## **Parts Manual**

## **Floor Type Gas Convection Steamer**

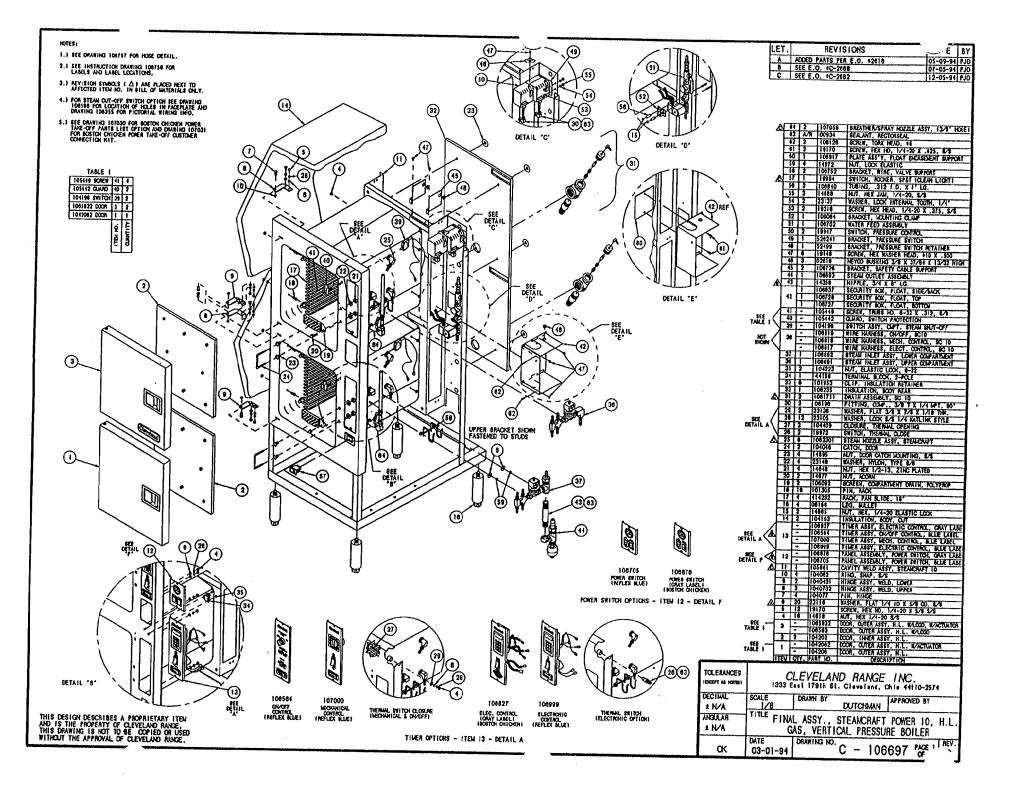


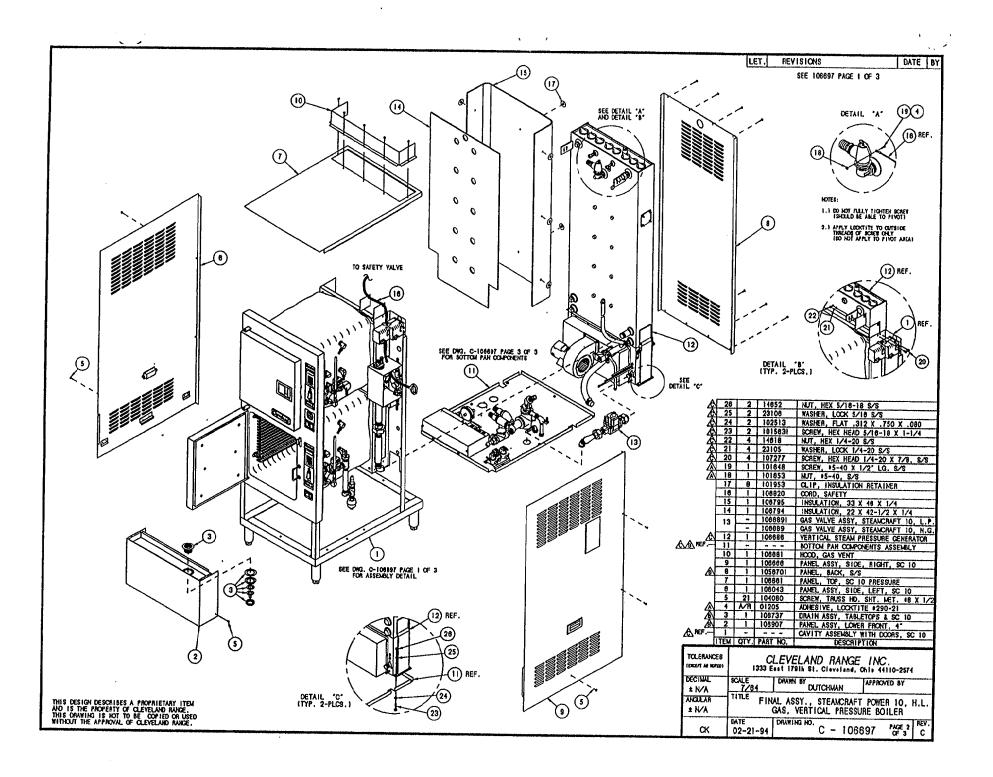
## Series: SteamCraft Model 24CGP10

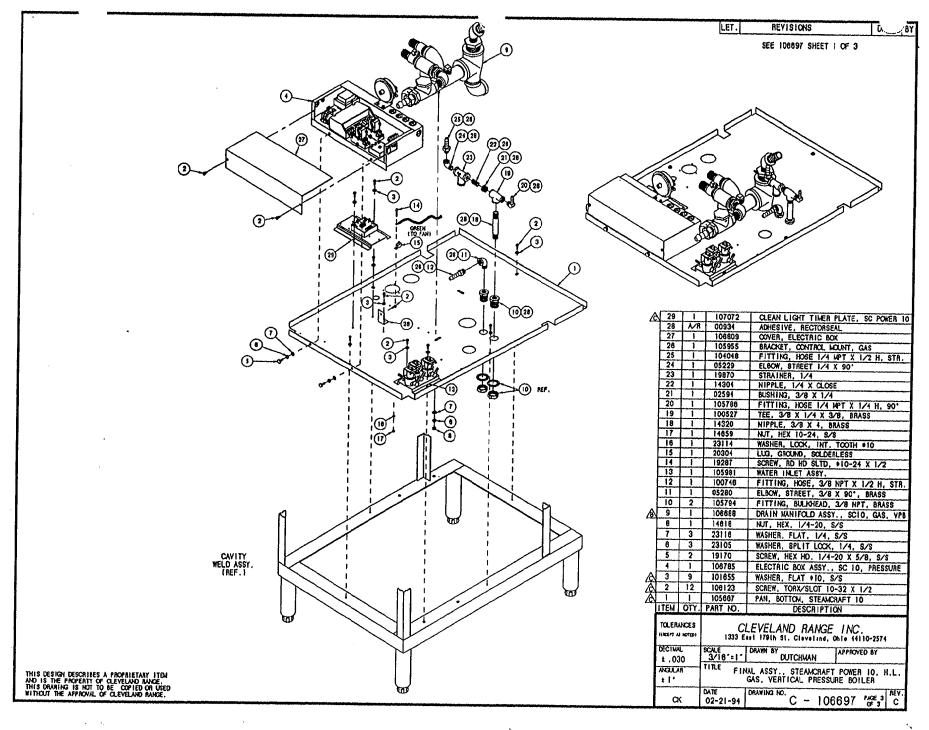
1333 East 179<sup>th</sup> Street Cleveland, Ohio 44110

Phone: (216) 481-4900 1-800-338-2204 Fax: (216) 481-3782 www.clevelandrange.com



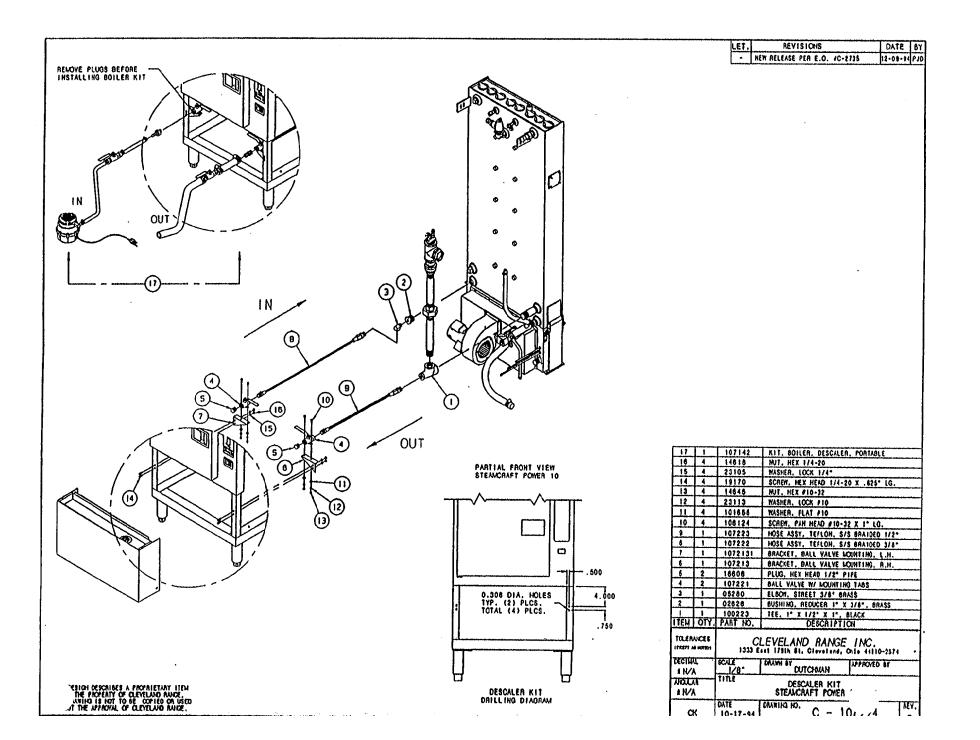


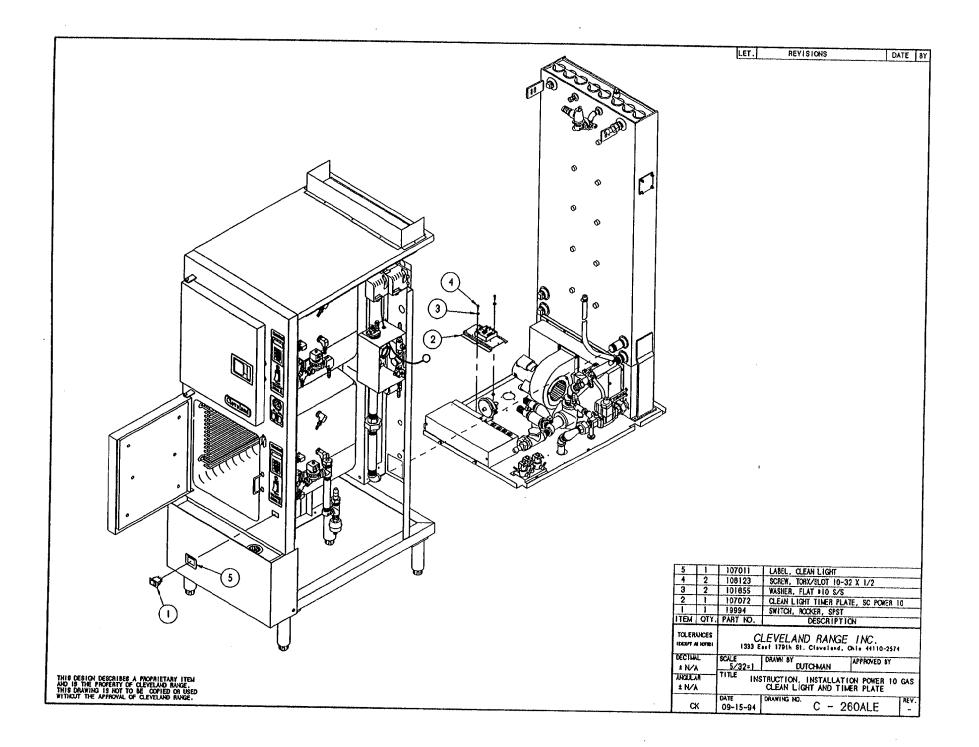


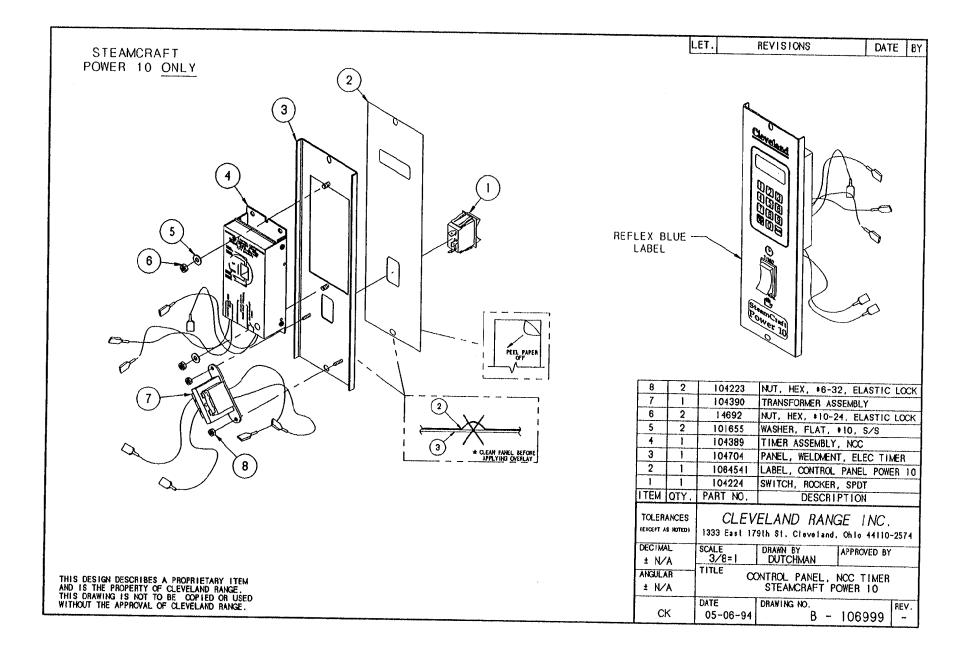


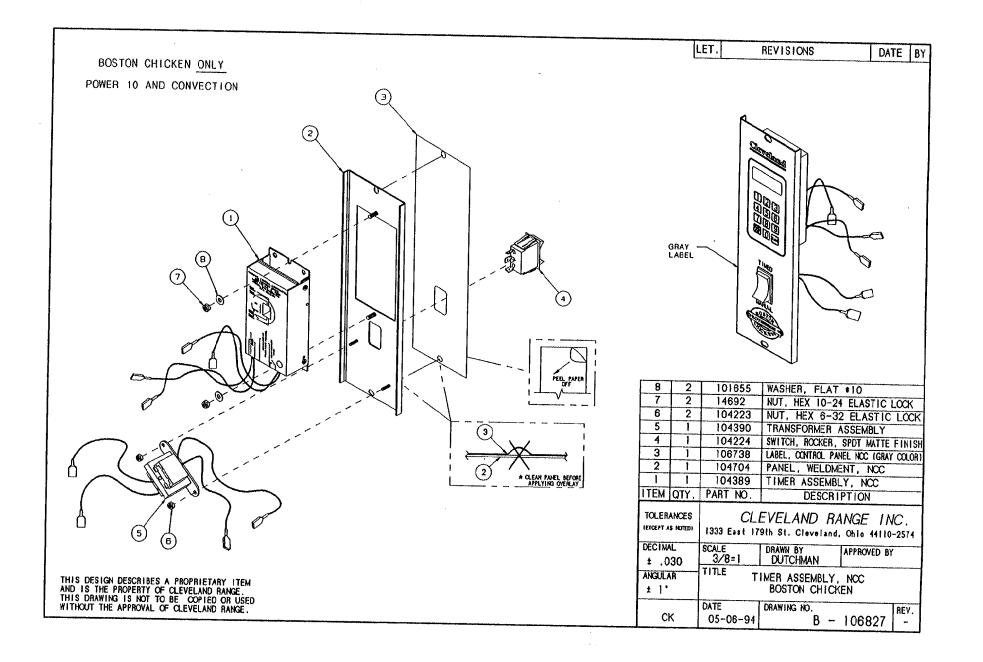
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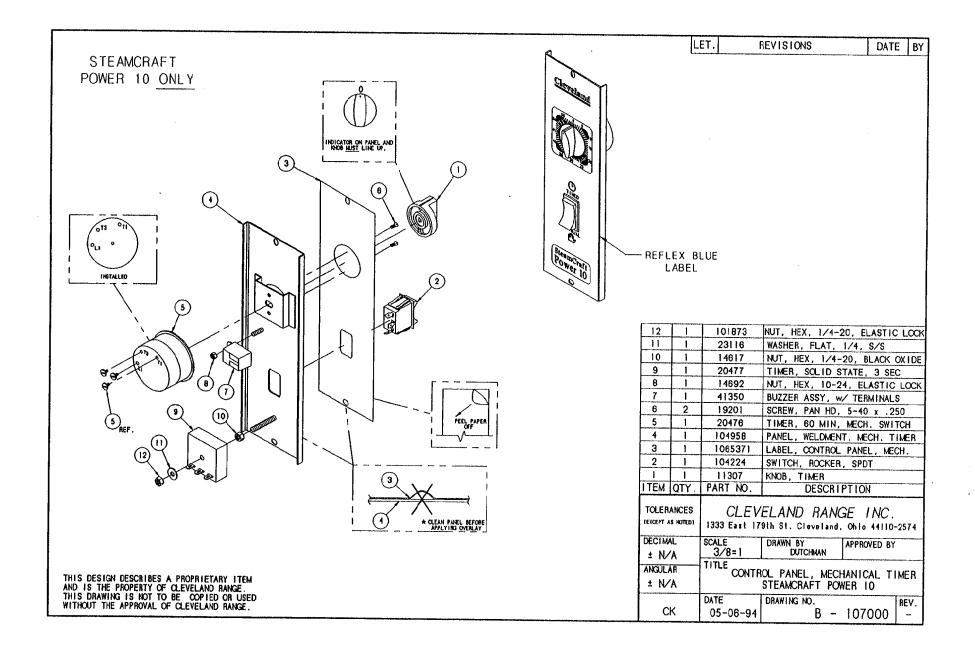
NOTES: 1.) RELATIVE POSITION OF OBJECTS ARE NOT REPRESENTATIVE OF INSTALLED LOCATIONS.		***	LET.         REVISIONS           A         SEE E.O. #C-2888         07-05-9           B         SEE E.O. #C-2882         12-05-9
NF. (3)			▲         58         1         1058500200         IKOSE, MT-80         1/4 K         1/2 X         2" LG.           ▲         55         1         107032         CHECK VALVE, PLASTIC DIAPHIAGM           54         ▲         00934         SEALAHT, RECTORREAL           53         -         14343         HIPPLE, 3/4 X CLOSE, BLACK           52         -         02398         BUSHING, HEX, I X 3/4           51         -         108840         HWHIFCLD ASST, GAS 250,000 BTU BOILER           ▲         50         -         14358         RIPPLE, 3/4" X 8" LG.           49         1         105791         FITTING, ROSE, TEE, 1/4"         1/4"
		(1) ALF.	▲ 10       2       10437310000 (KOSE, SILICONE L/4 ID X 1/2 CD X 10*         ▲ 47       10       1065200       CLAMP, MORL DRIVE 3/16 TO 5/16 DIA         ▲ 41       10       1054090000 (KOSE, BTCMA, BLACK, 1* ID X 60* LG         ▲ 1       1054090000 (KOSE, BTCMA, BLACK, 1* ID X 60* LG         ▲ 1       1054090000 (KOSE, BTCMA, BLACK, 1* ID X 60* LG         ▲ 1       - 1068900 (KOSE, BTCMA, BLACK, 1* ID X 60* LG         ▲ 1       - 1068900 (ROSE, BTCMA, BLACK, 1* ID X 1/2 CD X 40*         ▲ 1       - 106900 (ROSE, BTCMA, ASSEMBLY, SC 10 GAS PRES         ▲ 3       -       - GENERATOR ASSEMBLY, SC 10 GAS PRES         ▲ 1       - 105902 (ROSE, BTCMA, ASSEMBLY, SC 10 GAS PRES         ▲ 1       - 105902 (ROSE, BTCMA, ASSEMBLY, SC 10 GAS PRES         ▲ 1       - 105902 (ROSE, BTCMA, BLACK, 1* ID X 1/2 CD X 21*         ▲ 1       - 105902 (ROSE, BTCMA, BLACK, 1* ID X 0.5* LG         ▲ 39       1       1054080050 (KOSE, BTCMA, BLACK, 1* ID X 0.5* LG         ▲ 39       1       104219 (GLAP, WORM BRIVE 1/4* TO 25/32 DIA         ▲ 30       1       104219 (GLAP, WORM BRIVE 1/4* TO 25/32 DIA
	33 20 30 30 30 30 30 30 30 30 30 3		A         37         1         1098500000 [DOSE, MT-80, 1/4 ID X 1/2 CO X 6"           A         36         1         1098494400         [DOSE, MT-80, 1/2 ID X 3/4 CO X 44"           35         -         108687         VALVE ASSY, DRAIM           34         14         107030         [CLAW, HOSE, MT-80, 1/2 ID X 3/4 CO X 44"           33         -         108687         VALVE ASSY, DRAIM           33         1         08505150         HOSE, METAL TENSION BAND 3/2           33         1         08505150         HOSE, MAINERM 3/4 ID X 51.500° LG           32         -         1086931         STEAN OUTLET ASSY,           31         -         1086931         STEAN OUTLET ASSY,           31         -         108505150         HOSE, DARIPREN 3/4 ID X 3/4 CO X 10, 50°           30         -         10850912         STEAM OUTLET ASSY,         -           31         -         10850912         STEAM INLET ASSY, LOWER COLAPARTNEN           30         -         10827912001 HOSE, SILLICOME 3/8 ID X 10, 50°         LG           32         2         10327912001 HOSE, SILLICOME 3/8 ID X 4, 750° LG           32         -         105981         STEAM INLET ASSY TO FLOAT A COMPTE 23           33         -
		33 (1) (3) (1) (3) (1) (3) (3) (3) (3) (3) (3) (3) (3	24         1         1058501100         HCSE,         HT-80,         1/4         ID X         1/2         CO X         11           23         2         1058500200         HCSE,         HT-80,         1/4         ID X         1/2         CO X         21           23         1         105792         F11T1H3,         EL60         90°,         1/4         HX         1/2 H           21         1         1058490300         HCSE,         HT-80         1/2 ID X         3/4 00 X         2.000           20         1         1058490300         HCSE,         HT-80         1/2 ID X         3/4 00 X         2.000           20         1         1058490300         HCSE,         HT-80         1/2 ID X         3/4 00 X         2.000           30         2         1057900         F11T1H3,         TE 80         1/2 ID X         3/4 00 X         8.000           31         1058490350         HCSE,         HT-80         1/2 ID X         3/4 00 X         8.000           17         -         -         WATER         HLET         A3/4 00 X         2.000           17         -         -         WATER         HLET X5XY.         1/2 ID X         2/4 00
			13         1         1051693100         HCSE, EPCM, BLACK, 1 <sup>+</sup> ID X 41 <sup>+</sup> LG.           A         12         1         1051692100         HCSE, EPCM, BLACK, 1 <sup>+</sup> ID X 21 <sup>+</sup> LG.           A         11         105109100         HCSE, EPCM, BLACK, 1 <sup>+</sup> ID X 21 <sup>+</sup> LG.           A         11         11         05204         CAMP, WORM DRIVE
3 RF.			2     -     106702     WATER FEED ASSY.       A     -     -     CAVITY ASSY. WITH DOORS, SC 10       ITEM OTY. PART NO.     DESCRIPTION       TOLERANCES     CLEVELAND RANGE INC.       Iterri A MITER     1333 East 179th St. Cleveland. Onle 44110-2574       DECIDAL     SCALE     DRAWN BY       ANGULAR     TITLE     HOSE DETAIL, STEAMCRAFT POWER 10, H.L.
IS DESIGN DESCRIBES A PROPRIETARY ITEM AND IS THE PROPERTY OF OLEVELAND MARGE. IS DRAWING IS NOT TO BE COPIED OR USED WITHOUT THE APPROVAL OF OLEVELAND RANGE.	REF. (23)		± N/A         GAS, VERTICAL PRESSURE BOILER           CX         0ATE 02-28-94         DRAWING NO. C         -         106757         RE

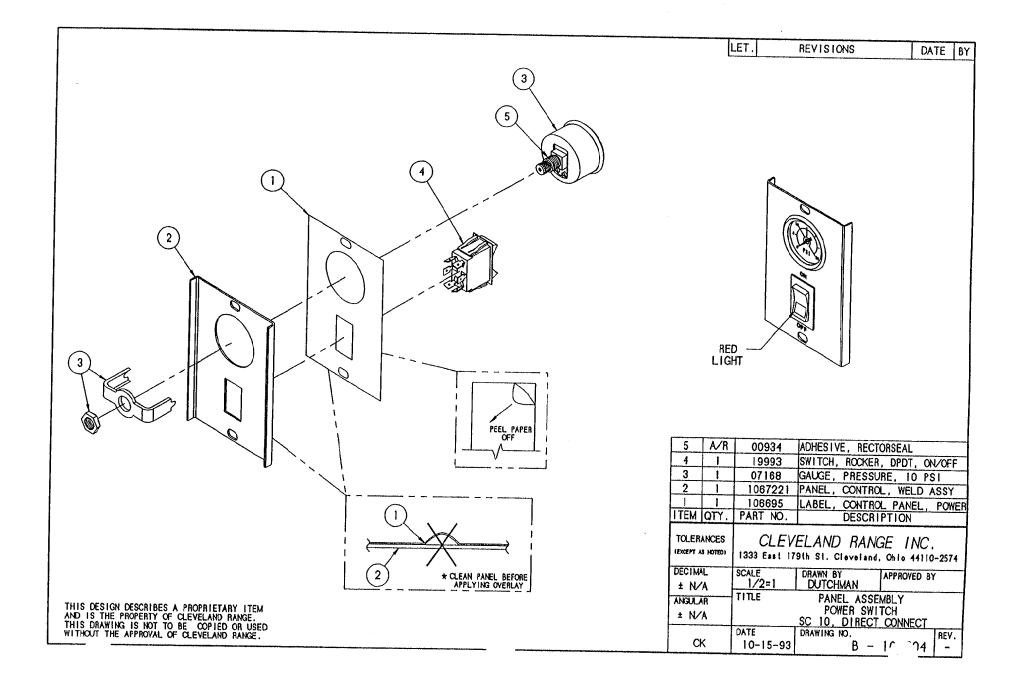






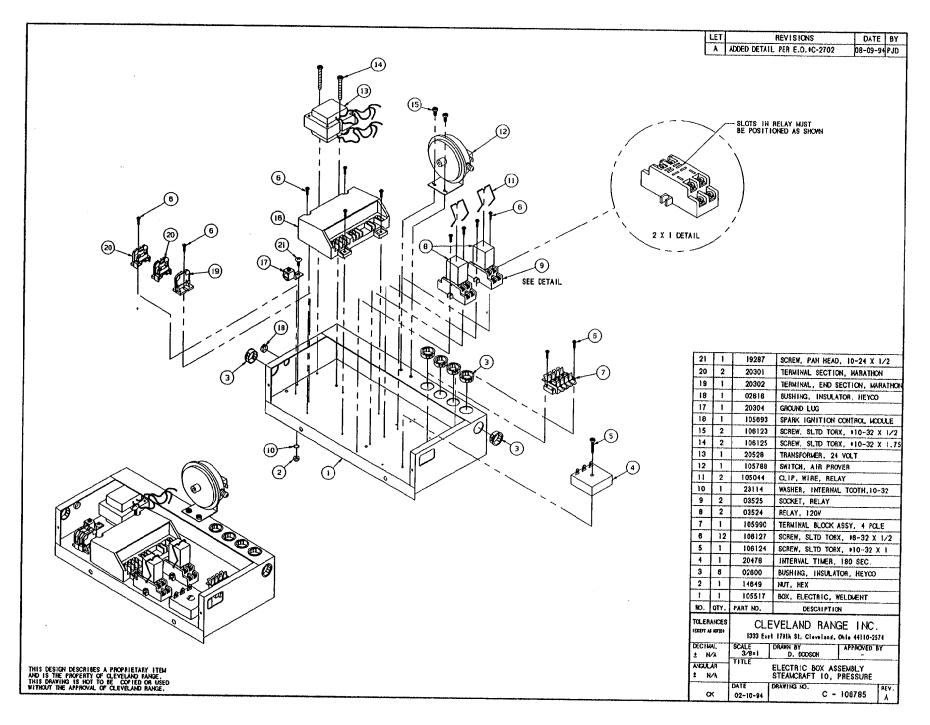


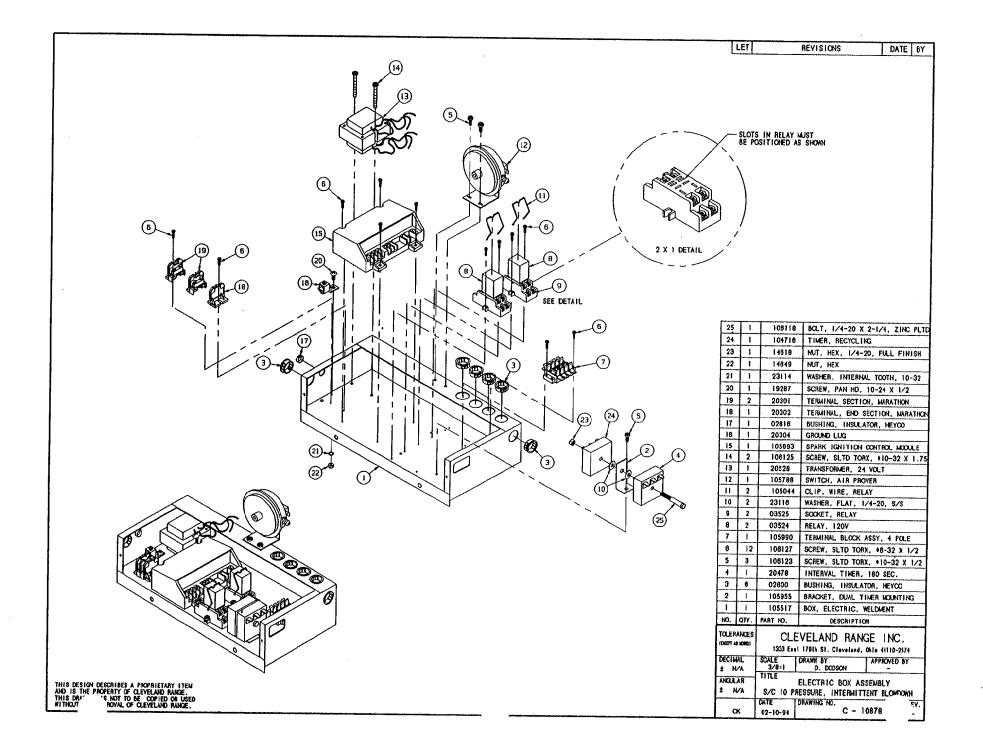




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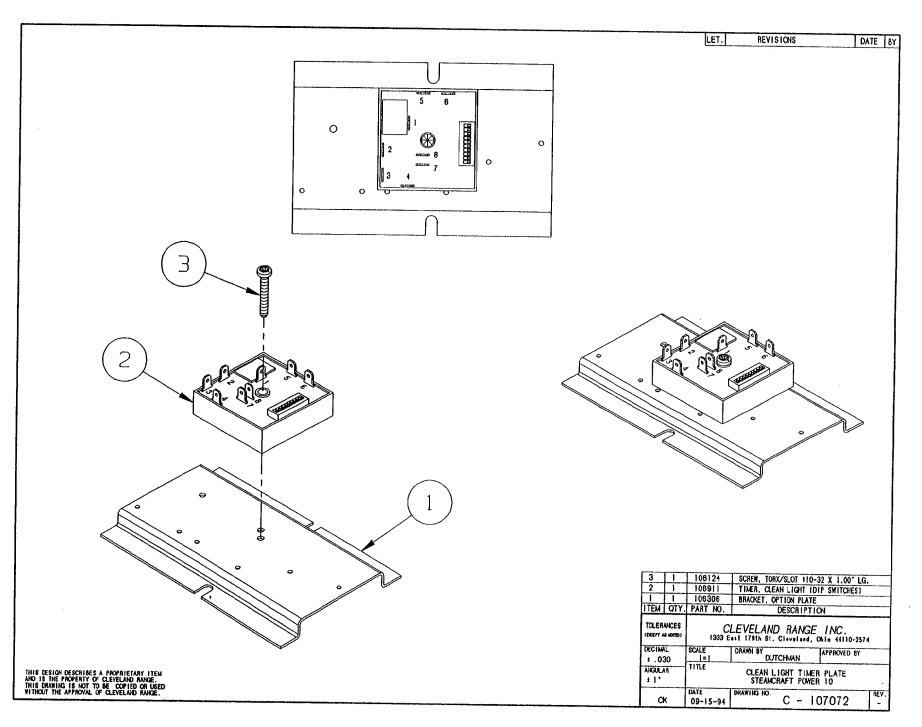


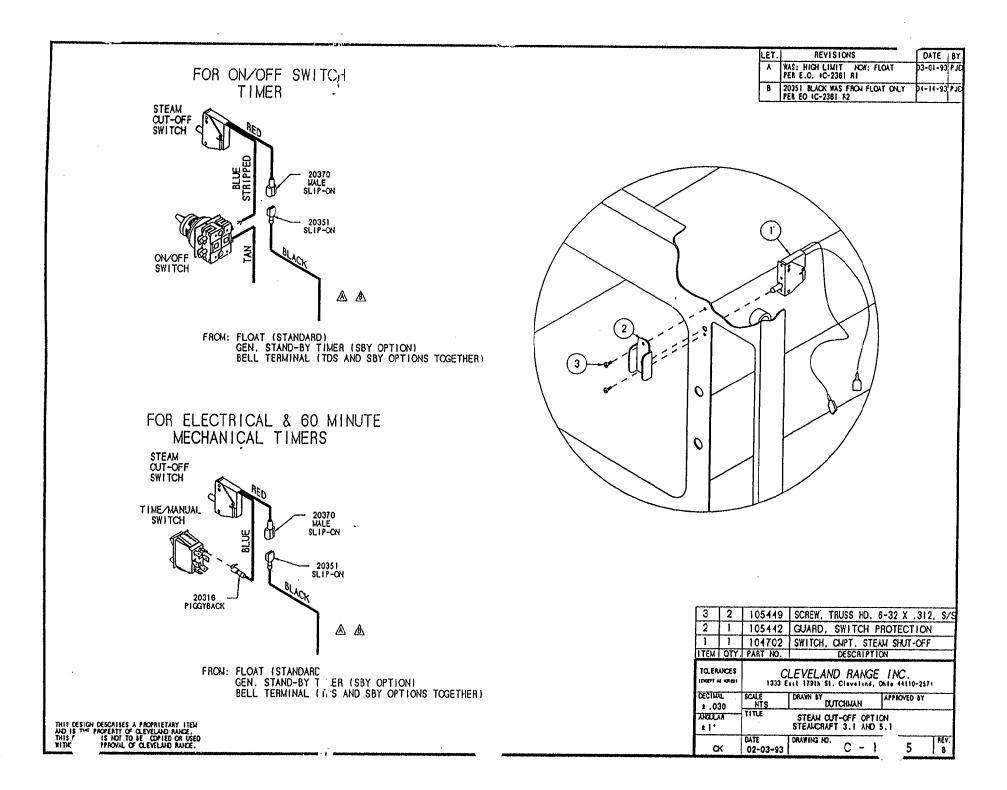




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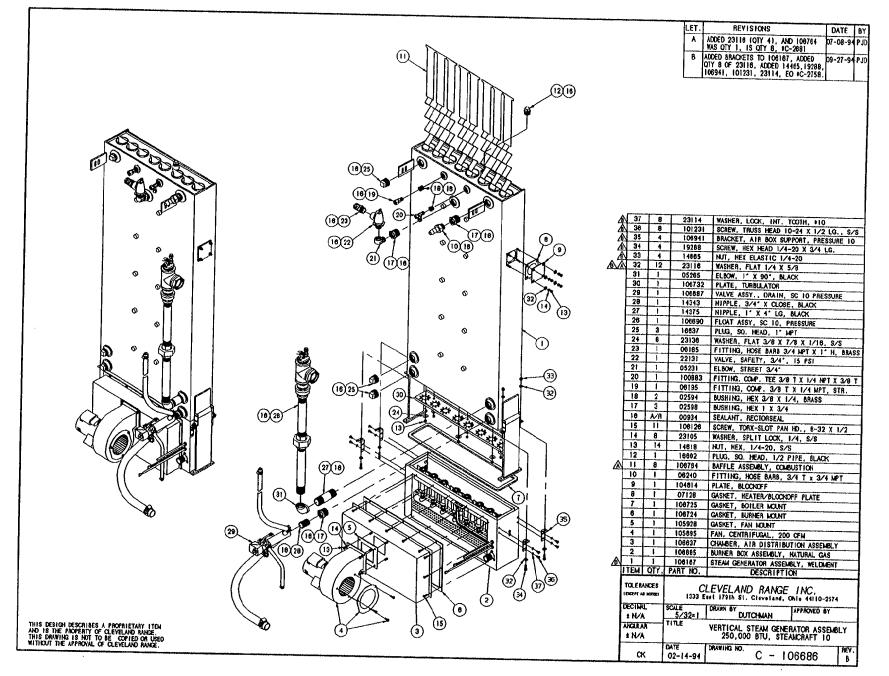


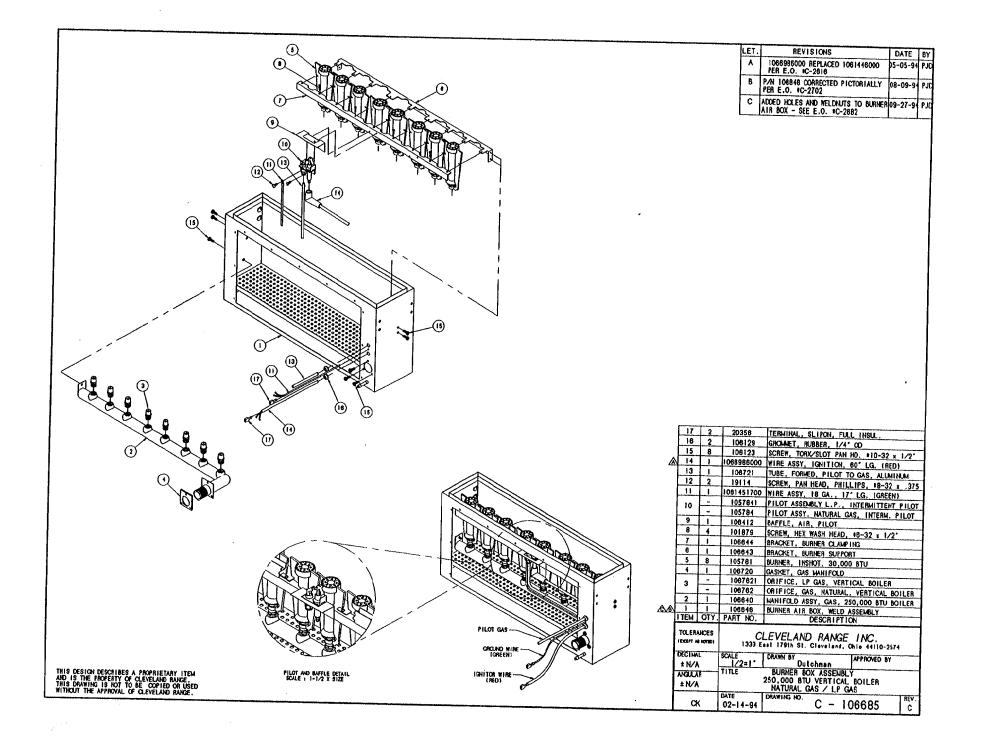


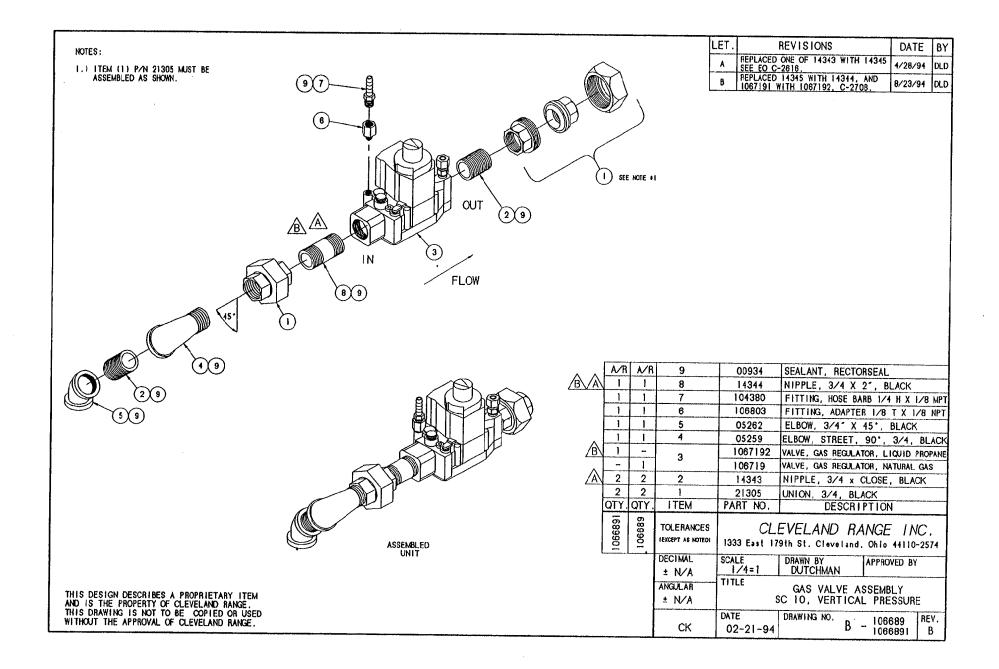




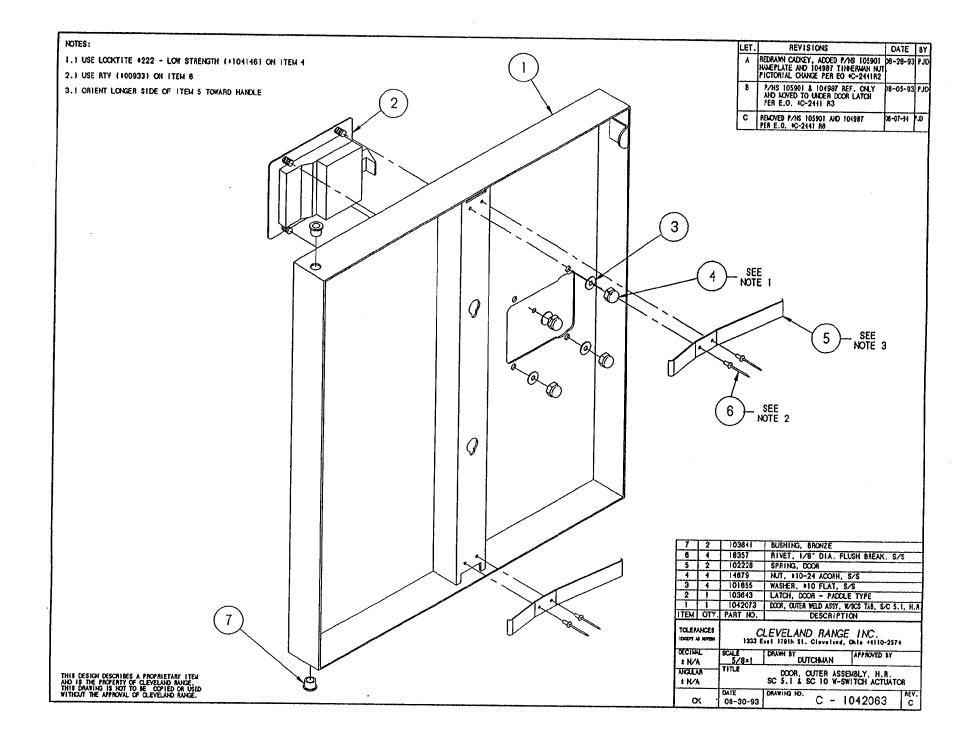


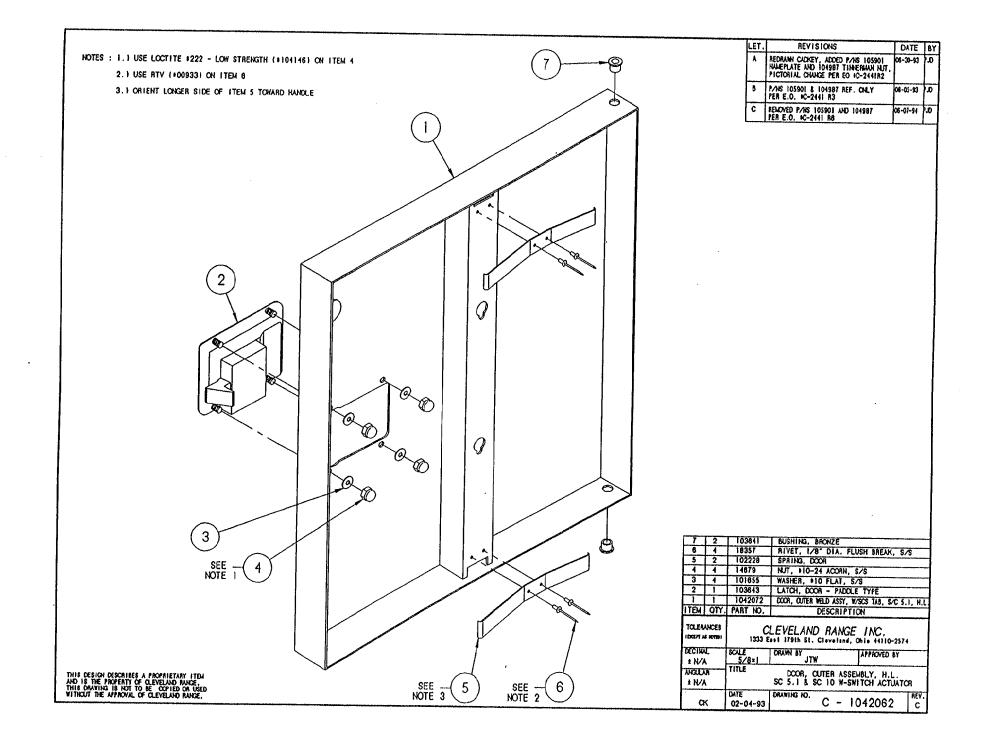






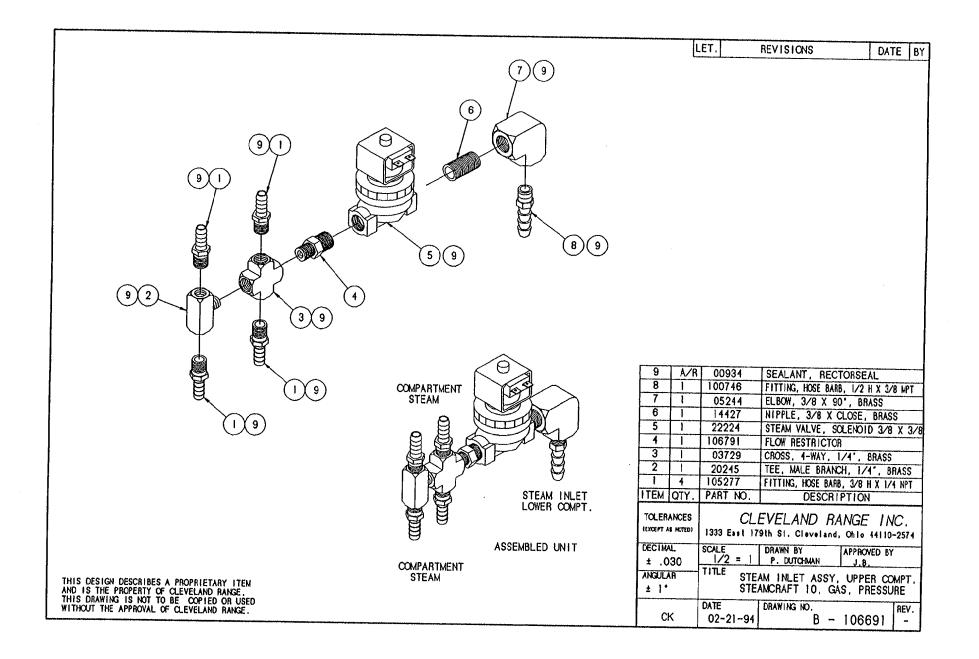
	LET. REVISIONS DATE B
	NOTE: 1.) REMOVE ORIFACE FROM P/N 105784 AND DISCARD. 2.) INSTALL P/N 106375.
	2I106375ORIFICE, PILOT, 0.012*11105784PILOTITEMQTY.PART NO.*DESCRIPTION
	TOLERANCES CLEVELAND RANGE INC. (EXCEPT AS NOTED) 1333 East 179th St. Cleveland, Ohio 44110-2574
	DECIMAL     SCALE     DRAWN BY     APPROVED BY       ± N/A     1=1     DUTCHMAN     -
THIS DESIGN DESCRIBES A PROPRIETARY ITEM AND IS THE PROPERTY OF CLEVELAND RANGE.	ANGULAR TITLE PILOT ASSEMBLY, L.P. ± N/A STEAMCRAFT 10
THIS DRAWING IS NOT TO BE COPIED OR USED WITHOUT THE APPROVAL OF CLEVELAND RANGE.	DATE DRAWING NO. CK 02-22-93 A - 1057841 -





NOTES :		**************************************	. 1	ET.	REVISIONS	DATE BY
I) FIRST ATTACH BOTTOM ANGLE (P/N 106844) NEXT ASSEMBLE DOOR (P/N 106845) INTO PLA THEN ATTACH TOP ANGLE ON TO SIDE PANEL	CE					
SEE NOTE 1 8	9 SEE NOT	Ξ 1				
			9         1           8         2           7         1           6         2           5         2           4         1           3         15           2         1           1         1           ITEM QTY.         0	106845 106844 106143 14676 106045 106045 106044 18357 08108 106682 PART NO.	DOOR, PANEL, RI ANGLE, DOOR, PA ANGLE, REINFORC NUT, ACORN 10-3 BRACKET, SIDE S BRACKET, SIDE S RIVET, FLUSH 1/ HANDLE, DOOR, S, PANEL, SIDE, RIC DESCRIPTI	NEL, SC 10 EMENT 2 S/S JPPORT, SHT. JPPORT, LG. 3 S/S /S SHT, SC 10
THIS DESIGN DESCRIBES A PROPRIETARY ITEM AND IS THE PROPERTY OF CLEVELAND RANGE. THIS DRAWING IS NOT TO BE COPIED OR USED WITHOUT THE APPROVAL OF CLEVELAND RANGE.		2	TOL'ERANCES IEXCEPT AS HOTEDI DECTIMAL ± N/A ANGULAR ± N/A CK	1333 East 17 SCALE 1/8 = 1 TITLE PAN	ELAND RANGE	<i>INC</i> . 10 44110-2574 ROVED BY BEDFORD ASSY. 10 REV.

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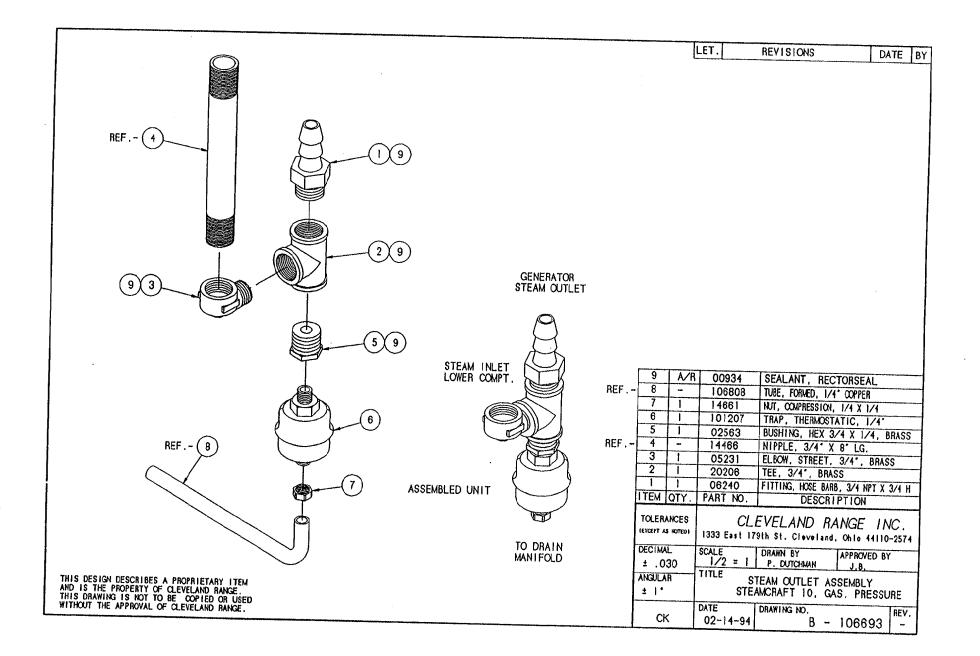


			LET.	REVISIONS DATE BY
		9 10 9 10 B STEAM INLET UPPER COMPT.		
	COMPARTMENT STEAM	ASSEMBLED UNIT	DECIMAL SCALE	SEALANT. RECTORSEAL FITTING, HOSE BARB, 1/2 H X 3/4 WPT TEE, 3/4", BRASS BUSHING, HEX 3/4 X 3/8, BRASS NIPPLE, 3/8 X CLOSE, BRASS STEAM VALVE, SOLENOID 3/8 X 3/8 FLOW RESTRICTOR CROSS, 4-WAY, 1/4", BRASS TEE, MALE BRANCH, 1/4", BRASS TEE, MALE BRANCH, 1/4", BRASS FITTING, HOSE BARB, 3/8 H X 1/4 NPT DESCRIPTION LEVELAND RANGE INC. 1791h S1, Cleveland, Ohio 44110-2574 DRAWN BY APPROVED BY
THIS DESIGN DESCRIBES A PROPRIETARY ITEM AND IS THE PROPERTY OF CLEVELAND RANGE. THIS DRAWING IS NOT TO BE COPIED OR USED WITHOUT THE APPROVAL OF CLEVELAND RANGE.	COMPARTMENT STEAM		±         .030         1/2 = 1           ANGULAR         TITLE         ST           ±         1*         ST           CK         02-14-94	EAM INLET ASSY, LOWER COMPT. EAMCRAFT IO. GAS, PRESSURE

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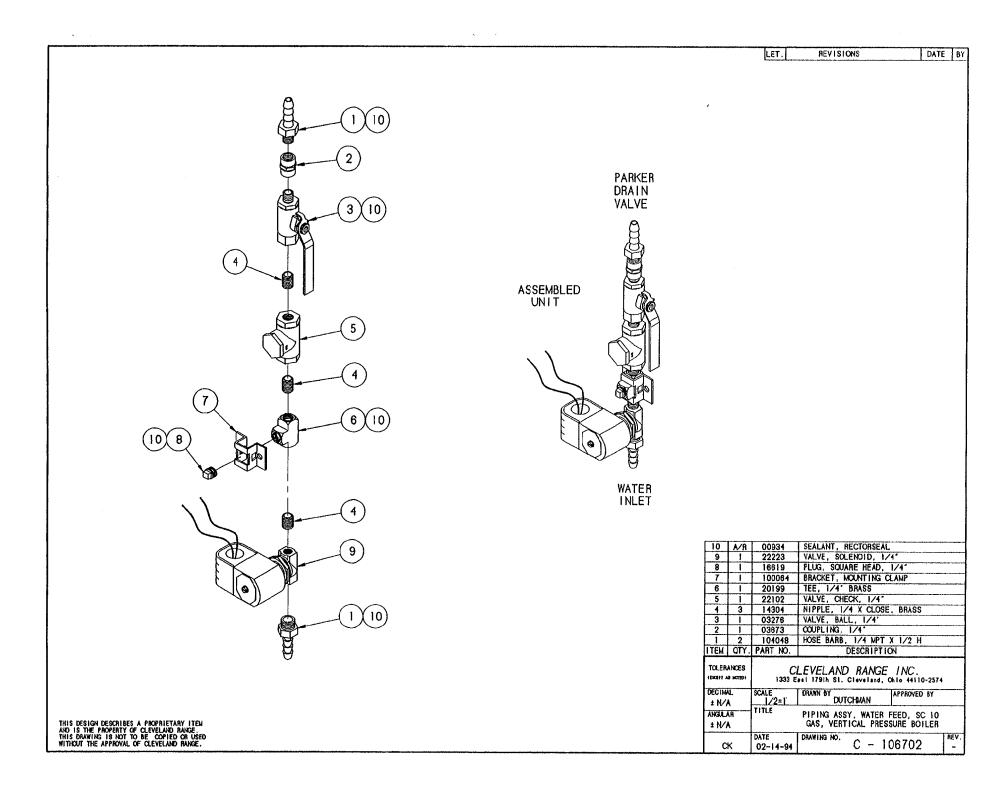
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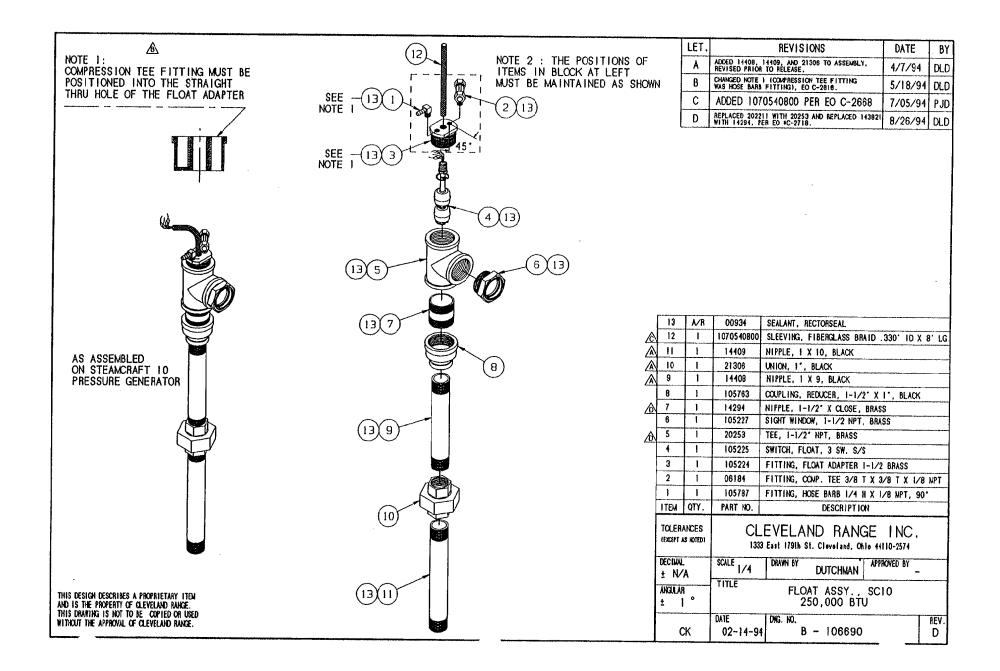
		_ET.	REVISIONS	DATE BY
TYPICAL APPLICATION	6 1 5 1 4 1 3 1 2 1 1 1 1 TEM QTY	104009 104082 104232 104081 05236 104048 PART NO.	FITTING, ASSY, STE GASKET, STEAM IN, WASHER, FLAT S/S NUT, JAM 5/8-18, ELBOW, 1/4" X 90° FITTING, HOSE 1/2 H DESCRIPTION	AM SUPPLY · IECTOR BRASS , BRASS X 1/4 MPT
THIS DESIGN DESCRIBES A PROPRIETARY ITEM AND IS THE PROPERTY OF CLEVELAND RANGE.	TOLERANCES (EXCEPT AS NOTED) DECIMAL ± .030 ANGULAR ± 1°	1333 East 17 SCALE 1/2" TITLE SI STE/	PRAY NOZZLE ASSEMBL AMCRAFT 3.1, 5.1 AN	44110-2574 VED BY THOMPSON
THIS DRAWING IS NOT TO BE COPIED OR USED WITHOUT THE APPROVAL OF CLEVELAND RANGE.	СК	DATE 02-12-93	drawing no. A - 10623	801 –

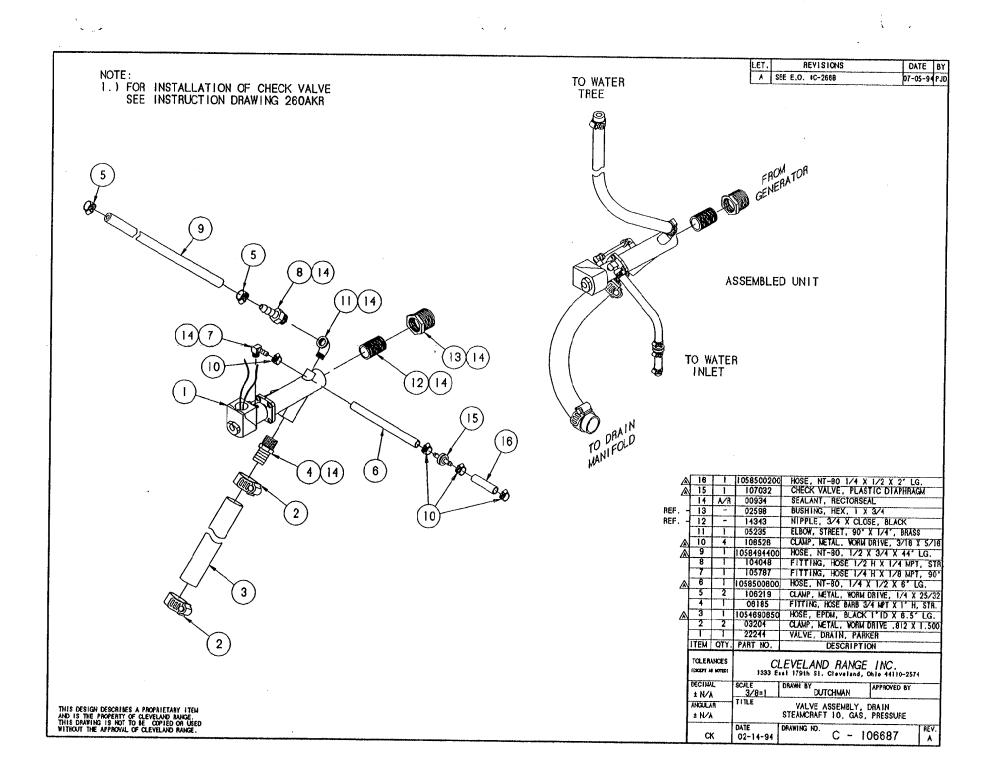


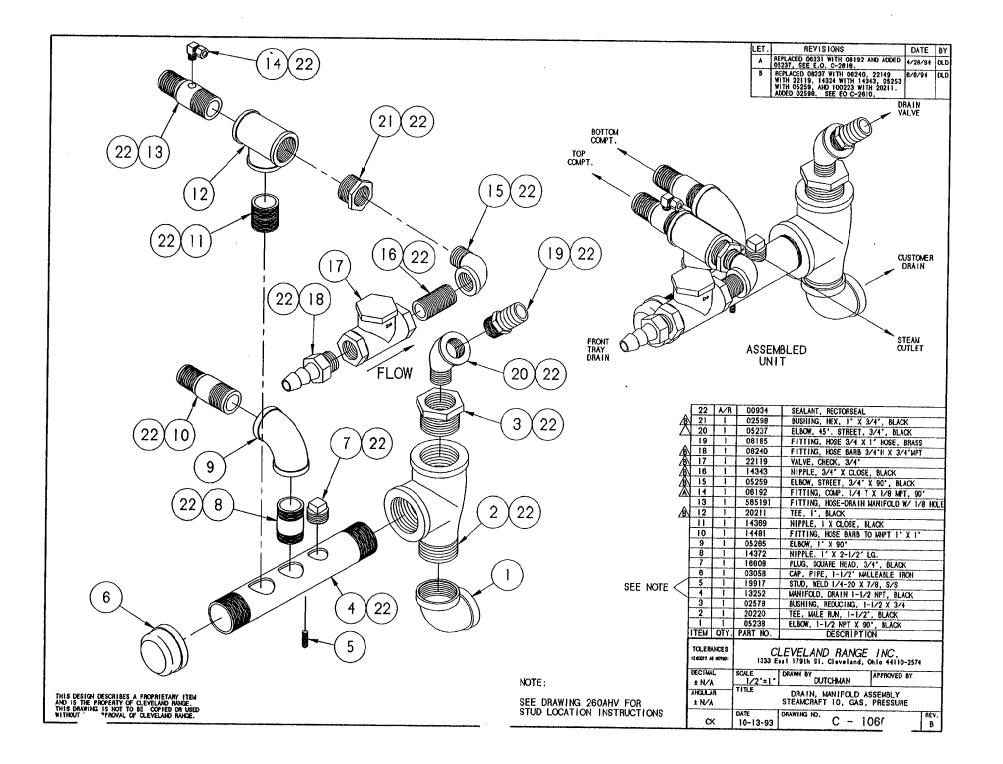
	L	ET. REVISIONS	DATE	E B
		A P/N 105786 MOVED TO SOLENOID IN PICTORI PER EO #C-2304	AL	.92 P
		B NEW VALVE REPLACING P/N (PICTORIAL ONLY) PER E.C	22218 01-28-93 0.*C-2221 RI	13 P.J
	6 A/R 5 6 4 1 3 2 2 4 1 3 ITEM QTY.	104284 BRACKET, NOU 104381 FITTING, HOSE 105786 FITTING, HOSE 22218 VALVE, SOLENC	TORSEAL D CUTTING, #8-32 x NTING, SOLENOID E BARB, 1/4 H x 1/4, E BARB, 1/4 H x 1/4, OID, 1/4", N.C., 120 SCR I PT I ON	1, S1 1, 9(
		CLEVELAND R 1333 East 179th St. Cleve	ANGE INC. land, Ohio 11110-25	2574
THIS DESIGN DESCRIBES A PROPRIETARY ITEM AND IS THE PROPERTY OF CLEVELAND RANGE.	± N/A	1/2=1 S. MILEW	APPROVED BY SKI LY, WATER INLET 10, ELECTRIC	T
THIS DRAWING IS NOT TO BE COPIED OR USED WITHOUT THE APPROVAL OF CLEVELAND RANGE.	1	DATE DRAWING NO.	RE	REV. B

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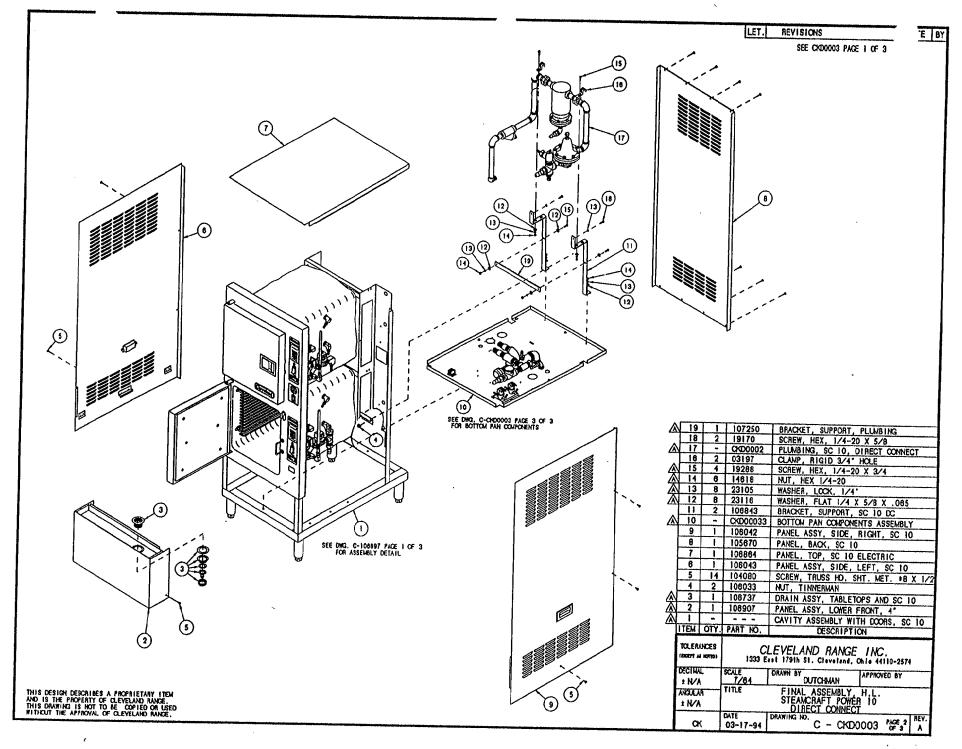


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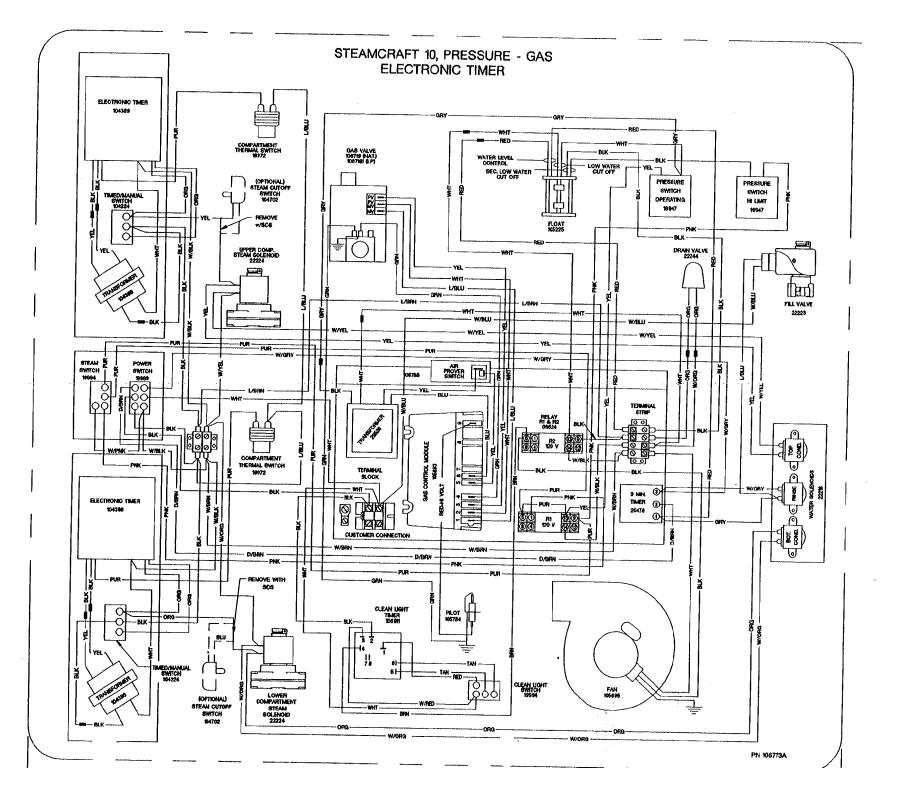
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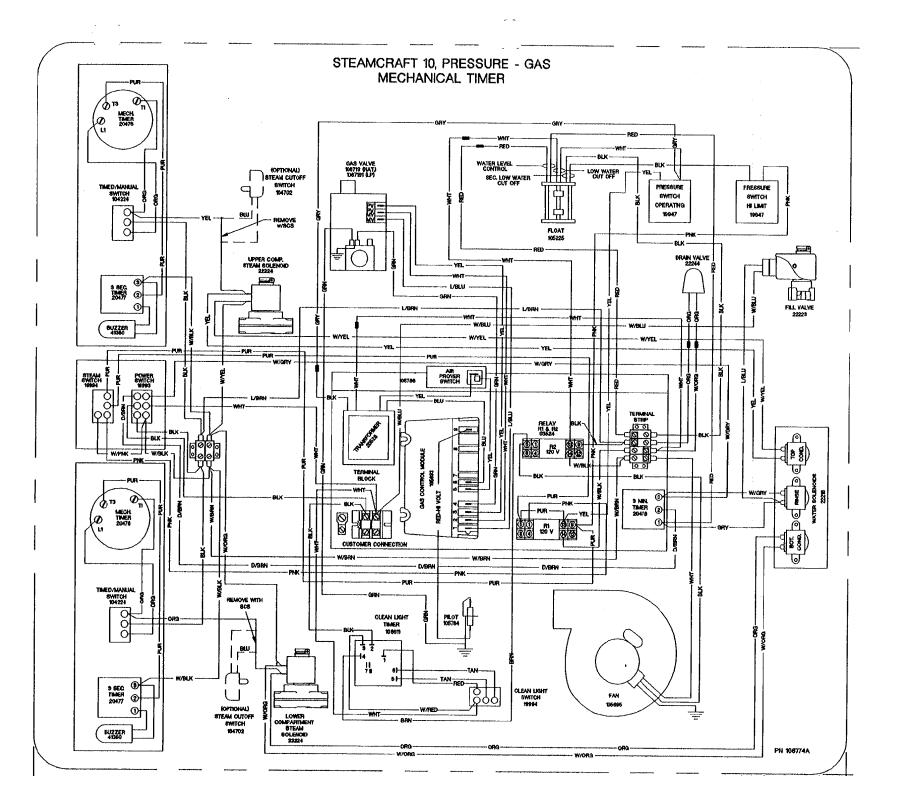
	NOTE: REMOVE AND DISCARD PLASTIC TAIL PIECE: REPLACE WITH ITEM 2	LET		REVISIONS	DATE	BY
	2					
	SEE -	2 1	106736	TAIL PIECE, DRAIN		
		1 1	105280	DRAIN. FITTING HOSE ADA	PTER	
		I TEM OT	Y. PART N	0 DESCRIPTI	ON	
			(0	CLEVELAND RANG		
		DECIMAL <u> </u> N/A	SCALE 1/3	2" DRAWN BY ATHERTON	APPROVED BY	
	THIS DESIGN DESCRIBES A PROPRIETARY ITEM AND IS THE PROPERTY OF CLEVELAND RANGE. THIS DRAWING IS NOT TO BE COPIED OR USED	ANGULAR ± N/A	TITLE	DRAIN ASSEMBLY TABLETOPS AND STEAMO	CRAFT 10	
Ľ	WITHOUT THE APPROVAL OF CLEVELAND RANGE.	СК	DATE 01-06	DRAWING NO. -92 A - 106737		REV.

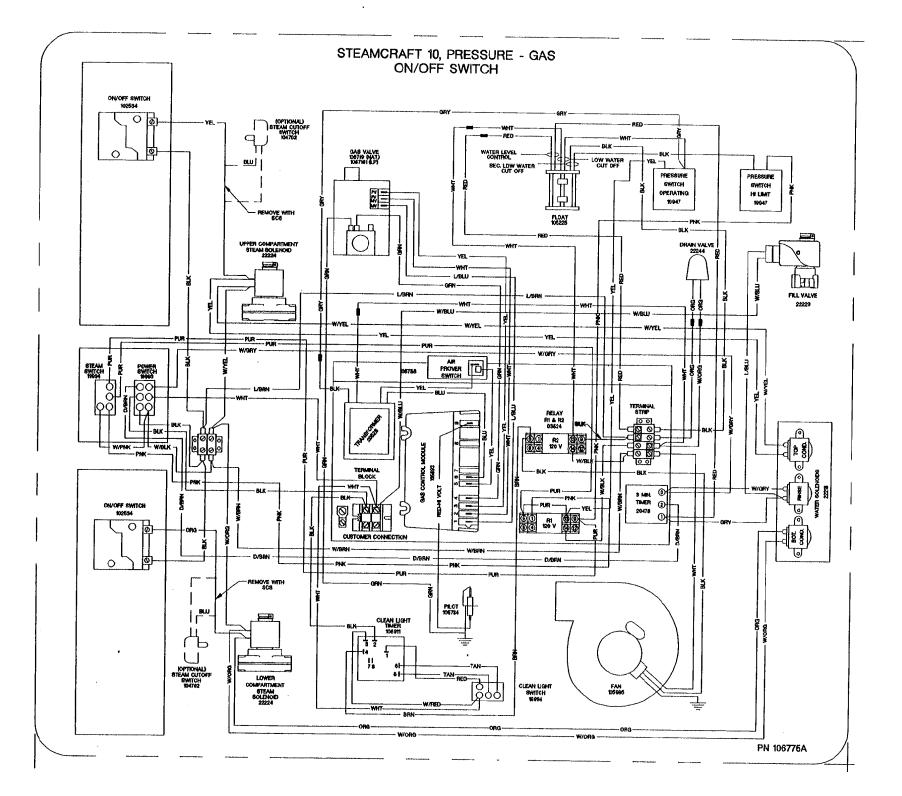


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### CLEVELAND RANGE SEQUENCE OF OPERATIONS 24CGP10 Mechanical Timer

- 1. To turn the unit on, depress the red on/off rocker switch.
  - 115 VAC is sent to normally open blowdown valve closing it.
  - 115 VAC is sent to the Timed/Manual switches for the cabinets.
  - 115 VAC is sent to L1 and L2 of the water level board.
- 2. With the water level board energized and no water in the boiler
  - 115 VAC is sent from the IND terminal to the low water indicator light on the console.
  - 115 VAC is sent from the WF terminal to the fill solenoid after a 5-second delay.
  - The fill solenoid opens and the boiler fills.
  - The water fills to the secondary low water cutoff probe in the boiler, shorting it to ground
    - 115 VAC is removed from the IND terminal and the low water indicator light is de-energized.
    - 115 VAC is sent from the HTR terminal through the normally closed contact of the high-pressure switch to the amber reset switch,
    - 115 VAC is sent through the normally closed R1 contacts to energize the amber light.
      - If the low water cut off probe is not grounded for 20 seconds, 115 VAC is removed from HTR and sent back to IND energizing the low water light.
- 3. When the momentary amber switch is depressed 115 VAC is sent to the R1 relay closing it.
  - The normally closed R1 contacts open de-energizing the amber light.
  - The relay latches through the normally closed contacts of R1
    - If either the high-pressure switch (set at 15 PSI) or the low probe circuit on the water level board opens, then the latch circuit opens.
    - When the water level or pressure returns to a safe condition the amber light will energize and the process may begin again.
- 4. The R1 relay contacts close sending 115 VAC through the normally closed operating pressure switch to the 24 VAC transformer.
  - 24VAC is sent through the low water cutoff float switch to the R2 relay coil.
    - The normally open R2 contacts close and send 115 VAC to the fan.
    - The fan turns and the air prover switch is closed.
    - 24 VAC is sent through the air prover switch to the ignition module.
      - With 24 VAC to the ignition module 24VAC is sent to the pilot coil on the gas valve.
        - A spark is generated at the igniter.
        - The pilot valve is energized and opens.
        - Gas is sent to the pilot burner.
        - The gas is ignited and the flame rectifies the AC current.

- When the ignition module reads 1.0 micro amps DC current through the ground wire the coil to the main gas valve is energized
- The pilot flame lights the main burner.
- If the module does not read 1.0 micro amps DC in 90 seconds it will shut down the main burner and make one more try before locking out.
- 5. The water in the boiler is heated to steam.
  - As steam is generated and pressure builds the air is pushed out through the steamtrap on the lower steam manifold.
  - Steam goes through the steam trap heating it to 192 degrees closing the steam trap.
- 6. Pressure builds in the boiler to the set point of 8-10 PSI.
  - The operating pressure switch opens and the heat circuit is de-energized.
- 7. With the timed/manual switch in the timed position and time on the timer.
  - 115 VAC is sent to the steam solenoid and steam is sent to the cooking cabinet. There the steam is directed around the product.
  - 115 VAC is sent to the "Pause" or "Sure Cook" light.
  - 115 VAC is sent to the normally open contacts of the compartment thermostat.
    - The normally open contacts of the compartment thermostat close when the compartment temperature reaches 193 degrees
    - 115 VAC is sent to the timer motor and the timer begins to count down.
    - 115 VAC is sent to the condensate solenoid and cold water is sent to the condensate spray nozzle pulling the steam down the drain.
  - When the steam pressure drops below the operating set point the heat circuit is energized and the heat process begins again.
- 8. Water continues to fill the boiler until the operational water float is lifted and closes, shorting the HI terminal on the water level board to the C terminal.
  - When the HI terminal is shorted to the C terminal the WF terminal on the water level board is de-energized.
  - If the water level drops below the operational water float switch for more than 5 seconds the WF terminal is energized and the water fill circuit begins again.
- 9. When the mechanical timer counts down:
  - 115 VAC is removed from the condensate circuit.
  - 115 VAC is removed from the steam solenoid.
  - 115 VAC is sent to the 3-second timer
    - 115 VAC is sent from the 3-second timer to the buzzer for 3 seconds.

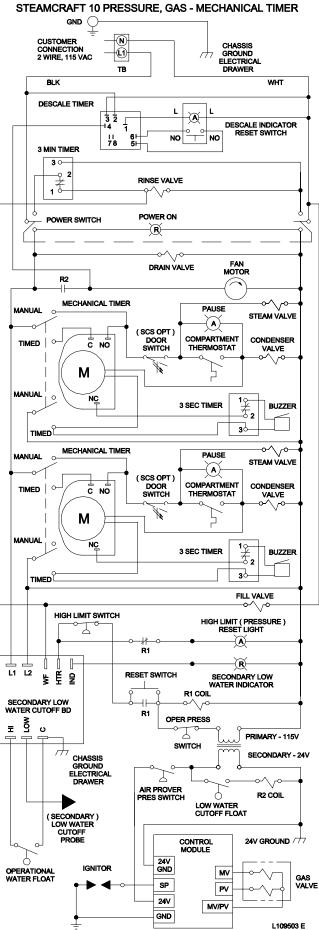
10. With the timed/manual switch in the Manual position

- 115 VAC is sent to the steam solenoid and steam is sent to the cooking cabinet. There the steam is directed around the product.
- 115 VAC is sent to the "Pause" or "Sure Cook" light.
- 115 VAC is sent to the normally open contacts of the compartment thermostat.
  - The normally open contacts of the compartment thermostat close when the compartment temperature reaches 193 degrees

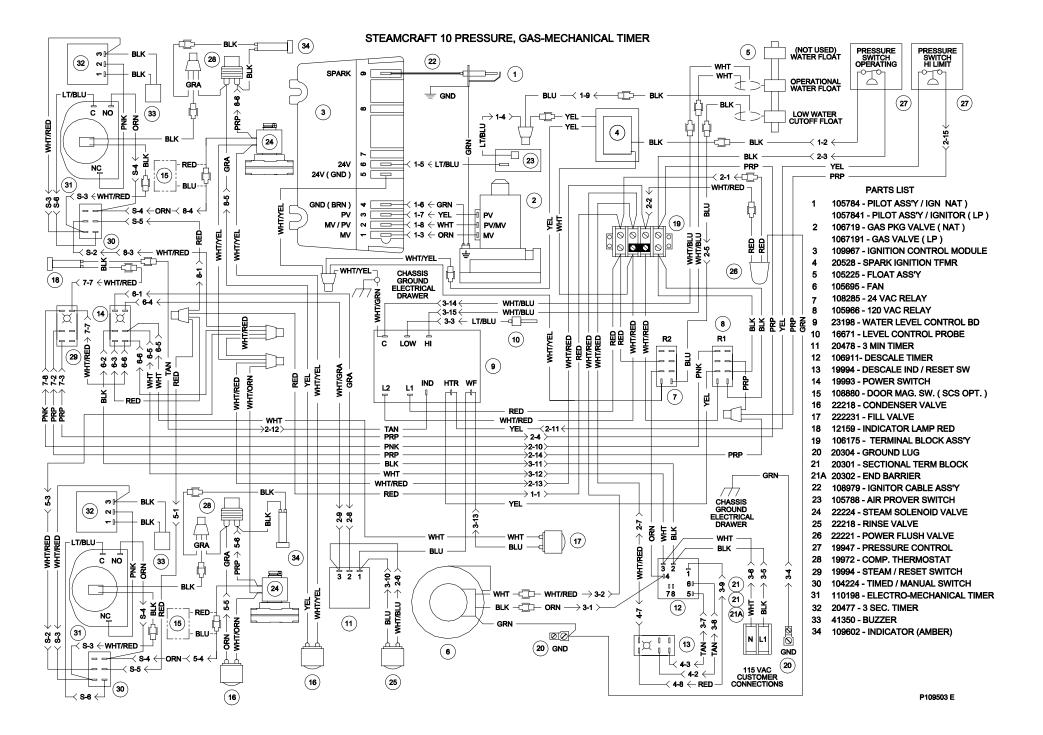
- 115 VAC is sent to the condensate solenoid and cold water is sent to the condensate spray nozzle pulling the steam down the drain.
- When the steam pressure drops below the operating set point the heat circuit is energized and the heat process begins again.

11. The unit is turned off by depressing the red rocker switch.

- 115 VAC is removed from the timing and heat circuits.
- 115 VAC is removed from the normally open blowdown valve allowing the unit to drain.
- 115 VAC is sent to the 3-minute timer.
  - The three-minute timer will energize the fill and rinse solenoids for 3 minutes while the steamer drains assisting and cooling the blowdown.







### CLEVELAND RANGE SEQUENCE OF OPERATIONS 24 CGP 10 Electronic Timer

- 1. To turn the unit on, depress the red on/off rocker switch.
  - 115 VAC is sent to normally open blowdown valve closing it.
  - 115 VAC is sent to the 24 VAC transformer to the timer.
    - 24 VAC is sent to the timer.
  - 115 VAC is sent to the Timed/Manual switches for the cabinets.
  - 115 VAC is sent to L1 and L2 of the water level board.
- 2. With the water level board energized and no water in the boiler
  - 115 VAC is sent from the IND terminal to the low water indicator light on the console.
  - 115 VAC is sent from the WF terminal to the fill solenoid after a 5-second delay.
  - The fill solenoid opens and the boiler fills.
  - The water fills to the secondary low water cutoff probe in the boiler, shorting it to ground
    - 115 VAC is removed from the IND terminal and the low water indicator light is de-energized.
    - 115 VAC is sent from the HTR terminal through the normally closed contact of the high-pressure switch to the amber reset switch,
    - 115 VAC is sent through the normally closed R1 contacts to energize the amber light.
      - If the low water cut off probe is not grounded for 20 seconds, 115 VAC is removed from HTR and sent back to IND energizing the low water light.
- 3. When the momentary amber switch is depressed 115 VAC is sent to the R1 relay closing it.
  - The normally closed R1 contacts open de-energizing the amber light.
  - The relay latches through the normally closed contacts of R1
    - If either the high-pressure switch (set at 15 PSI) or the low probe circuit on the water level board opens, then the latch circuit opens.
    - When the water level or pressure returns to a safe condition the amber light will energize and the process may begin again.
- 4. The R1 relay contacts close sending 115 VAC through the normally closed operating pressure switch to the 24 VAC transformer.
  - 24VAC is sent through the low water cutoff float switch to the R2 relay coil.
    - The normally open R2 contacts close and send 115 VAC to the fan.
    - The fan turns and the air prover switch is closed.
    - 24 VAC is sent through the air prover switch to the ignition module.
      - With 24 VAC to the ignition module 24VAC is sent to the pilot coil on the gas valve.
        - A spark is generated at the igniter.
        - The pilot valve is energized and opens.

- Gas is sent to the pilot burner.
- The gas is ignited and the flame rectifies the AC current.
- When the ignition module reads 1.0 micro amps DC current through the ground wire the coil to the main gas valve is energized
- The pilot flame lights the main burner.
- If the module does not read 1.0 micro amps DC in 90 seconds it will shut down the main burner and make one more try before locking out.
- 5. The water in the boiler is heated to steam.
  - As steam is generated and pressure builds the air is pushed out through the steamtrap on the lower steam manifold.
  - Steam goes through the steam trap heating it to 192 degrees closing the steam trap.
- 6. Pressure builds in the boiler to the set point of 8-10 PSI.
  - The operating pressure switch opens and the heat circuit is de-energized.
- 7. With the timed/manual switch in the timed position (with time on the timer) or in the manual position:
  - The timer display alternates between "PAUS" and the time set.
  - 115 VAC is sent to the steam solenoid and steam is sent to the cooking cabinet. There the steam is directed around the product and pulled down the drain by the condensate spray.
  - When the cooking compartment reaches 193 degrees internally the thermal switch closes and the timer begins to count down.
    - 115 VAC is sent to the condensate solenoid. The condensate solenoid sends cold water to the condensate spray nozzle pulling the steam down the drain.
  - When the pressure drops below the set point the heat circuit is energized and the heat process begins again.
- 8. Water continues to fill until the operational water float is lifted and closes, shorting the HI terminal on the water level board to the C terminal.
  - When the HI terminal is shorted to the C terminal the WF terminal on the water level board is de-energized.
  - If the water level drops below the operational water float switch for more than 5 seconds the WF terminal is energized and the water fill circuit begins again.
- 9. When the electronic timer counts down:
  - 115 VAC is removed from the condensate circuit.
  - 115 VAC is removed from the steam solenoid

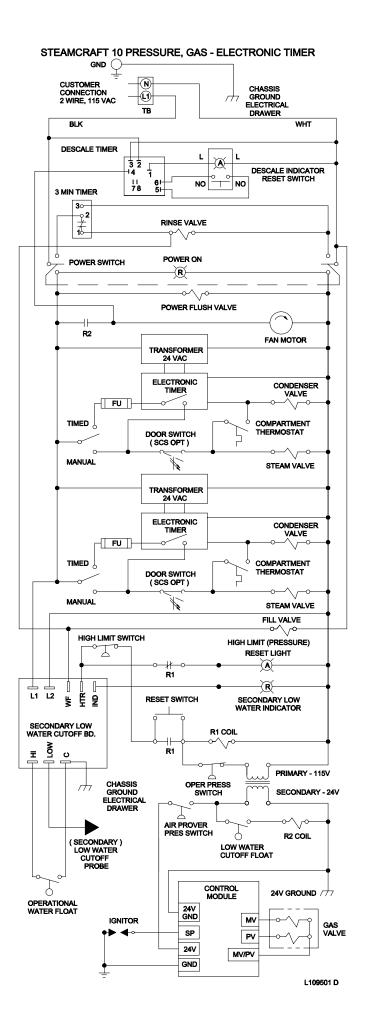
10. With the timed/manual switch in the manual position

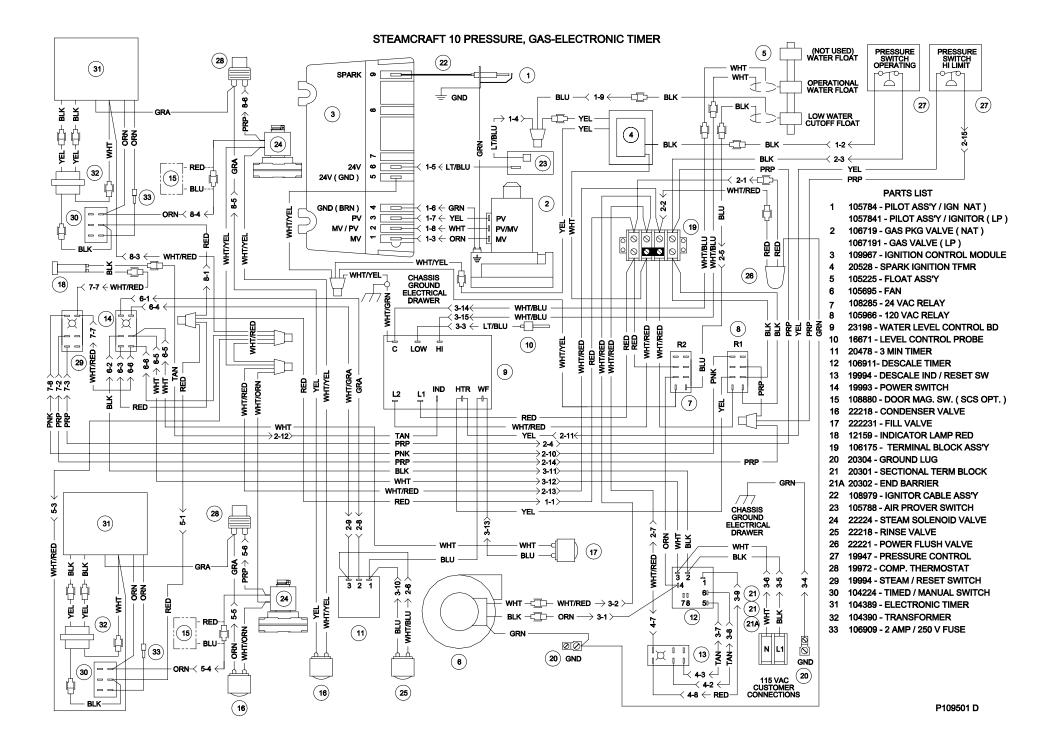
- 115 VAC is sent to the steam solenoid and steam is sent to the cooking cabinet and around the product.
- 115 VAC is sent to the normally open contacts of the compartment thermostat.

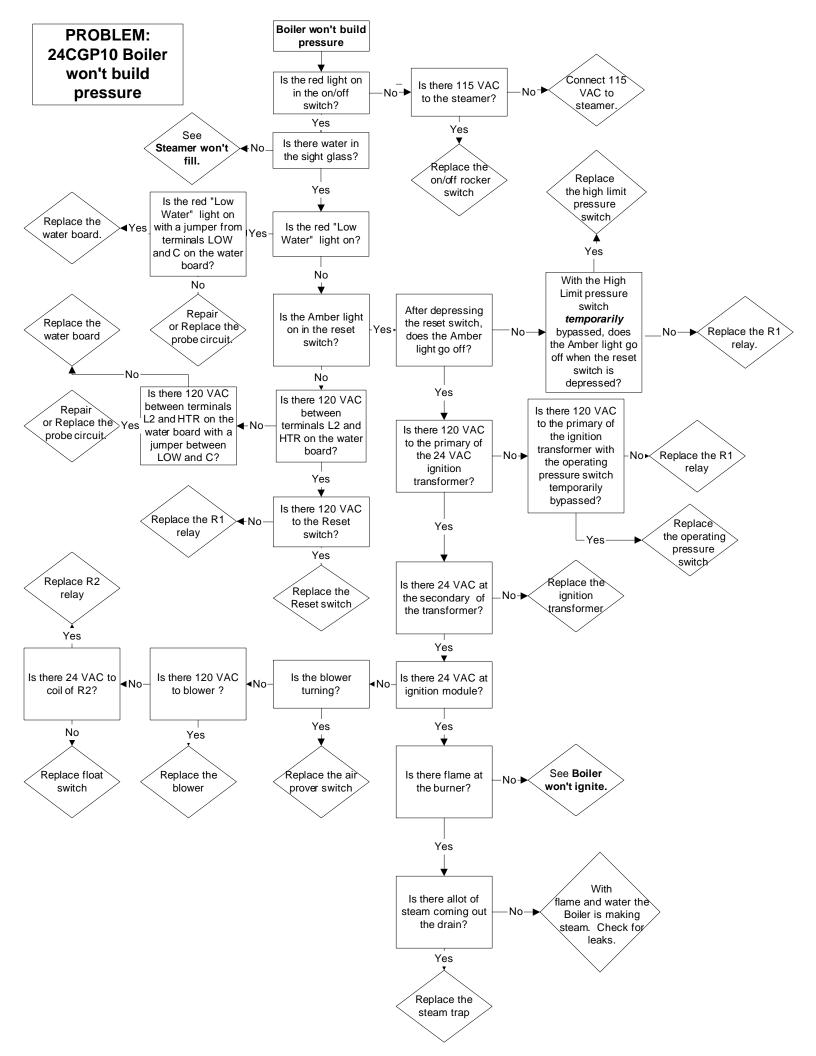
- The normally open contacts of the compartment thermostat close when the compartment reaches 193 degrees.
- 115 VAC is sent to the condensate solenoid and cold water is sent to the condensate spray nozzle pulling the steam down the drain.

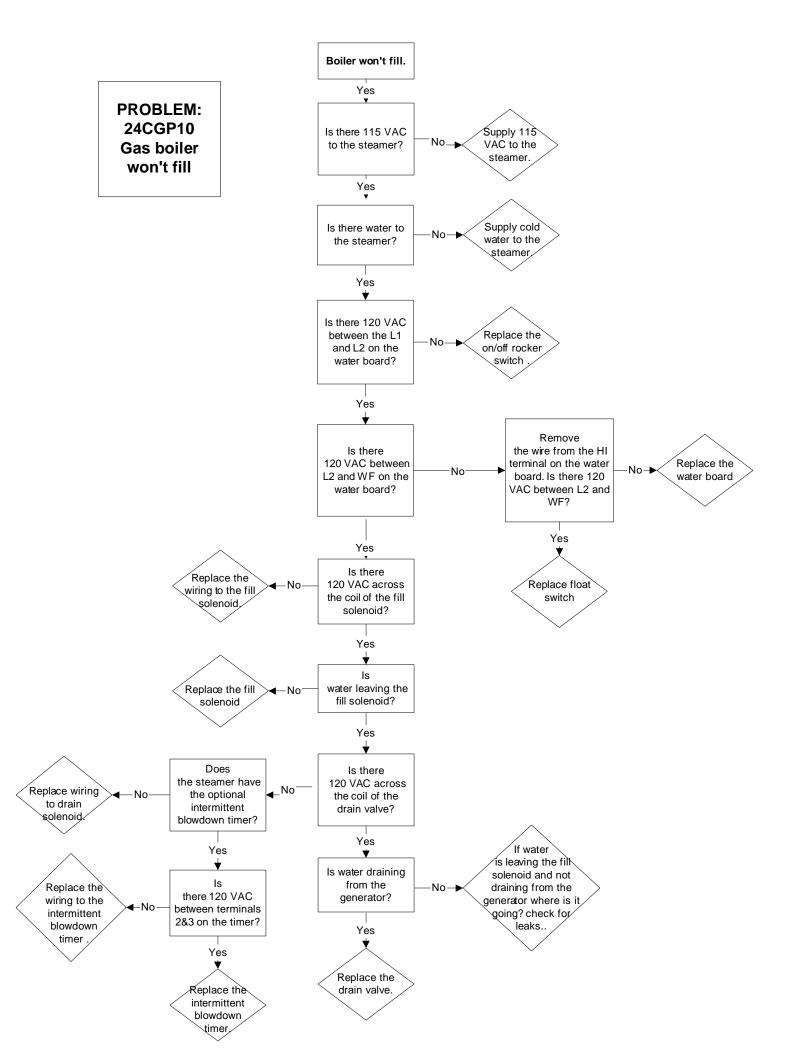
11. The unit is turned off by depressing the red rocker switch.

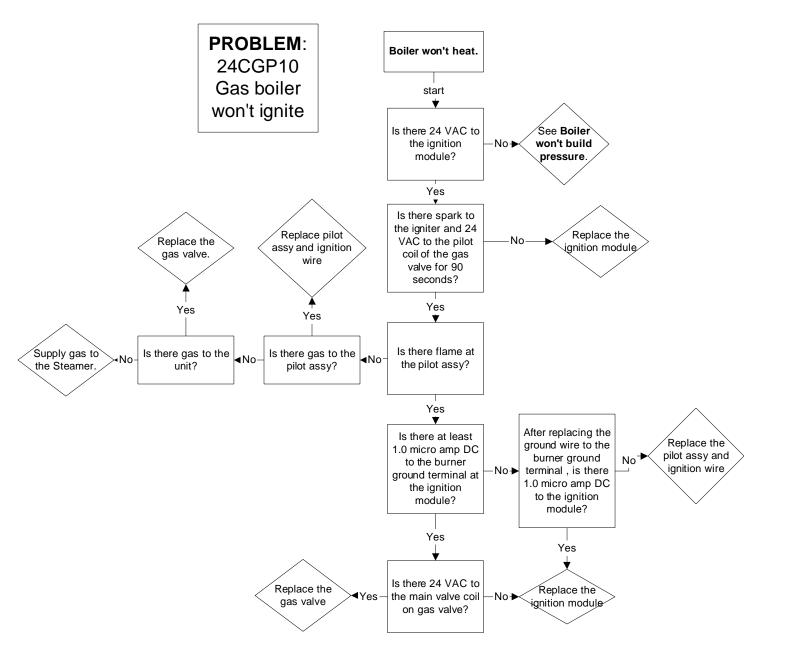
- 115 VAC is removed from the timing and heat circuits.
- 115 VAC is removed from the normally open blowdown valve allowing the unit to drain.
- 115 VAC is sent to the 3-minute timer.
  - The three-minute timer will energize the fill and rinse solenoids for 3 minutes while the steamer drains assisting and cooling the blowdown.



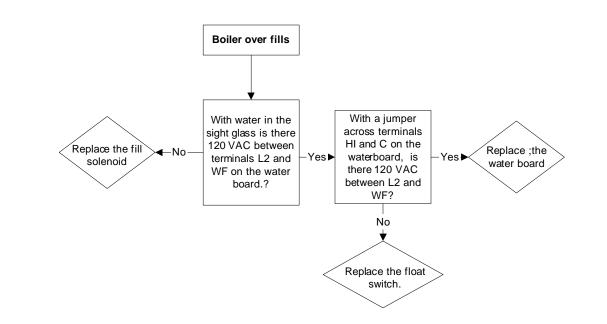


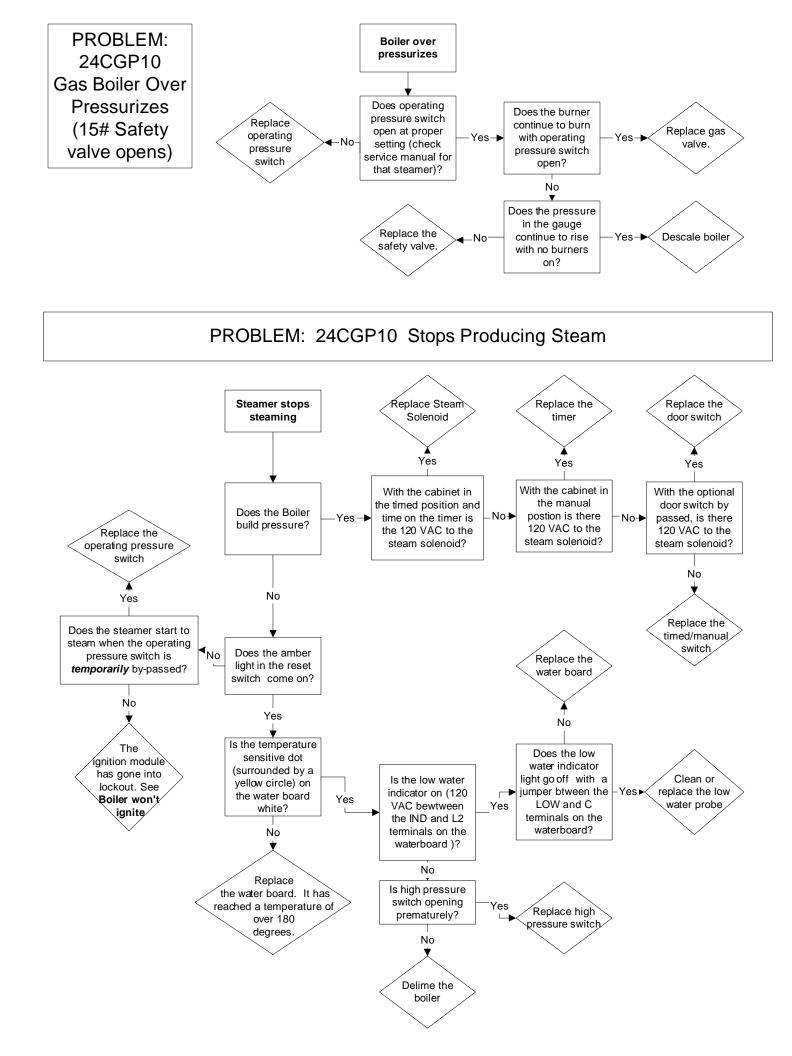


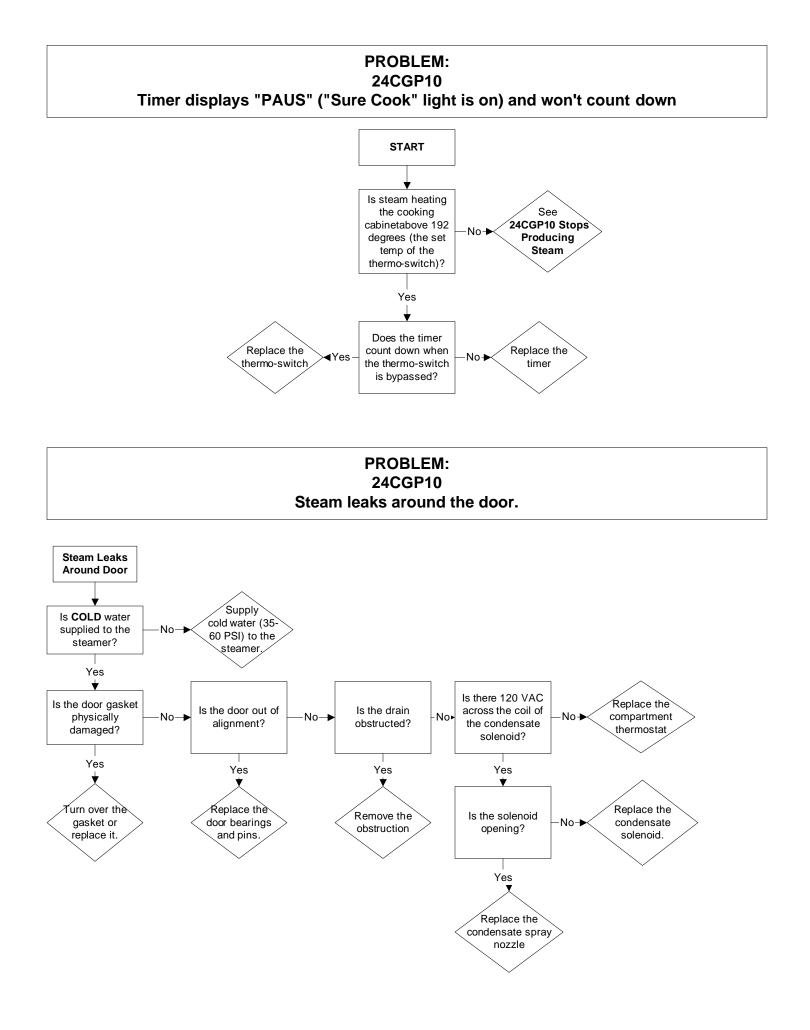




### PROBLEM: 24CGP10 Gas Boiler Overfills







## **DESCALING INSTRUCTIONS**

Steamcraft Power 10 uses Kit P/N: 107142

### PRELIMINARY PROCEDURE

- 1) Start with the unit turned off & completely cool. The boiler will drain for approximately 3 minutes.
- 2) Remove the lower front panel. There are 2 screws holding this panel in place.

GAS BOILER, ORIGINAL P10 (DETAIL "A")

- 1) Check that both ball valves are closed prior to removing the plug on both the inlet (left side) & outlet (right side) ports.
- 2) Attach the 3-inch nipples with attached unions to the inlet & outlet ports.
- 3) Install the 1/2 inch hose with the attached union to the inlet port.
- 4) Install the the 3/4 hose with the attached union to the outlet port.
- 5) Open the sliding view port on the right side panel of the unit. This will expose the float.
- 6) Fill the 5 gallon bucket with 2 gallons of descaler & 3 gallons of water.
- 7) Open the inlet & outlet ball valves attached to the unit. Turn the unit on.
- 8) Turn on the descaler pump & open the inlet valve to the boiler. Let the boiler fill with descaler just above the top of the float. This can be determined by watching the level rise in the float.

1333 East 179<sup>th</sup> Street Cleveland, Ohio 44110

Phone: (216) 481- 4900 Fax: (216) 481- 3782



Part No. 260ALQ - E 4/03

9) As the descaler level in the bucket drops, add water so the pump remains submerged.

Note: Liquid level in the descaler bucket should not go below the pump.

- 10) When the descaler reaches the required level, open the exit valve. make sure the exit line is the bucket. The required level can be maintained by controlling the flow with the ball valves.
- 11) Let the pump operate for 1 hour.
- 12) After 1 hour, turn the pump off & close the inlet ball valve. Turn the main switch to off and let drain.
- 13) Flush the boiler with water when all of the descaler has drained.
- 14) Turn the unit on to fill with water.
  -Fill the 5-gallon bucket with water.
  -When the water level reaches the middle of the sight glass, turn on the pump & open the inlet valve.
  -Make sure the outlet valve is closed.
- 15) Let the water level rise above the top of the float.
- 16) Open the outlet valve making sure the hose from the outlet valve is in the drain and not the bucket.
- 17) Continue flushing with water for 5 minutes. Note: Additional water may have to be added to the bucket.
- 18) When flushing is complete, close the 2 ball valves attached to the unit and turn the unit off.
- 19) Replace the plugs in the ball valves & re-install the lower panel.
- 20) The unit is now ready for use.

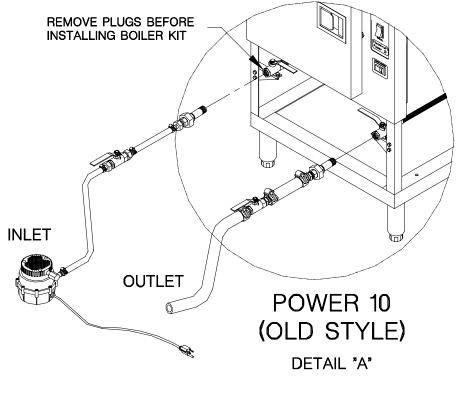
GAS BOILER, CURRENT P10 (DETAIL "B")

- 1) Remove the plugs.
- 2) Attach the 3-inch nipples with attached unions to the inlet & outlet ports.
- 3) Install the 1/2 inch hose with the attached union to the inlet port.
- 4) Install the the 3/4 hose with the attached union to the outlet port.
- 5) Open the sliding view port on the right side panel of the unit. This will expose the float.
- 6) Fill the 5 gallon bucket with descaler.
- 7) Turn the unit on.

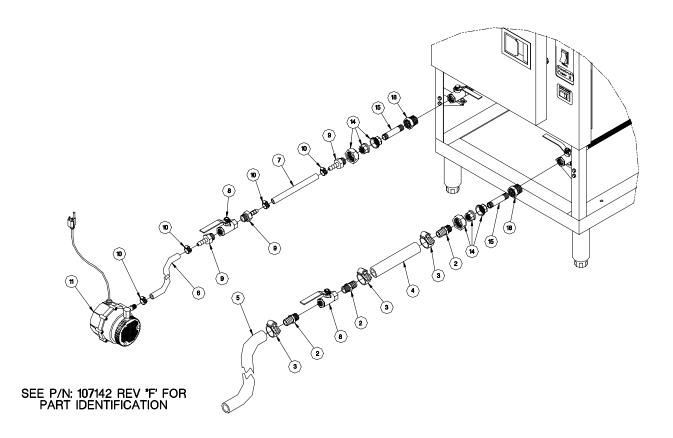
- 8) Turn on the descaler pump. Let the boiler fill with descaler just above the top of the float. This can be determined by watching the level rise in the float.
- 9) As the descaler level in the bucket drops, add water so the pump remains submerged.

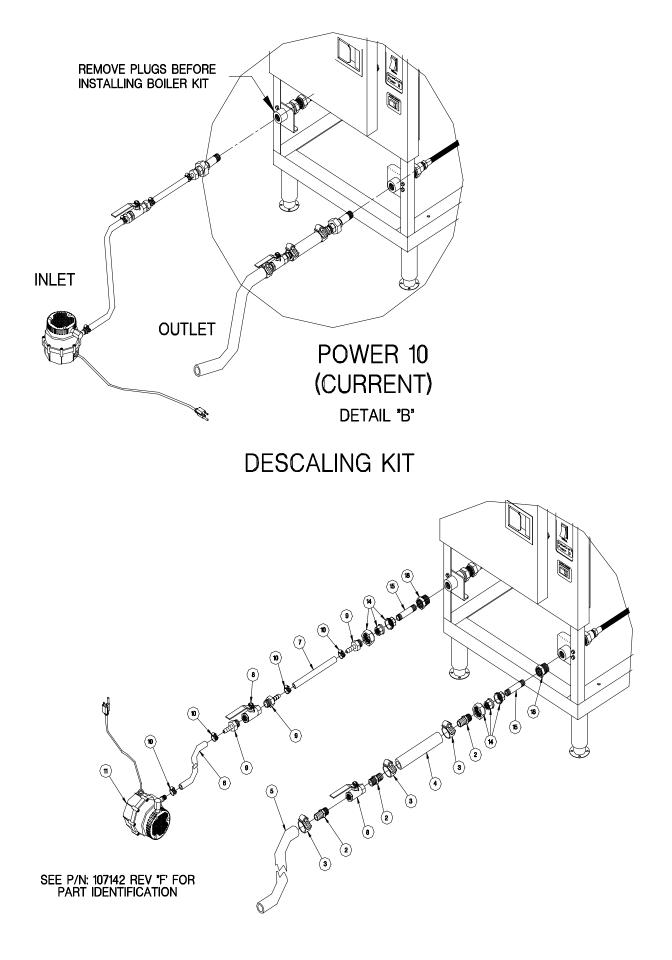
Note: liquid level in the descaler bucket should not go below the pump.

- 10) When the descaler reaches the required level, make sure the exit line is in the bucket with the pump. The required level can be maintained by controlling the flow with the ball valves.
- 11) Let the pump run for 1 hour.
- 12) After 1 hour, turn the pump off. Also, turn the main switch to off and let drain.
- 13) Flush the boiler with water when all of the descaler has drained.
- 14) Turn the unit on to fill with water.
  -Fill the 5-gallon bucket with water.
  -When the water level reaches the middle of the sight glass, turn on the pump & open the inlet valve.
  -Make sure the outlet valve is closed.
- 15) Let the water level rise above the top of the float.
- 16) Open the outlet valve making sure the hose from the outlet valve is in the drain and not the bucket.
- 17) Continue flushing with water for 5 minutes. Note: Additional water may have to be added to the bucket.
- 18) When flushing is complete, turn the unit off.
- 19) Replace the plugs & re-install the lower panel.
- 20) The unit is now ready for use.









# STEAMCRAFT 10 DESCALING KIT PART LIST (P/N: 107142)

	TEM	PART #	DESCRIPTION	QTY
	1	437481	Plate Ass'y, Handhole w/Descaler Port	1
	2	06241	Fitting, Hose Barb, 3/4 H x 1/2 MPT	3
	3	03204	Clamp, Hose, Worm Drive	3
	4	1088190600	3/4 Hose For Descaling Syst, 6.000" Lg	1
	5	1088193600	3/4 Hose For Descaling Syst, 36.000" Lg	1
	6	1088203600	1/2 Hose For Descaling Syst, 36.000" Lg	1
	7	1088200600	1/2 Hose For Descaling Syst, 6.000" Lg	1
	8	22212	Valve, Ball, 1/2 Female	2
	9	06237	Fitting, Hose, Barb, 1/2H X 1/2 MPT	3
	10	106219	Clamp, Hose Worm Drive	4
	11	107131	Pump, Submersible, Boiler Descaler Kit	1
	12	07106	Gasket, Handhole	1
	13	107199	Bucket W/Lid, 5 Gallon	1
	14	23103	Union, 0.500, Brass	2
	15	14331	Nipple, 0.500 NPT x 2.500 Lg, Sch 40	2
	16	108815	Label, Descaling System	1
	17	108845	Envelope, Vinyl, 10" x 13", Short Side Opening	g 1
	18	02566	Bushing, Reducing, $3/4 \times 1/2$	2
	19	41943	Plate Ass'y, Mounting, Weldment	1
	20	260 ALK	Instructions, Descaling Installation	1
	21	260 ALP	Instructions, Piping Conversion	1