



#### MODEL CTS67-17 SERIAL No. 2005-8899999 270 Industrial Montreal (Laval) Canada, H7S 1

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# 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 **2005-8899999** 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 <u>must to be disconnected</u> 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

| Maximum Load Size<br>Minimum Load Size | 48"W x 48"L x 75"H<br>30"W x 30"L x 26"H*   |
|--|---|
| Weight Capacity                        | 200 lbs*** - 4,000 lbs. Dynamic / 20,000 lbs. Static**  |
| Production Capacity                    | See Attached Throughput Calculation   |
| Utilities                              | 115/1/60 ; 20 Amps Electrical Service<br>3 CFM Compressed Air @ 80 PSI  |
| Turntable                              | Powered Conveyor Turntable Surface with 25" Diameter Ring Bearing Support   |
| Turntable Drive                        | 0 - 12 RPM Variable Turntable Speed<br>Electronically Adjustable Acceleration/Deceleration (Soft Start)<br>DC Variable Speed Drive<br>Heavy Duty ANSI Chain & Sprocket Turntable Drive  |
| Control Features                       | Free Standing, CSA Approved, NEMA 12 Control Panel<br>State-of the-Art Allen Bradley Programmable Logic Control for Maximum Flexibility<br>User Friendly Controls with Non-Proprietary Pushbuttons, and Switches<br>Electronic Film Tension Control Adjustment on the Panel<br>End of Cycle Film Force Release<br>Separate Top and Bottom Wrap Count Selectors<br>Variable Speed & Separate Film Carriage Up/Down Controls<br>Photocell for Automatic Load Height Detection ****<br>Rewrap Pushbutton for Rewrapping Load After Film Roll Replacement, E-Stop, Etc<br>Turntable Jog Pushbutton<br>Conveyor Jog Pushbuttons<br>Current Overload Protection |
| Film Delivery                          | 20" Orion Insta-Thread <sup>™</sup> Powered Prestretch Film Delivery System<br>Precision Ground, Polyeurethane Pre-Stretch Rollers for Consistent,<br>Maximum Film Yield<br>245% Standard Pre-Stretch Ratio (Adjustable from 100% to 300%)<br>Easy & Safe to Operate Self-Threading Carriage Design<br>Electronic Film Tension Control Adjustment on the Panel<br>Full Authority Film Dancer Bar with Variable Speed Output (Non-Wearing Sensor)<br>Heavy Duty ANSI Chain & Sprocket Ratio Control<br>Insta-Sense <sup>™</sup> Film Out/Broken Sensing Logic with Indicator Light   |
| Film Carriage Drive                    | Heavy Duty ANSI Chain Carriage Lift<br>DC Variable Speed Drive<br>Multi-Point UHMW Precision Carriage Guidance System   |

Visit our Distributor Support Website at <u>www.support.orionpackaging.com</u>

#### ORION PACKAGING SYSTEMS INC. FULLY AUTOMATIC EQUIPMENT SPECIFICATIONS

#### **ORION MODEL CTS67 CONTINUED**

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

2. Lift the machine (or other part of system) only to the necessary height to move it with no bouncing or friction on the floor.

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 <u>any of the electrical wires and rubber covering on the multistretch rollers.</u>

2. Perform a visual inspection of the electrical and mechanical parts for loosened joints and / or broken connections. Any suspected shipping damage must be reported immediately to the freight carrier.

Items that are vulnerable to damage and must be inspected are as follows:

- Motors and transmissions

- Junction boxes
- Electrical conduits
- Proximity and limit switches
- Photocells

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

4. Verify the following:

- Turntable or rotary arm drive system to confirm that the reducer to drive the chain is snug and properly aligned.

- Verify the wires tight conduits for crushed sections or loose fittings.

- Verify the carriage to be sure that it is correctly aligned with the tower and verify the tension on the lift chain.

- Verify all the dials and knobs on the control panel for smooth action.

#### MACHINE INSTALLATION

After the visual inspection has been completed the electrical power and the compressed air may be connected as specified on the diagrams supplied with the machine. An electrical diagram is provided with each machine in the envelope attached to the panel box.

#### ASSEMBLY PROCEDURE

The structural frames of the machine have to be installed on a 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).

Conveyor sections (where applicable) have to be positioned, leveled<sup>\*\*</sup> and bolted to the floor. 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. It allows identification of the proper position of the infeed and outfeed conveyor sections. Any wire run that appears too short or long may indicate that the position of the mechanical components is incorrect. Verify the status of all assemblies before proceeding.

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

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

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

#### SYSTEM START-UP

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

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

- Pallet sensor eyes (automatic systems only)
- Load height stop photoswitch (on the carriage)
- Conveyor acceleration/deceleration
- Turntable speed & jog speed
- Turntable speed acceleration/deceleration
- Turntable home position (rotary tower home position)
- Film tail treatment devices (automatic systems).

#### **MACHINE WRAPPING TEST**

Before the test procedure adjusts the wrapping cycle parameters i.e. top wraps, bottom wraps, height photocell on/off, film tension, carriage speed (those two parameters may be adjusted during the wrapping cycle). When there is no photocell, verify the top limit switch position.





CTS67–17 STANDARD PANEL LAYOUT (5412 ES302008) PANEL SIZE 30x20x08





| SLIP-            | RING |  |  |  |  |
|------------------|------|--|--|--|--|
| SECTION # WIRE # |      |  |  |  |  |
| 1. 63            |      |  |  |  |  |
| e,               | 84   |  |  |  |  |

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|  | 2270 NDUSTRIEL BLVD LAVAL, QUE., CANA<br>TEL: (450) 667–9769 FAX: (450)<br>APPR. DY; J.B.S. DRAWN BY; | DA H75 1P9<br>667-6320 |
|  | <sup>TTLE:</sup> CTS67-1  | 7                      |
| 2270 INDUSTRIEL BOUL, LAVAL<br>Quebbec, Canada, H75 1P9<br>Tel; (450) 667-9769 | D JOB # STANDARD 302  | 753/1 2                |
|  | DATE: DEC-19-2003   | SHEET: 1 OF 2          |
|  | FILENAME:: CS67-17C.DWG   | BASE:                  |



![](_page_11_Figure_1.jpeg)

![](_page_11_Figure_2.jpeg)

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| 2270 INDUSTRIEL BOUL, LAVAL<br>QUEBEC, CANADA, H7S 1P9<br>Tel; (450) 667-9769 | D JOB # STANDARD 302  | 2 753/2 💈              |
|   | DATE: DEC-19-2003   | SHEET: 2 OF 2          |
|   | FILENAME:: CS67-17P.DVG   | BASE:                  |

## **CONTROL PANEL**

The control panel layout is custom designed for each particular installation. Please before proceeding be familiar with location of the EMERGENCY button and all functions, switches and pushbuttons.

#### **POWER SWITCHES**

#### **Main Disconnect Switch**

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

#### **Power Switch**

When the power switch is not actuated, all the inputs of the machine are operative but the outputs will remain disabled. This is a useful aspect for troubleshooting since the signal may be traced at the PLC without having the machine operate. When the power switch is activated, the outputs are enabled and the machine will resume normal operation.

#### **Operation Mode Selector Switch**

The two settings on the operation mode selector switch are:

**MANUAL:** Manual operation for use during the machine testing, set-up, or troubleshooting.

**AUTO:** Automatic operation when using the programmed commands of the automatic cycle.

When the switch is set to **MANUAL** the manual control switches are enabled. In order to begin machine testing or operational set-up, the operation mode <u>MUST</u> be set to **MANUAL**. This will permit the operator to use the manual switches described in this section.

When the mode selector switch is set to **AUTO**, the programmed commands stored in the PLC are operate and the **START** button may be pressed to permit normal automatic operation. The STOP button may be pressed to stop the cycle during operation. The mode selector switch may be switched from **AUTO** to **MANUAL** during the cycle for a transfer to manual operation.

#### MACHINE OPERATION

The operator unload the liftruck on the infeed conveyor and the load move to the turntable, without getting off the liftruck he activate the lanyard switch, which begin the wrapping cycle. During this time the operator is free to get an other load and do not need to wait at the wrapping operations going. The next load is unloaded on the infeed conveyor and the wrapped load is unloaded. When it's done the operator activate the lanyard switch and the wrapping cycle goes again.

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

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

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

#### **REWRAP SELECTOR**

The REWRAP selector is a pushbutton switch that restarts the wrapping cycle during the automatic operation. The REWRAP will work only when the operation switch is set to **AUTO**, and a load is in the proper position for wrapping on the turntable (process conveyor).

#### CLAMP JOG

The Clamp Jog is a bistable pushbutton (except "MA" type machines\*) that opens the clamp when pressed once and closes when pressed again. The mono-stable action is achieved through the use of a four-way pneumatic valve mounted on turntable (or process conveyor frame) next to the clamp. The **CLAMP JOG** will work only when the Operation Selector Switch is set to **MANUAL**.

\*"MA" MODELS HAVE 3 POSITIONS RETURN SPRING SWITCH

#### **CONVEYOR CONTROL SWITCHES**

#### **Conveyor Jog Switches**

The Conveyor Control Switches are the pushbuttons type switches activating the conveyor when depressed. Each conveyor section has its own switch. Standard configuration is: Infeed, Process and Exit Conveyor. In case of extra conveyors (optional), the pushbutton switches will bear the number corresponding with particular conveyor (ex: Infeed # 2, # 3, etc. and Exit # 2, # 3 etc.).

#### **Conveyor Reverse /Forward Switch**

The conveyors reverse switch is a monostable two positions switch that reverses the flow direction of all/or chosen conveyor when activated. This Control Switch may be used & when the Operation Selector Switch is set to **MANUAL**.

#### **SPIRAL WRAP SWITCH**

The SPIRAL WRAP switch has two positions:

**UP** - in this position the cycle will end after completing the specified number of top wraps, therefore, the machine will only wrap the load once, going up.

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

#### TOP WRAP FIRST (OPTIONAL)

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

#### **CARRIAGE CONTROL SWITCH**

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

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

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

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

#### TURNTABLE (ROTARY TOWER) JOG

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

#### **FILM TENSION**

Film tension may be adjusted using the Film Tension Control Knob. It has a range of tension from 0 to 10: low range from 0 to 4, 4 to 8 is the most useful1 range for most of the films used by our customers and 8 to 10 considered as a very high range which may break some films).

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

Film tension is controlled through the dancer bar system Occasionally the Feed Back Proximity Sensor may need some adjustment. Adjustment of feedback is shown on drawing # 001.

#### Adjustment instructions:

- Remove the carriage cover

- Unbolt the two nuts holding the proximity switch (item # 1)

- Turn the Proximity sensor (item # 2) until the moment when the motor starts to turn (or hums)

- Tighten on the nuts securing the Proximity Sensor.

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

#### CARRIAGE SPEED

There are two carriage speed controls on the panel:

#### CARRIAGE SPEED UP & CARRIAGE SPEED DOWN

The carriage speed controls can be used to control the amount of overlap the film will have on itself during a wrap. It is recommended to start with a RAPID upward wrap in order to stabilize the load early in the cycle.

The control potentiometers have settings from 0 to 10, the higher settings being the fastest. High settings will mean less film overlap because of faster carriage speed, and low settings will mean more film overlap because of lower carriage speed.

#### **TOP AND BOTTOM WRAPS**

There are two bistable, three position type switches controlling the number of wraps that may be put at the top and bottom of the load.

#### TOP WRAPS: 1,2,3 BOTTOM WRAPS: 1,2,3

These switches may be set before the automatic cycle begins, and in their different positions will wrap respectively 1,2 or 3 turns of the film on the top or on the bottom of the load.

#### **PHOTOSWITCHES**

Photoswitches are placed on the machine to monitor the motion and location of the loads on the conveyors. For each optional, additional conveyor on the machine an additional photoswitch will be added. The photoswitches are located as follows (shown on the machine layout) :

**Load Height Sensing Photoswitch:** located on the carriage and stops it from moving higher than the highest point on the load. The photoswitch position on the track can be adjusted in order to make the carriage pass the top of the load and make the film overlap the top.

**Turntable Load Location Photoswitch:** is the middle one of the three photoswitches that are pointed at the turntable from behind the tower. Its purpose is to stop the load on the turntable/process conveyor in a suitable position for wrapping. The turntable conveyor or process conveyor is programmed to stop approximately 1.5 seconds after this photoswitch is activated.

**Turntable or Process Conveyor Safety Photoswitches:** these are the three photoswitches pointed at the turntable or process conveyor from behind the tower. Their purpose is to prevent the cycle from starting if the load is not properly positioned on the turntable or process conveyor.

**Infeed and Outfeed Photoswitches:** these are located approximately one foot from the side of each conveyor in the middle of the section. Their purpose is to monitor the position of the loads as load transfers are occurring. When the photoswitch is activated there is a delay of approximately 1.5 seconds before the conveyor stops.

**NOTE:** When testing the conveyor without the load the photoswitch must be kept activated for at least 1.5 seconds in order to have the conveyor stop. For a downstream conveyor, when the load is moved out the photoswitches range there will be delay of about 5 seconds before an upstream conveyor is activated to move load.

#### LIMIT SWITCHES.

There are three limit switches located on the tower. The top-most and bottom-most switches limits the motion of carriage determinate by location of the elevator's drive and idler sprocket. The middle limit switch purpose is to activate the clamp to open, once the carriage reaches its level.

**CAUTION:** These limit switches are factory adjusted. When setting the machine, please double check their proper position.

#### **PROXIMITY SWITCH**

**Proximity Switch** is located under the turntable next to the lock, or on the perch ("MA" type machine). Its purpose is to monitor the turntable or rotary arm position, and to signal the controller every time the turntable or rotary arm passes the home position. The proximity switches proper adjustment ensures that turntable or rotary tower will stop in the correct position for the lock to be activated (only turntable machine).

**CAUTION:** The Proximity Switch is factory adjusted and should not need any further adjustment unless it has been disturbed.

![](_page_17_Figure_0.jpeg)

## 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.

![](_page_19_Figure_0.jpeg)

#### **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 I/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<br>Cities Service Oil Co.<br>Gulf Oil Corp.<br>Mobil Oil Corp.<br>Philips Oil Corp.<br>Texaco Inc.<br>Shell Oil Co. | American Cyl Oil no: 196-L<br>Citgo Cyl Oil 100-5<br>Gulf Senate 155<br>Mobil 600 W Suer-r Cyl. Oil<br>Andes S 180<br>624 + 650T Cyl.Oil<br>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

| 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 chain should be tightened at the chain tensioner, or by moving the reducer on its mounting plate.

**NOTICE:** Chain tension first adjustment must be done after the first <u>two weeks of</u> machine usage.

#### **PNEUMATIC SYSTEM MAINTENANCE (when applicable)**

The air supply system must be checked weekly and must be free from the moisture. In cold environments, it may be necessary to drain the air supply system daily.

#### 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.

## FULLY AUTOMATIC STANDARD ASSEMBLY PART LIST

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

![](_page_23_Figure_0.jpeg)

| 3 5 FT CONTOUR ROLLER CONVEYOR |   |            |       |        |             |       | 1      |      |        |
|--------------------------------|---|------------|-------|--------|-------------|-------|--------|------|--------|
| 2                              | 2 ELECTRICAL PANEL STAND  |            |       |        |             |       |        | 1    |        |
| 1                              | BASE & TOWER ASS'Y  |            |       |        |             |       |        | 1    |        |
|                                | 76" DIA. TURNTABLE ASS'Y  |            |       |        |             |       |        |      |        |
|                                | 20" INSTA-THREAD FILM   | CARRIAGE / | 4SS Y |        |             |       |        |      |        |
|                                | 20" FILM TAIL TREATMENT   | T ASS'Y    |       |        |             |       |        |      |        |
| No.                            | DESCR   | IPTION     |       |        | dwg<br>Size | PART  | No.    | Q'ly | WEIGHT |
| REMAR                          | (S:   |            |       |        |             |       |        |      |        |
| REMAR                          | <u>(5</u> :   |            |       |        |             |       |        |      |        |
|                                |   | CTS 67     | LAYO  | IJΤ    |             |       |        |      |        |
|                                |   | DATE:      | AUG-  | 29-200 | J           | SCALE | 2      |      | 1:8    |
| PACKADING INC. DRAWN BY:       |   |            |       | UBICKA |             | MACH  | ne ty  | ት    | CTS67  |
|                                | 22/0 NOUSINEL, LAVAL<br>OUEBEC, CANADA, H7S 1P9<br>TEL.; [514] 687-97769 K. GLOWACI |            |       | LOWACK | 1           | DRAW  | NG SIZ | Æ;   | D      |
| ASSEMBLY DWG:<br>—             |   | JOB No.:   | STD . | 2003,  | /2          | DRAW  | NG Na  | 438  | 880M   |

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6 FORKLIFT WHEEL STOP

5 FORKLIFT WHEEL STOP

4 LANYARD SWITCH HANDLE ASS'Y

![](_page_24_Figure_0.jpeg)

![](_page_24_Picture_1.jpeg)

27)-(29)

*LOCTITE # 262 THREADLOCKER* 

1:4

LOCTITE # 262 THREADLOCKER

-13-25-26

30 ROTORSEAL-SLIPRING ASS'Y ( 4 WIRES ) 427861 1 29 HEX HEAD SCREW 013405 б 28 CENTERING BUSHING 27 HEX. NUT 402388 4 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 TURNTABLE BEARING 014671 1 14 TT. 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 SA66 BASE WELDING (L - R) 436211 1 SIZE PART No. Q'ty WEIGHT DESCRIPTION No. PLAP EMARKS:

| CTS67 BASE                                     | : & TO      | WER ASS'Y (L | – <i>R)</i>         |       |
|--|-------------|--------------|---------------------|-------|
|  | DATE:       | AUG-29-2003  | SCALE:              | 1:8   |
|  | DRAWN BY:   | S. KUBICKA   | MACHINE TYPE:       | CTS67 |
| QUEBEC, CANADA, H75 1P9<br>TEL: (514) 667-9769 | CHECKED BY: | K. GLDWACKI  | DRAWING SIZE:       | D     |
| ASSEMBLY DWG:<br>4.38880 D                     | JOB No.:    | STD 2003/2   | DRAWING No.:<br>4.3 | 8881M |

![](_page_25_Figure_0.jpeg)

|       | 1   |                    |             |                 |                      | ,      |
|-------|---|--------------------|-------------|-----------------|----------------------|--------|
| 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 BRAG                           | CKET               |             | 435272          | 1                    |        |
| 10    | SLIDE BUTTON                                    |                    |             | 427058          | 12                   |        |
| 9     | CARRIAGE ATTACHMENT AN                          | IGLE W/ACTUATOR    |             | 424814          | 1                    |        |
| 8     | CARRIAGE CHAIN ATTACHN                          | ENT ANGLE          |             | 420000          | 1                    |        |
| 7     | CHANNEL GUIDE                                   |                    |             | 220518          | 3                    |        |
| 6     | LIMIT SWITCH CABLE COVE                         | ER                 |             | 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 V                           | VELDING (L-R)      |             | 4 <i>362</i> 74 | 1                    |        |
| No.   | DESCR   | IPTION             | DWG         | PART No         | Q'ty                 | WEIGHT |
| RENAR | KS:   |                    |             |                 |                      |        |
| RENAR | KS:   |                    |             |                 |                      |        |
|       | CTS67 TUBULA                                    | R TOWER 8 x 2 A    | 4 <i>SS</i> | Υ (L-1          | R)                   |        |
|       | DATE: SCALE: 1 : 8                              |                    |             |                 |                      |        |
|       | OFION   | DRAWN BY:          |             | MACHINE TO      | (PE:                 | ንፖር ሰ7 |
|       | PACKAGING INC.<br>227D INDUSTRIEL, LAVAL        | J. NUDIUNA         |             |                 | 75.                  | 1901   |
|       | QUEBEC, CANADA, H7S 1P9<br>TEL.: (514) 667-9769 | K.GLOWACKI         |             |                 | 21.                  | D      |
| ASSEM | IBLY DWG:<br><i>438880</i> D                    | JOB No.: STD 2003, | /2          | DRAWING N       | <sup>⊾</sup><br>4.38 | 882M   |

![](_page_25_Figure_2.jpeg)

![](_page_26_Figure_0.jpeg)

| REMARKS:  |                                |                         |
|---|--------------------------------|-------------------------|
| REMARKS:  |                                |                         |
| CTS67 76" DIA. TUH                              | RNTABLE W/ROLLER CO            | ONVEYOR L-R             |
|   | date:<br>AUG-29-2003           | SCALE: 1 : 8            |
|   | drawn by:<br><i>S. KUBICKA</i> | MACHINE TYPE:<br>CTS67  |
| QUEBEC, CANADA, H7S 1P9<br>TEL.: (514) 667-9769 | CHECKED BY:<br>K. GLOWACKI     | drawing size:<br>D      |
| assembly dwg.:<br>438880 D                      | JOB No.:<br>STD 2003/2         | DRAWING No.:<br>438883M |

| 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    | TURNTABLE LOCK CATCH                  |              | 436221         | 1    |        |
| 9     | INFEED SIDE GUARD                     |              | 436218         | 1    |        |
| 8     | CHAIN GUARD                           |              | 437976         | 1    |        |
| 7     | DRIVE SIDE CHAIN GUARD                |              | <i>437</i> 977 | 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.<br>Size | PART No.       | Q'ty | WEIGHT |
| RFMAR | (5:                                   |              |                |      |        |

013471 8 010583 12

![](_page_27_Figure_0.jpeg)

| 20    | HEX. HOT                             |              | 072000   | ~    |        |
|-------|--------------------------------------|--------------|----------|------|--------|
| 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.<br>Size | PART No. | Q'ty | WEIGHT |
| REMAR | KS:                                  |              |          |      |        |

| CTS67— 5 FT LG                                  | CONTOUR ROLLER C               | ONVEYOR L-R             |
|---|--------------------------------|-------------------------|
|   | DATE: AUG-29-2003              | SCALE: 1:8              |
|   | drawn by:<br><i>S. KUBICKA</i> | MACHINE TYPE:<br>CTS67  |
| QUEBEC, CANADA, H7S 1P9<br>TEL.: (514) 667-9769 | CHECKED BY:<br>K. GLOWACKI     | DRAMING SIZE:           |
| ASSEMBLY DWG.:<br>438880 D                      | JOB №::<br>STD 2003/2          | DRAMING No.:<br>438884M |

![](_page_28_Figure_0.jpeg)

| CTS67   | FILM TAIL TREATMENT            |                         |
|---|--------------------------------|-------------------------|
|   | DATE:<br>SEP-04-03             | scale:<br>1:8           |
|   | drawn by:<br><i>S. KUBICKA</i> | MACHINE TYPE:<br>CTS67  |
| QUEBEC, CANADA, H7S 1P9<br>TEL.: (45D) 667-9769 | CHECKED BY:<br>K. GLOWACKI     | drawing size:<br>D      |
| ASSEMBLY DWG:<br>438880 D                       | JOB No.: STD 2003/2            | DRAWING No.:<br>438916M |

RENARKS:

| 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         | 8 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                  | TURNTABLE POSITIONING LOCK ASS'Y |             | 436080         | 1       |        |
| 6                  | ARM SEGMENT                      |             | 404925         | 5 1     |        |
| 5                  | KNIFE ARM SEGMENT                |             | 417244         | 1       |        |
| 4                  | BRUSH HOLDER                     |             | 412236         | 5 Z     |        |
| 3                  | HEX NUT                          |             | <i>0127</i> 51 | 8       |        |
| 2                  | HEX BOLT                         |             | 012757         | ' 8     |        |
| 1                  | CUTTER-BRUSH ARM                 |             | 427730         | 1       |        |
| No.                | DESCRIPTION                      | dwg<br>Size | PART No        | o. Q'ty | WEIGHT |
| RENAR <sup>‡</sup> | is:                              |             |                |         |        |

3 (2)(n)⊕. ╈ 

![](_page_29_Figure_1.jpeg)

[19] 20 21-22-23

| FILM   | CLAMP       | ASSEMBLY –  | <i>R.H</i> .       |                |
|--|-------------|-------------|--------------------|----------------|
|  | DATE:       | DEC-09-1996 | SCALE:             | 1:2            |
|  | DRAWN BY:   | G. SEWERYN  | MACHINE TYPE:      | FA , MA        |
| QUEBEC, CANADA, H7S 1P9<br>TEL: (514) 667-9769 | CHECKED BY: |             | DRAWING SIZE;      | D              |
| ASSEMBLY DWG.:                                 | JOB No.:    | STD         | DRAWING No.:<br>47 | '44 <i>33M</i> |

REMARKS:

|        |                        |              |          |      | -      |
|--------|------------------------|--------------|----------|------|--------|
| 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 PNOT 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            | DWC.<br>Sizf | PART N₀. | Q'ty | WEIGHT |
| REMARI | ζς.                    |              |          |      |        |

![](_page_30_Figure_0.jpeg)

![](_page_30_Figure_1.jpeg)

![](_page_30_Figure_2.jpeg)

![](_page_30_Figure_3.jpeg)

|           |  |   |      |                                  | 1          |        |
|-----------|--|---|------|----------------------------------|------------|--------|
| 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 T   | RAK BRACKET                                     |      | 435553                           | 1          |        |
| 35        | BOTTOM SPOOL WASHER  |   |      | <i>432322</i>                    | 1          |        |
| 34        | BOTTOM SPOOL   |   |      | 432323                           | 2          |        |
| 33        | 20" (30") ROLLER BRA   | CKET (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        | TIMMING BELT   |   |      | 011151                           | 1          |        |
| 19        | PULLEY   |   |      | 431672                           | 1          |        |
| 18        | SPROCKET (245 %)   |   |      | 428647                           | 1          |        |
| 17        |  |   |      | 431477                           | 1          |        |
| 16        | FL MOTOR   |   |      | 015740                           | 1          |        |
| 15        | CRADIE ROLLER OPENING  | S I DCK   |      | 4/19469                          | 2          |        |
| 14        | TENSION SCREW ASS'Y  |   |      | 433628                           | 1          |        |
| 13        | PROXIMITY SENSOR CAM   |   |      | <u> 100020</u><br><u> 113711</u> | 1          |        |
| 12        | PHATACELL BRACKET  |   |      | 475307                           | 1          |        |
| 11        | PHATACELL HAIDER /EI   | ç FRI)  |      | 430037                           | 1          |        |
| 10        | PHATACELL CHANNEL  | ,         |      | 434651                           | 7          |        |
| - 10<br>a | FIRERCIASS COVER - FI  | , p   |      | 414854                           | 1          |        |
| 8         | $\frac{1}{R} \frac{1}{R} \frac{1}$ | ראין אין אין אין אין אין אין אין אין אין        |      | 12/007                           | 1          |        |
| 7         | RUBBER ROLLER - 2 {2   | 0" FILM)  |      | 12031/<br>12/0016                | 1          |        |
|           | CODOCKET / DILLEV AC   | с <sup>•</sup> V                                |      | 121310                           | 1          |        |
| 5         | TOD MANDER ELD   | וכ  |      | 4J14/5<br>111057                 | 1          |        |
|           |  | YET ELP   |      | 414000                           | 1          |        |
| 4<br>  z  | DANGEN NULLER DRACK  | LIILN<br>ארך מת <b>יי</b> וד רוח                |      | 414002                           | 1          |        |
| 3         | CONNER RULLER ADDEMD   | $\frac{1}{10} = \frac{20}{20} \text{ II, } fLR$ |      | 414043                           | 1          |        |
|           | DACK DUATE 20" WOT   | LI = ZU II, FLK                                 |      | 42013/                           | 1          |        |
|           | DALA FLAIE - ZU INST.  | A-INKLAD, FLK                                   | DWC  | 438904                           | /          |        |
| No.       | DESCR  | IPTION  | SIZE | PART No                          | Q'ty       | WEIGHT |
| RENAR     | KS:  |   |      |                                  |            |        |
| RENAR     | KS:  |   |      |                                  |            |        |
|           | 20" INSTA-THRE   | AD FILM CARRIAGE                                | A    | SS'Y                             | (FLR       | )      |
|           |  | DATE:<br>SEP-02-2003                            |      | SCALE:                           | 1:4        |        |
|           |  | drawn by:<br><i>S. KUBICKA</i>                  |      | MACHINE T                        | re:<br>CTS | 67     |
|           | 2270 NDUSTRIEL, LAVAL<br>QUEBEC, CANADA, H7S 1P9<br>TEL : (450) 667-9750   | Checked by:<br>—                                |      | DRAWING S                        | ze:<br>D   |        |
|           |  |   |      |                                  |            |        |

STD 2003/2

JOB No.:

ASSEMBLY DWG .:

\_

xaming №:: 438885M

![](_page_31_Figure_0.jpeg)

![](_page_32_Figure_0.jpeg)

![](_page_33_Figure_0.jpeg)

| 4 LOCK SHAFT 436215 1   3 BRONZE BEARING 012925 2   2 TURNTABLE LOCK BRACKET 436081 1   1 AIR CYLINDER 014166 1   No. DESCRIPTION SDE PART No. Q'ty WEIGHT   REMARKS:   TURNTABLE POSITIONING LOCK   TURNTABLE POSITIONING LOCK   DESCRIPTION SOLE:   DESCRIPTION   SOLE:   DESCRIPTION   SOLE:   DESCRIPTION   SOLE:   DESCRIPTION   SOLE:   DESCRIPTION   SOLE:   DESCRIPTION   SOLE:   DESCRIPTION   SOLE:   DESCRIPTION   SOLE:   DESCRIPTION   DESCRIPTION   SOLE:   DESCRIPTION   < |
|---|

| DETAIL "A"<br>6<br>5<br>3<br>2 |                |   |                           |
|--------------------------------|----------------|---|---------------------------|
|                                |                | 10 HEX. HEAD CAP SCREW                              | 012722 1                  |
|                                |                | 8 HEX. NUT  | 012689 5                  |
|                                |                | 7 WIRE ATTACHMENT                                   | 409351 1                  |
|                                |                | 6 FLAT WASHER                                       | 012221 1                  |
|                                |                | 5 COMPR. SPRING                                     | 010693 1                  |
|                                |                | .3 HEX HEAD CAP SCREW                               | 012793 1                  |
|                                |                | 2 HOT WIRE BRACKET                                  | 409350 1                  |
|                                |                | 1 20" CUTTING WIRE BRACKET                          | 417752 1                  |
| (y)                            |                | No. DESCRIPTION                                     | SIZE PART No. Q'ty WEIGHT |
|                                |                | REMARKS:  |                           |
|                                | <del>u</del> — | REMARKS:  |                           |
|                                |                | 20" HOT WIRE CUTTE                                  | TR ASS'Y                  |
|                                |                | DATE: 0CT-30-j                                      | 1997 SCALE: 1 : 4         |
|                                |                |   | WACHINE TYPE:<br>ALL-66   |
|                                |                | 2270 INDUSTRIEL, LAVAL<br>QUEBEC, CANADA, H75 1P9   | ORAWING SIZE:             |
|                                |                | TEL: (514) 667-9769<br>ASSEMBLY DWC: JOB No.: 4 7 4 |                           |
|                                |                | / .340  | 417750M                   |

|          | 3  |                       |            |      |          |
|----------|--|-----------------------|------------|------|----------|
|          | 8 HEX. HEAD SCREW                        |                       | 013470     | 1    |          |
|          | 6 SHOULDER SCREW                         |                       | 015502     | 1    |          |
|          | 5 ROLLER STOPPER                         |                       | 431005     | 1    |          |
|          | 4 ROLLER                                 |                       | 431002     | 1    |          |
|          | 3 STEEL COLLAR                           |                       | 014596     | 1    |          |
|          | 2 ROLLER BRACKET                         |                       | 431003     |      | <b> </b> |
|          | / STAND                                  | DW                    | 431004     |      |          |
|          | No. DESCH                                | RIPTION SIZ           | PARI No.   | Q'ty | WEIGHT   |
|          | REMARKS:                                 |                       |            |      |          |
|          |  | 1                     |            |      |          |
|          | R  | OPING ROLLER ASS'Y    |            |      |          |
|          |  | DATE:<br>MAR. 15/2001 | SCALE:     | 1:   | 4        |
| TOP VIEW | orion                                    | DRAWN BY:             | NACHINE TY | /PE: |          |
|          | PACKAGING INC.<br>227D INDUSTRIEL, LAVAL | CHECKED BY:           | DRAWING S  | ZE:  |          |
|          | TEL.: (450) 667-9769                     |                       |            |      | В        |
|          | -  |                       |            | 431  | 001M     |

## APPENDIX

### Multistretch Interface Board Calibration Instructions For MIB-336 Interface Board.

#### Adjustments:

#### Gain: The Pot controls the system Gain.

This control injects an offset voltage, which adds or subtracts from the voltage reference defined by the External Tension Adjustment (Film Tension Potentiometer); this will allow extremes of adjustment to be set to levels consistent with proper operation. Typically, the Gain will be used to center the operating range in linear portion of its characteristics.

<u>Note:</u> This adjustment is normally made at the factory and should not require fields adjustment.

#### Zero: The Pot controls the system loop gain.

This system loop gain may be adjusted if the motor continues to be energized when the dancer arm is unloaded and at rest. With the machine stopped, the potentiometer should be adjusted to ensure that the motor is de-energized in this condition, and so that a light pull on the free end of the film causes the film to feed freely. Counter clockwise (CCW) adjustment of this potentiometer will increase the response time i.e. (soften the motor tension response). Clockwise (CCW) adjustment decreases the response time i.e. (sharpen the motor response) plus increases the maximum possible motor speed attainable.

#### <u>Trip:</u>

The output relay located on MIB-336 Board (Outputs: Com (14); NO(13); NC(15)) energized when the voltage between (11) & (12) overshoots the level selected on the potentiometer marked "Trip". It de-energizes when the voltage falls below the normal current by approximately 5% or when power to board breaks.