ANYTHING LESS IS A GAMBLE

MODEL SPECTRA Π
SERIAL # 2006-8899999

2270 Industrial boul. , Montreal (Laval), Canada, H7S 1P9
Tel.: (450) 667-9769, Fax: (450) 667-6320

ANYTHING LESS IS A GAMBLE

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.

Spectra Π

Low Profile Semi Automatic Heavv Duty Rotary Turntable Wrapper

Maximum Load Size	52”W x 52”L x 90”H
Minimum Load Size	30”W x 30”L x 10”H
Weight Capacity	5,000 Ibs. Dynamic, 20,000 Ibs. Static
Utilities	115/1/60 20 Amp Electrical Service
Turntable & Drive:	65” Diameter x 3/8” Steel Plate 0-14 RPM variable speed with adjustable soft-start Dynamic positive alignment home positioning feature Chain & sprocket drive with automatic, self-adjusting chain tensioner In-line helical gear reducer on turntable drive train No-maintenance, quiet DuraGlideTM support bearings 3” Height floor to top of turntable
Control Features:	CSA and UL Approved Control Panel State-of-the-Art Logic Control User Friendly Microprocessor with Micro-Switch Keypad DuraLogic™ Controller with Modular Plug In Components Revo-Logic™ Exact Wrap Counting Technology Insta-Sense™ Film Broken / Out Sensing Logic with Indicator Electronic Film Tension Control Adjustment on the Panel Separate Top / Bottom Wrap Count Selectors with LED Count Display Variable Speed Film Carriage Up/Down Control Film Carriage Raise/Lower Switch (Manual) All Colors Compatible Photocell for Automatic Load Height Detection Turntable Jog Pushbutton Cycle Pause for Stopping the Wrap Cycle Without Resetting
Film Stretch & Delivery:	Uses standard 20” film rolls InstaThread® for ultra-fast drop-in film threading 260% Standard film stretch (available from 100% to 425%) AUTOMATIC electronic non-contact film force-to-load control Dynamic dancer bar for consistent film tension around entire load Precision ground, polyurethane stretch rollers with lifetime warranty
Film Carriage Drive:	Heavy Duty Zero-maintenance industrial belt lift carriage Variable Speed Drive Motor UHMW Precision Carriage Guidance System
Structural Features:	All STEEL base frame and tower construction Base structure includes dual full-length steel channels Forklift portable from front or rear of machine Hinged tower for ease of transport (reduces machine profile) Adjustable, foldaway film roping bar to lock load to pallet
Ease Of Use And Safety:	Fail-Safe film carriage drive with free-fall prevention Film carriage features obstacle detection with automatic shut-off Ergonomic side facing film replacement Protective cover over powered prestretch rollers All-enclosed chains & electronics
Available Options:	SPE-001 Extended tower for loads up to 1 IO” tall (ships with tower hinged/tilted) SPE-010 Heavy-duty ramp for loading with pallet-jack or electric walkie

*ORION PACKAGING RESERVES RIGHTS TO CHANGE THIS SPECIFICATION AT ANY TIME WITHOUT NOTICE

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 <u>any of the electrical wires and/ or polyurethane covering on the film carriage 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. 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').

The roping bar

The roping bar is rotating around the shoulder screw (dwg M-435381 item # 7) and his height can be adjusted from 0 to 6 inches from the base. That device is squeezing a stripe from 0 to 6 inches of the film like a rope to stabilize the load itself or attach it on the pallet. To adjust the roping bar you need a ½" wrench and you have to loose up the screw #5 and #6.

Getting started

Security tip

Be careful to never walk on the turntable it could cause you an injury.

Put a pallet on the turntable and attach the end of film around the load on the same side than the control panel. Put the carriage at the bottom end of the tower to begin a cycle of wrapping. After the start don't stay to close and wait until the end of the cycle.
After the cycle, cut the film and remove the load. The carriage is returned back to the bottom of the tower and ready to wrap again.

Machine operation and security

Installation of a roll of 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. Release the lock and pull the handle to open film distributor cradle.

6. Pass the roped tail of the film through opening (as shown on the film quick threading pattern DWG. # 434460 Fig.1).

7. Close the film distributor cradle.

8. When the film distributor 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.

Broken film

Open the cradle, pull a few winds of film, close the cradle and the machine is ready to wrap again.

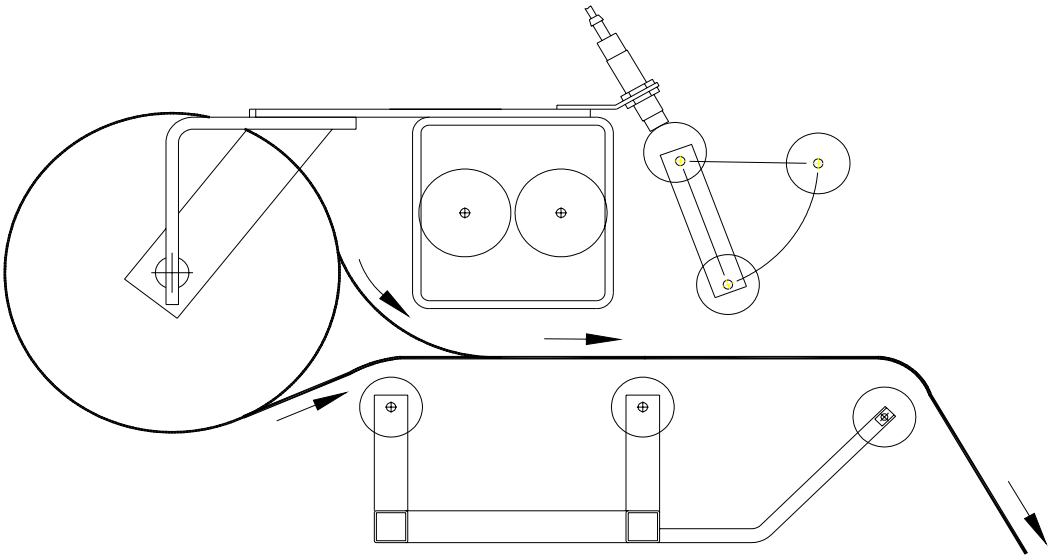


Fig. 1 OPEN CRADLE

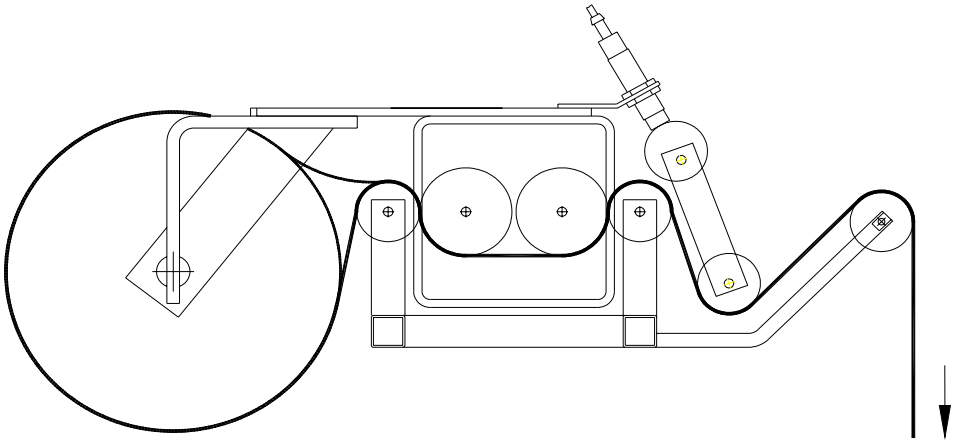


Fig. 2 CLOSED CRADLE

FILM QUICK THREADING

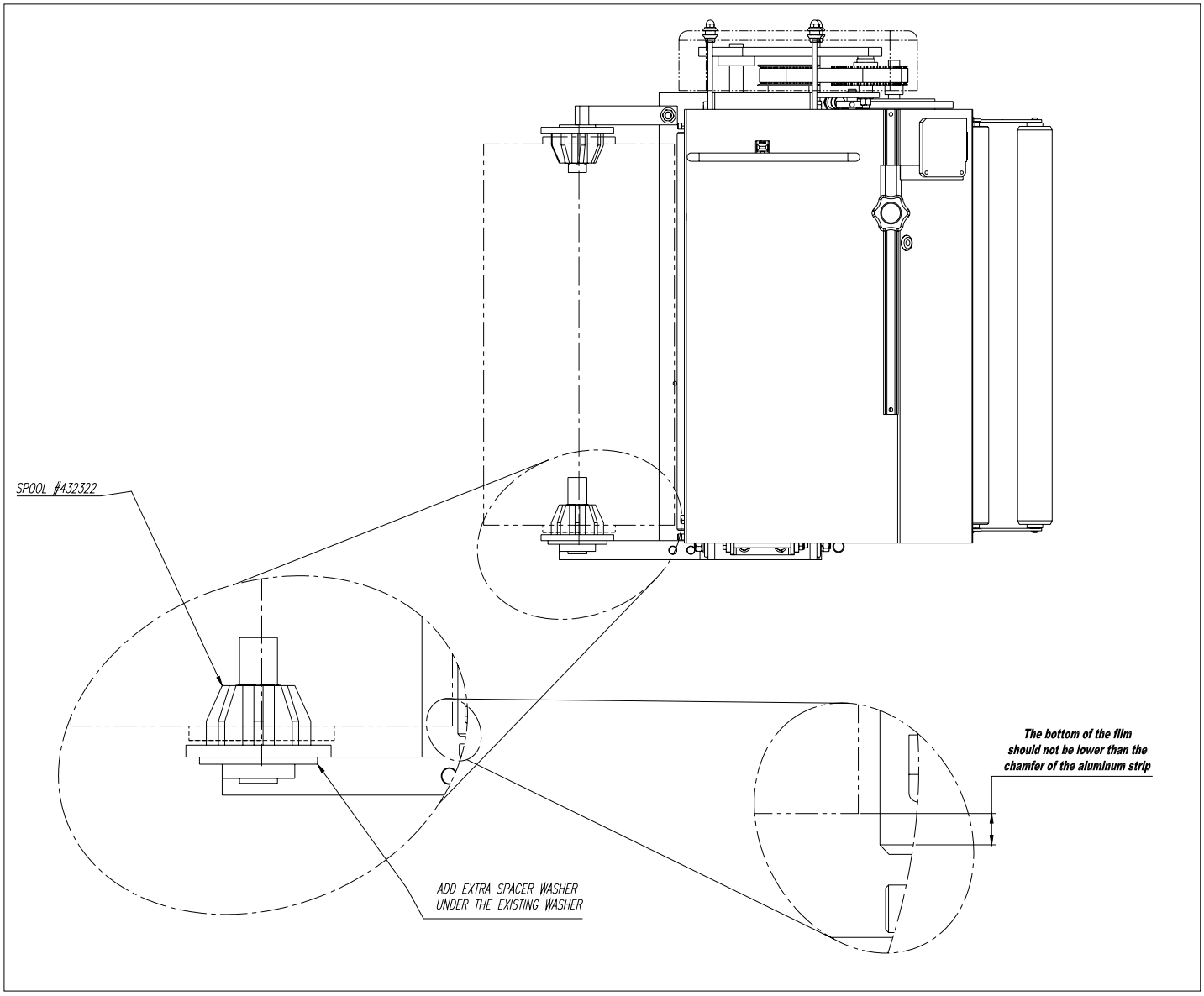
UPDATED APR-03-2002 **DWG # 434460**

ADDITIONNAL SPACER WASHER

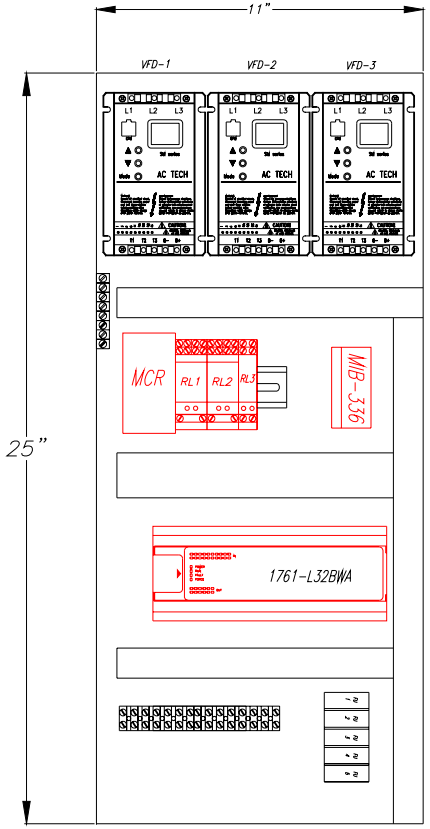
(IF NEEDED ONLY)

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 their is 1 washer under the bottom spool (432322), and you have received with the machine 2 extra washer to be use if needed.

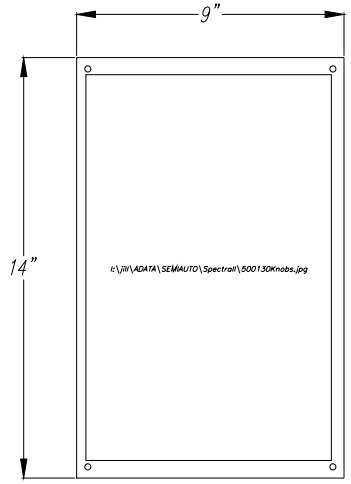
<u>Note:</u> The bottom of the film should not be lower than the chamfer of the aluminum strip as shown on the drawing below.




SPECTRA™ II
START
STOP
1x-Pause
2x-Reset
FILM TENSION
UP ONLY
UP/DOWN
WRAP MODE
TOP WRAPS
REINFORCE WRAP
TURNTABLE JOG
OFF
ON
PHOTOEYE
BOTTOM WRAPS
DOWN
UP
CARRIAGE JOG
CARRIAGE UP SPEED
! WARNING !
DANGEROUS OR FATAL ELECTRIC SHOCKS MAY RESULT IF POWER TO THE MACHINE IS NOT DISCONNECTED BEFORE OPENING THE PANEL. DISCONNECT POWER TO THE MACHINE BEFORE OPENING THE PANEL.
PN 500-130
CARRIAGE DOWN SPEED
orion® Orion Packaging Systems, Inc.
www.orionpackaging.com



BACK PLATE



FRONT PLATE

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2270 INDUSTRIEL BLVD LAVAL, QUE., CANADA H7S 1P9
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APPR. BY: J.B.S. DRAWN BY: A. ALEXANDER

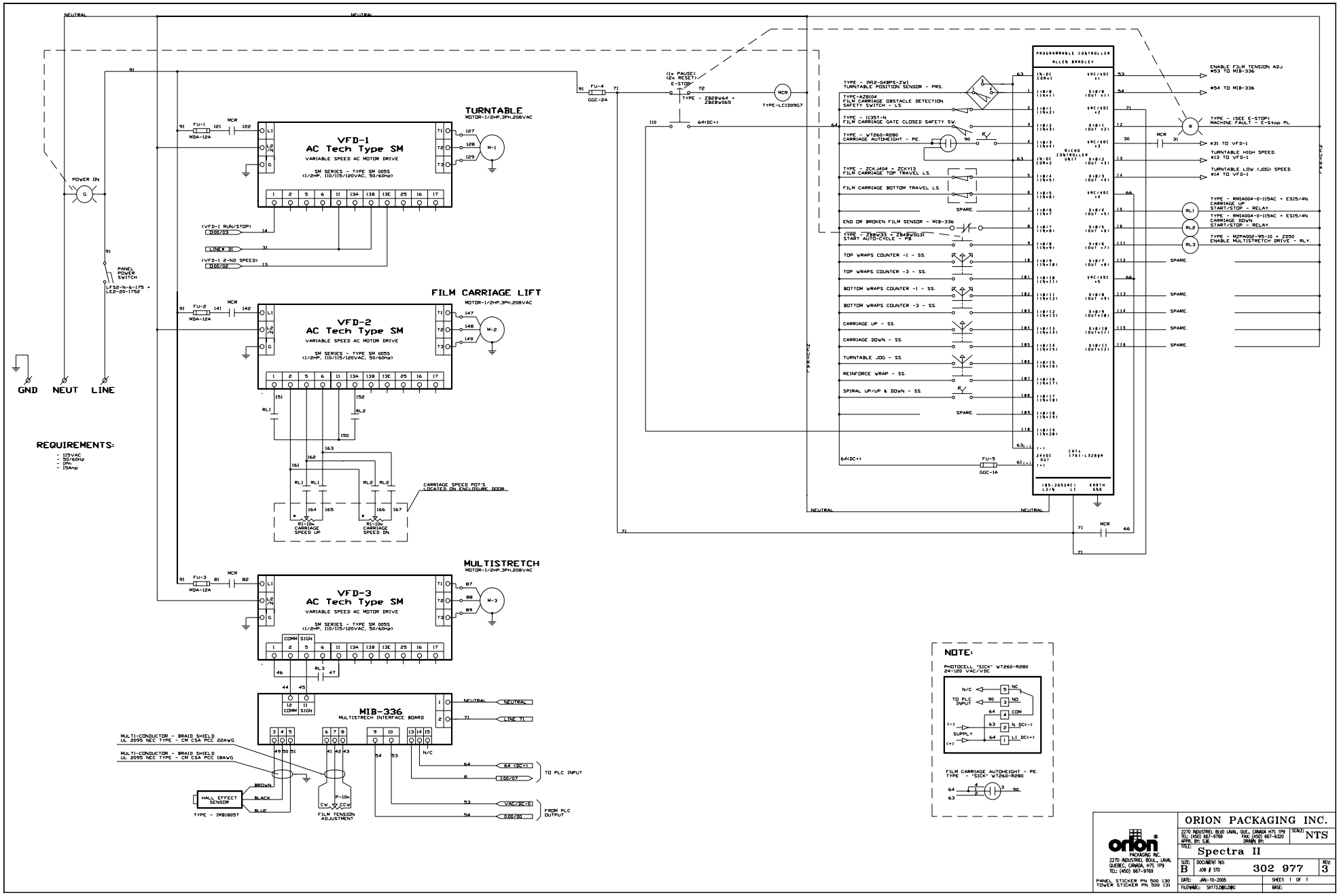
SCALE: 1:2

TITLE: SPECTRA II "STANDARD"

SIZE: B | DOCUMENT NO: JOB # STD 302 977 | REV: 3

DATE: APR-21-2005 | SHEET: 1 OF 1

FILENAME: SPH-17L.DWG | BASE:



PANEL STICKER PN 500 130
TOWER STICKER PN 500 131

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APPR. BY: S.M. DRAWN BY:

SCALE: NTS

TITLE: Spectra II

SIZE: B | DOCUMENT NO: 302 977 | REV: 3

DATE: JAN-10-2005 | SHEET: 1 OF 1

FILENAME: SH173.DWG,DWG | BASE:

MACHINE MAINTENANCE

All general information about machine maintenance is based on normal machine working conditions: indoors, 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 l/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 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 two weeks of machine usage.

PNEUMATIC SYSTEM MAINTENANCE (when applicable)

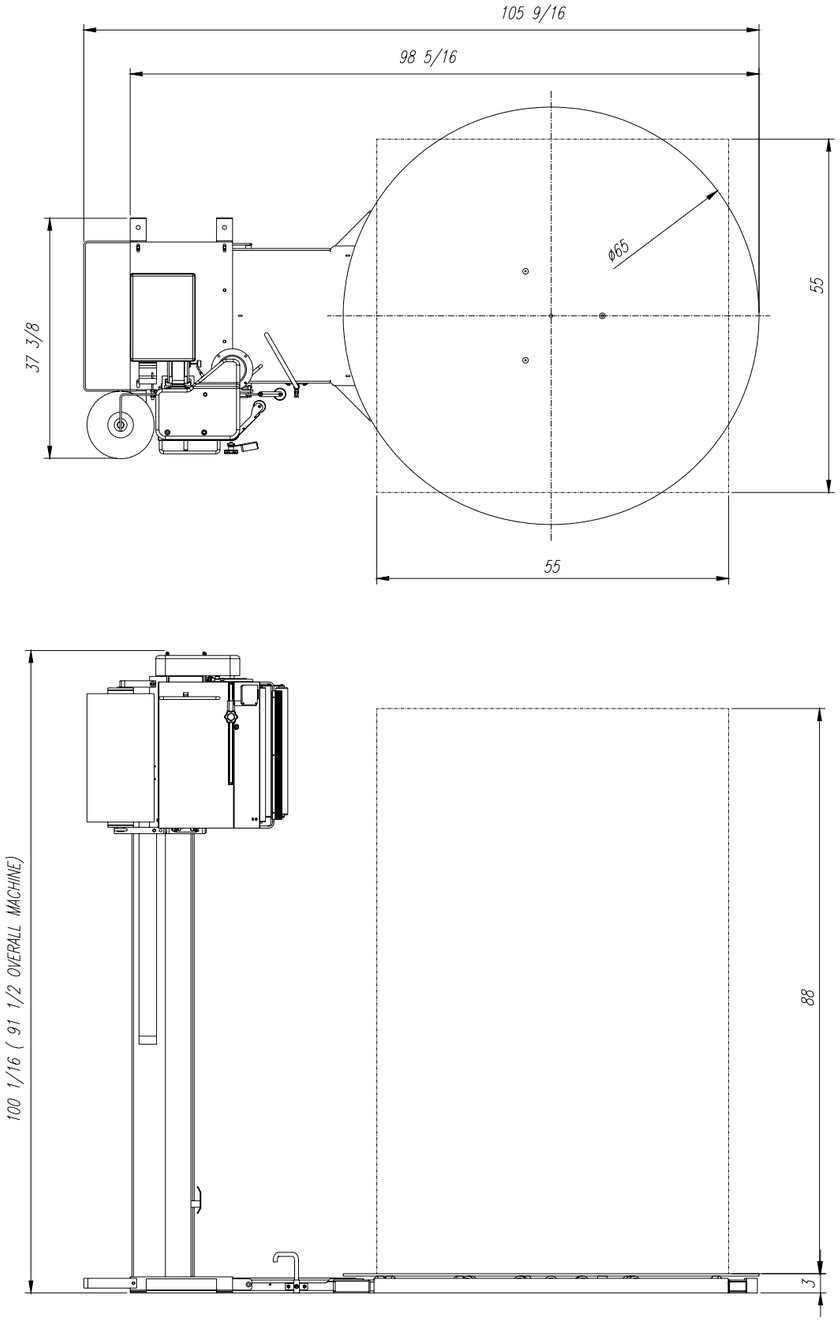
The air supply system must be checked weekly and must be free from the moisture. In cold environments, it may be necessary to drain the air supply system daily.

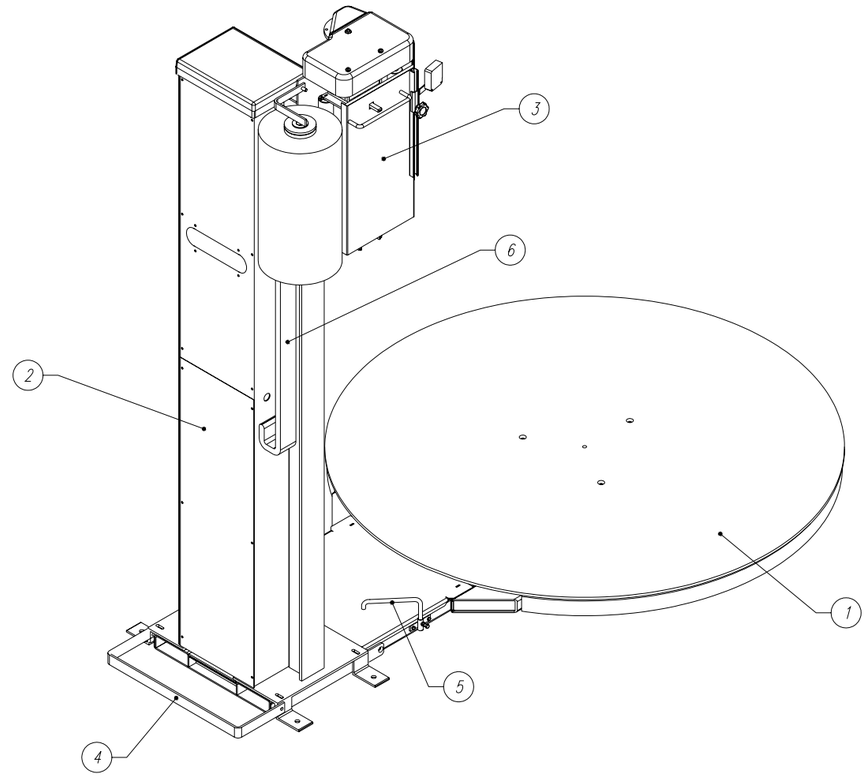
CAM FOLLOWER MAINTENANCE (when applicable)

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.

SEMI-AUTOMATIC STANDARD ASSEMBLY PART LIST

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





No.	DESCRIPTION	Length/In	DWG. SIZE	PART No.	Q'ty	WEIGHT
6	POWER TRAC K20-4			015897	1	
5	ROPING BAR ASSEMBLY			443608	1	
4	BACK TOWER STOPPER			436790	1	
3	INSTA-THREAD-FLR-20			443591	1	
2	TOWER ASSEMBLY			443622	1	
1	BASE ASSEMBLY			443512	1	

REMARKS:

REMARKS:

"SPECTRA II V1" – WRAPPER

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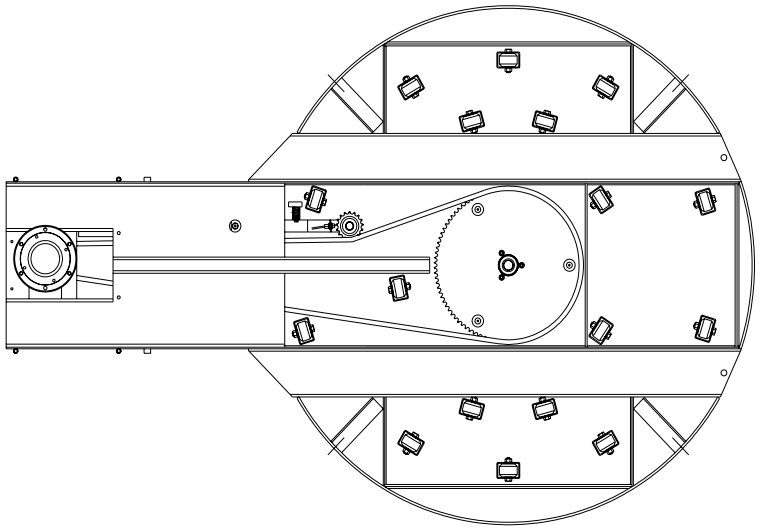
2270 INDUSTRIEL, LAVAL
QUEBEC, CANADA, H7S 1P9
TEL.: (450) 667-9769

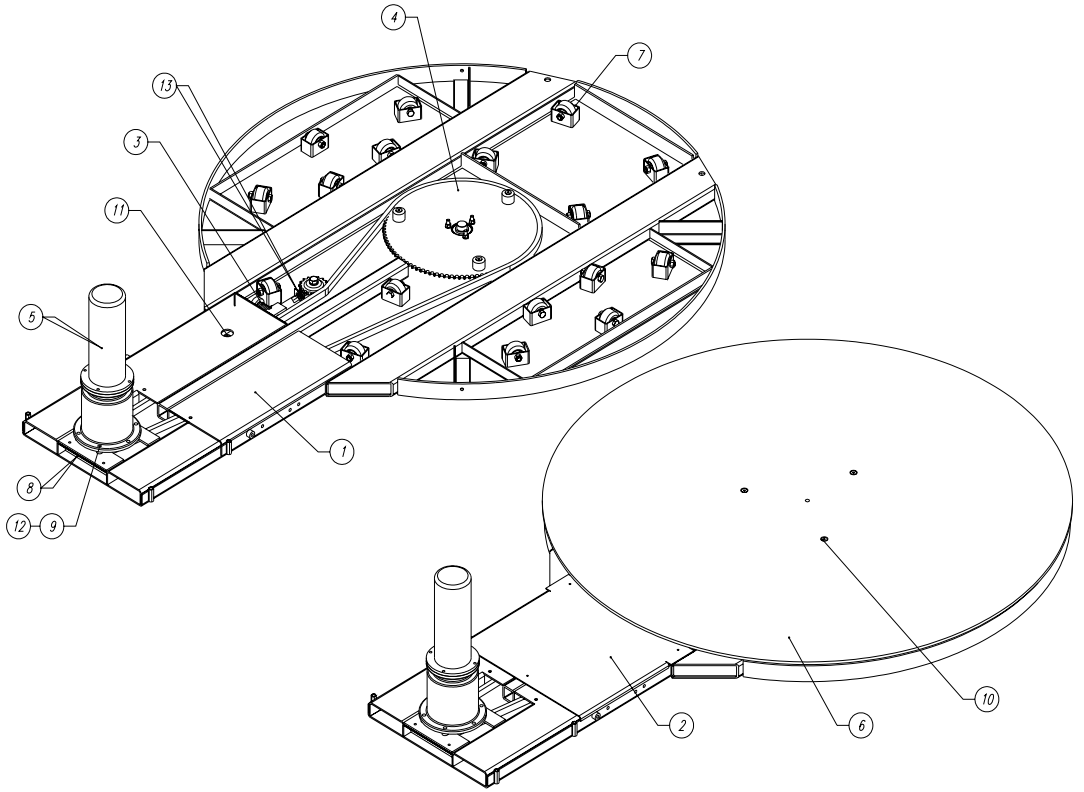
TOLERANCES
UNLESS OTHERWISE SPECIFIED
MACHINED: ±1/64
WELDED: ±1/32
ANG.: ± 1/32 PER 60"

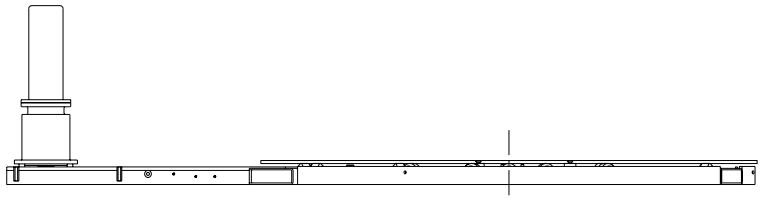
PROJECTION:

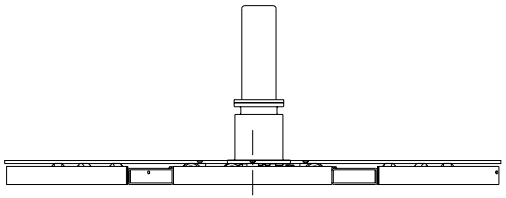
ASSEMBLY DWG.: –

DRAWN BY: V. TELEBAK
DATE: JAN-04-2005
CHECKED BY: –
TOTAL WEIGHT: –
DWG. SIZE: B
MACHINE TYPE: SPECTRA II V1
REFERENCE DWG.: 436472-B
SCALE: 1 : 24
Q-TY: 1
JOB No.: STD
DWG No.: 443511M
REV.: A









No.	DESCRIPTION	Length/In	DWG SIZE	PART No.	Q'ty	WEIGHT
13	PROXIMITY SWITCH			014719	1	
12	HEX SCREW			014157	4	
11	SHOULDER SCREW			015122	1	
10	HEX SOCKET FLAT SCREW			013842	3	
9	PLAIN WASHER			010948	4	
8	BASE BACK COVER			436438	1	
7	DURA-GLIDE CASTER 2.33 DIA-ASS'Y			435325	17	
6	65 DIA TURNTABLE DISK			433774	1	
5	TURNTABLE DRIVE ASSEMBLY			443056	1	
4	DRIVEN SPROCKET ASSEMBLY			430036	1	
3	CHAIN TIGHTENER ASSEMBLY			441083	1	
2	BASE COVER			441096	1	
1	BASE WELDING			443513	1	

REMARKS: _

REMARKS: _

BASE ASSEMBLY

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TEL.: (450) 667-9769

PROJECTION:

TOLERANCES
UNLESS OTHERWISE SPECIFIED
MACHINED: ±1/64
WELDED: ±1/32
ANG.: ± 1/32 PER 60"

ASSEMBLY DWG.: 443511 B

DRAWN BY: V. TELEBAK

DATE: JAN-05-2005

CHECKED BY: _

TOTAL WEIGHT: _

DWG. SIZE: B

MACHINE TYPE: SPECTRA II V1

REFERENCE DWG.: 436403-E

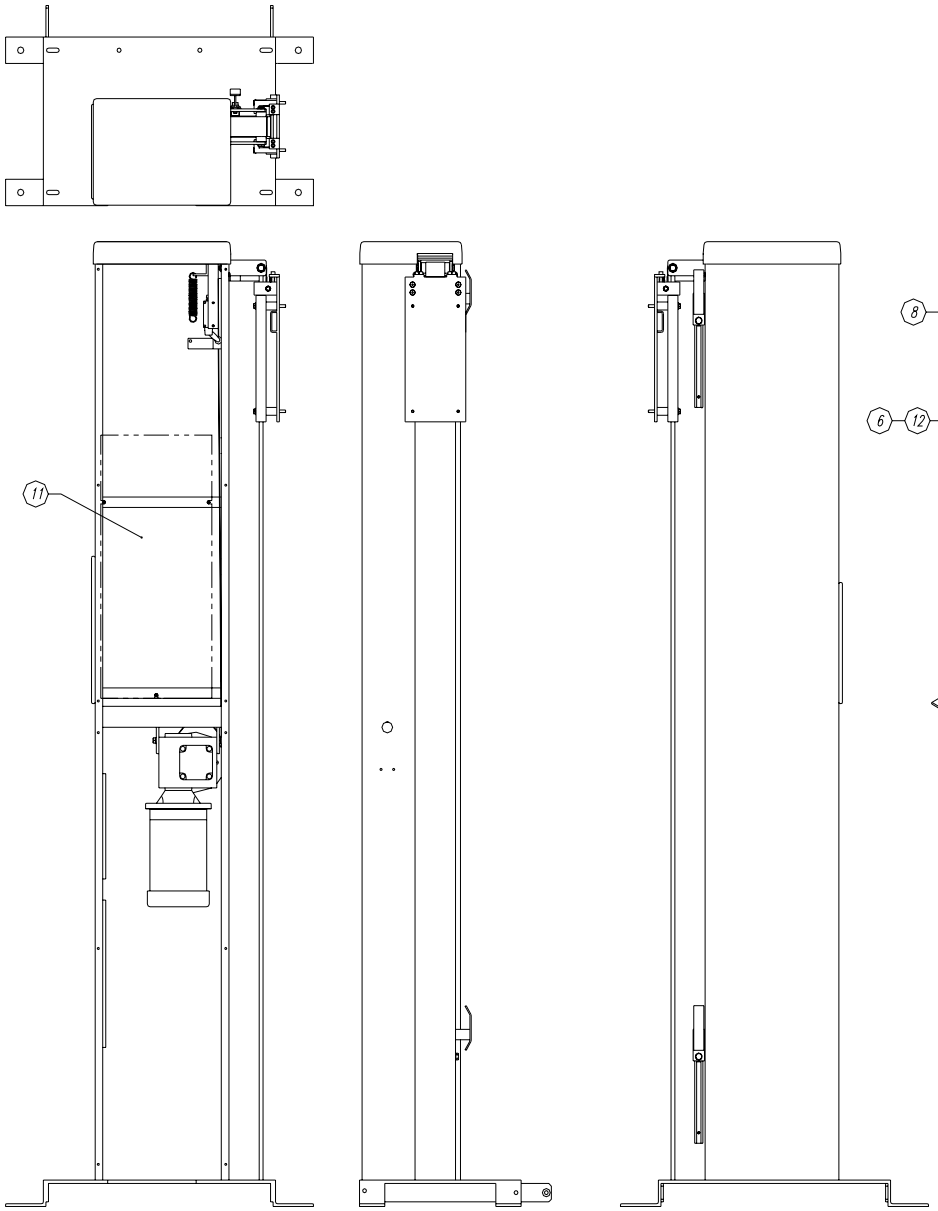
SCALE: 1 : 16

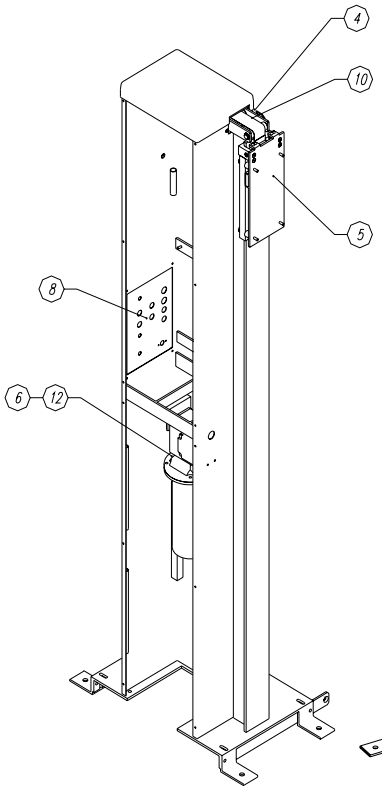
Q-TY: 1

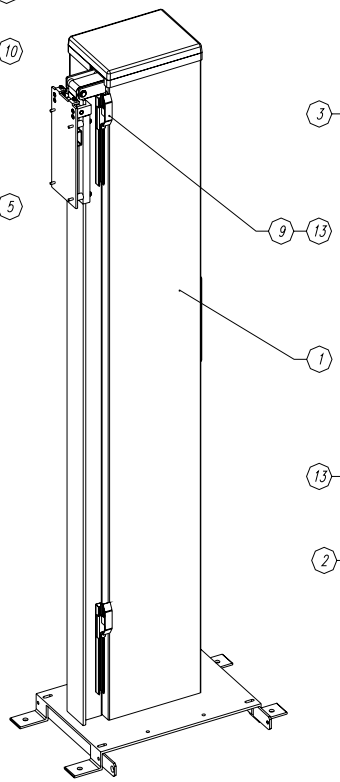
JOB No.: 14920

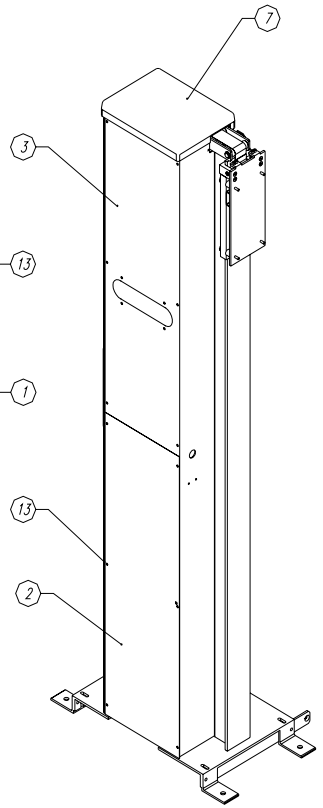
DWG No.: 443512M

REV.: A









No.	DESCRIPTION	Length/In	DWG. SIZE	PART No.	Q'ty	WEIGHT
13	PHILIPS PAN SCREW			013351	16	
12	HEX NUT			012682	4	
11	ELECTRIC INSIDE PANEL PLATE			443629	1	
10	CARRIAGE BELT (SP-2.1)			436474	1	
9	LIMIT SWITCH STRIKER ASSEMBLY			436843	2	
8	ELECTRIC PANNEL			443193	1	
7	TOP COVER			433976	1	
6	CARRIAGE BELT DRIVE			443441	1	
5	CARRIAGE ATTACHMENT ASSEMBLY			430020	1	
4	BELT IDLE ROLLER ASSEMBLY			436413	1	
3	TOWER BACK WALL TOP			443626	1	
2	TOWER BACK WALL DOWN			436412	1	
1	TOWER WELDING			443623	1	

REMARKS:

REMARKS:

TOWER ASSEMBLY

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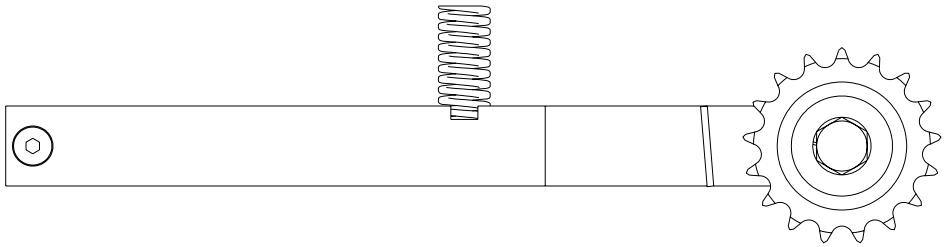
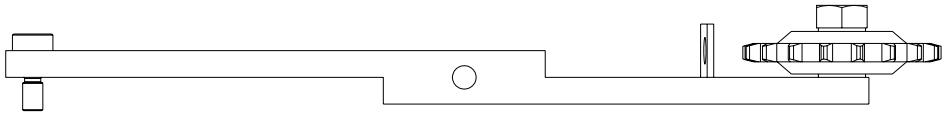
PROJECTION:

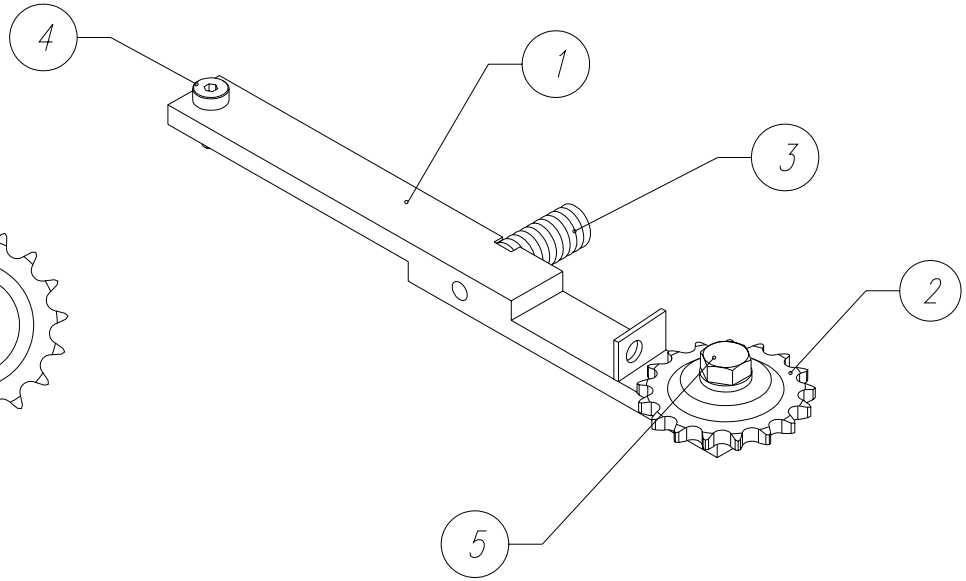
TOLERANCES UNLESS OTHERWISE SPECIFIED
MACHINED: ±1/64
WELDED: ±1/32
ANG.: ± 1/32 PER 60°

ASSEMBLY DWG.: 443511 B

DRAWN BY: V. TELEBAK
DATE: JAN-17-2006
CHECKED BY: -
TOTAL WEIGHT: -
DWG. SIZE: B
MACHINE TYPE: SPECTRA II V1
REFERENCE DWG.: 443057
SCALE: 1 : 12
Q-TY: 1
JOB No.: STD
DWG No.: 443622M
REV.: A







No.	DESCRIPTION	DWG. SIZE	PART No.	Q'ty	WEIGHT
5	SCREW		011366	1	
4	SHOULDER SCREW		015122	1	
3	SPRING		017284	1	
2	IDLE SPROCKET		010008	1	
1	CHAIN TIGHTENER ARM		430035	1	

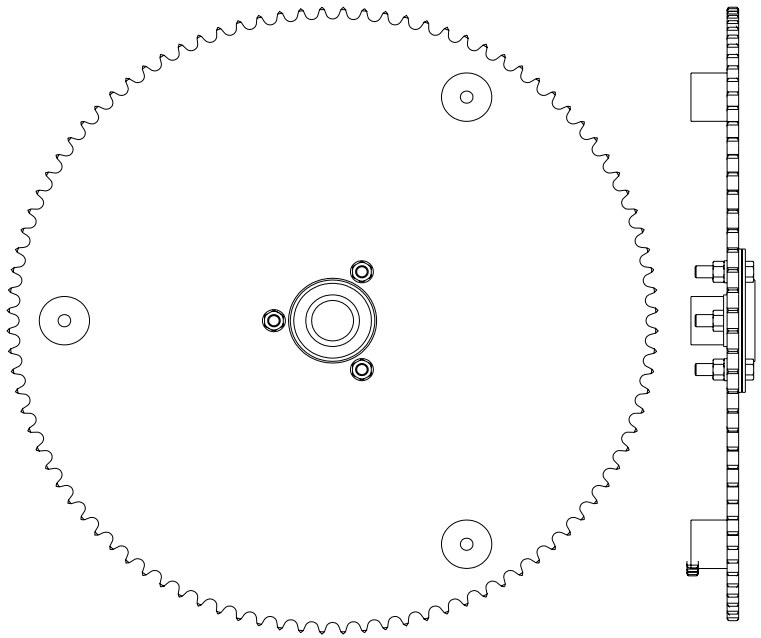
REMARKS:

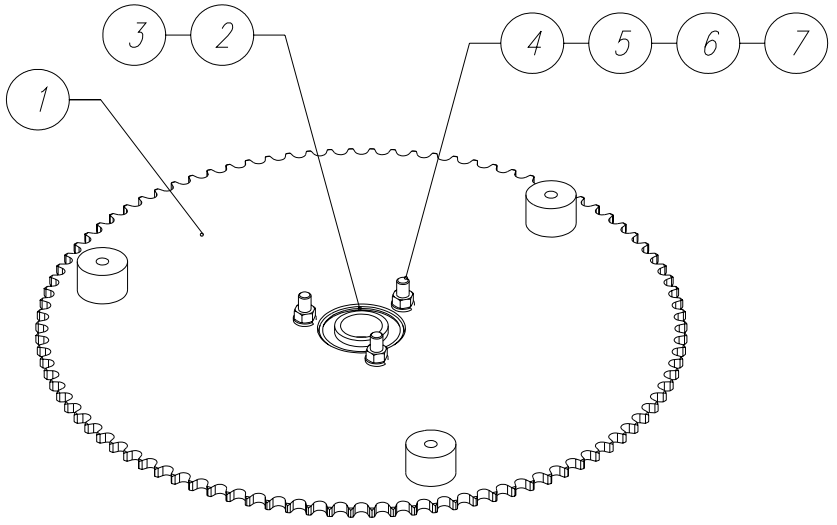
REMARKS:

CHAIN TIGHTENER ASSEMBLY

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

DATE: APR-13-2004		SCALE: 1 : 4
DRAWN BY: ROGER F.		MACHINE TYPE: SP-2.1
CHECKED BY:		DRAWING SIZE: A
ASSEMBLY DWG.: 430002	JOB No.: —	DRAWING No.: 441083M





No.	DESCRIPTION	DWG. SIZE	PART No.	Q'ty	WEIGHT
7	SPRING WASHER		011390	3	
6	FLAT WASHER		010948	3	
5	NUT		011128	3	
4	BOLT		010293	3	
3	HOUSING		014487	2	
2	BEARING		013689	1	
1	SPROCKET		406338	1	

REMARKS:

REMARKS:

DRIVE SPROCKET ASSEMBLY

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

DATE: DEC-18-2000

SCALE: 1 : 6

DRAWN BY: ROGER F.

MACHINE TYPE: CE-LP

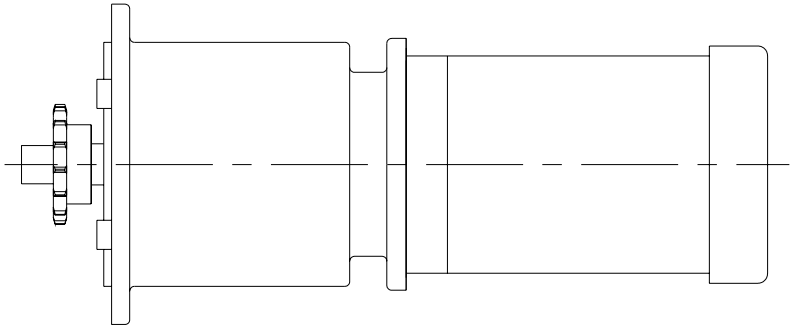
CHECKED BY:

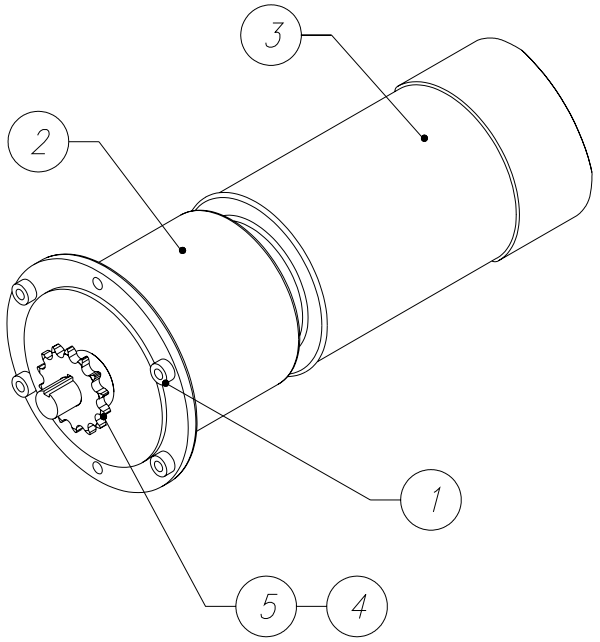
DRAWING SIZE: A

ASSEMBLY DWG.: 430002

JOB No.: 11295

DRAWING No.: 430036M





No.	DESCRIPTION	DWG. SIZE	PART No.	Q'ty	WEIGHT
5	KEY		010295	1	
4	SPROCKET		013997	1	
3	ELECTRIC MOTOR		015225	1	
2	VERTICAL REDUCER		016580	1	
1	SPACER		434081	4	

REMARKS:

REMARKS:

TURNTABLE DRIVE ASSEMBLY

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

DATE: NOV-10-2004

SCALE: 1 : 1

DRAWN BY: V. TELEBAK

MACHINE TYPE: SPECTRA ELITE

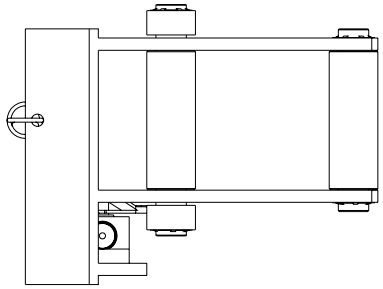
CHECKED BY:

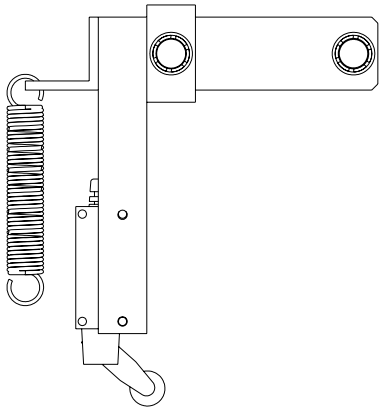
DRAWING SIZE: A

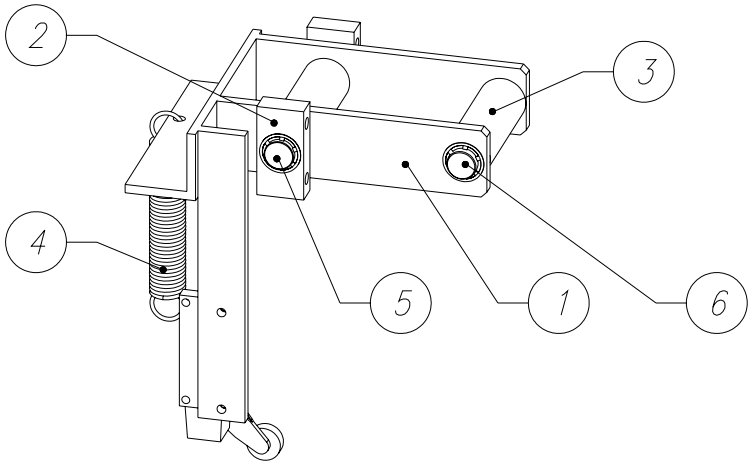
ASSEMBLY DWG.: 443054 B

JOB No.: 14738

DRAWING No.: 443056M







No.	DESCRIPTION	DWG. SIZE	PART No.	Q'ty	WEIGHT
7	SELF SEATING EXTERNAL RETAINING RING		017603	4	
6	CRS SHAFT		–	1	
5	CRS SHAFT		–	1	
4	EXTENSION SPRING		403118	1	
3	BELT ROLLER		436421	2	
2	BEARING PLATE		430022	2	
1	BELT IDLER ROLLER BRACKET		436420	1	

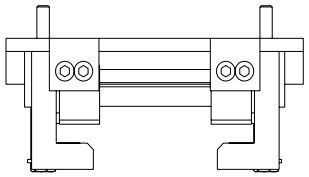
REMARKS:

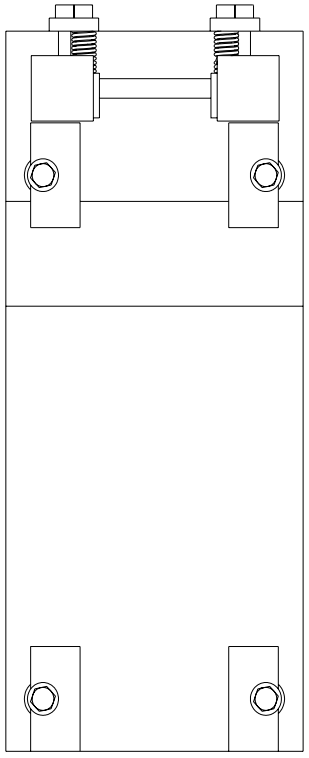
REMARKS:

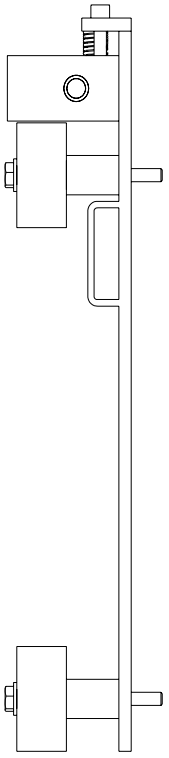
BELT IDLER ROLLER ASSEMBLY

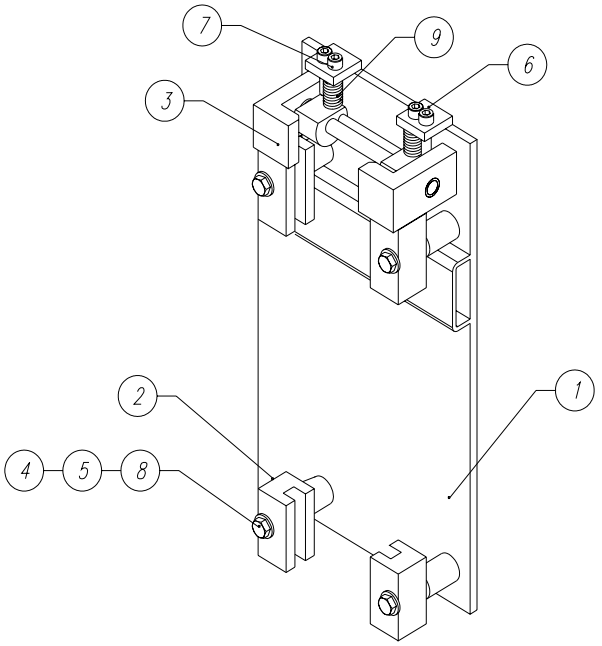
orion
PACKAGING INC.
2270 INDUSTRIEL, LAVAL
QUEBEC, CANADA, H7S 1P9
TEL.: (450) 667-9769

DATE: NOV-19-2002	SCALE: 1 : 4	
DRAWN BY: ROGER F.	MACHINE TYPE: SP-2.1	
CHECKED BY:	DRAWING SIZE: A	
ASSEMBLY DWG.: 436404	JOB No.: 12812	DRAWING No.: 436413M









No.	DESCRIPTION	DWG. SIZE	PART No.	Q'ty	WEIGHT
9	SPRING		013995	2	
8	FLAT WASHER		012221	4	
7	SOCKET CAP SCREW		017398	2	
6	SOCKET CAP SCREW		014254	2	
5	HEX CAP SREW		018276	4	
4	SPACER		434102	4	
3	SAFETY LOCK		430031	1	
2	SLIDE BEARING		439161	4	
1	CARRIAGE ATTACHMENT BACK PLATE		430028	1	

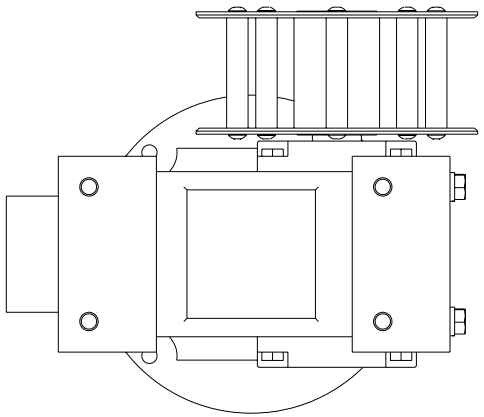
REMARKS:

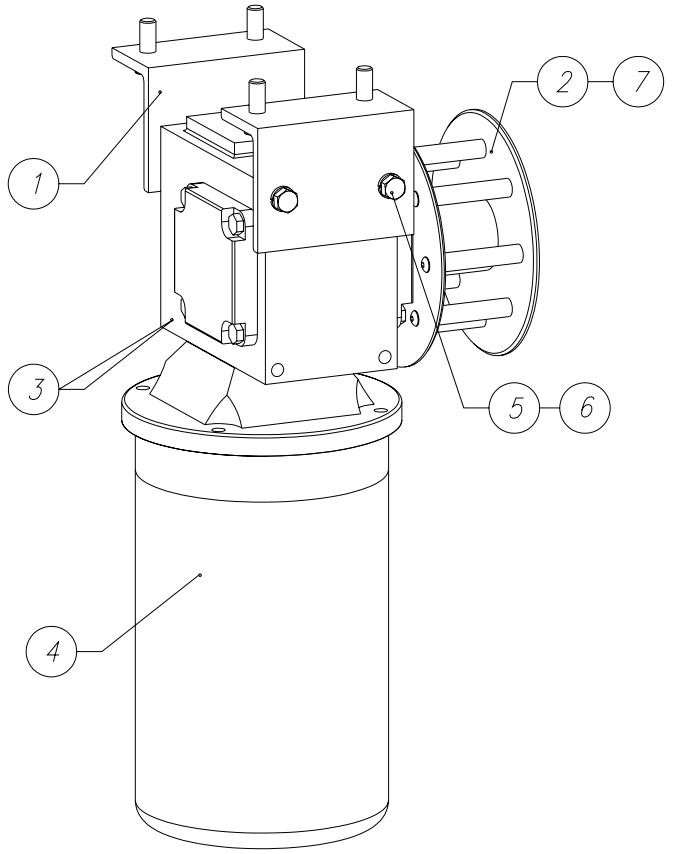
REMARKS:

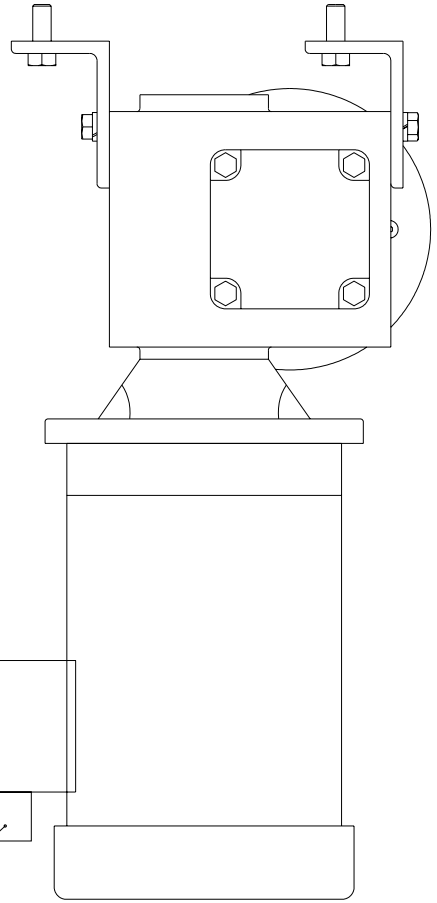
CARRIAGE ATTACHMENT ASSEMBLY

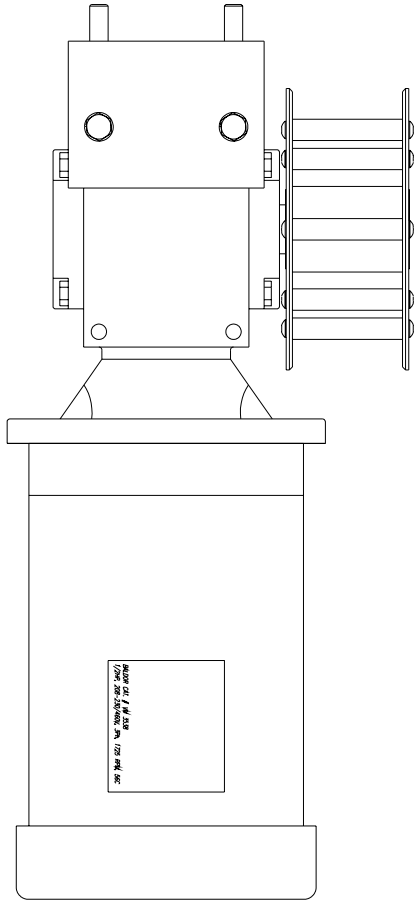
orion
PACKAGING INC.
2270 INDUSTRIEL, LAVAL
QUEBEC, CANADA, H7S 1P9
TEL.: (450) 667-9769

	DATE: MAR-25-2002	SCALE: 1 : 2.5
	DRAWN BY: ROGER F.	MACHINE TYPE: SPECTRA
	CHECKED BY:	DRAWING SIZE: B
ASSEMBLY DWG.: 4300011	JOB No.: 11295	DRAWING No.: 430020M









No.	DESCRIPTION	Length/In	DWG. SIZE	PART No.	Q'ty	WEIGHT
10	WASHER SEAL			010650-3	1	
9	NUT LOCK			010650-2	1	
8	PLASTIC CONNECTOR			010650-1	1	
7	KEY			010295	1	
6	LOCK WASHER			012724	4	
5	HEX SCREW			010316	4	
4	ELECTRIC MOTOR			015225	1	
3	REDUCER			010986	1	
2	BELT WHEEL			430024	1	
1	REDUCER BRACKET			436439	2	

REMARKS:

REMARKS:

CARRIAGE BELT DRIVE

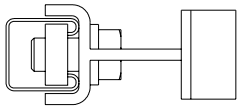
orion
PACKAGING INC.
2270 INDUSTRIEL, LAVAL
QUEBEC, CANADA, H7S 1P9
TEL.: (450) 667-9769

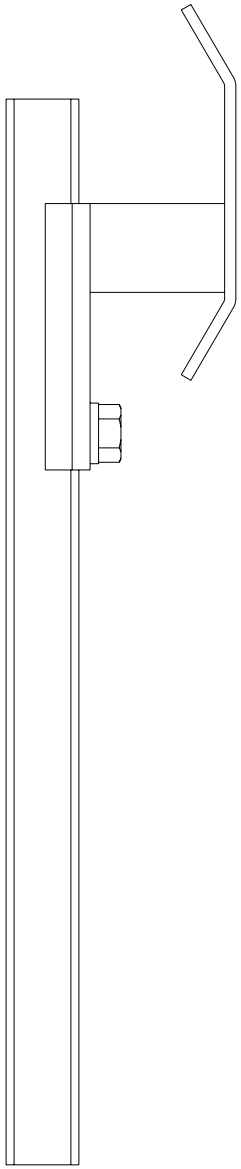
TOLERANCES
UNLESS OTHERWISE SPECIFIED
MACHINED: ±1/64
WELDED: ±1/32
ANG.: ± 1/32 PER 60"

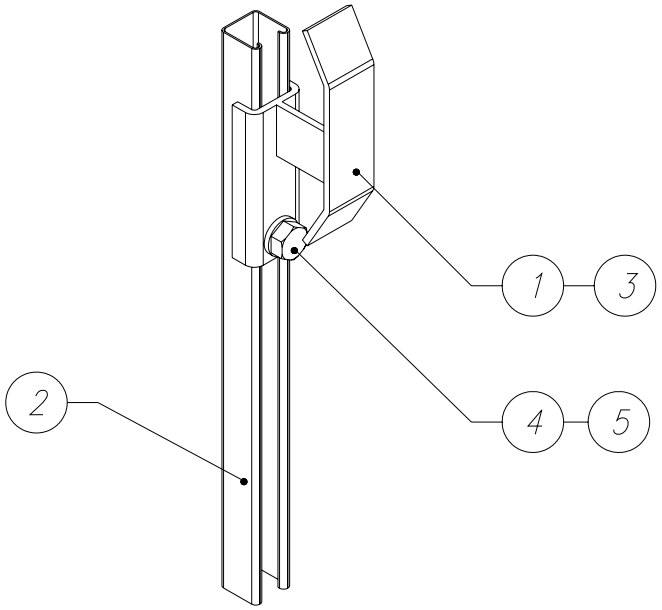
PROJECTION:

ASSEMBLY DWG.: –

DRAWN BY: MARIA MIERNIK
DATE: DEC-20-2004
CHECKED BY: –
TOTAL WEIGHT: –
DWG. SIZE: A
MACHINE TYPE: SP, SP-MAX
REFERENCE DWG. 436414
SCALE: 1 : 4
Q-TY –
JOB No.: STD
DWG No.: 443441M
REV. A







No.	DESCRIPTION	DWG. SIZE	PART No.	Q'ty	WEIGHT
5	LOCK WASHER		011390	1	
4	HEX CAP SCREW		012474	1	
3	NUT FLAT SQUARE		017853	1	
2	STRIKER CHANNEL		436440	1	
1	LIMIT SWITCH STRIKER		436844	1	

REMARKS:

REMARKS:

LIMIT SWITCH STRIKER ASSEMBLY

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

DATE: NOV-21-2002

SCALE: 1 : 2.5

DRAWN BY: ROGER F.

MACHINE TYPE: SP-2.1

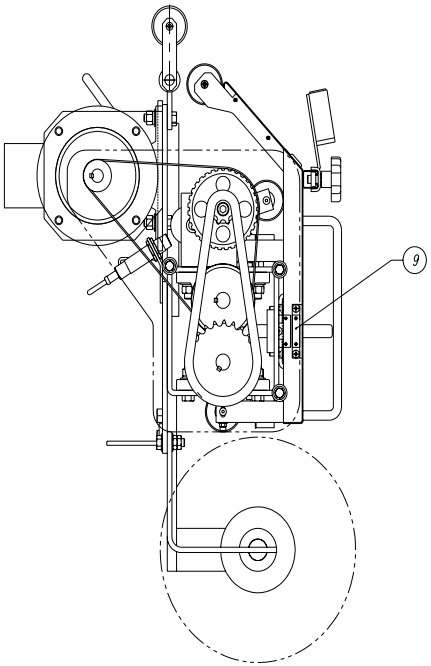
CHECKED BY:

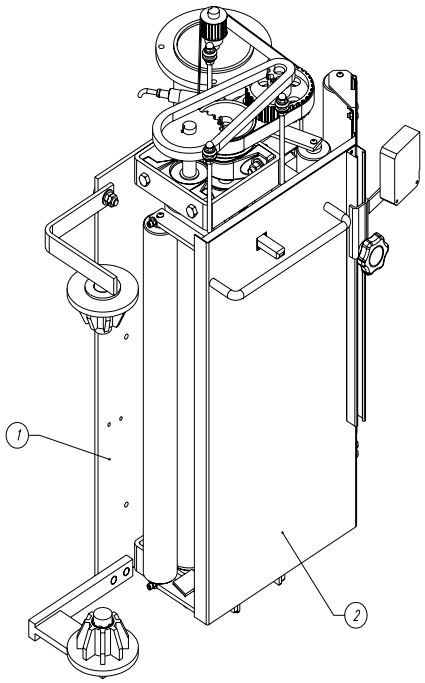
DRAWING SIZE: A

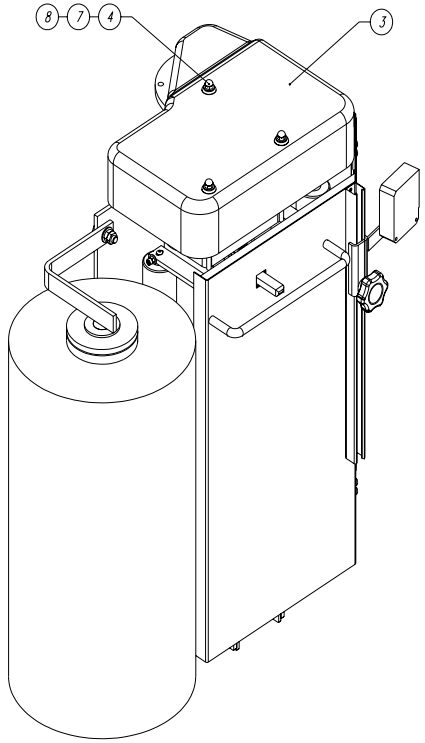
ASSEMBLY DWG.: 436473

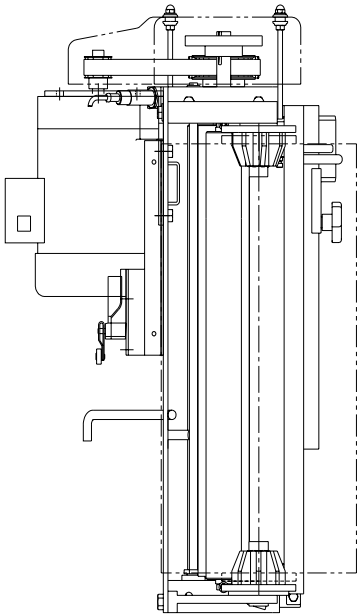
JOB No.: –

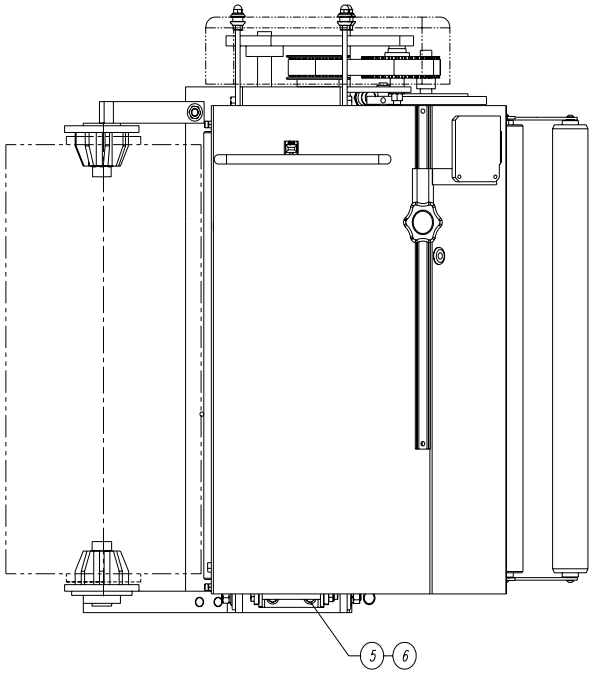
DRAWING No.: 436843M











No.	DESCRIPTION	Length/In	DWG. SIZE	PART No.	Q'ty	WEIGHT
9	POSITION SWITCH (SENTROL)			015101	1	
8	HEX NUT			012689	3	
7	FLAT WASHER			012221	3	
6	FLAT WASHER			012725	2	
5	HEX HEAD SCREW			017400	2	
4	RUBBER GROMMET			014502	3	
3	INSTA-THREAD FIBERGLASS COVER-FLR			414854	1	
2	CRADLE ROLLER ASSEMBLY-FLR-20			443593	1	
1	INSTA-THR.-FLR-20 BACK PLATE ASS'Y			443592	1	

REMARKS:

REMARKS:

INSTA-THREAD -FLR-20 CARRIAGE

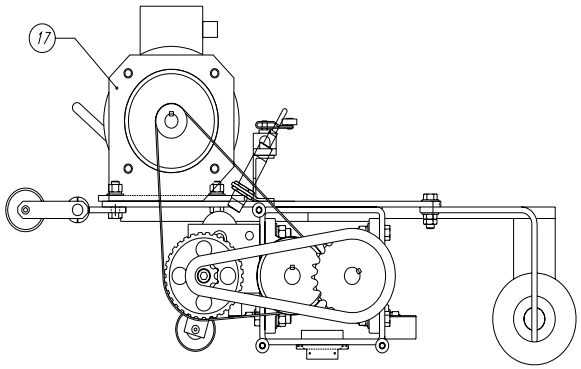
orion
PACKAGING INC.
2270 INDUSTRIEL, LAVAL
QUEBEC, CANADA, H7S 1P9
TEL.: (450) 667-9769

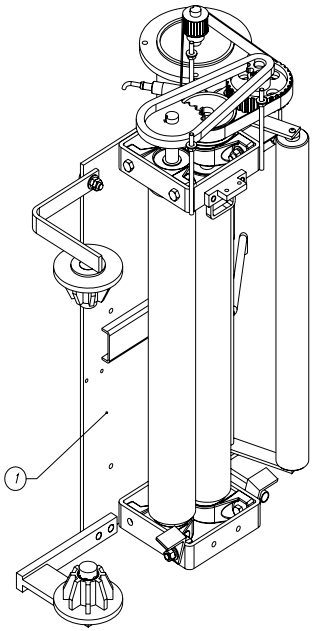
TOLERANCES
UNLESS OTHERWISE SPECIFIED
MACHINED: ±1/64
WELDED: ±1/32
ANG.: ± 1/32 PER 60"

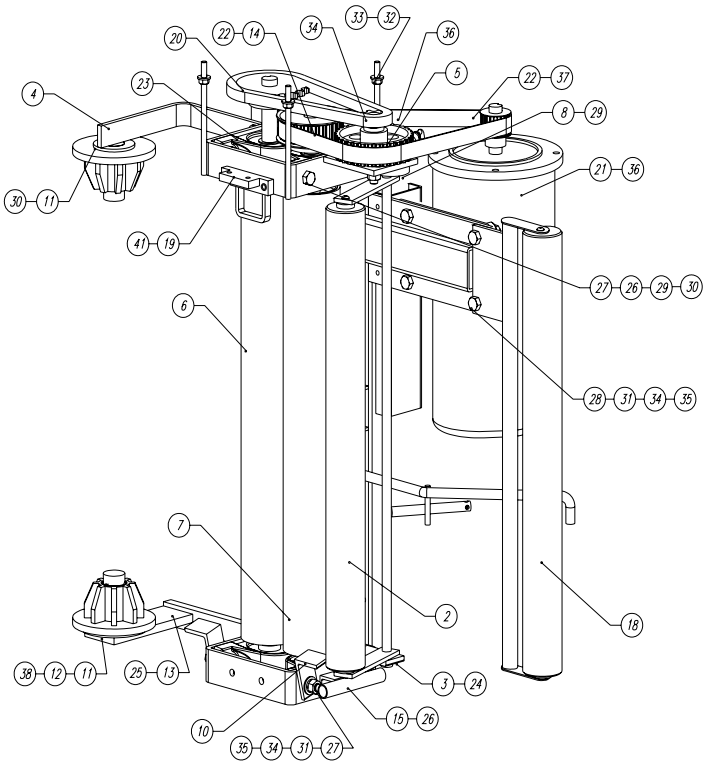
PROJECTION:

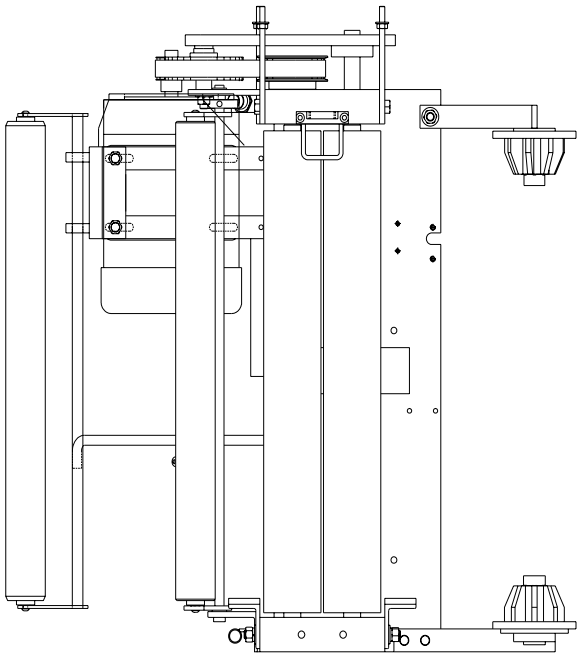
ASSEMBLY DWG.: -

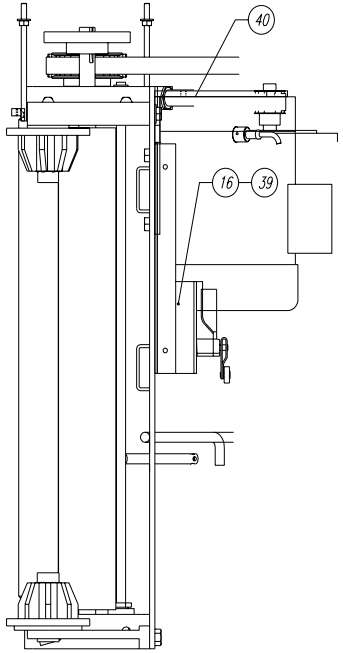
DRAWN BY: V. TELEBAK
DATE: JAN-1302005
CHECKED BY: -
TOTAL WEIGHT: -
DWG. SIZE: B
MACHINE TYPE: SPECTRA II V1
REFERENCE DWG.: 435713
SCALE: 1 : 8
Q-TY: 1
JOB No.: 14950
DWG No.: 443591M
REV.: A











No.	DESCRIPTION	Length/In	DWG SIZE	PART No.	Q'ty	WEIGHT
41	FLAT HEAD SOCKET SCREW			017976	2	
40	PROXIMITY SENSOR			011470	1	
39	MINI LIMIT SWITCH			012006	1	
38	SELF SEATING RETAINING RING			013860	2	
37	GEARBELT PULLEY			011283	1	
36	GEARBELT			011151	1	
35	SPRING LOCK WASHER			011390	12	
34	HEX. NUT			011128	12	
33	HEX. NUT			012689	3	
32	FLAT WASHER			012221	3	
31	FLAT WASHER			010948	12	
30	FLAT WASHER			012323	1	
29	SOCKET CAP SCREW			010326	1	
28	HEX. HEAD CAP SCREW			012406	4	
27	HEX. HEAD CAP SCREW			012476	4	
26	PAN PHIL SCREW			012481	2	
25	FLAT HEAD			013363	2	
24	FLANGE BRONZE BUSHING			014247	2	
23	PILLOW BLOCK			011192	4	
22	SQ. KEY			010227	3	
21	ELECTRIC MOTOR			015225	1	

No.	DESCRIPTION	Length/In	DWG SIZE	PART No.	Q'ty	WEIGHT
20	SPROCKET (260 %)			435715	1	
19	POSITION SWITCH HOLDER			443073	1	
18	ADJUSTED ROLLER ASS'Y			443415	1	
17	MOTOR BRACKET			442415	1	
16	LIMIT SWITCH BRACKET			434410	1	
15	CABLE SUPPORT BRACKET			434409	1	
14	GEARBELT PULLEY			431672	1	
13	BOTTOM MANDREL-FLR			431737	1	
12	BOTTOM SPOOL			432323	2	
11	BOTTOM SPOOL WASHER			432322	2	
10	CRADLE ROLLER OPENING LOCK			409469	2	
9	TENSION SCREW ASSEMBLY			435261	1	
8	PROXIMITY SENSOR CAM			413744	1	
7	RUBBER ROLLER			420917	1	
6	RUBBER ROLLER			420916	1	
5	SPROCKET / PULLEY			434017	1	
4	TOP MANDREL FLR			434077	1	
3	DANCER ROLLER BRACKET FLR			414852	1	
2	DANCER ROLLER ASSEMBLY - 20 MIRROR			435540	1	
1	CARR. BACK WELDING PLATE			443413	1	

REMARKS:

REMARKS:

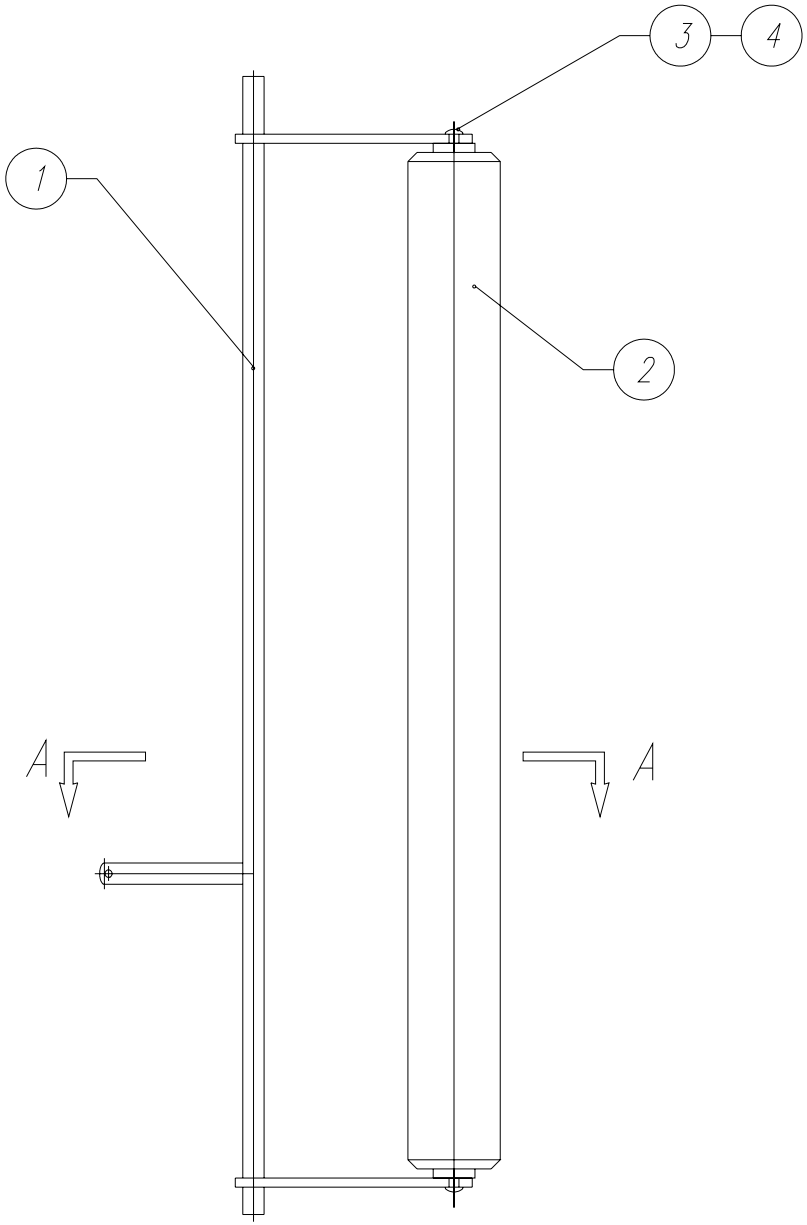
INSTA THREAD FLR 20 BACK PLATE ASS'Y

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

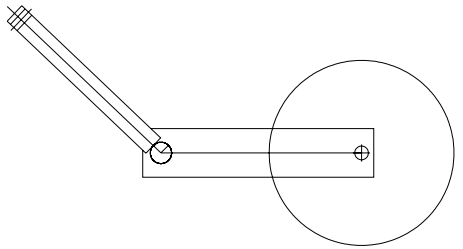
PROJECTION:

TOLERANCES UNLESS OTHERWISE SPECIFIED
MACHINED: ±1/64
WELDED: ±1/32
ANG.: ± 1/32 PER 60

DRAWN BY: V. TELEBAK
DATE: JAN-13-2005
CHECKED BY: -
TOTAL WEIGHT: -
DWG. SIZE: B
MACHINE TYPE: SPECTRA II V1
REFERENCE DWG.: 443064
SCALE: 1 : 8
Q-TY 1
ASSEMBLY DWG.: 443591 B
JOB No.: 14950
DWG No.: 443592M
REV. A



A – A



No.	DESCRIPTION	DWG. SIZE	PART No.	Q'ty	WEIGHT
4	BUTTON HEAD SCREW		014665	2	
3	FLANGE NUT		014164	1	
2	ALUMINIUM ROLLER		402789	1	
1	DANCER ROLLER CRADLE – 20 (FLR)		435541	1	

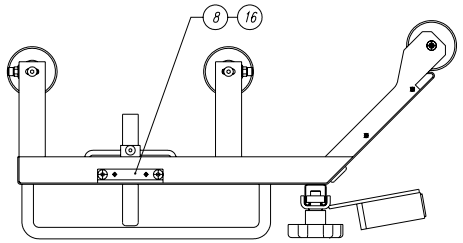
REMARKS:

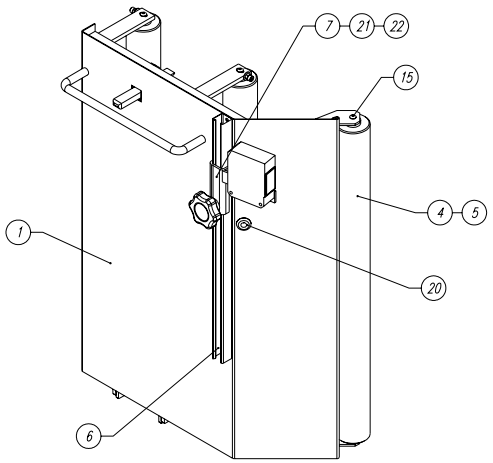
REMARKS:

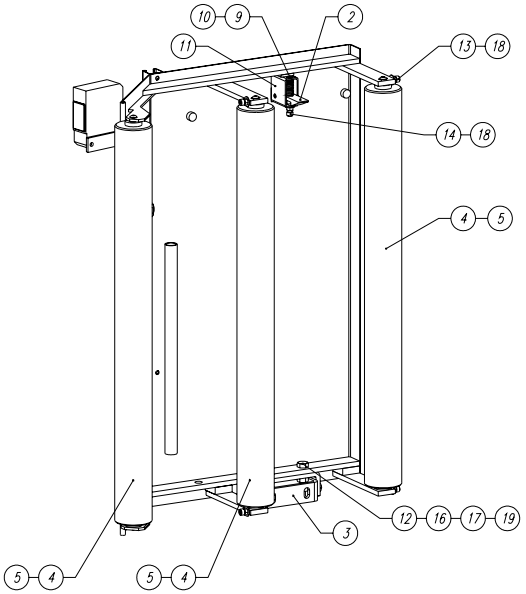
DANCER ROLLER ASSEMBLY – 20 (FLR)

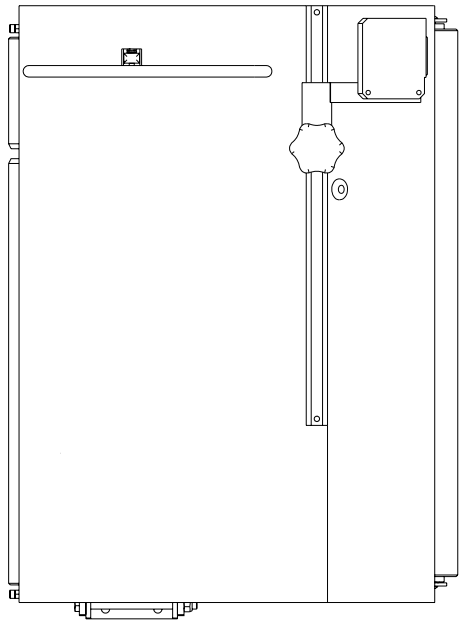
orion
PACKAGING INC.
2270 INDUSTRIEL, LAVAL
QUEBEC, CANADA, H7S 1P9
TEL.: (514) 667-9769

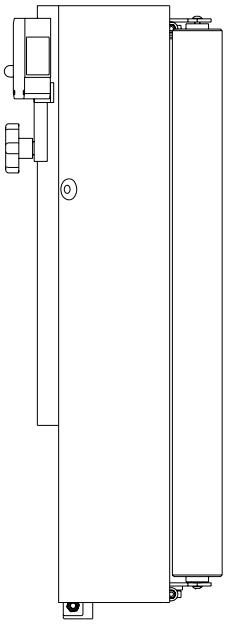
DATE: JAN-13-2003	SCALE: 1 : 4	
DRAWN BY: ROGER F.	MACHINE TYPE: SPECTRA	
CHECKED BY:	DRAWING SIZE: A	
ASSEMBLY DWG.: 434006	JOB No.: 12237	DRAWING No.: 435540M











No.	DESCRIPTION	Length/In	DWG. SIZE	PART No.	Q'ty	WEIGHT
22	BLACK KNOB			010092	1	
21	NUT FLAT SQUARE			017853	1	
20	GROMMET			014502	1	
19	HEX NUT			013407	2	
18	HEX NUT			013451	5	
17	FLAT WASHER			012725	2	
16	BUTTON HEAD SCREW			014665	6	
15	BUTTON HEAD SCREW			014313	6	
14	HEX SOCKET CAP NUT			014209	1	
13	HEX SOCKET CAP NUT			015020	4	
12	HEX HEAD SCREW			017400	2	
11	SPRING PIN			014458	1	
10	POP RIVET			015534	1	
9	SPRING			013995	1	
8	POSITION SWITCH HOLDER			443088	1	
7	PHOTOCELL HIGH HOLDER			434412	2	
6	PHOTOCELL HIGH CHANNEL			434411	1	
5	IDLE ROLLER SHAFT			413249	3	
4	ALUMINIUM ROLLER			402789	3	
3	ROLLER CRADLE HINGE			430054	1	
2	LATCH			430053	1	
1	CRADLE ROLLER SHELL WELD. FLR 20			443424	1	

REMARKS:

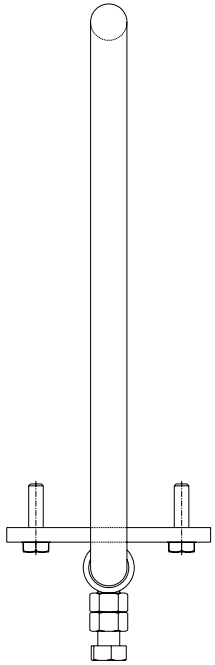
REMARKS:

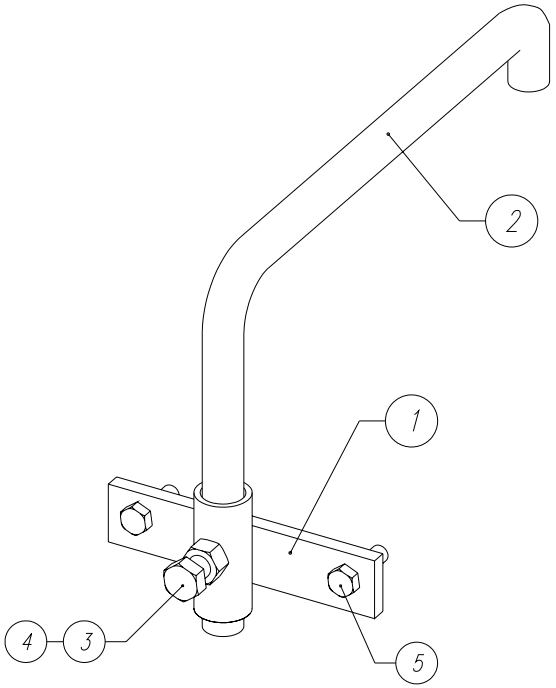
CRADLE ROLLER ASSEMBLY FLR-20

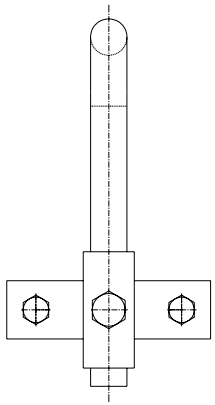
orion
PACKAGING INC.
2270 INDUSTRIEL, LAVAL
QUEBEC, CANADA, H7S 1P9
TEL.: (450) 667-9769

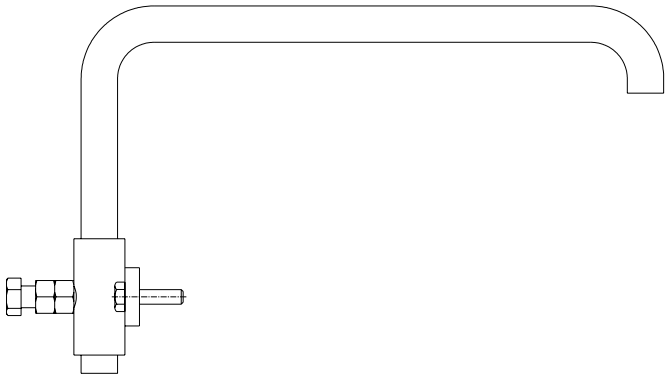
TOLERANCES UNLESS OTHERWISE SPECIFIED
MACHINED: ±1/64
WELDED: ±1/32
ANG.: ± 1/32 PER 60"

DRAWN BY: V. TELEBAK
DATE: JAN-13-2004
CHECKED BY: –
TOTAL WEIGHT: –
DWG. SIZE: A
MACHINE TYPE: SPECTRA II V1
REFERENCE DWG.: 434007
SCALE: 1 : 8
Q-TY: 1
PROJECTION:
ASSEMBLY DWG.: 443591 B
JOB No.: 14950
DWG No.: 443593M
REV.: A









No.	DESCRIPTION	Length/In	DWG. SIZE	PART No.	Q'ty	WEIGHT
5	HEX HEAD SCREW			012475	2	
4	HEX NUT			011128	1	
3	HEX SCREW			016656	1	
2	ROPING BAR			443610	2	
1	ROPING BAR BRACKET			443609	1	

REMARKS:

REMARKS:

ROPING BAR ASSEMBLY

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QUEBEC, CANADA, H7S 1P9
TEL.: (450) 667-9769

TOLERANCES
UNLESS OTHERWISE SPECIFIED
MACHINED: ±1/64
WELDED: ±1/32
ANG.: ± 1/32 PER 60"

PROJECTION:

ASSEMBLY DWG.: 443511 B

DRAWN BY: V. TELEBAK
DATE: JAN-14-2005
CHECKED BY: –
TOTAL WEIGHT –
DWG. SIZE: A
MACHINE TYPE: SPECTRA II V1
REFERENCE DWG. –
SCALE: 1 : 4
Q-TY 1
JOB No.: 14920
DWG No.: 443608M
REV. A

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.

Note: 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 (CW) adjustment decreases the response time i.e. (sharpen the motor response) plus increases the maximum possible motor speed attainable.

Trip:

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.