

INSTRUCTIONS
for
ALL ORION 44, 55, 66 SERIES
PALLET STRETCH WRAPPERS

Manufactured Exclusively for:



100 Crescent Drive
Collierville, TN 38017

PACKAGING SYSTEMS, INC.
A PRO MACH OPERATING PARTNER

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

Serial #.....

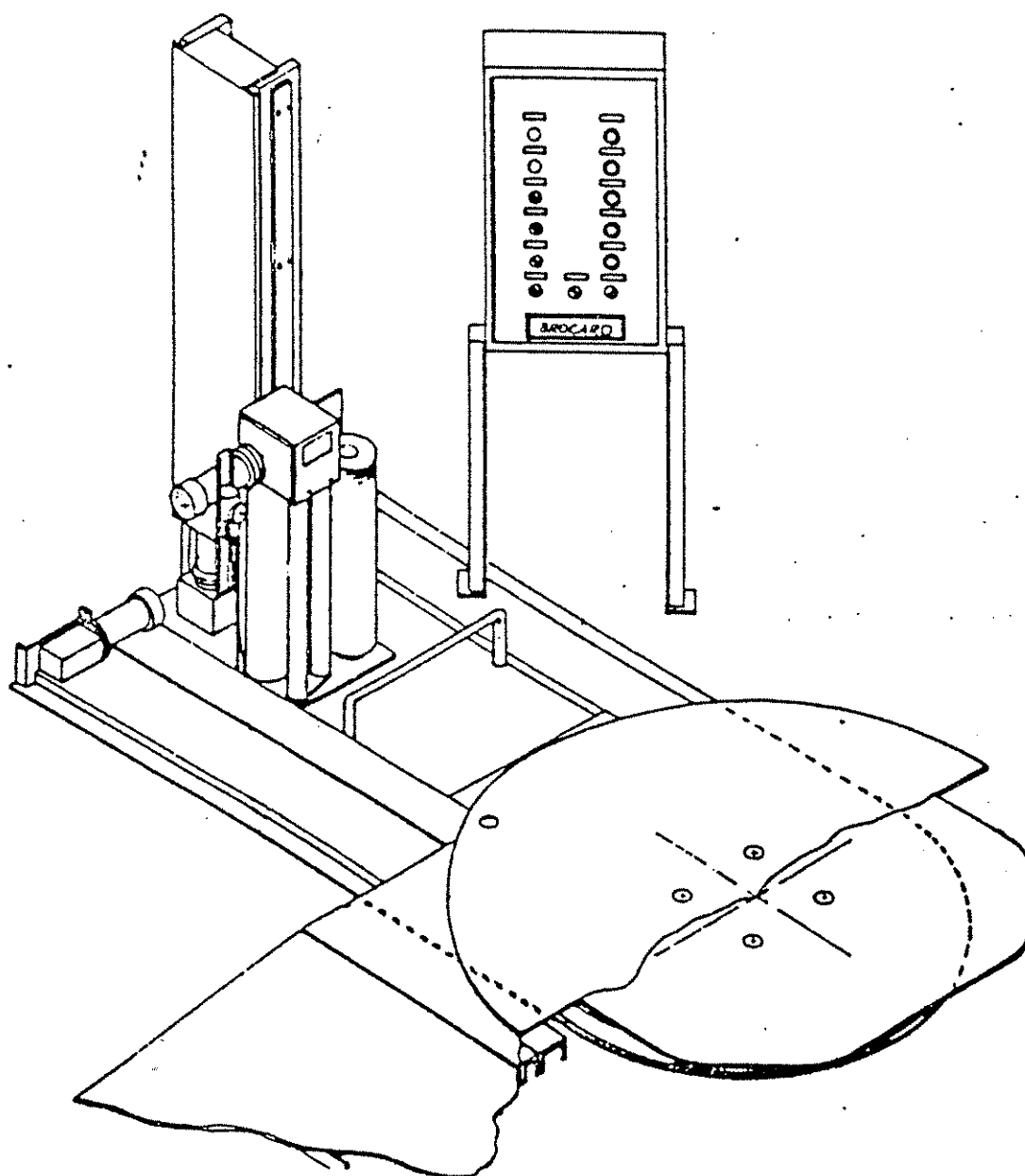
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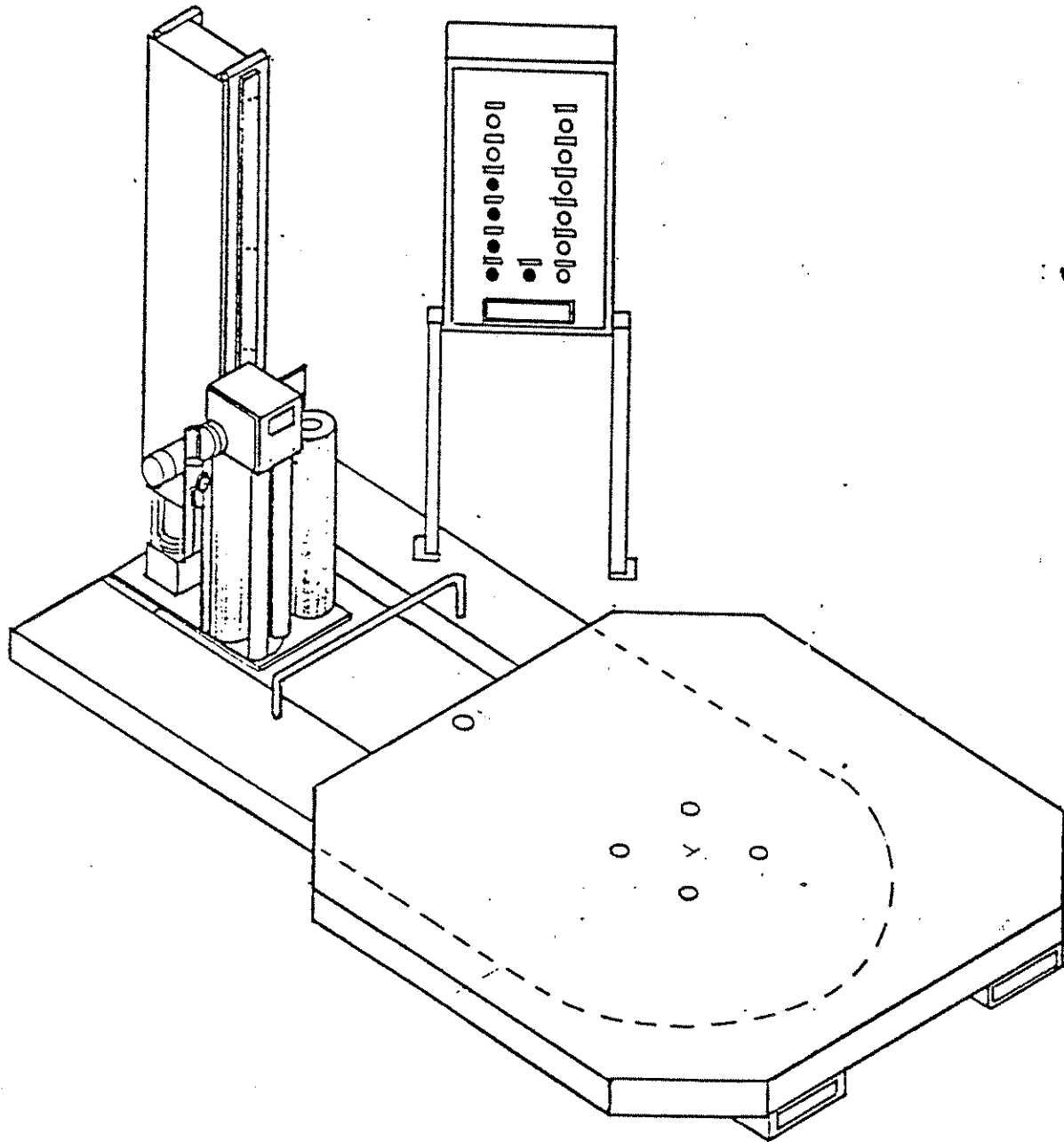
Model #.....

PALLET STRETCH WRAP MACHINE

MODEL B-44-B

MODEL H-44





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SPECIFICATIONS

Power requirements: 115 VAC, 60 HZ, 1 Phase, 20 Amps

Air Pressure requirements: N/A

Machine Floor Space Requirements

60" (Width) x 115" (Length) 92" (Height) - (B-44/55 Series)

52" (Width) x 96" (Length) 98 3/4" (Height) - (H-44/55 Series)

72" (Width) x 115" (Length) 92" (Height) - (B-44/55 Series 72"

Table)

60" (Width) x 94" (Length) 79" (Height) - (B-66 Series)

48" (Width) x 96" (Length) 87" (Height) - (H-66 Series)

Machine Weight

B-44 series 2450 lbs (60" Turntable)

B-44 series 2525 (72" Turntable)

H-44 2057 lbs (52" x 52" Turntable)

B-55 series 2305 lbs (60" Turntable)

H-55 series 1895 lbs (52" x 52" Turntable)

B-66 series 960 lbs (60" Turntable)

H-66 Series 770 lbs (52" x 52" Turntable)

Turntable

Standard Size (B-44/55/66 Series): 60" Diameter

(H-44/55 Series): 52" x 52"

(H-66 Series): 48" x 48"

Safety Skirt (H-44/55 Series): 6"

(H-66 Series): 3"

Distance from floor to Turntable top:

B-44/55 Series: 3 3/4"

H-44/55 Series: 13 1/2"

B-66 Series: 13"

H-66 Series: 11"

Variable Turntable Speed: 1 to 15 RPM (All 44 Series only)

9 RPM (All 55/66 Series)

Turntable Drive Motor: 3/4 HP 90 VDC (All 44 and 55SP models only)

1/2 HP (All 55 and 66 Series)

Turntable Castor: 4 - 6" x 2" Solid steel (H-44/55 Series)

12 - Cam followers (B-44/55 Series)

3 - 6" x 2" "Poly" castors (H-66 Series)

9 - Cam followers (B-66 Series)

Maximum Static Load: 22,000 lbs (H-44/55 Series)

30,000 lbs (B-44/55 Series)

22,500 lbs (B-66 Series)

5,000 lbs (H-66 Series)

Maximum Working Load: 6,000 lbs (All 44/55 Series)

4,000 lbs (All 66 Series)

SPECIFICATIONS

(continued)

minimum Working Load: 200 lbs (Consult your dealer or PES for loads
below minimum)

Maximum Pallet Load Dimensions+

80" x 80" x 96 (Height) - (B-44 series 60" or 72" Turntable)

58" x 58" x 94" (Height) - (H-44 Series)

52" x 52" x 74" (Height) - (H-66 Series)

50" x 50" x 78" (Height) - (B-66 Series)

Minimum Pallet Load Dimensions: N/A

Conveyor Output: N/A

Conveyor Motors: N/A

Conveyor Speed: N/A

Conveyor Rollers: N/A

Elevator Motor: 1/2 HP, 90 VDC

Elevator Speed: 30 Ft. Maximum

Film Roll: Upto 30" x 10" (Diameter) (44 Series)

Upto 20" x 10" (Diameter) (55/66 Series)

Film Brake Size: 4 1/2" (Non Pre-stretch models only)

Pre-stretch Motor: 1/2 HP, 90 VDC

In addition to the machine floor space requirements, the user must
allow for control console, and must provide a minimum of 3 feet working
floor space around the load on the table.

SECTION 2

INSPECTION

Promptly inspect your machine for apparent and hidden shipping damages. Shipping damage(s) are the complete responsibility of the freight carrier, and it is your responsibility to promptly enter a claim for any such damage(s).

Your machine left the shipping point in perfect condition and properly prepared for shipment, otherwise the carrier would not accept it.

Upon receipt remove the disposable protective wrapping from around the electronic control box and elevator carriage section of the machine, continuously checking for any hidden damages that may have occurred during transportation. If any damages are found, report them immediately, do not wait, as you may lose your right to submit such claims and all such claims and all related expenses related to repair will be your responsibility, and you may void any applicable warranties.

I M P O R T A N T

Before attempting to start your machine follow the following procedures completely:

1. Read your instruction book very carefully and become familiar with its contents.
2. LOW PROFILE - There are three (3) angle iron supports holding your table secure during shipment, these angles are located in the front and on either side of your table between the frame and the underneath of the table itself and are secured by four machine bolts. These four bolts and the angle irons must be removed. After their removal check to see that the turntable is free to move.

PLATFORM MODELS - Your turntable is secured for shipment by means of metallic or synthetic industrial straps. Cut the straps and remove them from around the table and underneath your machine. Make sure that there are no loose particles that can get caught in the machine and cause future damage.

SECTION 2 (Continued)

3. LOW PROFILE - Approximately 25" from the center of the turntable you will find a reservoir cap screw which is flush with the table. Before removing this screw make sure that your photosensor is visible through the open circular port in your table. Once this is aligned, you may remove the screw and fill the reservoir with SAE 30 oil as supplied. To fill the reservoir, about 1/2 quart should be sufficient. Replace the cap screw making sure it is flush with the table. Depending on your working conditions, this should be done about twice a year.

4. Open the electrical control panel. You will visually see that a relay is missing. This is relay #4 which is supplied with this manual. Replace the indicated relay and check to see that the other relays have not become loosened or jostled during transportation. You will also note that all circuit breakers (if this machine utilizes circuit breakers and not fuses) are in an opened position.. Close them by simply pushing the reset button firmly until the breaker clicks resetting the circuit. Close your panel securely, making sure that the main or master control switch is in the "off" position. After you have done this you may supply power to the unit by plugging your electrical cord into any standard 110 volt receptacle. DO NOT USE AN EXTENSION CORD!. This machine will have a tendency to malfunction and may not perform as it was designed to.

5. VERY IMPORTANT

Turn on the power to the unit by turning the power "ON/OFF" switch to the right. You will note that the power "ON" amber light has been activated. At this time, turn your elevator speed control to "0". Now move your "ELEVATOR DIRECTION" switch to the "RAISE" position. This switch is located at the left side of your panel second from the bottom. At this time begin to move very slow your "ELEVATOR SPEED" control switch towards "10". Your elevator should begin to rise very slowly. Once it has risen a few feet, push the "STOP" button, which is located second from the top on the left side. This should immobilize the elevator. At this point you should remove any packaging material or debris from underneath the elevator.. Once this is done move your "ELEVATOR DIRECTION" lever to "lower" and the elevator will return to its original or lower most position and is now ready for operation.

Once again, visually inspect the complete machine to see if there are any damages which are now apparent that were not before.

6. Proceed to become familiar with your equipment by reading through the instruction manual and by utilizing the many built in features as explained.

SECTION 3

UNLOADING THE MACHINE

Low Profile

All low profile Orion stretch wrap machines can be moved by driving in from behind with an adequately rated forklift truck. Make sure your forks are spread far enough apart as to enter these ports easily. Locate the fork tips under the tower in the rectangular tubes, be sure to avoid contact with the tower. Lift only the minimum height necessary to clear the machine completely from the floor.

Platform Models

All Orion Platform Model machines can be moved by driving in from either the front or back with an adequately rated forklift truck. Locate the fork tips in the rectangular tubes and avoid contact with either the tower or the turntable or any other part of the equipment. Lift only the minimum height necessary to clear the machine completely from the floor.

SECTION 4

Locating The System

All Orion pallet stretch wrap machines can be loaded from any one of three directions depending on the type of pallet fork lift system utilized. Locate the system where there is safe and easy access to the machine for both operation and maintenance. Allow adequate clearance for free rotation of the turntable and operator safety.

DO NOT bolt the unit to the floor. It must be free to slide if struck by the lift truck. Locate on a level surface and shim to level. If necessary to provide total frame support.

SECTION 5

INSTALLATION

All Orion pallet wrap machines are shipped ready to operate except models having extra high towers, dual turntables or conveyors. After locating your machine, place the machine into a properly rated electrical outlet. All standard models require 110V, single phase, 15 AMP 3 wire outlets.

!!!!DO NOT USE AN EXTENSION CORD!!!!

SECTION 6

PRELIMINARY MECHANICAL ADJUSTMENTS

Before attempting to operate the system make a final inspection. Set the ADJUSTABLE limit switches so that the elevator does not contact either the bottom or the top of the equipment frame, and the carriage has enough room to wrap your pallets properly.

The lower limit switch must be adjusted to that point so that the carriage clears the floor by At least 1/2 inch. DO NOT LET THE CARRIAGE OVERTRAVEL!!!! Serious damage to the machine will result.

THE MACHINE IS NOW READY TO OPERATE

SECTION 7

CONTROL PANEL DESCRIPTION

1. Push Button "START"
Start wrapping cycle.
2. Push Button "STOP"
Immediate machine stop.
3. Selector "TOP COVER - PAUSE/COMPLETE"
Turn to "PAUSE" if a top cover is to be applied
Turn to "COMPLETE" if no top cover is to be applied.
4. Selector "SPIRAL UP - SPIRAL UP/DOWN"
Selects elevator spiral mode.
5. Selector "REINFORCE WRAP/TURNABLE JOG"
To "REINFORCE WRAP" a pallet, when the elevator is
in the desired position turn the selector to stop
the elevator, release when complete.
Turn to "JOG" and hold until the table is in the desired position.
6. Selector "FILM CARRIAGE - RAISE/LOWER"
To raise or lower the elevator manually.
7. Selector "TABLE SPEED - LOW/HIGH"
Determines speed mode of turntable.
8. Selector "PHOTO CELL ON/OFF"
9. Selector "POWER ON/OFF" with indicator light
Master power switch.
10. Selector "CARRIAGE SPEED - LOWER"
Determines rate of downward elevator speed during operation.
11. Selector "CARRIAGE SPEED - RAISE"
Determines rate of upward elevator speed during operation.
12. Selector "BOTTOM WRAPS"
Select the number of film layers at bottom of load.
13. Selector "TOP WRAPS"
Select the number of film layers at top of load.
14. Selector "FILM TENSION"
Adjust force to load during wrapping operation.

SECTION 8

OPERATING INSTRUCTIONS

CAUTION CAUTION

DO NOT OPERATE if any person or foreign material is on any part of the machine. Personal injury and/or equipment damage may result.

FILM LOADING AND THREADING

A. Place the roll of film on the mandrel. All 44 series can accept up to 30" film size (55 and 66 series can accept up to 20" film rolls). The rotation of the film roll can be in either a clockwise or counter clockwise direction, although a CLOCKWISE direction is preferred.

B. Pull about 8 to 10 feet off the film roll in a roping manner.

C. Take note on all pre-stretch delivery systems that there is a gap between the top of the film rollers and the base of the pre-stretch housing. This is known as the "film gap". Through this "gap" pass the film in accordance with the film passage map located on the bottom of the elevator.
DO NOT ATTEMPT TO FORCE THE FILM BETWEEN THE SQUEEZE BARS.

D. After you have pulled the film through the dancer bar, turn the machine on at the main power switch; at this time with a steady motion pull the film through the system. You will see that the film begin to pass through the system and will spread to its width size.

E. It is important to follow the "map", if not it may result in a film "wrap up" on the roller feed bars which in turn can cause serious damage and will not permit the machine to function properly.

F. Place a pallet load on the turntable. The best wrapping results are obtained when the load is placed in the center of the table, although this is not mandatory.

G. Take the end of the film and attach it to the pallet near the bottom of the load using any method desirable in order to attain the initial film tension.

H. Select the number of film wraps desirable for the top and bottom of your pallet load. Your film supplier or PACKAGING EQUIPMENT SYSTEMS can assist you in making the proper selection to suit your particular load and shipping requirements.

I. Choose the desired wrap by selecting either the "spiral -up" or the "spiral - up/down" on the control panel. In most instances, you will be using the "complete" spiral -up/down circuitry.

SECTION 8 (Continued)

J. If a top cover is to be applied, turn selector knob #3; "TOP COVER - PAUSE/COMPLETE" to pause. The selector for the number of film wraps at the top must be a minimum of two (2) when a top cover is applied.

K. Adjust selector #11 "CARRIAGE SPEED - RAISE" and selector # 10 "CARRIAGE SPEED - LOWER" to obtain the amount of film overlap desirable for the load being wrapped. As the speed of the elevator is decreased the amount of the film overlap on the pallet being wrapped is increased. As the elevator speed is increased the opposite result is accomplished.

L. Adjust the upper limit switch striker arm to the height desired relative to the pallet being wrapped. When the carriage upper limit bar contacts the striker, the top of the film should be about 3" above the top of the load.

M. All Orion 44 series pallet wrappers are equipped with an automatic height sensor (electric eye). The machine operator has the option of utilizing the "eye" or not. This is accomplished by switch #8 "PHOTO CELL ON/OFF". If the height sensor is used the upper limit switch should be placed at its upper most point.

N. Your machine is now ready to run. Push the "START" button.

N. If the load being wrapped requires reinforcement by adding extra layers of stretch film at a given point, use the "REINFORCE WRAP" selector, by holding it in its position. Release the selector when the desired wraps are attained.

O. If a top cover is to be applied, the wrapping cycle will stop following application of one (1) layer of film at the top of the load. After the operator has placed the cover on the load, press the "START" button to complete the cycle.

P. After the wrapping cycle and the machine has stopped the operator cuts the film between the carriage and the pallet load and attaches the trailing end of the film to the pallet.

Q. If the wrapping cycle chosen was a spiral wrap "UP ONLY", after the operator has affixed the trailing end of the film to the pallet, the "CARRIAGE - LOWER" selector switch must be activated to return the carriage to its start position.

R. If the "STOP" button is pressed while the machine is in cycle the machine will stop immediately, and the programmed memory for that cycle erased. After resolving the problem or the reason for this action, a new cycle can be started without lowering the elevator to the bottom position by simply pressing the "START" button; however, if the operator wishes to begin over this can be accomplished by returning the elevator to its start position by activating the "CARRIAGE - LOWER" selector.

SECTION 8 (Continued)

S. If the operator wishes to rotate the table manually, this can be done by activating the selector #5 "TURNTABLE - JOG". The turntable will begin to rotate and once the table has reached its desired position release the pressure to the switch. This function is for convenience only and should not be used for repetitive table jogging.

SECTION 9

ADJUSTMENTS

1. Electric Eye - Can be raised or lowered on its track in order to give the operator the desired amount of film overlap on any given pallet load.

2. Upper Limit Switch - The switch striker can be adjusted to any desired position. When the "eye" is being used we suggest that the striker be set at its upper most position.

3. Lower Limit Switch - The switch striker arm should be adjust to the desired position relative to the wrapping results desired. However, it must not be adjusted to such a position as to permit the elevator to strike the base of the frame.

4. Roping Bar - Raise or lower according to the desired amount of film roping or gathering around the pallet.

SECTION 10

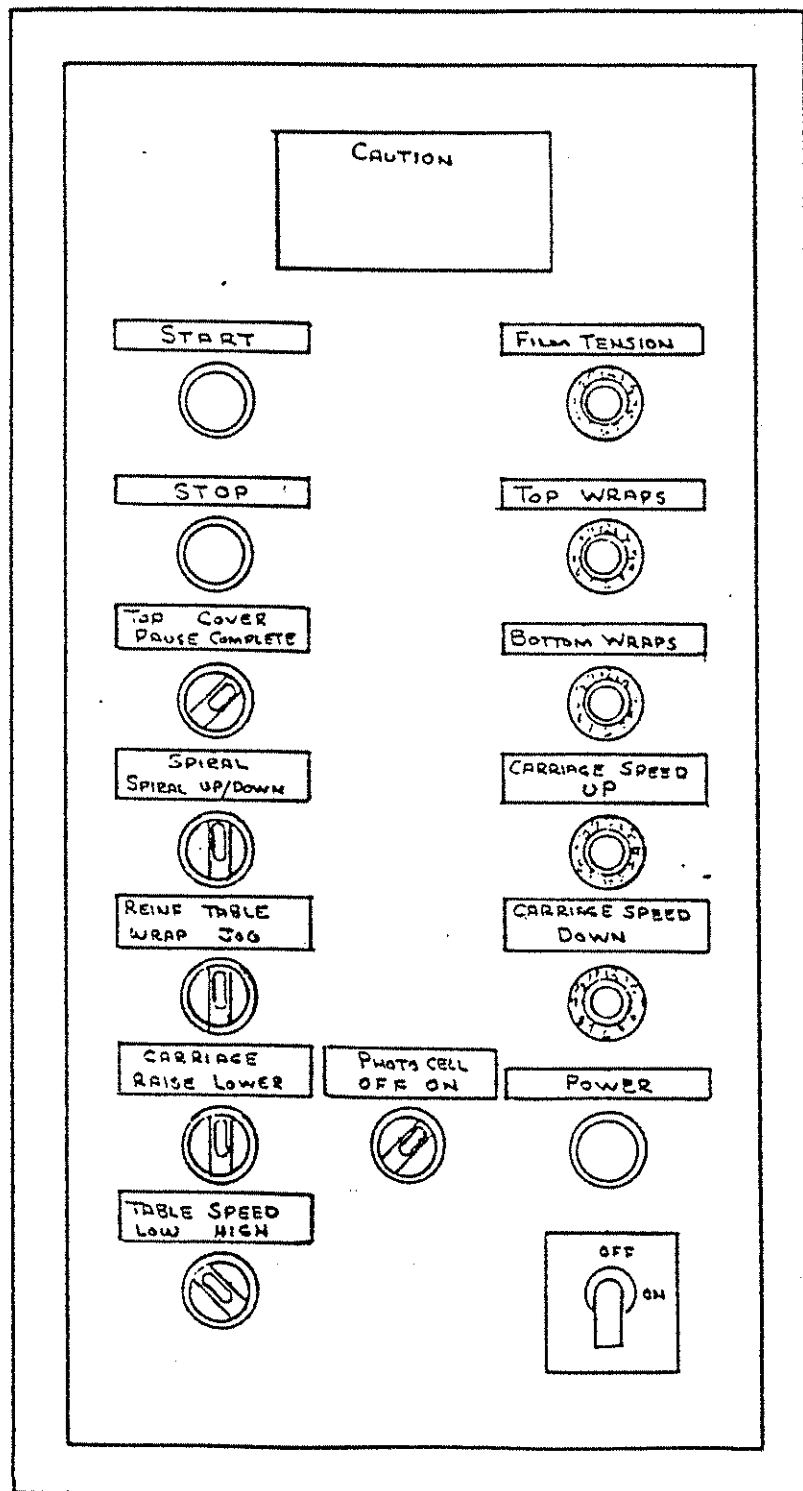
GENERAL MAINTENANCE

1. Grease the upper chain sprocket on the tower once a month.
2. Check the elevator chain tension monthly. If the chain is loose or has too much slack tighten by adjusting the two elevator/chain nuts.
3. Once a year change the oil in the two gear reducers using SAE 90 gear oil.
4. (Low Profile Models Only) Tighten the turntable drive chain once a month by turning the bolt located between the table and the elevator.
5. (Low Profile Models Only) Add oil to the reservoirs once a month. Remove the screw when the table is in the position as described in the beginning instructions. Add approximately 2 ounces of heavy oil (SAE 30), then replace the cap screw until it is flush with the table.
6. As a rule, use generally accepted maintenance procedures with regard to cleaning, lubrication and overall machine care.

SECTION 11

MALFUNCTIONS

1. Machine does not start.
 - A. Machine electric plug not making contact.
 - B. Insufficient power to operate.
 - C. Power supply line is too long between machine and the power supply.
 - D. Fuse Blown
2. Turntable rotates but carriage does not rise.
 - A. Carriage speed is at zero.
 - B. Table limit switch is not activated or is out of adjustment.
 - C. There is no load on the table (electric eye only).
 - D. Fuse blown.
 - E. Insufficient power to operate.
3. Carriage operates but turntable does not rotate.
 - A. Chain under the turntable is off.
 - B. Fuse or circuit breaker is open.
4. Turntable does not stop in correct position.
 - A. Table limit switch is not activated or is out of adjustment.
5. Film roll overtravels when unwinding creating a whip action.
 - A. Film roll drag spring is too loose.
6. Film brake roller does not rotate smoothly and tends to pause momentarily.
 - A. Foreign material or brake dust build up on armature.
7. Carriage wraps to top but will not automatically wrap down.
 - A. Top cover selector switch is turned to pause.
 - B. Insufficient power to operate.
 - C. Carriage down speed control is on "0".
 - D. Bad count board in control panel.



ELECTRONIC ADJUSTMENT TYPE 750M-1 CIRCUIT BOARD

CAUTION CAUTION CAUTION

Control "pots" # 2 & # 3 are preset at the factory and require no further adjustments

STEP 1 - Turn "pots" # 1- 4 - 5 - 6 - 7 counter clockwise to their furthest off position.

STEP 2 - "Pot" # 4 regulates the constant voltage to the turntable motor at the start of beginning cycle. To adjust turn # 4 in a clockwise direction until the table begins to turn very slowly. Wait a few seconds, then turn it in the other direction until the table stops. You may hear a motor a constant motor "hum", this is OK as long as the table does not turn.

STEP 3 - "Pot" # 5 regulates the jog and soft start speed of your table. Activate the "jog" control and at the same time turn "pot" 5 in a clockwise position until the turntable begins to rotate at the rate of speed you desire for your jog and soft start speed.

STEP 4 - "Pot" # 6 regulates the "high" speed of your turntable when in full motion and # 7 the "low" speed. Adjust these two "pots" until your table rotates at the desired speed. These two adjustments can be made at any time without effecting the other adjustments.

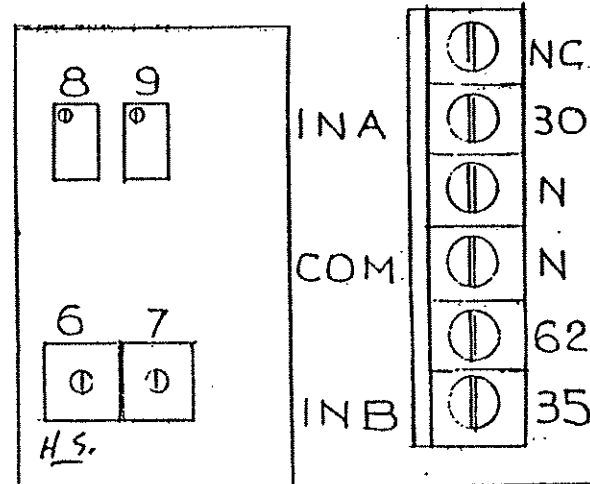
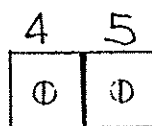
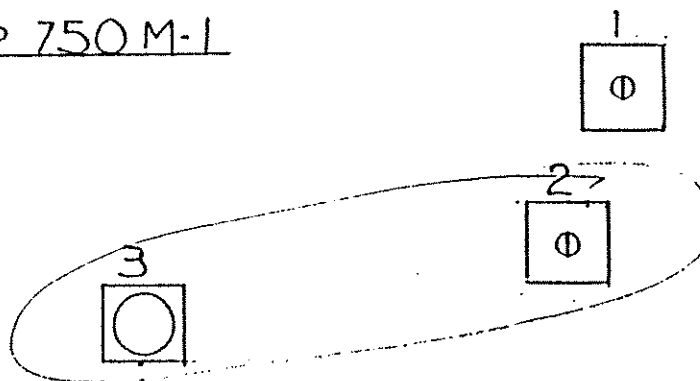
STEP 5 - To properly adjust "pot" # 1 you must start the machine into a complete cycle. Turn # 1 about in its halfway position and start the machine by pushing the "START" button. Observe how the table goes from its softstart motion to its full operation motion. If you wish to increase the time in the softstart mode turn # 1 clockwise and counter clockwise if you wish to slow it down.

STEP 6 - To adjust the positive alignment feature, each speed must be adjusted independently, # 8 is for the "high" speed and # 9 for the "slow. If the photosensor port goes beyond the "bullseye" turn the proper "pot" in a counter clockwise direction only a few turns and try the wrapping cycle again until you have obtained the proper alignment. Conversely if the table stops prior to reaching the "bullseye" turn the proper "pot" in a clockwise direction.

This adjustment can be done independently without effecting any of the other adjustments.

31		A1
32		A2
NC		F2
N		AC1
36		AC2
NC		F1

TYP 750 M-1



- 1 Acceleration
- 2 Current Compensation
- 3 Current Limitation
- 4 Zero speed adjustment
- 5 Slow II- II-
- 6 High II- II-
- 7 Low II- II-
- 8 High speed deceleration
- 9 Low II- - II-

ORION QUEBEC

SCALE:

APPROVED BY:

DRAWN BY

DATE: 2608,85

REVISED

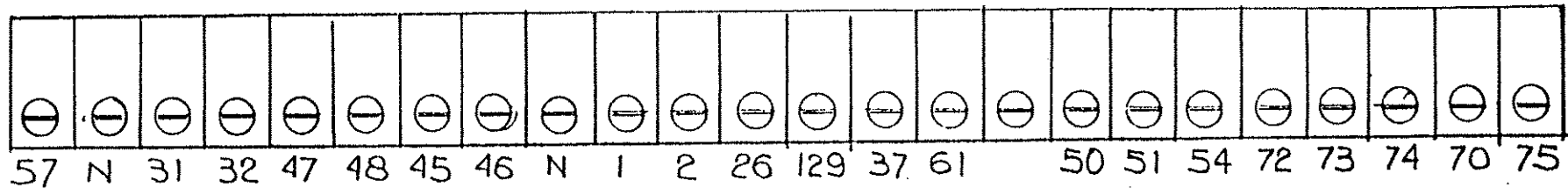
TYP 750 M-1

1HP/1φ/60Hz 120VAC 90V Arm/100V FLd

DRAWING NUMBER

Drawing 2

TERMINAL STRIP



ORION QUEBEC

SCALE:

APPROVED BY:

DRAWN BY: PJ

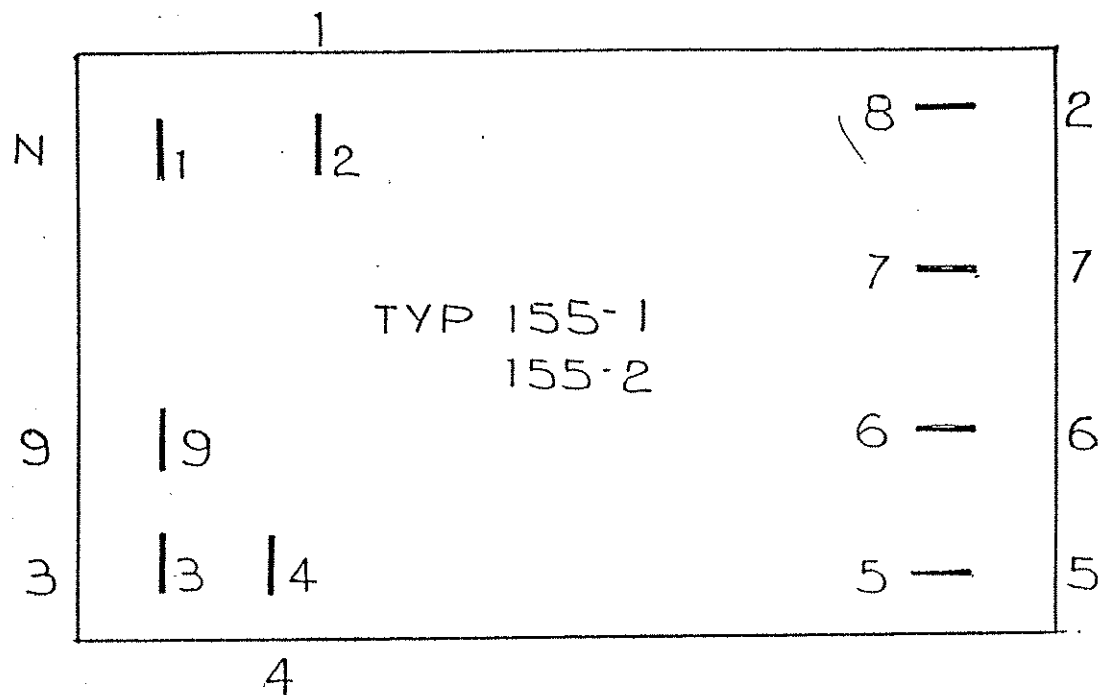
DATE: 260885

REVISED

TERMINAL STRIP

DRAWING NUMBER

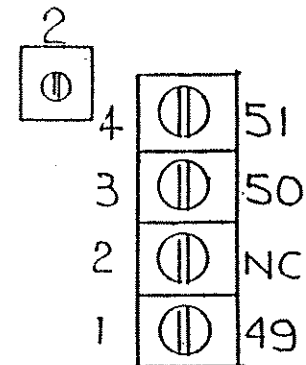
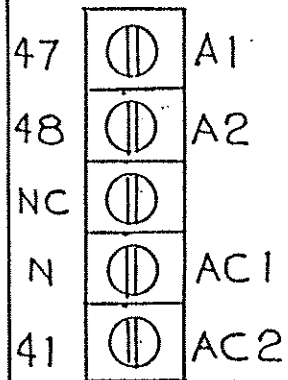
Drawing 3



ORION QUEBEC		
SCALE:	APPROVED BY:	DRAWN BY
DATE: 26.08.85		REVISED
TYP 155-1 ~ 155-2		
		DRAWING NUMBER

Drawing 4

TYP 236



1. Current Limiting (factory adjusted)
2. Prop gain (MAXIMUM)

ORION QUEBEC - PRE SKETCH

SCALE:

APPROVED BY:

DRAWN BY J. JADNIG &

DATE: 2608,85

REVISED

TYP 236

DRAWING NUMBER

Drawing 5

TYP 168-3	2 —	60
	DC- —	44
	DC+ —	43
	ACI —	N
	AC2 —	40
	1 —	54
	C —	55

ORION QUEBEC		
SCALE:	APPROVED BY:	DRAWN BY I. JADWIGA
DATE: 260885		REVISED
TYP 168-3		
		DRAWING NUMBER

Drawing 6

ITEM NO.	DESCRIPTION	REF. #
B10001	Base	1
B10002	Chain Tensioner	2
B10002A	Chain Adjusting Screw	2A
B10003	Main Sprocket Assembly	3
B10004	Chain Cover	4
B10005	Main Sprocket Assembly	5
B20006	Main Sprocket	6
B30007	Bearing assembly	7
B30008	Idler Sprocket (2)	8
M30009	Chain	9
M30010	Cam Followers	10
B10011	72" Table	11
B10012	60" Table	12
B10012	72" Table Ramp	13
B10013	60" Table Ramp	14
B10038	Proximity Switch Bracket	15
B10039	Electric Panel Stand (Semi-automatic)	16
B10030	Electric Panel Stand (Automatic)	17
M20034	Transmission Sprocket	18
D30035	Motor 90V DC 1/2 HP (M1)	19
D30035A	Motor 90V DC 3/4 HP (M1)	19A
D30036	Worm Gear Reducer	20
E40037	Electric Panel Relay Automatic	21
E20038	Enclosure	22
E30039	Relay Socket	23
E30100	Relay	24
E30101	Fuse Holder	25

E30102	Contactor (MC2)	26
E30103	Contactor (MC3)	27
E20105	SCR 1 Top 750	28
E30106	SCR 2	29
E30107	SCR 3 Bottom 236	30
E30108	Counter	31
E30109	P3 2.5K Potentiometer	32
E30110	Knob (5)	33
E30111	Terminal Strip (2)	34
E30112	Power Switch (SW)	35
E30113	Start Button w/contact block (PB1)	36
E30114	Stop Button w/contact block (PB2)	37
E30115	Pause Switch w/contact block (SW1)	38
E30116	Up/Down Switch w/contact block (SW2)	39
E30117	Reinforce Wrap/Turntable Jog w/contact block (SW3)	40
E30118	Carriage Up/Down w/contact (SW4)	41
E30119	Photocell Off/On w/contact block (SW5)	42
E30120	Indicating Light (L)	43
E30123	Limit Switch (2) (LS1) (LS2)	44
E30124	Proximity Switch (2)	45
E30125	Photocell (PH)	46
E30126	Carriage Potentiometer 10K (P4)	47
T10062	6' Tower	48
T10063	7' Tower	48
T10064	8' Tower	48
T10065	9' Tower	48
T10066	10' Tower	48
T10018	Left Side Mounting Angle	49

T10019	Right Side Mounting Angle	50
T30067	Side Trust Cam Follower	51
T10069	Chain Yoke	52
T10070	Chain Mounting Bolts (2)	53
T10071	Limit Switch Striker	54
T40072	Top Sprocket	55
M20073	Sprocket	56
M30053	Bushing	57
M20074	Transmission Sprocket	58
T20075	6' Tower Limit Switch Track	59
T20076	7' Tower Limit Switch Track	59
T20077	8' Tower Limit Switch Track	59
T20078	9' Tower Limit Switch Track	59
T20079	10' Tower Limit Switch Track	59
T10082	6' Tower Cover	60
T10083	7' Tower Cover	60
T10084	8' Tower Cover	60
T10085	9' Tower Cover	60
T10086	9' Tower Cover - Top	61
T10087	9' Tower Cover - Bottom	62
T10088	10' Tower Cover - Top	61
T10089	10' Tower Cover - Bottom	62
M10097	Limit Switch Bracket (2)	63
M10091	Limit Switch Bottom Plate (2)	64
M20092	Limit Switch Knob (2)	65
D30053	Motor 90V DC 1/2 HP (M2)	66
D30093	Worm Gear Reducer	67
C10015	30" Carriage Plate	68
C10016	20" Carriage Plate	68

C10017	Mounting Angle for Rollers	69
C10020	Carriage Cover	70
C10021	Transmission Spacer	71
C10022	Tensioner Arm	72
C10023	Squize Roller 30"	73
C40025	Dancer Assembly 30"	74
C10026	Dancer Main Shaft	75
C10027	Roller Shaft 30" (2)	76
C40028	Roller 30" (2)	77
C10029	Tube 30"	78
C30030	Bearing (2)	79
C10031	Mounting Plate 30" (2)	80
C40032	Dancer Assembly 20"	74
C10033	Dancer Main Shaft 20"	75
C10034	Roller Shaft 20" (2)	76
C40035	Roller 20" (2)	77
C10036	Tube 20"	78
C30030	Bearing 20"	79
C10031	Mounting Plate 20" (2)	80
C20037	30" 3" Dia. Rubber Roller	89
C20038	30" 4" Dia. Rubber Roller	90
C20039	20" 3" Dia. Rubber Roller	89
C20040	20" 4" Dia. Rubber Roller	90
C20041	Spring Pin for 4" Roller	91
C30042	Flange Bearing (3)	92
C30043	Pillow Block (2)	93
C20044	Transmission TB Pulley	94
M30010	Cam Follower Tensioner	95
C10045	Potentiometer Joint	96

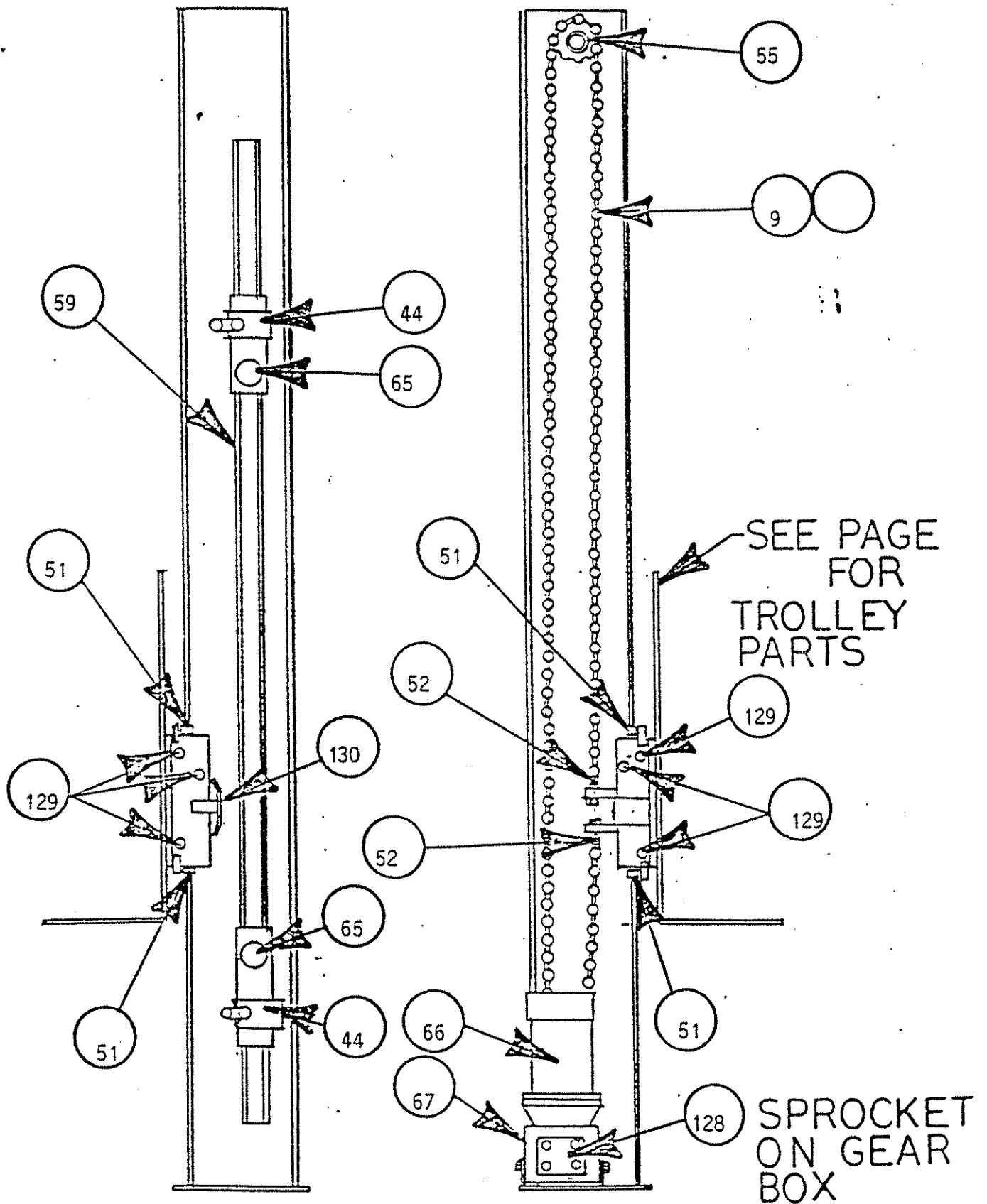
C10046	Potentiometer Bracket	97
C20047	Dancer Spring (2)	98
C10048	Dancer Spring Tensioner	99
C30049	Brake Pads (2)	100
C10050	Film Mondrel Shaft	101
C40051	Top Film Mondrel	102
C10053	Cone	103
M30053	Bushing (2)	104
C40054	Bottom Film Mondrel	105
C10055	Cone	106
M30053	Bushing (2)	107
C10056	Brake Disc	108
C20057	Cone Pins	109
C30058	Dancer Bushing (2)	110
D30059	Motor 90V DC 1/3 HP (M3)	111
D30059A	Motor 90V DC 1/2 HP (M3)	111A
D20060	Worm Gear Reducer for 30"	112
D20061	Worm Gear Reducer for 20"	112
C10062	Cover Mounting Shaft (2)	113
C20121	Photocell Rack Mounting Bracket	114
C20122	Photocell Rack	115
M10067	Photocell Bracket	116
M10061	Photocell Bottom Plate	117
M20062	Photocell Bracket Knob	118

C20127	Pulley 55%	119
C20128	Pulley 65%	119
C20129	Pulley 75%	119
C20130	Pulley 90%	119
C20131	Pulley 100%	119
C20132	Pulley 110%	119
C20133	Pulley 125%	119
C20134	Pulley 135%	119
C20135	Pulley 145%	119
C20136	Pulley 165%	119
C21037	Pulley 190%	119
C21038	Pulley 210%	119
C21039	Pulley 235%	119
C21040	Pulley 255%	119
C21041	Pulley 300%	119
C21042	Pulley 345%	119
C21043	Pulley 390%	119
C21044	Pulley 430%	119
C20145	Belt 55% - 145%	120
C20146	Belt 100% - 255%	120
C20147	Belt 300% - 345%	120
C20148	Belt 390% - 430%	120
P10076	Gear Reducer	121
P10077	Spacers	122
P10078	Proximity Switch	123
P10079	Roping Bar	124
P10080	AC 1/3 HP Motor Assembly	125
P10081	Castors - Steel	126
P10082	Castor Axel Assembly	127

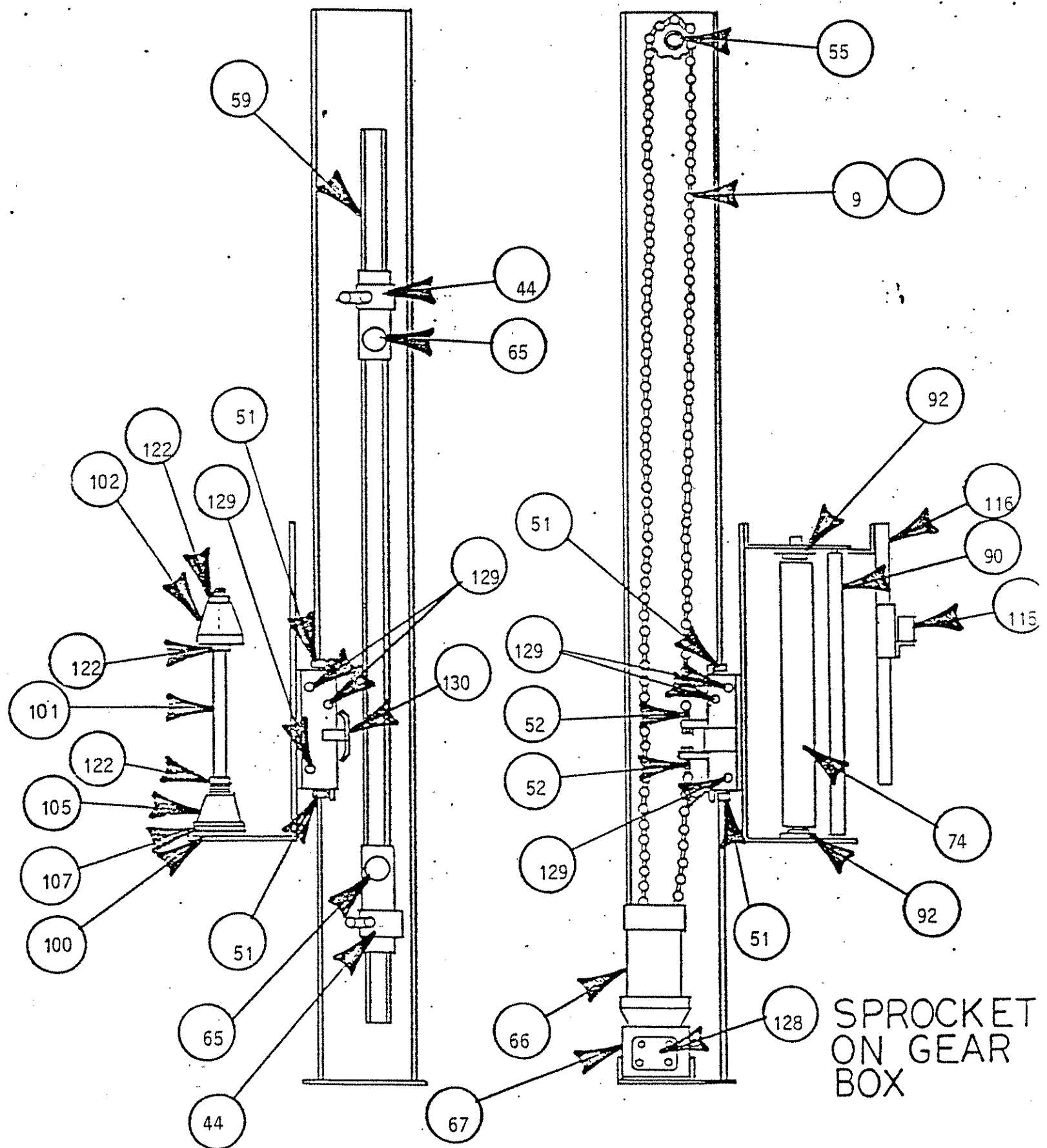
P10083	Cover plate- Gear Reducer	128
P10084	Cam followers - carriage	129
P10085	Striker guide - carriage	130

CIRCUIT WIRE NUMBER IDENTIFICATION

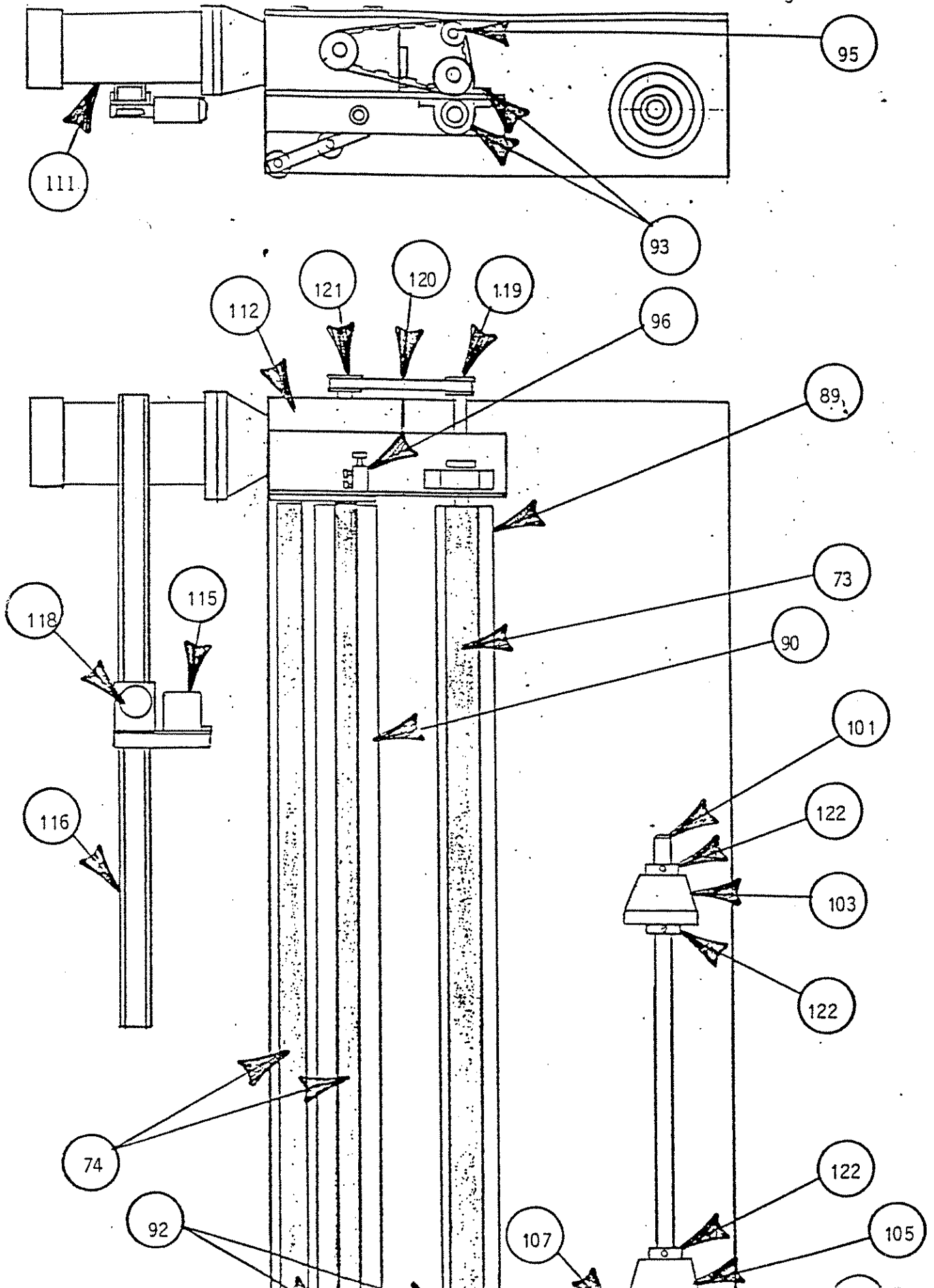
Wire #	Description
57	Hot AC 110V
N	Neutral - 110V AC
31	Drive Motor - 90V DC
32	Drive Motor - 90V DC
47	Pre-Stretch Motor - 90V DC
48	Pre-Stretch Motor - 90V DC
45	Elevator Motor - 90V DC
46	Elevator Motor - 90V DC
1	Circuit Hot - 110V AC
2	Circuit Controlled Hot - 110V AC
26	Lower Limit Switch/Relay S Intermittent - 110V AC
129	Proximity switch - 110V AC
37	Photocell - 110V AC
61	Upper Limit Switch - Intermittent - 110V AC
50	Dancer Bar Potentiometer - 90V DC
51	Dancer Bar Potentiometer - 90V DC
54	Dancer Bar Potentiometer - 90V DC
72 /73/ 74	Future Options
70	Closed circuit to #75
75	Closed Circuit to #70

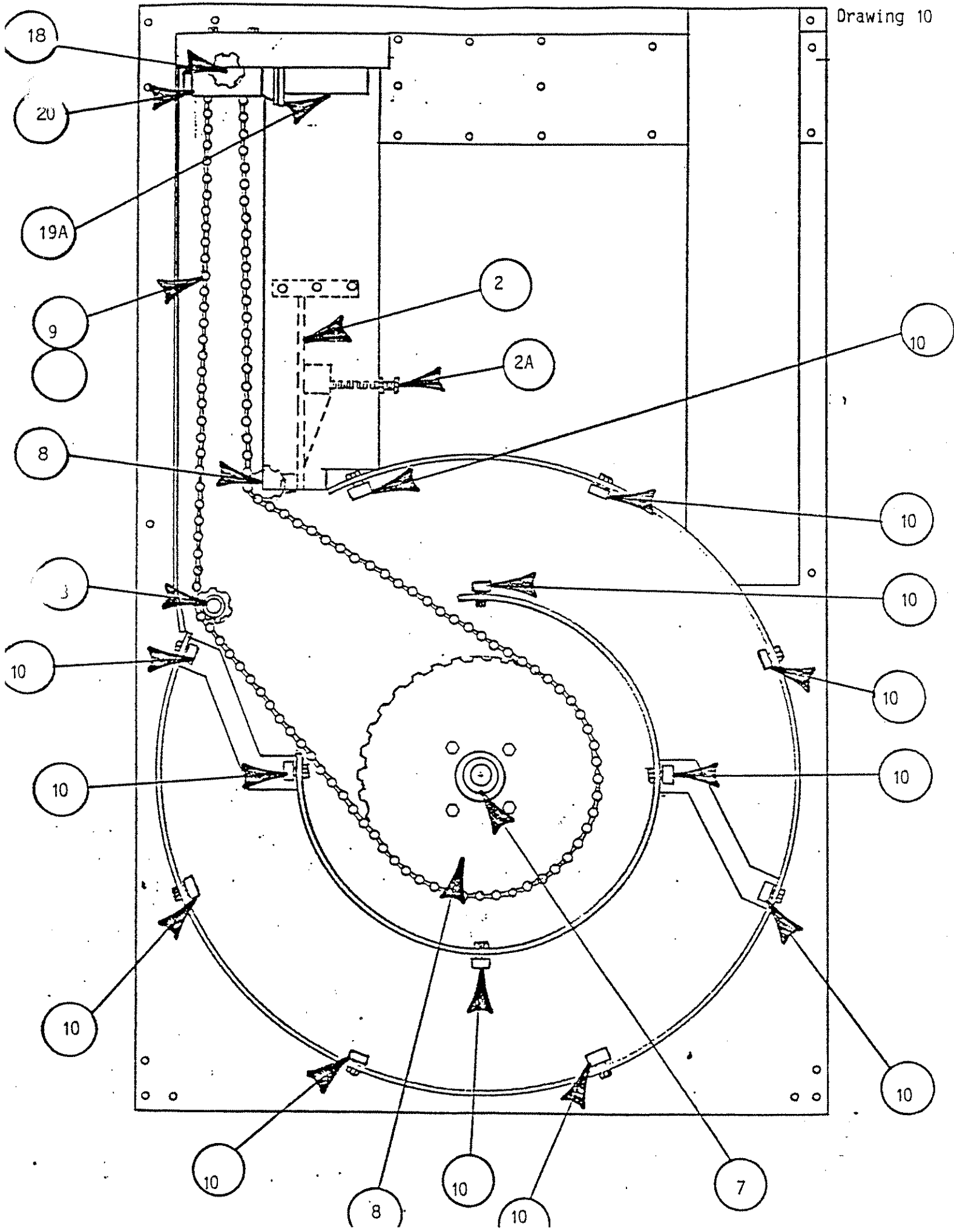


Drawing 8

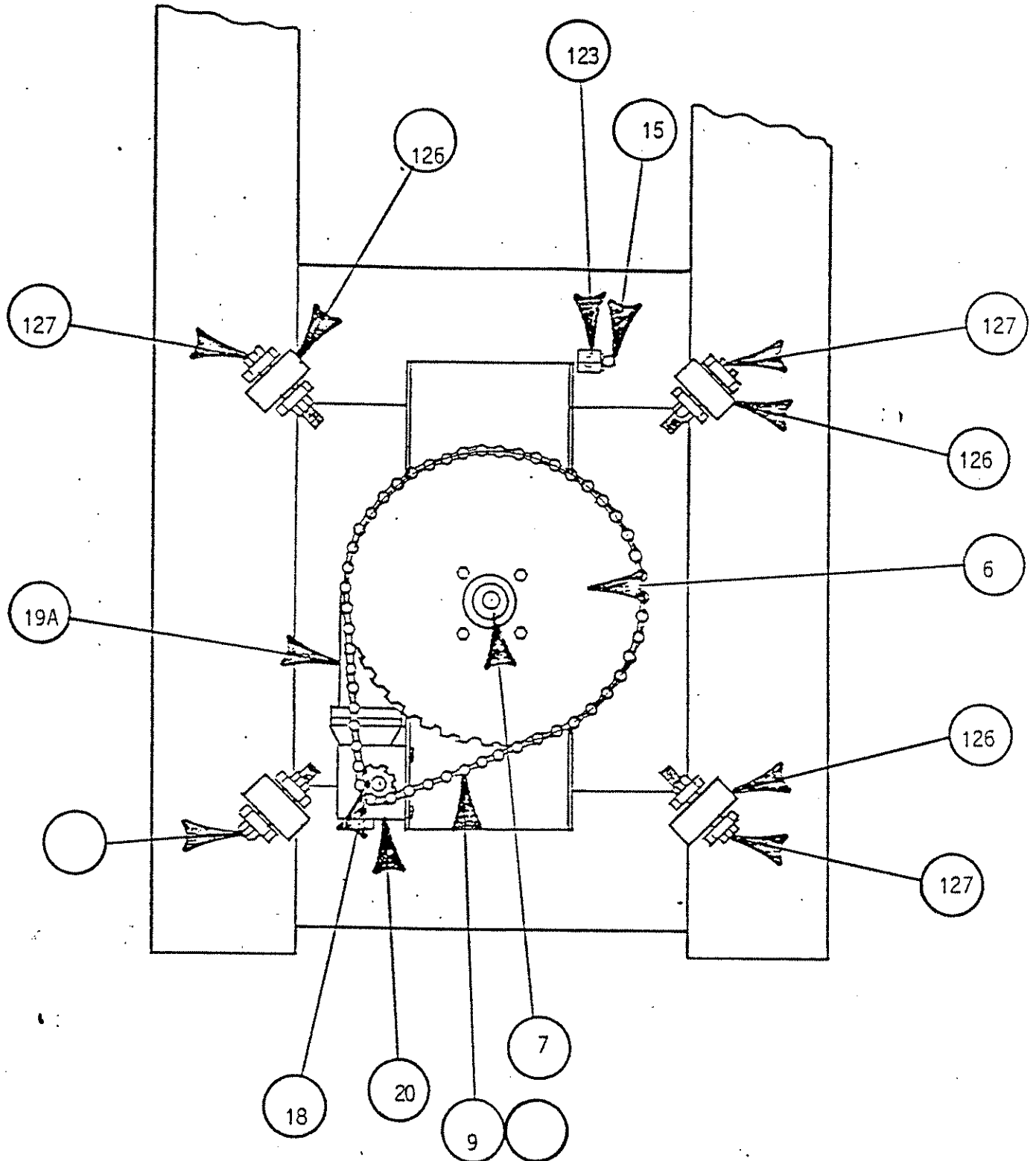


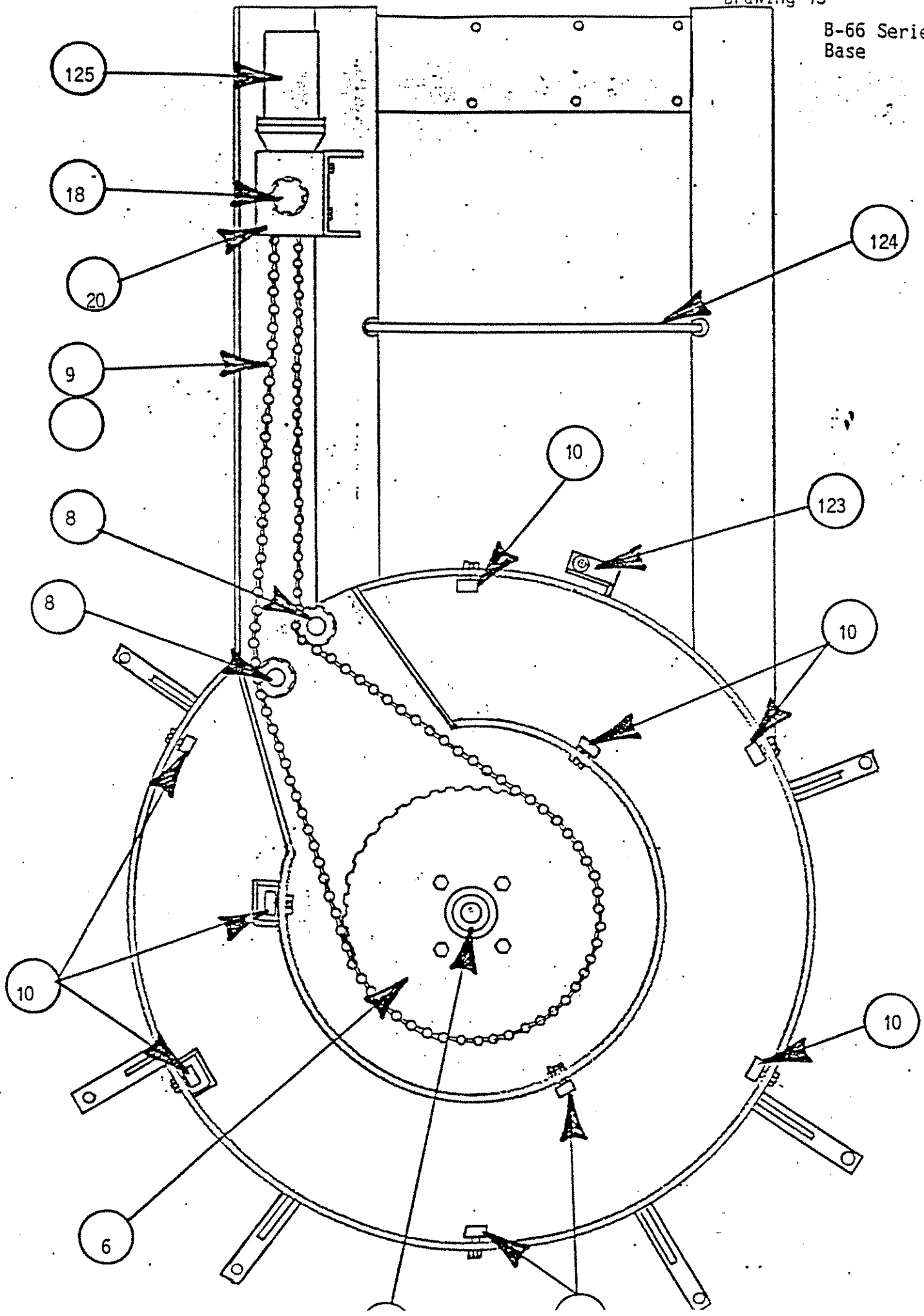
Drawing 9

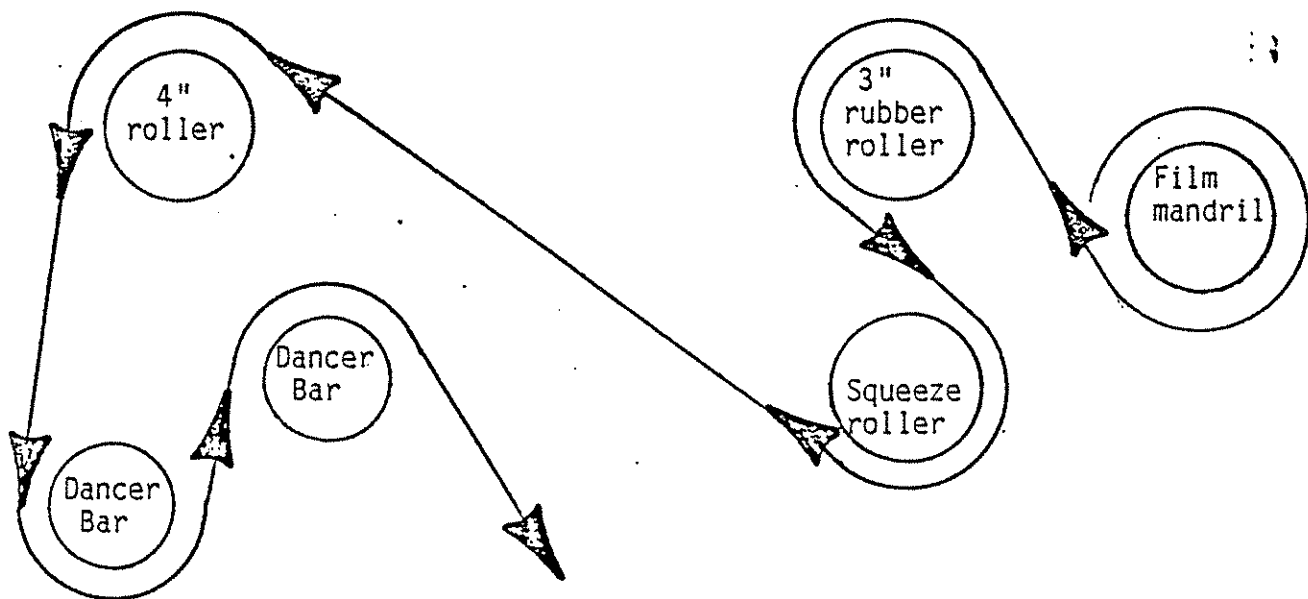




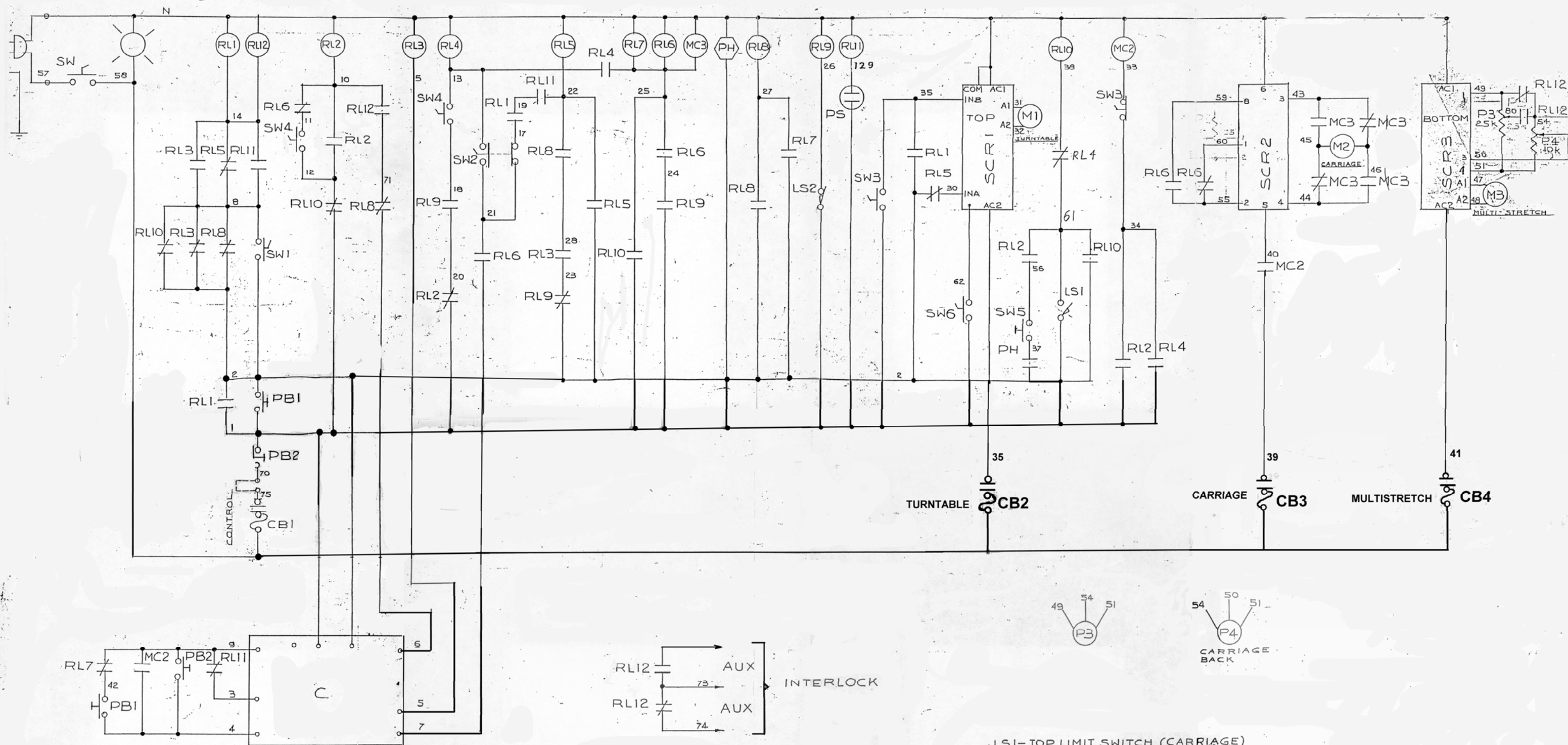
Drawing 11



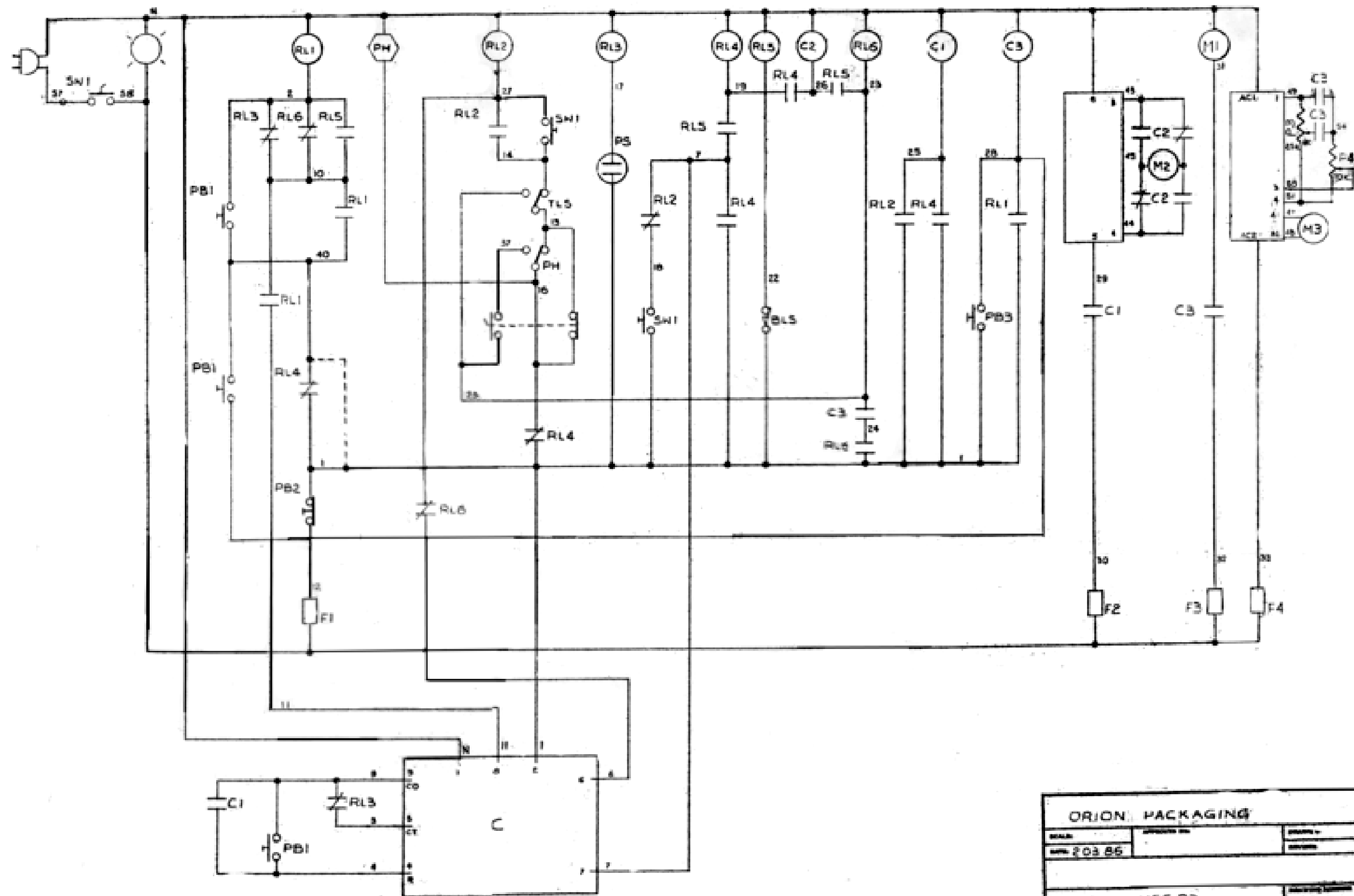




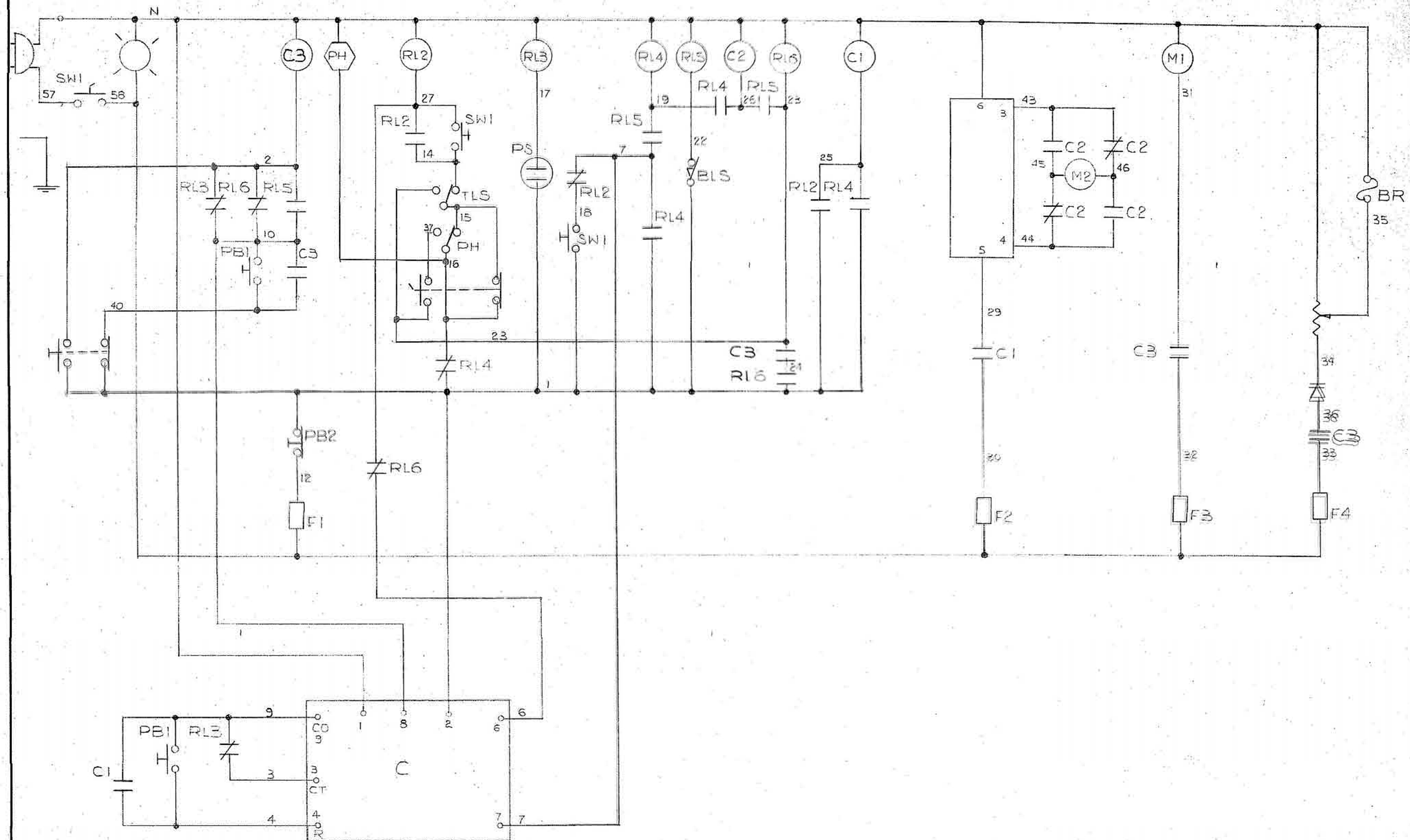
FILM MAP



ORION QUÉBEC		
SCALE:	APPROVED BY:	DRAWN BY: J. B. B.
DATE: 3.08.84		REVISED: 19.02.85
B44.B3 H44.B3		DRAWING NUMBER: 20032



ORION PACKAGING		
DATE	REVISED BY	REVISED
DATE 203 85		
B55 B3	H55 B3	200.50



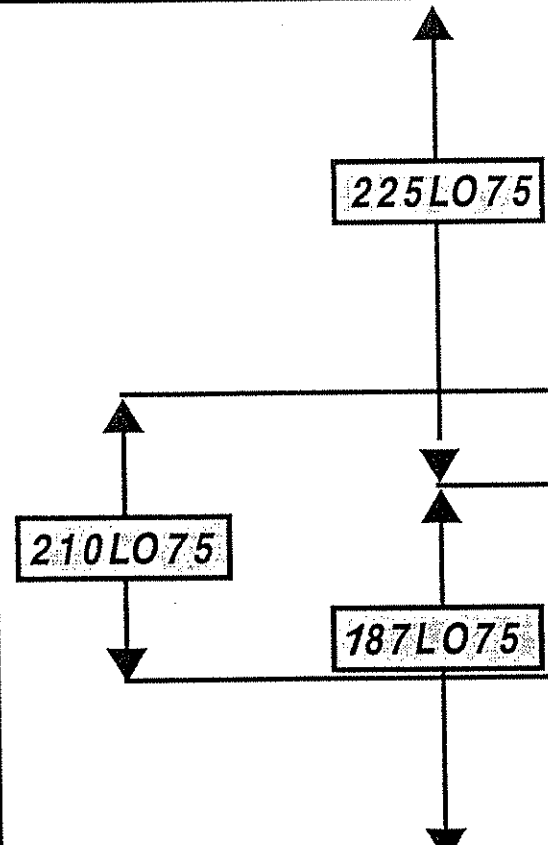
ORION QUEBEC

SCALE: APPROVED BY: DRAWN BY: JADNIG A
DATE: REVISED DEC. 85

B66C2

DRAWING NUMBER
20042

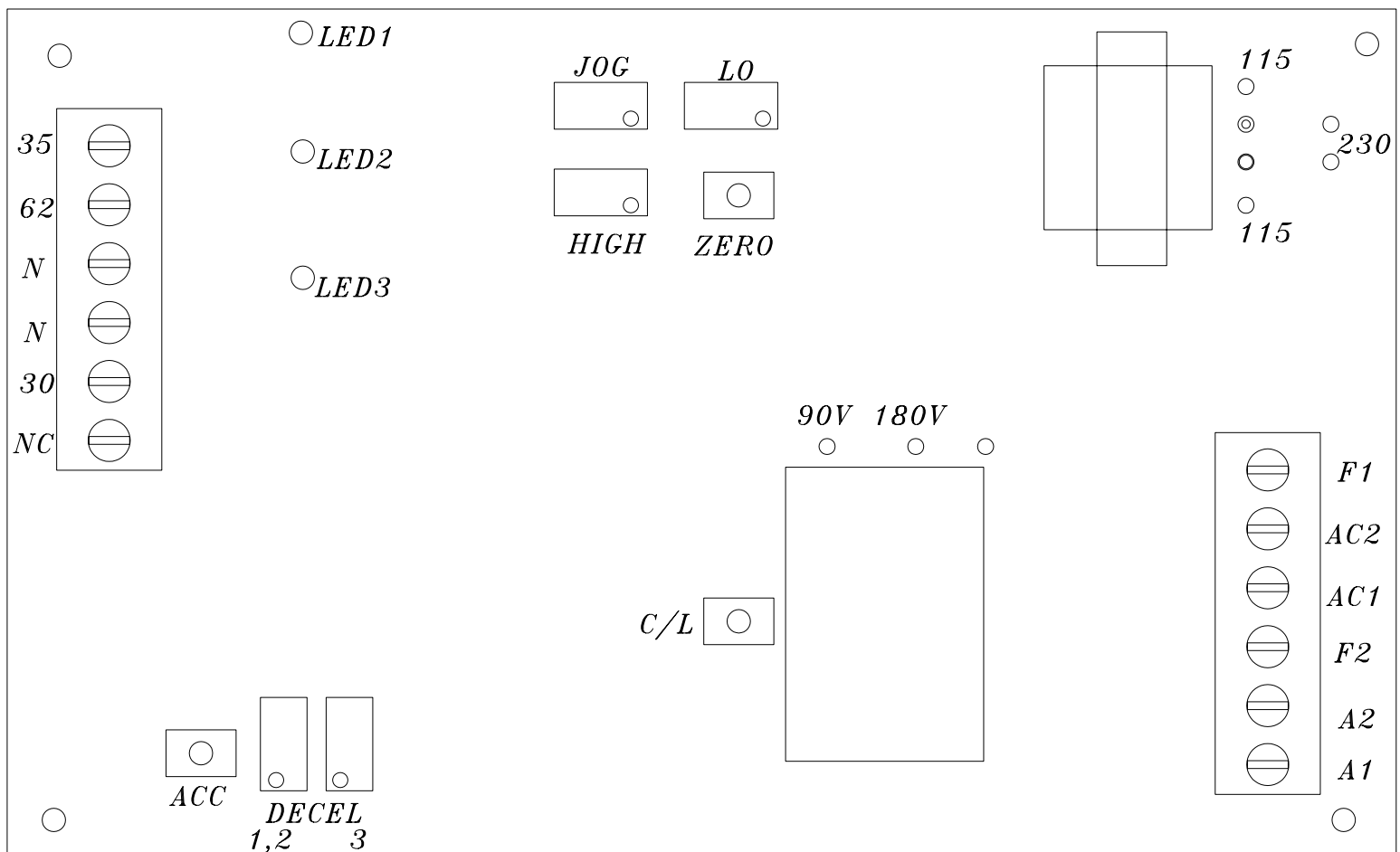
OLD STYLE MULTISTRETCH PRE-STRETCH RATIO CHART

BELT SIZE	PULLEY SIZE	FILM STRETCH	ORION PART #
		345%**	20142
	36 LB 075	300%	20141
	32 LB 075	255%	20140
	30 LB 075	235%	20139/12684
	28 LB 075	210%	20138
	26 LB 075	190%	20137
	24 LB 075	165%	20136
	22 LB 075	145%	20135
	21 LB 075	135%	20134/12683
	20 LB 075	125%	20133

Revised 3/1/94

**NOTE: May not fit under existing multistretch cover.

225L075 - PART # 20147
 210L075 - PART # 20146



A1: ARMATURE CONTROL.

AC1: AC INPUT

AC2: AC INPUT

A2: ARMATURE CONTROL.

F1: FIELD CONTROL

F2: FIELD CONTROL

N: 11VAC NEUTRAL

35: JOG SPEED

62: HIGH SPEED

30: LO SPEED

N/C: NOT USED

DECEL 1,2: DECEL ADJUSTMENT

DECEL 3: DECEL ADJUSTMENT

ACC: ACCELERATION ADJUSTMENT.

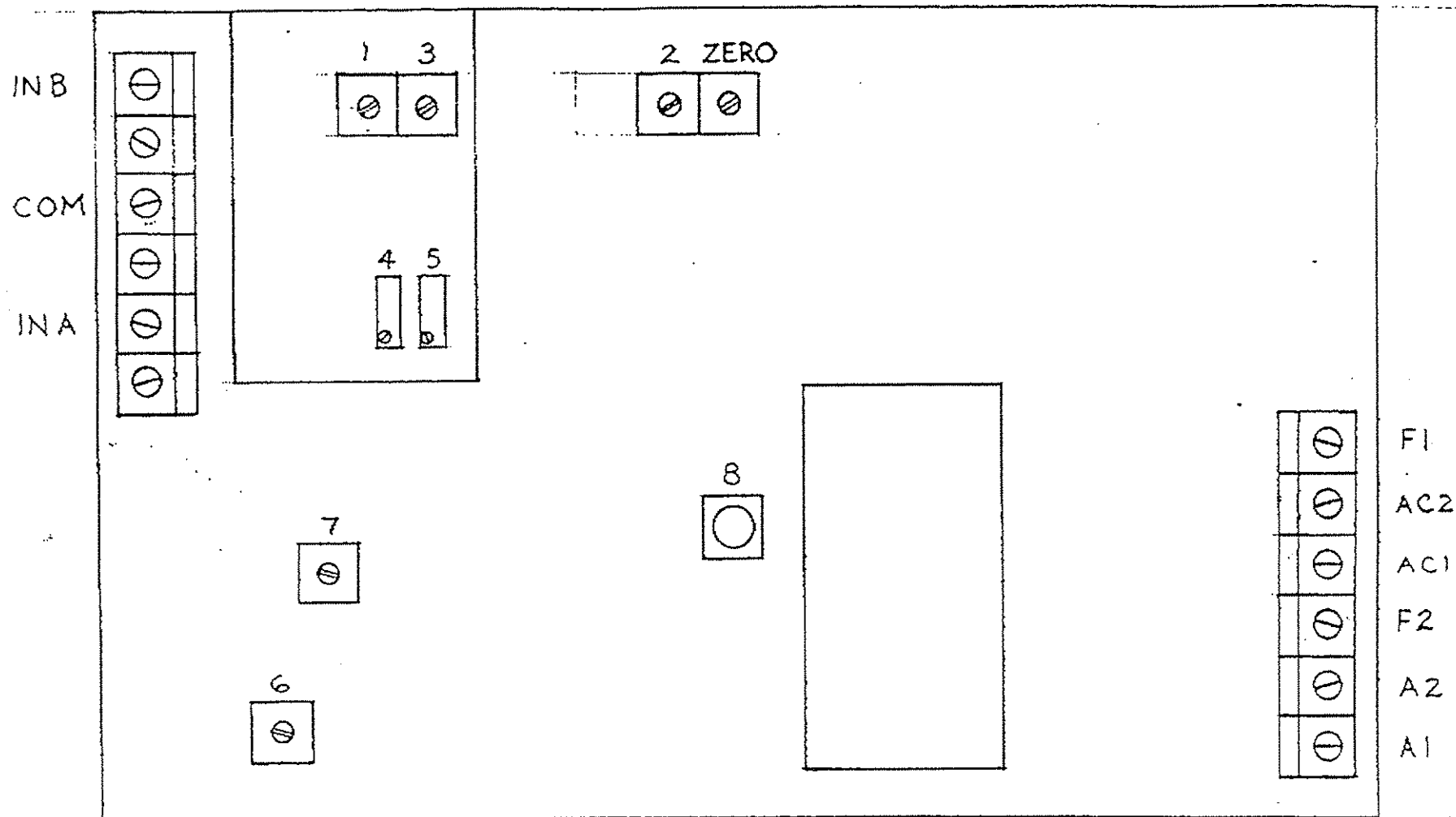
*C/L: CURRENT LIMITER.
(FACTORY SET)*

JOG: SPEED ADJUSTMENT

LO: SPEED ADJUSTMENT

HIGH: SPEED ADJUSTMENT

*750MX 3 SPEED 120/230VAC 90/180VDC
MOTOR CONTROL BOARD*



ZERO: TURNTABLE DEADBAND ADJ.

1: LOW SPEED ADJ.

2: JOG SPEED ADJ.

3: HIGH SPEED ADJ.

4: LOW SPEED DECELERATION ADJ.

5: HIGH SPEED DECELERATION ADJ.

6: ACCELERATION ADJ.

7: LOAD RANGE ADJ.

8: CURRENT LIMITER

ORION PACKAGING INC.

ECHELLE: N.T.S.
SCALE:

APPROUVE PAR:
APPROVED BY:

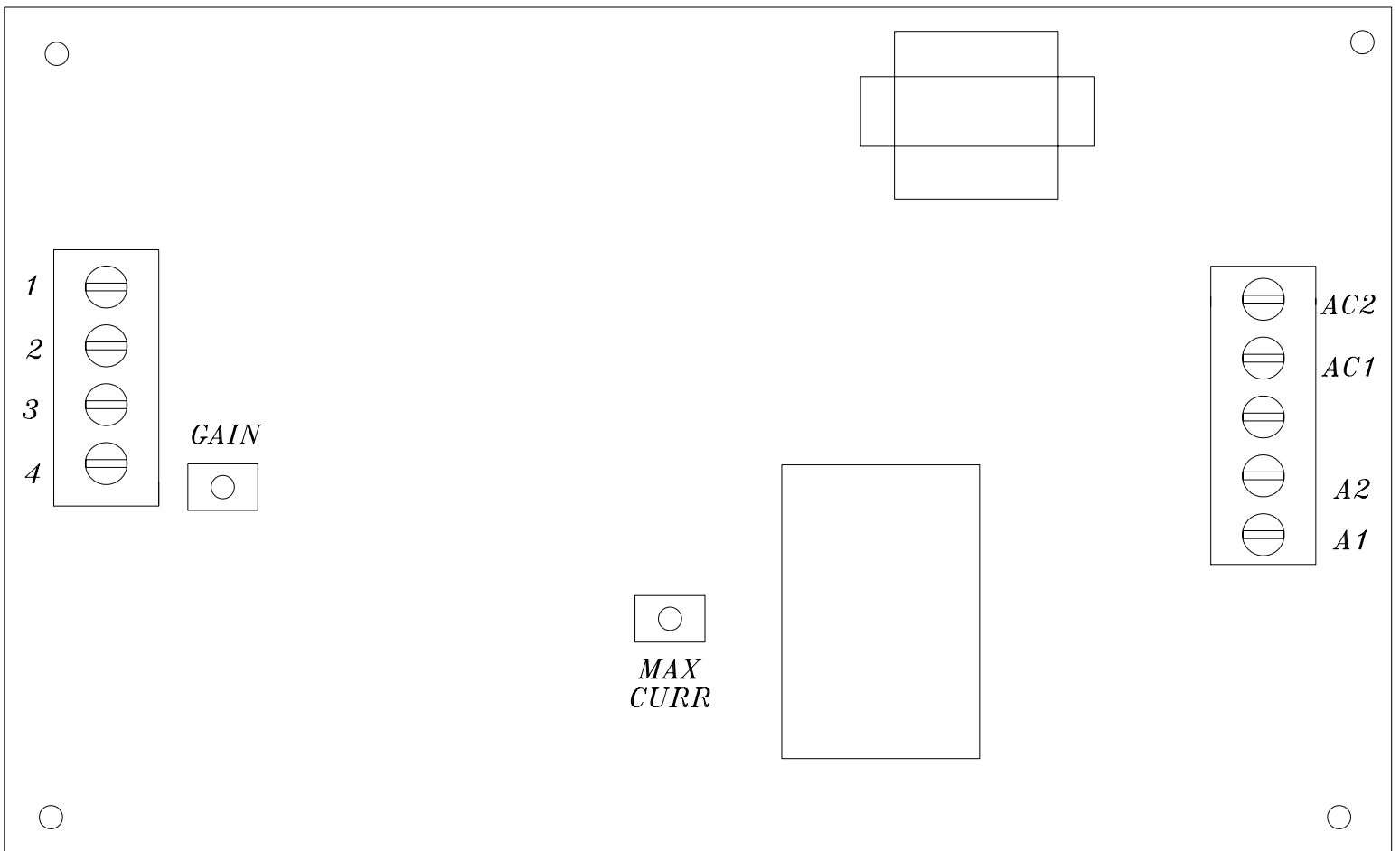
DESSINE PAR: VALENTINI
DRAWN BY:

DATE: 16-09-87

REVISE PAR:
REVISED BY:

750M + 233

NUMERO DE DESSIN
DRAWING NUMBER
200 888



A1: ARMATURE CONTROL.

AC1: AC INPUT

AC2: AC INPUT

A2: ARMATURE CONTROL.

1: SPEED POT

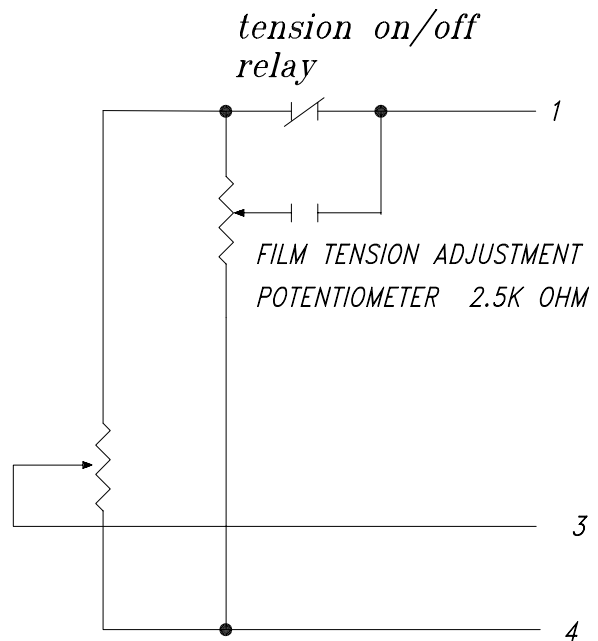
3: SPEED POT

4: SPEED POT

MAX CURR: CURRENT LIMIT

GAIN: SPEED POT ADJ.

*DANCER ROLLER BAR
POTENTIOMETER 10K OHM*



236 MULTISTRETCH BOARD



DC - OUT

DC + OUT

AC2 IN

AC1 IN (NEUTRAL)

168-A CARRIAGE UP/DN
SINGLE SPEED BOARD