



**MODEL CTS67-20**

**SERIAL # 2006-8899999**

2270 Industrial boul. , Montreal (Laval), Canada, H7S 1P9

Tel.: (450) 667-9769, Fax: (450) 667-6320



# **INSTRUCTION** **MANUAL**

**FOR ALL INQUIRIES  
PLEASE CONTACT  
OUR LOCAL DISTRIBUTOR**

**FOR NORTH AMERICA 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 advance 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 **2006-8899999**

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 shocks, careful operation of the machine and awareness of its many automatic functions is required.

**NOTE:** All electrical power and compressed air must to be disconnected prior to all inspection, maintenance or repair work.

**ORION PACKAGING INC.**

# ORION PACKAGING SYSTEMS INC.

## FULLY AUTOMATIC EQUIPMENT SPECIFICATIONS

### ORION MODEL CTS67 (2003)

#### Medium Duty Conveyorized Rotary Turntable Automatic System

<b>Maximum Load Size</b>	48"W x 48"L x 75"H
<b>Minimum Load Size</b>	30"W x 30"L x 26"H*
<b>Weight Capacity</b>	200 lbs*** - 4,000 lbs. Dynamic / 20,000 lbs. Static**
<b>Production Capacity</b>	See Attached Throughput Calculation
<b>Utilities</b>	115 / 1 / 60 ; 20 Amps Electrical Service 3 CFM Compressed Air @ 80 PSI
<b>Turntable</b>	Powered Conveyor Turntable Surface with 25" Diameter Ring Bearing Support
<b>Turntable Drive</b>	0 - 12 RPM Variable Turntable Speed Electronically Adjustable Acceleration/Deceleration (Soft Start) DC Variable Speed Drive Heavy Duty ANSI Chain & Sprocket Turntable Drive
<b>Control Features</b>	Free Standing, CSA Approved, NEMA 12 Control Panel State-of-the-Art Allen Bradley Programmable Logic Control for Maximum Flexibility User Friendly Controls with Non-Proprietary Pushbuttons, and Switches Electronic Film Tension Control Adjustment on the Panel End of Cycle Film Force Release Separate Top and Bottom Wrap Count Selectors Variable Speed & Separate Film Carriage Up/Down Controls Photocell for Automatic Load Height Detection **** Rewrap Pushbutton for Rewrapping Load After Film Roll Replacement, E-Stop, Etc Turntable Jog Pushbutton Conveyor Jog Pushbuttons Current Overload Protection
<b>Film Delivery</b>	20" Orion Insta-Thread™ Powered Prestretch Film Delivery System Precision Ground, Polyurethane Pre-Stretch Rollers for Consistent, Maximum Film Yield 260% Standard Pre-Stretch Ratio (Adjustable from 100% to 300%) Easy & Safe to Operate Self-Threading Carriage Design Electronic Film Tension Control Adjustment on the Panel Full Authority Film Dancer Bar with Variable Speed Output (Non-Wearing Sensor) Heavy Duty ANSI Chain & Sprocket Ratio Control Insta-Sense™ Film Out/Broken Sensing Logic with Indicator Light
<b>Film Carriage Drive</b>	Heavy Duty ANSI Chain Carriage Lift DC Variable Speed Drive Multi-Point UHMW Precision Carriage Guidance System

Visit our Distributor Support Website at [www.support.orionpackaging.com](http://www.support.orionpackaging.com)

# ORION PACKAGING SYSTEMS INC.

## FULLY AUTOMATIC EQUIPMENT SPECIFICATIONS

### ORION MODEL CTS67 CONTINUED

<b>Structural Features</b>	Ergonomic Chassis Layout for Ease of Operator Use Side Facing Carriage for Easy Film Roll Change Personnel Decking Between Chassis Tubes in Film Clamp Area 100% Structural Steel Construction Throughout Non-Proprietary, Locally Obtainable Components Throughout Easy Access to All Components Open Mechanical Design for Ease of Maintenance Forklift Portable Base Design Forklift Easy Access For Loading /Unloading Machine Design Floor Mounted Forklift Wheels Stoppers For Unloading
<b>Conveyor Features</b>	5' Powered Infeed Conveyor Included 100% Orion Manufactured 100% Structural Steel Construction 4,000 lb. Max Load Weight Capacity 18" Height to Top of Rollers 52" Effective Conveyor Width 2.5" Diameter Rollers on 3.75" Centers All Full Length Rollers Driven Via Heavy Duty ANSI Chain Loop to Loop Full Length Solid Steel Conveyor Roller Axles Individual Bearings with Cast Housings for Each Roller Fully Automatic Sequencing Logic 30 fpm Standard Conveyor Speed DC Variable Speed Drive
<b>Film Tail Treatment</b>	Pneumatic Film Clamp Impulse Wire Film Cutting Pneumatic Load Seeking Brush Down System
<b>Estimated Shipping Weight</b>	4,500 lbs.

\* Minimum load height capability is based on 20" film carriage. For 30" carriage, minimum load height capability is 36"

\*\* In applications in which the pallet bottom boards are parallel to conveyor rollers, the minimum bottom board width is 4", and the minimum number of bottom boards is 3.

\*\*\* For lighter loads than 200 lbs. consult factory.

\*\*\*\* For black, shiny or transparent loads special type of detector is required.

# 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 enter the forks under the frame or insert the forks in the tube brackets welded to the top of the machine.

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.

3. Sit the machine down assuring uniform contact with the floor, which is necessary to ensure correct and smooth operation.

## 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/ or polyurethane covering on the film carriage 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. Any transport damage cannot be claimed to Orion Packaging Inc.

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 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 film carriage to be sure that it is correctly aligned with the tower

- 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 shall 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 leveled 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).

Any wiring that has been disconnected to facilitate transport is marked with a number located on the junction box to which the wiring must be reconnected. 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.

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

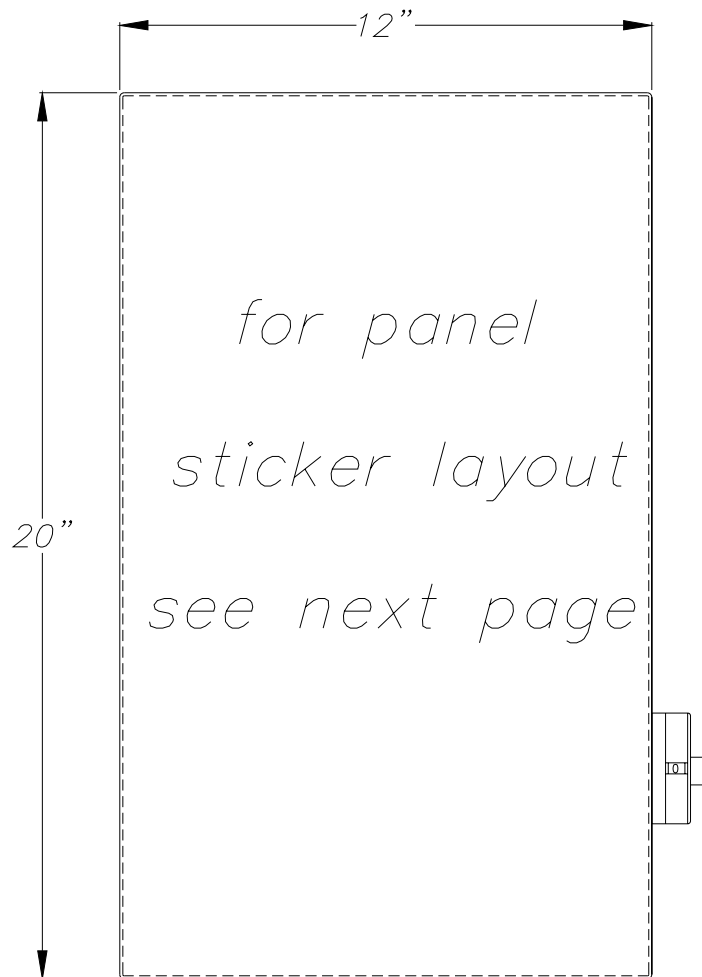
## CONTROL PANEL

In the case of the free standing panel (console) place it adjacent to the system and anchor firmly to the floor. Connect the liquid tight (rigid conduit) to the main junction box located on the wrapper main frame next to the tower.

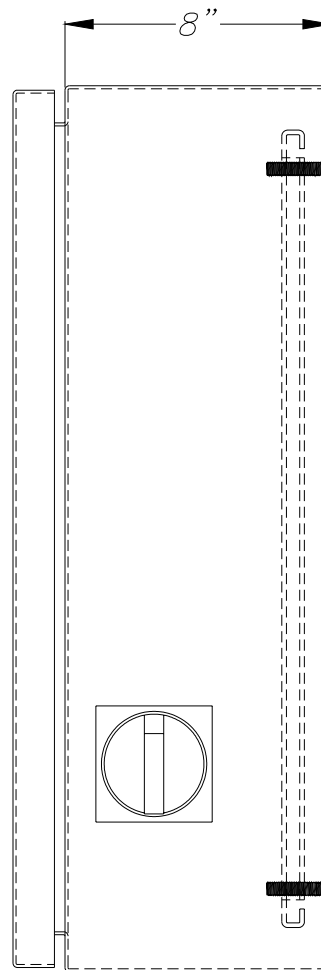
## Before Starting Machine Operation

Verify that the machine is properly connected to the electrical source. The electrical requirements depend on the machine type and features. For this information, please see the machine electrical diagram provided with the machine operation manual. The control panel layout for the machine is shown on the drawing.

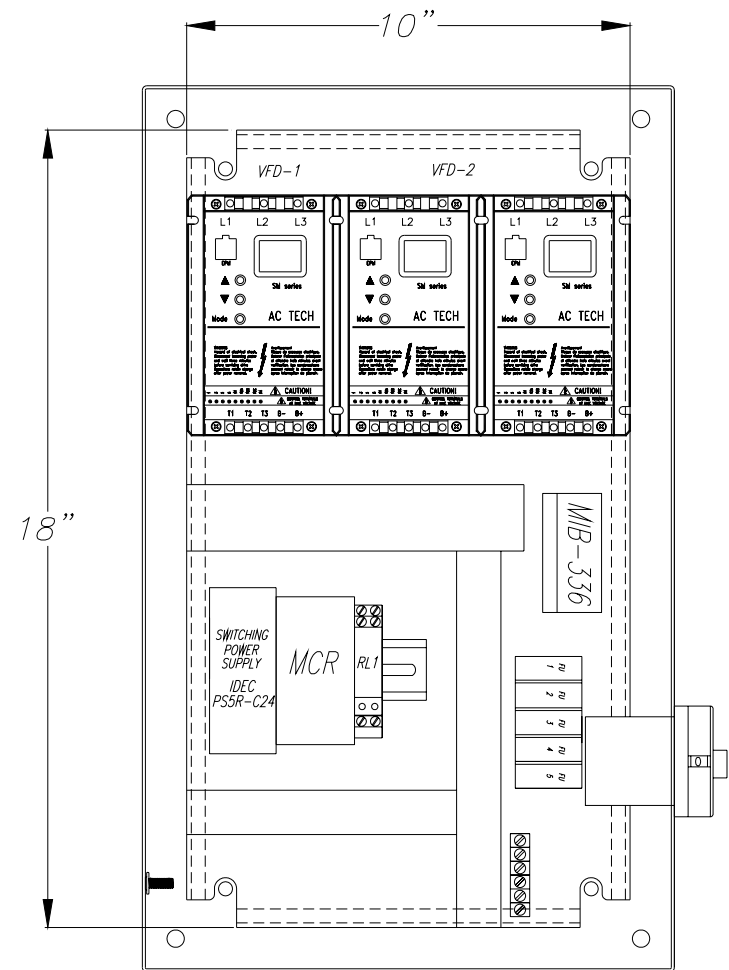
**CAUTION:** Before preceding the machine operation familiarize yourself with the **EMERGENCY-STOP** button and all functions, switches and pushbuttons.



FRONT PLATE



5412 ES20x12x06



BACK PLATE



ORION PACKAGING INC.

2270 INDUSTRIEL BLVD LAVAL, QUE., CANADA H7S 1P9 SCALE: 1:2  
TEL: (450) 667-9769 FAX: (450) 667-6320  
APPR. BY: J.B.S. DRAWN BY: J. ALEXANDER

TITLE: HL66-20 "STANDARD"

SIZE: B DOCUMENT NO: 303 319/L REV: 2  
JOB # STD

DATE: NOV-01-2006 SHEET: 1 OF 1  
FILENAME: H66-20L.DWG BASE:









**START**



**STOP**



**FILM TENSION**



**CARRIAGE SPEED**



**TABLE / TOWER**



**SPEED**

- ☐ 1 AUTOHEIGHT PE OFF/ON
- ☐ 2 TOP WRAPS T (1-9)
- ☐ 3 BOTTOM WRAPS B (1-9)
- ☐ 4 WRAPPING MODE a - SPIRAL UP & DOWN  
b - SPIRAL UP ONLY
- ☐ 5 WRAPPING MODE c - TOP WRAPS FIRST  
d - BOTTOM WRAPS FIRST
- ☐ 6 TURNTABLE JOG

- ☐ 7
- ☐ 8 REINFORCED WRAPS R (1-9)
- ☐ 9
- PAUSE / RESET**
- CARRIAGE JOG UP
- CARRIAGE JOG DN

**WARNING!**

DISCONNECT POWER TO THE MACHINE BEFORE OPENING THE PANEL. DANGEROUS OR FATAL ELECTRIC SHOCKS MAY RESULT IF POWER TO THE MACHINE IS NOT DISCONNECTED BEFORE OPENING THE PANEL.

PN 500 134

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# MACHINE OPERATION

## POWER SWITCH

Located on the panel door or side of the panel box, the lockable power switch has two settings:

- ON - connects a power source to the machine
- OFF - disconnects the power source.

## START AND EMERGENCY STOP SWITCHES

The START switch is used to start the cycle once the load is on the turntable. The cycle may be stopped at anytime by pressing the STOP button. (see **Figure 1**)



Figure 1

**NOTICE:** The STOP button interrupts the entire machine electrical circuits. To continue the cycle the STOP push/pull button should be pulled out and START button pressed for the machine to restart. Double pressing the push – pull STOP button will reset the machine program and machine will be ready to apply the wrapping cycle from the beginning.

## SETTING-UP MACHINE PARAMETERS

**Note:** Parameter change is available when machine is not in cycle.

### 1- AUTOHEIGHT PHOTOCELL

Press button #1 on the keypad to switch from ON to OFF, or vice-versa.(see **Figure 2**)

**ON** - When ON, the photocell is activated to automatically detect top of the load. The carriage will automatically stop at the top of the load regardless of its height.

**OFF** - When OFF, the photocell is inoperative and carriage will travel to the top limit switch regardless of its height.

**NOTE:** For proper machine operation, top limit switch position should be adjusted to desired level prior to starting the cycle.



Figure 2

### 2- TOP WRAPS 1,2,3...9

Press button #2 on the keypad to select “Top Wrap”, then using the arrows on the keyboard select between 1 to 9 for required number of wraps on top of the load.

### 3- BOTTOM WRAPS 1,2,3...9

Press button #3 on the keypad to select “Bottom Wrap”, then using the arrows on the keyboard select between 1 to 9 for required number of wraps at the bottom of the load.

**Note:** Refer to the list of options at the bottom of the panel sticker for reference. (see **Figure 3**)



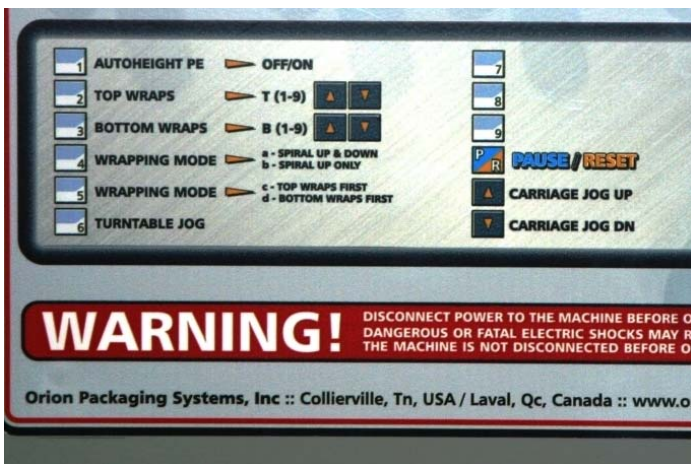
Figure 3

#### 4- WRAPPING MODE “SPIRAL” UP OR UP-DOWN

Press button #4 on the keypad to switch from **UP** to **UP & DOWN**, or vice-versa.

**UP** - When the UP position has been selected machine will first wrap bottom of load applying selected number of bottom wraps. The film carriage will then move to the top of load and stop. Selected number of top wraps will then be applied, after which the turntable will slow down and stop in home position. Wrap pattern “SPIRAL UP ONLY” has been completed.

**UP-DOWN** - This Selection has two Sub-Modes, programmable to enable the machine to perform the two different wrap patterns (Bottom Wraps First and Top Wraps First). (**Figure 4**)



**Figure 4**

#### 5- WRAPPING MODE; BOTTOM WRAPS FIRST OR TOP WRAPS FIRST (ENABLE ONLY IF THE WRAPPING MODE SPIRAL UP-DOWN HAVE BEEN SELECTED PREVIOUSLY)

Press button #5 on the keypad to switch from **BOTTOM WRAPS FIRST** to **TOP WRAPS FIRST**, or vice-versa.

**BOTTOM WRAPS FIRST** - When this Sub-Mode has been selected machine will first wrap bottom of load applying selected number of bottom wraps. The film carriage will then move to top of load and stop. Selected number of top wraps will then be applied. The film carriage will move down to bottom position, after which the turntable will slow down and stop in home position.

**TOP WRAPS FIRST** - When this Sub-Mode has been selected film carriage will move to top of load and stop. Selected number of top wraps will be applied. The film carriage will then move to bottom of the load and stop. Selected number of bottom wraps will then be applied. The film carriage will remain in bottom position; turntable will slow down and stop in home position.

#### 6- TURNTABLE JOG

The turntable jog can operate only when machine is not in cycle. The turntable jog will rotate at a low speed when the button #6 is held down, when released, the turntable will stop.

#### FILM TENSION

Film tension may be adjusted using the film tension control knob (see **Figure 5**). The range of tension is from 0 to 10 (0 to 4 the low range, 4 to 8 the most selected range for most of the films used by our customers, 8 to 10 as a very high range which may break some types of films).



**Figure 5**

#### CARRIAGE SPEED (Film Overlap)

The carriage speed knob can be used to control the amount of film overlap apply during the wrap. The potentiometer has settings from 0 to 10, the higher the settings the faster the speed. High settings apply less film overlap due to faster carriage speed. Low settings apply more film overlap due to lower carriage speed.

This machine is equipped with independent speed adjustment for travel up & down. (see **Figure 5**)

#### TABLE / TOWER SPEED

The table speed knob can be used to control the speed of the table during the operation mode.

#### MACHINE WRAPPING TEST

**Notice:** It is advisable to test-run the equipment with several pallet loads before attempting to wrap using film. Please position the operator beside the EMERGENCY STOP push button. Start up of the machine (system) may determine the need for the adjustment of:

- Load height stop photoswitch (on the carriage)
- Top limit switch position
- Bottom limit switch position
- Roping bar height adjustment

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

## LOADING THE FILM

The film roll can be loaded on the carriage mandrel 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. Swing up the top mandrel spool.
3. Put the roll of film on the bottom mandrel.
4. Install the top mandrel on top of the roll to prevent upward movement.
5. Pull the handle marked PULL TO OPEN to open film distributor cradle.
6. Pass the roped tail of the film through opening (as shown on the film quick threading pattern DWG. # 418180 Fig.1).
7. Close the film distributor cradle by pushing bar marked PUSH TO CLOSE.
8. When the film feeding is completed (fig. 2) – turn the power switch on.
9. Peel off the first few winds of the film (multistrech will run due to displacement of the dancer roller) and fix the film end onto the load.

**The system is now ready to begin the first wrapping cycle.**

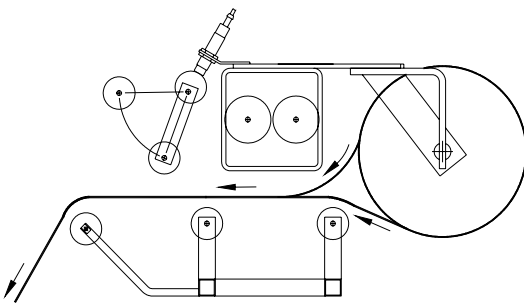


Fig. 1 OPEN CRADLE

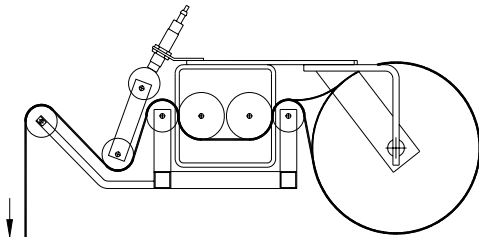


Fig. 2 CLOSED CRADLE

FILM QUICK THREADING

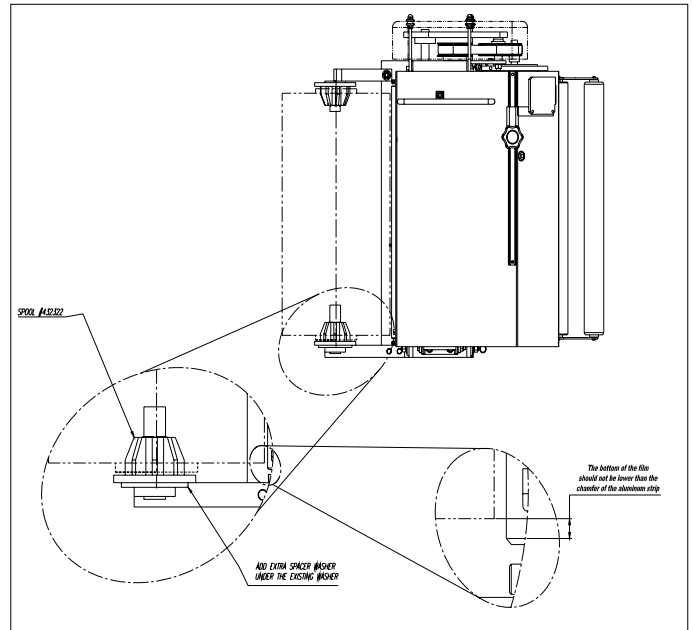
DWG # 418180

## ADDITIONNAL SPACER WASHER

(IF NEEDED ONLY)

The roll of film may be slightly different from time to time, so you might have to change the bottom spool spacer (washer). The only thing you have to do is to add or remove the spacer washer under the bottom spool. With the machine there is 1 washer under the bottom spool (432322), and you have received with the machine 2 extra washer to be use if needed.

**Note:** The bottom of the film should not be lower than the chamfer of the aluminum strip as shown on the drawing below.





## PROXIMITY SENSOR ADJUSTMENT

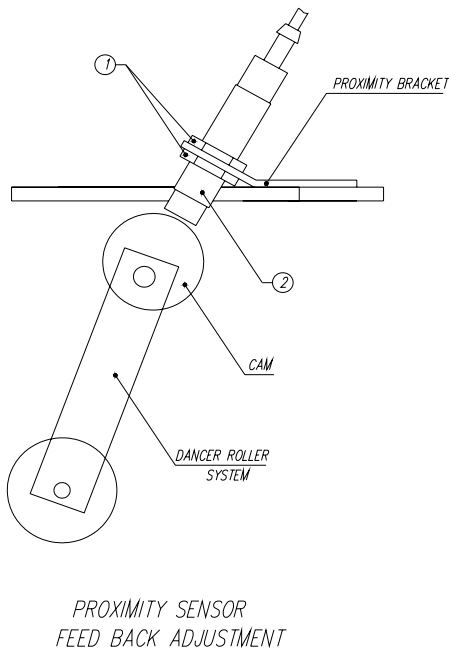
Occasionally the Feed Back Proximity Sensor may need some adjustment. The position of the feed back proximity sensor against the cam is shown on drawing # 419139 and on **Figure 6**.

Adjustment instructions:

- Power down machine.
- Remove the carriage cover.
- Unbolt the two nuts holding the proximity switch - item # 1.
- Turn the Proximity sensor - (item # 2) to create the gap between the cam and the front side of proximity sensor about 1/8 ".
- Tighten on the nuts securing the Proximity Sensor.
- Put the cover back on.
- Power up machine.
- Turning the trim pot SPAN adjust the moment when motor starts to turn when dancer roller moved from its home position up to 1 1/2".
- If not satisfied repeat the procedure.



**Figure 6**



# MACHINE MAINTENANCE

All general information about machine maintenance is based on normal machine working conditions: indoor, moderate dust and low moisture environment, and maximum rotation of 32 RPM of turntable/rotary arm. They should be regarded as guidelines, reviewed and corrected according to requirements of actual use and conditions.

## 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 it 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.

## REDUCER OIL CHANGE

All external cap screws and plugs on the reducing transmission should be checked for tightness after the first week. It is recommended to change the oil every six months or at least 1800 hours of operation, whichever comes first. When adding or changing oil, the transmission should never be filled above the oil level mark indicated, because leakage and overheating may occur. Below is the list of the type of lubricant that should be used. List of recommended reducer oils:

Manufacturer	Lubricant
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 Suer-r Cyl. Oil
Philips Oil Corp.	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

## RING BEARING MAINTENANCE (when applicable)

The ring bearing (located under the turntable) should be re-lubricated internally and externally.

**Internally:** by injecting grease into all the lubrication nipples in succession until a collar of fresh grease appears around the perimeter of the ring. The re-lubrication interval suggested for these bearings, used in Stretch Wrapping Machinery is 750 hours, with a maximum period of 6 months. The lubricant should be fresh and applied in sufficient quantities to make sure all surfaces are lubricated.

**Externally:** by lubricating and wiping the chain drive with oily cloth. The frequency of lubrication depends on entirely upon the usage of the machine and environment in which the machine is placed (dust, moisture etc.). Machines working under extremely dirty conditions should be lubricated every 400 operating hours but at minimum, every 2 months. Longer lubrication intervals may occur only when machine is working under very clean and dry conditions but should be not be longer than 6 months.

List of recommended lubricants for the ring bearing lubrication

Manufacturer	Lubricant
BP	Energrease LS2
Castrol	Speeroll AP2
Esso	Beacon 2
Gulf	Crown Grease 2
Mobil	Mobilus 2
Shell	Avania Grease R2
Texaco	Glissando FT 2
Valvoline	LB-2

## TOWER RACEWAYS MAINTENANCE

The film distributor (carriage) is sliding on the plastic guides attached behind its back plate. The section of the tower on which the plastic guides move (raceways) should be cleaned and re-greased approximately every 600 hours of machine operation.

NOTICE: If the machine works in a dusty and corrosive environment, the raceways should be re-greased more often (at least every 100 hours).

## CHAIN MAINTENANCE

To clean the chain, wipe it with an oily cloth every month. When machine is working in a dusty and damp environment, it may be necessary to repeat the cleaning operation more often. As the chain lubricants please use the most common chain lubricants on the market. With time, the chain will tend to stretch. A loose tower chain should be tightened by moving the reducer on its mounting plate. Turntable is equipped with automatic chain tensionner and does not need any adjustment.

NOTICE: First chain tension inspection must be done after the first two weeks of machine usage.

## CAM FOLLOWER MAINTENANCE (when applicable)

The cam followers 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 :**

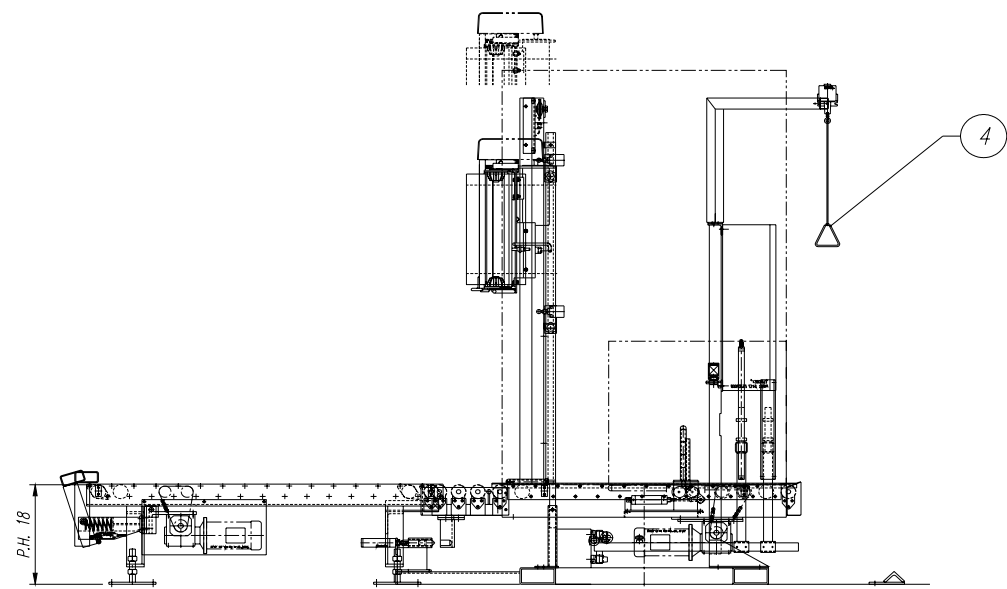
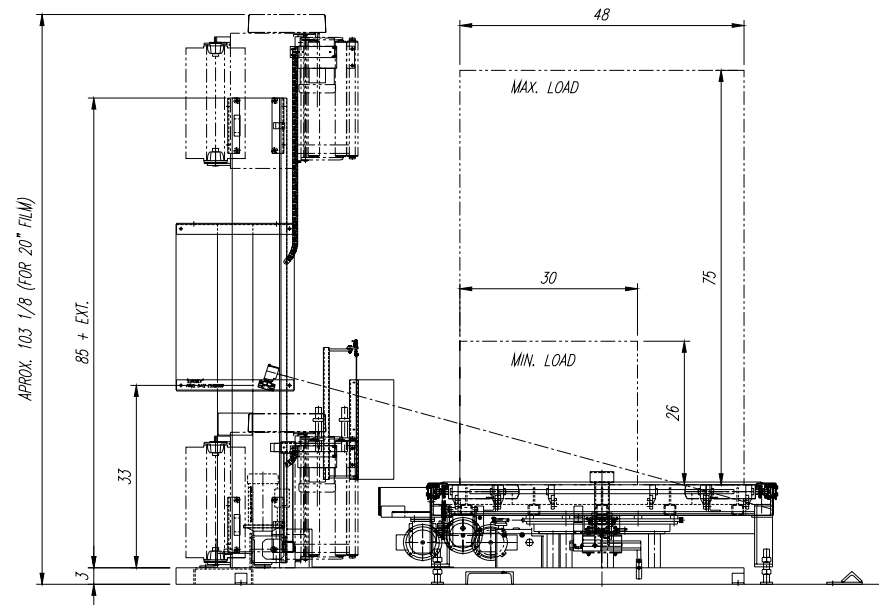
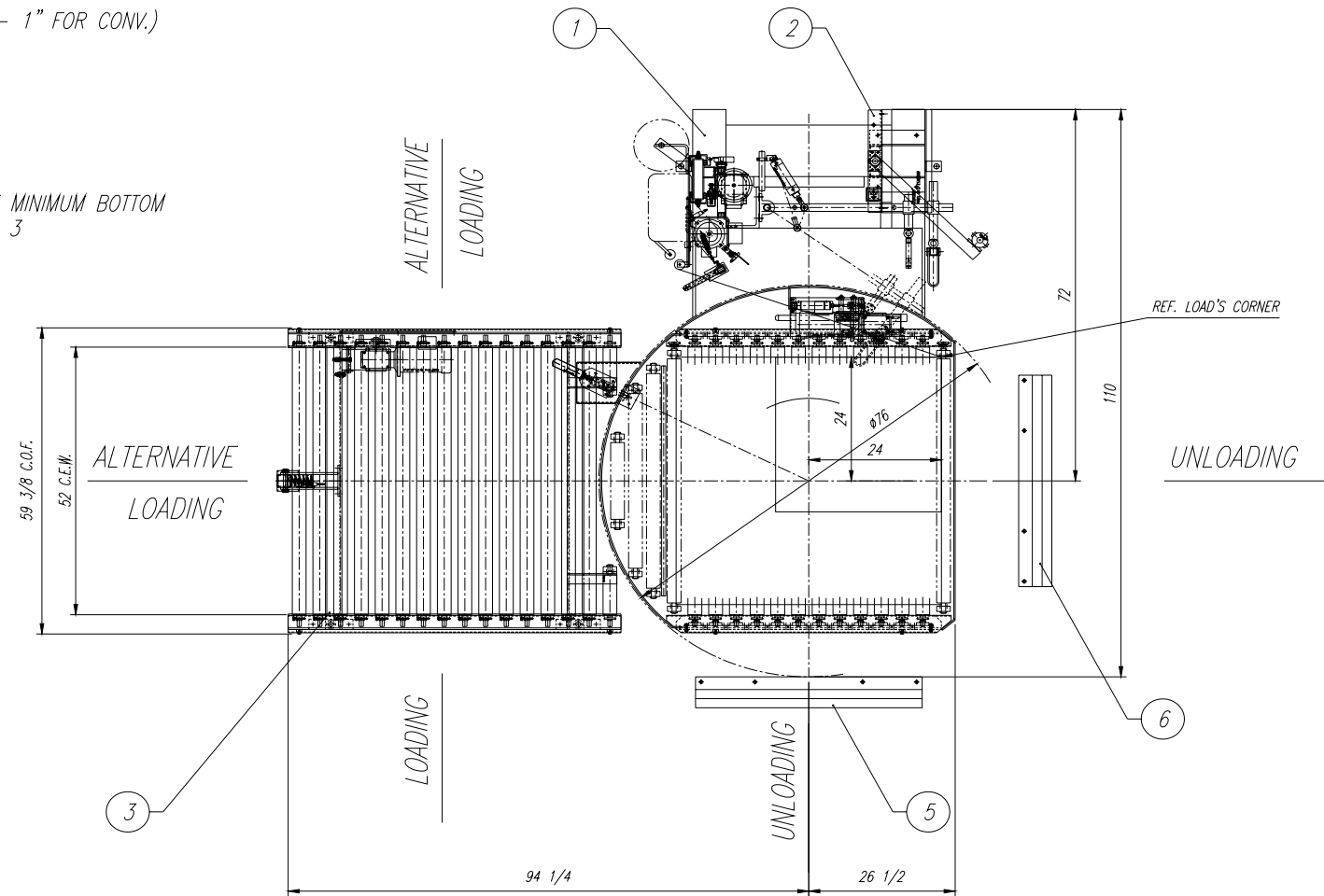
**\* Quantity listed in order of part number**


**\*\* The names given to the parts are generic**



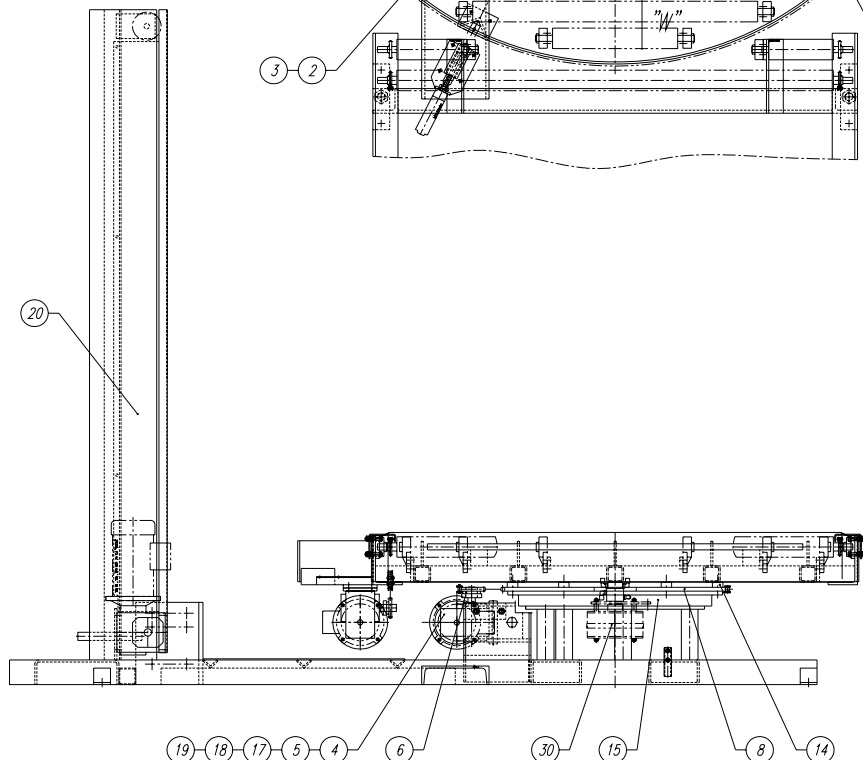
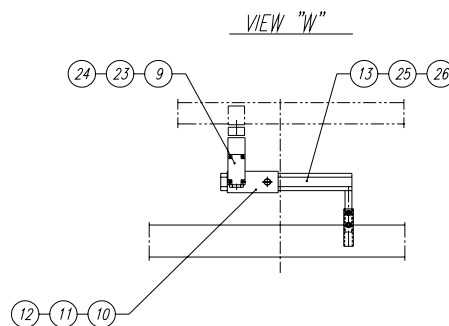
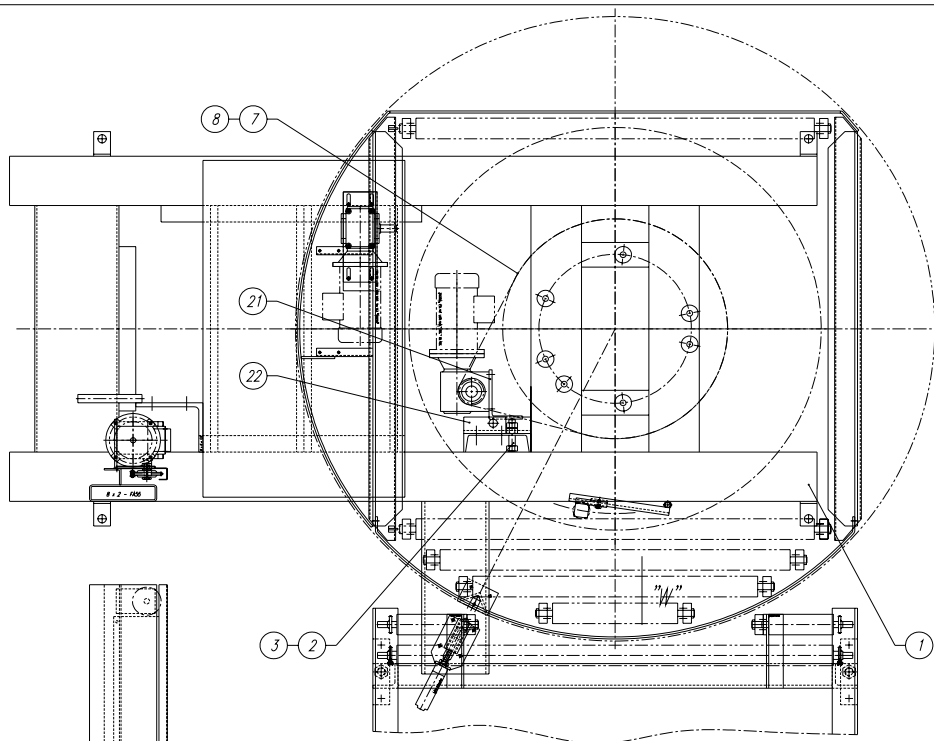
NOTE :


1. CONVEYOR ROLLERS : 2 1/2" DIA. x 3 3/4" CENTERS , 52" EFFECTIVE WIDTH
2. CONVEYOR PASS HEIGHT : 18" (FIXED FOR CENTRAL MODUL, ADJUSTABLE +/- 1" FOR CONV.)
3. CONVEYOR SPEED : 30 FPM
4. TURNTABLE SPEED : 12 RPM
5. MAX. LOAD SIZE : 48" L x 48" W x 75" H
6. MIN. LOAD SIZE : 30" L x 30" W x 26" H (\*)  
(\*) - FOR 20" FILM CARRIAGE. (FOR 30" FILM CARRIAGE IT IS 36" H)
7. LOAD WEIGHT : MIN. 200 Lbs , MAX. 4000 (\*\*)  
(\*\*) - IF PALLET BOTTOM BOARDS ARE PARALLEL TO CONVEYOR ROLLERS, THE MINIMUM BOTTOM BOARD WIDTH IS 4" , AND THE MINIMUM NUMBER OF BOTTOM BOARD IS 3
8. POWER REQUIREMENT : 115 VAC, 1 Ph, 60 Hz, 20 Amp
9. AIR SUPPLY : 3 CFM @ 80 PSI
10. MACHINE COLOR : "ORION STD. GREY"
11. REVERSING CONVEYOR



6	FORKLIFT WHEEL STOP			1	
5	FORKLIFT WHEEL STOP			1	
4	LANYARD SWITCH HANDLE ASS'Y			1	
3	5 FT CONTOUR ROLLER CONVEYOR			1	
2	ELECTRICAL PANEL STAND			1	
1	BASE & TOWER ASS'Y			1	
	76" DIA. TURNTABLE ASS'Y				
	20" INSTA-THREAD FILM CARRIAGE ASS'Y				
	20" FILM TAIL TREATMENT ASS'Y				
No.	DESCRIPTION	DWG SIZE	PART No.	Q'ty	WEIGHT
REMARKS:					
REMARKS:					
CTS 67 LAYOUT					
 PACKAGING INC. 2270 INDUSTRIEL LAVAL QUEBEC, CANADA, H7S 1P9 TEL.: (514) 667-9769	DATE:	AUG-29-2003	SCALE:	1 : 8	
	DRAWN BY:	S. KUBICKA	MACHINE TYPE:	CTS67	
	CHECKED BY:	K. GLOWACKI	DRAWING SIZE:	D	
	ASSEMBLY DWG:		JOB No.:	STD 2003/2	DRAWING No.:
				438880M	

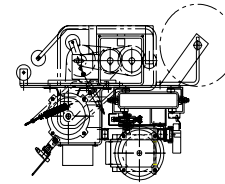
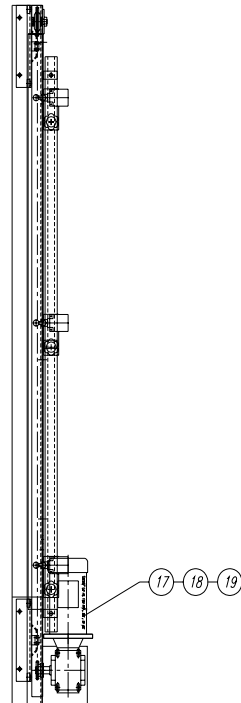
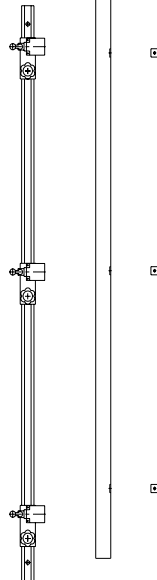
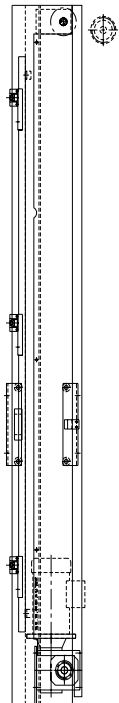
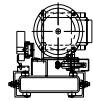
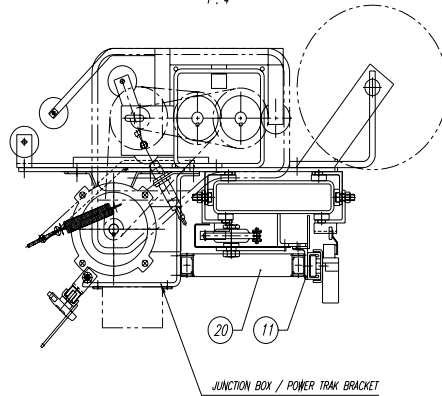




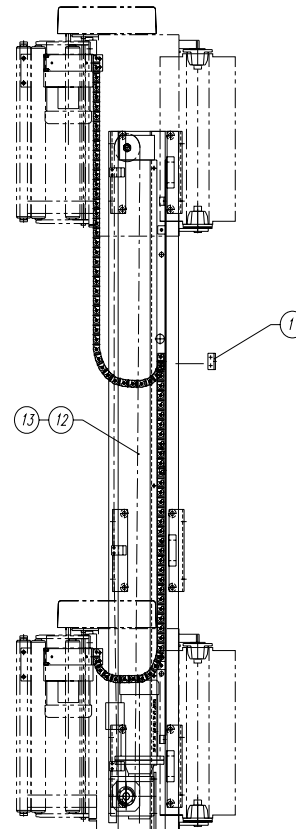
30	ROTORSEAL-SLIPPING ASS'Y ( 4 WIRES )	427861	1		
29	HEX HEAD SCREW	013405	6		
28	CENTERING BUSHING	402388	4		
27	HEX. NUT	012846	10		
26	HEX. NUT	013407	2		
25	HEX HEAD SCREW	013470	2		
24	HEX. NUT	012726	2		
23	RD. HEAD PHILLIPS SCREW	012858	2		
22	TOP BRACKET	403103	1		
21	REDUCER BASE	436762	1		
20	TUBULAR TOWER (L - R) ASS'Y	438882	1		
19	SPRING WASHER	012724	4		
18	FLAT WASHER	012725	4		
17	HEX HEAD SCREW	010455	4		
16	HEX HEAD SCREW	012847	11		
15	TURNABLE BEARING	014671	1		
14	TI. SPACER	270060	6		
13	PROXIMITY SWITCH CHANNEL	260972	1		
12	HEX HEAD SCREW	012474	1		
11	CHANNEL GUIDE	220518	1		
10	PROXIMITY SWITCH HOLDER	260817	1		
9	PROXIMITY SWITCH	010739	1		
8	SPROCKET	415961	1		
7	CHAIN	011484	1		
6	SPROCKET	011226	1		
5	REDUCER	015699	1		
4	EL. MOTOR	017851	1		
3	HEX. NUT	012992	1		
2	ADJUSTING SCREW	403264	2		
1	S466 BASE WELDING (L - R)	436211	1		
No.	DESCRIPTION	DWG SIZE	PART No.	Q'ty	WEIGHT
REMARKS:					
REMARKS:					
CTS67 BASE & TOWER ASS'Y (L - R)					
 <b>orion</b> PACKAGING INC. 2270 INDUSTRIEL, LAVAL QUEBEC, CANADA, H7S 1P9 TEL.: (514) 667-9769		DATE:  AUG-29-2003		SCALE:  1 : 8	
ASSEMBLY DWG:  438880 D		DRAWN BY:  S. KUBICKA		MACHINE TYPE:  CTS67	
		CHECKED BY:  K. GLOWACKI		DRAWING SIZE:  D	
JOB No.:		STD 2003/2		DRAWING No.:	
				438881M	

# POWER TRAK MOUNTING

1:4

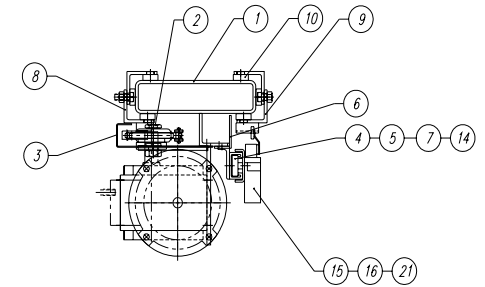


"W"



## VIEW "W"

1:4



21	LIMIT SWITCH	010123	3	
20	NYLATRAC	015897	1	
19	SPROCKET	010074	1	
18	REDUCER	015700	1	
17	EL. MOTOR	017851	1	
16	HEX. NUT	012726	6	
15	PAN PHILL SCREW	012481	6	
14	HEX. HEAD SCREW	012474	3	
13	CHAIN LINK	010009	2	
12	ROLLER CHAIN	010009	1	
11	TOWER POWER TRAK BRACKET	435272	1	
10	SLIDE BUTTON	427058	12	
9	CARRIAGE ATTACHMENT ANGLE W/ACTUATOR	424814	1	
8	CARRIAGE CHAIN ATTACHMENT ANGLE	420000	1	
7	CHANNEL GUIDE	220518	3	
6	LIMIT SWITCH CABLE COVER	436276	1	
5	LIMIT SWITCH HOLDER	260816	3	
4	LIMIT SWITCH CHANNEL	409047	1	
3	CHAIN GUARD (L-R)	436281	1	
2	IDLER SPROCKET ASS'Y	420809	1	
1	TUBULAR TOWER 8 x 2 WELDING (L-R)	436274	1	

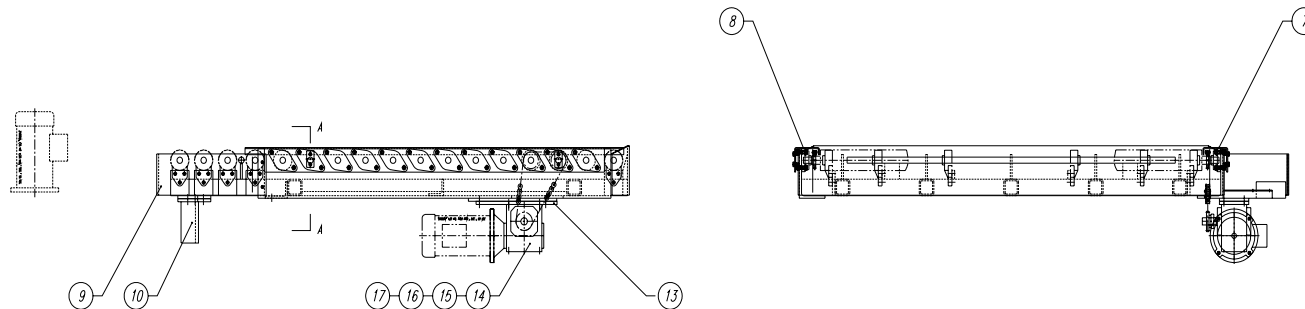
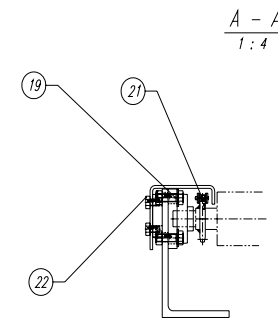
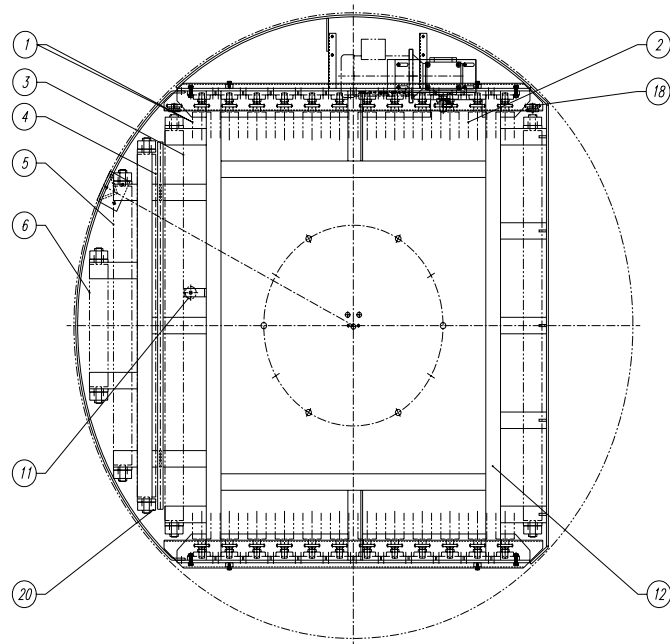
No.	DESCRIPTION	DWG SIZE	PART No.	Q'ty	WEIGHT
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REMARKS:

REMARKS:

## CTS67 TUBULAR TOWER 8 x 2 ASS'Y (L-R)


<p>ORION PACKAGING INC. 2270 INDUSTRIEL LAM QUEBEC, CANADA, H7S 1P9 TEL.: (514) 667-9769</p>	DATE:	AUG-29-2003	SCALE:	1:8
	DRAWN BY:	S. KUBICKA	MACHINE TYPE:	CTS67
	CHECKED BY:	K.GLOWACKI	DRAWING SIZE:	D
	ASSEMBLY DWG:	438880 D	JOB No.:	STD 2003/2
			DRAWING No.:	438882M



22	HEX. HEAD CAP SCREW	013471	8		
21	ROLLER CHAIN	010583	12		
20	BEARING	012341	10		
19	CONVEYOR CHAIN GUARD & BEARING, ASS'Y	436896	24		
18	SPROCKET	010748	2		
17	ROLLER CHAIN	010009	1		
16	SPROCKET	010411	1		
15	EL. MOTOR	017851	1		
14	REDUCER	015189	1		
13	REDUCER BASE	200626	1		
12	CTS67 TURNTABLE WELDING	437969	1		
11	PROXIMITY SWITCH TARGET	402711	1		
10	TURNABLE LOCK CATCH	436221	1		
9	INFEED SIDE GUARD	436218	1		
8	CHAIN GUARD	437976	1		
7	DRIVE SIDE CHAIN GUARD	437977	1		
6	ROLLER	410045	1		
5	ROLLER	410046	1		
4	ROLLER	409971	1		
3	ROLLER	414494	2		
2	MEDIUM DUTY DRIVE ROLLER	434967	2		
1	MEDIUM DUTY BASIC ROLLER	434966	10		
No.	DESCRIPTION	DWG. SIZE	PART No.	Q'ty	WEIGHT

REMARKS:

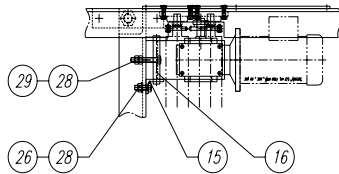
REMARKS:

 <b>orion</b> PACKAGING INC. 2270 INDUSTRIEL, LAVAL QUEBEC, CANADA, H7S 1P9 TEL.: (514) 667-9769	DATE:	AUG-29-2003	SCALE:	1 : 8	
	DRAWN BY:	S. KUBICKA	MACHINE TYPE:	CTS67	
	CHECKED BY:	K. GLOWACKI	DRAWING SIZE:	D	
	ASSEMBLY DWG.:	438880 D	JOB No.:	STD 2003/2	DRAWING No.:

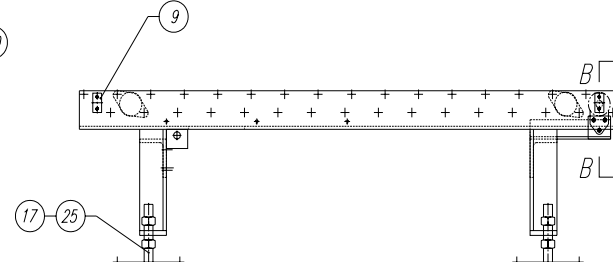
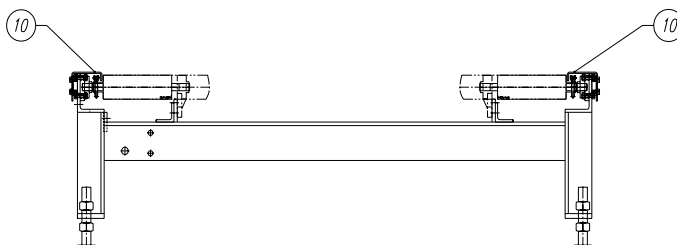
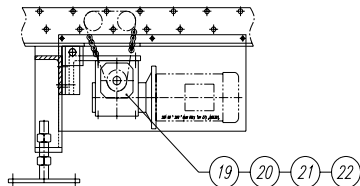
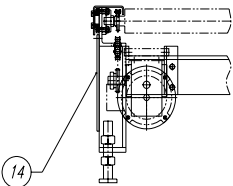
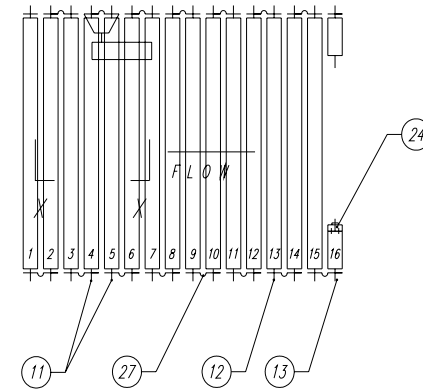
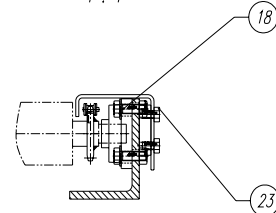
# DIAGRAM

N T S

X - X  
CONV. DRIVE ASS'Y



B - B  
1 : 4




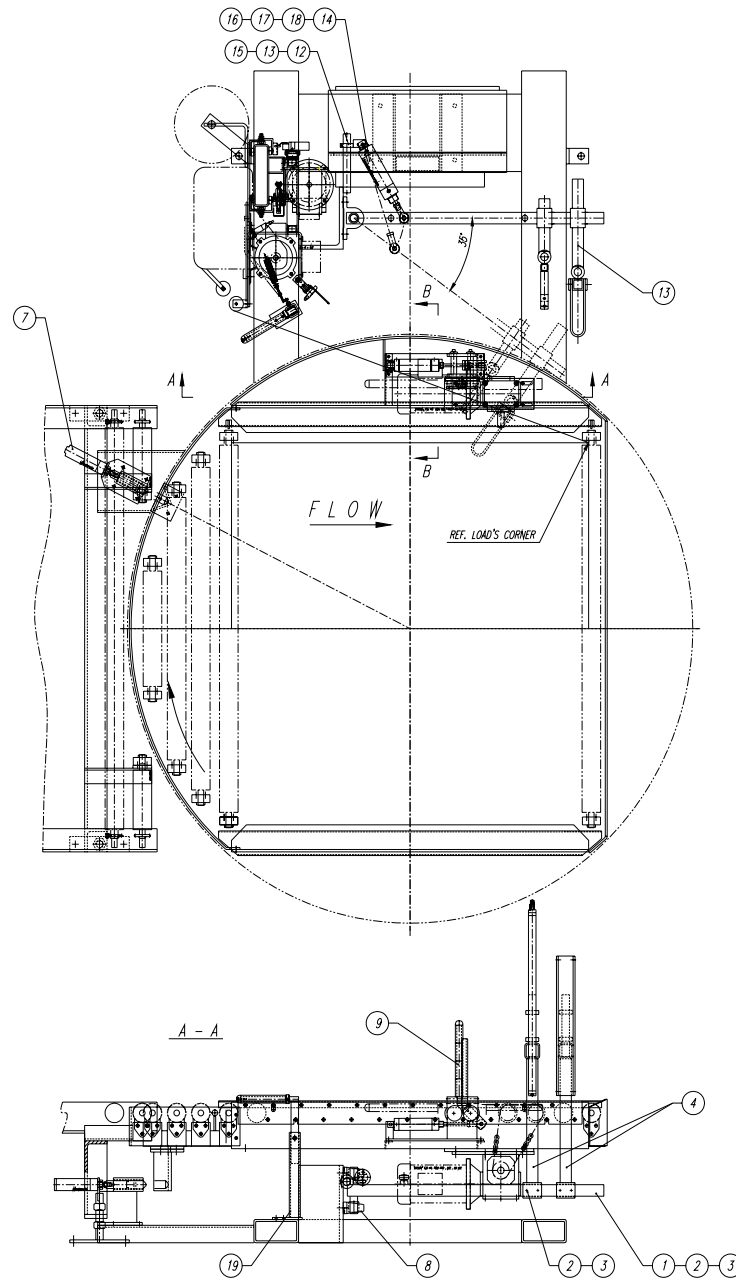
29	HEX. HEAD CAP SCREW	010408	1	
28	REGULAR HEX. NUT	011266	4	
27	ROLLER CHAIN	010583	14	
26	HEX. HEAD CAP SCREW	010287	2	
25	HEX. NUT	012688	8	
24	BEARING	012341	2	
23	HEX. HEAD CAP SCREW	013471	8	
22	ROLLER CHAIN	010009	1	
21	SPROCKET	010411	1	
20	REDUCER	015189	1	
19	EL. MOTOR	017851	1	
18	CONVEYOR CHAIN GUARD & BEARING ASS'Y	436896	32	
17	LEG	240868	4	
16	REDUCER BASE	403685	1	
15	BRACKET R.H.	408196	1	
14	CONVEYOR DRIVE GUARD	436184	1	
13	MEDIUM DUTY CONTOUR ROLLER	434968	2	
12	MEDIUM DUTY BASIC ROLLER	434966	13	
11	MEDIUM DUTY DRIVE ROLLER	434967	2	
10	5 FT CHAIN GUARD	436968	2	
9	CONVEYOR CHAIN GUARD SPACER	436894	4	


No.	DESCRIPTION	DWG. SIZE	PART No.	Q'ty	WEIGHT
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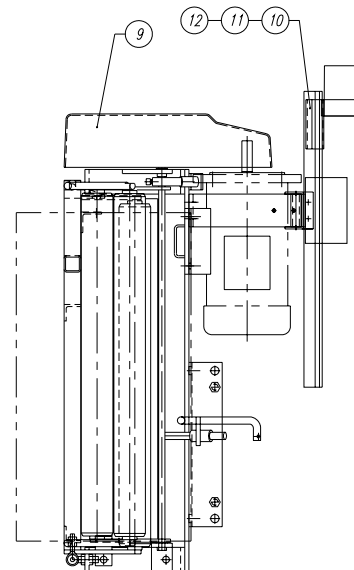
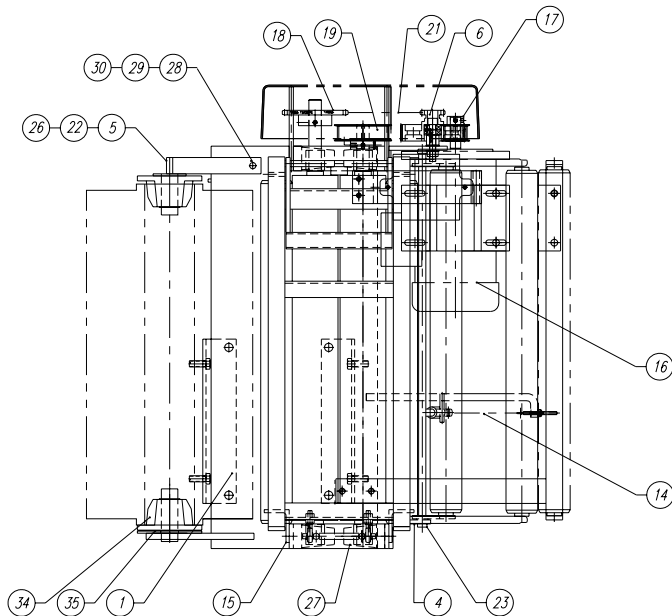
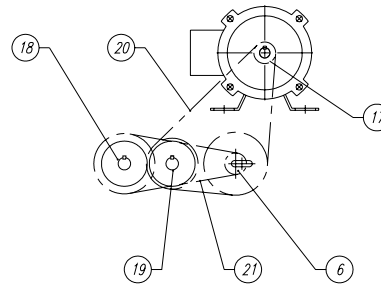
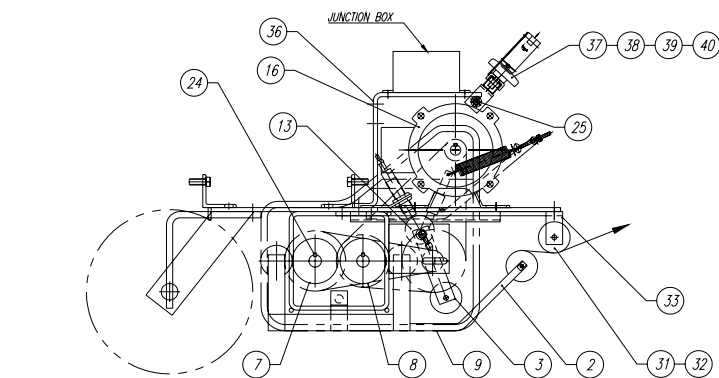
REMARKS:

REMARKS:


CTS67- 5 FT LG CONTOUR ROLLER CONVEYOR L-R					
 <b>orion</b> PACKAGING INC. 2270 INDUSTRIEL, LAVAL QUEBEC, CANADA, H7S 1P9 TEL.: (514) 667-9769	DATE:	AUG-29-2003	SCALE:	1 : 8	
	DRAWN BY:	S. KUBICKA	MACHINE TYPE:	CTS67	
	CHECKED BY:	K. GLOWACKI	DRAWING SIZE:	D	
	ASSEMBLY DWG.:	438880 D	JOB No.:	STD 2003/2	DRAWING No.:



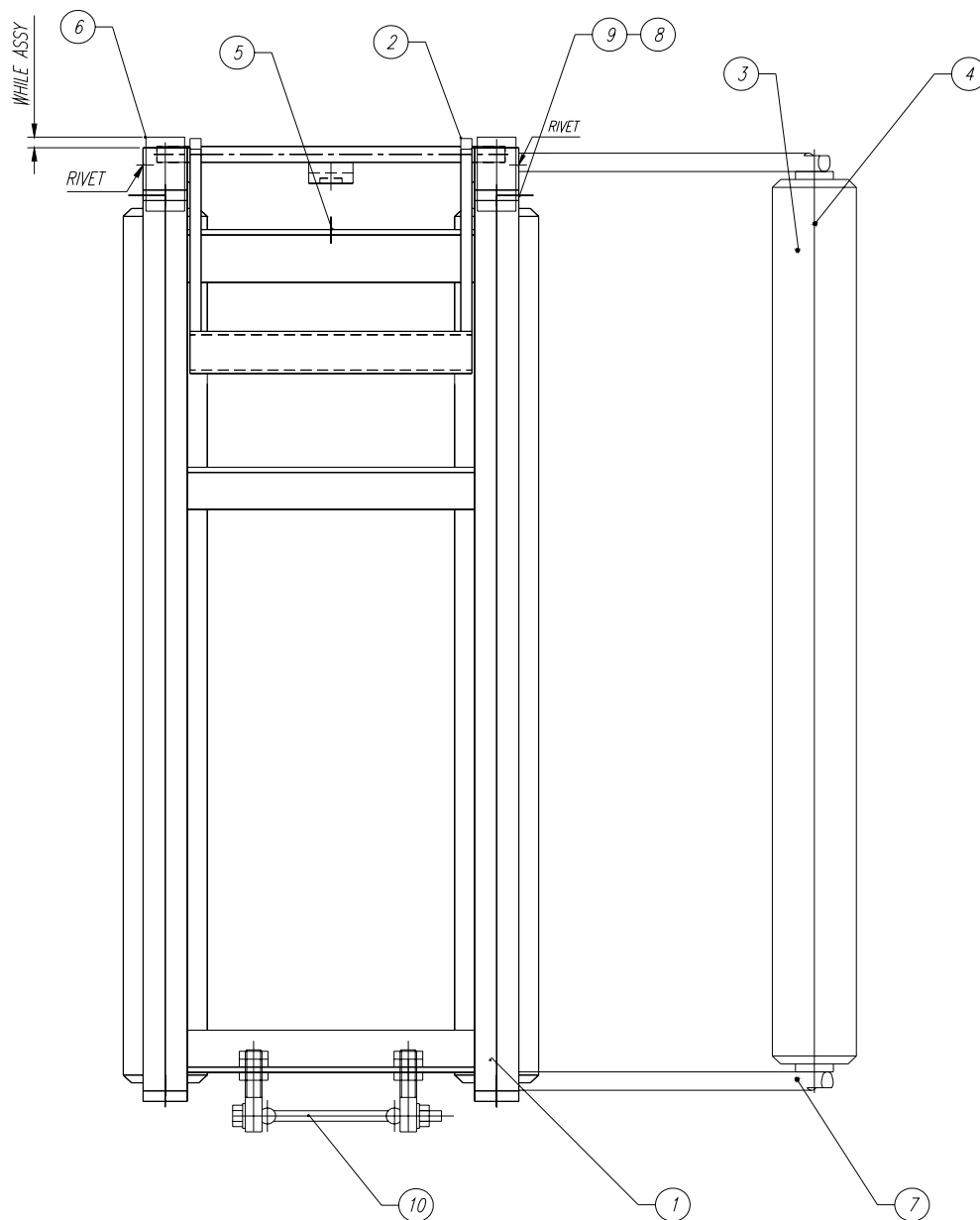
19	ROPING ROLLER ASS'Y	431001	1		
18	FLAT WASHER	017494	1		
17	SOCKET HD CAP SCREW	010191	1		
16	AIR CYLINDER	014167	1		
15	CYLINDER HOLDER	424885	1		
14	ROD END	013813	1		
13	HEX. NUT	011128	1		
12	HEX. HEAD CAP SCREW	013479	1		
11	20" BRUSH ASS'Y	417539	1		
10	20" HOT WIRE CUTTER ASS'Y	417750	1		
9	FILM CLAMP ASS'Y R.H.	414433	1		
8	BEARING	011191	2		
7	TURNABLE POSITIONING LOCK ASS'Y	436080	1		
6	ARM SEGMENT	404925	1		
5	KNIFE ARM SEGMENT	417244	1		
4	BRUSH HOLDER	412236	2		
3	HEX NUT	012751	8		
2	HEX BOLT	012757	8		
1	CUTTER-BRUSH ARM	427730	1		
No.	DESCRIPTION	DWG SIZE	PART No.	Q'ty	WEIGHT
REMARKS:					
REMARKS:					
CTS67 FILM TAIL TREATMENT					
 PACKAGING INC. 2270 INDUSTRIEL LAVAL QUEBEC, CANADA, H7S 1P9 TEL.: (450) 667-9769		DATE:	SEP-04-03	SCALE:	1 : 8
		DRAWN BY:	S. KUBICKA	MACHINE TYPE:	CTS67
		CHECKED BY:	K. GLOWACKI	DRAWING SIZE:	D
ASSEMBLY DWG:	438880 D	JOB No.:	STD 2003/2	DRAWING No.:	438916M




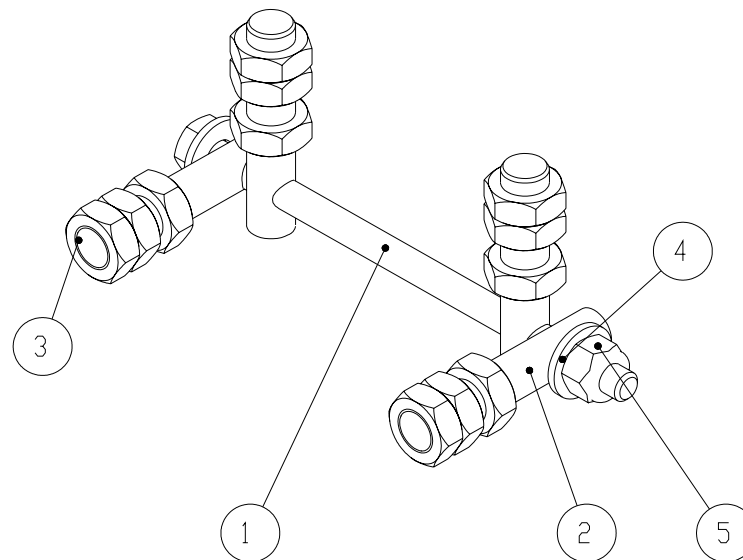
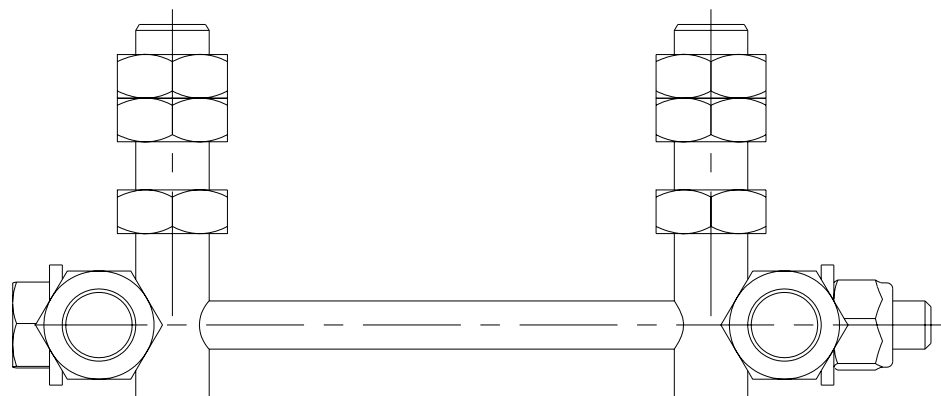
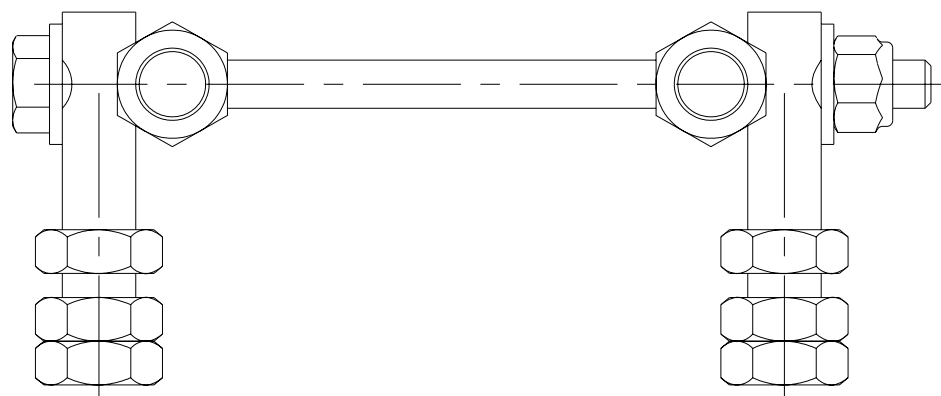
40	BLACK KNOB	010092	1	
39	PAN PHILL SCREW	012481	2	
38	HEX. NUT	012726	2	
37	CHANNEL GUIDE	427690	1	
36	JUNCTION BOX/POWER TRAK BRACKET	435553	1	
35	BOTTOM SPOOL WASHER	432322	1	
34	BOTTOM SPOOL	432323	2	
33	20" (30") ROLLER BRACKET (FLR)	427276	1	
32	IDLE ROLLER SHAFT-20"	413249	1	
31	ALUMINUM ROLLER 1.9 - 20"	402789	1	
30	HEX. NUT	012689	1	
29	FLAT WASHER	012221	1	
28	SOCK. HD. CAP SCREW	010259	1	
27	PILLOW BLOCK	011192	4	
26	FLAT WASHER	012323	1	
25	HEX. HEAD SCREW	012474	2	
24	SQ. KEY	010227	3	
23	FL. BRONZE BUSHING	014247	2	
22	SELF SEATING RETAINING RING	013860	2	
21	CHAIN	013397	1	
20	TIMING BELT	011151	1	
19	PULLEY	431672	1	
18	SPROCKET (245 %)	428647	1	
17	PULLEY	431477	1	
16	EL. MOTOR	015240	1	
15	CRADLE ROLLER OPENING LOCK	409469	2	
14	TENSION SCREW ASS'Y	433628	1	
13	PROXIMITY SENSOR CAM	413744	1	
12	PHOTOCELL BRACKET	435397	1	
11	PHOTOCELL HOLDER (FLR, FRL)	432739	1	
10	PHOTOCELL CHANNEL	434651	1	
9	FIBERGLASS COVER - FLR	414854	1	
8	RUBBER ROLLER - 2 (20" FILM)	420917	1	
7	RUBBER ROLLER - 1 (20" FILM)	420916	1	
6	SPROCKET / PULLEY ASS'Y	431475	1	
5	TOP MANDREL FLR	414853	1	
4	DANCER ROLLER BRACKET FLR	414852	1	
3	DANCER ROLLER ASSEMBLY - 20" IT, FLR	414843	1	
2	CRADLE ROLLER ASSEMBLY - 20" IT, FLR	426137	1	
1	BACK PLATE - 20" INSTA-THREAD, FLR	438964	1	

No.	DESCRIPTION	DWG. SIZE	PART No.	Q'ty	WEIGHT
REMARKS:					
REMARKS:					
20" INSTA-THREAD FILM CARRIAGE ASS'Y (FLR)					
 ORION PACKAGING INC. 2270 INDUSTRIEL, LAVAL QUEBEC, CANADA, H7S 1P9 TEL.: (450) 667-9769		DATE:	SEP-02-2003	SCALE:	1 : 4
		DRAWN BY:	S. KUBICKA	MACHINE TYPE:	CTS67
		CHECKED BY:	-	DRAWING SIZE:	D
		ASSEMBLY DWG.:	-	JOB No.:	STD 2003/2
				DRAWING No.:	438885M





10	CRADLE HINGE ASS'Y	426200	1		
9	HEX NUT	013451	2		
8	HEX SOCK. CAP SCREW	015020	2		
7	HEX SOCK. BUTT. HEAD SCREW	015133	2		
6	POLYETHYLENE	015023	2		
5	SPRING	013994	1		
4	IDLE ROLLER SHAFT	413249	3		
3	ALUMINIUM ROLLER 1.9 DIA - 20 LG	402789	3		
2	LOCK	412542	1		
1	CRADLE ROLLER FRAME - 20" (FLR)	426138	1		
No.	DESCRIPTION	DWG. SIZE	PART No.	Q'ty	WEIGHT
REMARKS:					
REMARKS:					
CRADLE ROLLER ASSEMBLY - 20 ( FLR)					
<div><p><b>orion</b> PACKAGING INC. 2270 INDUSTRIEL, LAVAL QUEBEC, CANADA, H7S 1P9 TEL.: (514) 667-9769</p></div>		DATE:	DEC-13-99	SCALE:	1 : 2
				MACHINE TYPE:	H,L/14
				DRAWING SIZE:	C
		ASSEMBLY DWG.:	-	JOB No.:	STD



5	HEX. SELF-LOCKING NUT		015098	1
4	FLAT WASHER		012221	2
3	HEX. JAM NUT		014235	12
2	SPECIAL BOLT		415938	4
1	HEX BOLT		015099	1
#	TITLE	Length	PART NO	Q

REMARKS

REMARKS

### CRADLE HINGE ASS'Y

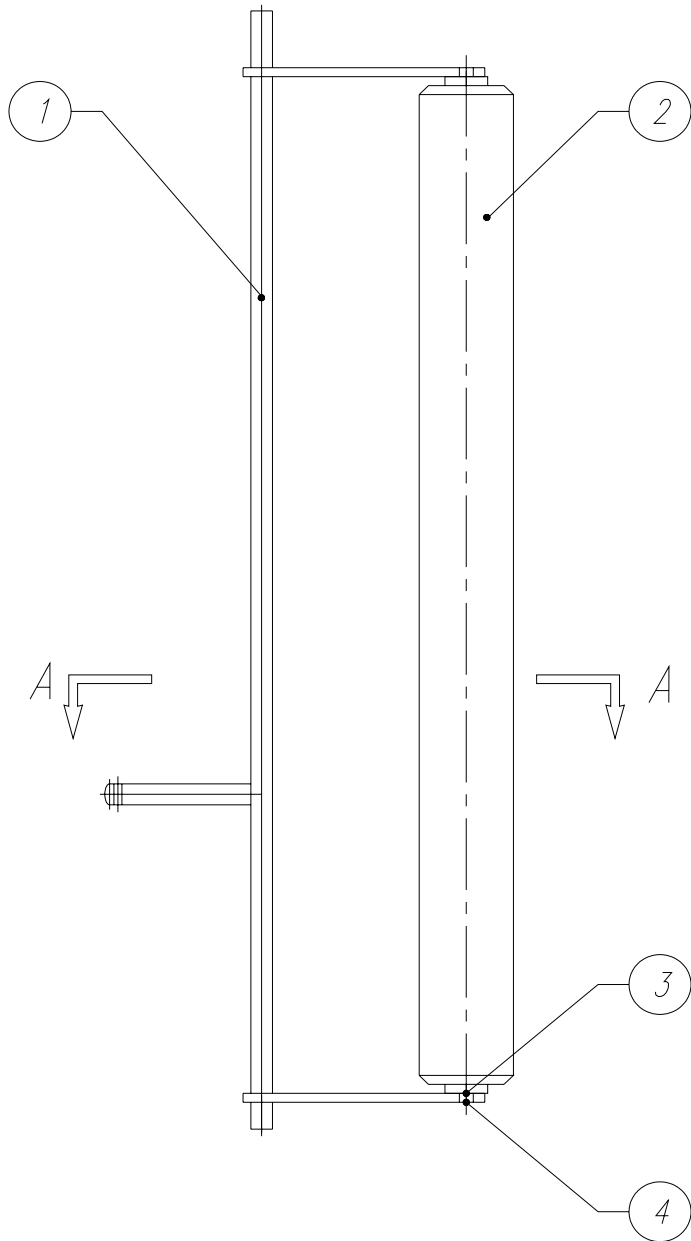
**orion**  
PACKAGING INC.  
2270 INDUSTRIEL, LAVAL  
QUEBEC, CANADA, H7S 1P9  
TEL: (450) 667-9769

TOLERANCES  
UNLESS OTHERWISE SPECIFIED  
MACHINED :  $\pm 1/32$   
WELDED :  $\pm 1/16$   
ANGLE :  $\pm 1/16$   
XXX : H02  
XXXX : H005  
REFERENCE DWG

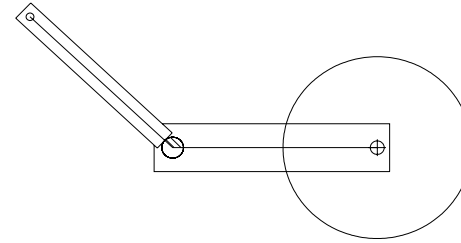
DRAWN BY  
**S.KUBICKA**  
APPROVED BY  
MACHINE TYPE  
**ALL**  
ASSEMBLY DWG


DRAWN DATE  
**12/15/1999**  
APPROVED DATE  
JOB NO.  
DWG NO.  
**426200M**

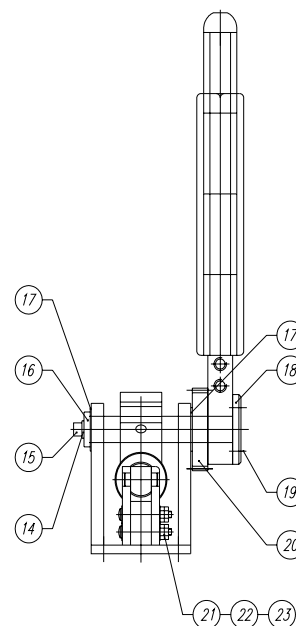
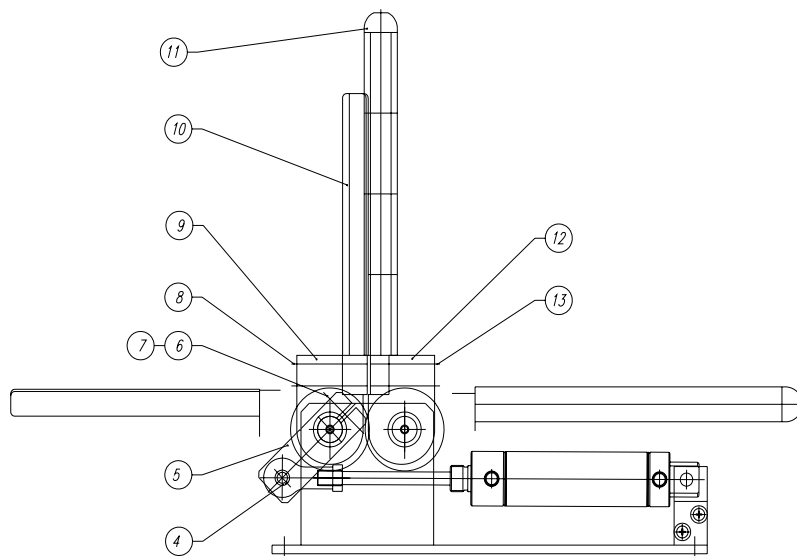
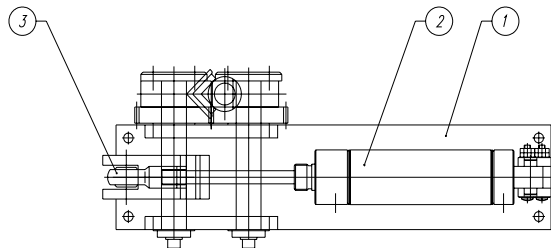
WEIGHT (lb)  
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SCALE  
**1:1**  
SHEET  
**1 / 1**  
REV.  
**A+**




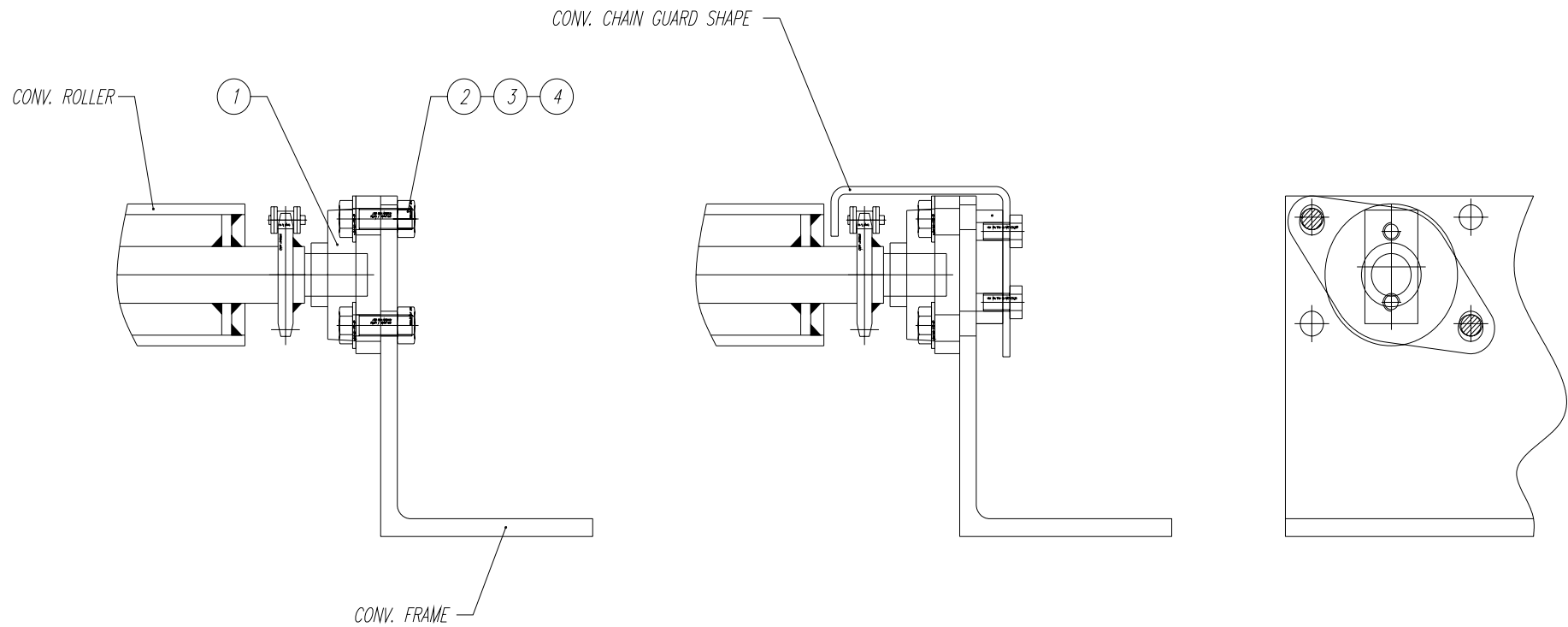
A - A




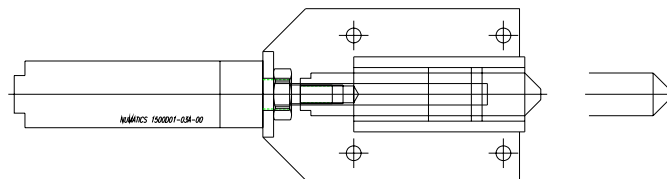
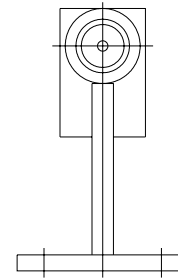
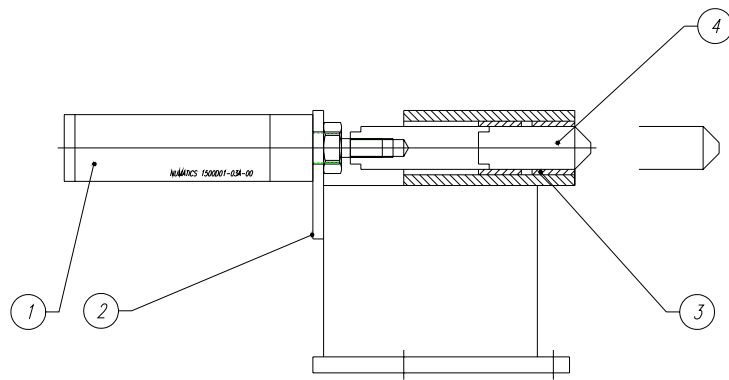
4	HEX HEAD SCREW		012475	2	
3	FLANGE NUT		014164	2	
2	ALUMINIUM ROLLER 1.9 DIA - 20		402789	1	
1	DANCER ROLLER CRADLE - 20 (FLR)		414851	1	
No.	DESCRIPTION	DWG. SIZE	PART No.	Q'ty	WEIGHT
REMARKS:					
REMARKS:					
<i>DANCER ROLLER ASSEMBLY - 20 (FLR)</i>					
 PACKAGING INC. 2270 INDUSTRIEL, LAVAL QUEBEC, CANADA, H7S 1P9 TEL.: (514) 667-9769		DATE:	JAN-23-1997		
		SCALE:	1 : 4		
		MACHINE TYPE:	ALL/12		
ASSEMBLY DWG.: 438636M		DRAWING SIZE:	A		
		DRAWING No.:	414843M		
		JOB No.:	STD - 12.1		




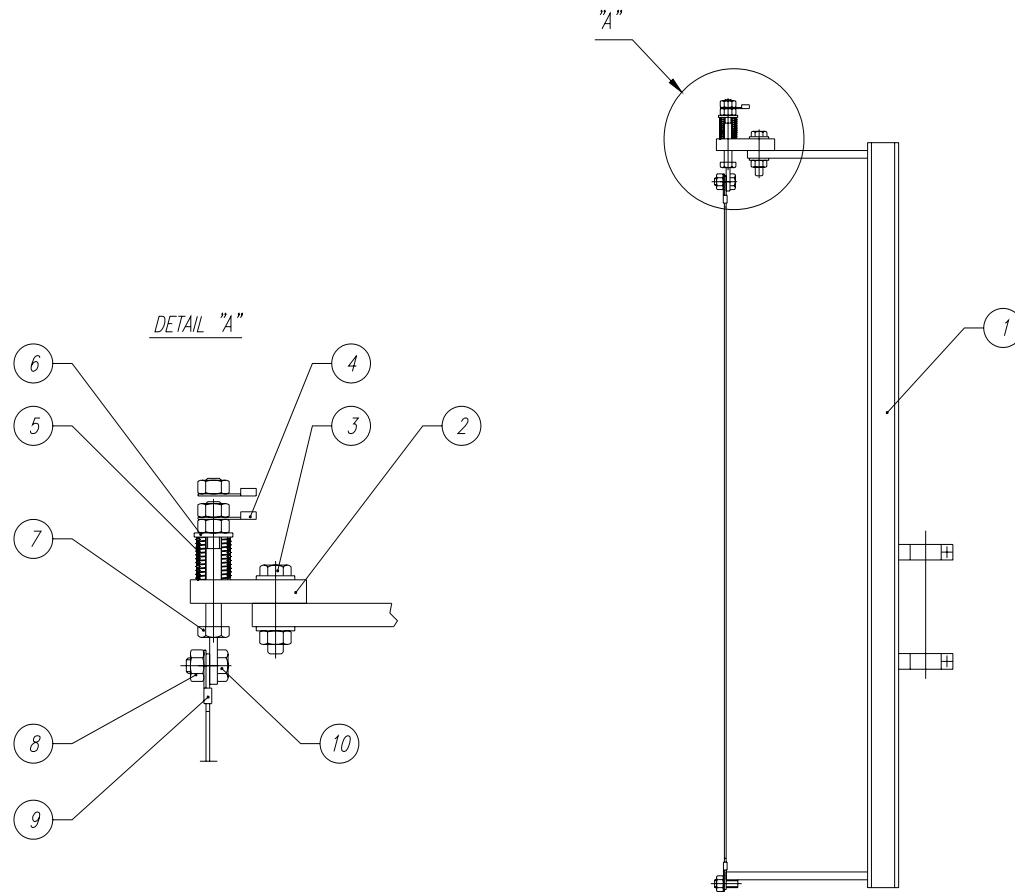
23	FLAT WASHER	013335	4		
22	HEX NUT	012726	4		
21	PAN PHIL	012858	2		
20	SPUR GEAR	011384	2		
19	FLAT CAP SCREW	012671	6		
18	CLAMP JAW PIVOT SHAFT	260558	2		
17	THRUST WASHER	010193	4		
16	FLAT WASHER	011381	2		
15	HEX SOCKET SCREW	010286	2		
14	SPRING WASHER	011393	2		
13	HEX SOCKET SCREW	012834	2		
12	SMOOTH JAW HOLDER	401184	1		
11	SMOOTH JAW	400810	1		
10	JAW WITH RUBBER	400811	1		
9	JAW WITH RUBBER HOLDER	401185	1		
8	HEX SOCKET SCREW	012686	2		
7	SPRING WASHER	011390	1		
6	HEX HEAD SCREW	012406	1		
5	CLAMP YOKE	421689	1		
4	SPRING PIN	010264	1		
3	ROD END	011201	1		
2	AIR CYLINDER	014150	1		
1	CLAMP BASE	414465	1		
No.	DESCRIPTION	DWG. SIZE	PART No.	Q'ty	WEIGHT
REMARKS:					
REMARKS:					
FILM CLAMP ASSEMBLY - R.H.					
 PACKAGING INC. 2270 INDUSTRIEL L'AVANT QUÉBEC, CANADA, H7S 1P9 TEL.: (514) 667-9769		DATE:	DEC-09-1996		
		DRAWN BY:	G. SEWERYN		
		CHECKED BY:			
		ASSEMBLY DWG.:	JOB No.:	STD	
		SCALE:	1 : 2		
		MACHINE TYPE:	FA , MA		
		DRAWING SIZE:	D		
		DRAWING No.:	414433M		



4	FL. WASHER		017298	2	
3	HEX. REGULAR NUT		014238	2	
2	HEX. HEAD CAP BOLT		014510	2	
1	BEARING		010042	1	
No.	DESCRIPTION	DWG. SIZE	PART No.	Q'ty	WEIGHT
REMARKS:					
REMARKS:					
CONVEYOR CHAIN GUARD & 3/4" BRG ASS'Y					
 <p>ORION PACKAGING INC. 2270 INDUSTRIEL, LAVAL QUEBEC, CANADA, H7S 1P9 TEL.: (514) 667-9769</p>		DATE:	NOV. 26. 2002	SCALE:	1 : 2
				MACHINE TYPE:	33, 44, 55, 66
				DRAWING SIZE:	B
ASSEMBLY DWG.:	—	JOB No.:	STD	DRAWING No.:	436896M



4	LOCK SHAFT		436215	1	
3	BRONZE BEARING		012925	2	
2	TURNTABLE LOCK BRACKET		436081	1	
1	AIR CYLINDER		014166	1	
No.	DESCRIPTION	DWG. SIZE	PART No.	Q'ty	WEIGHT
REMARKS:					
REMARKS:					
TURNTABLE POSITIONING LOCK					
 PACKAGING INC. 2270 INDUSTRIEL, LAVAL QUEBEC, CANADA, H7S 1P9 TEL.: (514) 667-9769		DATE:		SCALE:	
		SEP. 30. 2002		1 : 2	
				MACHINE TYPE:	
				FA55	
		DRAWING SIZE:		C	
ASSEMBLY DWG.: 436049 D		JOB No.:		DRAWING No.: 436080M	




10	HEX. HEAD CAP SCREW	012722	1	
9	CUTTING WIRE	402745	1	
8	HEX. NUT	012689	5	
7	WIRE ATTACHMENT	409351	1	
6	FLAT WASHER	012221	1	
5	COMPR. SPRING	013995	1	
4	TERMINAL RING	010693	1	
3	HEX. HEAD CAP SCREW	012793	1	
2	HOT WIRE BRACKET	409350	1	
1	20" CUTTING WIRE BRACKET	417752	1	

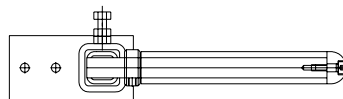
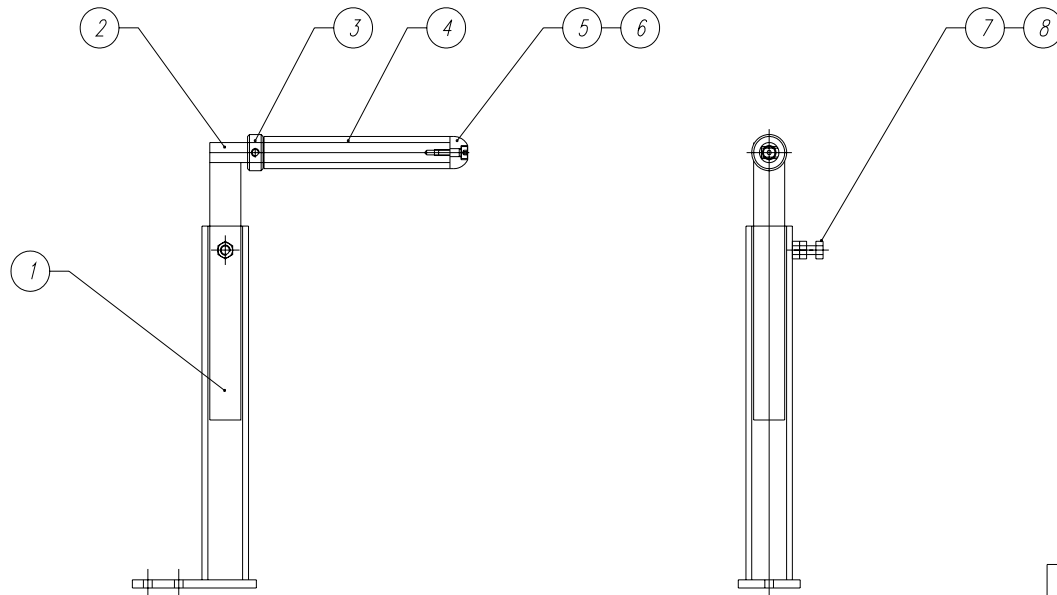
No.	DESCRIPTION	DWG SIZE	PART No.	Q'ty	WEIGHT
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REMARKS:


REMARKS:

### 20" HOT WIRE CUTTER ASS'Y

 PACKAGING INC. 2270 INDUSTRIEL, LAVAL QUEBEC, CANADA, H7S 1P9 TEL.: (514) 667-9769	DATE:	OCT-30-1997	SCALE:	1 : 4
			MACHINE TYPE:	ALL-66
			DRAWING SIZE:	B
	ASSEMBLY DWG:	-	JOB No.:	13405
			DRAWING No.:	417750M



TOP VIEW

8	HEX. HEAD SCREW		013470	1	
7	HEX. NUT		013407	1	
6	SHOULDER SCREW		015502	1	
5	ROLLER STOPPER		431005	1	
4	ROLLER		431002	1	
3	STEEL COLLAR		014596	1	
2	ROLLER BRACKET		431003	1	
1	STAND		431004	1	
No.	DESCRIPTION	DWG. SIZE	PART No.	Q'ty	WEIGHT
REMARKS:					
REMARKS:					
ROPING ROLLER ASS'Y					
 PACKAGING INC. 2270 INDUSTRIEL, LAVAL QUEBEC, CANADA, H7S 1P9 TEL.: (450) 667-9769	DATE:	MAR. 15/2001	SCALE:	1 : 4	
	DRAWN BY:	GREGORY STACHURA		MACHINE TYPE:	FA44
	CHECKED BY:			DRAWING SIZE:	B
	ASSEMBLY DWG.:	-		DRAWING No.:	431001M



