

OPERATION AND MAINTENANCE MANUAL REPLACEMENT PARTS LIST FOR



CH2M SERIES HOT FOOD SERVING TABLES



COLORPOINT

DIVISION OF LOW TEMP INDUSTRIES, INC.

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FIBERGLASS SERVING EQUIPMENT

INSPECTION

UPON RECEIPT, THE CRATE SHOULD BE INSPECTED FOR VISUAL DAMAGE. ANY DAMAGE SHOULD BE REPORTED IMMEDIATELY TO THE CARRIER.

INSTALLATION INSTRUCTIONS

COLOR POINT CH2M SERIES HOT FOOD UNITS ARE DESIGNED FOR DISPENSING FOOD. THIS UNIT IS DESIGNED TO HELP MAINTAIN A PRODUCT TEMPERATURE AT A MINIMUM OF 140 DEGREES FAHRENHEIT DURING SERVING PERIODS. THIS UNITS DESIGNED FOR ON LINE STORAGE OF PRODUCT. THEY SHOULD NOT BE USED AS LONG TERM STORAGE OF BULK PRODUCT. THE DESIGN OF THIS UNIT ALLOWS FOR A MODULAR OPERATION, WHERE A GROUP OF UNITS CAN BE ARRANGED TO FORM A CAFETERIA SERVING LINE. ROLL THE TABLE INTO A SERVING LINE OR OTHER NEEDED POSITION AND LOCK THE BRAKES ON THE CASTERS.

IF LINE UP LOCKS ARE PROVIDED, SIMPLY ALIGN THE UNITS AND PUSH THE BARREL BOLTS THROUGH THE KEY HOLE SLOTS ON BOTH UNITS THEN TURN THE BOLT DOWN AND PUSH UP THE CAM LOCKING LEVER. TO UNLOCK THE UNITS, REVERSE THIS PROCEDURE.

PLUG THE UNIT INTO THE PROPER GROUNDED ELECTRICAL OUTLET. THE UNIT IS NOW READY FOR OPERATION.

OPERATING INSTRUCTIONS

HOT FOOD SECTION:

THE FOOD WARMING UNIT IS DESIGNED FOR HOLDING PRECOOKED FOOD.

1. DRY HEATING

- A. SET THE CONTROL SETTING ON THE DESIRED POSITION AND ALLOW THE RECEPTACLE TO PREHEAT FOR 20 TO 30 MINUTES.
- B. PLACE THE CONTAINER OF FOOD IN THE RECEPTACLE. KEEP THE FOOD COVERED WHEN NOT SERVING.

EXACT DIAL SETTING TO MAINTAIN DESIRED FOOD TEMPERATURE WILL VARY WITH THE CHARACTER OF THE FOOD, SUCH AS WHETHER OR NOT THE FOOD IS WATERY OR HAS A CONSIDERABLE AMOUNT OF GREASE. THE MOST SATISFACTORY TEMPERATURE SETTING MUST BE DETERMINED BY EXPERIENCE.

THERMOSTAT:

THE THERMOSTAT WHENEVER THE HEATING UNIT IS ENERGIZED THE PILOT LIGHT COMES ON.

SHUTDOWN:

AT THE END OF THE DAY OR SERVING PERIOD, SET THE THERMOSTAT CONTROLS TO THE OFF POSITION. THIS REMOVES ALL POWER TO THE HEATING UNITS. TO SHUT OFF THE EQUIPMENT FOR LONG PERIODS OF TIME OR TO PREVENT THE UNAUTHORIZED USE OF THE EQUIPMENT PLACE THE **CIRCUIT BREAKER** TO THE **OFF** POSITION.

CLEANING

DRY OPERATION - WHEN THE FOOD WARMER IS USED DRY, FOOD SPILLAGE ON THE HOT SURFACES WILL BURN AND STICK. THE SAME COMMERCIAL CLEANERS USED ON STAINLESS STEEL UTENSILS MAY BE USED TO CLEAN THE RECEPTACLE. WASH THE INTERIOR SURFACES WITH WATER AND A MILD DETERGENT TO REMOVE DISCOLORATION. RINSE WITH PLAIN WATER AND DRY WITH AN ABSORBENT CLOTH. THE BOTTOM OF THE RECEPTACLE MAY TAKE ON A STRAW COLORED APPEARANCE WHEN IT IS USED DRY. THIS IS DUE TO THE INTENSE HEAT. THE DISCOLORATION WILL NOT COME OFF WITH NORMAL CLEANING PROCEDURES BUT DOES NOT POSE ANY PERFORMANCE OR HEALTH PROBLEMS. SEE THE SECTION ON "**HOW TO CLEAN STAINLESS STEEL**" FOR SPECIFIC RECOMMENDATIONS.

***** WARNING *****

DO NOT USE HARSH CHEMICALS, ACIDS OR ALKALIS IN CLEANING THIS TABLE OR HEATING RECEPTACLES. WITH ANY CLEANERS, READ INSTRUCTIONS CAREFULLY AND DILUTE AS INSTRUCTED BEFORE APPLYING TO STAINLESS STEEL EQUIPMENT.

THE FOOD WARMING RECEPTACLE IS MADE OF STAINLESS STEEL, BUT USE CARE DURING THE CLEANING OPERATION. HEAVY OBJECTS SHOULD NOT BE DROPPED IN THE RECEPTACLE.

FIBERGLASS BODY OR LAMINATE BODY

THE FIBERGLASS BODY OR LAMINATE BODY SHOULD BE CLEANED WITH A MILD NON-ABRASIVE CLEANER AND A SOFT CLOTH.

***** CAUTION *****

DO NOT USE BLEACHES, ABRASIVE CLEANERS OR ABRASIVE CLOTHS OR PADS AS THEY MAY DISCOLOR AND SCRATCH THE FIBERGLASS. DO NOT USE HARSH CHEMICALS, ACIDS OR ALKALIS IN THE CLEANING OF THE FIBERGLASS.

PLEXIGLASS SHIELDS:

USE A MILD SOAP AND A SOFT CLOTH WHEN CLEANING THE PLEXIGLASS SURFACES. WIPING THE SURFACE WITH A DRY CLOTH CAN CAUSE SCRATCHES.

DO NOT USE WINDOW CLEANING SPRAY OR KITCHEN SCOURING COMPOUNDS. PRODUCTS WITH A HIGH **ALCOHOL** CONTENT CAN CAUSE SURFACE FISSURES COMMONLY REFERRED TO AS "**CRAZING**". THIS WILL OCCUR IN ANY SPOT THAT HAS BEEN SUBJECT TO STRESSES, SUCH AS CHIPPED OR BURNED SAW CUTS, CRACKED HOLES FLAME POLISHED EDGES, FORMED EDGES, ETC. FOR BEST RESULTS USE "**NOVUS PLASTIC POLISH NO. 1**".

***** WARNING *****

IN ORDER TO PREVENT ANY ELECTRICAL ACCIDENTS, THIS EQUIPMENT SHOULD BE INSTALLED AND SERVICED BY QUALIFIED MAINTENANCE PERSONNEL ONLY PER NATIONAL ELECTRICAL CODE STANDARDS.

VARIOUS OPTIONS MAY BE PURCHASED WITH THIS EQUIPMENT. WHEN THESE OPTIONS ARE PROVIDED THE ELECTRICAL CIRCUITS MAY BE SEPARATELY FUSED WITH **CLASS "G" FUSES**. IF FUSES MUST BE REPLACED **REPLACE WITH THE SAME TYPE AND AMPERAGE FUSE.**

HOW TO CLEAN STAINLESS STEEL

THE FOLLOWING INFORMATION WAS TAKEN FROM A PAMPHLET BY MR. RICHARD E. PARET, STAINLESS STEEL SPECIALIST, AMERICAN IRON AND STEEL INSTITUTE.

STAINLESS STEEL IS ONE OF THE EASIEST MATERIALS TO CLEAN AND KEEP CLEAN.

THE REASONS FOR STAINLESS STEEL'S EASE OF CLEANING IS EASY TO SEE; THEY LIE IN THE NATURE OF THE METAL ITSELF.

1. IT'S HARD, TOUGH SURFACE. STAINLESS STEEL WILL WORK HARDER, THAT IS, THE MORE IT IS USED, THE MORE RESISTANT TO WEAR IT BECOMES. STAINLESS STEEL WILL NOT DEVELOP ROUGH SPOTS THAT HARBOR BACTERIA AND SOIL.

2. HIGH CORROSIVE RESISTANCE. STAINLESS STEEL IS PRACTICALLY UNTOUCHED BY THE CORROSIVE ATTACKS OF MOISTURE, DETERGENTS, FOOD ACIDS, BLOOD SALTS AND OTHER CORRODENTS CONNECTED WITH FOOD PREPARATION. THIS MEANS THAT STAINLESS STEEL ALWAYS HAS A BRIGHT SURFACE FREE FROM OXIDES THAT CAN AFFECT THE FLAVOR OF FOODS.

THE SECRET OF MAINTAINING STAINLESS STEEL IS FREQUENT, SCHEDULED CLEANING THAT WILL PREVENT BUILD UP OF SURFACE DEPOSITS. SURFACE DEPOSITS, IF ALLOWED TO REMAIN FOR LONG PERIODS OF TIME CAN HARM STAINLESS STEEL. STAINLESS STEEL THRIVES ON EXPOSURE TO AIR; UNDER CERTAIN CONDITIONS, THE LENGTHY DEPRIVATION OF OXYGEN BY HEAVY SOIL DEPOSITS CAN CAUSE LOCALIZED PITTING OR STAINING.

NEGLECTING THE MATERIAL IN THIS MANNER IS **DEFINITE ABUSE**, WHICH EVEN STAINLESS STEEL IS NOT IMMUNE.

TWO BASIC RULES:

1. CLEAN FREQUENTLY, AND ON A FIXED SCHEDULE.
2. SELECT THE SIMPLEST METHOD.

TO REMOVE ORDINARY DIRT AND FOOD RESIDUE FROM STAINLESS STEEL EQUIPMENT THAT OPERATES AT LOW TEMPERATURES, USE ORDINARY SOAP AND WATER AND APPLY WITH A SPONGE, FIBER BRUSH OR CLOTH. TO HASTEN ACTION, ADD EITHER SODA ASH, BAKING SODA, BORAX OR ANY OF SEVERAL NON-ABRASIVE COMMERCIAL CLEANSING AGENTS.

TO REMOVE SPLATTER OR CONDENSED VAPOR, WHICH HAVE "BAKED" ONTO THE EQUIPMENT, THE TREATMENT OUTLINED ABOVE IS OFTEN SUFFICIENT. IN OTHER CASES A GENTLE TO VIGOROUS POLISHING ACTION MAY BE NECESSARY.

FIRST TRY A PASTE MADE WITH WATER AND AMMONIA AS THE LIQUID AND EITHER MAGNESIUM OXIDE, FINELY POWDER PUMICE OR FRENCH CHALK AS THE SOLID. YOU CAN ALSO USE ONE OF SEVERAL COMMERCIAL CLEANERS LISTED IN THE FOLLOWING TABLE.

RUB AS GENTLY AS POSSIBLE IN THE DIRECTION OF THE POLISHING MARKS ON THE STEEL, USING A SOFT CLOTH. FOR MORE RESISTANT DEPOSITS, USE A STAINLESS STEEL SCOURING SPONGE OR STAINLESS STEEL WOOL OF THE FINEST POSSIBLE TEXTURE.

WHAT NOT TO DO:

DO NOT USE COMMON STEEL WOOL, SCOURING PADS, SCRAPERS, WIRE BRUSHES, FILES OR OTHER STEEL TOOLS, SINCE THESE CAN MAR THE STAINLESS STEEL. THESE PARTICLES WILL EVENTUALLY RUST AND STAIN THE SURFACE, AND YOU MAY HAVE TO REFINISH IT.

HOW TO CLEAN STAINLESS STEEL
(CONT.)

SLIGHTLY DARKENED AREAS SOMETIMES APPEAR ON STAINLESS STEEL SURFACES WHERE HEAT HAS BEEN APPLIED DURING FABRICATION OR IN SERVICE.

THESE ARE CAUSED BY THICKENING OF THE PROTECTIVE SURFACE OF STAINLESS STEEL, AND ARE NOT HARMFUL. REMOVAL CALLS FOR ENERGETIC SCOURING, AGAIN USING A STAINLESS STEEL WOOL OR SCOURING PAD, COMBINED WITH A SCOURING POWDER OR ONE OF THE HEAT-TINT REMOVERS LISTED IN THE TABLE.

THREE RULES WILL PREVENT HEAT TINTING:

- 1) USE ONLY ENOUGH HEAT TO DO THE JOB EFFICIENTLY.
- 2) DO NOT APPLY HEAT TO EMPTY EQUIPMENT.
- 3) AVOID CONCENTRATING HEAT ON A SMALL AREA.

***** CAUTION IS ADVISED *****

IN STERILIZING STAINLESS STEEL EQUIPMENT, PAY PARTICULAR ATTENTION TO AGENTS CONTAINING CHLORINE COMPOUNDS SUCH AS POTASSIUM HYPOCHLORITE. THESE COMPOUNDS MAY BREAK DOWN AND RELEASE FREE CHLORINE, OR HYDROLYZE TO FORM HYDROCHLORIC ACID.

STAINLESS STEEL RESISTS ATTACK BY SUCH COMPOUNDS FOR UP TO TWO HOURS. SEVERE LOCALIZED PITTING MAY OCCUR FROM LONGER EXPOSURE. FOR SAFE USE OF THESE AGENTS, KEEP CONTACT TIME SHORT, FLUSH THOROUGHLY WITH WATER, AND OPERATE EQUIPMENT NORMALLY BETWEEN APPLICATIONS. USING THESE PRECAUTIONS, THE STERILIZATION PROCESS CAN BE REPEATED ANY NUMBER OF TIMES.

CLEANERS AND THEIR EFFECT ON STAINLESS STEEL

<u>Cleaning agent</u>	<u>Method of Application</u>	<u>Effect on finish</u>
1. Tightly adhering deposits of "baked on" spatter, oil, grease, weather stain, dyes or other light discoloration may be removed with any of the following cleaners.		
Grade FFF Italian pumice Whiting or bon ami	scour or rub with damp cloth	satisfactory for all finishes use light pressure on no.7
Liquid NuSteel	scour with small amount on dry cloth	satisfactory for all finishes if rubbing pressure is light
Paste NuSteel or Temp	scour with small amount on dry cloth	satisfactory for no. 4 finish. Will scratch no.7
Household cleaners such as Old Dutch, Sunbrite, Wyandotte, Bob-O, Gold Dust and Sapolio	Rub with damp cloth	will scratch no. 4 finish slightly
Grade F Italian Pumice	Rub with damp cloth	will scratch no.4 finish slightly
Cooper's stainless steel polish	Rub with damp cloth	satisfactory for no.4 finish
Allen stainless steel polish	Rub with damp cloth	Scratches considerably but leaves mirror reflection
Best Effect Chemical Co. cleaner & Passivator	Rub with damp cloth	May scratch no.4 finish slightly
2. Heat tint or heavy discoloration with the following (see notes below)		
Allen stainless polish	Small amount on damp cloth remover	excellent heat tint
Birdsall's "Staybright"	Rub with damp cloth	Very good for heat tint removal. Does not scratch no.4finish but does scratch no.7
Wyandotte or Bob-O	Rub with damp cloth	Good for heat tint removal
Oxalic acid (use warm) Or15% nitric acid	Swab or immerse. Always follow with a 5% sodium carbonate or neutralizer rinse	Good discoloration remover
Best Effect Chemical Co. cleaner & Passivator	Rub with damp cloth	May scratch no 4 but leaves clean surface

CLEANERS AND THEIR EFFECT ON STAINLESS STEEL

(Cont.)

Cleaning agent

Effect on finish

3. The following detergents and solvents are excellent removers of grease, oil and fatty acids, where swabbing or rubbing is not practical.

4 to 6% solution of
(sodium Metasilicate)
(Trisodium Phosphate)
(Sodium Metaphosphate)
(Sodium Pyrophosphate)

all excellent
removers of grease,
oil, and milkstone

5-15% caustic soda (hot or cold)

will remove grease
and milkstone

4. The following organic solvents may be used for removing oils and grease deposits:

Carbon-tetrachloride, Naphtha, Trichlorethylene
Acetone, Kerosene, Gasoline, Ether, Alcohol, Benzene

No affect on finish,
however, take all
precautions against
fire.

Notes: ordinary wool or steel brushes should never be used on stainless steel surfaces. Particles of steel may become imbedded in the stainless steel surface, and rusting of these particles will eventually appear as stains. Use stainless steel wool or sponge on stainless steel equipment. Heat tint removers will usually scratch stainless steel surfaces. This, however, is necessary in removing heat tint by hand. Oakite, a fibrous material, may be used in place of metal sponges or cloth pads for applying cleaners and polishes. This material is effective in aiding in removal of milkstone.

For heavy hard water deposits, 15-20% (by volume) nitric acid is very effective. Acid treatment should be followed by a thorough water rinse.

The action of soldering fluxes should be neutralized immediately with a 5% sodium carbonate solution.

Soap and water followed by a water rinse will not harm stainless steel.

PREVENTATIVE MAINTENANCE OF COLORPOINT EQUIPMENT

To insure that your equipment will continue to operate properly, please follow these simple steps:

1. The food receptacle wells should be clean thoroughly every day. Food spillage left in the pans such as tomato paste can cause damage to the unit. The acidic base of foods over time can cause pitting of the units. For more cleaning information on these models, see the section on "HOW TO CLEAN STAINLESS STEEL" in this manual.
2. Always wipe the unit down with a damp cloth. Do not spray water directly in control panel areas or on areas with exposed heating elements.
3. Where applicable, clean sneeze guards daily. See the section on cleaning plexiglass.

TROUBLE SHOOTING
SERVICE CHART

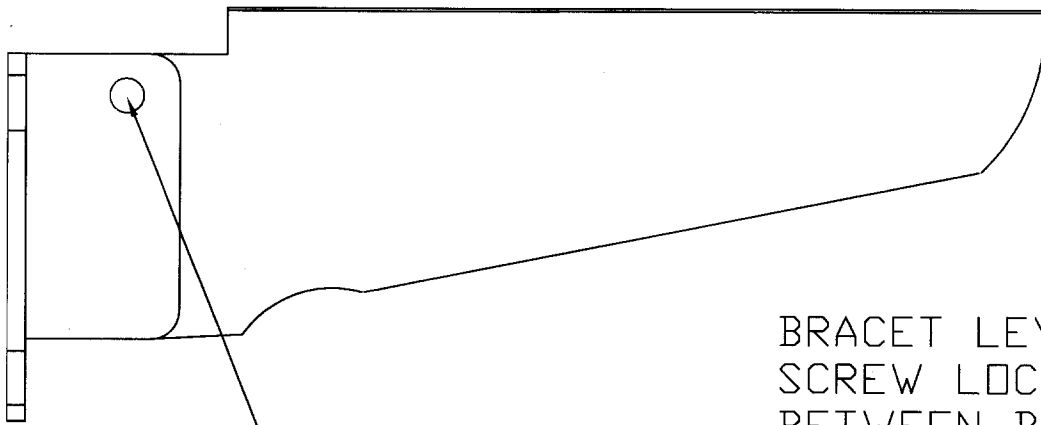
SERVICE TO BE PERFORMED BY QUALIFIED SERVICE TECHNICIAN ONLY.

<u>COMPLAINT</u>	<u>PROBLEM</u>	<u>SOLUTION</u>
TABLE WILL NOT HEAT	1. PLUG DISCONNECTED	1. CHECK ALL ELECTRICAL CONNECTIONS.
	2. LINE SWITCH OPEN	2. CLOSE SWITCH
	3. BREAKER TRIPPED	3. RESET BREAKER
	4. HEATER BURNED OUT OR DEFECTIVE	4. REPLACE
	5. THERMOSTAT DEFECTIVE	5. REPLACE
TABLE DOES NOT HEAT	1. LOW VOLTAGE	1. USING INSTRUMENT CHECK LINE VOLTAGE AND AMPERAGE. VOLTAGE MUST BE WITHIN 10 % OF NAME PLATE RATING.

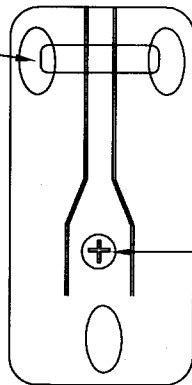
HOT FOOD WELL HEATING ELEMENT DATA SEE SPEC SHEETS
FOR VOLTAGE REQUIRED.

* STANDARD HEATING ELEMENT FOR COLORPOINT EQUIPMENT. OTHER ELEMENTS AVAILABLE UPON REQUEST.

LOW TEMP INDUSTRIES
TYPICAL FOLD DOWN BRACKET
USED FOR BOTH TRAY SLIDES
AND CUTTING BOARDS

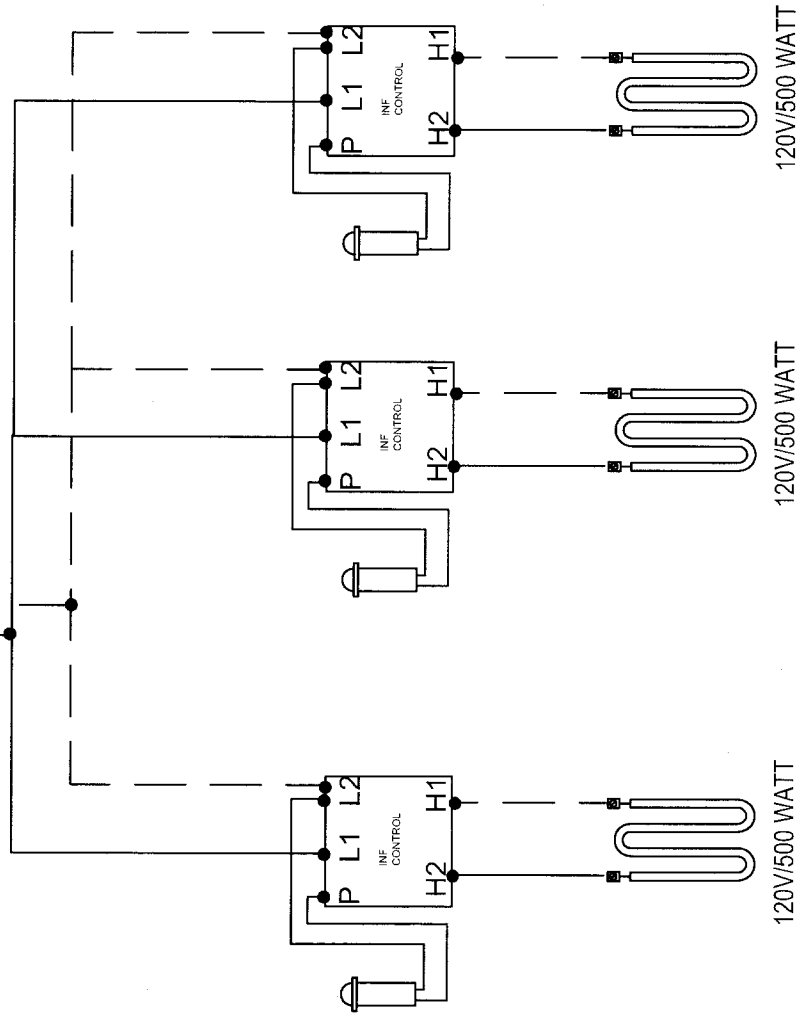
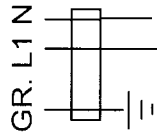


clevis pin



BRACKET LEVEL ADJUSTMENT
SCREW LOCATED ON HEAL PLATE
BETWEEN BRACKET SUPPORTS,
(3/8" ADJUSTMENT)

120V/12.5A/1PH



LOW TEMP INDUSTRIES INC.
JONESBORO, GEORGIA

WIRING DIAGRAM FOR
CH2M SERIES TABLE

WIRING DIAGRAM
NO. LT-ENG-CH2M

REV:

DATE 07-28-03

REPLACEMENT PARTS LIST
MODEL CH2M CAL

ITEM NO.	DESCRIPTION	STOCK NO.	MFG. NO.	MANUFACTURER
1	INF CONTROL 120 VOLT	190500	INF-120	E.G.O.
2	PILOT LIGHT	358000	515-5CL	JEMCO
3	ELEMENT 120 VOLT	194831 CAL		LOW TEMP

**NOTE! FOR PART NUMBERS ON HOT FOOD WELLS OTHER THAN THOSE LISTED ABOVE
CONTACT THE FACTORY.**

ONE YEAR WARRANTY

ALL LOW TEMP EF SERIES HOT FOOD SERVICE EQUIPMENT IS FULLY WARRANTED BY THE MANUFACTURER AGAINST DEFECTS IN MATERIALS OR WORKMANSHIP FOR A PERIOD OF ONE (1) YEAR FROM THE DATE OF PURCHASE BY THE ORIGINAL USER AND ONLY TO THE ORIGINAL PURCHASER PROVIDED IT IS INSTALLED AND OPERATED IN ACCORDANCE WITH THE INSTRUCTIONS SUPPLIED WITH THE UNIT. ALSO, IT MUST NOT BE MISUSED, ALTERED OR NEGLECTED AND USED ONLY ON CIRCUITS AND VOLTAGES REQUIRED FOR THAT UNIT.

OUR OBLIGATION UNDER THIS WARRANTY SHALL BE LIMITED TO ONE OF THE FOLLOWING PROCEDURES. SELECTION OF A PROCEDURE SHALL BE AT THE SOLE DISCRETION OF LOW TEMP INDUSTRIES INC.

LOW TEMP INDUSTRIES, INC. WARRANTY SERVICE DEPARTMENT MUST BE NOTIFIED PRIOR TO ANY SERVICE WORK FOR A WARRANTY AUTHORIZATION NUMBER. ANY REQUESTS FOR WARRANTY CLAIMS WITHOUT A WARRANTY AUTHORIZATION NUMBER, WILL NOT BE HONORED.

- A. REPLACEMENT OF DEFECTIVE PARTS, SHIPPED F.O.B. FACTORY, IN EXCHANGE FOR THE RETURNED DEFECTIVE PART, SHIPPED PREPAID FREIGHT.
- B. FREE REPLACEMENT OF DEFECTIVE PART, SHIPPED F.O.B. FACTORY.
- C. DEFECTIVE PART SHIPPED PREPAID FREIGHT TO FACTORY, REPAIRED AND RETURNED, SHIPPED F.O.B. . FACTORY.
- D. ALL LABOR COSTS SHALL BE COVERED FOR A PERIOD OF 1 YEAR FROM THE DATE OF PURCHASE.

LOW TEMP INDUSTRIES INC. SHALL NOT BE RESPONSIBLE FOR ANY DAMAGE CAUSED BY FIRE, FLOOD, WINDSTORM, OR ANY OTHER ACT OF GOD; WAR, WHETHER DECLARED OR UNDECLARED NOR SHALL WE BE RESPONSIBLE FOR THE LOSS OF FOOD OR OTHER PRODUCTS DUE TO POWER OR MECHANICAL FAILURE. THIS WARRANTY SHALL NOT COVER ANY DAMAGE CAUSED DURING SHIPMENT WHICH SHOULD BE REPORTED TO THE DELIVERING CARRIER.

COLORPOINT FIBERGLASS FOOD SERVICE EQUIPMENT

A DIVISION OF LOW TEMP INDUSTRIES INC.
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