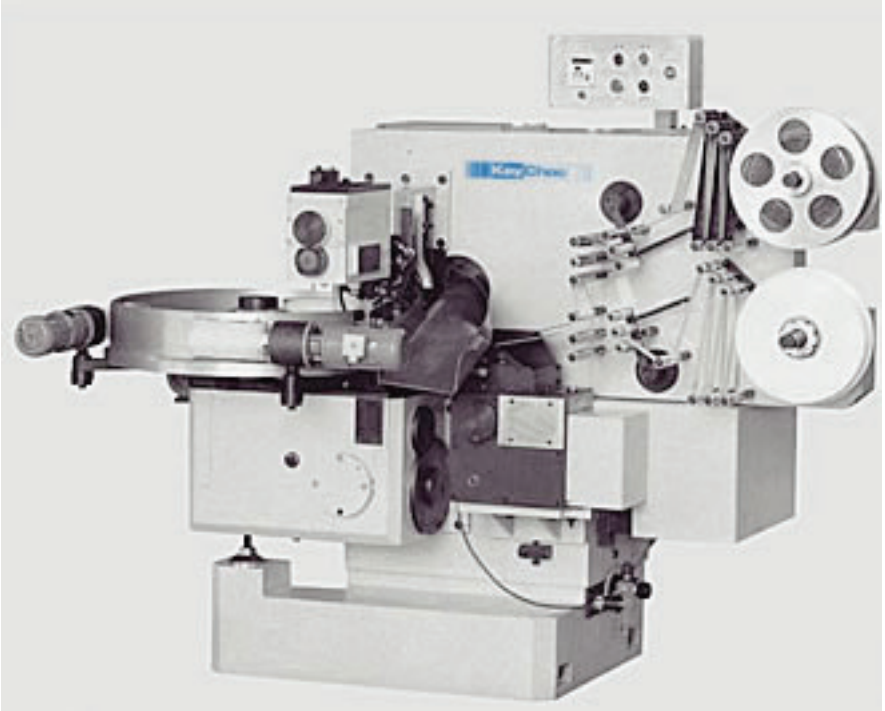
INSTRUCTION MANUAL

KeyChoc TW600D

Double Twist-Wrapper



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1. Usage and Characteristics:

This machine is designed for high-speed double twist-wrapping of hard candies and toffees and it can be set to wrap with a single or double layer of film. A photoelectric sensor ensures that the paper feed will stop if there is no product to wrap and vice versa, so there are no empty wraps and no unwrapped candies. Speed is controlled by a frequency inverter.

2. Technical parameters:

Capacity	500 pcs./min		
Packing material	Cellophane, PVC, polypropylene, composite material, etc.		
Max Power	2.5kw		
Electrical Supply	3 Phase, 380-420V, 50hz		
Weight of machine	1083kg		
Product Specification	*Length*	*Width*	*Height*
	12-32mm	12-26mm	6-20mm
Size of machine	*Length*	*Width*	*Height*
	915mm	1790mm	1474mm

3 Installation & Setting Up:

3.1 **Lifting** - The machine can be lifted into place using the lifting hook located on the top of the machine. The hook swivels freely allowing you to locate the machine as required.

3.2 **Connecting the Power Supply** - Open the main electrical box at the back of the machine (see Figure 1 and Figure 8) and connect the supply as shown in the wiring diagram.

3.3 **Connecting Air Supply** – The compressed air supply should be connected to the oil/water separator on the machine (see Figure 1).

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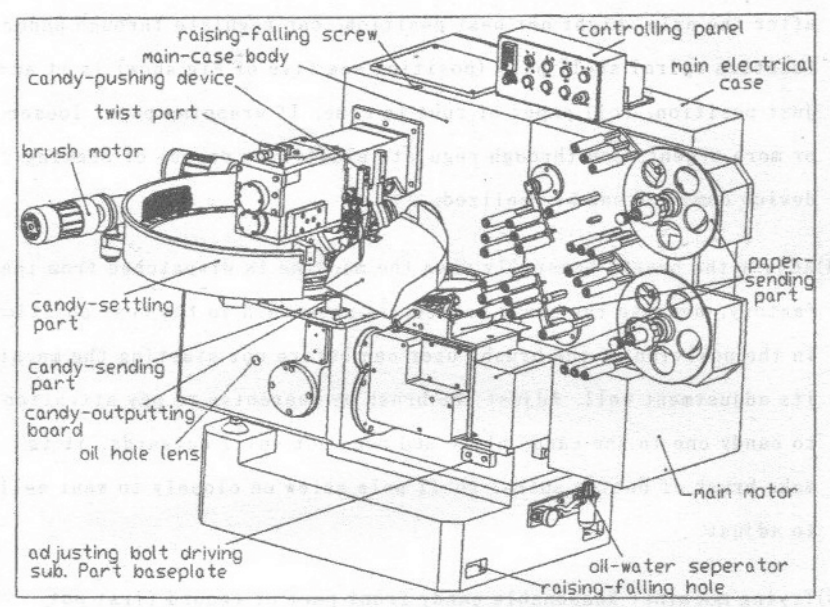


Figure 1

3.4 Starting & Stopping The Machine

Before starting the machine, operate it using the 'JOG' function (marked 'Interim Start' in Figure 2) to ensure that all moving parts are moving freely and that there are no mechanical obstructions to the normal operation of the machine.

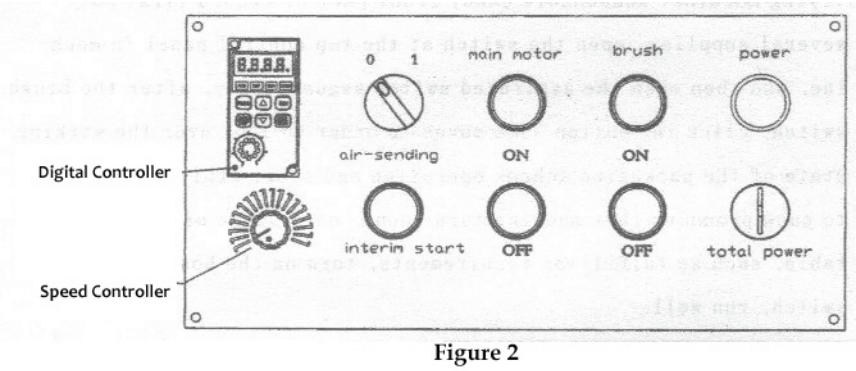


Figure 2

Starting the Machine:

(i) Switch on power
(ii) Switch on air (switch marked 'gas sending')
(iii) Switch on brushes
(iv) Ensure speed controller is set to zero
(v) Switch on main drive motor
(vi) Increase speed gradually as required

Stopping the Machine:

(i) Gradually reduce speed down to zero
(ii) Switch off motor
(iii) Switch off brushes
(iv) Switch off air
(v) Switch off power

IMPORTANT

- Air should always be switched to the 'ON' position before starting the machine
- Speed should always be adjusted gradually both up and down to protect the machine against mechanical damage

3.5 Loading Packaging Film

If wrapping with a single film, fit the spool onto the top paper axle. If wrapping with two films, fit the external film spool onto the top paper axle and the internal film spool onto the bottom paper axle. (See Figure 3)

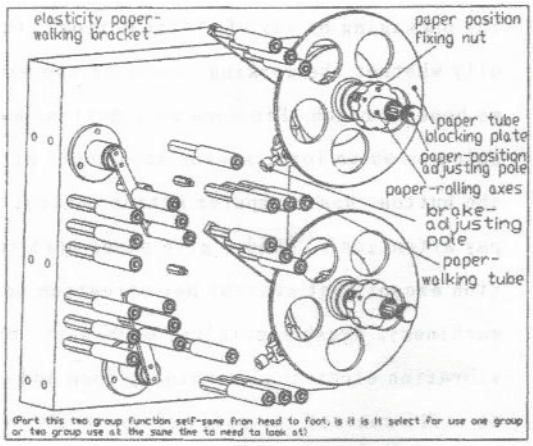


Figure 3

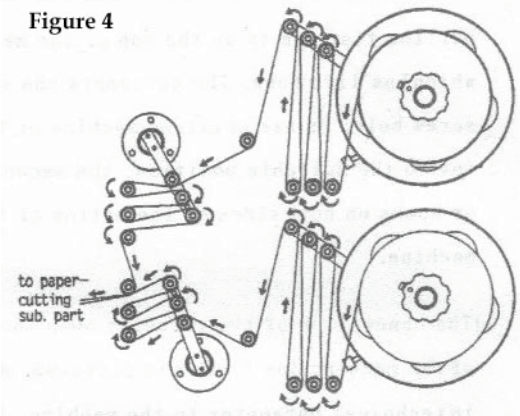
Once the spool is securely fitted, feed the film through the rollers (see Figure 4). Then raise the candy ejection tray and feed the film through the cutting station (see Figure 5).

To adjust the lateral position of the film as it passes through to the wrapping station, there is a tracking screw (labeled 'paper-position adjusting pole) located on each paper axle roller (see Figure 3).

If there is insufficient tension in the paper during operation, set the 'brake

adjusting pole' fitted to the side of each paper axle as required (see Figure 3).

Figure 4



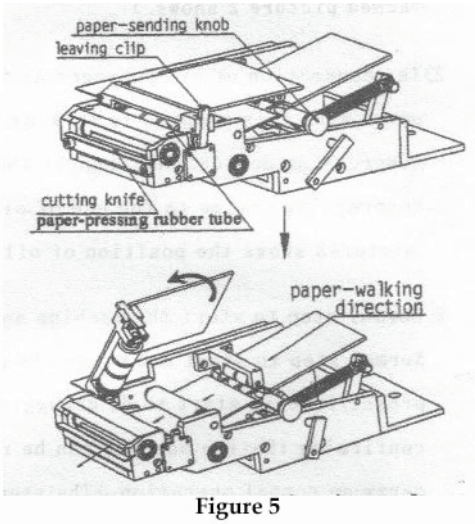


Figure 5

3.6 Adjusting the Brushes

During packing and transportation, it is possible that the brushes have moved from the ideal position. They can be adjusted vertically and laterally to ensure that the candies are correctly swept into the holes in the rotating candy plate.

3.7 Setting Up Automatic Infeed

The automatic infeed operates by vibrating for a set period of time, stopping for one minute and then repeating the cycle. To ensure that the correct quantity of product is always available on the candy disc, the vibration time, frequency and amplitude can all be adjusted.

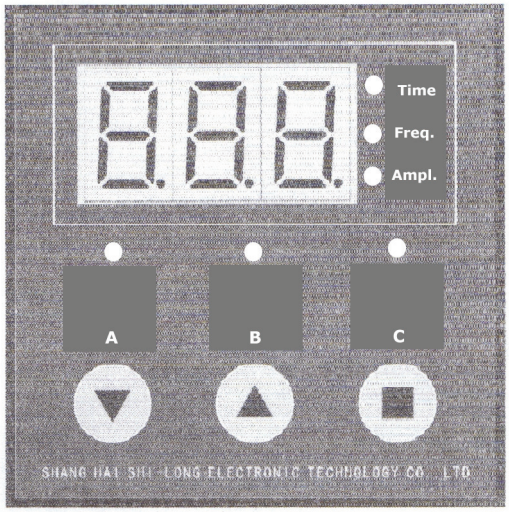


Figure 6

Time – this can be set to 0-999 seconds (default is 10s). Press button 'C' until the red light labelled 'Time' is lit. Then use the up and down arrows to set the time required.

Frequency – this can be set to 0-99.9 Hz (default is 16 Hz). Press button 'C' until the red light labelled 'Freq' is lit. Then use the up and down arrows to set as required.

Amplitude – this can be set to 0-99.9% (default is 60%). Press button 'C' until the red light labelled 'Ampl' is lit. Then use the up and down arrows to set as required.

When none of the above three lights are lit, the display will show the vibration time remaining in that cycle.

3.8 Testing Machine Set-Up

1. Start the machine as in section 3.4
2. Hand-feed a number of candies directly onto the candy disc
3. Check that candies are being properly wrapped
4. Check that no empty wraps are produced

If the machine is not running correctly, see the Troubleshooting Guide below

NOTE

In normal operation, if the machine is switched off to reload more paper with candies remaining in the candy disc, upon restart the first ten candies will not be

wrapped.

4. Troubleshooting Guide

4.1 Machine is producing empty wraps

	Cause	*Solution*
1.	Air not switched on	Ensure air supply is properly connected and 'gas sender' switch is in the 'ON' position
2.	Infeed candy sensor set too low	Readjust the height of the candy sensor

4.2 Machine is producing unwrapped product

	Cause	*Solution*
1.	Paper jam	Check within the cutting station for any obstructions
2.	Air not switched on	Ensure air supply is properly connected and 'gas sender' switch is in the 'ON' position
3.	Infeed candy sensor set too high	Readjust the height of the candy sensor

4.3 Product is not correctly located within wrap (see Figure 7)

Figure 7 shows the different ways in which the product may be misaligned

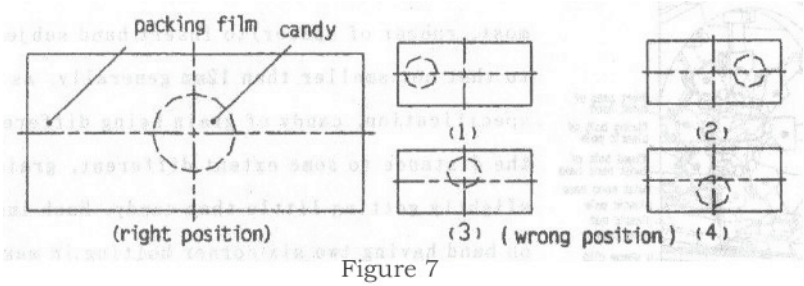


Figure 7

	Cause	*Solution*
1.	Images (1) and (2) – tracking adjustment required	Adjust the tracking screw (see Figure 3) whilst running the machine until the paper

		is correctly aligned
2.	Images (3) and (4) – paper infeed misaligned	Adjust the 'locking nut' (see Figure 8) until the paper is correctly aligned.

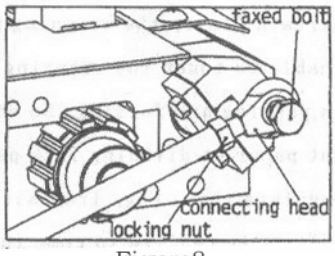


Figure8

5. Maintenance

5.1 Daily Maintenance

(i) Clean down at the end of each day to ensure there is no product debris anywhere in the machine

(ii) At the beginning of each day, check to ensure that there is oil in the three oil indicator windows. This inspection should be carried out when the machine is running

(iii) At the beginning of each day, check that the safety guard cut-out switches are operating correctly

5.2 Periodic Maintenance

(i) The oil should be changed every 1-2 months depending on product throughput

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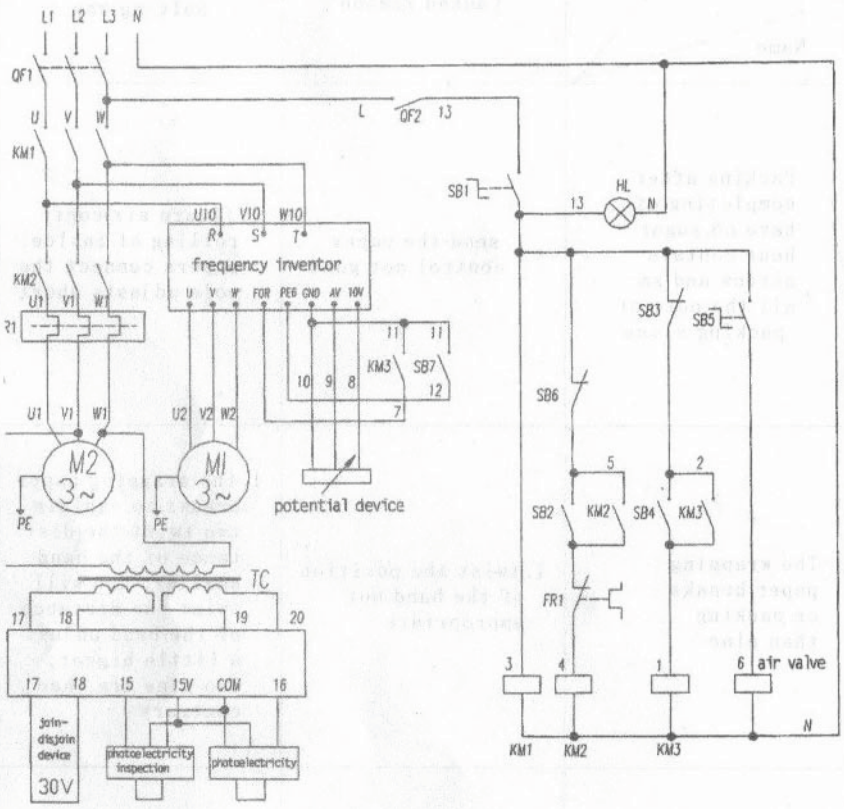
Circuit Diagram



2. instruction picture of wiring ends in the power case:
(the power should be connected to the ends on the nether row)

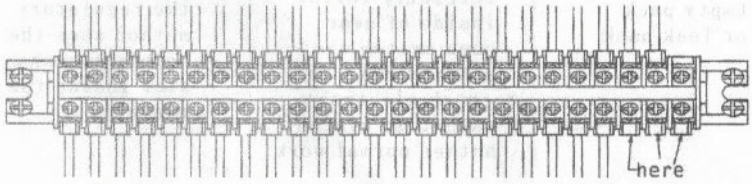


Figure 9

EC Declaration of Conformity

Product Type	:	'TW600D' Double Twist-Wrap Machine
Voltage	:	220-240V, 50Hz
Serial Number	:	
Year of Construction	:	

We declare that the product described above is in conformity with the relevant provisions of the following directives as amended.

The Machinery Directive (98/37/EC)
The Construction Products (89/106/EEC)
The Low Voltage Directive 73/23/EEC
The EMC Directive 89/336/EEC as amended by 91/263/EEC, 92/31/EEC, 93/97/EEC.

General Features

The KeyChoc 'TW600D' double twist-wrap machine is intended for the wrapping of small individuals pieces of confectionery.

Signature: .....

Signatory: Mr. S J Case

Position: Technical Manager

Dated:

KeyChoc Ltd, registered in the UK Company Number 7396808

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