



COOK/CHILL VERTICAL TUMBLE CHILLERS

MODELS: P-TC-220
 P-TC-320



Cleveland Standard Features

- Load capacity for up to 220 or 320 gallons of packaged product.
- All stainless steel construction throughout
- Solid state controls for:
 - Start/Stop
 - Chill Cycle rotation
 - Oscillation mode
 - Cleaning cycle
 - Digital temperature display
 - 99-minute digital countdown timer
 - Cycle completion light
- Fully-insulated, large stainless steel, perforated rotating drum
51" or 65" diameter by 43" long, driven by a Eurodrive motor at 7 RPM.
- Heavy-duty front loading door with water tight seal and automatic safety lock.
- Angled loading chute for product loading while drum is rotating.
- Choice of full drum rotation or oscillation mode.
- Pre-piped, highly-efficient built-in "plate type heat-exchanger" with back-flush cleaning feature.
- Pre-piped, built-in 11/2 HP water circulation pump.
- Large in-line basket strainer for chilled water loop to protect heat-exchanger.
- Automatic water fill with two selectable water level settings for full and half product load.
- Dependable air-powered solenoid valves.
- Automatic dispenser for sanitizing solution.
- Hot water connection for drum cleaning (No steam hookup required).
- Pre-piped for single point connections to utilities.
- Available with left or right hand operating controls.
- Accepted for use in USDA inspected facilities.

ITEM NUMBER _____

JOB NAME / NUMBER _____



Model P-TC-220 shown with optional Re-use Tank

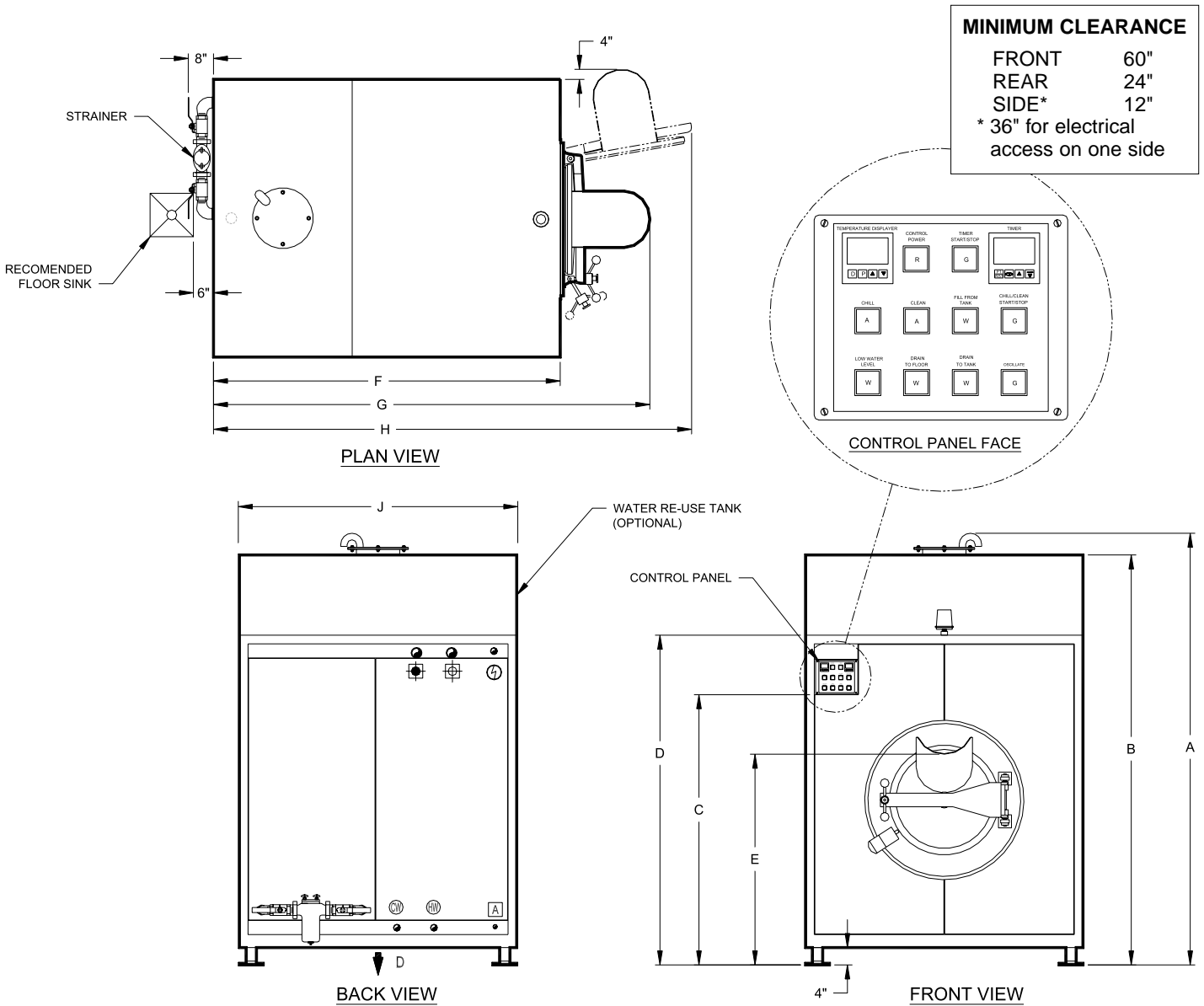
Short Form Specifications

Shall be CLEVELAND Model P-TC-___, COOK/CHILL VERTICAL TUMBLE CHILLER; All stainless steel construction; capacity for up to ___ gallons of product load; fully-insulated ___" diameter by 43" long perforated drum; built-in plate heat-exchanger; automatic dispenser for sanitizing solution; solid state controls for full drum rotation; oscillation mode; cleaning cycle; digital temperature display; countdown timer; two water level set points; hot water for cleaning. (No steam hook-up required.)

Options & Accessories

- Stainless steel chilled water re-use tank, mounted on top of machine for space savings.
- Product landing table
- Conveyor for automatic product loading
- Right hand controls (left hand door hinging)

- Ice Builders
- Condensing Units for Ice Builders
- Ice Water Control Panel
- Lockable cover over controls



SPECIFY LEFT OR RIGHT HAND DOOR HINGING

DIMENSIONS

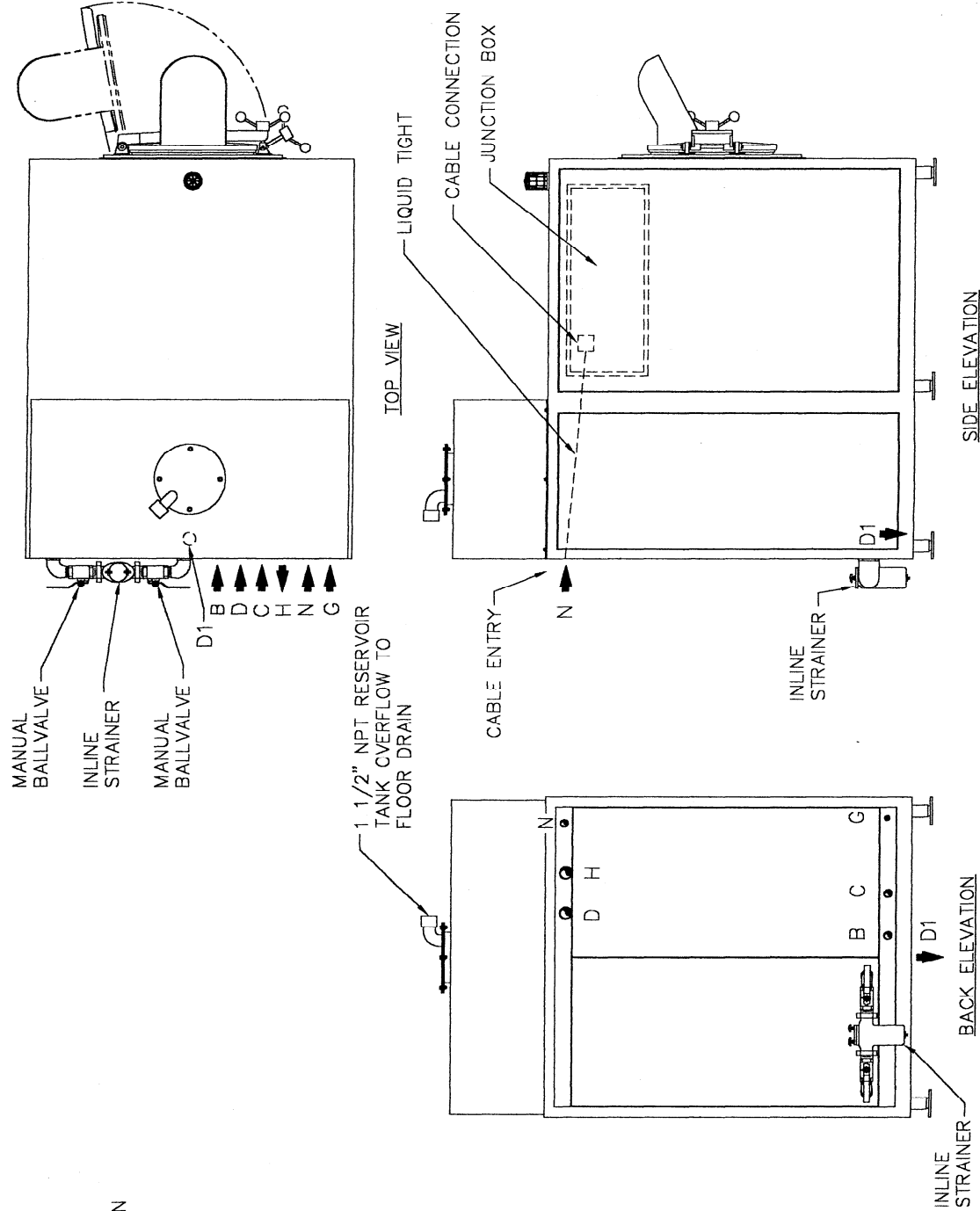
MODEL	A	B	C	D	E	F	G	H	I
P-TC-220	98"	93"	63"	77"	53 1/2"	82"	107"	115"	64"
P-TC-320	109"	104"	63"	88"	62"	90"	116"	131"	80"

UTILITY CONNECTIONS

MODEL	CHILLED WATER INLET	CHILLED WATER RETURN	COLD WATER	HOT WATER	AIR INLET	DRAIN	ELEC-TRICAL
						D	208V/ 3PH/60Hz
P-TC-220	1 1/2" NPT 75 GPM	1 1/2" NPT	1" NPT 30 GPM	1" NPT 30 GPM	1/2" NPT 1 CFM/65 PSI	1 1/2" NPT 30 GPM	17 AMPS
P-TC-320	2" NPT 80 GPM	2" NPT	1" NPT 30 GPM	1" NPT 30 GPM	1/2" NPT 1 CFM/65 PSI	2" NPT 30 GPM	28 AMPS

UTILITY CONNECTIONS:

- B. 1" NPT COLD POTABLE WATER IN
- C. 1" NPT HOT POTABLE WATER IN
- D. 1 1/2" NPT COOLING WATER IN
- D1. 2" NPT TANK DRAIN TO FLOOR DRAIN
- G. 1/2" NPT AIR IN
- H. 1 1/2" NPT COOLING WATER RETURN
- N. MAIN POWER SUPPLY



B	ADDED RES TANK OVER FLOW LINES	12/01
A	ADDED INLINE STRAINER	08/17/00
REV	DESCRIPTION	BY DATE
REVISIONS		

J.C.PARDO & SONS INC.
 1280 REAMES RD. BALTO MD. 21220
 PHONE (410) 891-9600 FAX (410) 891-9600

200 GALLON TUMBLE CHILLER
 UTILITY CONNECTIONS
 J.C. PARDO & SONS INC.
 BALTO MD 21220
 PHONE (410) 891-9600 FAX (410) 891-9600

INSTALLATION INSTRUCTIONS

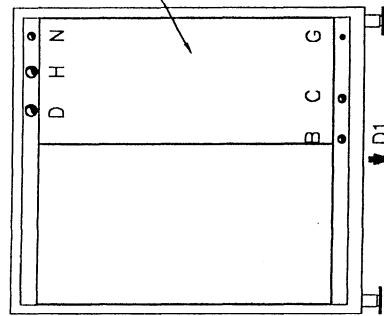
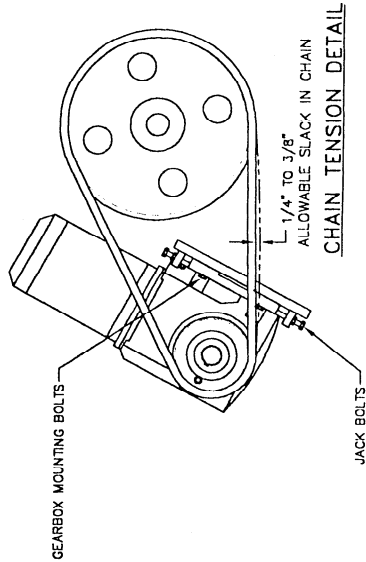
DISCONNECT ALL POWER TO THE CHILLER BEFORE WORKING ON ANY OF THE DRIVE COMPONENTS.

1. LEVEL CHILLER TANK SIDE TO SIDE AND FRONT TO BACK. THE MAX. FEET ADJUSTMENT IS 3/4". IF THIS IS NOT ENOUGH THEN ADD SPACERS UNDER THE FLOOR FLANGES.
2. IF THE CHILLER TANK IS NOT LEVEL THE REMOVABLE ACCESS PANELS WILL NOT FIT PROPERLY AFTER BEING REMOVED.
3. REMOVE BACK PANELS AND MAKE ALL UTILITY CONNECTIONS.
4. CHECK DRIVE ASSEMBLY TO ENSURE ALL BEARINGS, SPROCKETS AND CHAIN ARE TIGHT AND SECURE.
5. CHECK ALL COMPONENTS IN THE PLUMBING SYSTEM TO BE SURE THEY DID NOT VIBRATE LOOSE DURING SHIPMENT. (HEAT EXCHANGER, CIRCULATING PUMP ETC.)
6. NEXT TURN POWER TO CHILL TANK ON. START FILLING TANK (SEE OPERATING INSTRUCTIONS). CHECK THE CIRCULATING PUMP ROTATION VS THE DIRECTION MARKED ON THE PUMP BODY. IF THE PUMP IS RUNNING BACKWARDS THEN SHUT OFF ALL CONTROLS AND POWER, THEN REVERSE PUMP ROTATION. (ROTATING DRUM CAN ROTATE EITHER DIRECTION)
7. CAUTION: ROTATING DRUM AND PUMP WILL AUTOMATICALLY START WHEN LOW LEVEL SWITCH IS ACTIVATED DURING A CHILL CYCLE. KEEP ALL PERSONNEL AWAY FROM DRIVE GEARS AND CHAIN WHEN POWER IS ON AND TANK IS FILLING.
8. IF WATER LEVEL NEEDS ADJUSTMENT SEE INSTRUCTIONS ON THE ELECTRICAL SCHEMATICS.
9. AFTER THE CHILL TANK HAS RUN ONE CYCLE OR FULLY TESTED AND BEFORE REATTACHING THE BACK PANELS TURN POWER OFF AND CLEAN ALL IN LINE STRAINERS IN THE PLUMBING SYSTEM.
10. THERE IS ROOM FOR A 5 GALLON PAIL OF CHLORINE INSIDE THE CHILL TANK REAR HOUSING OR A CONTAINER CAN BE SET ON THE OUTSIDE BUT A HOLE MUST BE DRILLED IN THE ACCESS DOOR FOR THE SIPHON TUBE TO COME OUT.
11. THE SWITCH ON THE CHLORINE PUMP MUST BE IN THE ON POSITION IN ORDER FOR THE PUMP TO OPERATE.

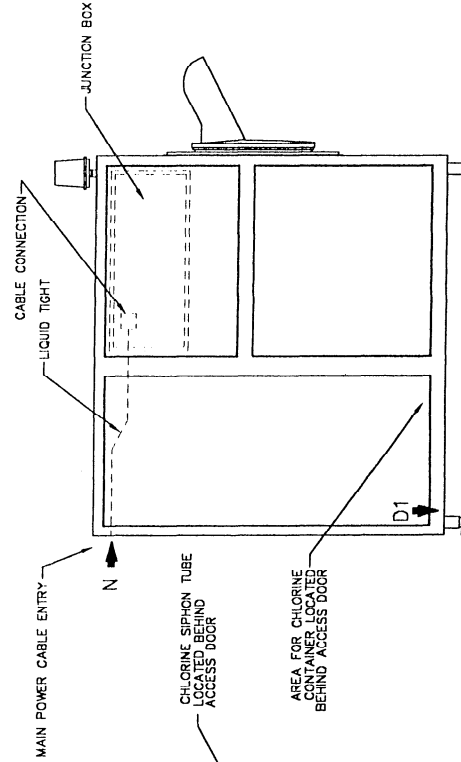
CHAIN ADJUSTMENT INSTRUCTIONS

DISCONNECT ALL POWER TO THE CHILLER BEFORE WORKING ON ANY OF THE DRIVE COMPONENTS.

TO MAKE CHAIN ADJUSTMENT LOOSEN GEARBOX MOUNTING BOLTS. BY USING THE GEARBOX JACK BOLTS PUSH UP TO LOOSEN CHAIN OR PUSH DOWN TO TIGHTEN CHAIN. AFTER THE CHAIN IS ADJUSTED PROPERLY RETIGHTEN THE GEARBOX MOUNTING BOLTS AND THE JACK BOLTS. AT THE SAME TIME MAKE SURE THAT THE CHAIN AND BOTH SPROCKETS ARE IN LINE.



BACK ELEVATION



SIDE ELEVATION

UTILITY CONNECTIONS 200-TC:

- B. 1" NPT COLD POTABLE WATER IN
- C. 1" NPT HOT POTABLE WATER IN
- D. 1 1/2" NPT COOLING WATER IN
- D1: 1 1/2" NPT TANK DRAIN TO FLOOR DRAIN
- G. 1/4" NPT AIR IN 90 PSI
- H. AIR MUST BE CLEAN AND DRY.
- N. 1 1/2" NPT COOLING WATER RETURN
- N. POWER SUPPLY.

UTILITY CONNECTIONS 300-TC:

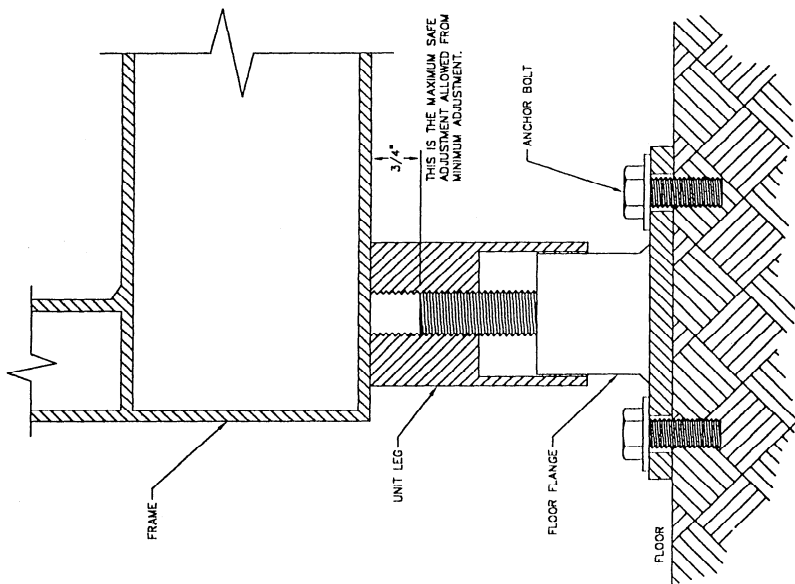
- B. 1" NPT COLD POTABLE WATER IN
- C. 1" NPT HOT POTABLE WATER IN
- D. 2" NPT COOLING WATER IN
- D1: 2" NPT TANK DRAIN TO FLOOR DRAIN
- G. 1/4" NPT AIR IN 90 PSI
- H. AIR MUST BE CLEAN AND DRY.
- N. 2" NPT COOLING WATER RETURN
- N. POWER SUPPLY.

REV.	DESCRIPTION	BY	DATE
REVISIONS			

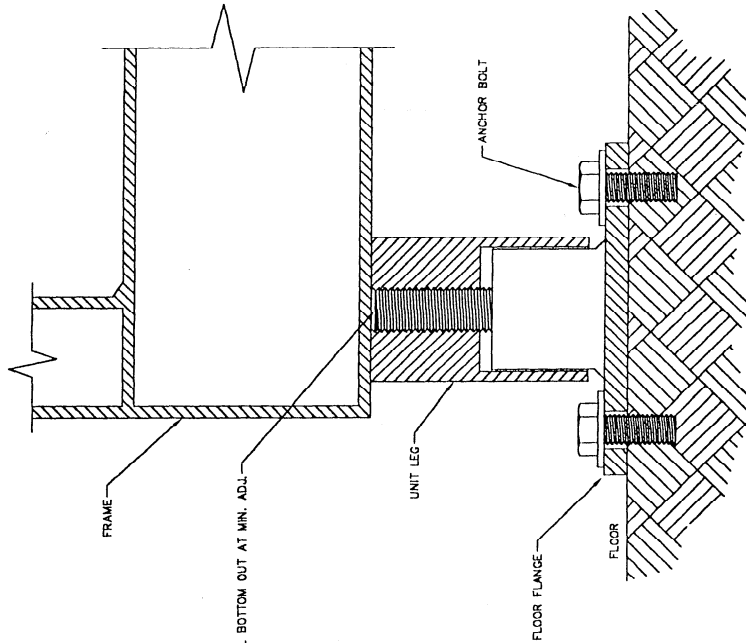
J.C. PARDO & SONS INC.
 1260 BEAMERS RD. BALTO MD. 21220
 PHONE (410) 381-3000 FAX (410) 381-3000

300-TC & 200-TC INSTALLATION

D 8814
 1 of 1



MAXIMUM ADJUSTMENT
OF FLOOR FLANGE



MINIMUM ADJUSTMENT
OF FLOOR FLANGE

NOTES:

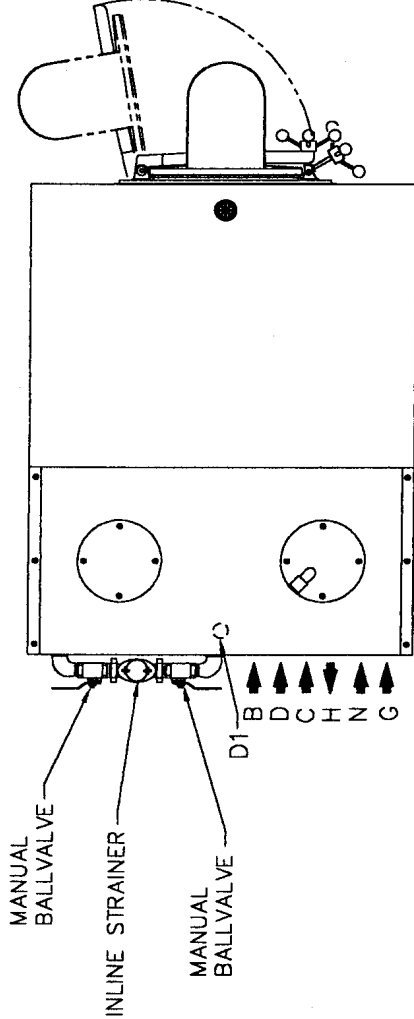
AFTER UNIT IS LEVEL, ANCHOR ALL FLOOR FLANGES TO THE FLOOR BY USING AN ANCHOR BOLT IN EACH HOLE OF THE FLANGES.

J.C.PARDO & SONS INC. 1250 REAMES RD. BALTO MD. 21220 PHONE (410) 391-3600	CHECKED BY:	DRAWN BY: JAY S.	SIZE: B	DRAWING NUMBER: 8815
	APPROVED BY:	DATE: 4-15-98	REV.	SHEET 1 of 1
300-TC & 200-TC FLOOR FLANGE ADJUSTMENT INSTRUCTIONS			This drawing and all information contained therein is the property of J.C.Pardo & Sons Inc. Balto MD. The drawing and all information is confidential and must not be made public or copied. It is loaned subject to return upon demand and is not to be used directly or indirectly in any way detrimental to J.C.Pardo & Sons.	

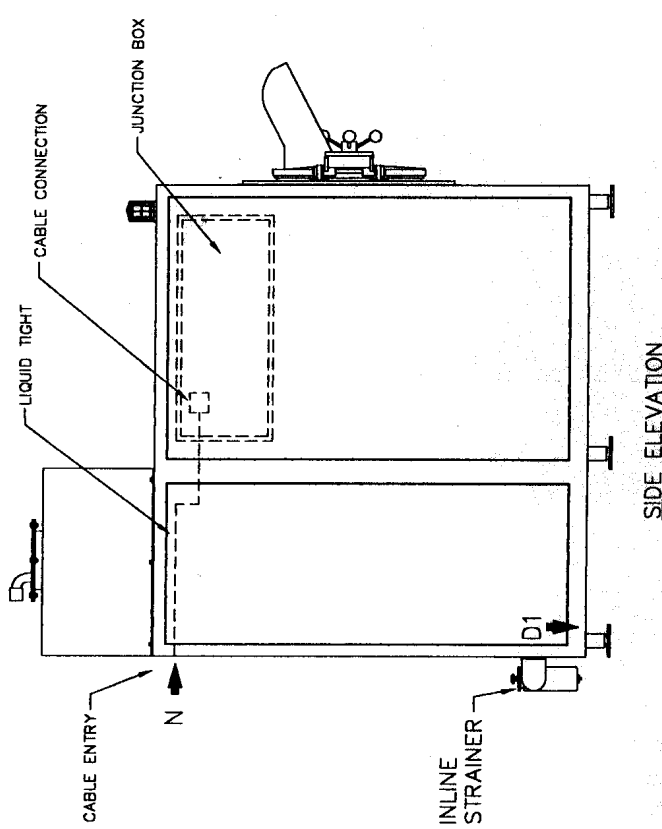
UTILITY CONNECTIONS:

- B. 1" NPT COLD POTABLE WATER IN
- C. 1" NPT HOT POTABLE WATER IN
- D. 2" NPT COOLING WATER IN
- D1. 2" NPT TANK DRAIN TO FLOOR DRAIN
- G. 1/2" NPT AIR IN
- H. 2" NPT COOLING WATER RETURN
- N. POWER SUPPLY, 208/460V-3PH-60HZ

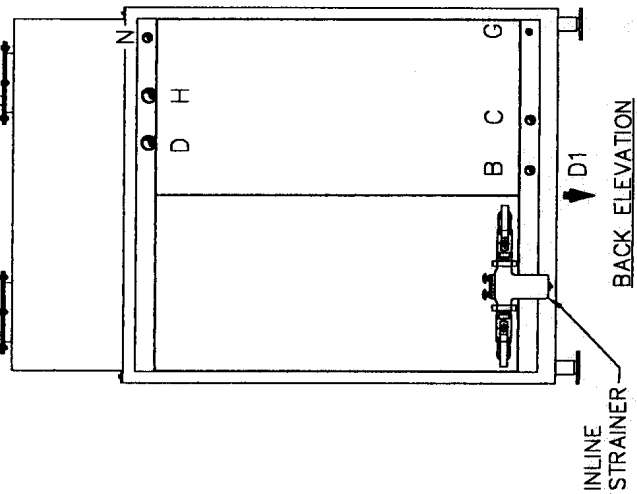
1 1/2" NPT OVERFLOW FOR REUSE TANK. RUN TO OPEN FLOOR DRAIN



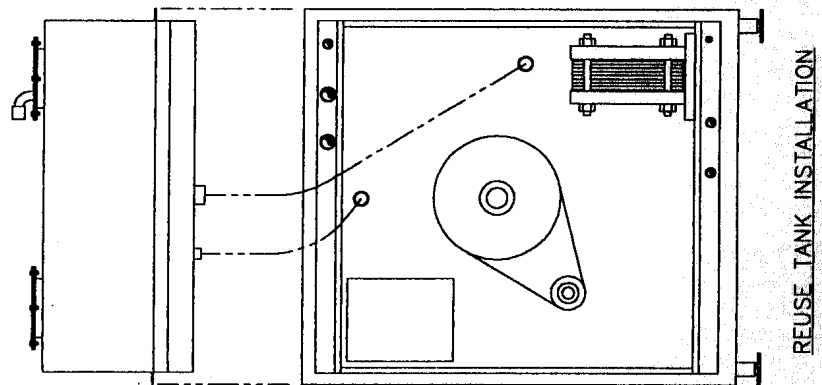
TOP VIEW



SIDE ELEVATION



BACK ELEVATION



REUSE TANK INSTALLATION BACK ELEVATION

REV.	DESCRIPTION	DATE
B	ADDED REUSE TANK OVERFLOW	1/15/08
A	ADDED INLINE STRAINER	1/15/08
REV.	DESCRIPTION	DATE

J.C. PARDO & SONS INC.		300 GALLON TUMBLE CHILLER	
1800 BEAVER RD. BALTO MD 21030		UTILITY CONNECTIONS	
PHONE (410) 841-4000		REV. 1	
FAX (410) 841-4000		REV. 2	
DATE 2-15-08		REV. 3	
DRAWN BY		REV. 4	
CHECKED BY		REV. 5	
DATE 2-15-08		REV. 6	
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Cleveland Range, LLC.
1333 East 179th Street
Cleveland, OH 44110
Phone: (216) 481-4900
Fax: (216) 481-3782
<http://www.clevelandrange.com>

TUMBLE CHILLER

Electrical Requirements

- Voltage
- Phase
- Amp draw
- Wire Size
- Check motor rotation

Water Requirements

1. Cold water supply (Potable)

- Line size
- Maximum water pressure
- Line strainers
- Pressure regulator
- Water quality
- Check for leaks

1. Chilled Water

- Line sizes (in and out)
- Drain size
- Check for leaks

Drain Requirements

- Line size

Steam Requirements

- Line sizes (in and out)
- Steam pressure
- Steam usage
- Check safety valve operation
- Check for leaks

Air Requirements

- Line size
- Pressures
- Check lubricator
- Check for leaks

Reuse Tank

- Inspect mounting and unions
- Check for leaks

Model no. _____
Serial no. _____

Comments:

<p>FIRST LOAD OF THE DAY</p>	<p>WHEN LOAD HAS COOLED</p>	<p>ALL OTHER LOADS</p>																																																																								
<p>PRESS BUTTONS IN SQUENCE</p> <ol style="list-style-type: none"> CONTROL POWER CHILL SEQUENCE START/STOP <p>MACHINE WILL FILL AND START COOLING WATER</p>	<p>PRESS BUTTON IN SEQUENCE</p> <ol style="list-style-type: none"> SEQUENCE START/STOP DRAIN TO TANK 	<p>PRESS BUTTONS IN SEQUENCE</p> <ol style="list-style-type: none"> FILL FROM TANK CHILL SEQUENCE START/STOP <p>AFTER LAST LOAD DRAIN TO FLOOR AND PUSH CONTROL POWER</p>																																																																								
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LOW WATER	DRAIN FLOOR	DRAIN FLOOR	OSCI LLANTE																																																																							

J.C. PARDO 200 & 300 GALLON CHILLERS

OPTIONAL FEATURES:

1. PARTLOW CHART RECORDER FOR ONLY RECORDING THE TEMPERATURE OF THE PRODUCT.
2. CLEANING CYCLE BY THE USE OF STEAM:

OPERATION DESCRIPTION

WHEN YOU SELECT CLEANING CYCLE THE COLD WATER VALVE WILL OPEN FILLING THE TANK TO THE PROPER LEVEL.

WATER STOPS, STEAM STARTS GOING IN.

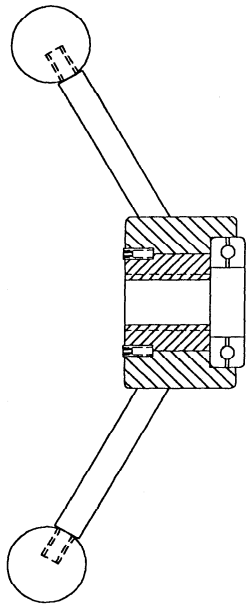
TEMPERATURE CONTROLLER IS PRESET AT REQUIRED TEMPERATURE FOR CLEANING. ONCE WATER REACHES TEMPERATURE SET POINTS THE CONTROLLER WILL CYCLE ON OFF TO MAINTAIN WATER TEMPERATURE.

THE TIME THAT THE STEAM STAYS ON IS SETABLE BY RESETTING A TIMER ON THE INSIDE OF SIDE CONTROL PANEL.

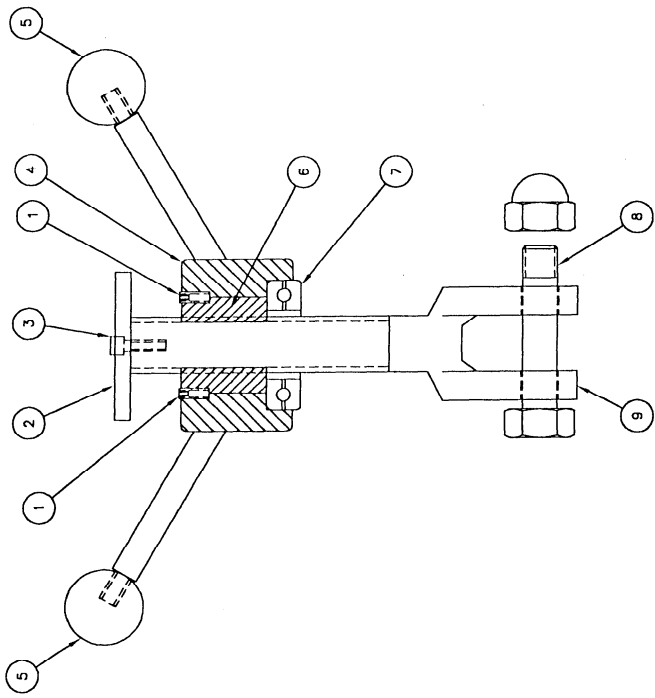
**** *NOTE:* THIS MUST BE DONE BY A QUALIFIED TECHNICIAN.

REPLACEMENT PARTS LIST

ITEM	PART NO.	DESCRIPTION
1	HWS00-2500012	SET SCREW
2	1FS02-0000015	RETAINER CAP
3	HWS00-3100004	RETAINER SCREW
4	1FS03-0000009	WING NUT BODY ONLY
5	MSF02-0000001	RED BALL
6	1FZ02-0000002	THREADED INSERT
7	EGS00-0000003	THRUST BEARING
8	1HS00-6200004	PIVOT PIN W/NUT
9	1FS01-0000005	SWING BOLT ONLY
10	1FS03-0000008	WING NUT ASSEMBLY
11	1FS01-0000004	SWING BOLT ASSEMBLY



10 WING NUT ASSEMBLY

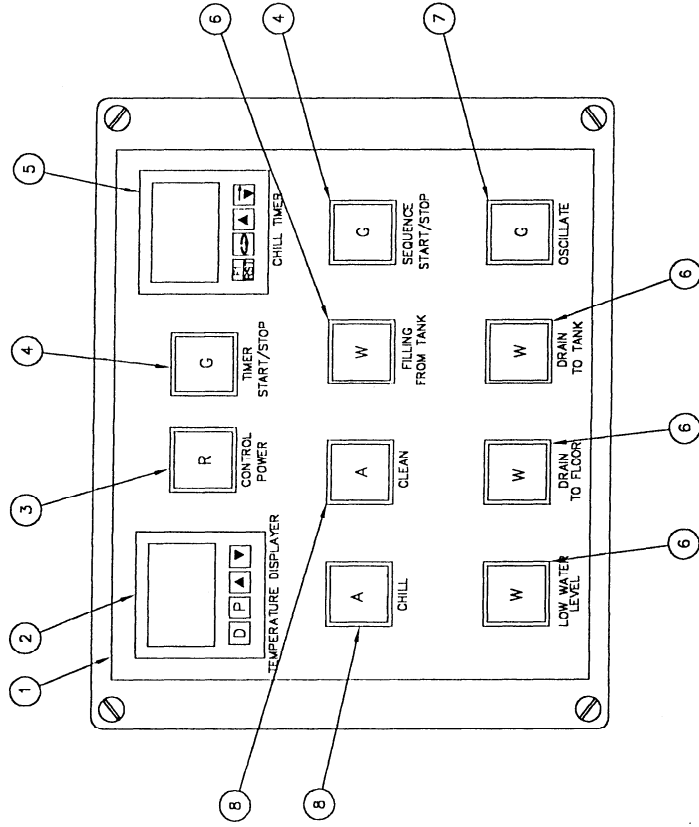


11 SWING BOLT ASSEMBLY

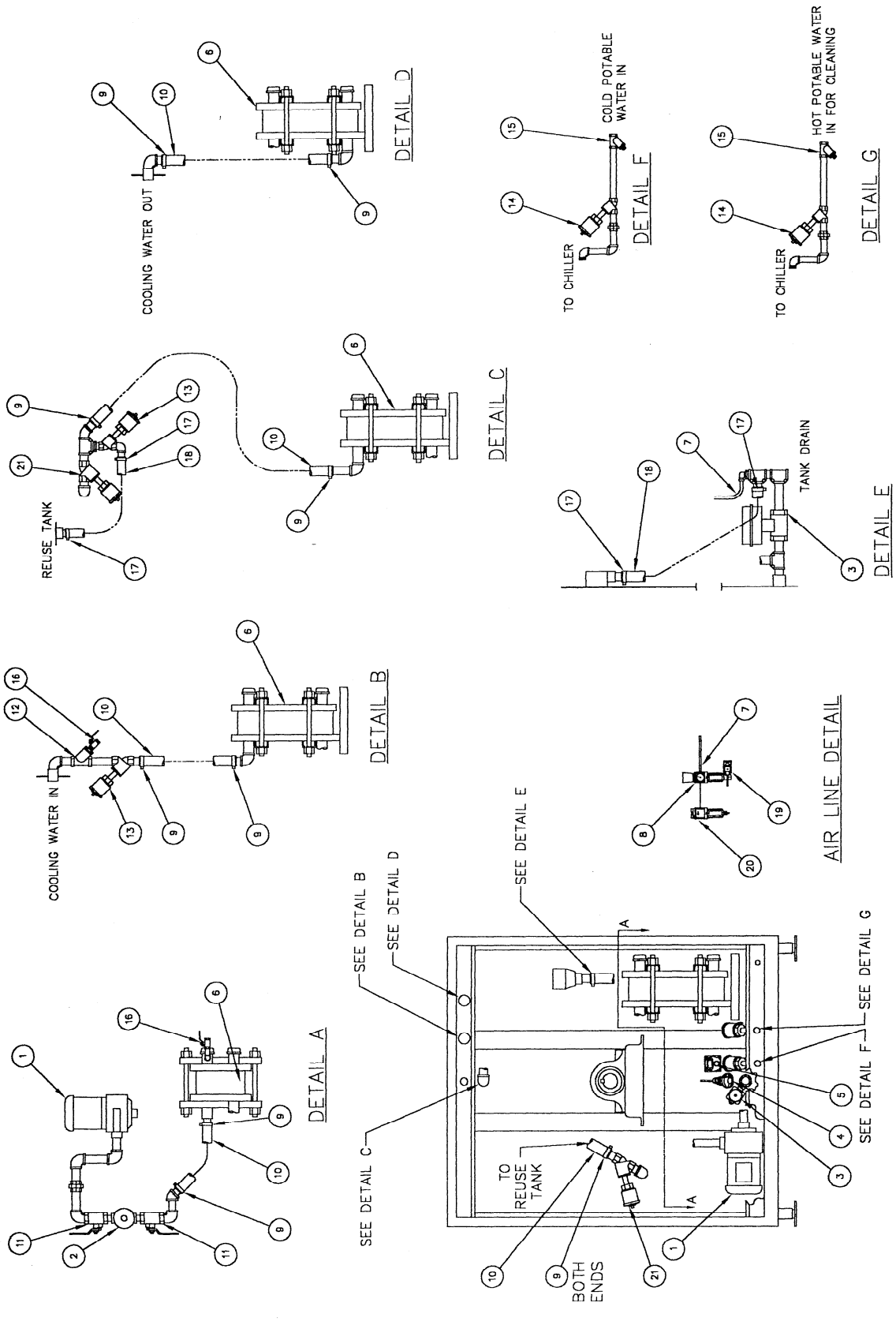
A ITEM #9 WAS 1FS01-0000005 SMT 5/4/00		DRAWN BY: JAY S.		SWING BOLT & WING NUT TC-P-200/300		DRAWING NUMBER: 11362	
REV.	DESCRIPTION	BY	DATE	DATE: 4-6-98	REVISIONS	REV.	SHEET
	REVISIONS			NAME: NONE		A	1 of 1
J.C.PARDO & SONS INC. 1250 REAMERS RD. BALTO MD. 21220 PHONE (410) 391-3800 FAX (410) 391-0042				THE DRAWING OR INFORMATION CONTAINED HEREIN IS THE PROPERTY OF J.C.PARDO & SONS INC. THE DRAWING OR INFORMATION CONTAINED HEREIN IS TO BE USED FOR THE PURPOSES SPECIFIED ONLY AND IS NOT TO BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM.			

REPLACEMENT PARTS

ITEM	PART NO.	DESCRIPTION
1	NPBLUE0000017	FUNCTION TAG
2	ELBC0-0000026	DISPLAYER UNIT
3	2EP00-8800032	RED LIGHTED PUSH BUTTON
4	2EP00-8800033	GREEN LIGHTED PUSH BUTTON
5	ELBC0-0000027	TIMER
6	2EP00-8800034	WHITE LIGHTED PUSH BUTTON
7	2EP00-8800035	GREEN LIGHTED PUSH BUTTON
8	2EP00-8800036	AMBER LIGHTED PUSH BUTTON
-	ELV00-2400003	REPLACEMENT BULB FOR ALL SWITCHES



A ITEM #1 WAS NPBLUE0000017 SHEET 5/4/00		DRAWN BY: TJK		CHECKED BY: JES		TC-P-300/200 CONTROL BOX		DATE: 4/3/98		SIZE: C		DRAWING NUMBER: 11366	
REV.	DESCRIPTION	BY	DATE	APPROVED BY:		REPLACEMENT PARTS		DATE: NONE		REV: A		SHEET: 1 of 1	
J.C. PARDO & SONS INC. 1850 REAMES RD. BALTO MD. 21220 PHONE (410) 381-3800 FAX (410) 381-8042													
REVISIONS This drawing is an information drawing. It is not a contract document. It is not to be used for procurement or for construction. It is not to be used for liability purposes. It is not to be used for any other purpose without the written consent of J.C. Pardo & Sons, Inc.													



REV.	DESCRIPTION	BY	DATE	REVISIONS
J.C. PARDO & SONS INC. 1250 REAMES RD. BALTO MD. 21220 PHONE (410) 981-3800				DRAWN BY: JAY S. DATE: 01/04/01 SCALE: NONE
P-TC-220 WITH REUSE TANK PLUMBING REPLACEMENT PARTS <small>The following information is provided for your information. It is not intended to be a substitute for the manufacturer's instructions. It is the property of J.C. Pardo & Sons, Inc. and is not to be distributed, copied, or used in any way without the written consent of J.C. Pardo & Sons, Inc.</small>				DRAWN NUMBER: C 11579 REV: 1 of 2

REPLACEMENT PARTS LIST	
ITEM	DESCRIPTION
1	ELH01-5000001 CIRCULATING PUMP
-	SP999-9900050 REPAIR KIT FOR ITEM #1
-	SP999-9900051 REPLACEMENT IMPELLER FOR ITEM #1
2	MSB02-0000005 BASKET STRAINER ASSEMBLY
-	SEE DWG# 11629 FOR PARTS BREAK DOWN
3	ARS02-0000001 AIR ACTUATED BALL VALVE
-	ARBVA-0000003 REPLACEMENT ACTUATOR FOR ITEM #3
-	VAS02-0000002 REPLACEMENT BALL VALVE FOR ITEM #3
4	TSENSOR00006 TEMPERATURE SENSOR
5	ELBSW-0000004 WATER LEVEL SWITCH
6	MSC00-000011 HEAT EXCHANGER
7	ARP00-2500003 AIR TUBING
8	AR800-2500010 AIR FILTER REGULATOR
-	AR800-0000002 REPLACEMENT GAUGE FOR ITEM #8
9	HWS02-7500004 HOSE CLAMP
10	PBD02-0000001 FOOD GRADE HOSE
11	MSB02-0000004 MANUAL BALL VALVE
12	MSB01-5000001 STRAINER
-	MSB01-5000003 REPLACEMENT SCREEN FOR ITEM #12
13	ARB01-5000001 AIR SOLENOID
-	SP999-9900046 REPAIR KIT FOR ITEM #13
14	ARB01-0000001 AIR SOLENOID
-	SP999-9900047 REPAIR KIT FOR ITEM #14
15	MSB01-0000001 STRAINER
-	MSB01-0000004 REPLACEMENT SCREEN FOR ITEM #15
16	MSB00-5000004 MANUAL BALL VALVE
17	HWS02-0000005 HOSE CLAMP
18	PBD01-5000001 FOOD GRADE HOSE
19	ELB00-2500009 TIMER & DRAIN SOLENOID COMBO
20	AR800-2500009 COALESCING FILTER
-	AR800-0000001 REPLACEMENT ELEMENT FOR ITEM # 20
21	ARB02-0000001 AIR SOLENOID
-	SP999-9900052 REPAIR KIT FOR ITEM #21

**

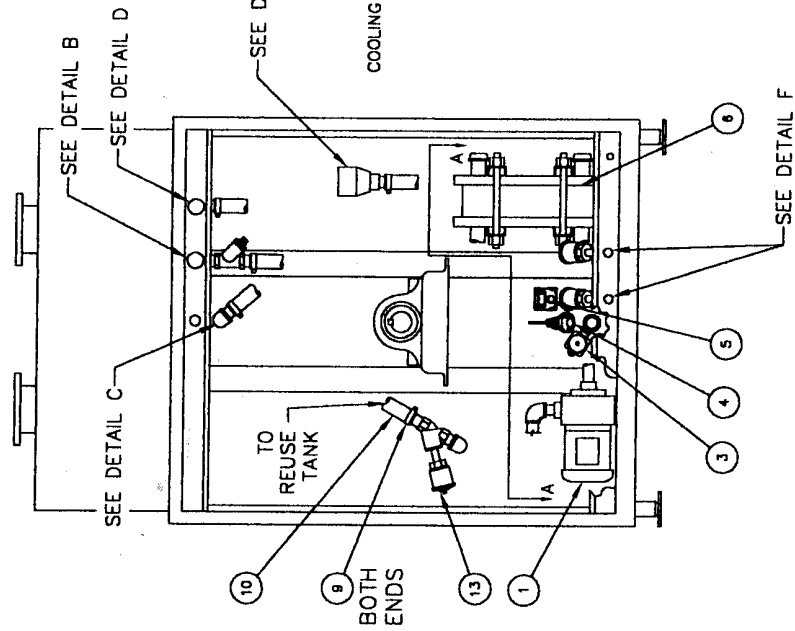
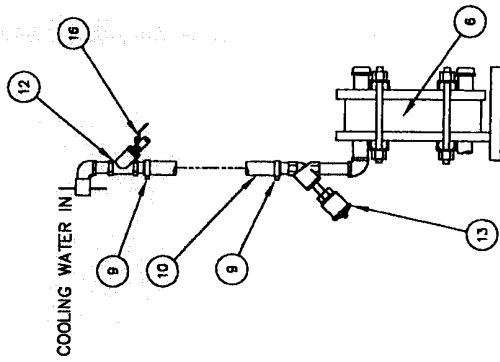
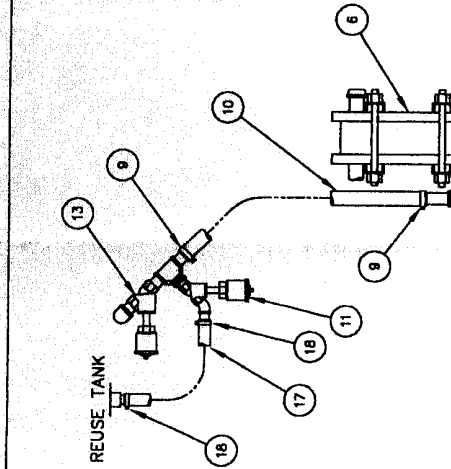
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NOTES:

** CUSTOMER TO SPECIFY LENGTH

REV. A	NEW HOSE CLAMP #S	JES	1/3/02	DATE	1/3/02	DATE	11579	REV. C	2 of 2
DESCRIPTION		BY	DATE		DATE		REV. A		
REVISIONS									
J.C.PARDO & SONS INC. 1260 BEARDS RD. BALTO MD. 21220 PHONE (410) 381-5800 FAX (410) 381-6046				ORDER BY APPROVED BY		DRAWN BY JAY S. DATE 01/04/01 SCALE NONE		P-TC-220 WITH REUSE TANK PLUMBING REPLACEMENT PARTS <small>THE PURCHASER OF THIS INFORMATION AGREES TO HOLD THE PROVIDER HARMLESS FROM AND AGAINST ALL CLAIMS, DAMAGES, LOSSES AND EXPENSES, INCLUDING REASONABLE ATTORNEY'S FEES, THAT MAY BE ASSERTED AGAINST OR INCURRED BY THE PROVIDER IN CONNECTION WITH THE USE OF THIS INFORMATION.</small>	



DETAIL C

DETAIL E

AIR LINE DETAIL

DETAIL D

DETAIL F

REV.	DESCRIPTION	BY	DATE	DESIGNED BY	DATE	APPROVED BY	SCALE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
	REVISIONS						NONE	11571	C	1 of 2
<p>J.C.PARDO & SONS INC. 1250 REAMES RD. BALTO MD. 21220 PHONE (410) 961-9600 FAX (410) 391-9042</p> <p>TC-P-300 W/REUSE TANK PLUMBING REPLACEMENT PARTS</p> <p><small>J.C. Pardo & Sons, Inc. is an Equal Opportunity Employer. The company and its products are not to be used in any way that would discriminate on the basis of race, sex, or ethnicity. In any case, reproduction is prohibited by J.C. Pardo & Sons.</small></p>										

REPLACEMENT PARTS LIST	
ITEM	DESCRIPTION
1	CIRCULATING PUMP
-	REPAIR KIT FOR ITEM #1
-	REPLACEMENT IMPELLER FOR ITEM #1
2	BASKET STRAINER
-	REPLACEMENT SCREEN FOR ITEM #2
3	AIR ACTUATED BALL VALVE
-	REPLACEMENT ACTUATOR FOR ITEM #3
-	REPLACEMENT BALL VALVE FOR ITEM #3
4	TEMPERATURE SENSOR
5	WATER LEVEL SWITCH
6	HEAT EXCHANGER
7	AIR TUBING
8	AIR FILTER REGULATOR
-	REPLACEMENT GAUGE FOR ITEM #8
9	HOSE CLAMP
10	FOOD GRADE HOSE
11	AIR SOLENOID
-	REPAIR KIT FOR ITEM #11
12	STRAINER
-	REPLACEMENT SCREEN FOR ITEM #12
13	AIR SOLENOID
-	REPAIR KIT FOR ITEM #13
14	AIR SOLENOID
-	REPAIR KIT FOR ITEM #14
15	STRAINER
-	REPLACEMENT SCREEN FOR ITEM #15
16	MANUAL BALL VALVE
17	FOOD GRADE HOSE
18	HOSE CLAMP
19	TIMER & DRAIN SOLENOID COMBO
20	COALESCING FILTER
-	REPLACEMENT ELEMENT FOR ITEM# 22
21	MANUAL BALL VALVE

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NOTES:

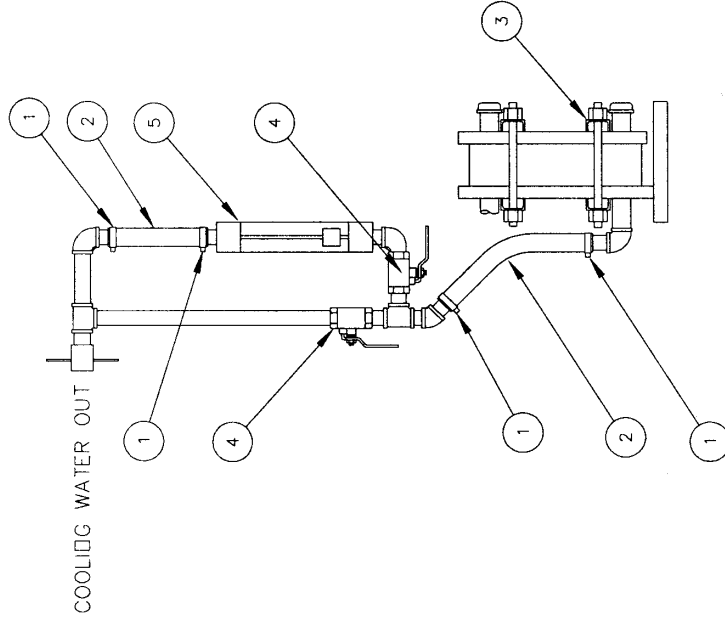
** CUSTOMER TO SPECIFY LENGTH

NEW HOSE CLAMP #S	JES 1/3/02	DATE	REV. A
DESCRIPTION	BY	DATE	REV. A
REVISIONS			
J.C.PARDO & SONS INC. 1250 REAMES RD. BALTO MD. 21220 PHONE (410) 381-9600 FAX (410) 381-9042		ORDER BY DATE: JAY S. DATE: 01/03/01 QUOTE NONE	ORDER NO. C SHEET 11571
TC-P-300 W/REUSE TANK PLUMBING REPLACEMENT PARTS		THIS DRAWING IS THE PROPERTY OF J.C. PARDO & SONS INC. IT IS TO BE USED ONLY FOR THE PROJECT AND NOT TO BE REPRODUCED OR COPIED IN ANY MANNER WITHOUT THE WRITTEN PERMISSION OF J.C. PARDO & SONS INC.	

REPLACEMENT PARTS LIST

ITEM	PART NO.	DESCRIPTION
1	HWS02-7500004	HOSE CLAMP
2	PBD02-0000001	FOOD GRADE HOSE
3	-----	HEAT EXCHANGER OPTIONS
--	MSS00-0000008	STANDARD HEAT EXCHANGER
--	MSC00-0000033	EX-COOLING HEAT EXCHANGER
4	MSB02-0000004	MANUAL BALL VALVE
5	MSB02-0000009	FLOW METER

**



NOTES:
 ** CUSTOMER TO SPECIFY LENGTH

REV.	DESCRIPTION	BY	DATE	REVISIONS
J.C.PARDO & SONS INC. 1250 REAMES RD. BALTO MD. 21220 PHONE (410) 391-3600 FAX (410) 391-9042				CHECKED BY: DATE: 5/31/02 SCALE: NONE
TC-P-200/300 OPTIOAL COOLING WATER OUT FLOW METER				DRAWN NUMBER: 11669 SHEET: 1 of 1

This drawing and all information herein are the property of J.C. Pardo & Sons, Inc. and must not be made public or used in any way detrimental to J.C. Pardo & Sons, Inc.

ITEM	PART NO.	DESCRIPTION
1	ELPSW-0000001	HIGH VOLTAGE DISCONNECT
2	----	FUSES BY SYSTEM VOLTAGE
-	ELV06-0000017	10 AMP FUSE
-	ELV06-0000020	6 AMP FUSE
3	ELV06-0000008	4 AMP FUSE
4	----	TRANSFORMER BY SYSTEM VOLTAGE
-	ELV05-0000003	TRANSFORMER 208V TO 115V
-	ELV05-0000005	TRANSFORMER 230/460V TO 115V
5	ELV00-5000002	TRANSFORMER 115V TO 24V
6	ELPSW-0000002	RELAY
-	ELPSW-0000003	RELAY HOLDER FOR ITEM #6
7	EL8CO-0000017	TIMER
-	ELP00-0000006	TIMER BASE FOR ITEM #7
* 8	ARP00-2500002	BLUE PLASTIC HOSE
9	ELP00-0000016	4 WAY SOLENOID
10	ELP00-0000015	3 WAY AIR SOLENOID
11	EL8CO-0000019	CONTROLLER
12	ELV02-5000001	5 AMP FUSE
13	ELPSW-0000004	MOTOR CONTACTOR ROTATE MOTOR
14	ELPSW-0000009	MOTOR CONTACTOR PUMP MOTOR
15	----	PUMP MOTOR STARTER BY VOLTAGE
-	ELPSW-0000019	PUMP MOTOR STARTER 208/230V
-	ELPSW-0000032	PUMP MOTOR STARTER 460V

200-TC REPLACEMENT PARTS		
ITEM	PART NO.	DESCRIPTION
16	----	FUSES BY SYSTEM VOLTAGE
-	ELV06-0000007	20 AMP FUSE (208/230V SYSTEM)
-	ELV06-0000010	10 AMP FUSE (460V SYSTEM)

300-TC REPLACEMENT PARTS		
ITEM	PART NO.	DESCRIPTION
16	----	FUSES BY SYSTEM VOLTAGE
-	ELV06-0000018	30 AMP FUSE (208/230V SYSTEM)
-	ELV06-0000004	15 AMP FUSE (460V SYSTEM)

STEAM & CHART RECORDER OPTION		
ITEM	PART NO.	DESCRIPTION
17	ELV02-5000023	1/2 AMP FUSE
18	ELP00-0000013	SIGNAL CONDITIONER
19	EL8CO-0000017	TIMER
-	ELP00-0000006	TIMER BASE FOR ITEM #19

* SOLD IN FOOT INCREMENTS ONLY

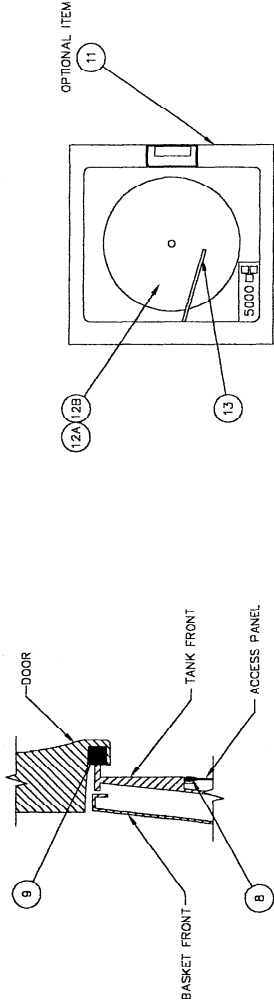
REV.	DESCRIPTION	BY	DATE	REVISIONS
J.C.PARDO & SONS INC. 1250 REAMES RD. BALTO MD. 21220 PHONE (410) 381-9800 FAX (410) 381-9843				ORDER BY APPROVED BY
DATE 4/17/01 REASON NONE				P-TC-200/300 UPPER JUNCTION BOX INTERNAL REPLACEMENT PARTS 208/230/460V C
<small>The quantity of all information contained herein is the property of J.C.Pardo & Sons, Inc. and is to be used only for the purpose of the contract. It is to be returned to J.C.Pardo & Sons, Inc. if not used.</small>				DRAWING NUMBER 11616 SHEET 2 of 2

REPLACEMENT PARTS LIST

ITEM	PART NO.	DESCRIPTION
1	MMOTORS00015	CHLORINATOR PUMP
2	ELV01-5000039	FLASHING WARNING LIGHT, AMBER
3	SEF00-5000001	TANK GASKET
4	BGZ00-7500003	BUSHING, DOOR HINGE
5	ARS00-0000001	PNEUMATIC SAFETY CYLINDER
6	MSP02-0000001	RED BALL
7	MSP00-2500001	CHLORINE SUCTION TUBE
8	SENGASKT00011	PANEL GASKET
9	SED01-0000001	DOOR GASKET
10	HWLOCKS-00001	LOCK AND KEY SET (OPTIONAL)
11	ELR60-0000062	PARTLOW 5000 (OPTIONAL)
12	EL977-7700023	CHART MOTOR FOR ITEM #11
12A	MSJ00-0000001	CHART PAPER F (OPTIONAL)
12B	MSJ00-0000002	CHART PAPER C (OPTIONAL)
13	MSP00-0000002	RED REPLACEMENT PEN (OPTIONAL)

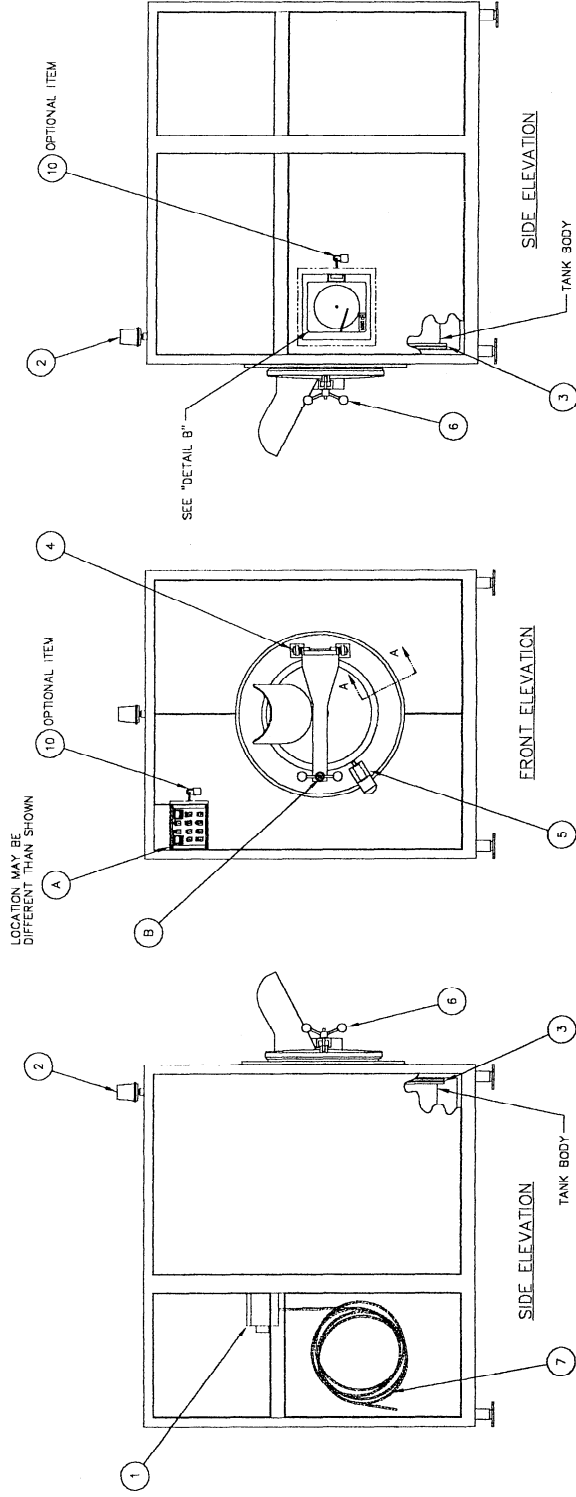
DRAWINGS FOR REPLACEMENT PARTS

ITEM	DRAWING NO.	DESCRIPTION
A	C-11.366	CONTROL PANEL FACE PARTS
B	C-11.362	WING NUT & SWING BOLT

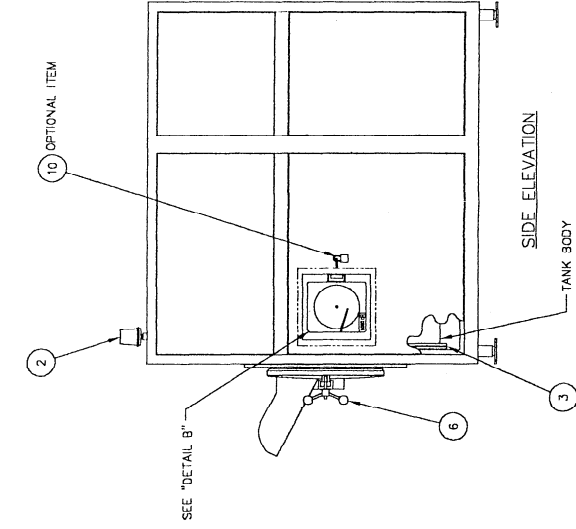


SECTION A-A

DETAIL B
OPTIONAL ITEM



FRONT ELEVATION



SIDE ELEVATION

LOCATION MAY BE DIFFERENT THAN SHOWN

REV.	#4 WAS	8GZ00-0000003	JES 1-3-02	REVISIONS
A	ADDED	PARTLOW OPTION	JES 8-1-01	
		DESCRIPTION	BY	DATE

J.C. PARDO & SONS INC.
 BALTO. MD. 21220
 1250 REAMES RD.
 PHONE (410) 381-3800
 FAX (410) 381-9042

DESIGNED BY: JES
 DATE: 5/15/01
 APPROVED BY: [Signature]
 SCALE: NONE

TC-P-200 EXTERNAL
 REPLACEMENT PARTS

DRWG. NUMBER: C 11621
 SHEET: 1 of 1

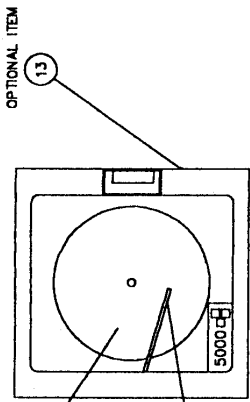
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REPLACEMENT PARTS LIST

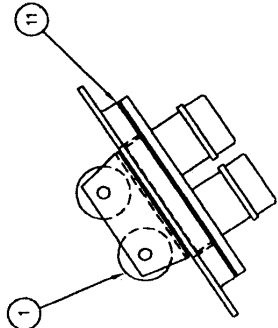
ITEM	PART NO.	DESCRIPTION
1	HWF00-000004	TANK SUPPORT WHEEL
2	MOMOTORS00015	CHLORINATOR PUMP
3	ELV01-1500015	FLASHING WARNING LIGHT
4	ELV00-0000020	REPLACEMENT LIGHT BULB FOR ITEM #3
5	SEF00-5000001	TANK GASKET
6	BGZ01-0000003	BUSHING, DOOR HINGE
7	ARS00-0000001	PNEUMATIC SAFETY CYLINDER
8	MSP02-0000001	RED BALL
9	MSP02-0000001	CHLORINE SUCTION TUBE
10	SENGASKT00011	PANEL GASKET
11	SENGASKT00014	DOOR GASKET
12	HWLOCKS-00001	SUPPORT WHEEL GASKET
13	ELBCO-0000062	LOCK AND KEY SET (OPTIONAL)
14	ELB77-7700023	PARTLOW 5000 (OPTIONAL)
15	EL977-7700024	CHART MOTOR FOR ITEM #13
16	ELP00-0000046	PEN MOTOR FOR ITEM #13
17	MSJ00-0000001	DOOR FOR ITEM #13
18	MSJ00-0000002	CHART PAPER 'C' (OPTIONAL)
19	MSP00-0000002	RED REPLACEMENT PEN (OPTIONAL)

DRAWINGS FOR REPLACEMENT PARTS

ITEM	DRAWING NO.	DESCRIPTION
A	C-11366	CONTROL PANEL FACE PARTS
B	C-11362	WING NUT & SWING BOLT

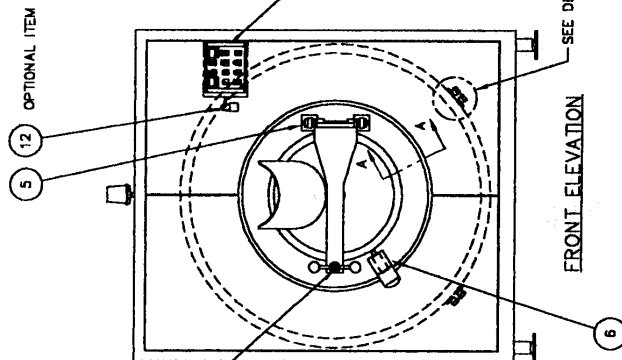


DETAIL B
OPTIONAL ITEM

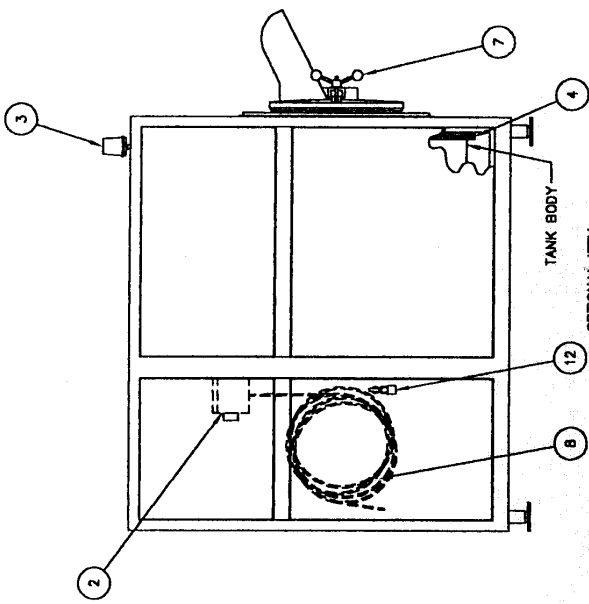


SECTION A-A
TANK FRONT
FRONT PANEL
DOOR
BASKET FRONT

DETAIL B



FRONT ELEVATION



SIDE ELEVATION

J.C. PARDO & SONS INC. 1250 REAMES RD. BALTO MD. 21220 PHONE (410) 381-5800 FAX (410) 381-9048		DRAWN BY JAY S. DATE 01/03/01 CHECKED BY APPROVED BY SOLD NONE	ORDER NUMBER C 11573 SHEET B 1 of 1
TC-P-300 EXTERNAL REPLACEMENT PARTS		THIS DRAWING IS THE PROPERTY OF J.C. PARDO & SONS INC. IT IS TO BE USED FOR THE MANUFACTURE OF THE PRODUCT SPECIFIED HEREIN ONLY. IT IS NOT TO BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM, WITHOUT THE WRITTEN PERMISSION OF J.C. PARDO & SONS.	

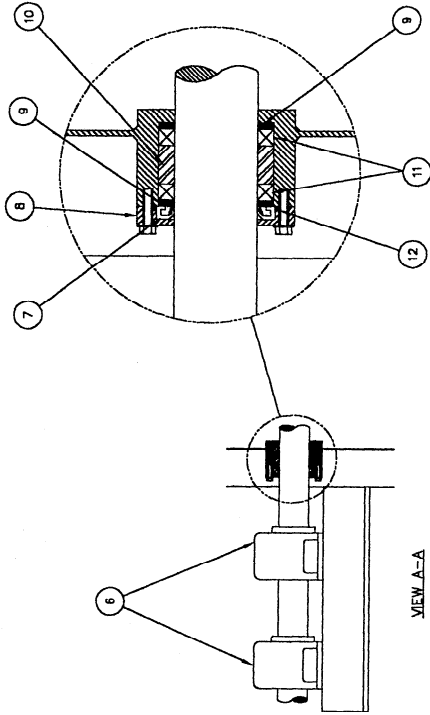
REV.	DESCRIPTION	DATE	BY
B	ADDED PARTLOW OPTION #5	3/26/02	JES
A	WAS B6200-0000003	1-2-02	JES

REVISIONS

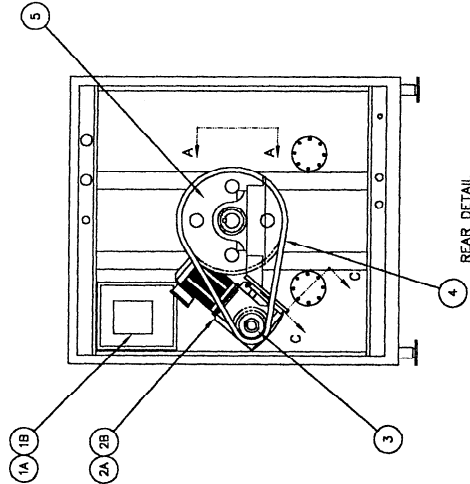
REPLACEMENT PARTS LIST

ITEM	PART NO.	DESCRIPTION
1A	ELH02-000008	2 HP INVERTER 208/230V
1B	ELH02-000008	2 HP INVERTER 460V
2A	DLH02-000004	2 HP DRIVE UNIT 208V
2B	DLH02-000017	REPLACEMENT GEARBOX FOR ITEM #2A
3	DLH02-000017	2 HP DRIVE UNIT 460V
3B	DLH02-000017	REPLACEMENT GEARBOX FOR ITEM #2B
4	MS00-000004	MOTOR SPROCKET
5	MS00-000008	DRIVE CHAIN
6	MS00-000008	REPLACEMENT MASTER LINK FOR ITEM #4
7	MS00-000007	TANK ROTATE SPROCKET
8	MS00-000008	REPLACEMENT HUB FOR ITEM #5
9	MS00-000008	PILLOW BLOCK
10	SEAL-15	OIL SEAL
11	1750-500001	COVER PLATE
12	1750-400001	SEAL RETAINING RING
13	SEAL-500002	SEALING MATERIAL -SEE NOTE 1-
14	SEALING000028	BRAIDED PACKING
15	SEALING000028	O-RING
16	WFOG-000001	WHEEL, BASKET SUPPORT
17	SENGASK000013	GASKET, ACCESS DOOR

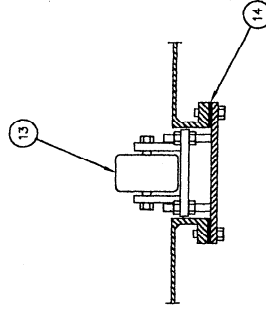
VIEW A-A



NOTE 1:
 HAND PUMP REQUIRED TO REFILL/ADD SEALING MATERIAL IN PACKING GLAND WILL BE LOANED OUT WHEN SEALING MATERIAL IS PURCHASED.
 THE HAND PUMP MUST BE RETURNED IN WORKING CONDITION IMMEDIATELY AFTER APPLICATION IS COMPLETED OR THE FULL PRICE OF THE PUMP WILL BE CHARGED TO THE CUSTOMER.



SECTION C-C



J.C.PARDO & SONS INC.
 1250 REAMES RD. BALTO, MD. 21220
 PHONE (410) 381-8600 FAX (410) 381-8048

TC-P-200 MECHANICAL
 REPLACEMENT PARTS 208/230/460V

REV. DESCRIPTION BY DATE
 REVISIONS

DESIGNED BY: JAY S.
 DATE: 5/15/01
 DRAWN BY: NONE

DATE: 5/15/01
 DRAWING NUMBER: 11622
 SHEET: 1 of 1

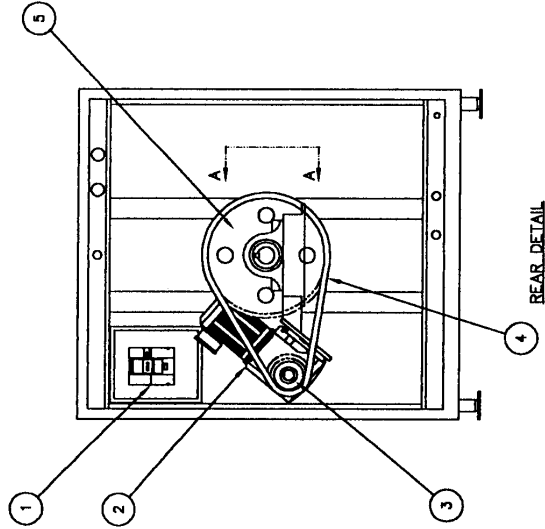
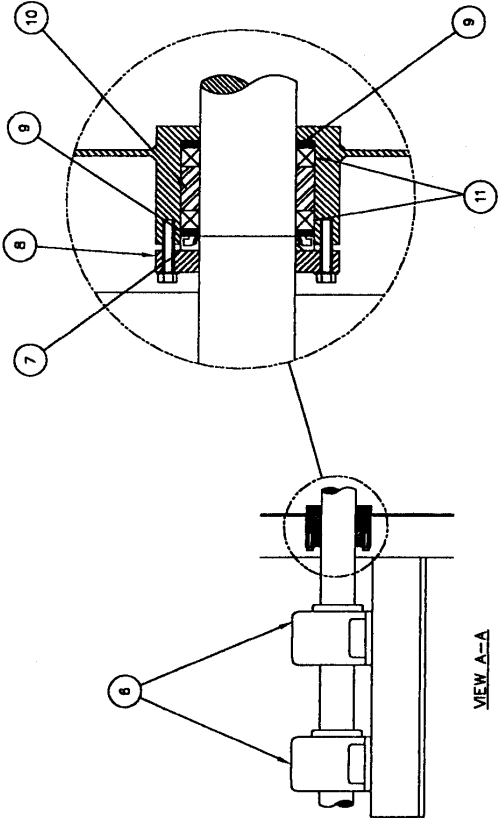
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REPLACEMENT PARTS LIST

ITEM	PART NO.	DESCRIPTION
1A	ELH05-0000009	5 HP INVERTER 208/230V
1B	ELH05-0000014	5 HP INVERTER 460V
2A	DUH05-0000013	5 HP DRIVE UNIT, 208V
-	DU902-3800008	REPLACEMENT GEARBOX FOR ITEM #2A
-	DU905-0000005	REPLACEMENT 5 HP MOTOR FOR ITEM #2A
2B	DUH05-0000017	5 HP DRIVE UNIT, 230/460V
-	DU902-3800008	REPLACEMENT GEARBOX FOR ITEM #2B
-	DU905-0000003	REPLACEMENT 5 HP MOTOR FOR ITEM #2B
3	MSC00-0000010	MOTOR SPROCKET
-	MSC00-0000011	REPLACEMENT INSERT FOR ITEM #3
4	MSC00-0000012	DRIVE CHAIN, DUAL WIDTH
-	MSC00-0000013	REPLACEMENT MASTER LINK FOR ITEM #4
5	MSC00-0000014	TANK ROTATE SPROCKET
-	MSC00-0000015	REPLACEMENT HUB FOR ITEM #5
6	BGG03-0000002	PILLOW BLOCK BEARING
7	SEDS00-0000001	OIL SEAL
8	TFW05-0000002	COVER PLATE
9	TFW05-0000001	SEAL RETAINING RING
10	MSFLUIDS00002	SEALING MATERIAL - SEE NOTE 1-
11	SEF00-5000001	BRAIDED PACKING

NOTE 1:

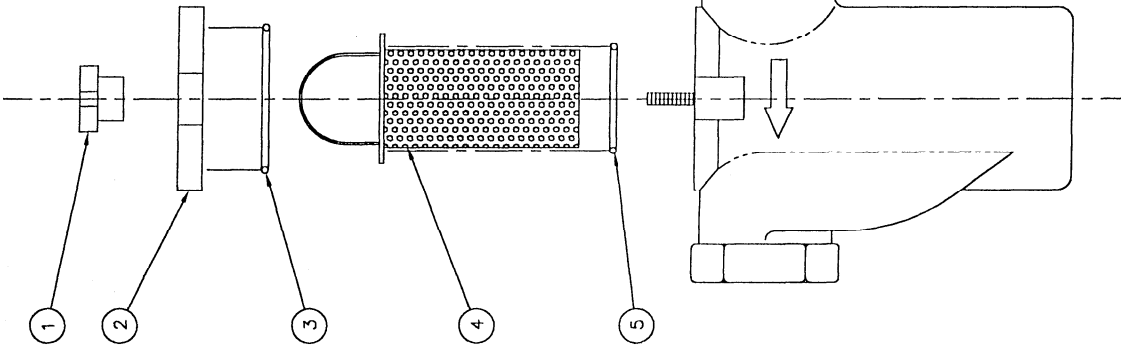
HAND PUMP REQUIRED TO REFILL/ADD SEALING MATERIAL IN PACKING GLAND WILL BE LOANED OUT WHEN SEALING MATERIAL IS PURCHASED.
 THE HAND PUMP MUST BE RETURNED IN WORKING CONDITION IMMEDIATELY AFTER APPLICATION IS COMPLETED OR THE FULL PRICE OF THE PUMP WILL BE CHARGED TO THE CUSTOMER.



REV.	DESCRIPTION	BY	DATE	REV.	QUANTITY
B	#6 WAS BGG04-0000001	JES	4/01	C	11572
A	ADDED 208/230V INFO	JES	4/01	B	1 of 1
REVISIONS					
J.C.PARDO & SONS INC. 1250 REAMES RD. BALTO MD. 21220 PHONE (410) 381-3600 FAX (410) 381-9042				TC-P-300 MECHANICAL REPLACEMENT PARTS 208/230/460V	
ORDER BY: JAY S. DATE: 11-11-98 QUANTITY: NONE				THIS DRAWING IS THE PROPERTY OF J.C.PARDO & SONS INC. IT IS TO BE USED ONLY FOR THE PROJECT SPECIFIED. IT IS NOT TO BE REPRODUCED OR USED IN ANY MANNER WITHOUT THE WRITTEN PERMISSION OF J.C.PARDO & SONS.	

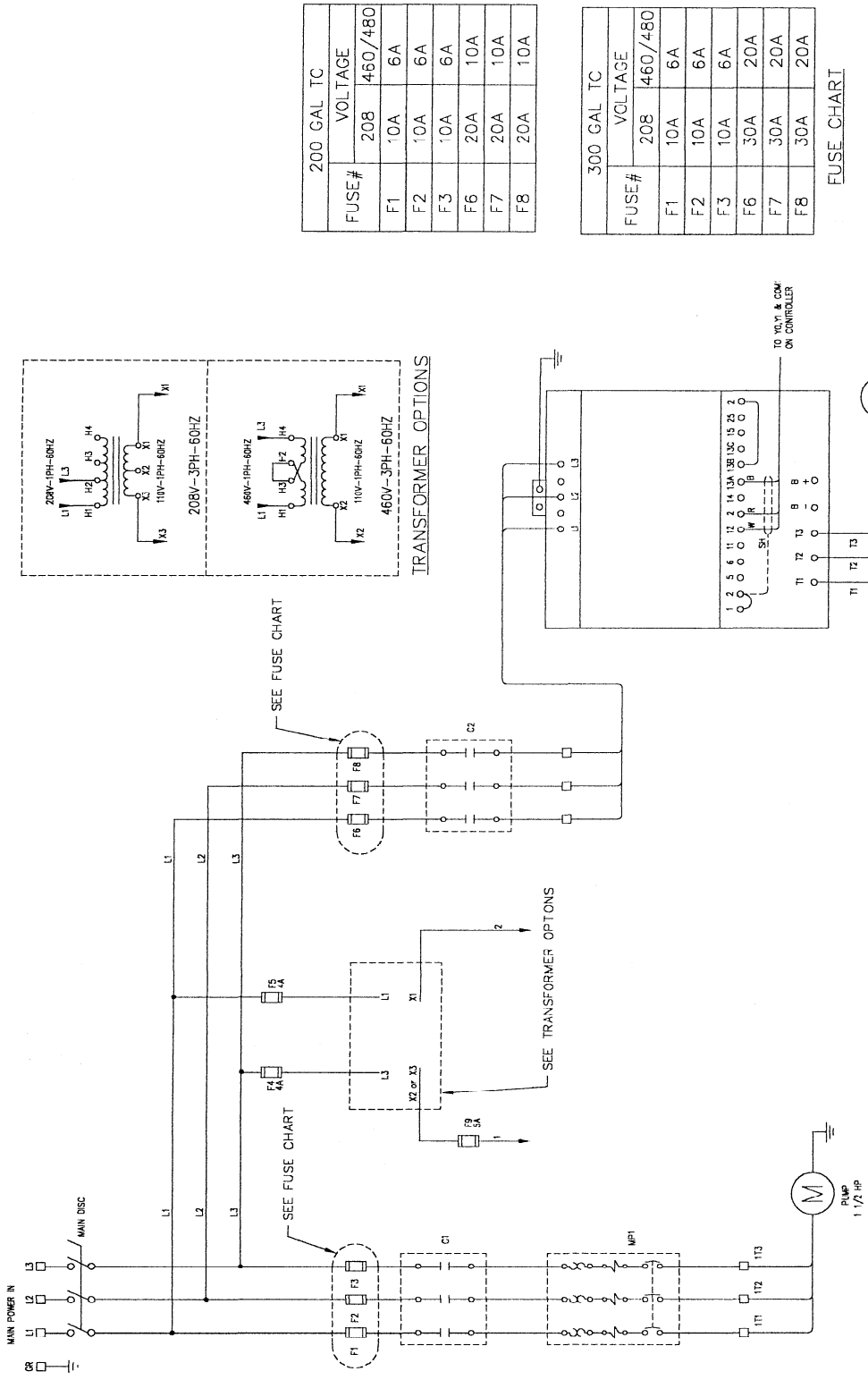
REPLACEMENT PARTS LIST

ITEM	PART NO.	DESCRIPTION
1	HWC00-5000001	KNOB
2	MSB02-0000008	COVER
3	SE3ORING00041	LID O-RING
4	MSB02-0000006	BASKET
5	SE3ORING00011	BASKET O-RING
6	MSB02-0000005	COMPLETE BASKET ASSEMBLY



⑥ COMPLETE ASSEMBLY

REV.	DESCRIPTION	BY	DATE
	REVISIONS		
J.C. PARDO & SONS INC. BALTO MD. 21220 1250 REAMES RD. PHONE (410) 381-3600 FAX (410) 381-8042			
DESIGNED BY	DATE	FR. JES	DATE
APPROVED BY	10-4-01		
	REASON	NONE	
2" INLINE STRAINER REPLACEMENT PARTS			SIZE C
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			SHEET 1 of 1



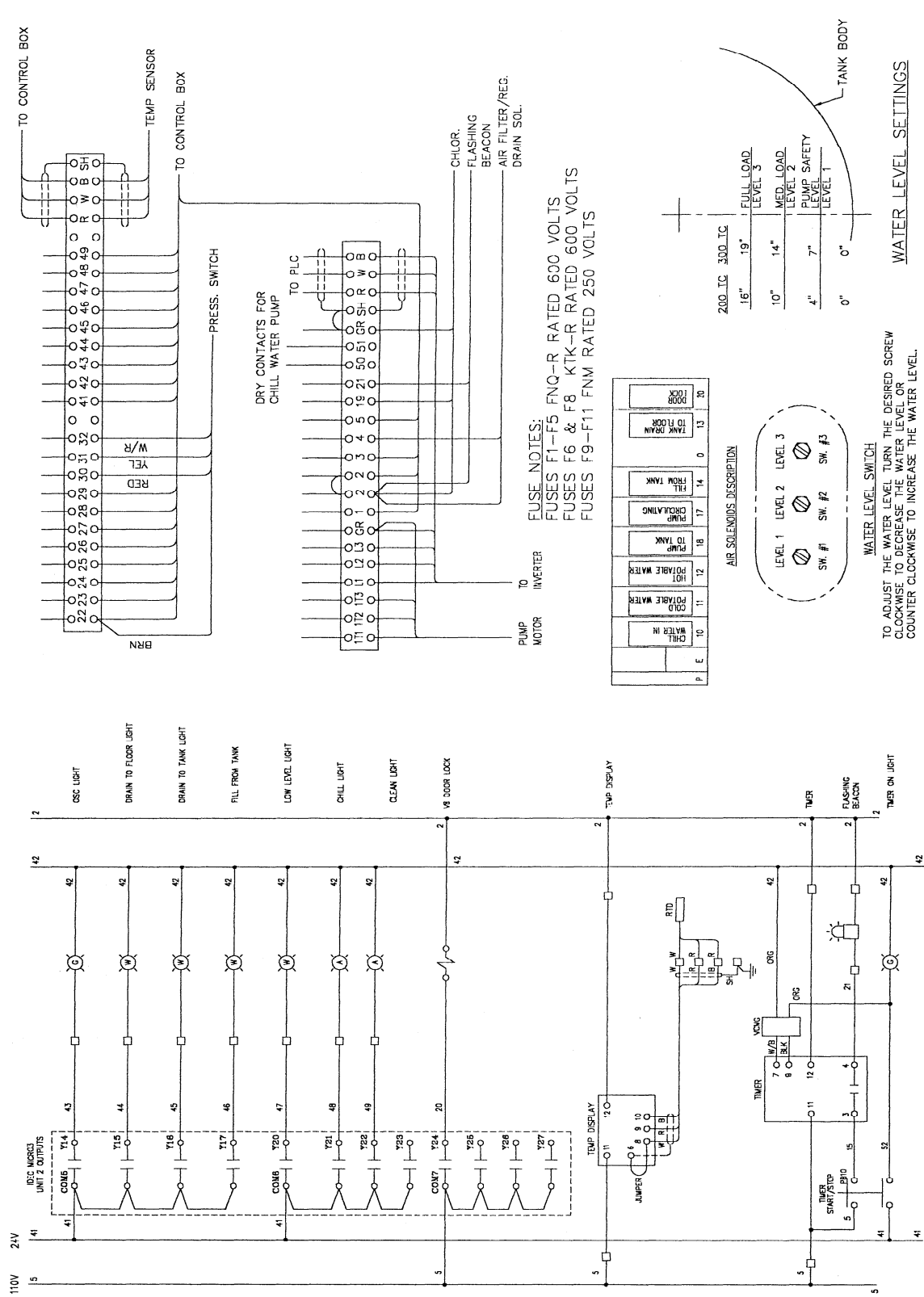
FUSE NOTES:
 FUSES F1-F5 FNQ-R RATED 600 VOLTS
 FUSES F6-F8 KTK-R RATED 600 VOLTS
 FUSES F9-F11 FNM RATED 250 VOLTS

200 GAL TC	
FUSE#	VOLTAGE
F1	208 460/480
F2	10A 6A
F3	10A 6A
F6	20A 10A
F7	20A 10A
F8	20A 10A

300 GAL TC	
FUSE#	VOLTAGE
F1	208 460/480
F2	10A 6A
F3	10A 6A
F6	30A 20A
F7	30A 20A
F8	30A 20A

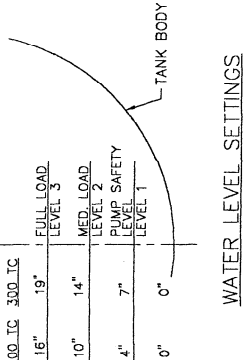
FUSE CHART

J.C. PARDO & SONS INC. 1250 REAMES RD. BALTO MD. 21220 PHONE (410) 391-8800 FAX (410) 391-9042		DRAWN BY: JAY S. DATE: 3/2/01 SCALE: NONE	ELECTRICAL SCHEMATIC, 208/4600V 200-300 CHILL TANK WITH REUSE TANK	DRAWING NUMBER ES-0220
A REV. 1 DESCRIPTION REVISIONS	JES BY DATE	6/01 DATE	SIZE C	SHEET 1 of 3



FUSE NOTES:
 FUSES F1-F5 FNO-R RATED 600 VOLTS
 FUSES F6 & F8 KTK-R RATED 600 VOLTS
 FUSES F9-F11 FNM RATED 250 VOLTS

AIR SOLENOIDS DESCRIPTION	
10	CHILL WATER IN
11	CHILL WATER
12	POTABLE WATER
13	POTABLE WATER
14	PUMP TO TANK
15	TANK DRAIN
16	TO FLOOR
17	TO FLOOR
18	TO FLOOR
19	TO FLOOR
20	TO FLOOR



WATER LEVEL SETTINGS
 TO ADJUST THE WATER LEVEL TURN THE DESIRED SCREW
 CLOCKWISE TO DECREASE THE WATER LEVEL OR
 COUNTER CLOCKWISE TO INCREASE THE WATER LEVEL.

REV	DESCRIPTION	DATE	BY
A	ADDED JUMPER T.DISP	12/10	JES

REV	DATE	BY
A	3/2/01	JES

REV	DATE	BY
A	3 of 3	JES

REV	DATE	BY
A	3 of 3	JES

REV	DATE	BY
A	3 of 3	JES

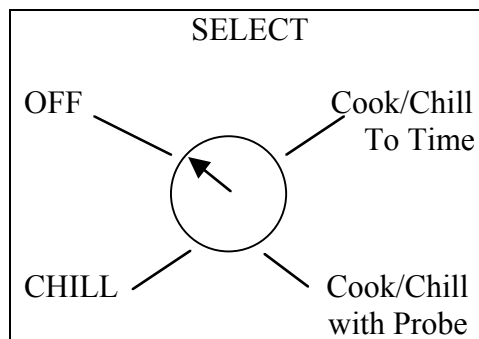
J.C.PARDO & SONS INC.
 1250 REAMES RD.
 BALTO MD. 21220
 PHONE (410) 581-3600
 FAX (410) 381-9042

**ELECTRICAL SCHEMATICS, 208/460V
 200-300 CHILL TANK WITH REUSE TANK**

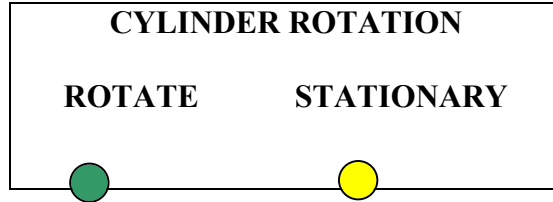
**OPERATION INSTRUCTIONS FOR A
TUMBLE CHILLER/COOK TANK**

A. CHILLER FOR KETTLE COOKED FOODS:

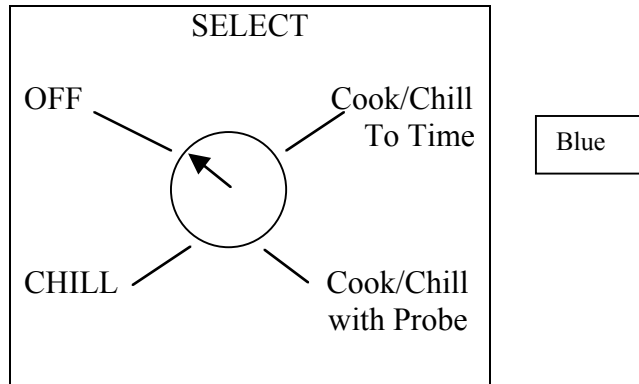
- Step 1 Open outer cover with Tumble Chiller/Cook Tank-120 – lift right hand cover first
- Step 2 Loosen large clamps at front of inner rotating drum and raise door of drum to the open position
- Step 3 Start each operation with a Power “**OFF**”



- Step 4 To Start: Turn Power Switch “**ON**” or pull out Red Emergency Stop Button
- Step 5 Begin chilling cycle by
- A. Set Select switch to chill
 - B. Push green button marked Tank Run:
This begins the filling of the Cook/Chill Tank with water up to chill water low level probe.
 - C. After tap water rises past the lower water level probe the water pumps come on – circulating pump moves the water from the chill tank through the heat exchanger while the chilled water pump moves water from the ice builder to the shell side of the heat exchanger.
- Step 6 Load in up to 60 gallons for TCCT-60, or 120 gallons for TCCT-120 of hot pumped kettle cooked product in casings. Close the inner perforated drum cover by releasing the latch located on the right hand side of the cover. Secure all large clamps at front edge of the inner rotating drum.
- Step 7 Close outer tank cover beginning with the left hand cover (TCCT-120).
- Step 8 To start rotation of inner drum push green cylinder rotation button to ROTATE. Green light will turn on.

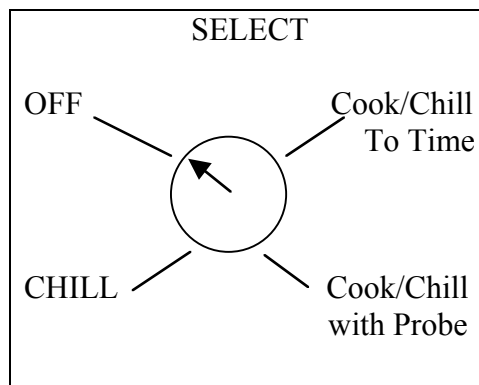


- Step 9
- A. Observe actual tank water temperature by digital readout located lower right hand on the Chart Recorder.
NOTE: Water temperature set control is by passed.
 - B. The water in tank is constantly recorded by the green pen in the Temperature Recorder.
 - C. Depending on product viscosity, it will take from 30-75 minutes to cool down the product from 165° to 40°F once the drum has started rotating. The red light will come on to show the tank cooling water is at 40°F. This usually means the product is 2-3° higher in temperature, but it is best to check several casings in each batch to establish a base line for this type of temperature correlation.
 - D. The chill cycle will continue until it is turned off.
IMPORTANT: A safety interlock is built into the system. Opening the cover will stop functions at once. Close the cover and rotation resumes. No other functions are effected by this safety interlock.
- Step 10 To stop the chill cycle and remove chilled casings to refrigerate storage:
- A. Stop drum rotation – Push Yellow STATIONARY Button. The drum will continue to the proper horizontal open point. Yellow STATIONARY Light goes on when the drum is in the proper position to open.
 - B. Terminate chill cycle (pumps stop) by one of two methods:
 - 1. If more food is going to be chilled – stop pumps by pushing in the Tumble Chiller Emergency Stop button. This will save chilled water for the next batch.
 - 2. To empty water from the tank, if there is no more food to chill, turn select switch to OFF.



B. COOK TANK FOR OVERNIGHT COOKING USING MEAT PROBE.

- Step 1 Open outer cover beginning with right hand cover first (Tumble Chiller/Cook Tank-120)
- Step 2 Loosen large clamps at front of inner rotating drum and raise door of drum to the open position, will lock into place with a right hand catch.
- Step 3 Start each operation with Power **OFF**



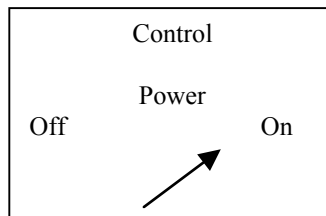
- Step 4 To load cook tank:
- A. Place single narrow rack in center of drum bottom – the prongs will fit into the drum holes.
Place 1-2 rows of vacuum bagged product along each side of the divider.
 - B. Place larger rack with risers (risers facing upward) as the next row and load product on rack.
- NOTE:** Do not overlap the product. It should be a *single* layer.
- C. Place the next rack and load product.

- D. Place hold -down rack slightly above the last load of product. Hold -down rack has locking pins. Push pin through drum perforations to secure in place.

Step 5 To put meat probe in product:

- A. Wash probe with alcohol swab.
B. Insert meat probe through large hole in cook tank and through hole in drum.
C. Before putting last rack in place, put a second bag around the largest roast.
D. Puncture the vacuumed bag of the largest roast with the probe. The tip of the probe must be in the center of the muscle.
NOTE: Avoid getting the probe near a bone or fat clod.
E. Gather the second bag around the meat probe wire. Secure tightly with a wire tie or string. Place the bag through the opening of the two grids so the opening of the bag extends above the water line. This prevents meat juices from getting into the water bath.

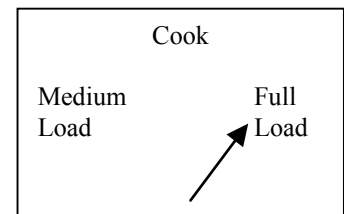
Step 6 Check the Main Control Power is “ON”.



WARNING: Be sure the yellow STATIONARY light is on. ***DO NOT*** push **ROTATE**.

Step 7 Set water level switch to MEDIUM or FULL LOAD.

IMPORTANT: The water level must completely cover the cook-in-casing products or incomplete cooking will occur.



Step 8 Check to be sure the red emergency stop button is pulled out on the control panel.


Step 9 To set cooking cycle: Set select switch to **COOK/CHILL WITH PROBE**.

Step 10 Set required process time

NOTE: Maximum timer setting is **99** hours **59** minutes.

- A. Press P1 to bring up 0000 on display.
B. Press button under each 0 to display a number for that digit.
C. Press (E) for Enter.
D. Press (R) for Recall to display set time. Timer will clock down to 0000.
- Step 11 Set probe temperature set point. Push ↑ or ↓ buttons to change temperature setting.
- Step 12 Set cook tank water temperature: Push ↑ or ↓ buttons to change/set temperature setting approximately 5-7°F higher than probe temperature set point.
- Step 13 Start cooking cycle by pressing green button marked **RUN**. After cook cycle is finished, the chill cycle starts. The hot water is dumped for 5 minutes, cold tap water refills to high water level, and cooling cycle begins and runs until operator shuts down system.
- Step 14 To drain tank, turn Select switch to off.



C. AS COOK TANK FOR OVERNIGHT COOKING TO TIME AND TEMPERATURE WITHOUT MEAT PROBE:

- Step 1 Follow instructions for Step B
- Step 2 Set cook tank water temperature set point: Push ↑ or ↓ buttons to set temperature approximately 5-7°F higher than the required product temperature. Push until  display Control, Push ↓ to lock temperature in place.
- Step 3 Start cooking cycle by pressing green button marked “**RUN**”.
- Step 4 Observe green pen for water temperature in tank. When water temperature is reached, timer will clock down to “0”; the unit will automatically go into the chill cycle and continue until the unit is turned off the unload.

NOTE: Put finished product into food bank as soon as possible after unloading.

D. COOK TANK FOR RETHERMALIZING OR COOKING –IN-CASING SUCH AS EGGS AND FLAKED POTATOES:

- Step 1 Determine if drum shall rotate or stay stationary and press green or yellow push button.

CYLINDER ROTATION	
ROTATE 	STATIONARY 

IMPORTANT – If in “**ROTATE**” remove all hold down grids before loading. Disregard Step 4, Section C.

Step 2 Set controls as listed in steps 1-12, Section B

E. USE SOAK CYCLE WITH COOK TANK OVERNIGHT COOKING:

1. This function is provided when partially frozen meat or poultry products are to be cooked overnight. A soak or thaw period is provided by circulating tap water for a fixed time period before the cook cycle begins.
2. Set up the tank and controls by following:

SECTION C: Cook tank for overnight cooking to time and water bath temperature without meat probe.

Step 1 Start soak cycle with yellow push button marked:

V. SOAK TIMER

REMEMBER: Time does not begin until water level reaches set point.

Step 2 Set soak time by putting in time (hours and minutes) at timer marked:

W. SOAK TIMER

- A. Press P1 to bring up 0000 on display.
- B. Press button under each 0 to display a number for that digit.
- C. Press (E) for Enter.
- D. Press (R) for Recall to display set time. Timer will clock down to 0000.

When the soak cycle times out the cook cycle will begin.

Soak Timer Settings:

Small (up to 2” thick) – 1 hour soak.

—

Medium (2” to 5” maximum thickness) – 2 hours soak.
Large Roasts (5” to 9” thick) – 3 hours soak.

Step 3 See steps 9-14

F. CLEANING INSTRUCTIONS FOR TUMBLE CHILLER:
--

1. On the inside of the cook tank, there is an intake strainer for the circulating water pump. This should be checked daily to make sure it is clean. Power wash if there is a grease build-up. If the unit cannot be power washed (not available), it may be necessary to pull the drum out.
2. Keep probes clean – water temperature probe and water level indicators (white discs).
3. For removal of inner drum on tumble chiller make sure it is the “UP” position. Remove the two (two) bolts on the right-hand side, push center knob of the pin, remove pin, and carefully lift the basket out of the tank.

When reinstalling basket, line up holes on the basket shaft and the stub shaft. Push center knob of pin and insert pin into holes.

NOTE: If the pin does not go in easily, the holes are not properly aligned.

DO NOT FORCE.

Install the bolts and make sure they are tight.

PREVENTIVE MAINTENANCE

TUMBLE CHILLER

A. MAIN CONTROL PANEL

Weekly

- Check complete operation
- Should never spray with water.

B. DRIVE COMPONENTS

Weekly

- Check for loose hardware.
- Inspect motor mounting bolts.

C. DOOR

Weekly

- Check for proper operation of safety latch.
- Check for gasket wear and proper care

D. MOTORS

Monthly

- Check motors for dirt and grease.
- Check mounting bolts.
- Lubricate per manufacturer's instructions.

E. WATER TEMPERATURE

Weekly

- Check water temperature.
- Must reach 34 degrees.
- Compare actual temp to read outs

F. CHLORINE DISPENSER

Weekly

- Check supply tubing for signs of leakage.
- Check if chlorine container is full.

TUMBLE CHILLERS

P-TC-220CC & 320CC

- Check chiller for proper cleaning practices
- Check inside control panel for moisture and signs of corrosion
- Check for any loose wiring
- Check all switches and lamps
- Check for signs of wear or abuse
- Check the door hinges, gasket, door latch, and safety lock
- Check all drive components for loose hardware
- Spin drum checking for any play or drag.
- Check drive chain for signs of wear and lubricate
- Check the operation of water circulation pump
- Clean & lubricate pump motor, check for loose mounting bolts
- Check air supply (90psi clean dry air)
- Check air regulator and blow off, listen for and address any leaks
- Check chill water inlet and returns lines for leaks
- Check chill water return basket strainer (#1 reason for slow chill times)
- Check hot and cold potable water inlets, clean strainers if needed
- Check complete operation, (chilling-cleaning- chlorine pump- reuse tank, drain)
- Chilling temperature 34°F (most products 40 to 60 min.)
- Check the operation of Ice Water Control Panel in conjunction with chiller
- Check ice water supply (Ice builder & pump package or Glycol system)
- Flush heat exchanger if needed
- Check operation of chart recorder & temperature read out
- Check the drum support wheels for wear.

PTC120-CC

- Make sure tank is being cleaned properly
- Check control functions, switches, lamps, read outs, chart recorders
- Check inside control panel for signs of water damage and corrosion
- Check meat probe cable for signs of wear
- Check lids springs, basket latches (Adjust if needed)
- Check all motor mounting bolts
- Lubricate motor per factory specs.
- Check all Hot and cold water connection for leaks
- Check all in line strainers for debris
- Run operational test
- Check water fill system
- Compare actual temps with read out temps.
- Check meat probe operation
- Check safety valve operation
- Check drain operation