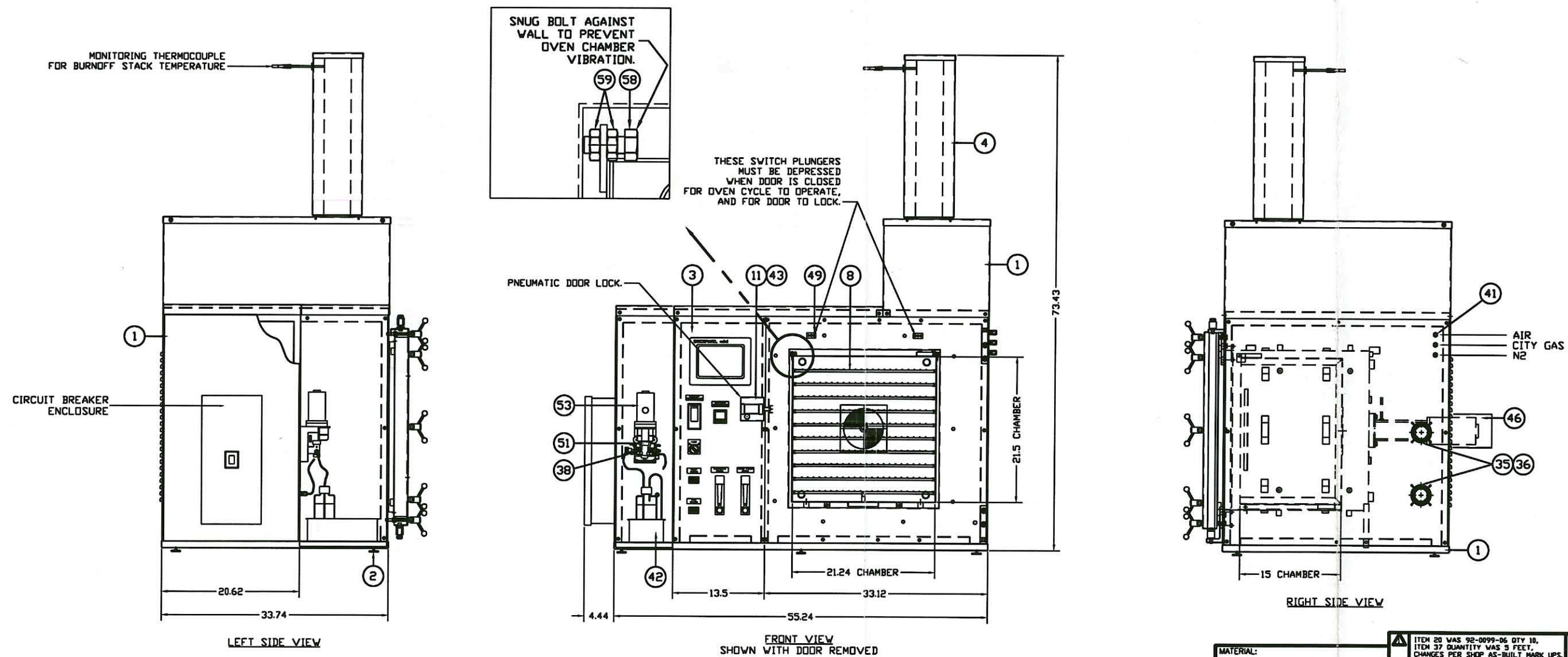


ITEM	PART NUMBER	DESCRIPTION	QTY	ITEM	PART NUMBER	DESCRIPTION	QTY	ITEM	PART NUMBER	DESCRIPTION	QTY	ITEM	PART NUMBER	DESCRIPTION	QTY
1	14-0111-01D	SHEET METAL ASSEMBLY	1	21	92-0005-29	JAM NUT, STAINLESS STEEL, 3/8-16	20	41	59-0010-16	BULKHEAD UNION, 3/8" TUBE, S.S.	3	61	59-0044-30	MALE CONNECTOR, 1/4" T - 3/4" P, S.S.	1
2	19-0025-13	ADJUSTABLE GLIDE	6	22	44-0005-03A	FIREROD CARTRIDGE HEATER	1	42	99-0020-02	STAINLESS STEEL PAN	1	62	59-0002-41	MALE ELBOW, 3/8" T - 3/4" P, S.S.	1
3	20-0106-15B	POWER SUPPLY/ELECTRICAL SCHEMATIC	1	23	64-0020-14	CERAMIC TRAY	1	43	77-0002-66	AIR CYLINDER, 1" STROKE	1	63	29-0009-41	CONDUIT, FLEXIBLE, 1/4" ID, 304 S.S.	1.5ft
4	50-0020-29D	BURNOFF STACK ASSEMBLY	1	24	23-0002-10	T/C TYPE "T"	1	44	93-0008-77A	DOOR SEAL, VITON	1				
5	50-0023-08C	ATMOSPHERE FLOW SCHEMATIC	1	25	20-0212-02	T/C TYPE "J", 8" LONG	2	45	14-0095-258	DOOR SEAL SUPPORT	4				
6	70-0025-02D	MOTOR & BLOWER WHEEL ASSEMBLY, 3450 RPM	1	26	59-0038-02	MALE CONNECTOR, 1/8" T-1/4" P, S.S., BORED THRU	3	46	14-0088-31C	MOTOR COVER	1				
7	44-0005-04B	WATROD HEATING ELEMENT	12	27	59-0043-12	PIPE PLUG, 1/4" NPT, S.S.	1	47	14-0095-19B	MICROSWITCH STRIKE	2				
8	99-0020-05A	WIRE RACK	8	28	59-0043-15	PIPE PLUG, 3/4" NPT, S.S.	3	48	99-0003-01	CM LOGO PLATE	1				
9	14-0095-13A	DOOR HINGE ADAPTOR	2	29	59-0024-66	PIPE NIPPLE, 3/4" NPT x 2" LONG, S.S.	4	49	22-0006-01	MICROSWITCH	2				
10	14-0095-15A	HINGE SUPPORT	2	30	59-0014-22	HEX REDUCING BUSHING, 3/4-3/8" NPT, S.S.	1	50	31-0180-01	INSULATING BLANKET	0.2				
11	14-0095-26B	CYLINDER ENCLOSURE	1	31	59-0131-12	TEE, 3/4" NPT, S.S.	3	51	52-0012-09	PUMP HEAD MODULE	1				
12	14-0111-11C	DOOR SHELL	1	32	59-0044-31	MALE CONNECTOR, 3/8" T-3/4" P, S.S.	1	52	52-0012-06	PUMP PEDESTAL	1				
13	14-0111-12C	DOOR HINGE	1	33	59-0140-19	REDUCING COUPLING, 3/4-1/4" NPT, S.S.	1	53	71-0001-46	MOTOR, 90 VDC, 1/30HP, 32 RPM	1				
14	14-0111-10D	DOOR SEAL MOUNTING PLATE	1	34	59-0038-05	MALE CONNECTOR, 1/4" T-1/4" P, S.S., BORED THRU	1	54	14-0095-27B	CYLINDER STRIKE	1				
15	19-0099-54B	MACHINED DOOR KNOB	10	35	26-0005-02	COOLING FAN	2	55	58-0006-06B	INLET CONE	1				
16	19-0088-29	COMPRESSION SPRING, 1/2" OD	1	36	26-0005-03	FAN FINGER GUARD	2	56	COMM	FLAT WASHER, 3/8", S.S.	10				
17	92-0003-52B	SHOULDER SCREW, 1/2" DIA x 2" LONG	2	37	54-0007-03	PTFE TEFLON TUBING, 1/8" OD	6ft	57	14-0095-28B	INSULATION SUPPORT	8				
18	92-0003-59B	SHOULDER SCREW, 1/2" DIA x 1 1/4" LONG	2	38	59-0008-56	REDUCER, 1/8" T-1/4" T, S.S.	3	58	92-0105-05	HEX HEAD CAP SCREW, S.S., 5/16-18 x 1" LG	2				
19	79-0046-72	BRONZE BEARING, 1/2" ID	4	39	19-0034-05	S.S. TUBE, 1/4" OD	48in	59	92-0005-28	JAM NUT, S.S., 5/16-18	4				
20				40	59-0010-15	BULKHEAD UNION, 1/4" TUBE, S.S.	1	60	14-0095-29A	DOOR STOP	1				



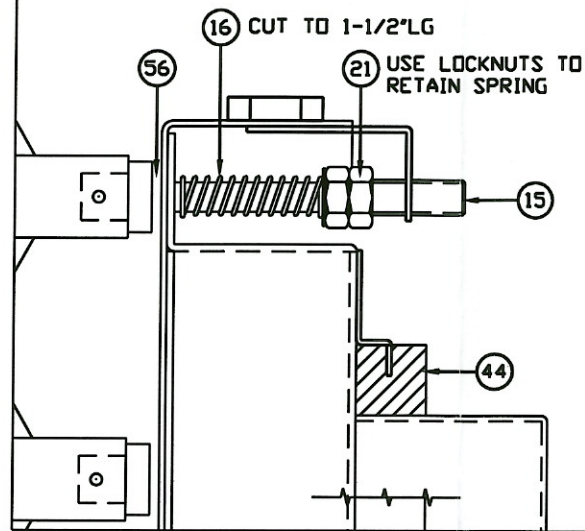
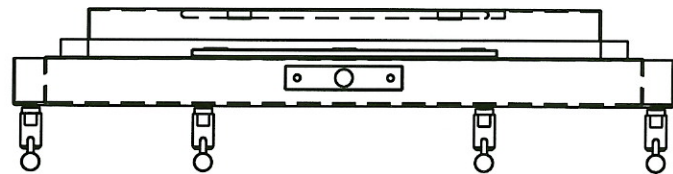
GENERAL NOTES:

- 100 SERIES MODEL 125 CATALYTIC DEBINDING OVEN.
- N2 ATMOSPHERE.
- NITRIC/OXALIC ACID PUMP WITH CONTROLLER.
- OPERATING TEMPERATURE (MAX °F): 350
- ZONES: 1

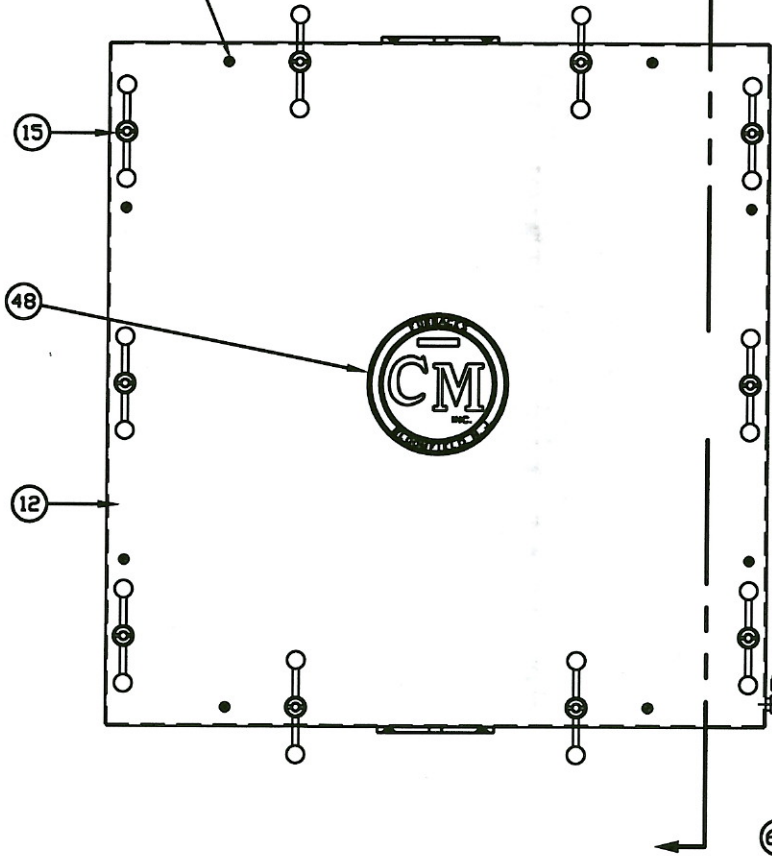
OPTIONS:

- CUSTOM CHAMBER SIZE; 21.25" WIDE x 21.5" HIGH x 15" DEEP.
- OVEN IS SUPPLIED WITH TWO ADDITIONAL RACKS FOR A TOTAL OF TEN.
- THERMOCOUPLE INSTALLED IN THE BURNOFF STACK, FOR MONITORING PURPOSES ONLY.

MATERIAL:		DO NOT SCALE DRAWING		ITEM 20 WAS 92-0099-06 QTY 10, ITEM 37 QUANTITY WAS 3 FEET, CHANGES PER SHOP AS-BUILT MARK UPS.		REV		DESCRIPTION OF CHANGE		BY		DATE		30	
FINISH:		REFERENCE DRAWINGS		DEBINDING OVEN 125-C		CUSTOM CHAMBER SIZE		CM FURNACES		103 DEWEY ST., BLOOMFIELD, N.J. 07003		DATE		SCALE	
NOTES: ALL PARTS TO BE IDENTIFIED WITH CM DRAWING NO.		FIRST USED		0300951		THIS DRAWING MUST NOT BE USED, DISCLOSED OR REPRODUCED WITHOUT PRIOR WRITTEN AUTHORITY FROM CM FURNACES		10-0205-21D		1		1		1	

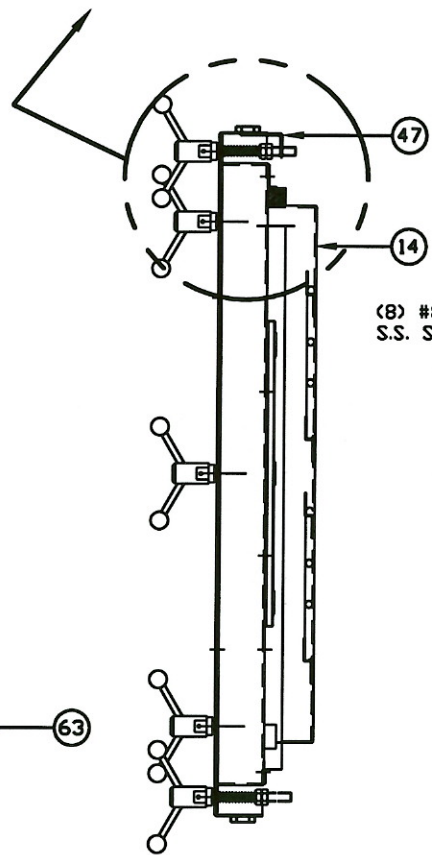


(8) #10-32 x 1/2" LG S.S. SCREWS



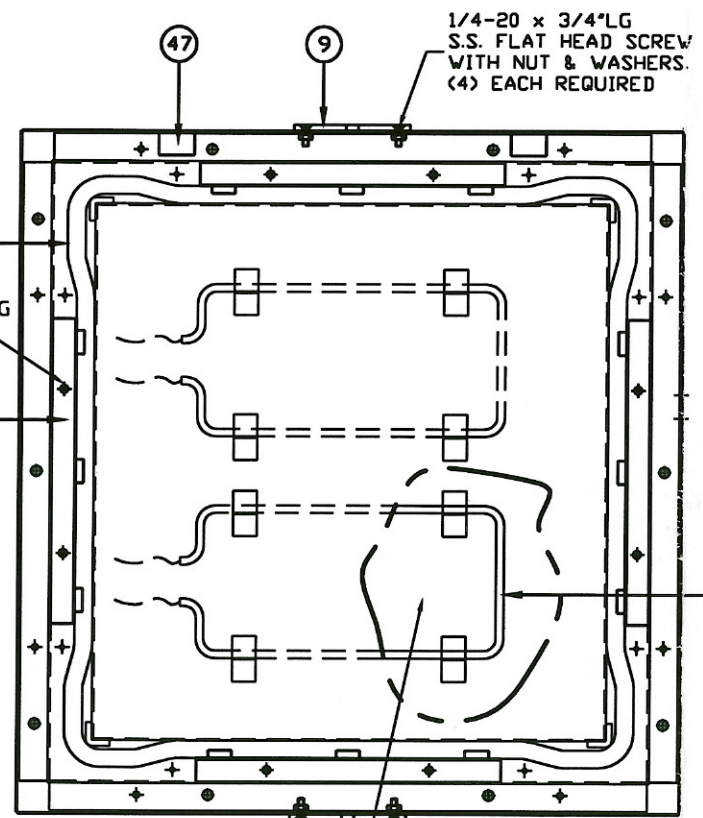
FRONT VIEW

DOOR ASSEMBLY



SIDE SECTION

(8) #8-32 x 1/2" LG S.S. SCREW.



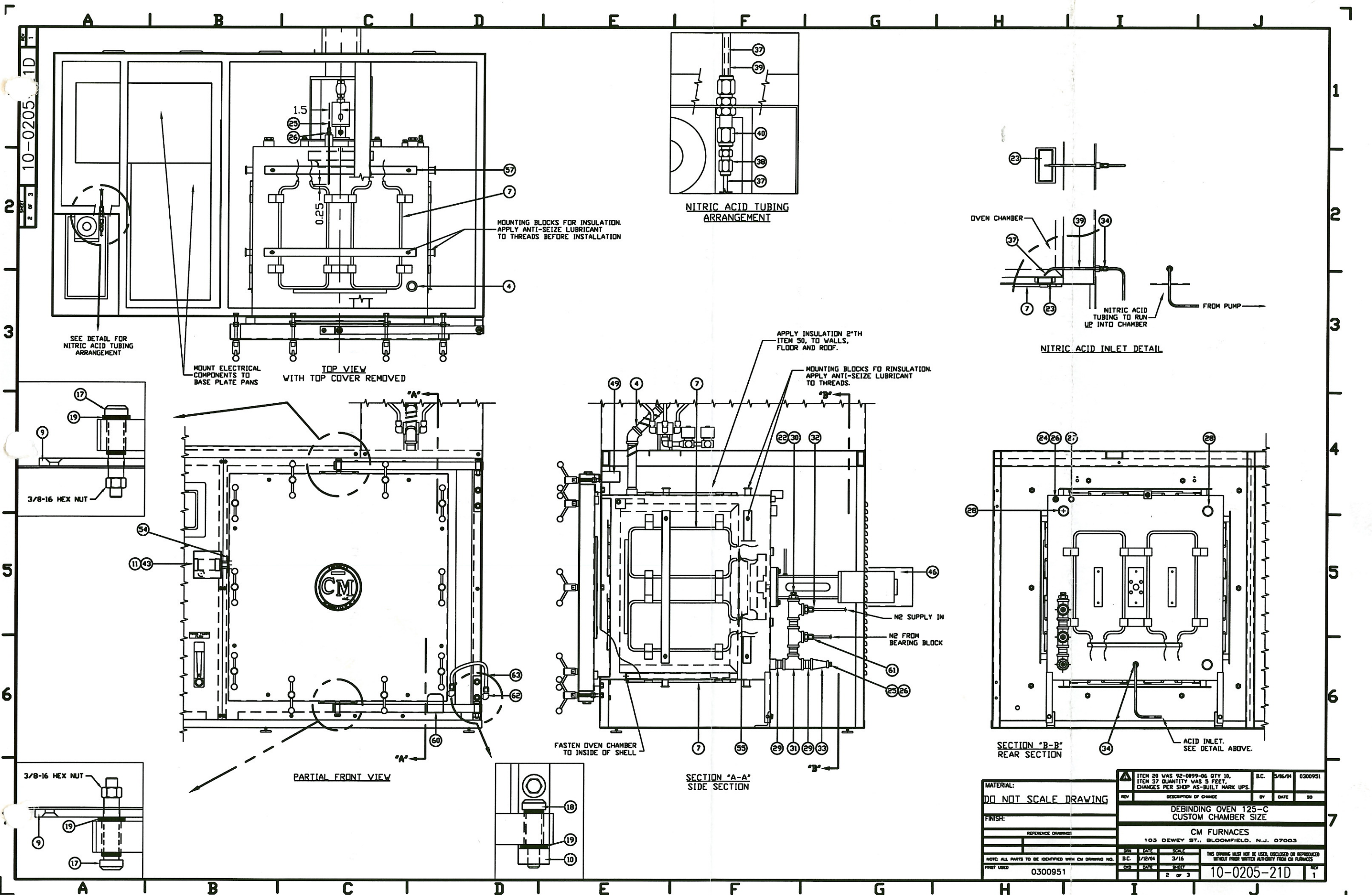
FILL AREA WITH INSULATION ITEM 50, AFTER INSTALLING HEATING ELEMENTS

HOT FACE VIEW OF DOOR

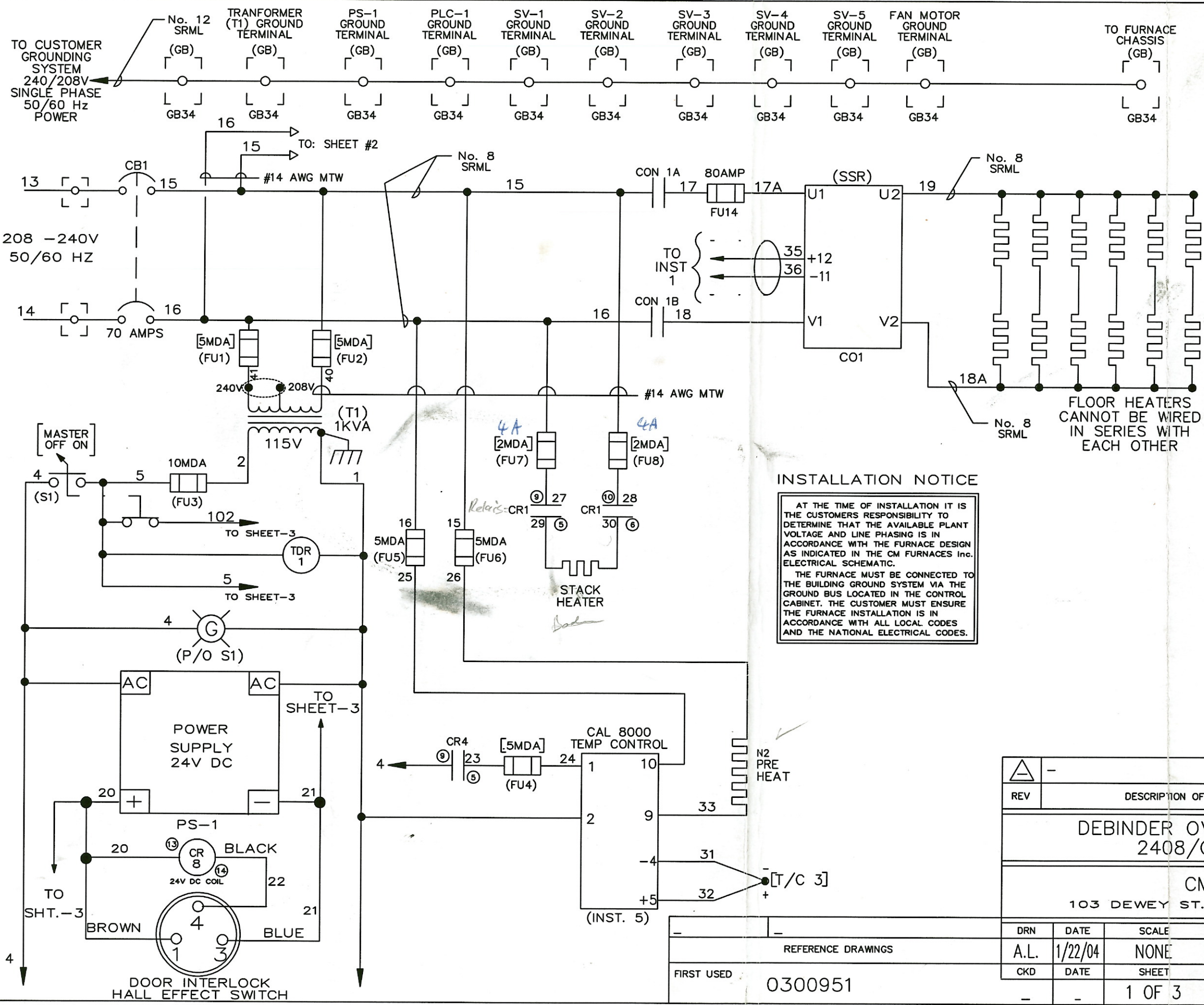
1/4-20 x 3/4" LG S.S. FLAT HEAD SCREW WITH NUT & WASHERS. (4) EACH REQUIRED

DO NOT SCALE DRAWING

MATERIAL:	ITEM 20 WAS 92-0099-06 QTY 10, B.C. 5/16/04 0300951
FINISH:	ITEM 37 QUANTITY WAS 5 FEET, CHANGES PER SHOP AS-BUILT MARK UPS.
REFERENCE DRAWING:	DESCRIPTION OF CHANGE BY DATE 50
	DEBINDING OVEN 125-C CUSTOM CHAMBER SIZE
	CM FURNACES
	103 DEWEY ST., BLOOMFIELD, N.J. 07003
NOTE: ALL PARTS TO BE IDENTIFIED WITH CM DRAWING NO.	DATE SCALE
FIRST USED 0300951	B.C. 1/12/04 1/4
	DATE SCALE
	3 OF 3 10-0205-21D 1



MATERIAL:		ITEM 20 WAS 92-0099-06 QTY 10, B.C. 5/16/74 0300951	
DO NOT SCALE DRAWING		ITEM 37 QUANTITY WAS 5 FEET, CHANGES PER SHOP AS-BUILT MARK UPS.	
REV	DESCRIPTION OF CHANGE	BY	DATE
DEBINDING OVEN 125-C CUSTOM CHAMBER SIZE			
CM FURNACES			
103 DEWEY ST., BLOOMFIELD, N.J. 07003			
DATE	SCALE	THIS DRAWING MUST NOT BE USED, DISCLOSED OR REPRODUCED WITHOUT PRIOR WRITTEN AUTHORITY FROM CM FURNACES	
B.C. 7/12/74	3/16		
REV	DATE	BY	DATE
0300951			
PRINT USED		10-0205-21D	
		REV 1	



NOTES

1. CUSTOMER MUST INSURE FURNACE IS PROPERLY GROUNDED TO THE BUILDING GROUNDING SYSTEM.
2. ALL WIRING MUST COMPLY WITH THE LATEST REVISION OF THE NATIONAL ELECTRIC CODE.

LEGEND

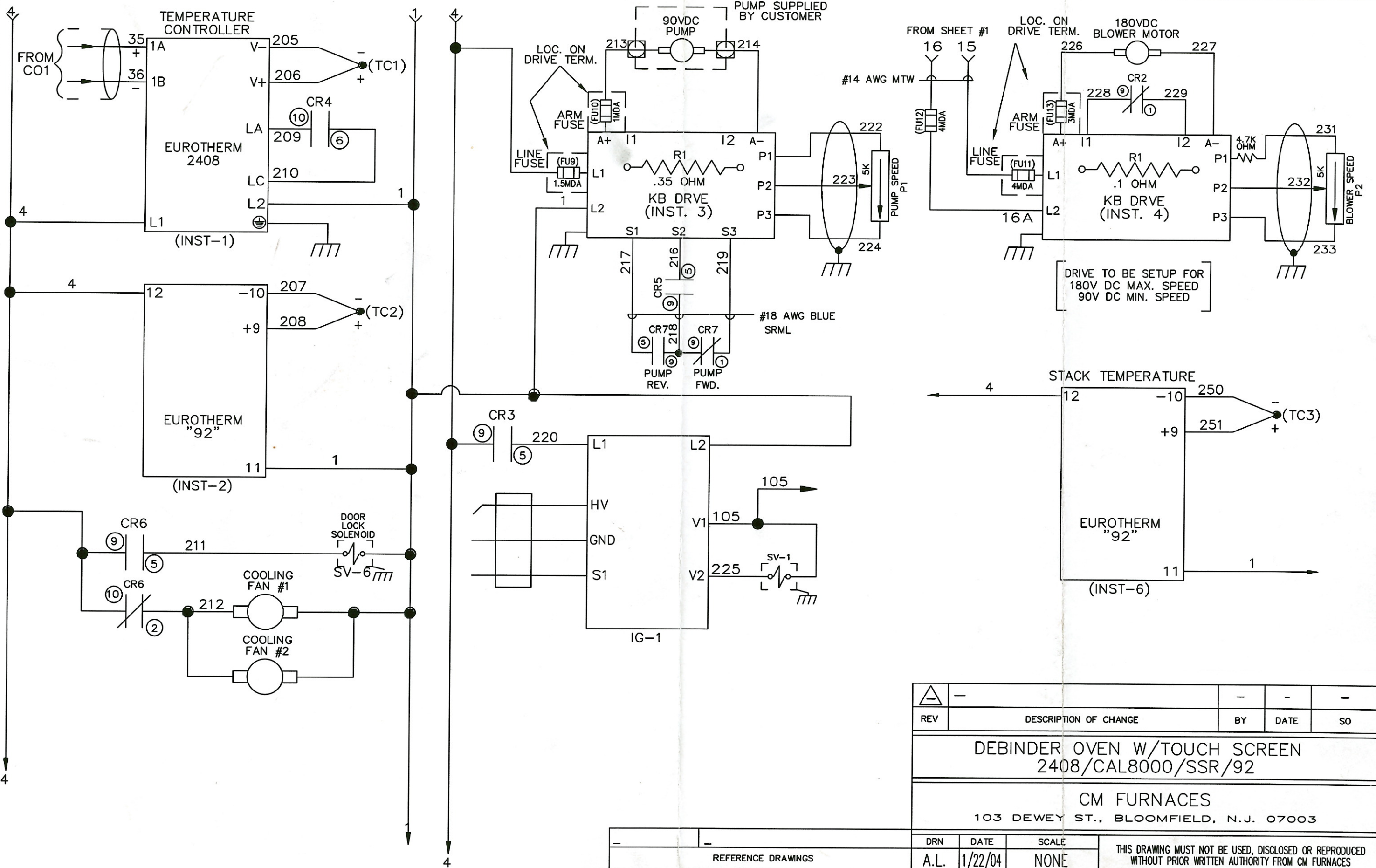
CB-1	CIRCUIT BREAKER, 2 POLE, 50 AMP	24-0009-22
CON 1	CONTACTOR, 60A	24-0005-13
INST 1	TEMPERATURE CONTROLLER	21-0099-18
INST 2,6	TEMPERATURE CONTROLLER	21-0012-29
INST 5	TEMPERATURE CONTROLLER	21-0075-02

INSTALLATION NOTICE

AT THE TIME OF INSTALLATION IT IS THE CUSTOMERS RESPONSIBILITY TO DETERMINE THAT THE AVAILABLE PLANT VOLTAGE AND LINE PHASING IS IN ACCORDANCE WITH THE FURNACE DESIGN AS INDICATED IN THE CM FURNACES Inc. ELECTRICAL SCHEMATIC.

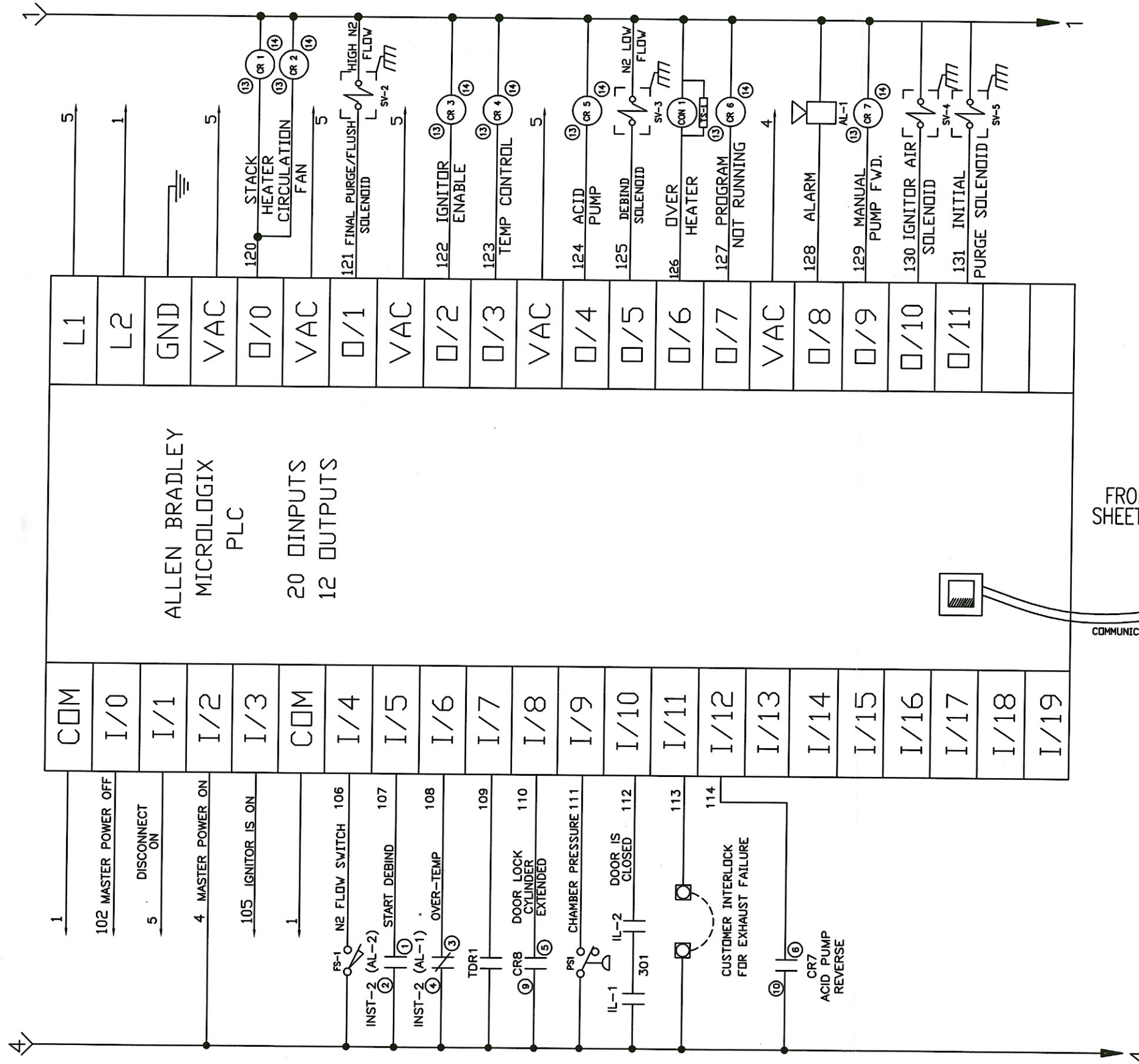
THE FURNACE MUST BE CONNECTED TO THE BUILDING GROUND SYSTEM VIA THE GROUND BUS LOCATED IN THE CONTROL CABINET. THE CUSTOMER MUST ENSURE THE FURNACE INSTALLATION IS IN ACCORDANCE WITH ALL LOCAL CODES AND THE NATIONAL ELECTRICAL CODES.

△	-	-	-	-
REV	DESCRIPTION OF CHANGE	BY	DATE	SO
DEBINDER OVEN W/TOUCH SCREEN 2408/CAL8000/SSR/92				
CM FURNACES 103 DEWEY ST., BLOOMFIELD, N.J. 07003				
DRN	DATE	SCALE	THIS DRAWING MUST NOT BE USED, DISCLOSED OR REPRODUCED WITHOUT PRIOR WRITTEN AUTHORITY FROM CM FURNACES	
A.L.	1/22/04	NONE		
CKD	DATE	SHEET		
FIRST USED	0300951	1 OF 3	20-0106-15B	REV -



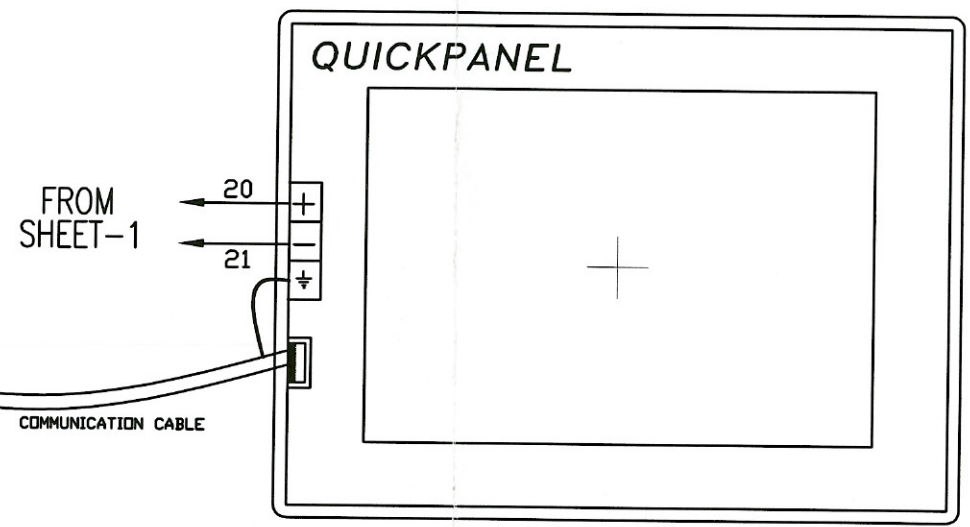
DRIVE TO BE SETUP FOR
180V DC MAX. SPEED
90V DC MIN. SPEED

△	-	-	-	-
REV	DESCRIPTION OF CHANGE	BY	DATE	SO
DEBINDER OVEN W/TOUCH SCREEN 2408/CAL8000/SSR/92				
CM FURNACES 103 DEWEY ST., BLOOMFIELD, N.J. 07003				
DRN	DATE	SCALE	THIS DRAWING MUST NOT BE USED, DISCLOSED OR REPRODUCED WITHOUT PRIOR WRITTEN AUTHORITY FROM CM FURNACES	
A.L.	1/22/04	NONE		
CKD	DATE	SHEET		
FIRST USED	0300951	2 OF 3	20-0106-15B	REV -



COM	L1
I/0	L2
I/1	GND
I/2	VAC
I/3	O/0
COM	VAC
I/4	O/1
I/5	VAC
I/6	O/2
I/7	O/3
I/8	VAC
I/9	O/4
I/10	O/5
I/11	O/6
I/12	O/7
I/13	VAC
I/14	O/8
I/15	O/9
I/16	O/10
I/17	O/11
I/18	
I/19	

ALLEN BRADLEY
MICROLOGIX
PLC
20 DIGITAL INPUTS
12 DIGITAL OUTPUTS



REV	DESCRIPTION OF CHANGE	BY	DATE	SO
-	-	-	-	-
DEBINDER OVEN W/TOUCH SCREEN 2408/CAL8000/SSR/92				
CM FURNACES 103 DEWEY ST., BLOOMFIELD, N.J. 07003				
DRN	DATE	SCALE	THIS DRAWING MUST NOT BE USED, DISCLOSED OR REPRODUCED WITHOUT PRIOR WRITTEN AUTHORITY FROM CM FURNACES	
A.L.	1/22/04	NONE		
CKD	DATE	SHEET		
FIRST USED	0300951	3 OF 3	20-0106-15B	REV
-	-	-	-	-

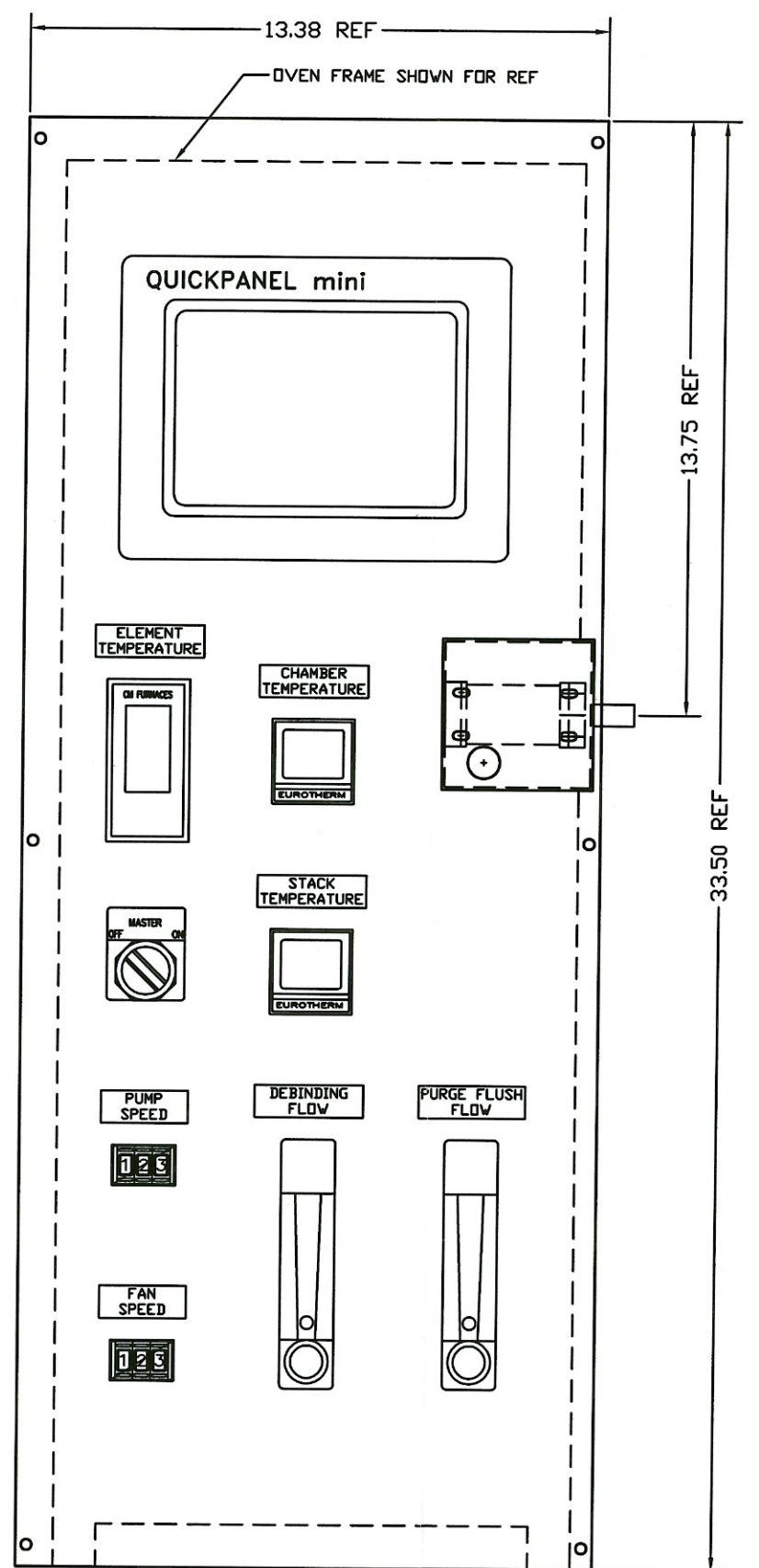
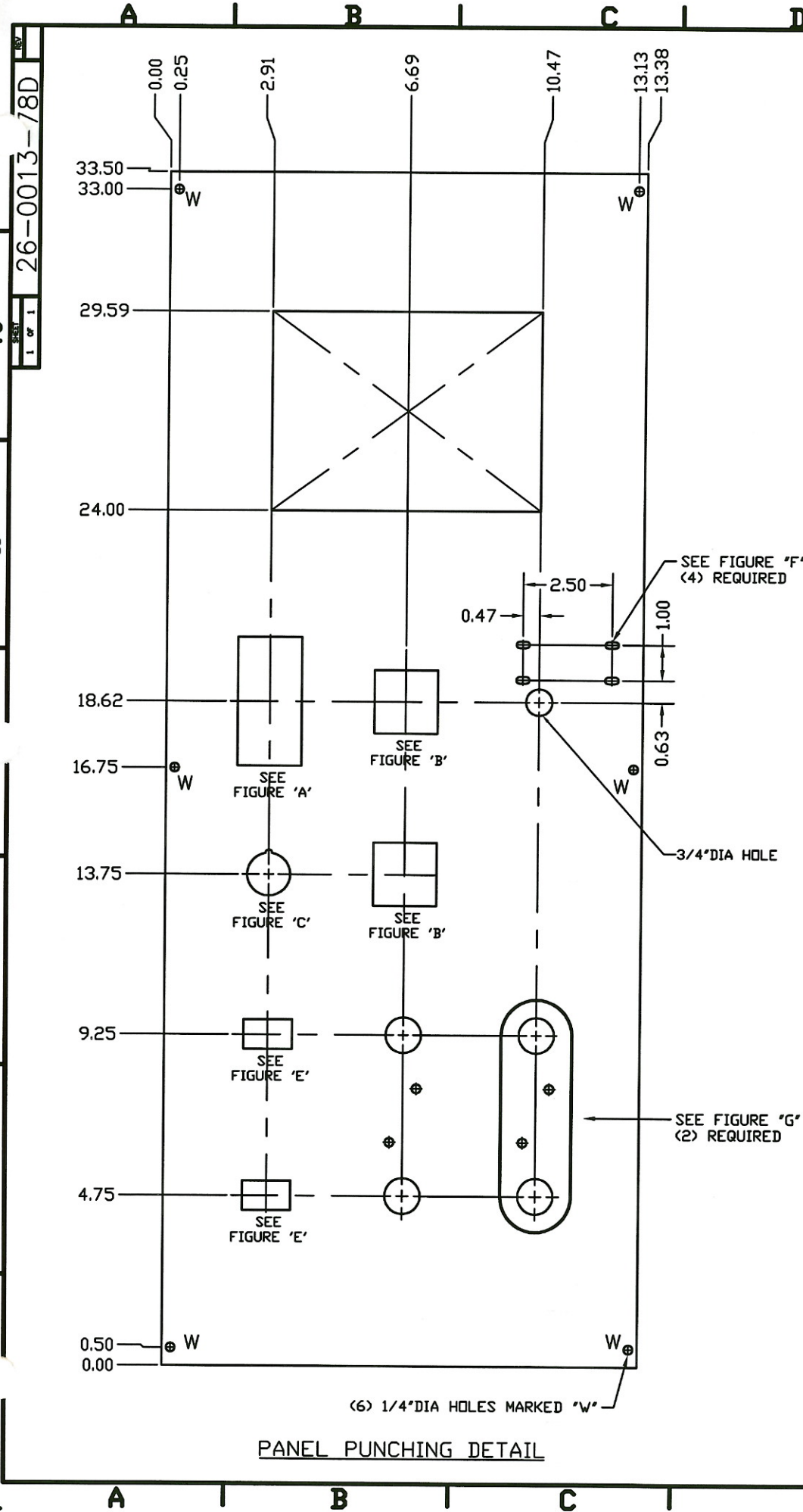


FIGURE "A"

FIGURE "B"

FIGURE "C"

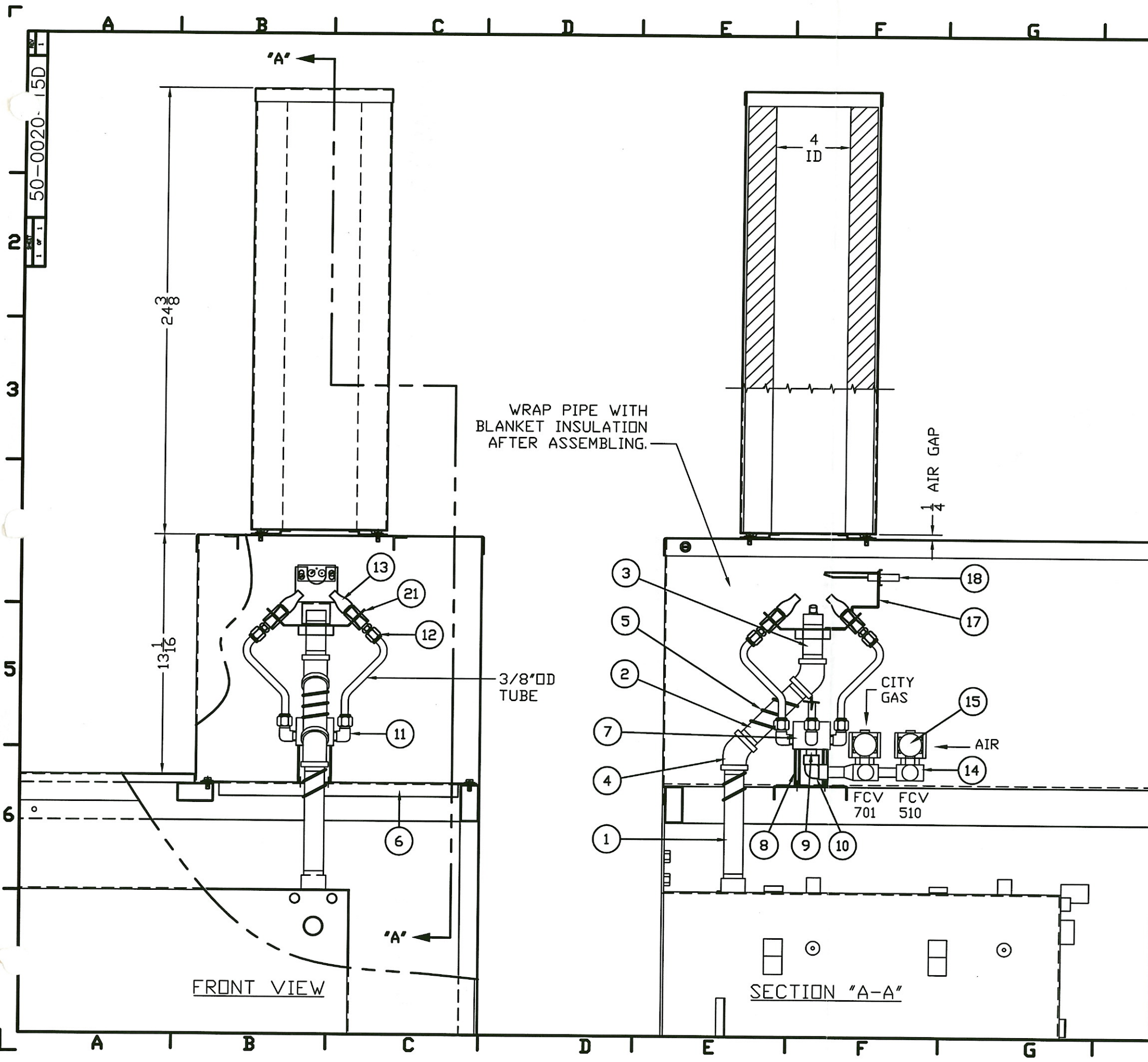
FIGURE "E"

FIGURE "F"

FIGURE "G"

DO NOT SCALE DRAWING

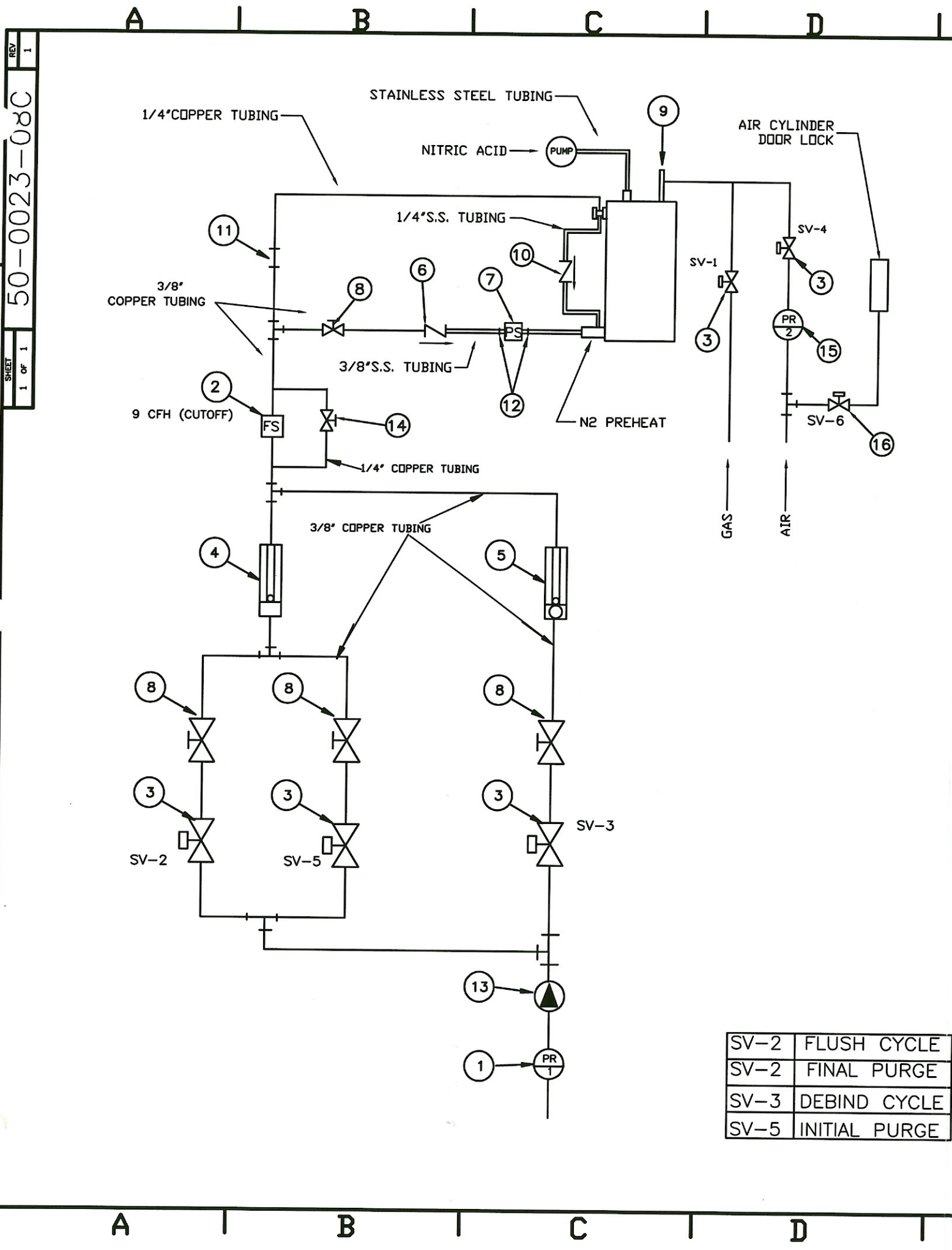
MATERIAL: 16 GA 304 STAINLESS STEEL	REV	DESCRIPTION OF CHANGE	BY	DATE	NO
FINISH: #4 HORIZONTAL	PANEL, ELECTRICAL CUSTOM DEBINDING OVEN 125-C				
REFERENCE DRAWING:	CM FURNACES 103 DEWEY ST., BLOOMFIELD, N.J. 07003				
TOLERANCES UNLESS NOTED OTHERWISE FRACTIONS ±1/32 DECIMAL X.XXX ±0.005 X.XX ±0.010 ANGULAR ±1/2°	DATE	SCALE	THIS DRAWING MUST NOT BE USED, DISCLOSED OR REPRODUCED WITHOUT PRIOR WRITTEN AUTHORITY FROM CM FURNACES		
FIRST USED	0300951	DATE	2/16/03	SHEET	1 of 1
					26-0013-78D



ITEM	PART NO	DESCRIPTION	QTY
1	59-0024-83	PIPE, 3/4"IPS x 7"LONG, S.S.	1
2	59-0024-67	PIPE, 3/4"IPS x 5"LONG, S.S.	1
3	59-0024-70	PIPE, 3/4"IPS x 3"LONG, S.S.	1
4	59-0150-19	ELBOW, 45 DEGREE, 3/4"IPS, S.S.	2
5	49-0002-05	CABLE HEATER	1
6	14-0095-18B	MANIFOLD SUPPORT BRACKET	1
7	51-0002-30A	PIPE MANIFOLD BLOCK	1
8	19-0017-03	STANDOFF, 3/8 HEX BODY, 2"LONG	4
9	59-0024-15	CLOSE NIPPLE, 1/4"NPT, BRASS	1
10	59-0148-02	ELBOW, 1/4"IPS, BRASS	1
11	59-0002-06	MALE ELBOW, 1/4"MNPT-3/8" TUBE, BRASS	4
12	59-0001-06	MALE CONNECTOR, 1/4"MNPT-3/8" TUBE, BRASS	4
13	51-0001-09	FISHTAIL BURNER, GAS-AIR MIXTURE.	4
14	51-0001-10	MIXER ASSEMBLY	1
15	REFERENCE	SOLENOID VALVE, 2-WAY, NORMALLY CLOSED, 1/4"NPT, 120 V	2
16			
17	14-0088-19B	IGNITOR BRACKET	1
18	24-0044-13	IGNITOR	1
19	36-0003-39	CYLINDER 2300 F, 7"OD x 4"ID x 23.25" LG.	1
20	14-0095-22C	BURNOFF CYLINDER	1
21	51-0014-03C	BURNER SUPPORT	1
22			
23			
24			
25			

DO NOT SCALE DRAWING

MATERIAL: SEE PARTS LIST	REDRAWN IN ACAD 2002	S.C.	1/19/94	0300951
FINISH:	DESCRIPTION OF CHANGE	BY	DATE	NO
REFERENCE DRAWINGS	BURMOFF STACK ASSEMBLY DEBINDING OVEN 125-C			
	CM FURNACES 103 DEWEY ST., BLOOMFIELD, N.J. 07003			
NOTE: ALL PARTS TO BE IDENTIFIED WITH CM DRAWING NO.	DATE	SCALE	THIS DRAWING MUST NOT BE USED, DISCLOSED OR REPRODUCED WITHOUT PRIOR WRITTEN AUTHORITY FROM CM FURNACES	
FIRST USED	S.C.	5/13/90	3/8	
9800258	DATE	SHEET	50-0020-15D	
		1 OF 1	1	



ITEM	PART NO	DESCRIPTION	QTY
1	51-0004-01	PRESSURE REGULATOR	1
2	22-0021-09	FLOW SWITCH	1
3	53-0001-07	SOLENOID VALVE, 2WAY, NORMALLY CLOSED, 120V	5
4	53-0005-83	FLOWMETER, N2, 22-220 SCFH, WITHOUT VALVE	1
5	53-0005-82	FLOWMETER, N2, 12-120 SCFH, WITH VALVE	1
6	53-0007-15	CHECK VALVE 3/8" TUBE S.S.	1
7	51-0003-08	PRESSURE SWITCH, 0-110 PSI	1
8	53-0008-07	NEEDLE VALVE, 3/8" TUBE, BRASS	4
9	-----	BURNER/IGNITOR ASSEMBLY	REF
10	53-0007-14	CHECK VALVE, 1/4" TUBE, S.S.	1
11	59-0009-02	REDUCER, 3/8 - 1/4 TUBE, BRASS	1
12	59-0044-09	MALE CONNECTOR, 3/8T - 1/4P, S.S.	2
13	53-0009-07	FILTER, 90 MICRON, 3/8 TUBE BRASS	1
14	53-0008-04	NEEDLE VALVE, 1/4" TUBE, BRASS	1
15	51-0004-18	PRESSURE REGULATOR, AIR, WITH 0-160 PSI / 0-11 BAR GAUGE	1
16	53-0002-02	SOLENOID VALVE, AIR	1

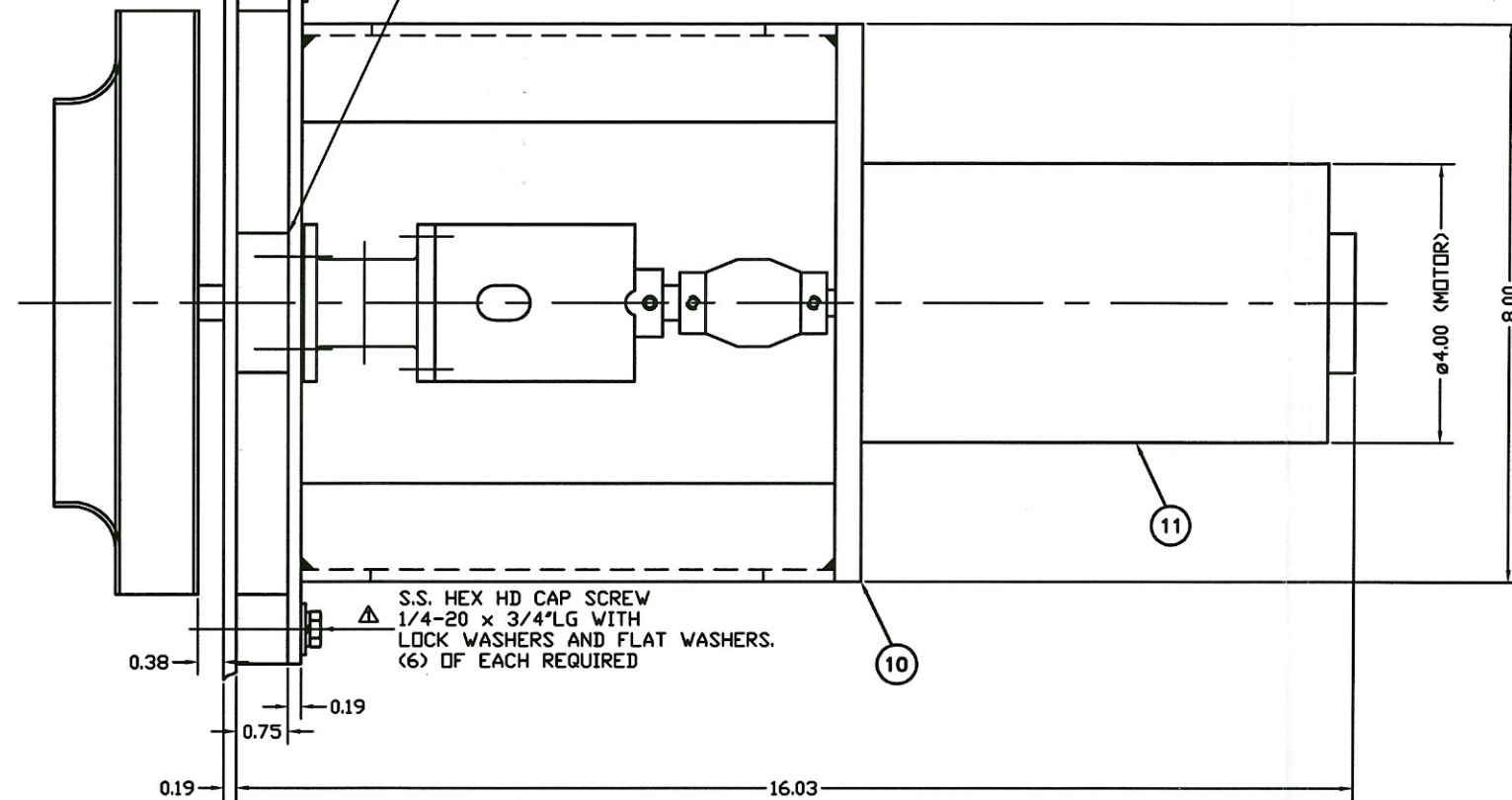
NOTES
 1) DOUBLE LINES INDICATE TUBING TO BE STAINLESS STEEL. ALL OTHER MATERIAL TO BE COPPER TUBING AND BRASS FITTINGS, EXCEPT WHERE NOTED.
 2) MOUNT PRESSURE SWITCH ITEM 7 IN INVERTED POSITION.
 3) MOUNT FLOW SWITCH ITEM 2 WITH THE INLET PORT UP VERTICALLY.
 4) SEE OVEN ASSEMBLY FOR ADDITIONAL INFORMATION ON INSTALLATION OF FITTINGS.

SV-2	FLUSH CYCLE
SV-2	FINAL PURGE
SV-3	DEBIND CYCLE
SV-5	INITIAL PURGE

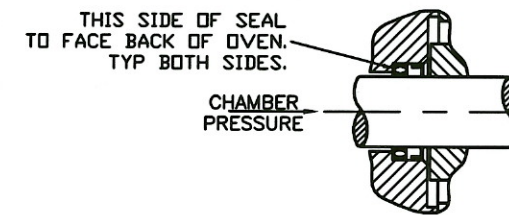
MATERIAL:		ITEM 10 WAS 53-0007-05, ADDED ITEMS 15 AND 16, RE-ROUTED TUBING INTO N2 PREHEAT.		B.C.	8/03/98	9800505
REV	DESCRIPTION OF CHANGE	BY	DATE	SO		
ATMOSPHERE FLOW DEBINDING OVEN 125-C						
CM FURNACES 103 DEWEY ST., BLOOMFIELD, N.J. 07003						
DRN	DATE	SCALE	THIS DRAWING MUST NOT BE USED, DISCLOSED OR REPRODUCED WITHOUT PRIOR WRITTEN AUTHORITY FROM CM FURNACES			
KBF	7/15/98	NONE				
NOTE: ALL PARTS TO BE IDENTIFIED WITH CM DRAWING NO.	CKD	DATE	SHEET			
FIRST USED	9800505		1 OF 1	50-0023-08C		REV 1

REV 1
70-0025-02D

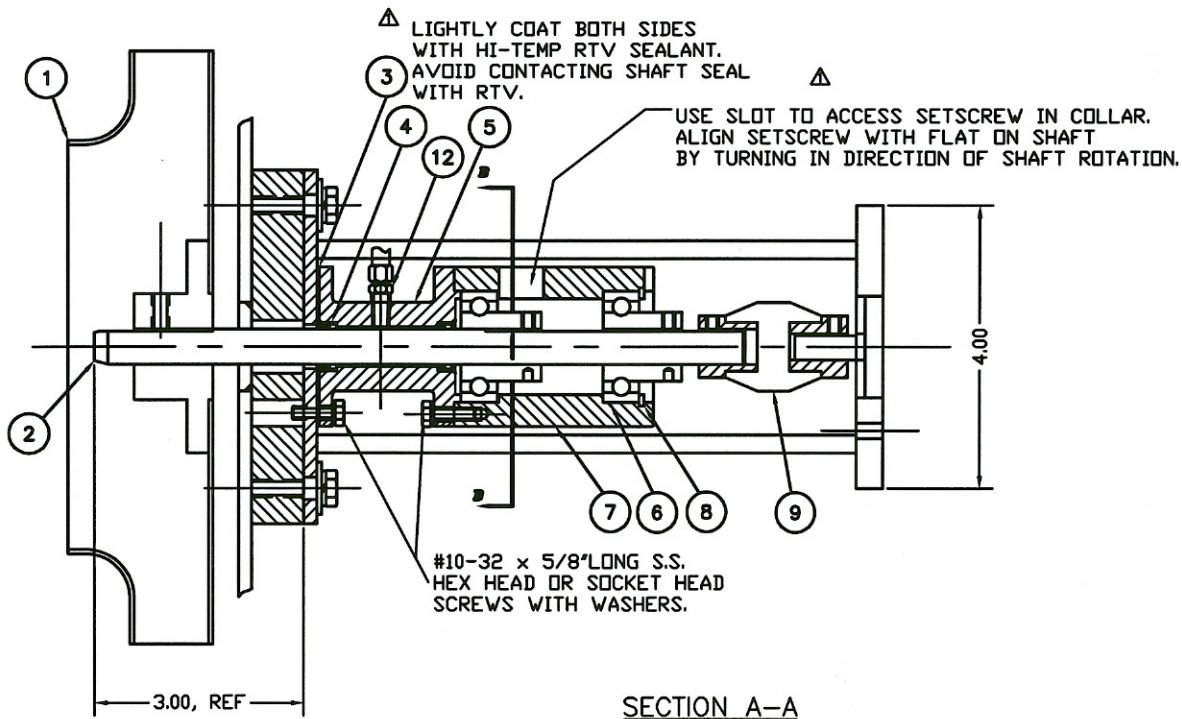
INNER WALL OF DEBINDING OVEN
COAT OUTER FACE OF BLOCKS WITH HI-TEMP RTV SEALANT. (3) PLACES



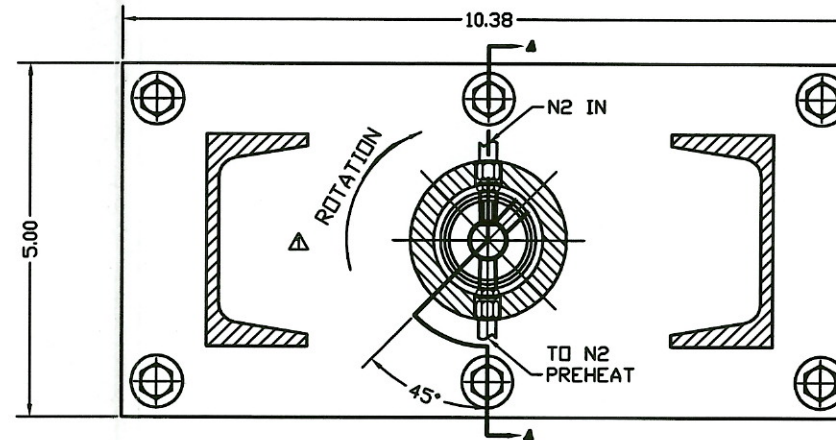
TOP VIEW



SEAL INSTALLATION DETAIL



SECTION A-A



SECTION B-B

ITEM	PART NO	DESCRIPTION	QTY
1	58-0004-02B	BLOWER WHEEL, 8 3/8" DIA, 304 S. S.	1
2	73-0055-18B	SHAFT DETAIL	1
3	14-0089-29A	SEAL RETAINER	1
4	93-0015-04	SHAFT SEAL	2
5	18-0038-36B	SEAL HOUSING	1
6	79-0048-32	ROLLER BEARING	2
7	73-0017-09B	BEARING HOUSING	1
8	92-0085-01	RETAINING RING	1
9	79-0033-24	COUPLING, 3/8"-1/2" BORE	1
10	14-0085-23C	MOTOR BRACKET	1
11	71-0001-78	MOTOR, 180 VDC, 1/4 HP	1
12	58-0044-04	MALE CONNECTOR, 1/4"-1/8" P, S. S.	2
13			
14			
15			
16			

DO NOT SCALE DRAWING

MATERIAL:
AS NOTED IN BOM

FINISH:

REFERENCE DRAWING:

NOTE: ALL PARTS TO BE IDENTIFIED WITH CM DRAWING NO.
FIRST USED 9800505

TOLERANCES UNLESS NOTED
OTHERWISE
FRACTIONS ±1/32
DECIMAL X.XXX ±0.005
X.XX ±0.010
ANGULAR ±1/2°

ITEM 6 WAS 79-0048-36. ADDED NOTES FOR BEARING COLLAR, SCREWS, RTV, AND ROTATION.	B.C.	11/9/98	9800505
REV	DESCRIPTION OF CHANGE	BY	DATE
			98
MOTOR & FAN ASSEMBLY DEBINDING OVEN 125-C, STANDARD			
CM FURNACES 103 DEWEY ST., BLOOMFIELD, N.J. 07003			
REV	DATE	SCALE	
B.C.	5/4/98	3/4	
REV	DATE	SHEET	
		1 OF 1	
70-0025-02D			REV 1

THIS DRAWING MUST NOT BE USED, DISCLOSED OR REPRODUCED WITHOUT PRIOR WRITTEN AUTHORITY FROM CM FURNACES