

FOREWORD

Thank you for selecting COLDELITE to meet today's fast growing demands. Your COLDELITE freezer has been manufactured at one of the most modern manufacturing plants, utilizing the most advanced equipment and technology available in the industry. We at COLDELITE, take great pride and care in the manufacture of each and every freezer, using only the finest components available, to provide you with years of trouble-free operation.

Over thirty years of experience in the manufacturing of dispensing equipment have guided us in the preparation of this Operation and Service Manual. PLEASE READ IT CAREFULLY. Keep it for future reference and most of all, follow the instructions from the very time your machine is put into service.

On the following pages, you will find important information and procedures which describe the proper installation, sanitizing, operation, and maintenance of your COLDELITE machine. We feel certain that your full compliance with these instructions will assure you of excellent performance, trouble-free operation and profitable business for years to come.

All technical data, pictures and drawings contained in this manual are not binding on the manufacturer, nor can the manufacturer be held liable for any modification of the machine in part or completely.

CODE:

WARNING

NEVER PUT YOUR HANDS INTO THE MACHINE. NOT EVEN INTO THOSE PARTS THAT APPEAR AS TOTALLY HARMLESS, WITHOUT FIRST HAVING SET THE MACHINE SWITCH INTO THE "STOP" POSITION AND CUT OUT THE GENERAL SWITCH.

COLDELITE IS NOT RESPONSIBLE FOR ANY ACCIDENT THAT MIGHT HAPPEN DURING THE OPERATION, THE CLEANING AND/OR THE SERVICING OF ITS UNITS, IF THIS WARNING HAS NOT BEEN FULLY COMPLIED WITH.

Useful advice

First of all we would like to thank you for having chosen one of our machines. These have been specifically designed to please and grant the greatest satisfaction to their users.

To enjoy it fully, however, you should carefully follow the advice given in this booklet.

- Always use first class ingredients and first class syrups, as they will at the same time satisfy your clients and assure you of good business now and in the future.
- Keep your machine constantly clean.
- Have it serviced by COLDELITE authorized and trained technicians only.

Thank you

LOCATION AND INSTALLATION

Before starting this procedure, make sure the shipping case does not show any evidence of having been dropped, tampered with or abused in such a way as to indicate that its contents may have been damaged in transit.

IMPORTANT: Should the outside of the shipping case give any indication of possible hidden damage, state this on the bill of lading before signing. Contact the carrier immediately and request an inspection of damage. If this procedure is not adhered to, you will forfeit your right to file damage claim and be responsible for subsequent repair costs.

To select the proper location where to install the machine within your premises, remember that

- a) the more people see the machine, the highest is the demand;
- b) this machine being **aircooled**, its rear and side parts must stay at least 20 inches from any wall or any obstruction which may jeopardize the intake of air.

ELECTRICAL CONNECTIONS

When connecting the machine to the power mains, do not forget to:

- connect the current carrying wires to the power mains
- ground well the third wire, which is a ground lead
- check that voltage on mains used is the same as indicated in the machine own plate.

All wiring installed to operate this freezer must be in accordance with the National Electrical Code and/or local electrical codes, rules and regulations. The machine must be properly grounded. It is recommended the power supply be installed by a licensed electrician.

Power Supply must be adequate to meet requirements at all times. Voltage fluctuations, with the machine in operation, should not exceed $\pm 5\%$ of the normal or rated voltage.

Adequate Wiring must be provided with respect to wire size or gauge. Unless otherwise required by the local Electrical Code, the same size wire gauge at the machine junction box should be used for direct power line. A separate circuit breaker with adequate fuse protection should be employed.

An unfused disconnected switch or a properly sized plug and receptacle within 6 feet of the freezer, is recommended.

Coldelite freezers are equipped with protection for the beater motor. Should the line voltage drop, or in the unlikely event a short circuit occurs, the overload protector will automatically disconnect the starter and the machine will stop immediately so that no permanent damage can be caused to the motor.

TABLE CHARACTERISTICS				
Dimensions inches			Net weight in lbs	Max. power Kw
a	b	c		
28.54	13.38	20.27	156	1.5

CONTROLS AVAILABLE TO OPERATORS

SWITCH "GRANITA"



When the switch is on this position, the machine produces "Granita" (Slush). The beater motor is continuously running, while refrigeration is automatically switched on and off by the Hard-O-Matic, according to the consistence of the product in the barrel.

SWITCH STOP



The machine is off.

DISPENSING HANDLE

This handle opens the product dispensing tap.

LEVEL GAUGE



A warning lamp lights up whenever the level of the mix in the tank is too low. When this happens, additional mix must be immediately poured in. Do not forget inserting the float on its support.

HARD-O-MATIC ADJUSTMENT

The Hard-O-Matic patented system controls the consistency of the product regardless of temperature, when the proper switch is on position "Granita".

The HOM is regulated at the factory for a correctly consistency of the product. However, it may happen that, due to jolting in transit, the microswitch of the Hard-O-Matic has been displaced. When installing your machine, this microswitch must be tested and, if necessary, re-set.

If, when the compressor stops running, the consistency of the product in the barrel is higher than required, the screw must be loosen by half a turn per time.

Allow at least half an hour between one adjustment and the next one.

If on the contrary, when the compressor stops, the product in the barrel is too soft, the screw should be turned clockwise always by half a turn per time and with half an hour waiting between two adjustments.

During these operations, an amperometer must be inserted on the line of the beater motor so as to keep it under control and avoid that it is set to run under wrong conditions of either stress or current absorption, or both.

On motors working on 115 Volts, the maximum absorption of current allowed is 5 Amp.

STARTING THE MACHINE

Once the machine is installed as per instructions given in the section "location and installation" and after having been carefully cleansed and sterilized as indicated in section "cleaning", proceed as follows:

- 1) Assemble the anti-flow valve.
- 2) Pour the mix into the tank (min. 6 qts, or enough to switch off the red gauge lights).
- 3) Slightly unscrew the air draining tap and get out all the air into the barrel. When the barrel is throughly filled with mix, the machine is ready to work. While the machine is working keep the cover on, so as to prevent dust and other impurities from deteriorating the mix.
- 4) Switch on the safety circuit breaker.
- 5) Position the switch as required to obtain the product desired.
- 6) Wait 30 to 50 minutes, depending on the product you have in the barrel, before the product is ready for dispensing.
- 7) The rythm of production depends on such factors as mix composition, room temperature, peculiarities requested to the final product, etc.

Production	In 8 oz. portions
15 qts	one every 55"

This machine is equipped with a level gauge: when the product into the tank reaches an excessively low level, and new mix must be added, a light flashes.

CLEANING

Turn switch into position "Cleaning" and drain completely both the barrel and the tank.

Fill tank with cold water and allow the machine to run for a few minutes.

Put a bucket under the spigot and drain the machine. (If hole leaks, the beater seal must be replaced with a new one). Unscrew knobs disassemble front lid, and pull out beater. Wash all components with hot water.

SANITIZING

Before you start working, fill the machine with a sanitizing solution.

Turn switch on "Cleaning" and allow the machine to run for one minute.

Turn switch on "OFF" and allow the machine to stand for a few minutes with the sanitizing solution inside.

Then put a bucket under the spigot, turn switch on "Cleaning" and drain machine off completely.

HYGIENE

Foodstuffs are an ideal ground for mildew and bacteria to proliferate.

If all parts in contact with food are carefully cleaned and sterilized as indicated above, they can be eliminated. It is good to note, however, that although the special materials used for these parts, as well as their shape, make the cleaning easier, if they are insufficiently cleaned they cannot prevent either mildew formation or bacteria growing.

MAINTENANCE

Your COLDELITE machine has been designed, engineered and manufactured to achieve high performance and long durability.

The life expectancy of a machine, any machine, does not depend only on the quality of its components and design, but also on the beneficial effects of basic maintenance procedures.

It is important to you, therefore, to become familiar with a few of these basic procedures:

- 1) Remove O-rings only with the O-ring extractor supplied with the machine.
- 2) Clean the machine according to the instructions.
- 3) Lubricate all O-rings and seals, as instructed.
- 4) The wearing or the improper cleaning of the beater shaft seals, will result in leakage from the rear. Check the drip chute pans frequently and replace seals, when so necessary.
- 5) Replace any O-ring that has a nick in it. If not replaced, it will leak and interfere with the proper performance of the machine.
- 6) When all the spare parts supplied with the machine are used, re-order immediately. Do not wait until the part is required again.
- 7) **IMPORTANT** - During the washing and sanitizing period, run the machine only for the time strictly necessary for this operation. Prolonged use of the beater in the Cleaning position may cause severe damage to the machine.
- 8) Always wash metal, plastic or rubber parts in lukewarm water. **NEVER, NEVER USE HOT WATER!**

Important

If your Model is an air cooled machine, its efficiency depends on the air cooled condenser. The fins of the condenser must be cleaned every two or three months to assure efficiency.

Warning

Extreme care must be taken when removing side, rear or control box panels.

Always turn the Selector Switch to the OFF position. Also, turn off the Disconnect Switch on the electrical supply line before exposing any electrical connections and/or moving parts, such as belts, pulleys, fan blades and beater.

Hygiene

Mildew and bacteria can thrive and multiply rapidly in fat mixture contents, therefore cleaning and sterilizing must be carried out as above mentioned with utmost care.

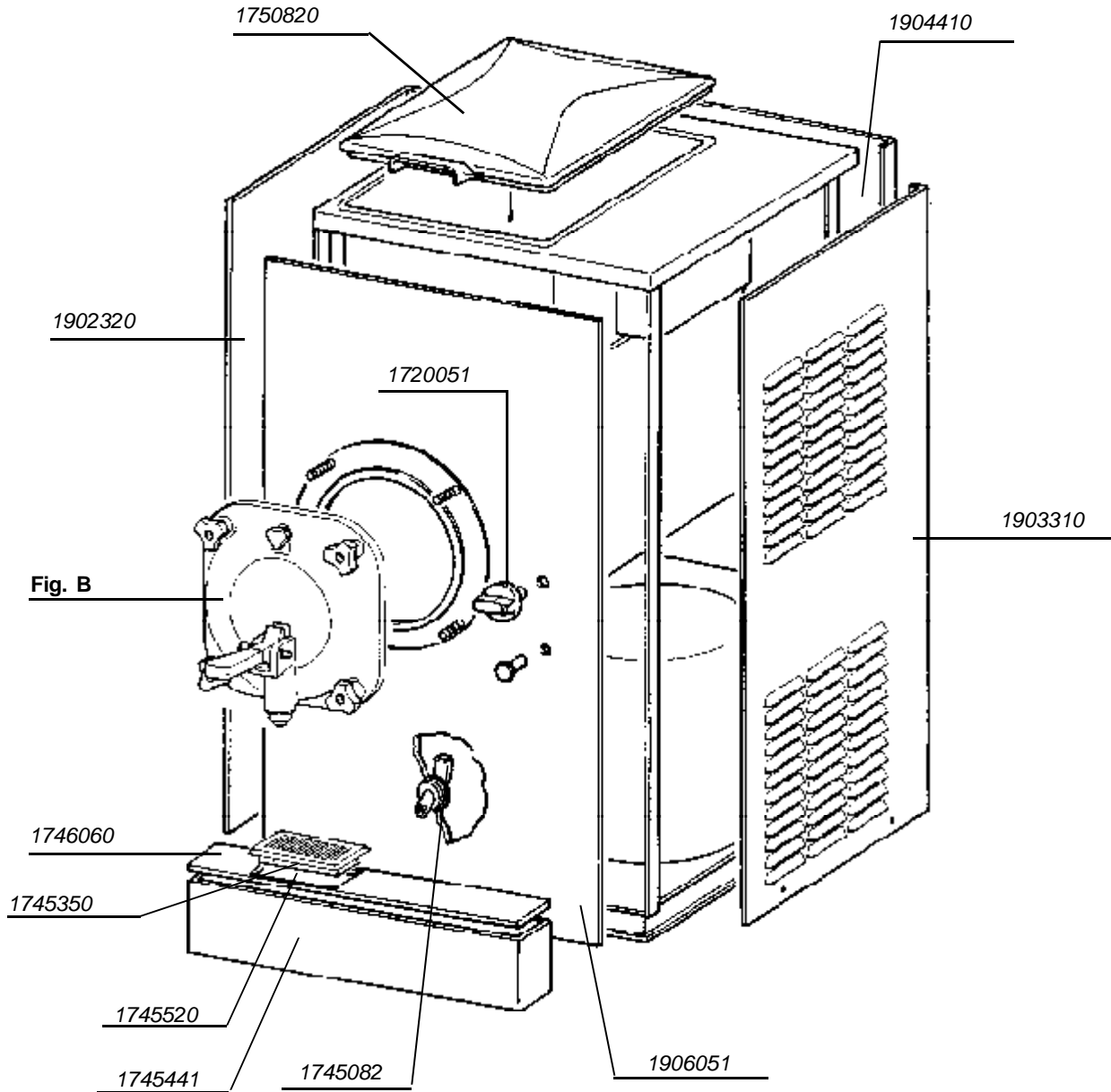
All stainless materials used for parts in contact with mixture and ice cream are easy to clean but do not prevent the formation of mildew if not cleaned sufficiently.

TROUBLE SHOOTING GUIDE

Problem	Possible Cause	Suggested Remedy
1) Machine does not start	<ul style="list-style-type: none"> a) Machine unplugged b) Burnt fuses. c) Overload released. 	<ul style="list-style-type: none"> a) Check and plug in. b) Check and replace. c) Push proper buttons.
2) Compressor starts then stops after a few seconds without the ice being thick.	a) Air cooled machine: air not circulating.	<ul style="list-style-type: none"> a) Check that rear of machine is at least 50 cm from the wall. Clean condenser obstructed by rags, dust, etc.
3) Machine fails to cut out when set at GRANITA.	<ul style="list-style-type: none"> a) Air not circulating enough. b) No mix in the tank and barrel half empty. c) Beater tension spring improperly mounted. 	<ul style="list-style-type: none"> a) See procedure no. 2. b) Refill. c) Check and adjust.
4) Machine is running but not dispensing.	<ul style="list-style-type: none"> a) H-O-Matic sets too hard. b) Barrel half empty. 	<ul style="list-style-type: none"> a) See HOM resetting. b) Refill tank.
5) Machine works but product is too soft.	<ul style="list-style-type: none"> a) Too much sugar in mix. b) Product is dispensed too fast. 	<ul style="list-style-type: none"> a) Modify or replace mix. b) Remember not to exceed production rate.
6) Front hole dripping.	a) Stuffing box missing or ruined.	a) Install or replace with new one, as required.
7) Piston hard to handle.	a) Crusts or dry sugar on piston.	a) Clean and grease with edible fat.
8) Lid leaking.	<ul style="list-style-type: none"> a) Gaskets missing or not properly installed. b) Front lid knobs not tightened evenly. 	<ul style="list-style-type: none"> a) Install or adjust. b) Loosen or tighten again.
9) Bacteria tests show too high level.	<ul style="list-style-type: none"> a) Too much bacteria in mix. b) Machine not clean enough. 	<ul style="list-style-type: none"> a) Improve preparation procedure by sterilizing all containers, tools, etc., have product analyzed before being introduced to machine. b) Empty and clean machine with care. It is important to follow instructions in Sterilization chapter with care.
10) Level gauge stays alight.	a) No product in tank.	a) Refill.

PARTS IDENTIFICATION

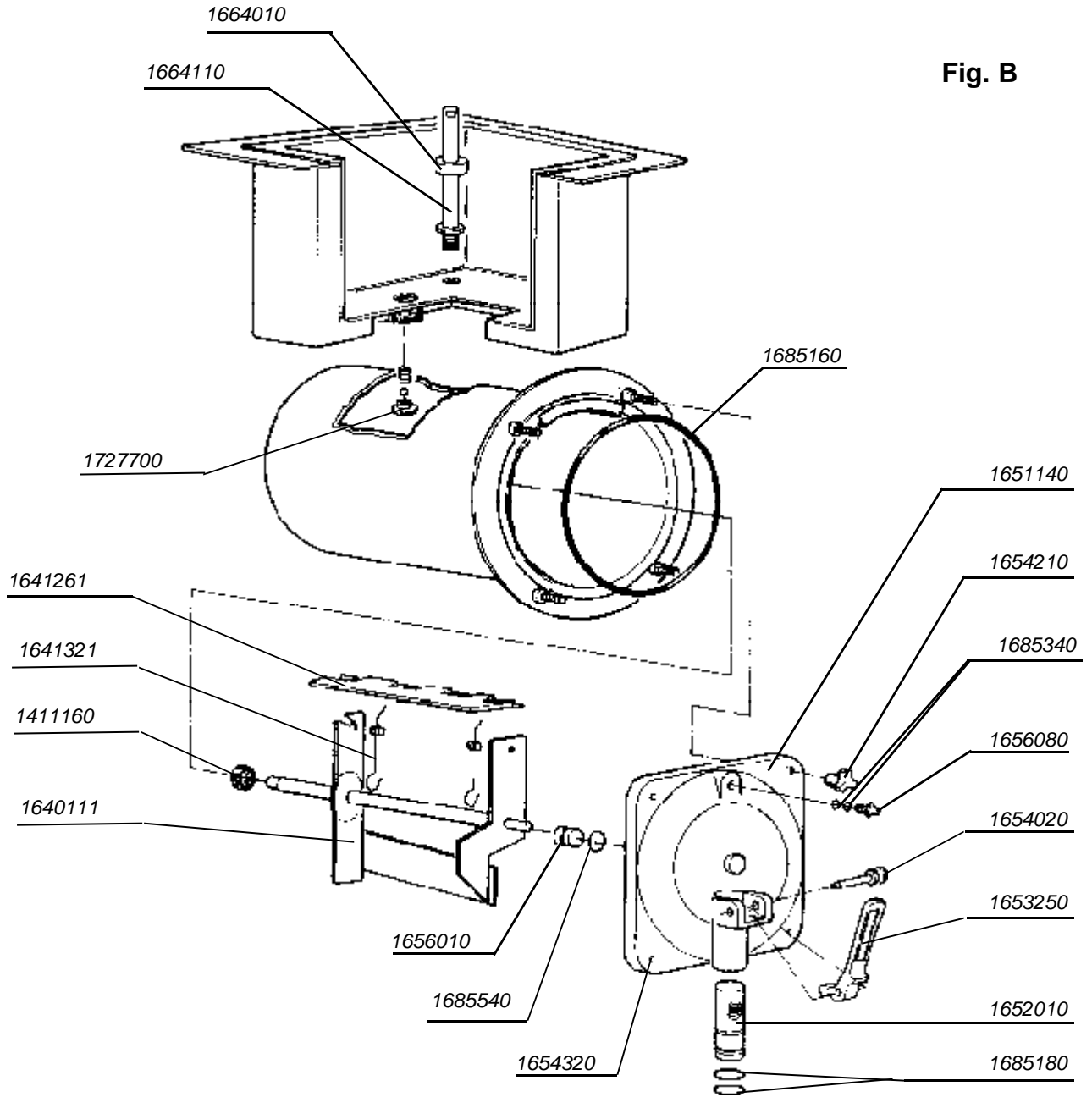
Fig. A



Code No.	Description	Code No.	Description
1902320	Left side panel	1745082	Drip pipe
1750820	Tank cover	1745350	Drip tray cover
1904410	Rear panel	1745520	Drip tray
1903310	Right side panel	1906051	Front panel
1720051	Commuter	1746060	Cover, drip tray console
1745441	Console		

PARTS IDENTIFICATION

Fig. B



Code No.	Description	Code No.	Description
1664010	Flot	1656010	Spigot head bushing
1664110	Flot supporting rod	1685540	O-ring
1727700	Valve	1654320	Stud bolt
1685160	O-ring	1685180	O-ring
1641321	Beater spring	1652010	Complete piston
1641261	Knife	1653250	Dispense handle
1411160	Beater seal	1654020	Handle retaining rod
1640111	Beater shaft	1656080	Plug
1685340	O-ring	1654210	Retaining knob
1651140	Spigot head body		

PARTS IDENTIFICATION

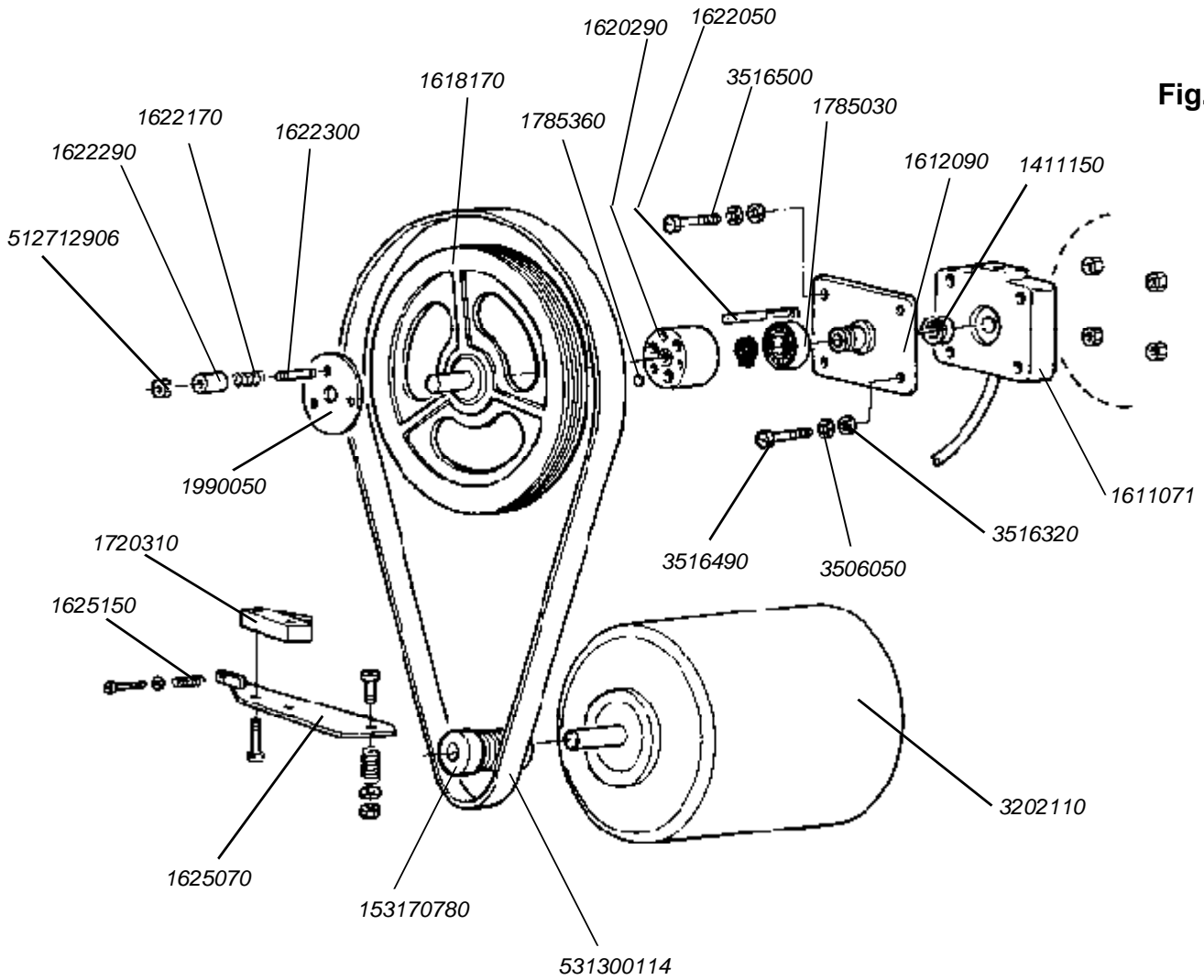
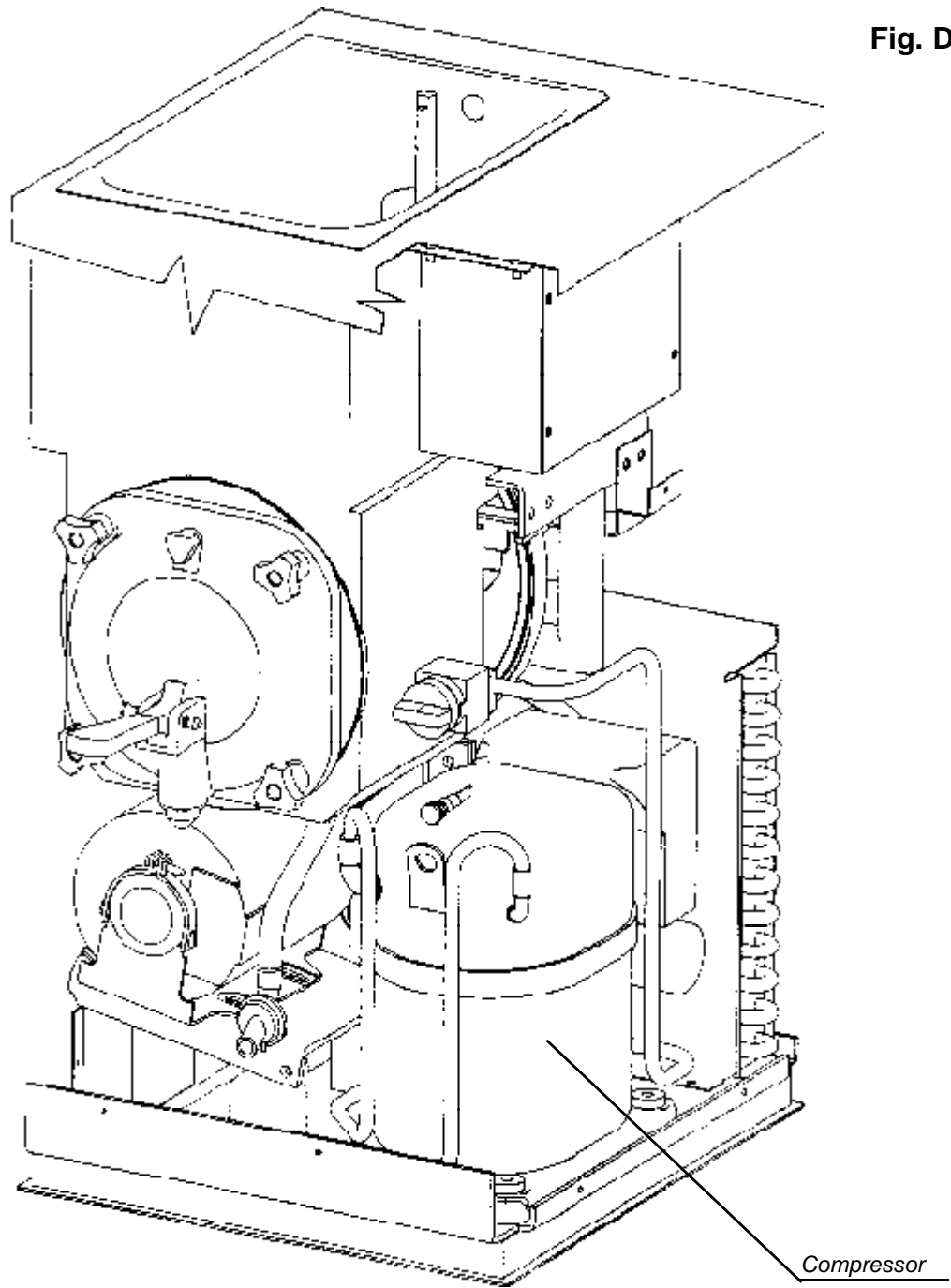


Fig. C

Code No.	Description	Code No.	Description
153170780	Motor pulley	1622300	Spacer
1625070	Support plate	1618170	Pulley
1625150	Spring	1785360	Ball
1720310	Micro switch	1620290	Driving hub
1990050	Washer	1622050	Stud bolt
512712906	Nut	3516500	Screw
1622290	Spring retainer	1785030	Bearing
1622170	Spring	1612090	Rear drive support
1411150	Gasket	1611071	Rear drive spacer
3516320	Washer	3506050	Washer
3516490	Screw	531300114	Belt
3202110	Motor	1990580	Seeger ring

PARTS IDENTIFICATION

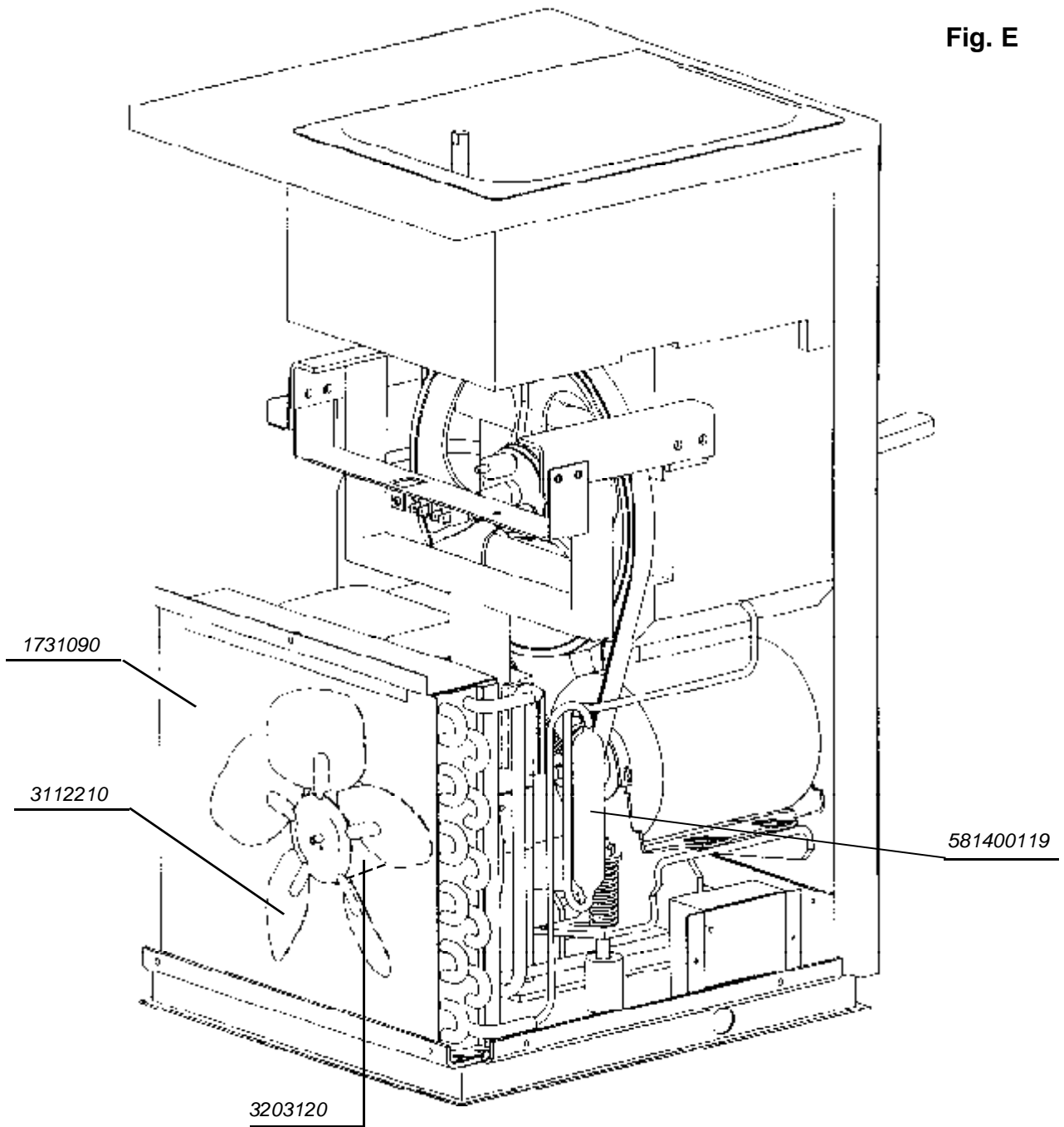
Fig. D



Code No.	Description	Code No.	Description
	<i>Compressor</i>		

PARTS IDENTIFICATION

Fig. E

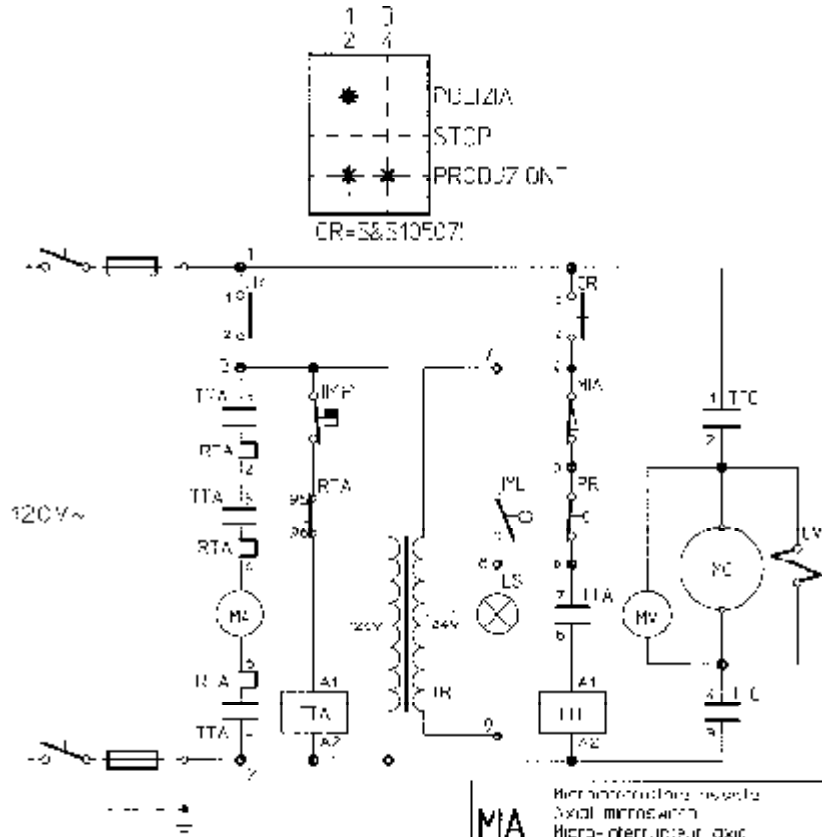


Code No.	Description	Code No.	Description
3112210	Fan	3203120	Fan motor
1731090	Air condenser	581400119	Filter

PARTS IDENTIFICATION

Code No.	Description
571100257	Contactor
574100313	Transformer

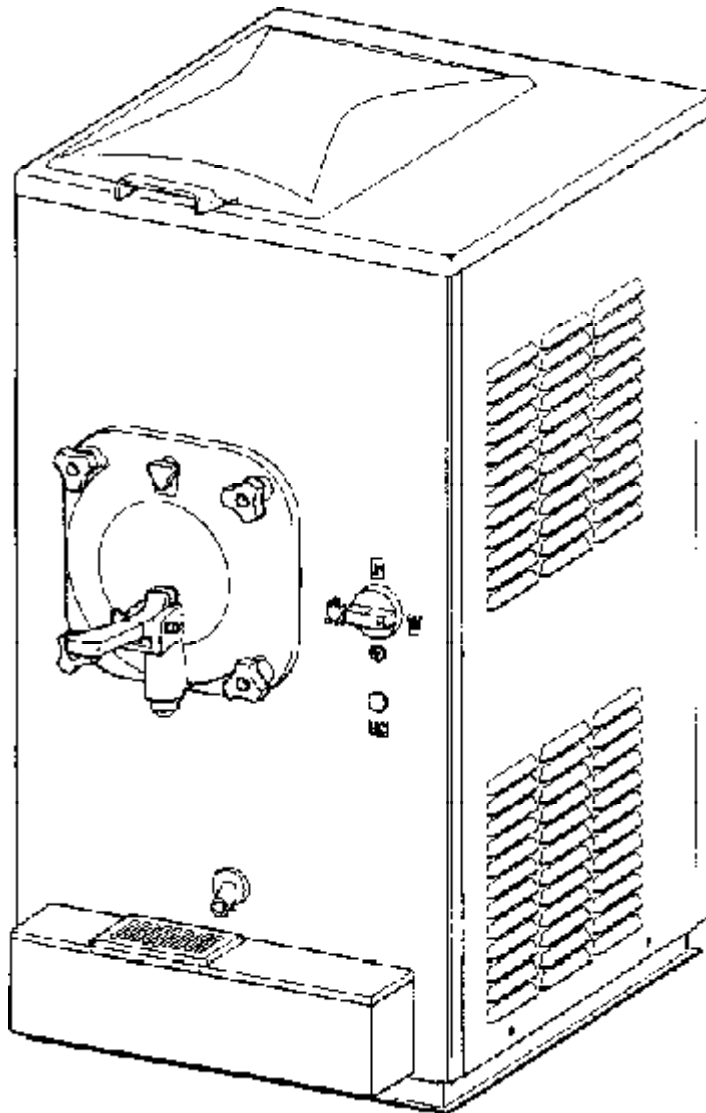
WIRING DIAGRAM 192151093



CR	Comutator rotativ Relay switch Comutator rotatif Drehgeber
EVC	Valvă cilindrică cilindrică Cylindrical solenoid valve Souboupe cilindrică cilindrică Zylinder Magnetventil
IML	Întrerupător magnetic nivel Level magnetic switch Interrupteur magnétique niveau Nivellar Magnetventil
IMP	Întrerupător magnetic parțial Partial magnetic switch Interrupteur magnétique partiel Partiellmagnetventil
MA	Motor agitator Echter Motor Moteur agitateur Rührwerksmotor
MC	Motor compresor Compressor motor Moteur compresseur Kältemaschinenmotor

MA	Micromercur axial Axial micro-switch Micro-interrupteur axial Axial Mikroschalter
MV	Motor variator Euler motor Moteur variateur Ventilator motor
PR	Presorator Pressure control Pressostat Pressostat
LS	20 poută optică Optical limit 20 poută optică Controlmotor
RTA	Relă termică motor agitator Overheat protection for heater motor Protection thermique pour moteur mélangeur Wärmeschutz für Rührwerksmotor
TR	Trasformatore electric Electric transformer Transformateur électrique Elektrischer Transformator
TTA	Întrerupător magnetic agitator Echter Motor contactor Contacteur moteur agitateur Mikroschalter Eerschalter
TTC	Întrerupător magnetic compresor Compressor motor contactor Contacteur moteur compresseur Kältemaschinenmotor Eerschalter

COLDELITE



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OPERATION & SERVICE MANUAL

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