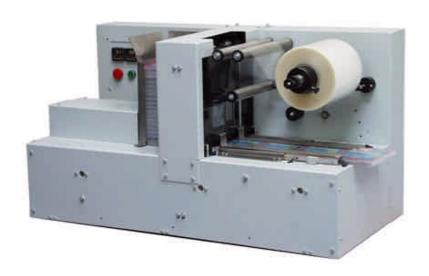


COMPLETE SOLUTIONS FOR ON-DEMAND CD AND DVD PRODUCTION



Speed Wrap
Case Wrapper for CD or DVD Cases

## OPERATING AND SETTING MANUAL



### Thank you for purchasing a JMV Robotique Speed Wrap

#### **OPERATING AND MAINTENANCE MANUAL**

Document Reference No. TP 000 156 (Rev 1.07)

**Production Standard** 

T.ZZ 004 020 DVD Speed Wrap

T.ZZ 004 021 CD Speed Wrap

#### **JMV Robotique**

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#### **WARNING**

To avoid electrical shock hazards, unit covers should only be removed by authorised personnel.



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#### **ENVIRONMENTAL PROTECTION**

Waste electrical products should not be thrown away with household waste. Please recycle where facilities exist.

Check with your local authority or retailer for recycling advice.

JMV Robotique reserves the right to amend or modify the specifications and design criteria applying to these products.

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#### **WARRANTY TERMS**

The DVD Speed Wrap is covered by the JMV Robotique standard warranty.

#### **WARRANTY EXCLUSIONS**

We will not provide warranty repairs if, in our opinion, the problem resulted from externally caused damage, use outside the product's specification, faults caused by inexperienced or non-approved repairers.

The warranty does not cover the replacement of used consumables (or of parts which need periodic replacement during the life of the product as a result of the use made of them) unless the consumable itself is defective.



#### Note:

Heater blocks are not covered by the warranty.

#### IF YOUR PRODUCT FAILS WITHIN THE WARRANTY PERIOD

- Prepare a description of the problem you have had
- Make sure you have your proof of purchase document (invoice or receipt)
- Contact your supplier



#### Note

Throughout this manual reference is made to the DVD Speed Wrap. The procedure for the CD Speed Wrap is identical except where stated.

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#### **SECTION 1: SPECIFICATION**

**Power supply:** 200/220Vac 50/60Hz 1000 VA

Fuse: 5 Amp

Capacity: 1200 per hour

**Duty Cycle:** Continuous

**Dimensions:** Height: 27" (685mm)

Width: 44.5" (1130mm) Depth: 22.6" (575 mm)

Gross Weight: 320lbs (145Kg)

Net Weight: 187.4lbs (85kg)

**Polypropylene required:** Bi-Oriented Polypropylene (OPP)

DVD Speed Wrap

CD Speed Wrap

**Hopper capacity:** 25 DVD 'Amaray' cases 35 CD jewel cases

Polypropylene size: Hub: 76.2mm (3") 76.2mm (3")

Roll Length: 1500m / 4291ft 1500m / 4291ft

Roll Width: 213mm(min) -215mm(max) 141mm(min) -142mm(max)

8.385"(min) - 8.46"(max) 5.55" (min) - 5.59" (max)

Roll Diameter: 240mm / 9.4" 240mm / 9.4"

The Speed Wrap will only accept rolls up to a maximum

diameter of 240mm (9.448").

Polypropylene thickness

**recommended:** 25 Micron 25 microns

No. of cases per roll: 4800 approx. 4800 approx.

Polypropylene wrapping material is available from JMV Robotique.

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#### **SECTION 2: INTRODUCTION AND INSTALLATION**

#### 2.1 Introduction

The DVD **Speed Wrap** has been specially designed to provide a professional wrapping facility for DVD and "Amaray" type cases. The automatic operation is simple and effective using rolls of polypropylene wrapping material. The **DVD Speed Wrap** is a tabletop mounted unit, which can easily be transported if required.

In order to achieve the very best result, ensure you are using polypropylene material to the exact size specified above. This can be ordered from JMV Robotique.

#### 2.2 Installation

Your **DVD Speed Wrap** has been fully tested at the factory and our Quality Control Department has ensured, before dispatch that it performs satisfactorily to the full specification.

Carefully remove your **DVD Speed Wrap** from its shipping carton and verify that all parts are present. If there are missing or damaged parts contact JMV Robotique or an authorised partner immediately.

You should find the following:

- DVD SPEED WRAP
- Manual
- Roll of polypropylene wrapping material



#### Note:

If your DVD SPEED WRAP is damaged during shipment, please contact the freight carrier first, then, contact your JMV Robotique partner/reseller or JMV Robotique. You should save your shipping materials so that if the need arises, you can return your DVD SPEED WRAP for service. This packaging was designed specifically for shipping your DVD SPEED WRAP. Other packaging may not be suitable.

After unpacking, place your **DVD SPEED WRAP** on a flat and clear surface.

The **DVD SPEED WRAP** will accept power from either 200/220v 50/60Hz. The power connection is made to the **DVD SPEED WRAP** via the power cable supplied. The power circuit should be rated in accordance with the national and local electrical codes.



#### **CAUTION:**

The machine may be damaged if an incorrect voltage is used. A good electrical ground must be connected to the DVD SPEED WRAP.

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#### **SECTION 3: OPERATION**

#### 3.1 Power

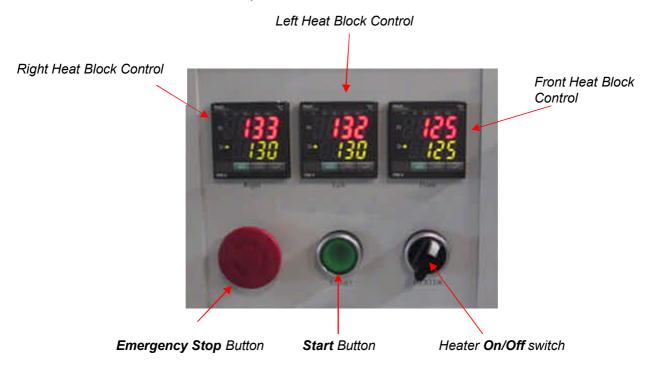
#### 3.1.1 Powering Up

After connecting to the power supply, power up the **DVD SPEED WRAP** using the switch situated on the side of the machine.



Turn to **On** position

The commands on the front panel of the machine are as follows:



#### 3.1.2 Emergency Stop

Pressing the Emergency Stop at any time stops the unit mechanism.



#### Note:

It **does not** turn off the heater. To release the Emergency Stop, rotate the switch approximately 10 degrees clockwise. The Emergency Stop switch must be depressed and the main power disconnected before any adjustments are made to the unit.

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#### 3.2 Heater Seal Temperature Control

Switch the Heater On/Off switch to the **On** position by turning the switch to the right. This allows the heaters to heat up. Each heater has been pre-set in the factory with temperatures suitable for a typical DVD case. It will take approximately 15 minutes for the heaters to reach and stabilize at this temperature.

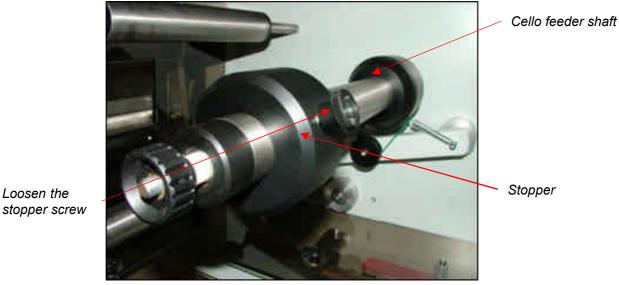
The top figure on the heater control indicates the actual temperature of the heaters. The bottom figure indicates the setting temperature. To change the temperature of a heater simply press the up ▲ and down ▼ arrow keys to change the setting temperature to that desired.



Note:

Ensure the unit is switched off before attempting to install a new Cello Roll.

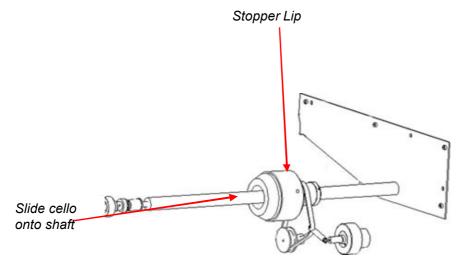
Loosen the screw and remove the stopper from the end of the Cello feeder shaft.



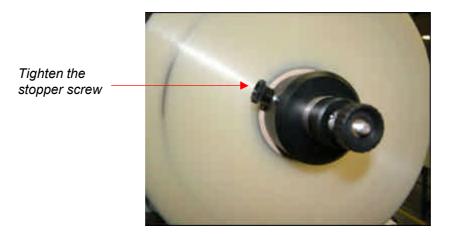
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Slide the roll of Cello onto the shaft. Ensure that the cello is pushed fully onto the shaft and that the cello sits on the stopper lip.

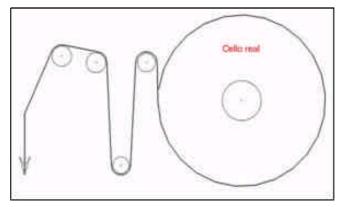


Secure in the cello in place by replacing and tightening the stopper the screw.



#### 3.4 Threading the Cello Wrapping

The roll of Cellophane needs to be threaded through the machine before powering up the wrapper. The diagram below shows how the Cellophane should be threaded through the machine.



As per the line diagram, thread the Cello through the machine. If the unit is at the start of the cycle the Cello will feed easily vertically into the cutting area.

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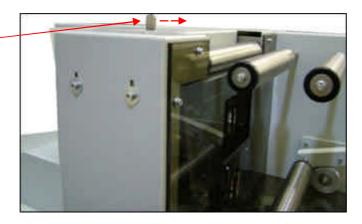


#### Note:

When the unit is at the start of the cycle the DVD case pusher is fully retracted to the left and cannot be seen in the hopper.

If the unit is not at the start of the cycle, thread the Cello into the wrapping tower/cutting station, hold the lever shown below to the right to allow the Cello access.

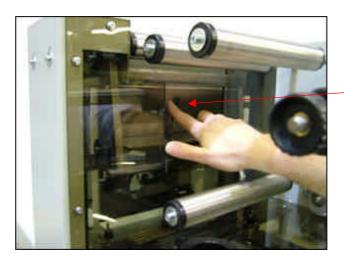
Push this lever to the right





This lever will need to be operated if you wish to remove the Cello at any time from the tower/cutting station and the DVD Speed Wrap is not at the start of the cycle.

The Cello needs to hang half way down the wrapping tower/cutting station. Use your fingers to pull the Cello down.



Pull the Cello down

The final stage of threading the Cello is to ensure that the Cello is in the correct area so it can be clamped by the wrapping mechanism.



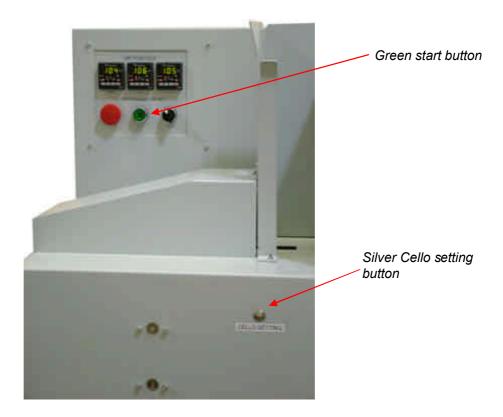
#### Note:

Do **NOT** place any DVD cases into the hopper at this stage. The hopper should be empty.

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To check the Cello is in the correct position, you can operate the unit in simulate mode. With the wrapper turned on hold down the green start button with your left hand and press the silver Cello setting button with your right hand.



The wrapper goes through the process of a single wrap, leaving the Cello at the correct position to begin a full wrapping cycle. Using these buttons you can index the wrapping mechanism slowly through the cycle. To ensure the unit is in the start position, wait until the pusher is fully retracted to the left i.e. it cannot be seen in the hopper.

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#### 3.5 Making Adjustments

#### 3.5.1 Adjusting the Cello tension

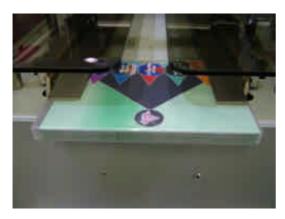
The tension of the Cello can be adjusted to achieve the wrap type you require. The tension is achieved by 2 bars which run on top of the DVD case the length of the wrapping chute.

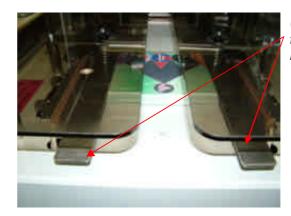


#### Note:

Ensure the wrapper is switched **OFF** at this stage.

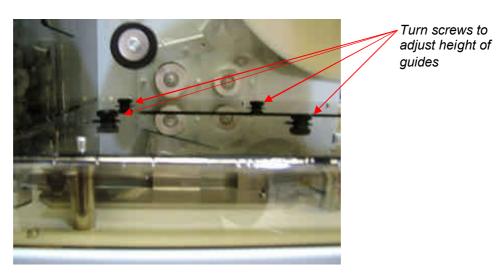
To check this, place a case under the guides and run it along the length of them to feel whether the pressure is even.





Cello tension bars

If the guides on either side are not even, you can adjust their height by turning the screws shown below. To increase the Cello tension turn the screw anticlockwise to increase the weight on top of the DVD case.



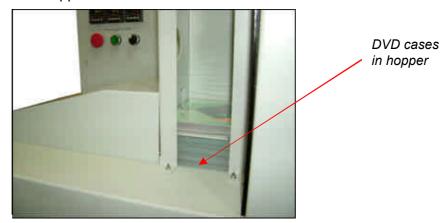
#### 3.5.2 Adjusting the Cello Position

Ensure the wrapper has been switched **ON** for at least 15 minutes to allow the heaters to have reached their pre-set temperatures.

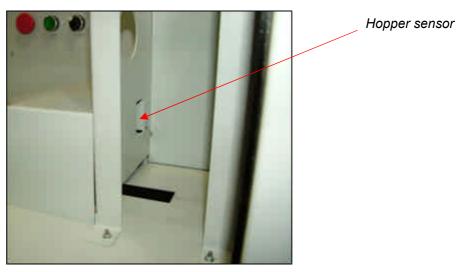
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Place a few DVD cases into the hopper.



Ensure you have enough cases in the hopper to cover the hopper sensor otherwise the wrapper will not operate.



Press the green start/stop button on the control panel and the cases in the hopper will be pushed forward one at a time through the wrapping mechanism.

The first process sees the case mechanism wrap the polypropylene material around the case and seal it on the long edge. In the second process, the cases are pushed forward one at a time between the side folders and heaters and ejected at the right hand side of the unit in a fully wrapped condition.



#### Note:

The unit will require to wrap between 5 and 10 cases before it 'settles down'. This is because the Cello needs time to run consistently in the guides.

Once you have a wrapped 5-10 cases

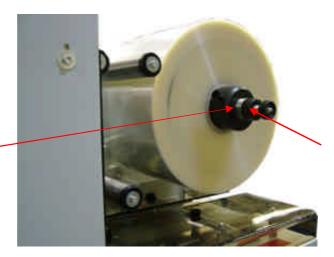
, look to see if the case end wraps (the short edges) need adjusting.

If it appears that there is too much Cello on one side of the case and not enough Cello on the other, this indicates that the Cello is not positioned centrally on the feeder shaft. To move the Cello more towards the back of the wrapper, tighten the screw situated on the stopper. To

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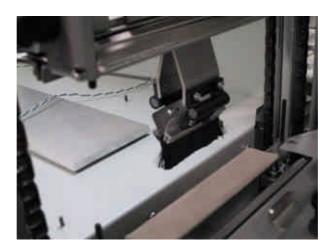
move the Cello more towards the front of the wrapper, loosen the screw and pull the roll towards you.



Loosening the screw and pulling the roll towards you moves the Cello slightly to the front.

Tighten screw moves Cello slightly to the right

The long edge wrap is factory set and should never normally require adjusting, however, if the cello wrap does not align properly on the front overlap edge of the case, the operator can adjust the cello by moving the brush, as shown below, left or right.



#### 3.5.3 Adjusting the Heater Temperature

Under normal circumstances the temperature settings should not require adjustment. The correct temperature is around 130°C. However, should difficulty in obtaining a reliable weld be experienced, the settings may be adjusted via controls on the front panel. In other instances, the heaters might be too hot and may damage the case, in which case the heater temperatures should be lowered.



#### Note:

Care should be exercised not to set an excessively high temperature, which may result in damaged cases. The heater is locked to a maximum setting of 160°C.

To increase or lower the temperature hold down the  $\triangle$  or  $\blacktriangledown$  button respectively for more than 3 seconds. The current value will be displayed and will start to change. When the desired value is reached, release the button and do not push any buttons for a further 3 seconds.

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#### 3.5.4 Adjusting the wrapper for different DVD case widths



#### Note:

This section does not apply to CD jewel cases as their dimensions do not vary.

The DVD Speed Wrapper is set in the factory to work with a standard 192 mm wide DVD case. There are many different case widths and the unit may have to be adjusted to accommodate the case you wish to use.



#### Note:

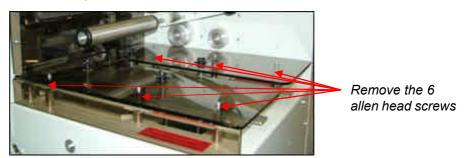
Before commencing this adjustment switch off the unit and disconnect it from the mains supply.

To check the adjustment, place a DVD case in between the Cello folders. The front to back movement should be between 0.5mm and 0.75mm. If it is too tight the Cello will be loose at the ends and pushed up away from the seal. If it is too loose, the wrap will be loose at the ends.

#### 3.5.5 Adjusting the case width

#### 3.5.5.1 Removal of the wrap tunnel cover

To adjust the case width you first have to remove the plastic tunnel cover. Remove the 6 allen head screws and carefully remove the cover.

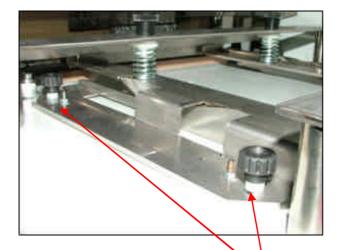


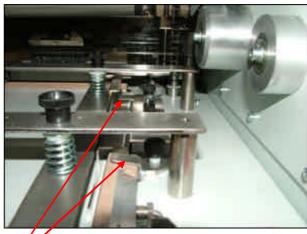
#### 3.5.5.2 Adjusting the case width

Place the case in between the Cello folders and again check the clearance. To adjust the Cello folder, loosen the 2 screws in each folder and move them in the required direction.

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Loosen the screws to adjust case width ensuring you adjust both Cello folders equally and squarely



They must be adjusted squarely and both must be moved an equal amount. **NEVER** only move one guide.

When you have completed adjustment, tighten the 4 screws holding the Cello folders and replace the tunnel cover.

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#### 4.0 Operating the DVD Speed Wrap

Fill the hopper with up to 25 DVD cases. Press the green **Start** button.



Wrapped cases come out here

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#### 5.0 Long edge seal adjustment

Because DVD cases can vary in thickness, it may be necessary to adjust the wrapping film overlap as follows:

Loosen the knob as shown below.

Turn adjustment knob:

Anti-clockwise overlap
Clockwise to overlap



Adjustment knob to increase the decrease the

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#### 6.0 Spare Parts List

Rep.	Quantity	Description
151	12	Bearing
152	6	Foot
162	1	Bearing
164	8	Bearing
168	4	Bearing
169	4	Bearing
170	2	Rubber stopper
171	4	Bearing
200	18	Roll 604ZZ
201	8	Roll 262ZZ
202	1	Roll 608ZZ
203	28	Roll 6000ZZ
204	12	Ball slide
210A	5	Pinion
210B	3	Pinion
210C	1	Pinion
210D	1	Pinion
215A	1	Pinion
257	1	Button
301	1	security microswitch
305	1	24V Power supply
310	1	DC Motor 21 rpm
311	1	DC Motor 42 rpm
315	1	E Stop Button
318	1	Start pushbutton with light
321	4	Relay
322	1	2 position switch
323	1	Fuse socket
323	1	Front pushbutton
325	1	Main switch
331	3	Heater controller
333	3	Temperature Probe
334	3	Heater 220V 315W
400	2	Shaft
408	1	Belt
411	2	Rail for grip
412	1	Articulation shaft for grip
417	2	Bearing
418	1	Tube
419	4	Bearing
420	4	roll shaft for cutter arm
421	1	Rail to fix cutter
422	1	Fix cutter
426	2	Moving cutter
431+432	1	Right grip assmebly
431S+432S	1	Left grip assembly
437	2	Chain
446	1	Chain
447	1	Chain

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449	1	Cover protection
453	1	Cover protection
455	1	Cover protection
500	1	Heater block right
500S	1	Heater block Left
503	1	Folder finger
503S	1	Folder finger
5035	2	Nut for roll
505	2	
		shaft for upper folding
508	2	Cam
510	1	Front Heater bolck
512	2	Cam
520	14	Bearing
520A	2	Bearing
521	2	Shaft for front heater roll
522	1	Cam
523	2	Cam
526	1	Pusher
534	2	Shaft
540	4	Shaft
560	2	
568	2	Cello hub
571	1	Shaft for tension roll
572	1	
573	1	Shaft for cello roll
576	4	Cutter cam
585	2	Grip Cam
589	2	Spring Shaft
594	2	Spring shaft
595	4	Washer
596	2	Pusher Rail
597	1	Pusher Articulation
599	2	Rail for roller
602+603+604	1	Right Conformer assembly
602S+603S+604S	1	Left Conformer assembly
1032	3	Spring
1033	2	Spring
1034	2	Spring
1035	5	Spring
1000	J	Opining

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**Diagram 1: Cello Cutter Assembly** 

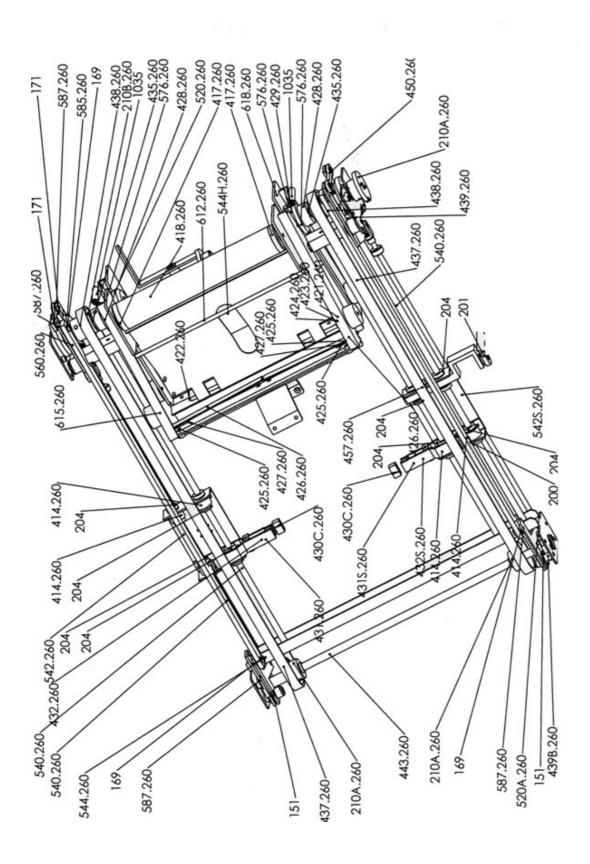
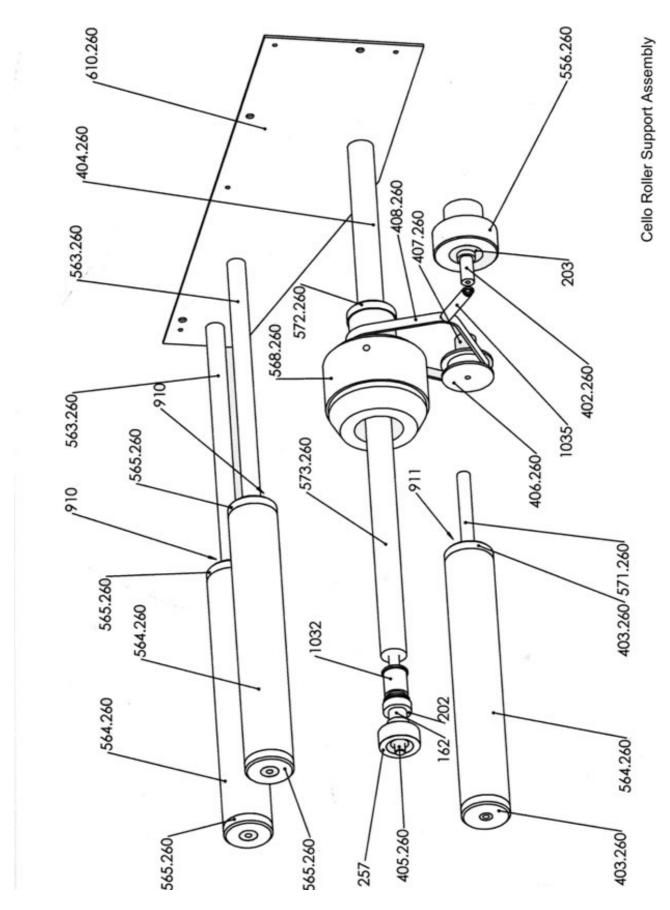


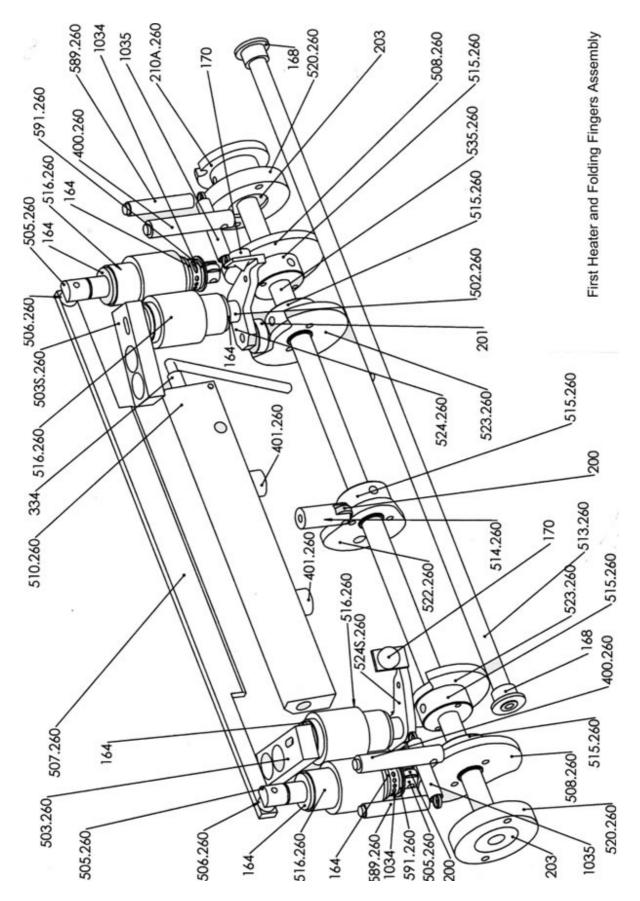
Diagram 2: Cello Roll Support Assembly



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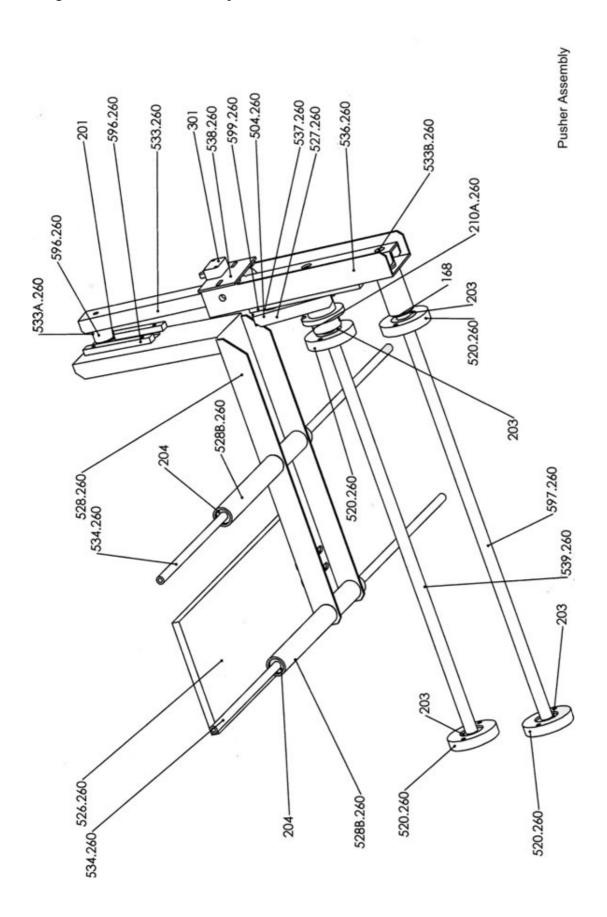
**Diagram 3: First Heater and Folding Fingers Assembly** 



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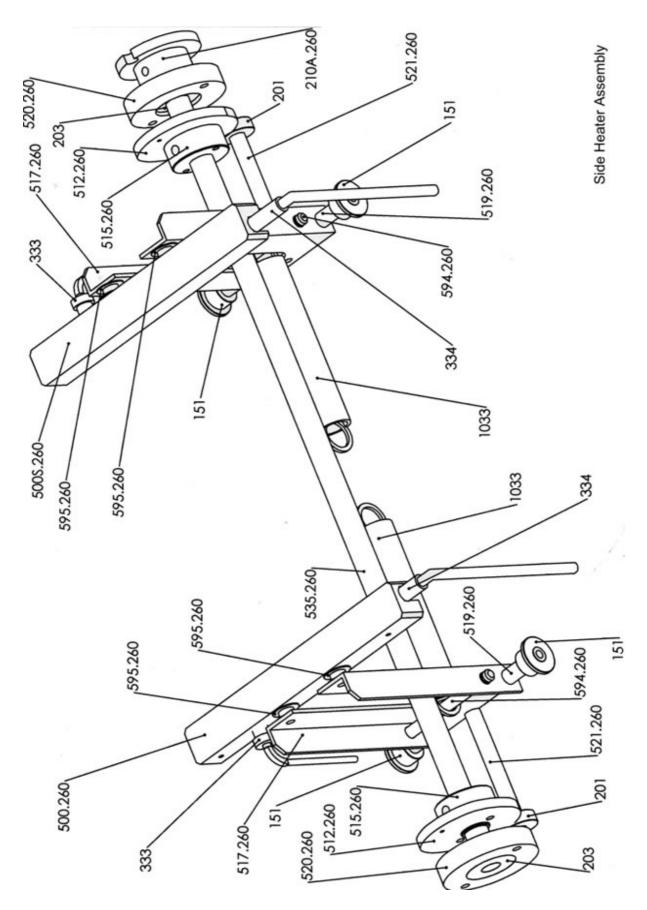


#### **Diagram 4: Pusher Assembly**



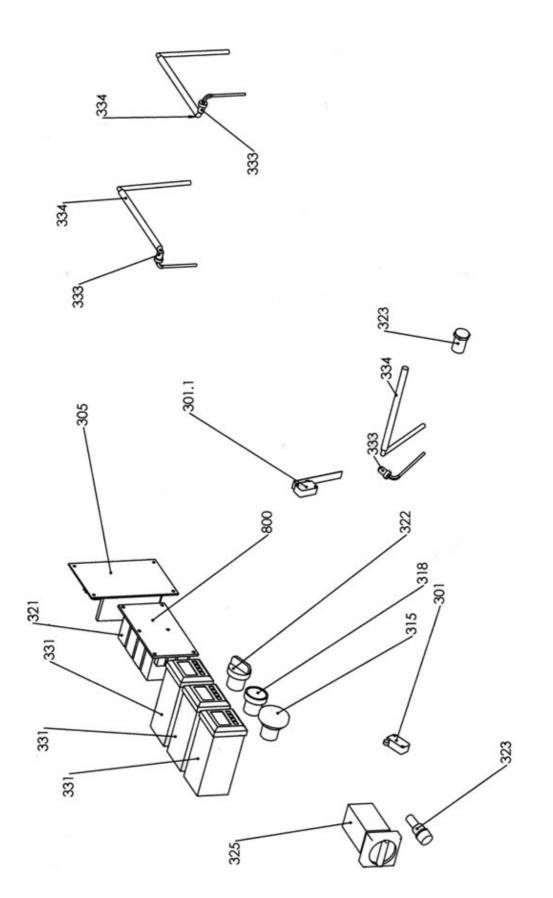


**Diagram 5: Side Heater Assembly** 



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**Diagram 6: Electrical Components** 



Electronic Components

# Supplied by: JMV ROBOTIQUE ZI du Clos Aux Pois 6/8 Rue de la Closerie LISSES 91048 EVRY Cedex France

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