert the forks into the lifting tubes to the maximum possible depth. Depending on the model, a forklift access may be either at the turntable end of the machine frame, the tower end or both. In case of the mongoose machine or the conveyor, enter the forks under the frame.
2. Lift the machine (or other part of system) only to the necessary height to move it with no bouncing or friction on the floor.
  - 2a. On the mongoose machines use the brackets welded on the top part of the machine.
3. Sit the machine down assuring uniform contact with the floor which is necessary to ensure correct and smooth operation.
  - 3a. Mongoose type machines (M66, M67) have to be attached on the bracket or on the stand (collapsible or anchored to the floor). The M55 has it's own supporting frame which allows the machine to stand independently.

### **INSPECTION**

1. Remove all packing and supporting additions - these may include the blocks under the carriage and the restraining bar over the table.

NOTE: when removing the stretchwrap film covering the machine, care must be taken not to cut any of the electrical wires and rubber covering on the multistretch rollers.

2. Perform a visual inspection of the electrical and mechanical parts for loosened joints and / 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 as follows:

- motors and transmissions
- junction boxes
- electrical conduits
- proximity and limit switches
- photocells

3. Check under the turntable (H - series models only) to ensure that there is no crippling of the movable parts i.e. casters, center axle or drive assembly.

4. Verify the following:

- turntable or rotary arm drive system to confirm that the reducer to drive the chain is snug and properly aligned
- verify the wires tight conduits for crushed sections or loose fittings
- verify the carriage to be sure that it is correctly aligned with the tower and verify the tension on the lift chain
- verify all the dials and knobs on the control panel for smooth action.

## **MACHINE INSTALLATION**

After the visual inspection has been completed the electrical power and the compressed air may be connected as specified on the diagrams supplied with the machine.

An electrical diagram is provided with each machine in the envelope attached to the panel box.

## **ASSEMBLY PROCEDURE**

The structural frames of the machine have to be installed on a levelled floor. Locate the main wrapper section into its final position, keeping the tower assembly\* away from any traffic.

The wrapper mainframe section must be bolted to the floor by the 1/2" concrete floor anchors (leg & shield or expandable type).

Conveyor sections (where applicable) have to be positioned, levelled\*\* and bolted to the floor. Any wiring which has been disconnected to facilitate transport is marked with a number located on the junction box to which the wiring must be reconnected. It allows identification of the proper position of the infeed and outfeed conveyor sections. Any wire run that appears too short or long may indicate that the position of the mechanical components is incorrect. Verify the status of all assemblies before proceeding.

**CAUTION:** improper placement and alignment of the conveyor section(s) and/or electric photocells may lead to equipment malfunction and damage.

\* The tower deviation from vertical must not exceed 1/4" on the distance of 10 feet (angle: 0 degrees 6').

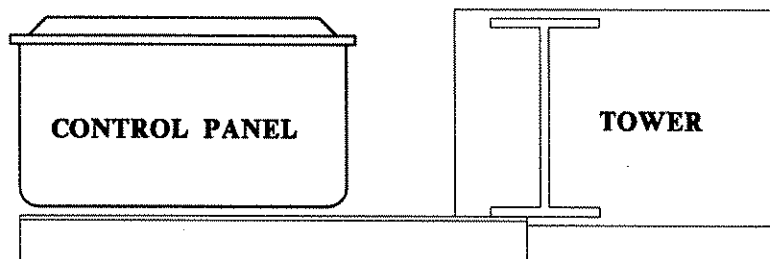
\*\* In the case of the conveyors, the roller deviation from the horizontal must not exceed 1/16 "on the distance 52" (angle: 0 degrees 4').



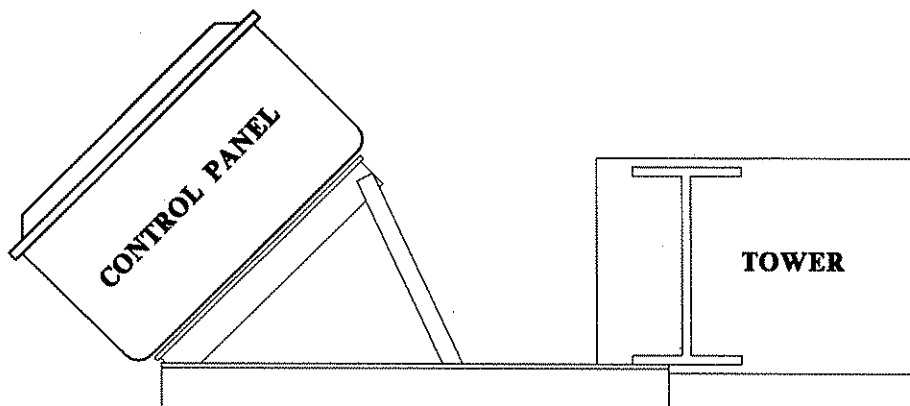
## **CONTROL PANEL**

In the case of the free standing panel (console) place it adjacent to the system and anchor firmly to the floor. Connect the liquid tide (rigid conduit) to the main junction box located on the wrapper main frame next to the tower (or tower home position in case of mongoose). The wires must be matched properly on both sides.

**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 is attached to the tower's foot)**

## **CONTROL PANEL MOUNT TWO POSITIONS**

## **CYCLE CONTROLS**

The control panel layout is custom designed for each particular installation, however, common standard controls have been employed.

**CAUTION:** before proceeding be familiar with the EMERGENCY button and all functions, switches and pushbuttons.

## **POWER SWITCH**

The Power Switch has two settings:

**ON** - connects a power source to the machine (voltage depends on the machine type - see electrical diagram provided with the machine).

**OFF** - disconnects the power source.

## **START AND STOP SWITCHES (EMERGENCY STOP)**

The **START** switch is used to start the cycle once the load is on the turntable (or under the rotary arm). The cycle may be stopped at anytime by pressing the **STOP** button.

**NOTICE:** In case of emergency, use the **STOP** button which interrupts all the machine electrical circuits (except multistretch drive). If the **STOP** pushbutton is pressed in the middle of the cycle, the carriage and turntable may be returned to their home position by using the jog buttons before restarting the cycle.

## **SPIRAL WRAP SWITCH**

The **SPIRAL WRAP** switch has two positions:

**UP** - in this 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 this position the cycle will be completed after the load is wrapped in both the up and down directions.

NOTE: TOP WRAP FIRST (OPTIONAL)

The carriage raises faster at the beginning of the cycle to wrap the top of the load (see electrical diagram provided with the machine).

## **CARRIAGE CONTROL SWITCH**

The CARRIAGE CONTROL switch is a three position switch with the following settings:

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

LOWER - lowers the carriage until the bottom limit switch on the tower is attained.

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

## **TURNTABLE ( ROTARY TOWER ) JOG**

The turntable (rotary tower) jog switch is a pushbutton which will rotate the turntable (rotary arm) in a clockwise direction (as viewed from the top) when the switch is held depressed. When the switch is released the turntable (rotary tower) will stop. The switch is inoperative during the wrap cycle.

## **PHOTOCELL SWITCH**

The photocell switch has two settings:

ON - when turned ON, the photocell instructs the carriage to 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 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 when the top limit switch has been activated.

## **FILM TENSION**

Film tension may be adjusted using the film tension control knob. It has a range of tension from 0 to 10 (0 to 4 the low range, 4 to 8 the most usefull range for most of the films used by our customers, 8 to 10 as a very high range which may break some films).

NOTE: Lighter loads may require lower tension settings then heavier loads.

Film tension is controlled through the dancer bar system. Occasionally the feed back proximity sensor may need some adjustment. Adjustment of feed back is shown on drawing # 001

Adjustment instructions:

- remove the carriage cover
- unbolt the two nuts holding the proximity switch -item # 1
- turn the proximity switch - item # 2 until the moment when the motor starts to turn (or hums)
- tighten on the nuts securing the proximity switch.

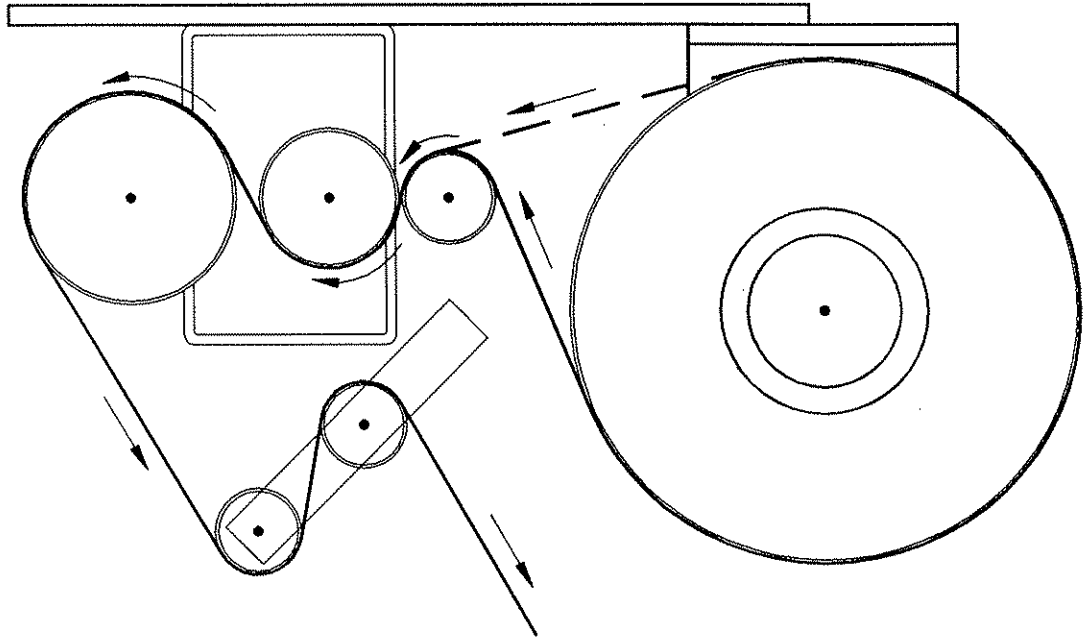
NOTE: The condition in which the motor hums but does not turn must be maintained even after all elements are tightened. If not, the adjustment procedure must be repeated.

## **TO LOAD THE FILM....**

The film roll can be loaded on the mandrel of the carriage from either end of the roll. When using tacky film, please verify that the inward tacky surface of the film is inward on the load.

1. Disconnect power (turn off power switch).
2. Put the roll of film on the mandrel and press down to insure penetration of spikes into the card board center of the film roll.
3. In the case of automatic machines, install the film cap on top of the roll to prevent upward movement.
4. Introduce the roping end of the film between the shafts of all rollers (as shown on the dwg.) and pull to pass it around all three rollers (pressure roller and both rubber rollers).
5. Pass the film between the two dancer (aluminium) rollers (in certain applications the film has to be passed around one or two additional position aluminium rollers).
6. When the film feeding is completed - turn the power switch ON
7. Peel off the first few winds of the film (multistretch will run due to displacement of the dancer roller) and fix the film end onto the load or into the clamp mechanism (if machine is fully automatic).

The system is now ready to begin the first wrapping cycle.  
Proceed to page titled **SYSTEM START UP**.



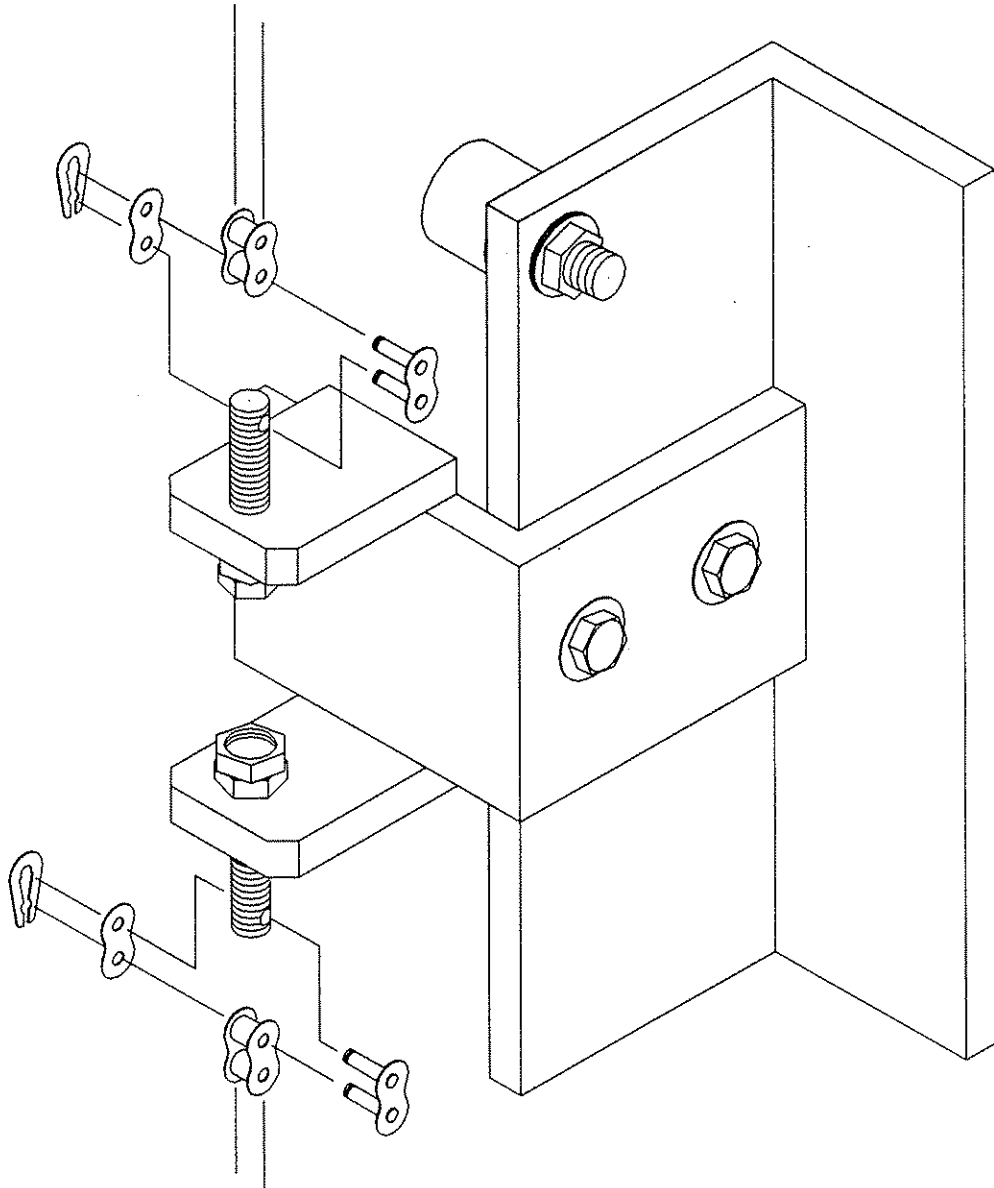
**WARNING:**

**DISCONNECT POWER BEFORE FEEDING FILM**

**FILM FEEDING PATTERN  
FOR STANDARD CARRIAGE**

**ATTENTION:**

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



**CHAIN TENSIONER ASSEMBLY**



## **SYSTEM START-UP**

Notice: It is advisable to test-run the equipment with several pallet loads before make the attempt to wrap with film. Please position a worker at the EMERGENCY STOP push button.

Start up of the machine (system) may determine the need for the adjustment of:

- pallet sensor eyes (automatic systems only)
- load height stop photoswitch (on the carriage)
- conveyor acceleration/deceleration
- turntable speed & jog speed
- turntable speed acceleration/deceleration
- turntable home position (rotary tower home position)
- film tail treatment devices (automatic systems).

## **MACHINE WRAPPING TEST**

Before the test procedure adjust the wrapping cycle parameters i.e. top wraps, bottom wraps, height photocell on/off, film tension, carriage speed (those two parameters may be adjusted during the wrapping cycle).

When there is no photocell, verify the top limit switch position.

## MACHINE MAINTENANCE

### REDUCER OIL CHANGE

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 25000 hours of operation, whichever ever 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:

<b>Manufacturer</b>	<b>Lubricant</b>
American Oil CO.	American Cyl Oil no:196-L
Cities Service Oil Co.	Citgo Cyl.Oil 100-5
Gulf Oil Corp.	Gulf Senate 155
Mobil Oil Corp.	Mobil 600 W Suerr Cyl.Oil
Philips 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

### 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 shape, 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.

## **CHAIN MAINTENANCE**

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

With time the chain will tend to stretch. A loose elevator and turntable (rotary arm) chain should be tightened at the chain tensioner, or by moving the reducer on the mounting plate.

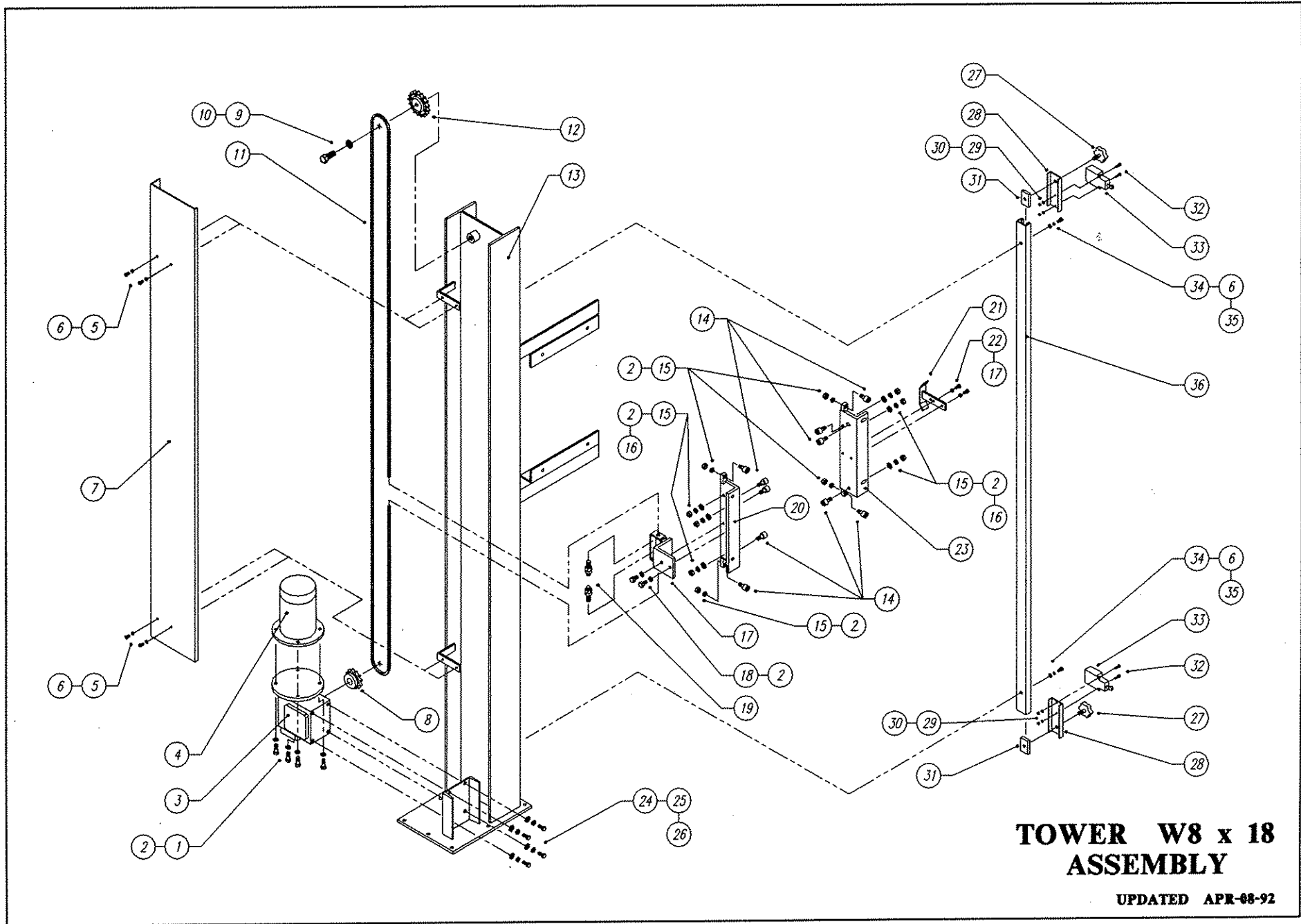
## **CAM FOLLOWER MAINTENANCE**

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 run, 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.

**SEMI-AUTOMATIC  
STANDARD ASSEMBLY  
PART LIST**

**Note :**

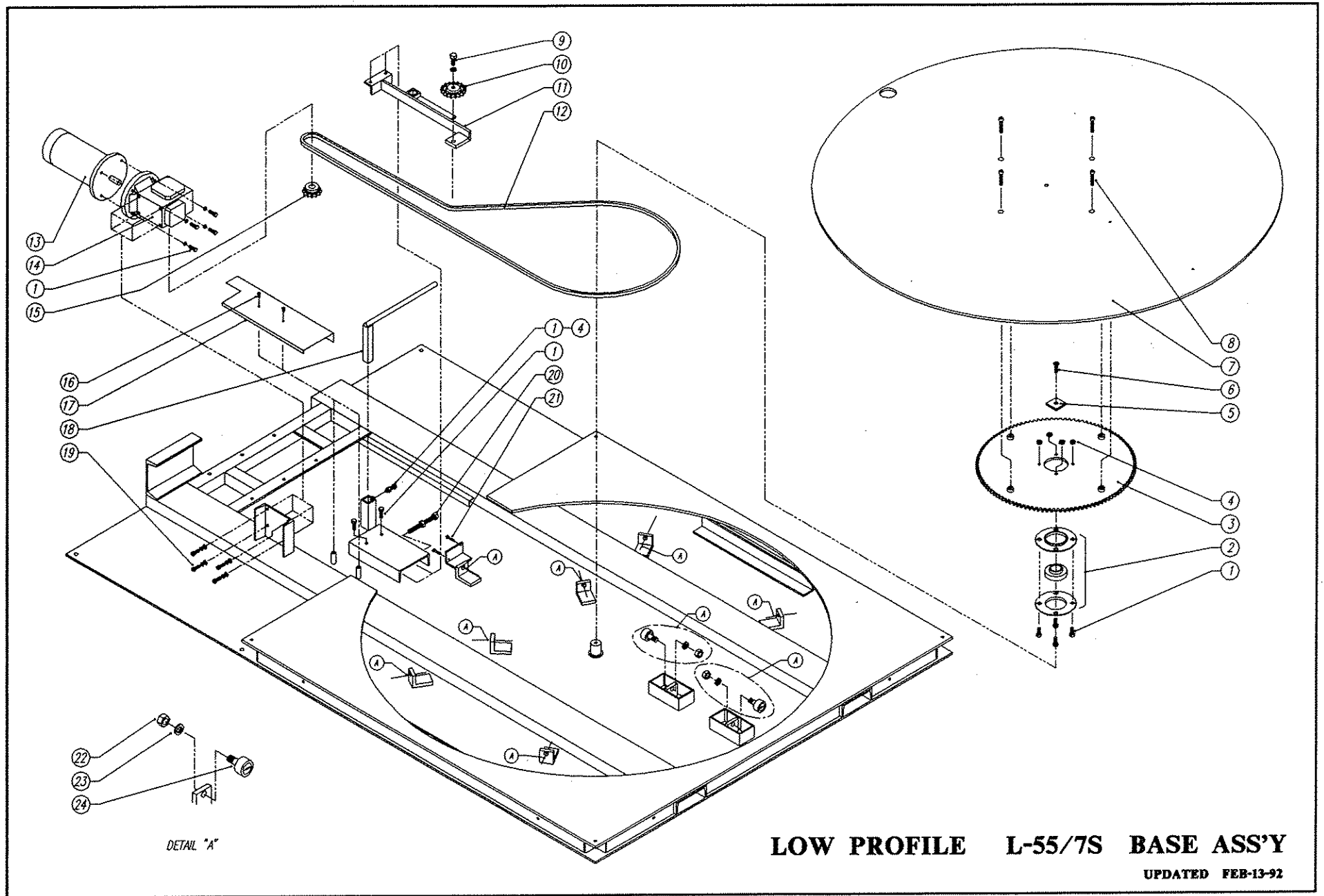
- \* Quantity listed in order of part number**
- \*\* The names given to the parts are generic**



## TOWER W8 x 18 ASS'Y - PART LIST

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



PART LIST

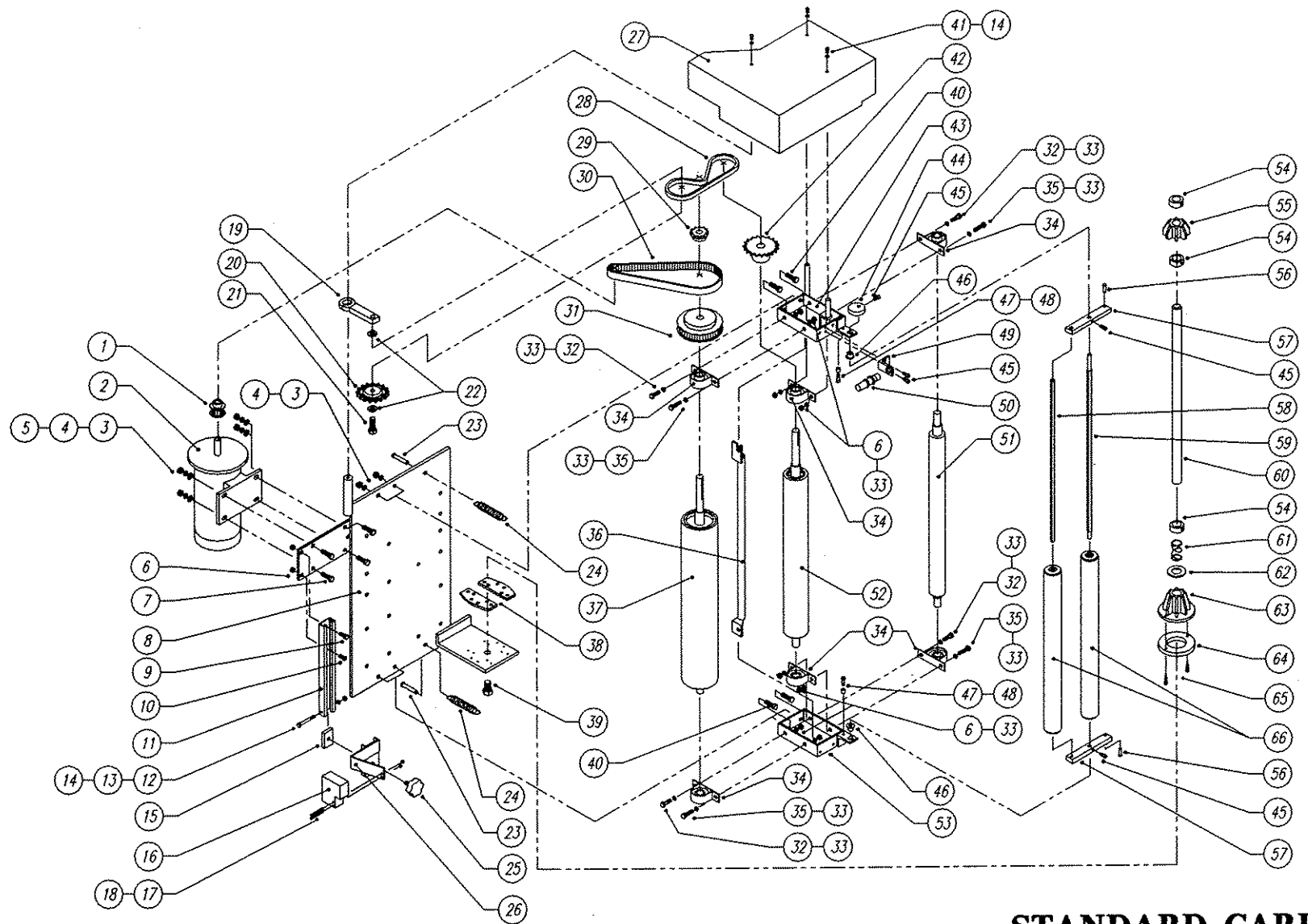
FOR LOW PROFILE L-55/7S BASE ASS'Y

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.	010343	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.	<del>012598</del>	CAM FOLLOWER	9

12531





# STANDARD CARRIAGE ASSEMBLY

UPDATED MAY-29-92

## STANDARD CARRIAGE ASS'Y - PART LIST

updated May-28-92

ORION NO.	PART NO.	DESCRIPTION	Q-TY
1.	011283	TIMING BELT PULLEY	1
2.	010036	ELECTR. MOTOR	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

ORION			
NO.	PART NO.	DESCRIPTION	Q-TY
41.	012049	PAN PHILL SCREW	3
42.	011456	DRIVE SPROCKET	1
43.	011369	TOP BRACKET	1
44.	011477	PROXIMITY SE NSOR 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
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

## ELECTRICAL BOARDS' CHART FOR ORION STRETCHWRAPPERS

	168-4	168-A	336-6 & 7	750 MX	850 M	850 C	155-3	850 D
L-77, H-77		X					X	X
M-77		X				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	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			X	
*M-44,*L-44,*H-44	X	X	X	X				

\* - PROCESSOR  
 PA - POSITIVE ALIGNMENT  
 DEMO - DEMO PACKAGE  
 336-7 - REPLACES 336-6

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 it's preset turntable speed.

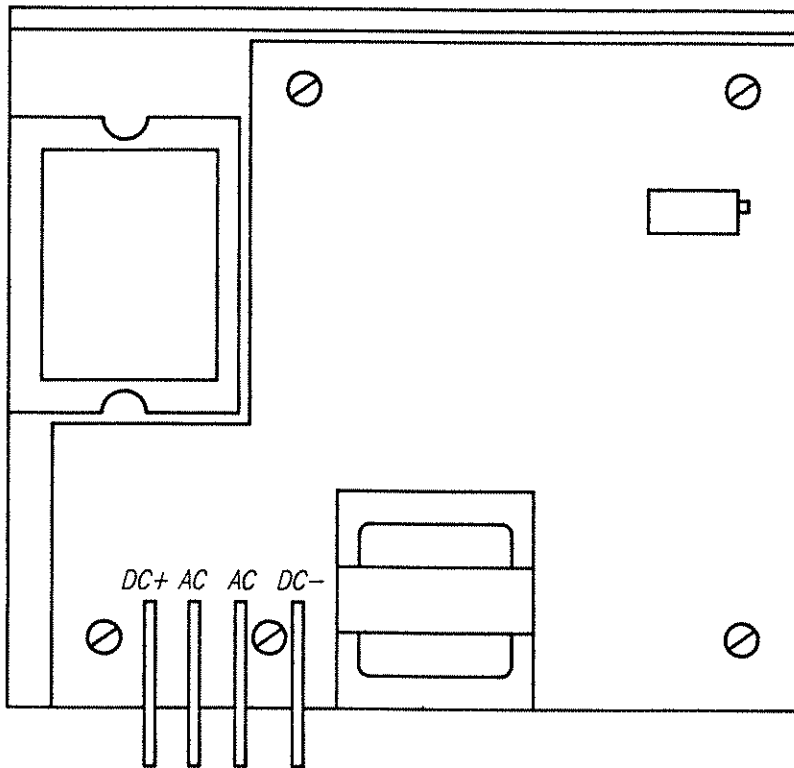
The pot marked 1 is the turntable jog speed, and should be set for approximately 2 RPM. Please note that this setting should be made with a load on turntable.

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.

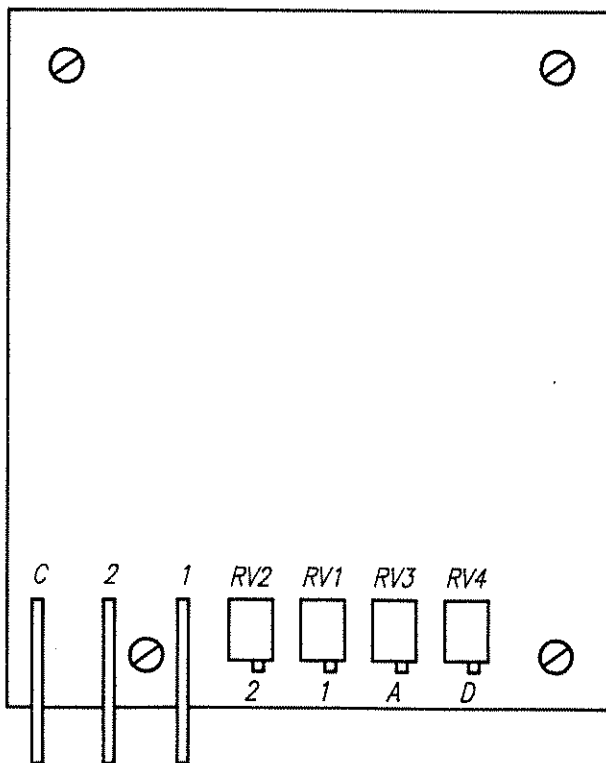
The pot marked D is the deceleration control. It is a critical setting because our machine logic requires that we decelerate from speed 2 to speed 1 during the course of the final revolution of the turntable before shutoff. Thus, the deceleration control is important in that if deceleration time is too 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

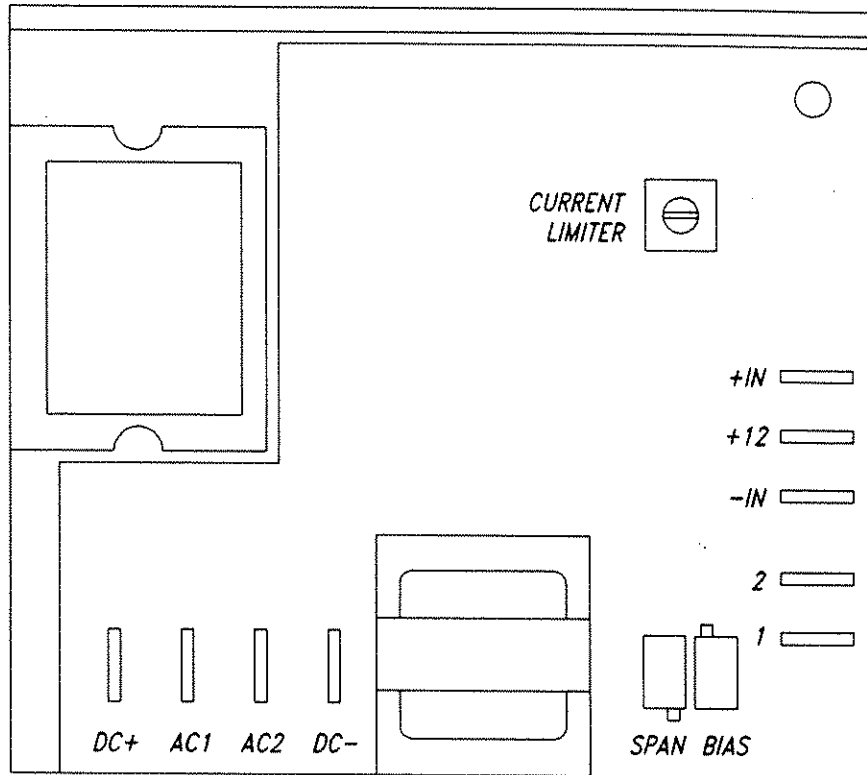


C: COMMON  
 2: SPEED CONTROL (HIGH)  
 1: SPEED CONTROL (LOW)

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

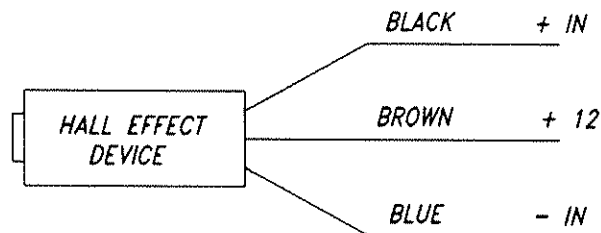
*AC2:* AC INPUT

*DC-:* ARMATURE CONTROL

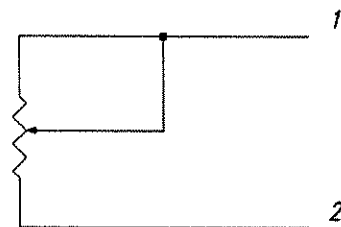
POTENTIOMETER

*SPAN:* HALL EFFECT SENSITIVITY CONTROL

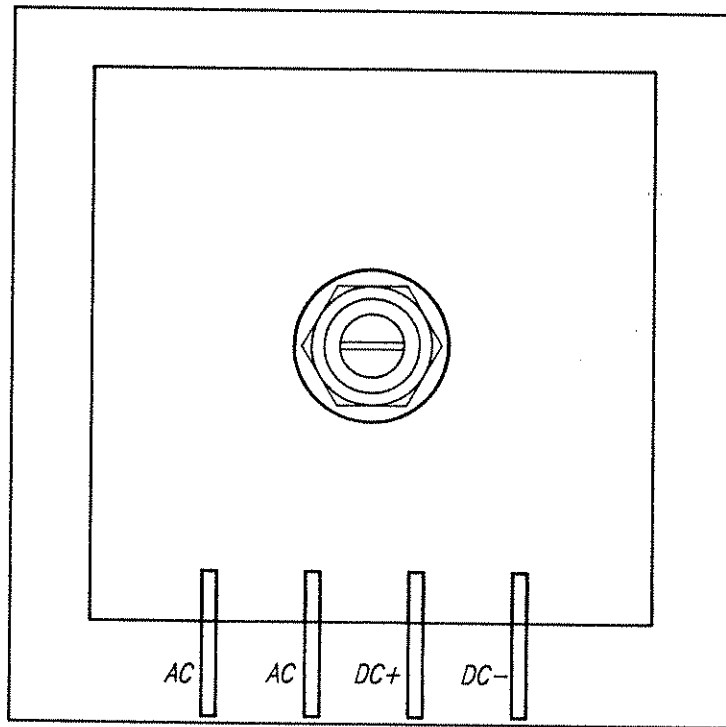
*BIAS:* SYSTEM BIAS (FACTORY SET)



FILM TENSION ADJUSTMENT  
REMOTE POTENTIOMETER



**336-6/7**  
**MULTISTRETCH BOARD**

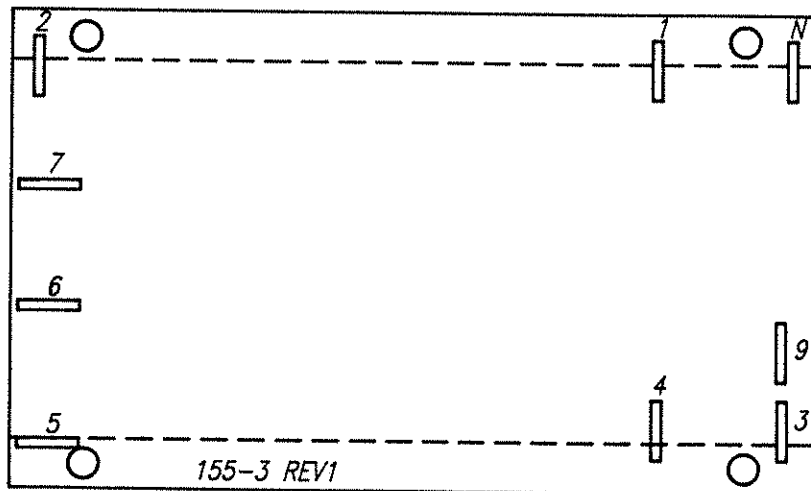
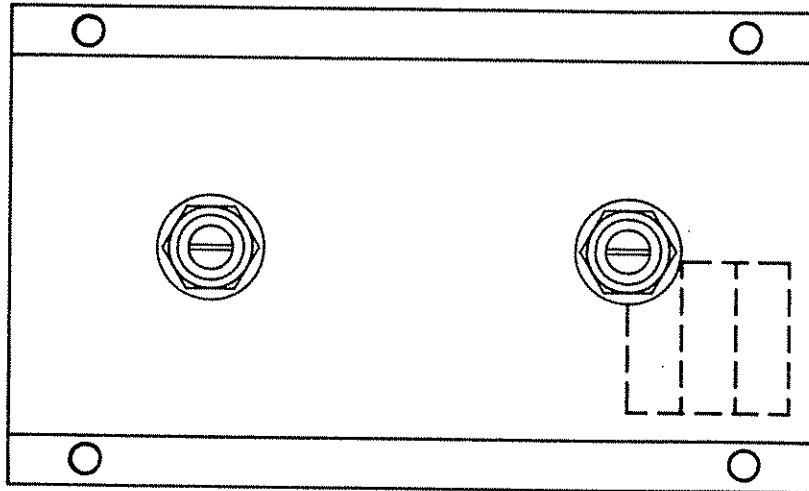


*AC: AC INPUT*  
*AC: AC INPUT*  
*DC+: ARMATURE CONTROL*  
*DC-: ARMATURE CONTROL*

*168-A*

*CARRIAGE SINGLE SPEED BOARD*

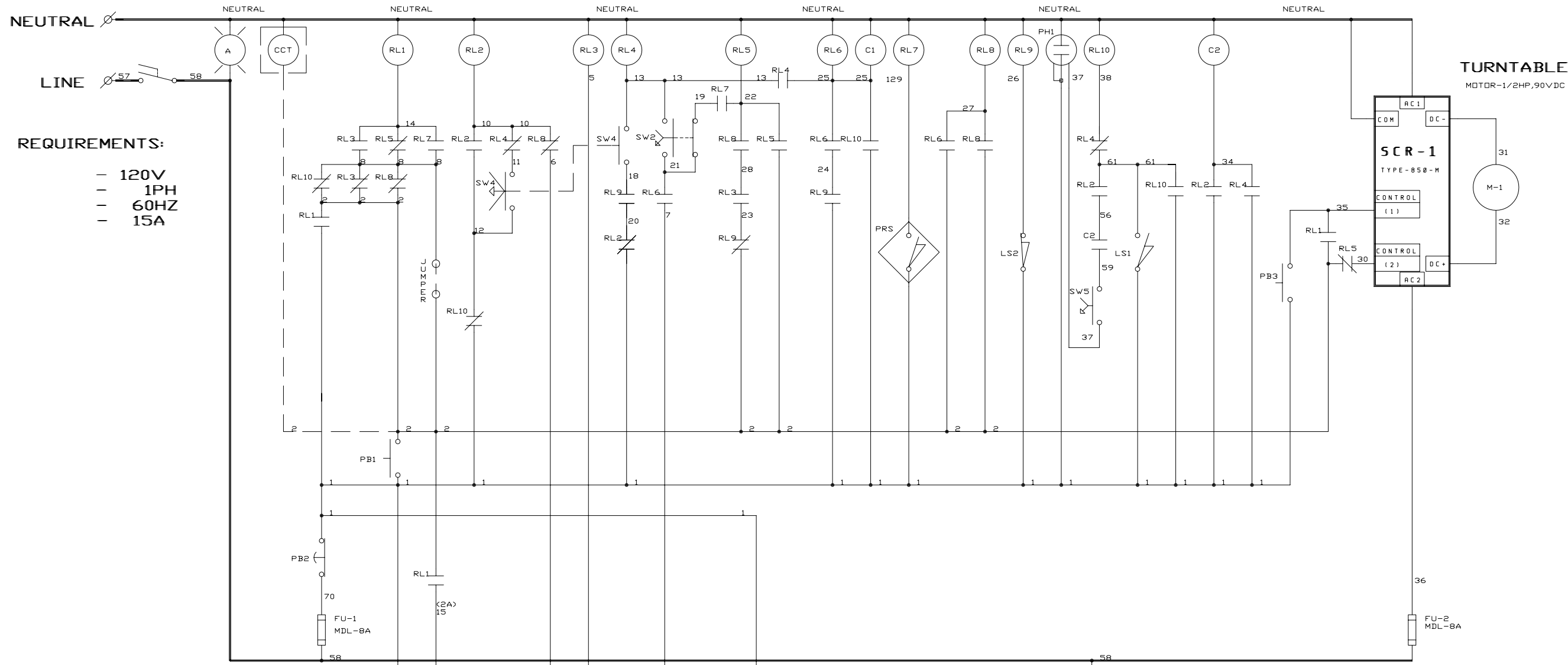




155-3 REV1

- |               |               |
|---------------|---------------|
| 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

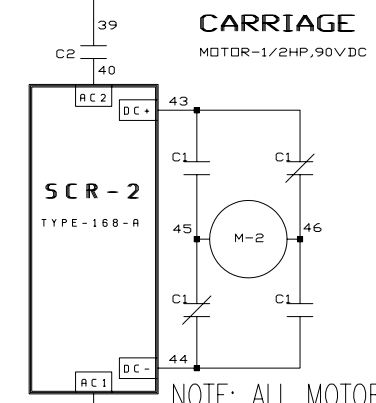
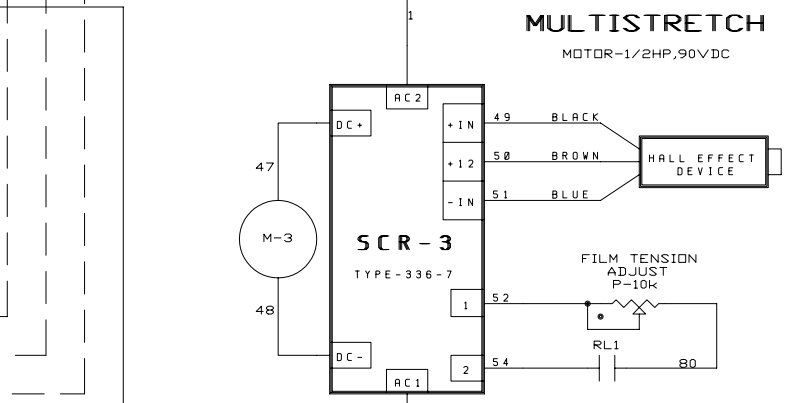
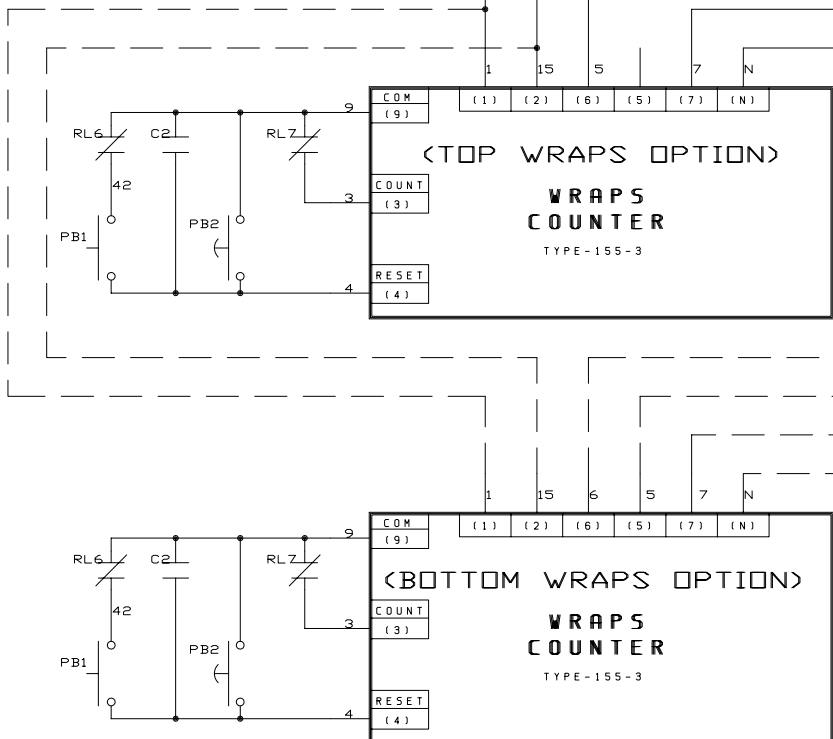


**REQUIREMENTS:**

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

**LEGEND**

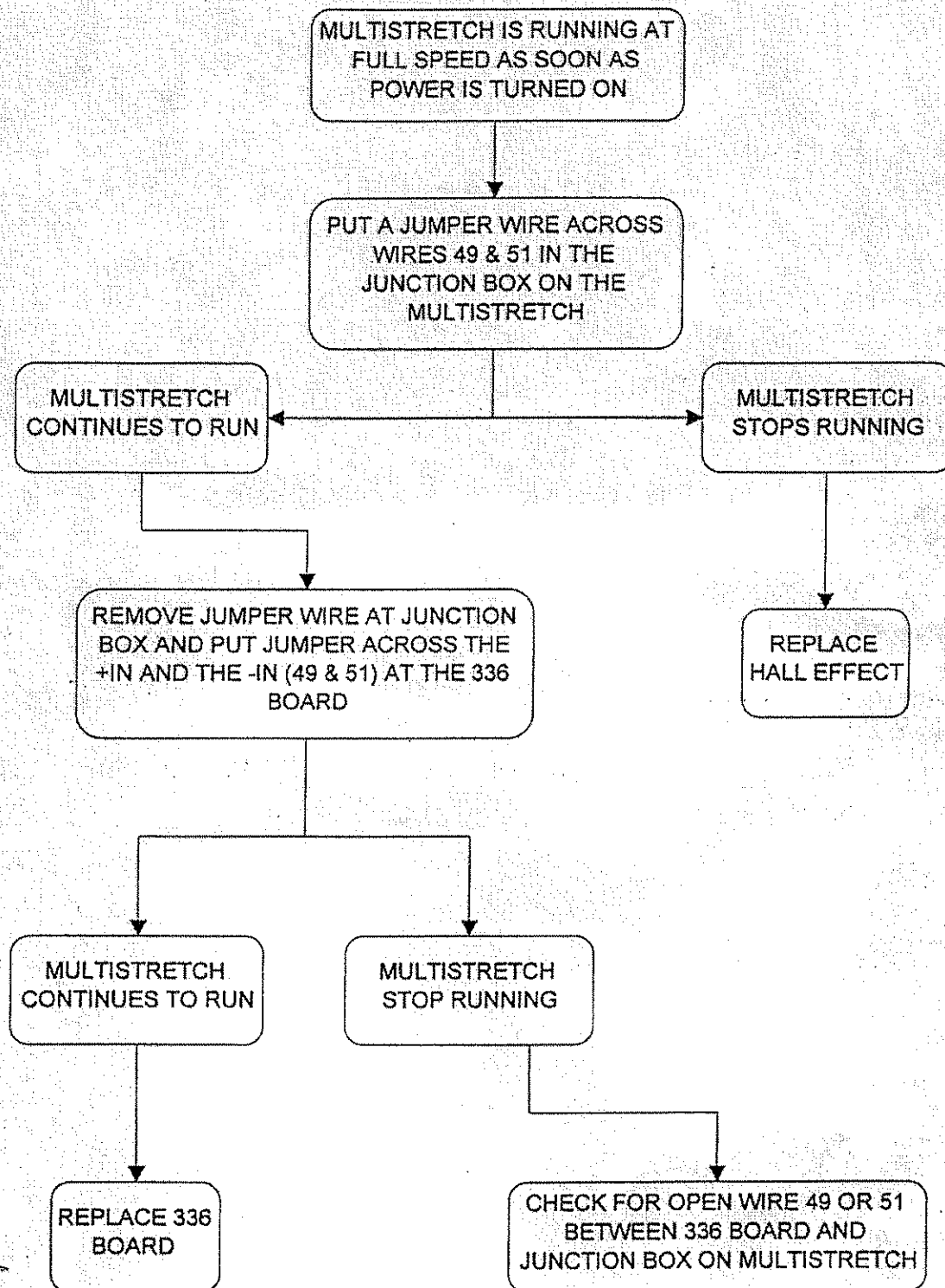
- RL1 AUTOCYCLE START
- RL2 CARRIAGE UP
- RL3 FIRST COUNT FROM COUNTER
- RL4 CARRIAGE DOWN
- RL5 END OF CYCLE, BEGIN ROTOR DECELERATION
- RL6 CARRIAGE DOWN
- RL7 ROTOR PROXIMITY SWITCH
- RL8 END OF CYCLE RECORDED
- RL9 BOTTOM OF CARRIAGE TRAVEL LIMIT SWITCH
- RL10 TOP OF CARRIAGE TRAVEL LIMIT SWITCH OR AUTO-HEIGHT PHOTOCELL
- PH1 AUTOHEIGHT PHOTOCELL
- C1 CARRIAGE REVERSE CONTACTOR
- C2 CARRIAGE DRIVER POWER
- PB1 START PUSH BUTTON
- PB2 STOP PUSH-PULL BUTTON
- PB3 TURNTABLE JOG
- SW MAIN POWER
- SW2 WRAP UP OR UP/DOWN
- SW4 CARRIAGE UP/DOWN
- SW5 PHOTOCELL OFF/ON
- LS1 TOP LIMIT SWITCH
- LS2 BOTTOM LIMIT SWITCH
- PRS PROXIMITY SWITCH
- CCT CYCLE COUNTER (OPTIONAL)



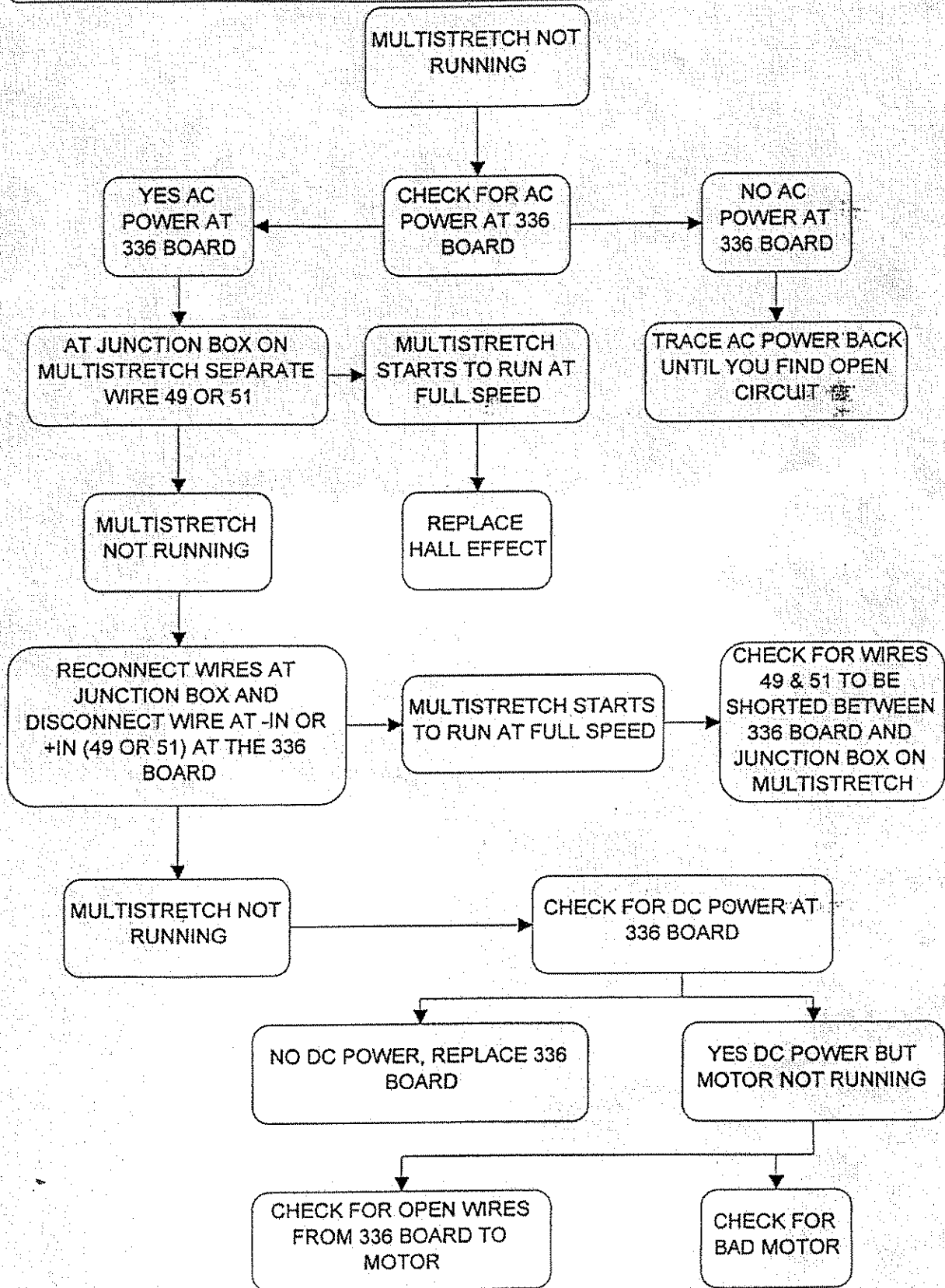
NOTE: ALL MOTORS 1/2HP FOR 55 SERIES  
 NOTE: 30" MULTISTRETCH CARRIAGE  
 FU-1 (MDA-10A); FU-3 (MDL-8A)

<p>ORION PACKAGING INC. 2270 INDUSTRIEL BOUL., LAVAL QUEBEC, CANADA, H7S 1P9 TEL:(450) 667-9769</p>		<b>ORION PACKAGING INC.</b> SCALE: NTS		
		2270 INDUSTRIEL BLVD LAVAL, QUE., CANADA H7S 1P9 TEL: (450) 667-9769 FAX: (450) 667-6320 APPR. BY: J.B.S. DRAWN BY: G.RUGGIERI		
TITLE: <b>H&amp;L66/55-8</b> "W/PUSH-PULL E-STOP & TOP WRAPS FIRST"		SIZE: <b>C</b>	DOCUMENT NO: <b>300 568 0</b>	REV: <b>0</b>
DATE: JULY-01-1993		SHEET: 1 OF 1		
ENCLOSURE SIZE: 4500-161206 PANEL STICKER: 500 021		FILENAME: HL66-8.DWG		

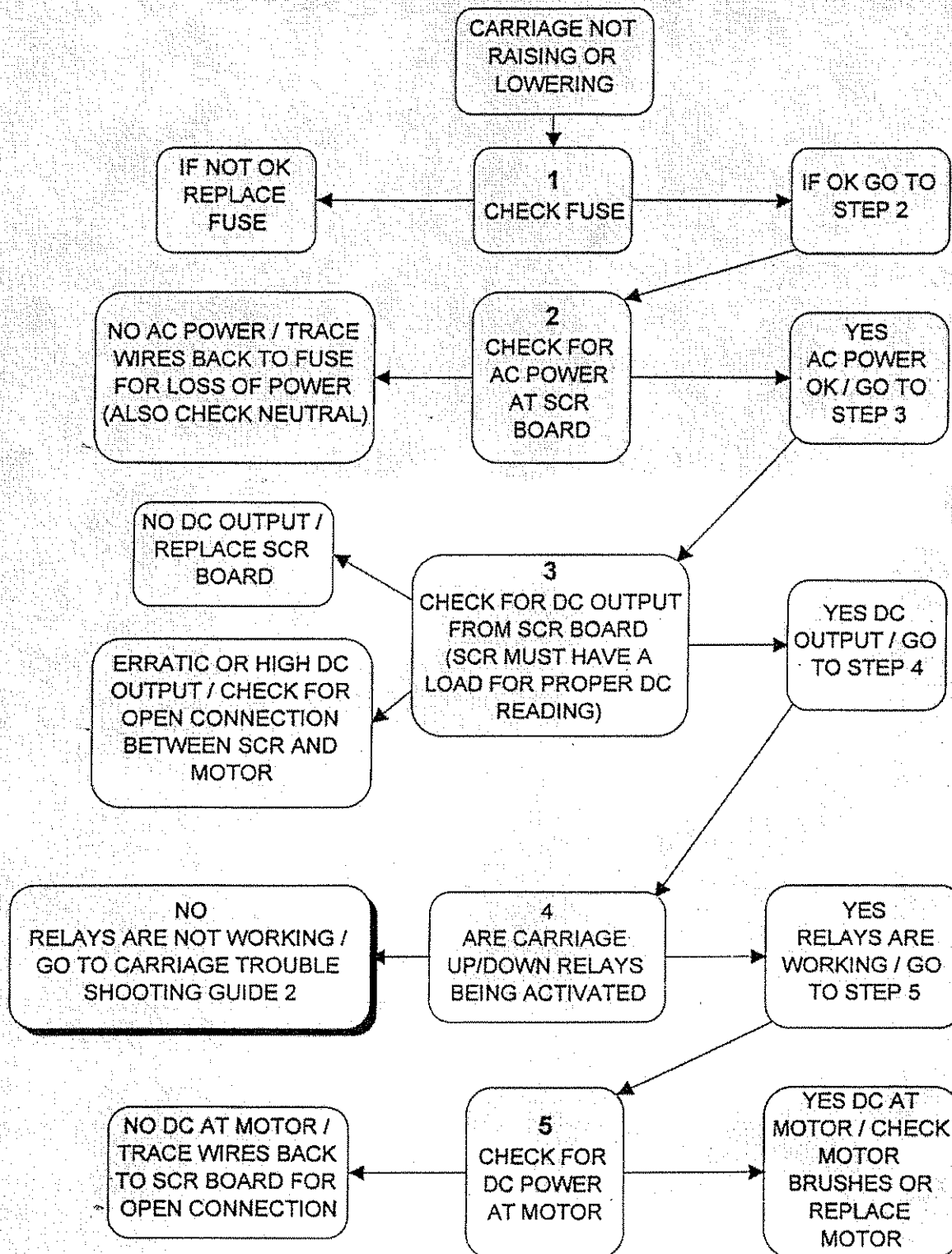
## MULTISTRETCH TROUBLE SHOOTING GUIDE 1



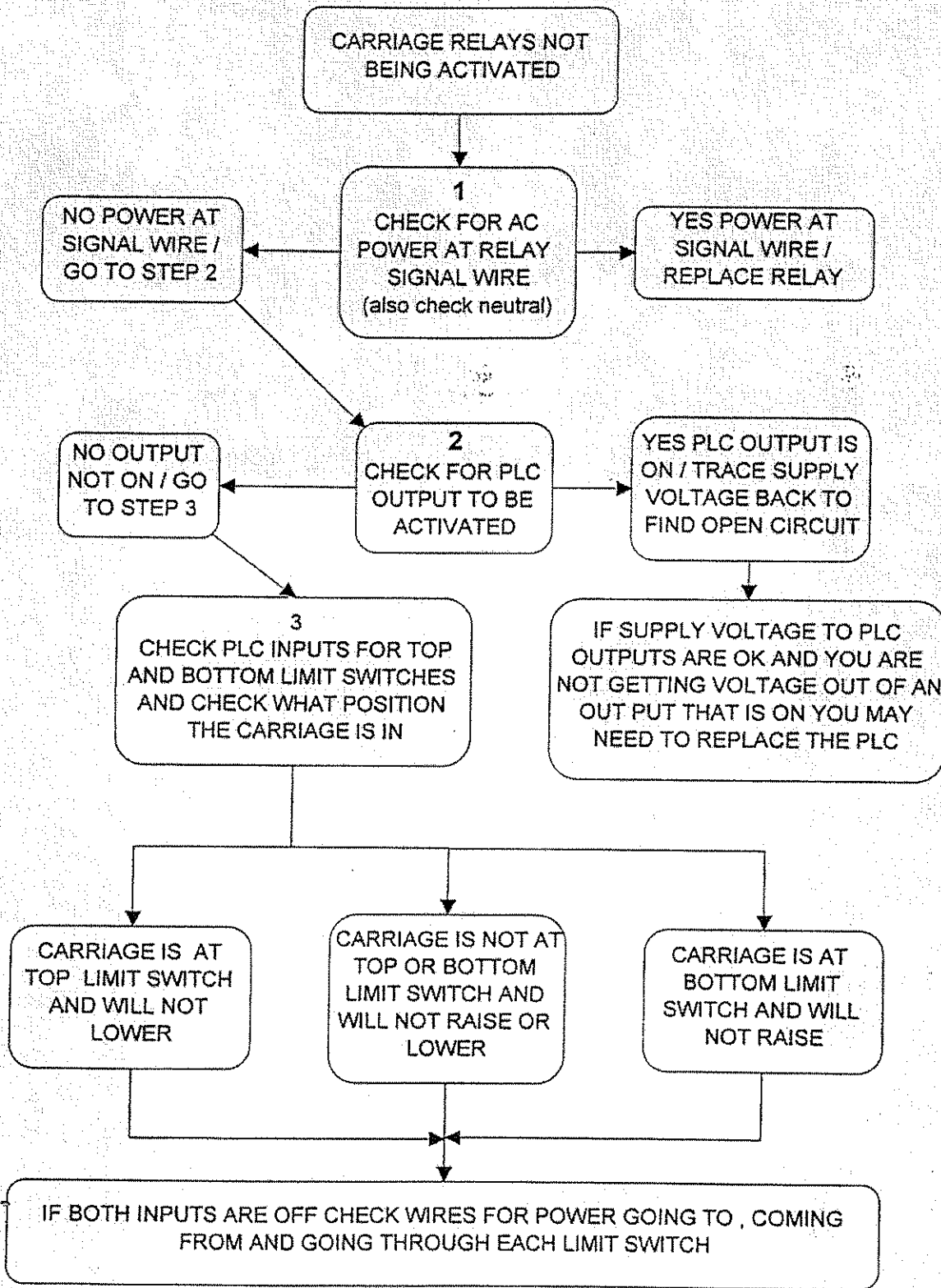
# MULTISTRETCH TROUBLE SHOOTING GUIDE 2



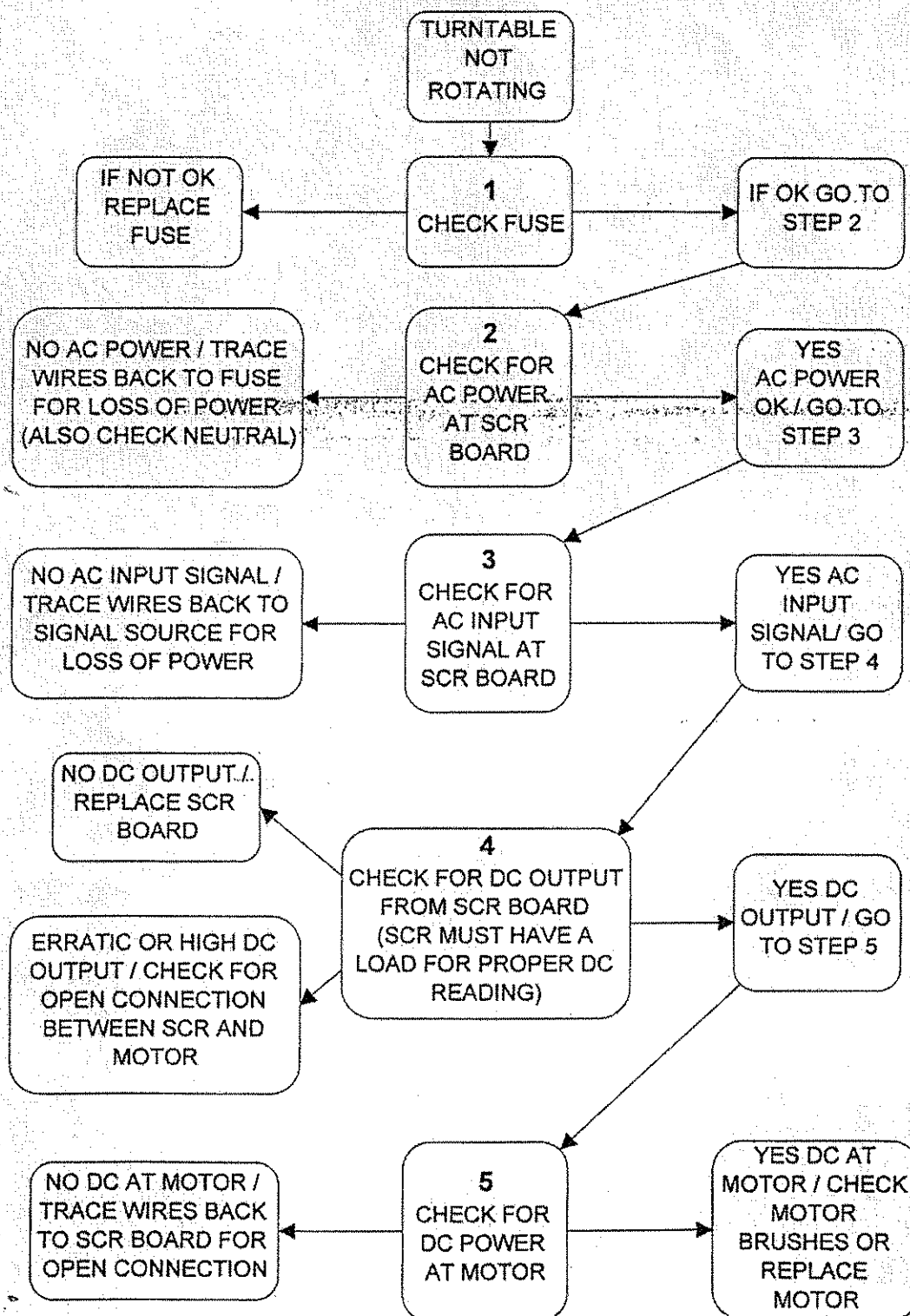
# 1 BASIC CARRIAGE RAISE / LOWER TROUBLE SHOOTING GUIDE



## 2 BASIC CARRIAGE RAISE / LOWER TROUBLE SHOOTING GUIDE



## BASIC TURNTABLE TROUBLE SHOOTING GUIDE



- IF TURNTABLE RUNS AS SOON AS POWER IS TURNED ON THE MOTOR MAY HAVE AN INTERNAL SHORT TO GROUND.