ORION PACKAGING
H66
HIGH PROFILE,
STRETCHWRAPPER

OWNER'S MANUAL

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1. H66 SPECIFICATIONS

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

Machine floor space requirements: 48" x 96"

Distance from floor to top of table: 11 inches.

Turntable dimensions: 48" x 48"

Turntable drive: 1/2 hp, 90 VDC, TEFC, SCR controlled soft start and stop.

Carriage elevator drive: 1/3 hp, 90 VDC, TEFC, SCR controlled variable speed, 20 fpm max, ANSI #40 chain.

Maximum static load: 8 000 lbs.

Maximum dynamic load: 3 000 lbs.

Minimum load: 350 lbs.

Maximum pallet and load dimensions: 63" x 63" x 78"(h)

Machine dimensions: 48" x 96" x 86"(h)

Machine weight: 670 lbs.

2. STANDARD FEATURES

The standard H66 stretchwrapper comes with a 20" electromechanical film delivery system, designed for ease and simplicity of operation and quick access for routine maintenance and servicing.

The master control panel features are,

- Film tension selector,
- Individual count selectors for top and botom wraps,
- Solid state elevator speed control,
- Electric eye OFF/ON,
- Spiral up - up/down,
- Turntable jog,
- Raise/Lower elevator control,
- Power OFF/ON
- Start,
- Stop,
- Current overload protection.

The turntable has positive alignment by using electronic dynamic braking resulting in a soft stop of the turntable. The turntable is driven by a cast iron wheel with polyurethane tread. The turntable is powered by a constant torque motor and reaches a speed of 18 rpm.

The H66 also has a roping bar designed to more fully secure the load to the pallet.

3. OPTIONS

The options available for the H66, High Profile stretchwrapper are,

- Carriage for the 30" film roll
- Extended mast,
- Extended base,
- Programmable logic controller,
- Heater option for cold environment application,
- Custom design features.

Custom design features may be in the form of special brackets or tracks that hold loads that don't require pallets, or additional features such as scales to measure the load's weight as it is being wrapped.

4. PARTS LISTS

4.1 Tower Parts List

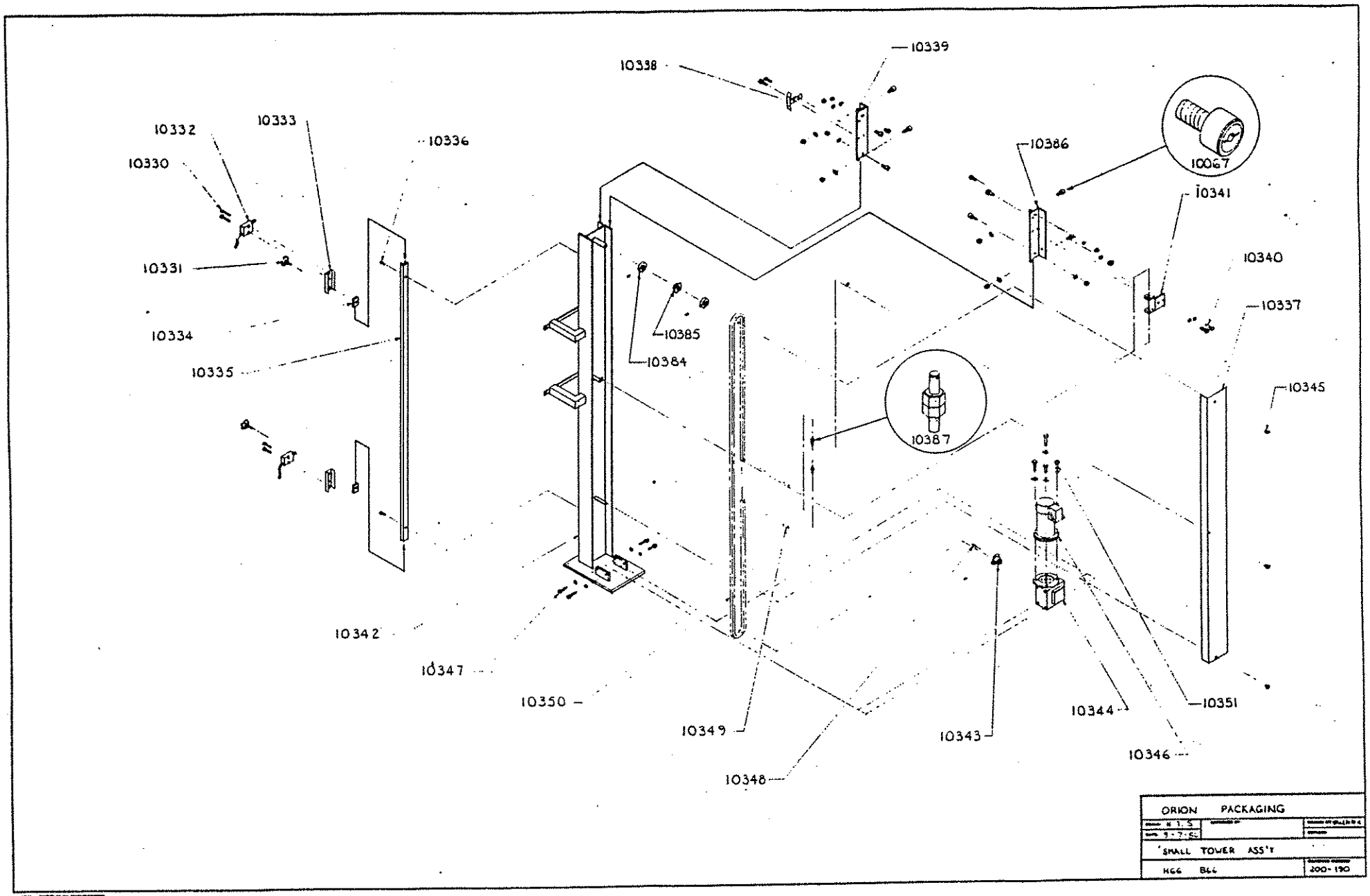
The exploded assembly drawing of the Small Tower is shown on drawing number 200 190. Table 1 has the parts listed in order of part number. Note: the names given to the parts are generic.

TABLE 1

Tower parts list

Part number	Description	Quantity
10067	Cam follower (1/2 inch O.D.)	4
10330	10-24 UNC x 2 long SHCS	2
10331	Knob	2
10332	Limit switch	2
10333	Limit switch bracket	2
10334	Channel guide	2
10335	Channel	1
10336	1/4-20 UNC x 1/2 long SHCS	2
10337	Chain cover	1
10338	Limit switch actuator	1
10339	Right carriage holder	1
10340	3/8-16 UNC x 1 long hex bolt	2
10341	Chain tensioner	1
10342	Tower	1

10343	Elevator driver sprocket	1
10344	Reducer (40:1)	1
10345	1/4-20 UNC x 1/2 long SHCS	3
10346	Motor (1/3 hp, 90 VDC)	1
10347	5/16-18 UNC x 1 long hex bolt	4
10348	3/16 square key	1
10349	Chain link pin	2
10350	Chain	1
10351	3/8-16 UNC x 2 long hex bolt	4
10384	1" collar	2
10385	Elevator idler sprocket	1
10386	Left carriage holder	1
10387	Chain tensioning screw	2



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SMALL TOWER ASS'Y		
HGG B44		200-190

4.2 CARRIAGE PARTS LIST

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

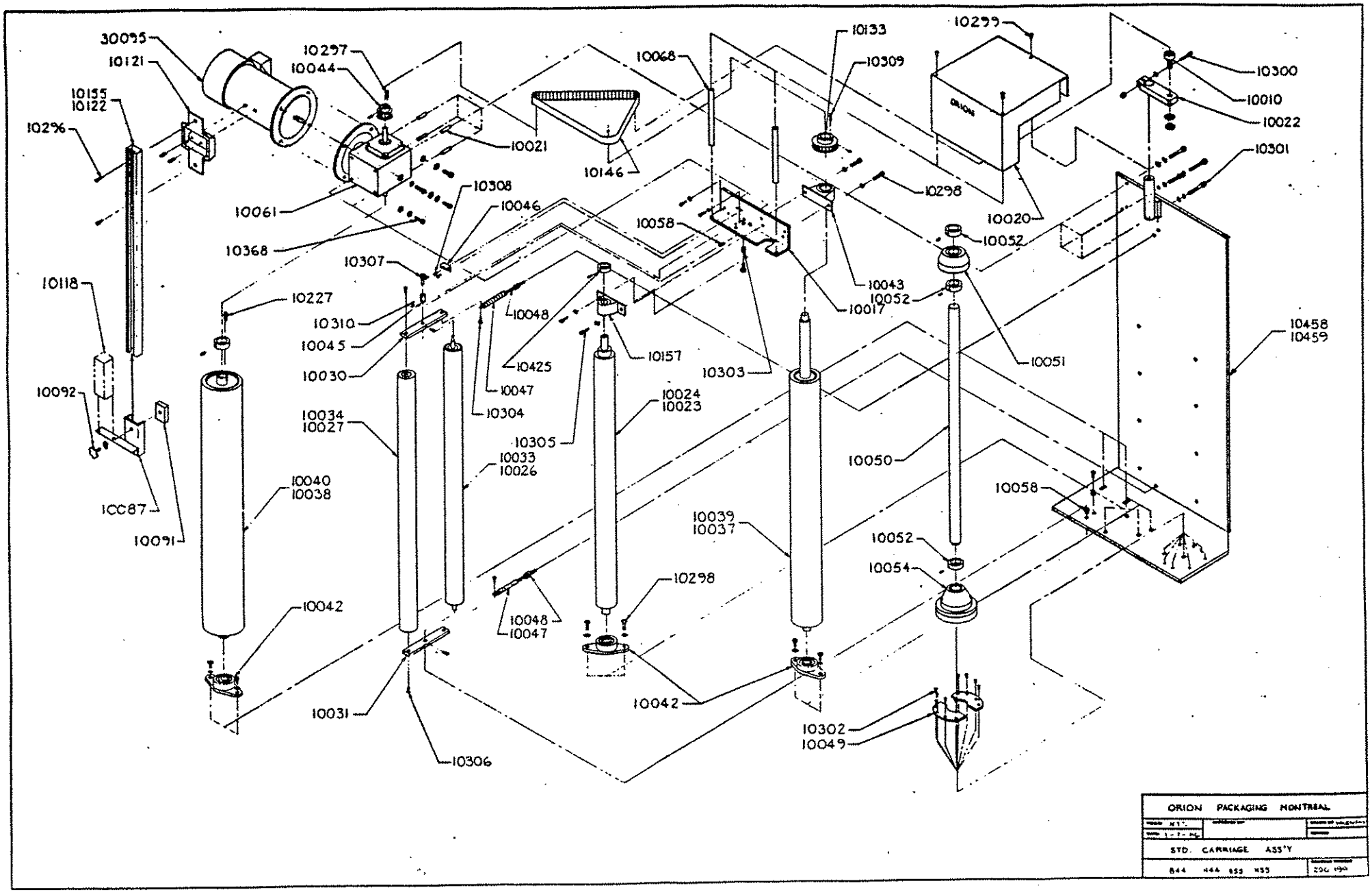
TABLE 2

Carriage parts list

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

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

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



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STD. CARRIAGE ASS'Y

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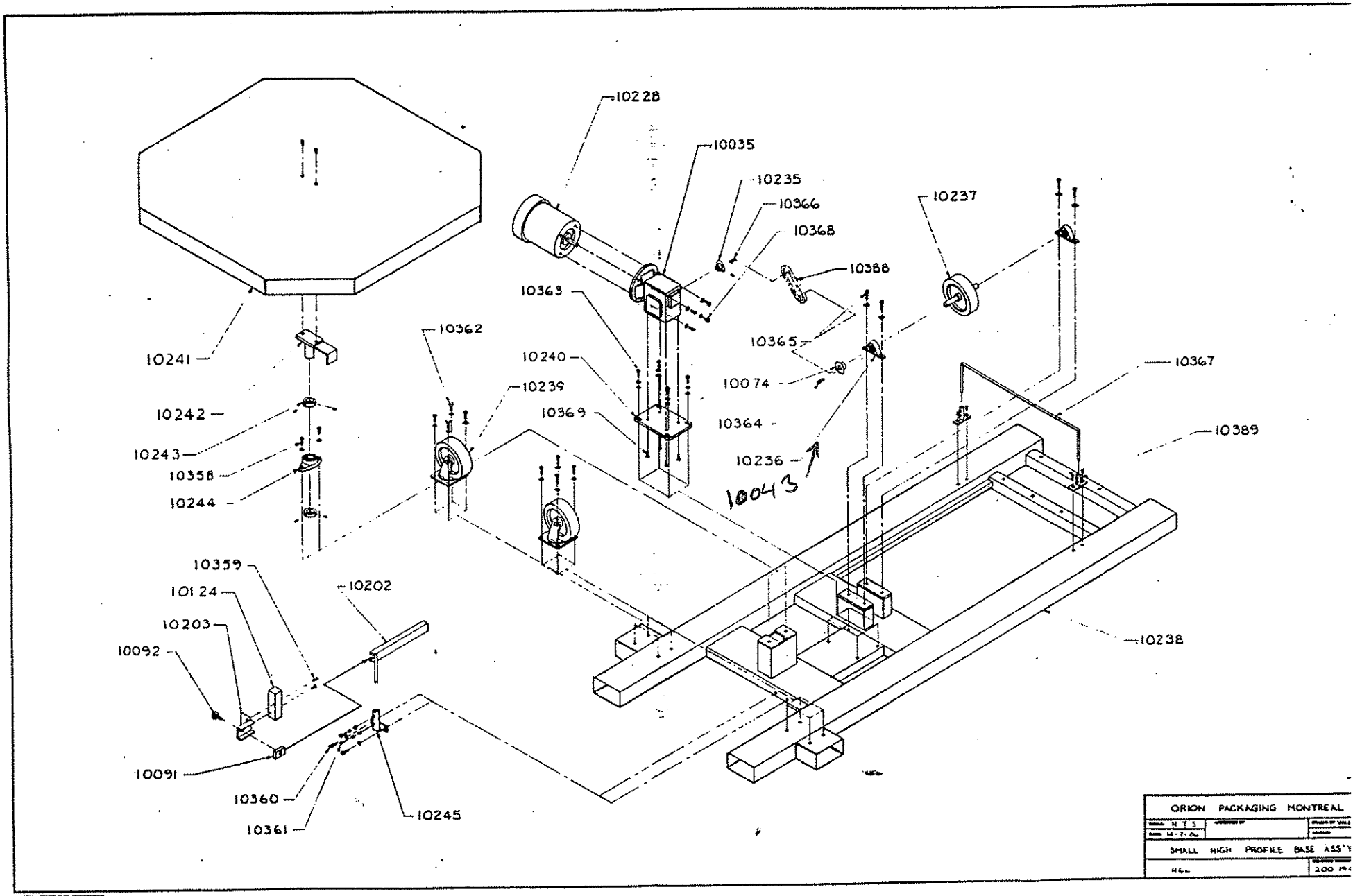
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10238
ORION PACKAGING MONTREAL
SMALL HIGH PROFILE BASE ASS'Y

4.3 Base And Turntable Parts List

The exploded assembly drawing of the H66 base is shown on drawing number 200 194. Table 3 has the parts listed in order of part number. Note: the names given to the parts are generic.

TABLE 3

Base and turntable parts list

Part number	Description	Quantity
10035	Reducer	1
10074	Drive sprocket	1
10091	Channel guide	1
10092	Knob	1
10124	Proximity switch	1
10202	Channel	1
10203	Proximity switch bracket	1
10228	Motor (1/2 hp, TEFC)	1
10235	Driver sprocket	1
10236	1" pillow block bearing	2
10237	Turntable drive wheel	1
10238	Base	1
10239	Caster	2
10240	Reducer mounting plate	1
10241	Turntable	1
10242	Turntable coupling	1
10243	1" collar	2

10244	Center bearing unit	1
10245	Channel stand	1
10358	3/8-16 UNC x 1 long hex bolt	2
10359	10-24 UNC x 2 long SHCS	2
10360	3/8-16 UNC x 1 long hex bolt	2
10361	3/8-16 UNC x 1 long hex bolt	2
10362	3/8-16 UNC x 1 long hex bolt	4
10363	3/8-16 UNC x 1 long hex bolt	8
10364	3/16 square key	1
10365	3/8-16 UNC x 1 long hex bolt	4
10366	3/16 square key	1
10367	Roping bar	1
10368	3/8-16 UNC x 1 long hex bolt	4
10369	5/16-18 UNC x 3/4 long CHCS	4
10388	Chain	1
10389	Roping bar stand	2

5. MACHINE INSPECTION AND INSTALLATION

5.1 Inspection Upon Arrival

CAUTION: When unloading the stretchwrapper, care must be taken not to lift it by the turntable. The forks of the forklift should be inserted in the 6 x 2 inch rectangular tubes at either end of the base 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 bar over the table.

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

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

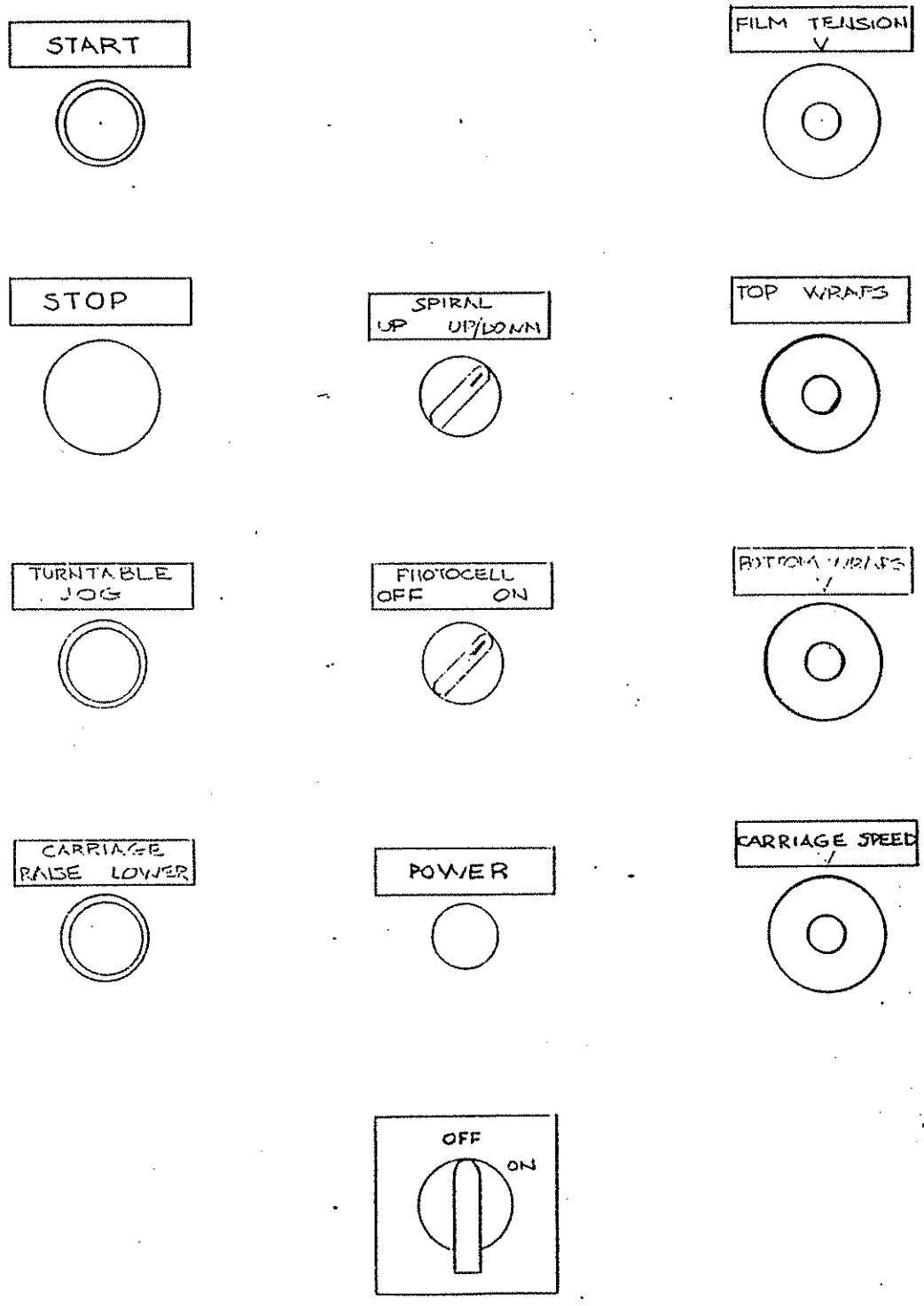
Items that are vulnerable to damage and must be inspected are the motor and transmission housings and connections at the base of the tower, under the turntable, and on the carriage, the photoswitch on the carriage, the carriage holders, and the roping bar and stands.

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.

6. MACHINE CONTROLS



6.1 Power Switch

The Power Switch has two settings,

ON - Connects a 115 VAC power source to the machine,

OFF - Disconnects the power source.

6.2 Start And Stop Switches

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

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

The Turntable jog switch is a pushbutton switch that will turn the turntable in a clockwise direction (as viewed from the top) when the switch is held depresed. When the switch is released the turntable will stop.

6.5 Carriage Control Switch

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

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

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

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

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

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.

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

7. CYCLE CONTROLS

7.1 Film Tension

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

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

7.2 Carriage Speed

The carriage speed control can be used to control the amount of overlap the film will have on itself during a wrap.

The control potentiometer has 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 slower carriage speeds.

7.3 Top And Bottom Wraps

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

These switches may be set before the cycle begins.

8. MACHINE MAINTENANCE

8.1 Speed Reducer Maintenance

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

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, under the turntable, and at the base of the tower.

8.2 Motor Maintenace

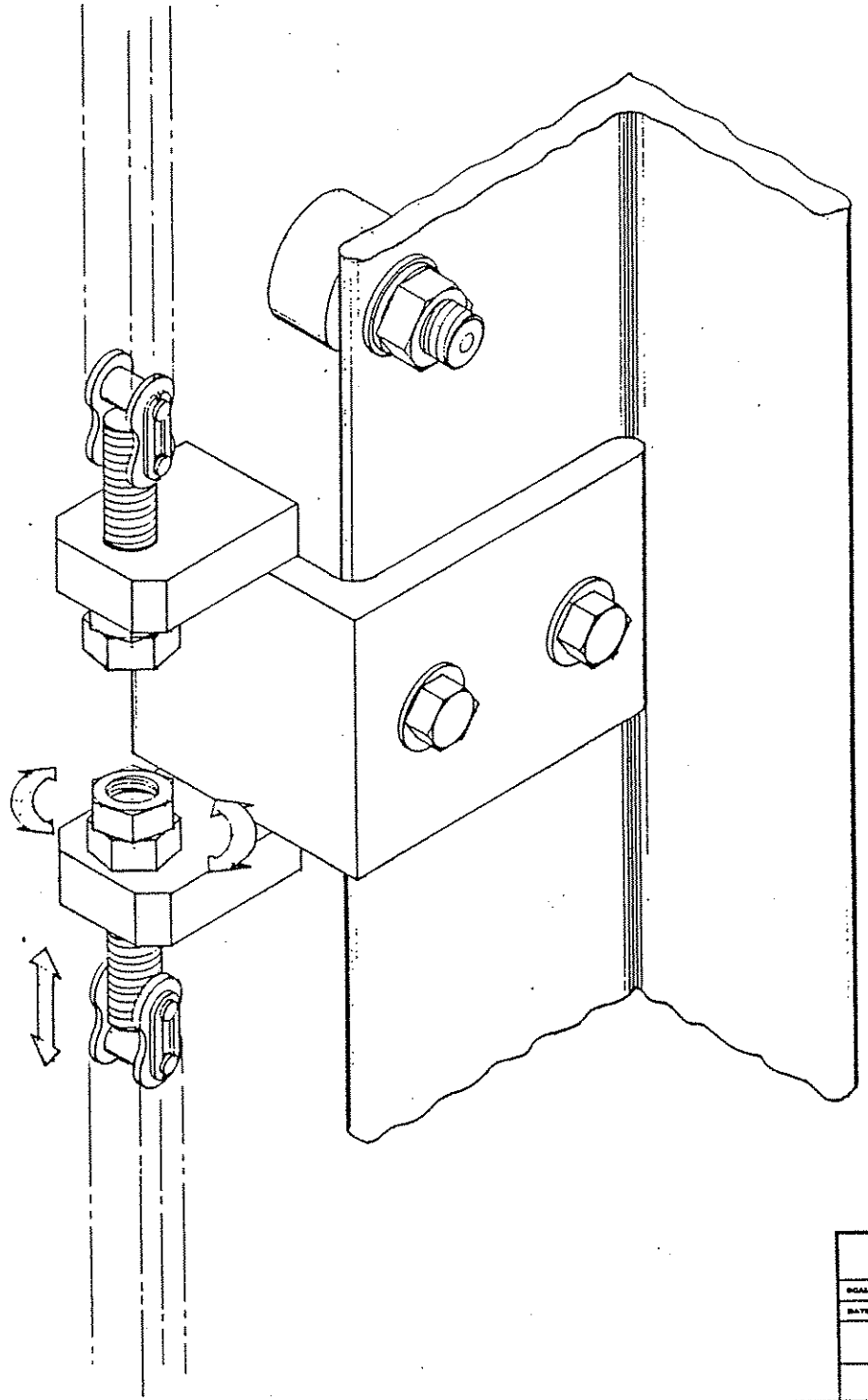
An occasional inspection of the brushes should be made in order to establish a wear rate. Replacement brushes should be installed before old brushes wear to 9/16" long, measured on the long side. After replacing brushes run the motor near rated speed for at least 1/2 hour with no load to seat the new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

8.3 Chain Maintenance

To clean and relubricate chains, wipe them with an oily cloth every month. If the environment is very dusty or damp, it may be neccessary 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 pulling back on the reducer under the turntable after having its bolts loosened.

CHAIN TENSION
ADJUSTMENT



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CHAIN TENSIONER ASS'Y

200-192

8.4 Cam-Follower Maintenance

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

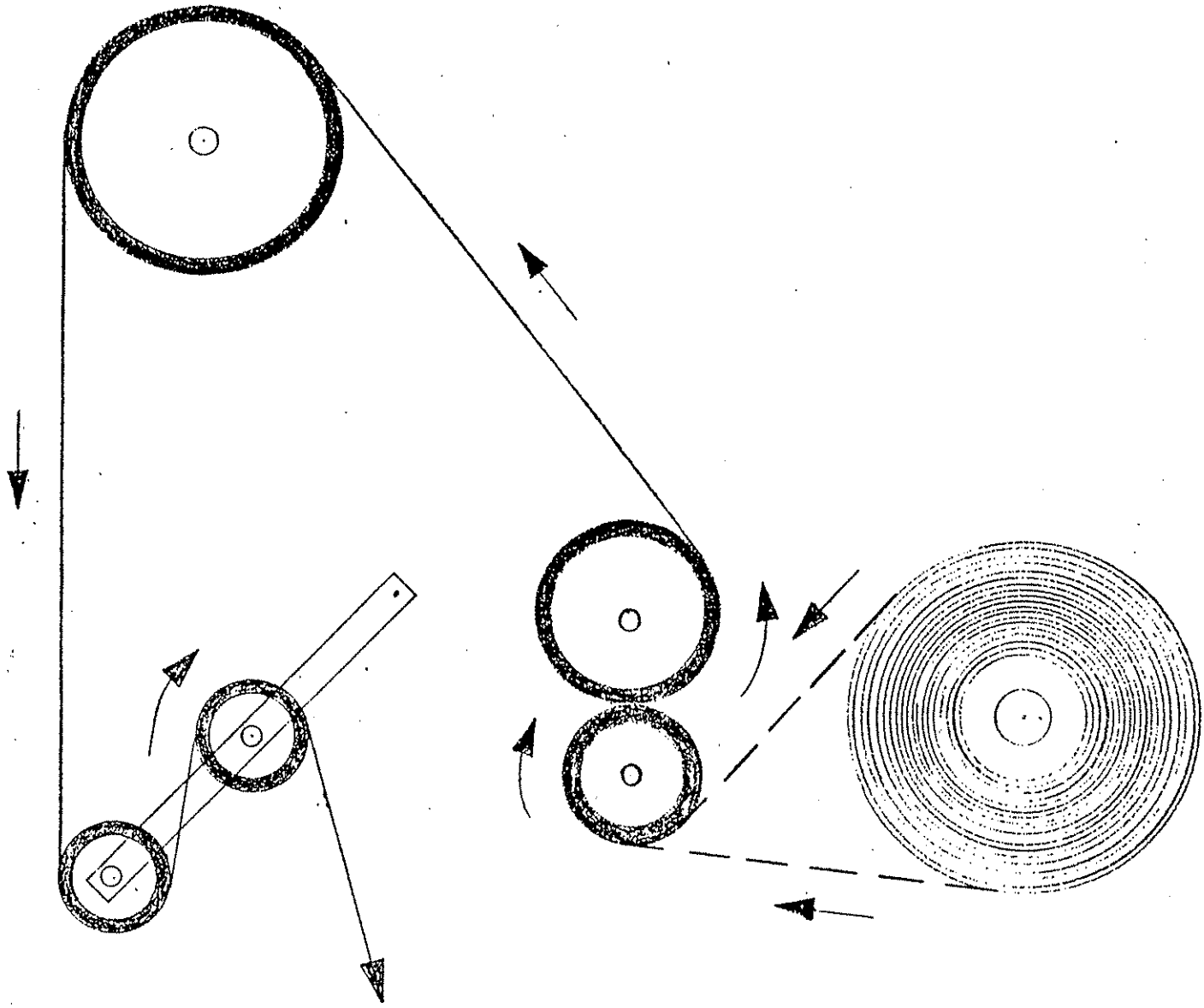
The portion of the tower on which the cam followers roll should be cleaned and regreased every 300 hours of operation. If the machine operates in a dusty or corrosive environment the tower should be relubricated more often.

8.5 Caster Maintenance

The two swivelling casters under the turntable may be relubricated every 300 hours of operation by injecting a good quality lithium based grease into the grease nipples.

The drive wheel bearings are factory greased and sealed so they need not be relubricated in their lifetime.

APPENDIX

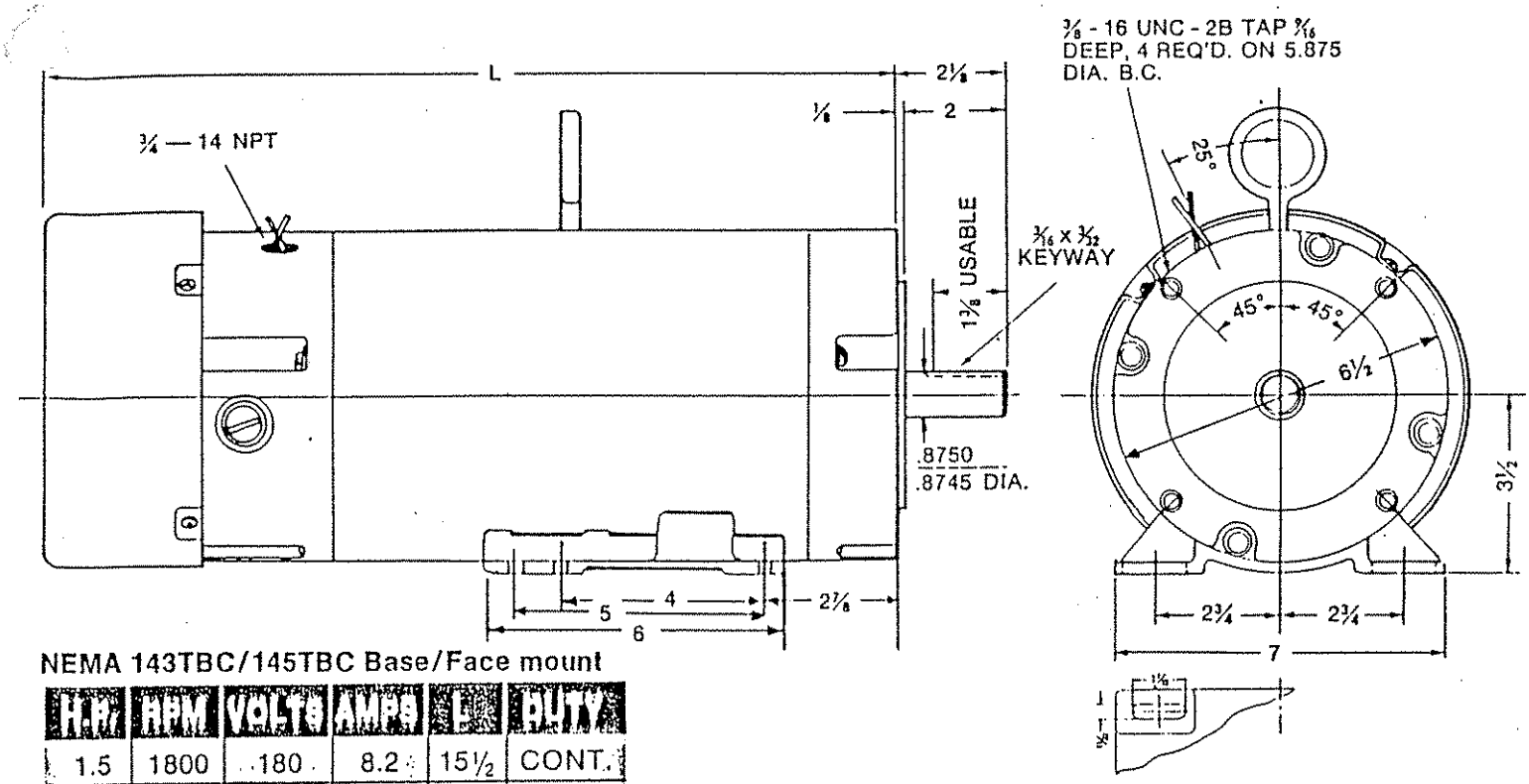


This diagram shows the pattern the film must take around the rollers for the proper operation of the stretchwrapper.

WARNING: The machine must be disconnected from the power source before the flim is fed through the rollers. Failure to do this may result in serious injury to the operator and damage to the machine.

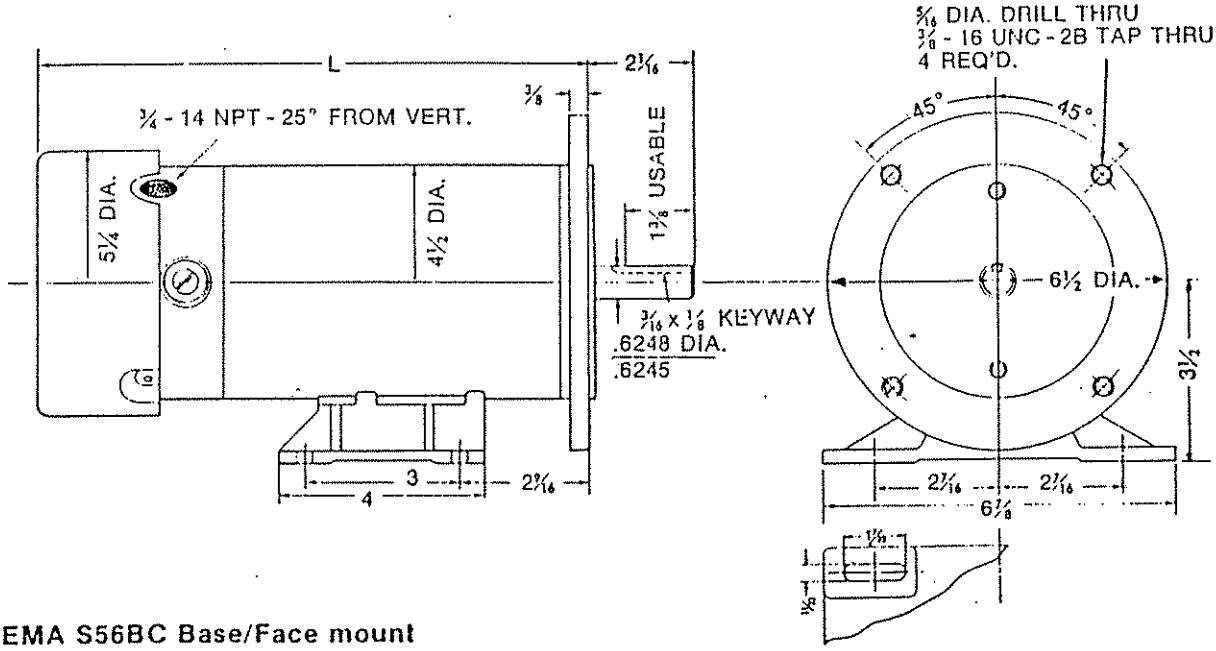
Motor dimensions

TEFC P/M motor



NEMA 143TBC/145TBC Base/Face mount

H.P.	RPM	VOLTS	AMPS	L	DUTY
1.5	1800	180	8.2	15½	CONT.
2	1800	180	11.6	16½	CONT.



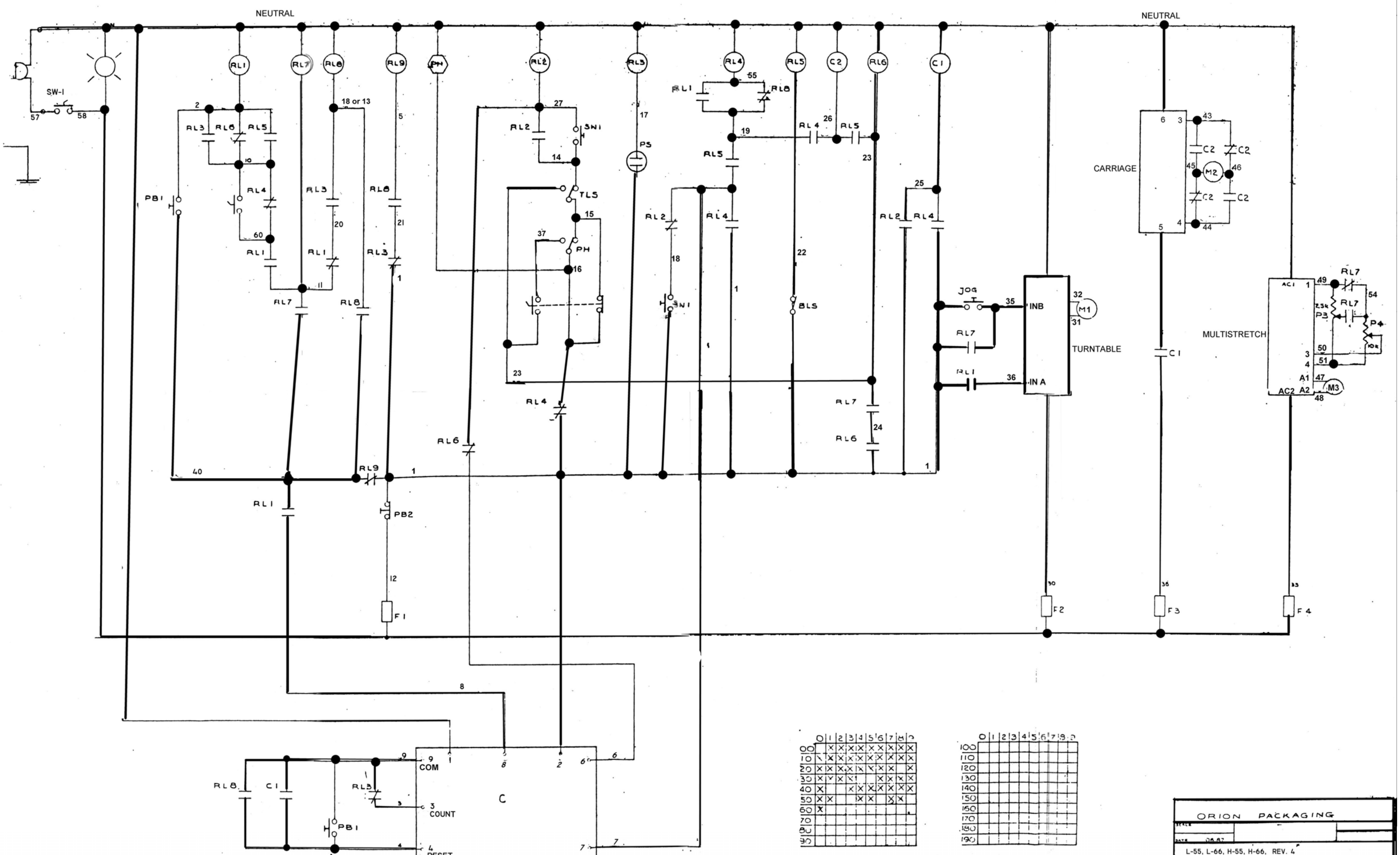
NEMA S56BC Base/Face mount

180 V.

H.P.	RPM	VOLTS	AMPS	L	DUTY
½	1725	180	2.8	10¾	CONT.
¾	1725	180	3.5	12¾	CONT.
1	1725	180	5.35	14¾	CONT.

90 V.

H.P.	RPM	VOLTS	AMPS	L	DUTY
½	1725	90	5.35	10¾	CONT.
¾	1725	90	8.1	12¾	CONT.
1	1725	90	10.6	14¾	CONT.



	0	1	2	3	4	5	6	7	8	9
00		X	X	X	X	X	X	X	X	X
10	\	X	X	X	X	X	X	X	X	X
20	X	X	X	X	X	X	X	X		X
30	X	X	X	X			X	X	X	X
40	X			X	X	X	X	X	X	X
50	X	X			X	X		X	X	
60	X									
70										
80										
90										

	0	1	2	3	4	5	6	7	8	9
100										
110										
120										
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