# TROUBLE SHOOTING GUIDE ELMECO FIRST CLASS

Products	FC - First Class GB
Symptons	A01 - Instructions on how to read the references.

In this manual, all the references to components, LED's and any other element, are made through the position (pos. XX) specified in the exploded view. Please note that the exploded view consists, in addition to the graphics section, of a table linking the position of the component indicated in the graphics to the corresponding article code, depending on the model. In the "Troubleshooting" chapter you will find references (a) to tools described in the "Maintenance tools" chapter.

Products			
	FC - First Class GB		
Symptons	A05 - Maintenance tools		
a) Brush			
b) 13 mm c	ombination wrench		
	ombination wrench		
*	mbination wrench		
'	mbination wrench		
	tted tip screwdriver		
g) Large slotted tip screwdriver h) Small Phillips screwdriver			
	·		
'	<ul><li>i) Large Phillips screwdriver</li><li>l) Small Phillips stubby screwdriver</li></ul>		
m) 1.5 mm			
n) Hammer	nex neg		
o) Pliers			
p) Cutting nippers			
q) 5 mm hex key			
r) Tester			
	s) Electrician's scissors		
t) Wire trimmers			
'	u) Refractometer		
These refere	ences are also shown in the "Troubleshooting" chapter		

Products	
	FC - First Class GB
Symptons	A15 - Spare parts

The parts of they point out her in the following Chart they are subject an usury, for which they must periodically be replaced it governs a dependent frequency from the formalities of exercise of the machine; the is recommended of it therefore the substitution in case of ordinary maintenance of the machine.

Description	Exploded view pos.	code
hinge hook	48	M0006102
Vertical auger pinion	31	M0004104
Horizontal auger pinion	45	M0004105
O-ring 117	6	OR13000117
Cock throat gasket	9	M0003117
Stainless steel low-voltage contact wire	15	M0005111
Stainless steel refill contact wire	16	M0005128

**NOTE:** check periodically to see if the condenser is clogged with dust. If it is, consult the "Troubleshooting" chapter.

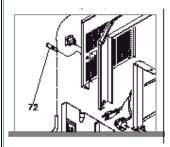
Products	
	FC - First Class GB
Symptons	A10 - Characteristics and specifications

Mod.	Freon type	Compres- sor	Voltage	Condenser	Capillaries	Gas charge	Filter	Pressures*
FC1	R22A	NE2125E	230/50	Iron M0102101- 001 14 pipes	5,5mx1.06mm	110gr.	032S Parker WAH032S KMP	1.5bar -20°C
FC1	R404A	NE2125GK	115/60	Iron M0102101- 001 14 pipes	6mx1.06mm	150gr.	032S Parker WAH032S KMP	2,0bar -20°C
FC1	R134A	E2121Z	115/60	Iron M0102109- 001 14 pipes	5,5mx1.06mm	115gr	032S Parker WAH032S KMP	0,46bar -18°C
FC1	R134A	T2134Z	100/60	Iron M0102109- 001 14 pipes	4mx1.06mm	80gr	032S Parker	0,3bar -21°C
FC2	R404A	T2168GK	115/60 230/50	Iron C082036007 32 pipes	3mx1.06mm	275gr	032S Parker	2,0bar -20°C
FC2	R404A	T2168GK	115/60 230/50	Iron C082036007 32 pipes	3mx1.06mm	290gr	WAH032S KMP	2,0bar -20°C
FC2	R134A	T2134Z	100/50	Iron C082036007	4,3mx1.06mm	230gr	WAH032S KMP	0,65bar -15°C

				32 pipes				
FC3	R404A	T2168GK	115/60 230/50	Iron C082036007 32 pipes	5mx1.06mm	315gr	032S Parker	2,7bar -15°C
FC3	R404A	T2168GK	115/60 230/50	Iron C082036007 32 pipes	5mx1.06mm	330gr	WAH032S KMP	2,7bar -15°C

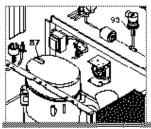
Products FC - First Class GB

Symptons P01 - The refrigerator does not get cold and the red light (pos. 72) is on.



# **Problem**

The pressure switch has disconnected the compressor (pos. 87).

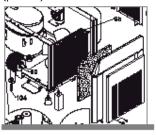


#### Cause1

Dirty condenser (pos. 95).

## Solution1

Clean the condenser using a brush (a) or compressed air, to rearm the pressure switch with the button on the same (pos.93)



## Cause2

Poor ventilation around the slush machine, other appliances discharge hot air in the direction of the slush machine.

## Solution2

Restore proper ventilation, to rearm the pressure switch with the button on the same (pos.93)

Jammed or burned out fan (pos. 99).

## Solution3

Make sure the fan does not strike the condenser or other components (e. g.electric wire, condensate drain pipe or other). If necessary, straighten the condenser or adjust the part to ensure that it does not touch the fan. If the motor is burnt, replace it, disconnect the wires and unscrew the two pins (pos. 104) from the base using two wrenches (b). Loosen the fan fastening screw with wrench (e), mount the fan near the new motor and reassemble the parts following the above instructions in the reverse order, to rearm the pressure switch with the button on the same (pos.93)

Products	FC - First Class GB
Symptons	P02 - One of the tanks does not get cold, even though the cold telltale lightis on.

#### **Problem**

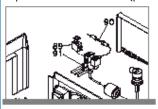
There is no gas delivery from the electric valve.

#### Cause1

Blown fuse or burnt coil.

## Solution1

Replace the 315ma fuse (pos. 90) located in the fuse carrier near the coil.



#### Cause2

Defective valve block (pos. 91); the valve clicks but does not open.

#### Solution2

2) Replace the coil (pos. 89), removing the retainer on the coil with a slotted tip screwdriver (g).

#### Cause3

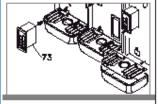
Faulty fuse carrier contact.

#### Solution3

Restore contact by stretching the springs in the fuse carrier.

## Cause4

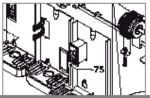
The electronic module (pos. 73) is burnt and does not deliver power to the electric valve. Check with the tester (r).



#### Solution4

Replace the electronic module using a slotted tip screwdriver (f), remove the frame and the screws (pos. 75) located

underneath using a Phillips screwdriver (h). Extract the module from the front panel and disconnect the 4 electric system connectors. To mount the new module, repeat the above operations in the reverse order.



Products	FC - First Class GB
	P03 - On one of the tanks, in the slush position, the cold telltale light does not come on, while in the cold drink position it perates normally.

## **Problem**

The tank does not get cold.

## Cause1

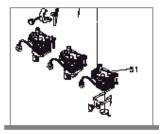
Faulty setting of electronics.

## Solution1

1) Turn off the main switch (pos. 69) of the slush machine, pour into the tank product at a temperature of over 15° and switch the slush machine back on. The electronics will be re- set automatically.



Products	FC - First Class GB
	P04 - The electronics does not respond to commands; when the top light cover is lifted the motor (pos. 51) does not switch off.



## **Problem**

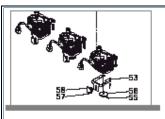
The tank does not get cold.

## Cause1

Dirty optical reader.

## Solution1

Clean the optical reader (pos. 58) using a brush or compressed air.



Faulty optical reader.

## Solution2

Replace the optical reader. Disconnect the three- way cable and unscrew the two screws (pos. 57) that fasten the reader to the bracket (pos. 53). Using a Phillips screwdriver (I), repeat the above operations in the reverse order to mount the new reader.

## Cause3

Connection of optical reader with the electronics is interrupted.

#### Solution3

Check to see if the three- way cable is properly connected to the reader and the electronics. If necessary, replace it. Disconnect the two connectors on the old cable from the reader and the electronic module and install a new cable using electric tape or clamps

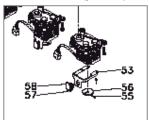
near the electric system.

#### Cause4

The disk is not fastened properly on the motor shaft.

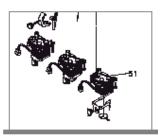
## Solution4

Centre the disk (pos. 56) on the optical reader, secure it by tightening the dowel (pos. 55) with a hex key (m).



Products	
	FC First Class GB

Symptons P04bis - On the display, number "1" flashes.



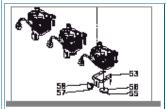
### **Problem**

The tank does not get cold.

#### Cause1

Dirty optical reader.

## Solution1



Cleanàà the optical reader (pos. 58) using a brush or compressed air.

## Cause2

Faulty optical reader.

## Solution2

Replace the optical reader. Disconnect the three- way cable and unscrew the two screws (pos. 57) that fasten the reader to the bracket (pos. 53). Using a Phillips screwdriver (I), repeat the above operations in the reverse order to mount the new reader.

#### Cause3

Connection of optical reader with the electronics is interrupted.

#### Solution3

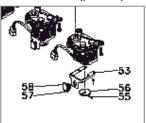
Check to see if the three- way cable is properly connected to the reader and the electronics. If necessary, replace it. Disconnect the two connectors on the old cable from the reader and the electronic module and install a new cable using electric tape or clamps near the electric system.

#### Cause4

The disk is not fastened properly on the motor shaft.

## Solution4

Centre the disk (pos. 56) on the optical reader, secure it by tightening the dowel (pos. 55) with a hex key (m).



Products	FC First Class CD
	FC - First Class GB
Symptons	P05 - One of the tanks always gets cold, another never does.

#### **Problem**

The slush machine does not operate properly.

#### Cause1

1) Electric valves or capillaries are inverted.

## Solution1

1) Exchange the electrical connections between the two electric valves, also in the case of inverted capillaries.

Products	FC - First Class GB
Symptons	P06 - In the cold drink position, cold generation never switches off.

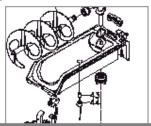
It always produces slush until the augers jam.

## Cause<sub>1</sub>

Thermostat sensor is not positioned properly in its seat.

#### Solution1

1) Remove the grommet (pos. 44) that holds the thermostat sensor (pos. 43) and, using a slotted tip screwdriver (f), push the sensor into its seat. Replace the grommet, make sure to fit it properly.



Products	FC - First Class GB
	P07 - All the elements (electrical and mechanical) of the slush machine are in operation, but after three hours the product is still liquid in all the tanks.

#### **Problem**

The compressor does not work, there is no gas in the circuit.

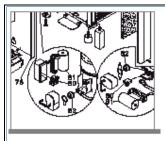
## Cause1

Defective compressor or electric components.

## Solution1

Check to see if the compressor is working. If necessary, check with a pressure gauge to see if the pump maintains the pressure (see gas pressure table). If the compressor is not running, check the electrical components (pos. 80- 81- 82) and replace them if necessary. Using a screwdriver (f), pry the sides of the plastic cap, remove the steel retainer and extract the cap with your hands.

Extract the components pulling them towards you; with the screwdriver (i) loosen the screws that hold the wires. To mount the new components, follow the above instructions in the reverse order.



There is a crack in some weld of the refrigerating system.

## Solution2

To find the leak, insert nitrogen in the refrigerating system and locate the leak using a leak finder. Empty out the system again and re- solder (using silver alloy with an antioxidant coat). Empty out and re- charge with gas following the specifications shown on the rating plate attached to the steel panel (pos. 76).

#### Cause3

The pressure switch has disconnected the gear motor (pos. 87) and the red warning light (pos. 72) does not work.

## Solution3

Restore the pressure switch with its push button (pos. 93); if the gear motor starts to work again, check if the red warning light works properly, its links (pos.72) and the pressure switch's links.

Products	FC - First Class GB
Symptons	P08 - Number "8" flashes on the display.

#### **Problem**

Voltage fluctuations exceed 10%. This, in the long run, can damage the slush machine.

#### Cause 1

Defective mains power supply, multiple sockets, inadequate extension cords, etc.

#### Solution1

Make sure that the slush machine receives the proper voltage. Reset the system by holding down the light switch located bottom left on the electronic module, until number "8" stops flashing. If the flashing "8" appears again this means that the voltage is still wrong; if so turn off the top lights so that the absorbed voltage will become lower; this will let the slush machine work again until the voltage will be restored.

**Note**: if the slush machine has switched on the autofill system, the slush machine must be switched off completely (through the main switch) in order to reset the system.

Products	FC - First Class GB
Symptons	P09 - The slush machine works, except for the electronics.

#### **Problem**

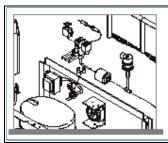
Blown fuse or burnt transformer.

#### Cause1

Unstable voltage or accidental causes.

## Solution1

1) Replace the fuse of 5A (pos. 88). Extract the fuse carrier with your hand, remove the blown fuse and install a new one, then insert the fuse carrier in its seat and check to see if the slush machine works. If it does not, check with a tester to make sure that 12 V power is delivered. If it is not, replace the transformer. Using a screwdriver (g) and a hammer (n), dislodge the two rivets that hold the transformer, then disconnect the wires with a screwdriver (f). Install a new transformer and secure it with rivets or 4 mm screws and nuts. Replace the wires, watch the inlet and outlet positions.



Products	FC - First Class GB
Symptons	P10 - Number "2" flashes on the display of the electronic module.

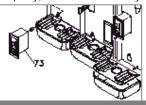
The machine works properly in the slush position, but in the cold drink position the cold telltale light does not come on.

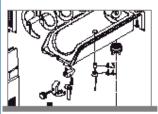
#### Cause1

Defective thermostat sensor; the connector behind the electronic module is not inserted properly.

#### Solution1

Restore the contact, making sure that no oxidation has formed. If necessary, clean the contacts. If the problem continues, replace the sensor (pos. 43). Remove the grommet (pos. 44) that holds the thermostat sensor (pos.43), pull the sensor (by the cable) downwards until it comes off its seat. Insert the new sensor, after spreading some conductive paste on the tip. Using a slotted tip screwdriver (f), push the probe into its seat, reposition the grommet properly, insert the two-way connector behind the electronic module (pos. 73).





**Note:** Follow this procedure to understand if the probe is truly defective: Check the voltage on the suspicious probe by using a voltmeter; check then the voltage on a certain well working probe. If the two voltages are different, then the suspicious probe is truly defective.

Products	
	FC - First Class GB

P11 - The motor has stopped and the cold telltale light is off.

#### **Problem**

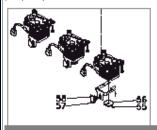
The tank does not get cold and the augers do not turn.

#### Cause1

The aluminium disk is warped and touches the optical reader, thus jamming the gearmotor (for 115V 60 Hz, or 230V 60 Hz slush machines, even if the disk has only moved close to the reader, it can jam the gearmotor).

## Solution1

If possible, straighten out the disk (pos. 56) using a pair of pliers (o). If it needs replacing, the optical reader (58) must be removed: unscrew the cross- slotted screws (pos. 57) with screwdriver (I). When the reader has been removed, unscrew the dowels (pos. 55) using the hex key (m), so that the disk (pos. 56) can be extracted. Then repeat the above operations in the reverse order to reassemble all the parts, and check to see if the machine works properly.



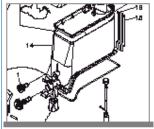
Products	FC - First Class GB
Symptons	P12 - The low level alarm has triggered, the tank is full and number "0" flashes (on rev. 04- 05- 05R).

#### **Problem**

The slush machine works without any problems.

#### Cause<sub>1</sub>

The level sensor (pos. 16) is not properly connected near the terminal board (pos. 37), or is missing.

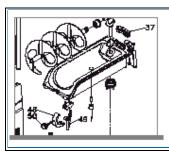


#### Solution1

Re- connect the level sensor (pos. 16) or replace it. Remove the top light cover by lifting it from the back, unscrew the knobs (pos. 50), unscrew and extract the sleeve (pos. 1), release the hook (pos. 48) by pulling the front hinge lever (pos. 49), then extract the tank (pos. 14). Facing the tank from the contact side (pos. 15- 16), pull the bottom part of the contact outwards with the pliers (o), so as to restore the contact near the terminal board (pos. 37). Then repeat all the above operations in the reverse

order to reassemble all the parts, and check to see if everything works properly.

To completely eliminate the flashing "0" (up to rev. 05R), set up a jumper on the terminal board (pos. 37) between contacts 1 and 3: strip the wires, join them and cover them with electric tape.

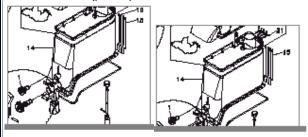


Products	FC - First Class GB
•	P12bis - "0" flashing on the display. With empty tank partially (the level sensor pos.16 doesn't touch the mix).

The slush machine works without any problems.

## Cause1

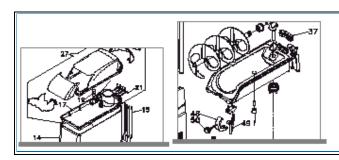
The level sensor (pos.16) doesn't make contact with the relative thin plate of the dome (pos.21).



## Solution1

Press the reed (pos. 21) inward and position the top light cover properly in its seat.

To completely eliminate the flashing "0" (up to rev. 05R), set up a jumper on the terminal board (pos. 37) between contacts 1 and 3: strip the wires, join them and cover them with electric tape.



Products	FC - First Class GB
Symptons	P13 - The augers do not turn and the light is off.

The tank does not get cold.

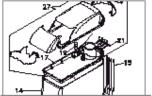
**Warning**: In most cases the problem has the origin in contacts (pos. 15-16) completely out from terminal board (pos. 37). Pls check it.

## Cause1

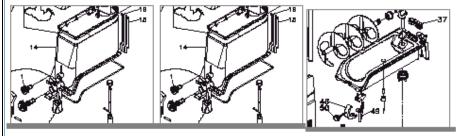
The top light cover is not positioned properly.

# Solution1

Press the reeds (pos. 21) inward and position the top light cover properly in its seat.



The four contacts (pos. 15-16) lodged on the terminal board (pos. 37) are not well touching the terminal board itself.



## Solution2

Restore the 1st contact (facing the back of the tank, counting from the left, there are the 1 st, 2 nd, 3 rd and 4 th contacts). Remove the top light cover, lifting it from the back, then unscrew the knobs (pos. 50) - if presents -, unscrew and extract the sleeve (pos. 1), release the hook (pos. 48) by pulling the front hinge lever (pos. 49), and extract the tank (pos. 14). Facing the tank from the contact side (pos. 15), pull the bottom part of the contact outwards with the pliers (o), so as to restore the contact near the terminal board (pos. 37). Then repeat all the above operations in the reverse order to reassemble all the parts, and check to see if everything works properly.

<u>NOTE:</u> From January 2001 was introduced a new function in the electronic board (rev. 07A) called "bypass". This system permits to resolve temporarily - by phone - contacts problems (as illustrated in Solution2). The procedure is:

1. press the key selection slush-juice till augers turn (pay attention: this system disactive the safety system and the "lock out keyboard");

2. If the augers starts again, there is a malfunction of the contact 1 or of the contact 2 (see Solution2), to which it has been made up for with an electronic bypass. The bypass remains active also following turning off and on of the slush machine.

Once replaced the defective contact, or installed the lost contact, in order to eliminate the electronic bypass realized previously, must be used the following procedure:

- up the lid;
- stop the augers pressing the key
- holding pressed the , press the augers key to have the augers left again;
- Wait until the augers are stopped and release the keys;
- put the cover on the tank;
- the augers leaves again, and the electronic bypass has been eliminated.

<u>Warning:</u> you always have to check the right position of the contacts, especially of the refill contact (the long probe which touches the liquid): if you look the tank from behind and start to count from the left, this contact must be at the third place. The slush machine may not work properly if you do not place this contact in its right place.

Products	FC - First Class GB
Symptons	P14 - The augers do not turn and the light is on.

#### Problem

The tank does not get cold.

#### Cause 1

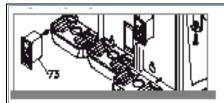
The auger switch is turned



off.

#### Solution1

Press the auger switch located bottom right on the electronic module (pos. 73) to reset the appliance.



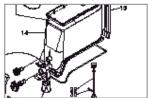
The gearmotor is out of order due to mechanical or electrical problems.

## Solution2

Check to see if the gearmotor (pos. 51) is properly connected to the electric system connector. If the electrical connection is

good, replace the gearmotor. Disconnect the power supply system and optical reader (pos. 58) connectors. Using the cutting nippers (p), remove the split pin (pos. 35) and slide out the drive shaft (pos. 29). Unscrew the two pins (pos.52) with the hex key (q) and extract the gearmotor from underneath the tank. Then repeat all the above operations in the reverse order to reassemble all the parts, and check to see if everything works properly.





Products	FC - First Class GB
Symptons	P15 - The light on the top cover does not come on.

## **Problem**

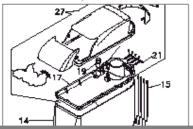
No lighting.

## Cause1

Burnt out lamp.

## Solution1

Replace the lamp (pos. 19). Remove the top cover (pos. 27), detach the cover glass (pos. 17), extract the lamp (bayonet coupling) and replace it with a new one. Then repeat the above operations in the reverse order to reassemble all the parts, and check to see if everything works properly.

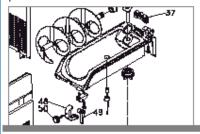


## Cause2

The 4th contact is loose near the top light cover or terminal board.

#### Solution2

Remove the top light cover lifting it from the back, press the reeds (pos. 21) inward. Unscrew the knobs (pos. 50), loosen and extract the sleeve (pos. 1), release the hook (pos. 48) by pulling the front hinge lever (pos. 49), and extract the tank (pos. 14). Facing the tank from the contact side (pos. 15), pull the bottom part of the 4th contact outwards with the pliers (o), so as to ensure the contact near the terminal board (pos. 37). Then repeat all the above operations in the reverse order to reassemble all the parts, and check to see if everything works properly.



Products	FC - First Class GB
Symptons	P16 - The vertical auger is damaged.

## **Problem**

Even though the augers are stationary, the cold telltale light is on and the tank gets cold.

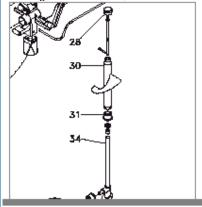


#### Cause1

Sugar content in the product is less than 11%.

## Solution1

Add sugar to the product and mix well before switching the machine back on. Replace the vertical auger (pos. 30). **Warning:** on slush machines manufactured before 2001, replace also the vertical auger fastening ring nut (pos. 28). Remove the top light cover, lifting it from the back, unscrew the vertical auger fastening ring nut (pos. 28). Extract the auger from the tube (pos.34), remove the vertical auger pinion (pos. 31) and mount it on the new auger. Insert the new auger in the sleeve, screw down the vertical auger fastening ring nut (pos. 28) and replace the top light cover.



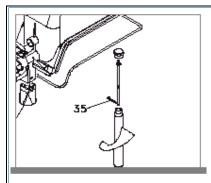
Products	FC - First Class GB
Symptons	P17 - The augers do not turn and the cold telltale light is on.

## Problem1

The motor's split pin (pos. 35) is broken.

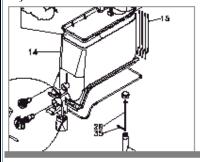
## Cause1

The sugar content in the product is less than 11%, or accidental damage.



## Solution1

Check the split pin (pos. 35) to see if it is broken. If necessary, replace it, inserting the new one in the hole in the motor shaft (pos. 29) and bending the two ends one to the left and the other to the right, so that they are not in the way when the motor turns.



#### Problem2

Damaged motor gears.

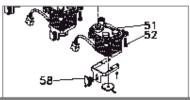
#### Cause2

The sugar content in the product is less than 11%, or accidental damage.

## Solution2

Replace the gearmotor (pos. 51). Disconnect the power supply system and optical reader (pos. 58) connectors. Using the cutting nippers (p), remove the split pin (pos. 35) and slide out the drive shaft (pos. 29). Unscrew the two pins (pos. 52)

with the hex key (q), and extract the gearmotor from underneath the tank. Then repeat all the above operations in the reverse order to reassemble all the parts, and check to see that everything works properly.



Products	FC - First Class GB
Symptons	P18 - The horizontal auger skips.

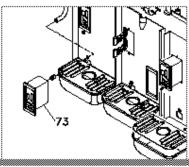
#### **Problem**

The rotation of the horizontal auger is wrong; it begins to jump and suddenly stops.

The horizontal auger gears are worn because:

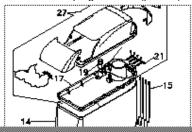
-the sugar content in the product is under 11%;

-or, the position on the electronic module (pos. 73) is too high.



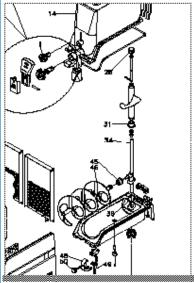
## Solution1

Remove the top light cover (pos.27) lifting it from the



back; unscrew the vertical auger fastening ring nut (pos. 28). Extract the auger from the bushing trasmission shaft (pos. 34), remove the vertical auger pinion (pos. 31) and place a new one. Insert the new set in the sleeve and spread some Vaseline for foodstuffs on the gears to prevent creaking, then screw down the vertical auger fastening ring nut (pos. 28). Unscrew the knobs (pos. 50), unscrew and extract the sleeve (pos. 1), release the hook (pos. 48) by pulling the front hinge lever (pos. 49), then extract the tank (pos. 14). Pull out the horizontal auger (pos. 46), remove the horizontal auger pinion (pos. 45) and

replace it with a new one, spreading some Vaseline for foodstuffs on the gears. Then repeat all the above operations in the reverse order to reassemble all the parts.

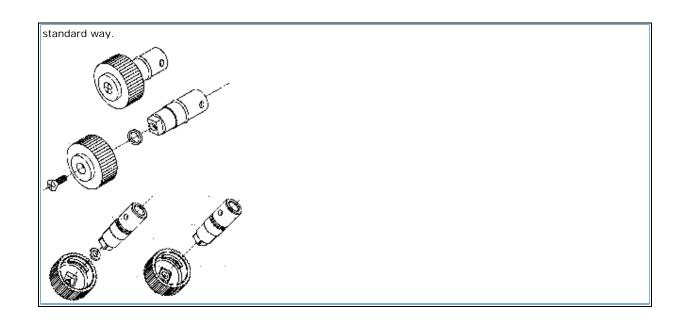


## Cause2

The whole of the horizontal auger (pos.46) and its ring nut might be short. That's why the auger tries to jump out of the gear during its rotation.

#### Solution2

Unscrew the ring nut out of the slush machine; screw out of the ring nut the screw with the help of a screwer; insert a piece with a proper thickness in order to compensate the missing length; set up again the whole following the



Products	FC - First Class GB
Symptons	P19 - Creaking noises from augers or drive shaft.

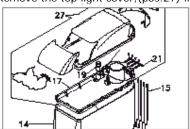
No operating problems.

## Cause1

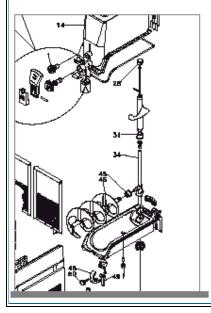
No lubricant near auger pinions.

#### Solution1

Remove the top light cover, (pos.27) lifting it from the back;



unscrew the vertical auger fastening ring nut (pos. 28). Extract the auger from the tube (pos. 34), remove the vertical auger pinion (pos. 31) and spread some Vaseline for foodstuffs on the gears to prevent creaking, reposition the pinion on the auger and reassemble the whole on the tube (pos. 34), then screw down the vertical auger fastening ring nut (pos. 28). Unscrew the knobs (pos.50), unscrew and extract the sleeve (pos. 1), release the hook (pos. 48) by pulling the front hinge lever (pos. 49), then extract the tank (pos. 14). Pull out the horizontal auger (pos. 46), remove the horizontal auger pinion (pos. 45) and spread some Vaseline for foodstuffs on the gears. Then repeat all the above operations in the reverse order to reassemble all the parts.



Products	
	FC - First Class GB

**Symptons** 

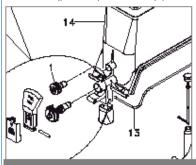
P20 - Liquid leaks from the tank.

#### **Problem**

The drip tray fills with product.

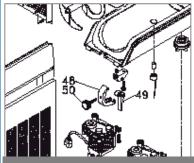
## Cause<sub>1</sub>

Tank seal (pos. 13) incorrectly positioned or damaged.



#### Solution1

Remove the top light cover, lifting it from the back, unscrew the knobs (pos. 50), unscrew and extract the sleeve (pos. 1), release the hook (pos.48) by pulling the front hinge lever (pos. 49), then extract the tank (pos.14). Check the seal to make sure it is properly positioned in its seat. If necessary, replace it, then repeat the above operations in the reverse order to reassemble the unit.



## Cause<sub>2</sub>

Worn, warped hinge hooks (pos. 48).

## Solution2

Replace the hinge hooks (pos. 48). Unscrew the knobs (pos. 50), release the hooks (pos. 48) by pulling the front hinge lever (pos. 49), remove the hooks from the tank and front hinge (pos. 49). Install new hooks and reassemble the fastening knobs (50).

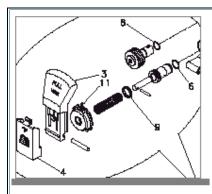
Products	FC - First Class GB
Symptons	P21 - Product leaks from the dispensing spout.

## **Problem**

Constant dripping of product.

#### Cause1

If the product drips from below the dispensing spout, the O- ring (pos. 6) is worn or the spring on the spout is improperly positioned. If it drips from behind the spout, the valve gasket (pos. 9) is worn.



#### Solution1

Empty out the tank, stop the augers by turning off the switch at bottom right of the module (pos. 73), open the valve by pulling

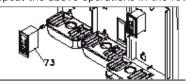
the lever (pos. 3) all the way, move the lever on the ring nut (pos. 11) to the right so as to lock the valve open, then pull out

the cover on the lever (pos. 4). Rotate the piston 180° to make sure that the spring is positioned properly in its seat. Holding the

lever (pos. 3) down in the open position, move the lever on the ring nut (pos. 11) to the left so as to release the valve. Then

unscrew the ring nut (pos. 11), turning it to the left with the help of the lever, and extract the entire dispenser unit

the lever. Using the screwdriver (f), pry out the seal to be replaced and remove it from the piston assembly (g). Repeat the above operations in the reverse order to reassemble all the parts.



Products	FC - First Class GB
Symptons	P22 - In cold drink mode the freezing is never active or freezes too much.

#### **Problem**

The cooling function of a tank seems to be incorrect as the tank does not freeze enough or it cools too much forming an ice block and stopping the auger.

#### Cause1

This problem is generally caused by the thermostat probe which is wrongly placed or defective.

#### Solution1

You need a tester and a new probe (or anyway a correctly working one), to check if the installed probe is defective. Proceed as follows:

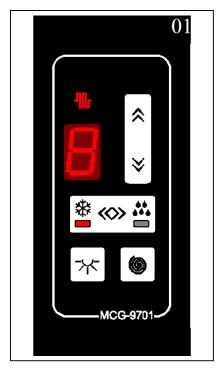
- 1. disconnect the machine by the electrical plant;
- 2. remove the lateral panel and, if you need a better view to operate correctly in the machine, remove also the back panel;
- 3. following the white wire which starts from the electronic board and finishes under the tank, please find the probe;
- 4. disconnect the white wire from the electronic board;
- 5. right where the wire finishes, under the tank, there is a hole where the termostat probe is inserted in; you will find it fixed in with a steel bushing or a little gum block;
- 6. if you have found the steel bushing, please remove it with a plain screwdriver; if you have found the little gum block remove it rotating it gently; after this procedure, remove the probe gently pulling the white wire down;
- 7. clean the probe from the conducting paste and put it in a glass of water with a certain temperature together with the probe which works perfectly;
- 8. place the tester pins inside the two ways ending pin of the probe's wire;
- 9. record the value of the resistance indicated by the tester;
- 10. check the value of the resistance indicated by the tester on the other probe;
- 11. if the values are different (difference of many tens of Ohm) this means that the probe is really defective.

# COTTER PIN REPLACEMENT

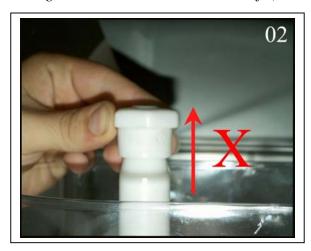
# What to do when the cotter pin is broken

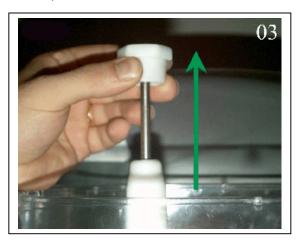
1. When the machine is working it might happen that the electronic device works perfectly (freezing light indicator and switches in function, see Picture 01) but the augers don't turn around. This is possible because of a broken cotter pin (split pin) which connects the gear motor to the transmission shaft and allows the movement of the augers.



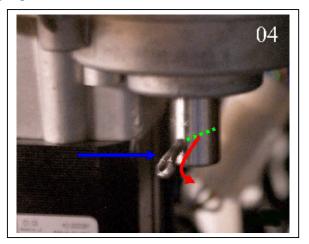


2. Remove the back and lateral stainless steel panels and you will be able to understand what is wrong with the slush machine trying to lift the ring nut of the blocked vertical auger out of the tank. The ring nut will not raise (as shown in Picture 02) or it raises together with the transmission shaft (see Picture 03).



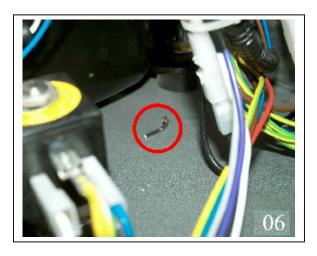


3. In the first case you should check the base of the shaft inside the machine next to the gear motor (output shaft). The cotter pin is still inside the hole of the gear motor (as shown in Picture 04) but it is slackened and deformed; the blue arrow indicates the cotter pin, the red one shows how the cotter pin has lost its original shape and the green dotted line shows its right placement.

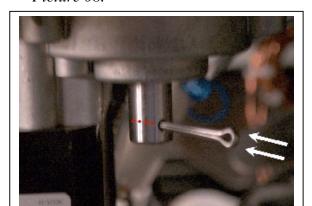


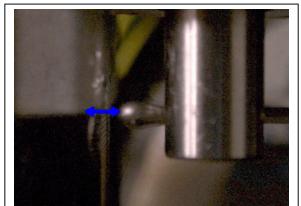
4. In the second case the hole of the gear motor (see Picture 05) should be completely empty and the remaining of the broken cotter pin will certainly be on the base inside the machine (as the red circle shows in Picture 06).



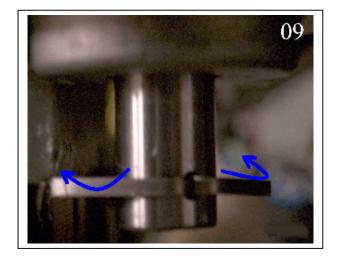


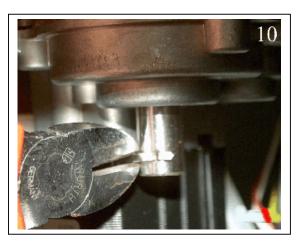
5. You must replace the old cotter pin with a new one; place the transmission shaft and remember to align the hole of the transmission shaft with the hole of the output shaft; if you watch through the holes you should be able to see the other side; insert the new cotter pin as shown in Picture 07. Remember to keep some space between the head of the cotter pin and the gear motor so the former cannot touch the latter during its rotation; respect a little distance between the two components as shown by the arrows in Picture 08.





6. Fold the ends of the cotter pin with pliers as shown by the blue arrows in Picture 09; cut the exceeding legs of the cotter pin with nippers to avoid the contact with the gear motor during the rotation (see Picture 10).





7. The final result is shown in Picture 11.

