

## **INSTALLATION INSTRUCTIONS**

**Oven Location.** The oven must be located on a level non-combustible surface with adequate space for maintenance. Please refer to the Installation Drawing. At least 3 feet of clear space must be provided for the top relief door(s). The oven must not be located closer than 12 inches from any combustible surface, materials or equipment. The oven must be installed inside or otherwise protected from the elements. The water lines must be protected from freezing temperatures. The oven must not be installed within 20 feet of dip tanks, spray booths storage or mixing areas for flammable or corrosive materials or solvents which may be drawn into the oven burners and cause ignition or the formation of corrosive fumes.

The exhaust stack must be installed according to local codes. The discharge opening should be at least 3 feet above the top of the roof or any other wall or roof within 10 feet of the discharge. Careful planning can minimize the expense of purchasing additional stack. If the roof or any ceiling or wall through which the stack passes is combustible, special steel thimbles will be required. Contact Steelman if you have any questions.

**Moving Oven. A spreader bar must be used when lifting the oven with an overhead crane.**

It may also be moved using a fork lift or rollers. The main body of the oven must be supported at all times.

**Utilities.** The oven requires a reliable supply of clean water to control the processing rate. A 1/2" supply line should be adequate. The water pressure should be unaffected by other equipment, hoses or facilities. The oven has a pressure switch that requires 50 psi to start and will shut off if the pressure drops below 30 psi. The water pressure **must not** exceed 65 psi. A pressure reducer should be installed if line pressure exceeds 65 psi. The water requirements are listed on the Specification Sheet.

The electrical requirements are listed on the Specification Sheet. The oven should be on a dedicated circuit with a properly sized breaker.

**\*NOTICE\* Oven ground terminal (green wire) must be connected to the power company ground using 14 gauge stranded wire, to eliminate noise problems.**

The fuel gas requirements are listed on the Specification Sheet. The pipe size should be adequate to supply the required gas with a minimum pressure loss. Contact the factory if you are unsure of the correct pipe size. The gas pressure must be at least 8" W.C. at the required gas flow. If the supply pressure is more than 14" W.C. (1/2 PSI), a gas pressure regulator will be necessary. Before starting the oven, check all gas piping connections for leaks with a soap and water solution.

Gas pressure regulators and valves are provided with vent taps, these must be vented outside the building.

**Exhaust Stack Installation.** The exhaust stack must be installed correctly for safety and proper operation of the oven. If possible, the stack should be installed vertically without bends. Elbows are available for offsets if needed. **The oven must be installed with all of the stack supplied in order to have adequate draft.**

The stack is assembled as follows:

1. Place an insulated gasket in the bottom of a new stack section.
2. Slide the new section over the existing stack and attach with sheet metal screws.
3. Repeat this procedure until the last section is in place.
4. The roof flashing covers the opening in the roof and the storm collar prevents rain from entering the space between the stack and the flashing. Seal the storm collar with silicone sealant.
5. The rain cap attaches to the last section.

**Combustion Air.** The burners must have an adequate source of "free air" to operate. If the oven is installed in an "air tight" building or if there are exhaust fans that may cause negative pressure in the building, the oven will not operate properly. Additional make-up air or air ducts may be required. Contact Steelman for details.

### **INITIAL START-UP**

Before starting ovens with 3 phase motors, verify that both burner blower wheels are rotating in the proper direction. The top of the wheel should move toward the oven.

After the oven is connected to utilities and the exhaust stack is in place, it should be run through a complete cycle to verify that everything is operating properly. For this test, the cart should be in the oven without any parts or combustible materials loaded.

Start the oven by following the Operating Instructions in the following section. The burners may be difficult to light until the piping is full of gas so the "start" button may have to be depressed several times initially. On some units, the "reset" button on the red Burner Controller (Fireye) next to the Control Box may have to be reset several times until the burner lights. On some ovens there is a toggle switch located on the bottom of the gray box located near the Primary (top) Burner. If the Primary Burner fails to light, turn the switch off for 1 minute. The burner should light when the switch is turned on.

As the oven heats up, verify that the gas pressure gages agree with the gas pressure values recorded on the "Specification Sheet" in this manual. If not, adjust the supply pressure until the gages read correctly. The pressure readings should be done after the afterburner temperature reaches 1,000°F and all gages are showing pressure. **DO NOT OPERATE THE OVEN WITH INCORRECT GAS PRESSURE.**

Open the Back-up Water Spray Valve and verify that the water pressure stays above 30 PSI. If the water pressure drops below 30 psi, the water pressure lamp and the primary burner will turn off. If this occurs, the water pressure must be increased or a larger pipe must be installed before

operating the oven. The water pressure must not exceed 65 psi. High pressure lines will require a regulator.

Set the Soak Timer, located at the bottom of the control box, for 1 hour. The Soak Cycle Lamp should light between 1 1/4 and 1 1/2 hours after starting the oven. If the Soak Cycle starts in less than 1 1/4 hours or more than 1 1/2 hours, contact Steelman for instructions.

When the Soak Cycle starts, the Afterburner (top controller) should read 1,520°F to 1,530°F.

Put the “Normal/Temp. Sensitive” Switch in the “Temp. Sensitive” mode. After the Soak Cycle starts, activate the Water Spray Test Switch for 15 seconds. The oven will begin to control temperature by turning the primary water sprays on and off. After approximately 5 minutes, the water should stop and the Soak Cycle will start again. Allow the oven to run until it shuts off automatically.

If everything works as described above, the oven is ready to use. If you have any questions, contact the factory at (903) 984-3061.

## **OPERATING INSTRUCTIONS**

**Starting the Oven.** Start the oven as follows:

1. Open all manual gas valves.
2. Reset high/low gas pressure switch.
3. Turn power switch "on".
4. Always test water sprays before each run. This can be done by turning the power switch "on" which causes the sprays to be activated for 15 seconds or by activating the water spray test switch on the control box. Each nozzle must deliver a horizontal, fan-shaped spray over the top of the cart or baskets. If any nozzle fails to work properly it must be removed and cleaned or replaced.
5. Verify that the oven temperature controller is at the proper setting for the material being processed. Refer to the Temperature Setting section for recommendations. The controller regulates the maximum temperature in the oven which is at the top in the rear. The setpoint is changed by pressing the "UP" or "DOWN" arrow on the oven temperature controller. To change temperature faster, press the other arrow once (while keeping the initial arrow depressed) to count by tens or twice to count by hundreds.
6. Put the “Normal/Temp. Sensitive” Switch in the correct position. It should be in the “Normal” position unless you are processing materials such as aluminum or temperature sensitive parts such as electric motor stators.

7. Open the door(s) and verify that there is no combustible gas or smoke in the oven. If a combustible mixture is detected, **DO NOT START THE OVEN UNTIL IT HAS BEEN CLEARED AND THE SOURCE DETERMINED AND REPAIRED.**
8. With the door(s) open push the "start" button. The blowers will run for 1 minute to purge the chambers with fresh air.
9. When the purge is complete, the afterburner will light, then the primary burner will light. The primary burner cannot operate without the afterburner being "on". (On special EPA ovens once the afterburner lights the oven door must be shut. The afterburner must then heat up to 1525°F before the primary burner will light.)
10. Close and latch the door(s).
11. The oven will heat up to operating temperature and the primary burner will modulate to control temperature at setpoint. During the cycle the water sprays may come on to control the production rate at a safe level. This will be indicated by a lamp and the water spray seconds counter located at the top of the control box.
12. When the temperature at the bottom front of the oven reaches setpoint, the "soak cycle" will start. During this time, the last remaining combustible material will be removed. At the end of the Soak Cycle the oven will shut off automatically. If the water sprays activate during the Soak Cycle, the Soak Timer will reset. On ovens with a part temperature controller, the Soak Timer will stop, then restart without resetting.
13. Allow the oven to cool below 300 degrees F before opening the door(s). The primary water spray manual valve may be opened to cool the oven faster but don't leave it open. If the water spray is used for cooling or if the "Stop" switch was used, the oven should be re-heated to dry the inside.
14. After opening the door(s), raise the cart track rails, if so equipped. **ALWAYS CHECK THAT FOLDING TRACKS ARE LATCHED IN THE UPRIGHT POSITION BEFORE MOVING THE CART.**
15. **CAUTION !!!** The cart will remain hot for a long period of time. Use a steel hook or other means to pull it from the oven.

### **CONTROLLER SETTINGS**

**Temperature Setting.** Generally, the lowest setting that will produce "clean" parts will give the fastest cycle times. The oven is designed to run for 30 - 60 minutes (adjustable) after the last water spray and after the temperature is at setpoint in both the top and bottom of the oven. This is called the "Soak Cycle" and is indicated by a lamp on the control box. The Soak Timer located at the bottom of the control box may be adjusted as needed.

The oven temperature controller regulates the hottest location in the oven which is in the rear near the top. A second thermocouple is located in the coolest area which is in the front near the floor. The controls are factory adjusted so that the Soak Cycle will not start until the temperature difference between the hottest spot (top/rear) and the coolest spot (bottom/front) has reached a factory set value.

***Paint Line Fixtures.*** Steel paint hooks and racks can be safely cleaned with a 850 degree F setting. The setpoint can be raised to 950 degrees F if necessary.

***Extruder Screws & Dies.*** Plastics have a wide range of processing temperatures ranging from 850 degrees F to 1,000 degrees F. Contact Steelman Engineering Dept. for recommendations.

***Electric Motors.*** Electric motors that are to be rebuilt according to EASA standards should not exceed 775 degrees F. Maximum metal temperatures are typically 25 degrees F above oven temperature due to heat release from the motor, so 750 degrees F is a good setpoint. Cycle times for parts cleaned with this low setpoint will be longer than for higher settings and the Soak Cycle time may have to be increased. Try 5 hours initially and adjust up or down as necessary. Electric motors should be placed so that the top thermocouple can sense any exotherms (heat release) that may occur. If a small load is to be cleaned in a relatively large oven, position the load in the top rear near the top thermocouple. If a small load is to be cleaned, placing it near the top will reduce the cycle time. Part temperature monitors and controllers are also available.

***Part Temperature Control.*** Part temperature controls and/or indicators are available. Contact Steelman for details.

***Automobile Engines.*** Automobile engines can be safely cleaned at 850 degrees F.

***Aluminum.*** These parts should be cleaned at the lowest temperature that will remove the coating and not above 900°F. **Heat treated aluminum will most likely be damaged in the oven.** Do not pile or stack parts that have a heavy coating because the heat release from the coating may damage the parts above or next to them. Allow 12" between aluminum stators.

***Loading Parts.*** The hottest location in the oven is the top/rear and the coolest location is the bottom/front. If a load contains some temperature sensitive parts, they should be placed in the bottom of the oven.

Always allow space between and under parts for air and cooling spray circulation.

Parts containing chlorinated (PVC) or fluorinated (Teflon) materials may seriously corrode the oven. If these materials are processed, the oven should be run again for several hours to remove remaining liquid or vapor.

Heavily coated parts should be separated by 1" minimum.

**DO NOT ALLOW ANYTHING TO BLOCK THE FREE FLOW OF COOLING WATER DOWN THROUGH THE OVEN.**

**DO NOT PLACE ANY SEALED CONTAINERS, CYLINDERS, PIPE, TUBING OR OTHER CLOSED OBJECTS IN THIS OVEN THAT MAY EXPLODE WHEN HEATED AND DAMAGE THE OVEN OR CAUSE SERIOUS INJURY.**

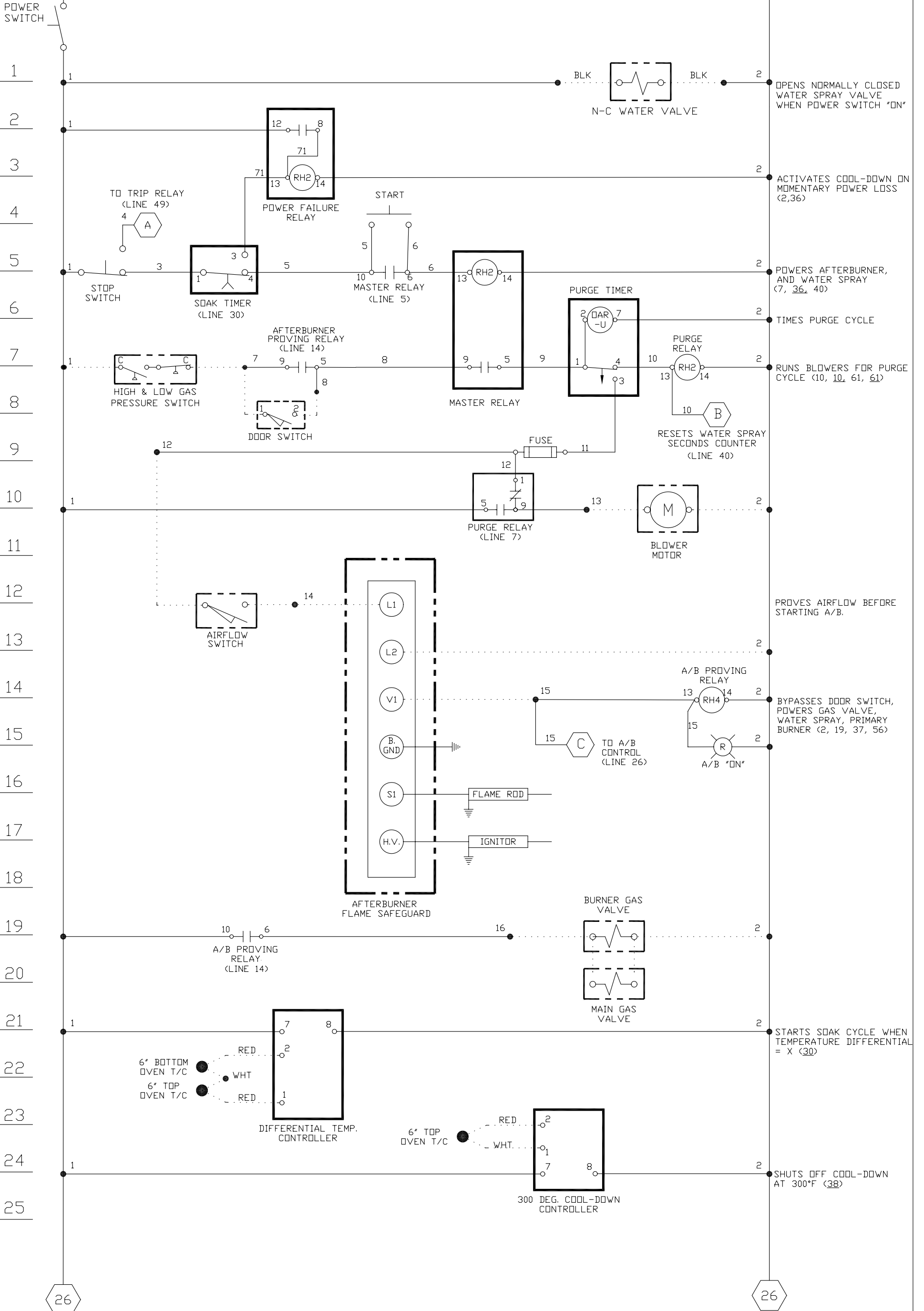
**DO NOT PROCESS MAGNESIUM PARTS.**

## MAINTENANCE

1. Always test the water sprays before EVERY cycle. This is done by activating the water spray test switch on the control box. All nozzles must have a horizontal, fan-shaped spray that sprays over the cart or baskets. If any nozzle fails to work properly, it must be removed and cleaned or replaced. Once a month the complete system should be tested. Activate the water spray test switch and leave it on until you have observed that the back-up spray and the trip system operate properly. When the back-up spray comes on, close the water supply valve to prevent excessive water from spraying into the oven. After the test open the water supply valve and reset the trip system.
2. Every 3 - 6 months, or more frequently if required, flush the strainers to remove any trash. Close the water supply valve, remove the drain plug, place a container under the strainer and open the water supply valve. Flush the strainer for 30 seconds. Replace the drain plugs and open the valve.
3. Once a week, blow out the burner air inlets with compressed air to keep the oven from over heating. This should be done when the oven is not operating.
4. Always wear a breathing mask when cleaning or repairing the inside of the oven.
5. **Always repair damaged insulation before using the oven. The heat will destroy the coating that protects the walls from corrosion.**
6. Once a year inspect the inside and outside of the exhaust stack for damage and repair as necessary.
7. It is normal for the burner flames to be orange rather than blue. DO NOT adjust burner air shutters.
8. Leak test gas valves at least annually.

120V, 1 $\phi$ , 60HZ

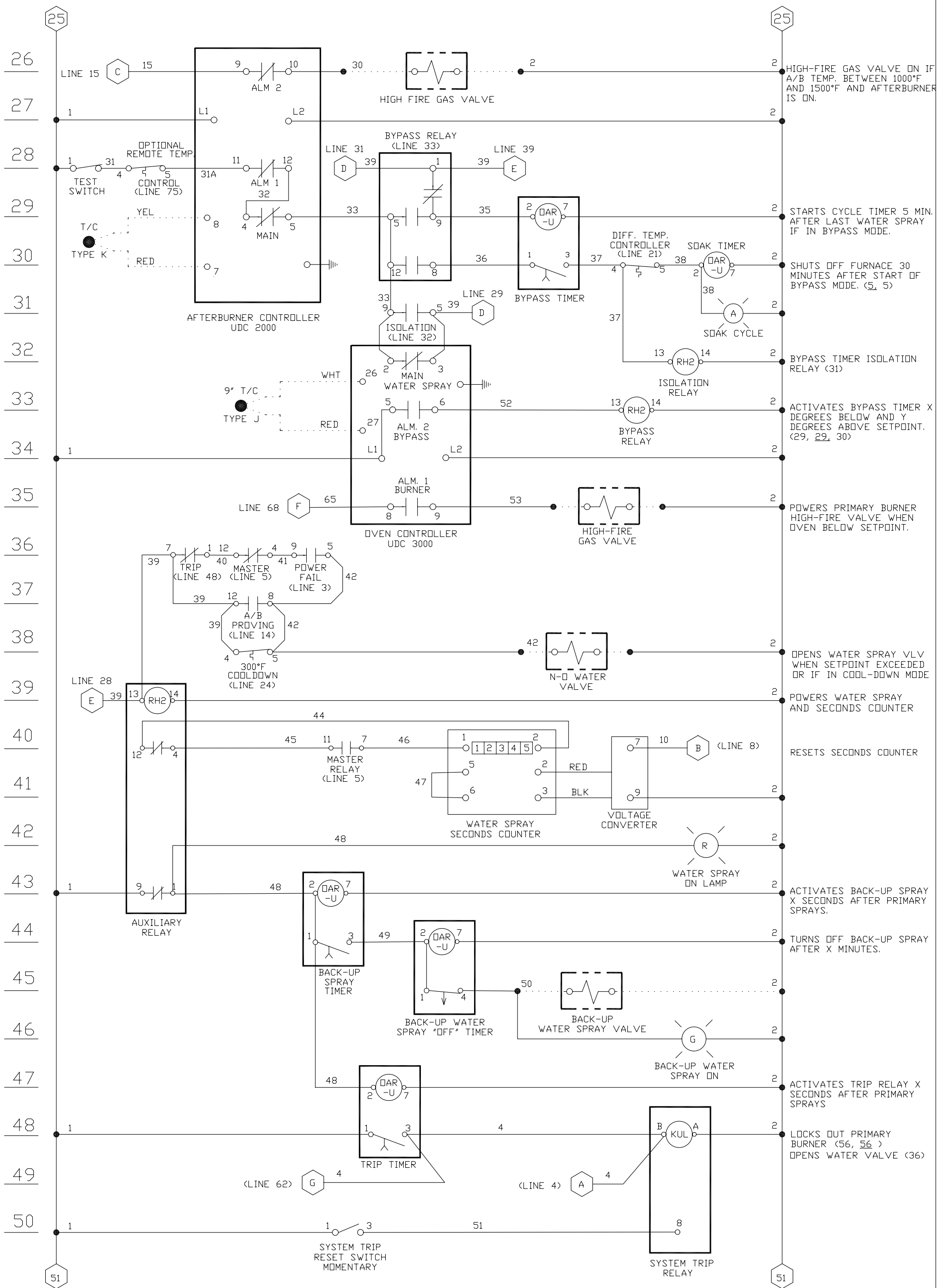
N



● - INDICATES WIRE CONNECTION  
 ..... - INDICATES WIRE IN CONDUIT  
 - - - - - INDICATES FIELD DEVICE

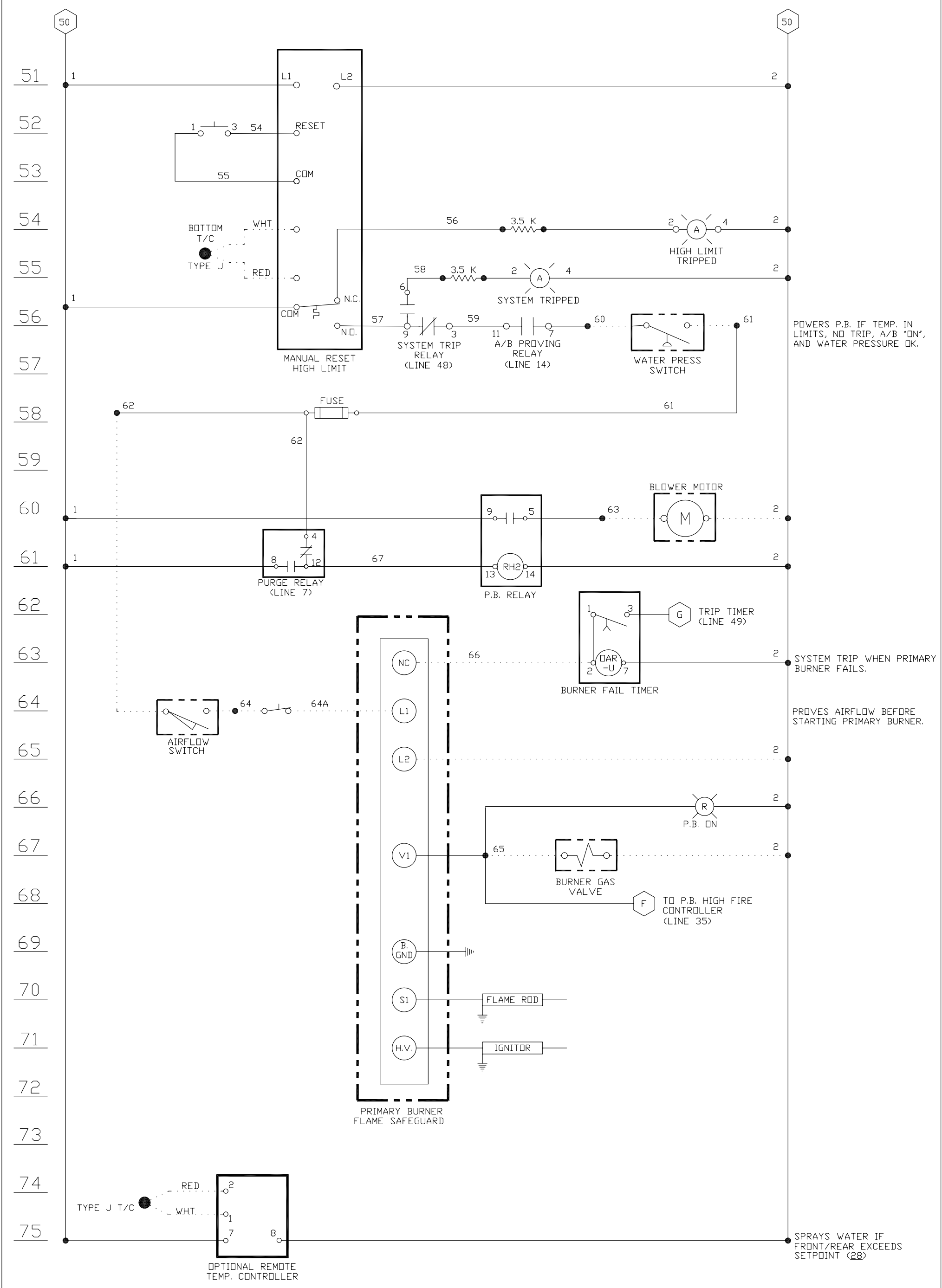
SCALE NONE	DR. BY C.B.M.	DATE 2-4-94
DWG. SIZE B	CHKD BY	DATE
SHEET 1 OF 3	DWG. NO. MINRATE2	





REV. 1-BURNER FAIL TIMER

SCALE NONE	DR. BY C.B.M.	DATE 7-21-94
DWG. SIZE B	CHKD BY	DATE
SHEET 2 OF 3	DWG. NO. MINRATE2	



REV. 2-PRIMARY BURNER TIMER  
 REV. 1-BURNER FAIL TIMER

SCALE NONE	DR. BY C.B.M.	DATE 7-21-94
DWG. SIZE B	CHKD BY	DATE
SHEET 3 OF 3	DWG. NO. MINRATE2	

SPECIFICATION SHEET

MODEL 555 BA-C SERIAL NO. 95B 0081 DATE 9-22-95  
FUEL NAT INPUT 547,000 BTU/HR  
ELECTRICAL 480V 3Ø 60HZ WIRING DIAGRAM MIN RATE 2  
DRAFT .13 IN. W.C.

BURNER SETTINGS

PRIMARY BURNER: TOTAL INPUT 202,000 BTU/HR  
PILOT ORIFICE      PILOT GAS PRESSURE      IN. W.C.  
MAIN ORIFICE 5/32 MAIN GAS PRESSURE 4 IN. W.C.  
HIGH-FIRE ORIFICE 1/4 H-F GAS PRESSURE 4 IN. W.C.  
AIR SHUTTER 3 TURNS OUT GRILL TEMP. 1460 °F at 875 °F BLOWER AIR PRESSURE +0.52 IN. W.C.

AFTERBURNER: INPUT (MINUS H-F) 265,000 BTU/HR H-F INPUT 80,000 BTU/HR  
PILOT ORIFICE      PILOT GAS PRESSURE      IN. W.C.  
MAIN ORIFICE 1/32 MAIN GAS PRESSURE 4 IN. W.C.  
HIGH-FIRE ORIFICE 13/64 H-F GAS PRESSURE 4 IN. W.C.  
AIR SHUTTER 1 5/8 turns out BLOWER AIR PRESSURE -0.03 IN. W.C. STACK I.D. 10 INCHES

TIMER SETTINGS

PURGE TIMER 1 min X 1 BYPASS TIMER 1 min X 5 TRIP TIMER 0.1 min X 7  
BACK-UP WATER SPRAY TIMER 0.1 min X 3 SOAK TIMER CUSTOMER ADJUST  
WATER SPRAY OFF TIMER 1 min X 2 CYCLE TIMER #2      OTHER BURNER FAIL 0.1 min X 5

CONTROLLER SETTINGS

COOL-DOWN / DOOR LOCK CONTROLLER 300° F  
DIFFERENTIAL CONTROLLER 190° F

SPECIAL FEATURES

236 JIB BURNER ON PRIMARY  
210 JIB BURNER ON AFTERBURNER

# 3.18 Configuration Record Sheet *555 BA-C 95B0081*

Keep a record

Enter the value or selection for each prompt on this sheet so you will have a record of how your controller was configured.

Group Prompt	Function Prompt	Value or Selection	Factory Setting	Group Prompt	Function Prompt	Value or Selection	Factory Setting	
TUNING	PROP BD	<u>0.1</u>	1.0	CONTROL	PID SETS	<u>2PV SW</u>	1 ONLY	
	or GAIN		1.0		SW VALUE	<u>600</u>	0.00	
	RATE MIN	<u>0.25</u>	0.00		SP SOURC	<u>1 LOCAL</u>	1 LOCAL	
	RSET MIN	<u>0.02</u>	1.0		RSP SRC		NONE	
	or RSET RPM		1.0		RATIO		1.0	
	or MAN RSET		0.0		BIAS		0	
	PROP BD2	<u>0.1</u>	1.0		SP TRACK	<u>NONE</u>	NONE	
	or GAIN 2		1.0		POWER UP	<u>ALSP</u>	MANUAL	
	RATE2MIN	<u>0.75</u>	0.00		SP HILIM	<u>1000</u>	1000	
	RSET2MIN	<u>0.02</u>	1.0		SP LOLIM	<u>500.0</u>	0	
	or RSET2RPM		1.0		ACTION	<u>REVERSE</u>	REVERSE	
	CYCSEC	<u>2</u>	20.0		OUT RATE	<u>DISABL</u>	DISABL	
	CYC2SEC		20.0		PCT/M UP		0	
	SECURITY		0		PCT/M DN		0	
	LOCKOUT	<u>MAX</u>	CALIB		OUT HILIM	<u>100.0</u>	100.0	
	AUTO MAN	<u>DISABL</u>	ENAB		OUT LOLIM	<u>0.0</u>	0	
	SP SEL	<u>ENABLE</u>	ENAB		DROPOFF	<u>0.0</u>	0.0	
	RUN HOLD	<u>DISABL</u>	ENAB		DEADBAND		2.0	
	SP RAMP	SP RAMP	<u>DISABL</u>		DISABL	OUT HYST		0.5
		TIME MIN			3	FAILSAFE	<u>0.0</u>	0.0
FINAL SP			—	MAN OUT	<u>0.0</u>	0.0		
SP RATE		<u>DISABL</u>	DISABL	AUTO OUT	<u>0.0</u>	0.0		
EU/HR UP			—	PBorGAIN	<u>PB ACT</u>	GAIN		
ADAPTIVE	ADAPTIVE		DISABL	MINorRPM	<u>MIN</u>	MIN		
	SP CHANG		10	OPTIONS	AUX OUT		DISABL	
	KPG		1.0		4mA VAL		0	
ALGORITHM	CONT ALG	<u>PID B</u>	PID A		20mA VAL		0	
	INPUT 2		DISABL		DIG IN 1		NONE	
	OUT ALG	<u>TIME</u>	—		DIG IN 2		NONE	
	4-20RNG		50PCT	Com	ComSTATE		DISABL	
RLY TYPE	<u>MECHAN</u>	MECHAN	Com ADDR			0		
INPUT 1	DECIMAL	<u>XXXX</u>	XXXX		SHEDTIME		0	
	UNITS	<u>DEG F</u>	NONE		PARITY		ODD	
	IN1 TYPE	<u>5 TCH</u>	0-10mV		BAUD		300	
	XMITTER		LINEAR	DUPLEX		—		
	IN1 HI	<u>1600</u>	1000	LOOPBACK		DISABL		
	IN1 LO	<u>0</u>	0	SHEDMODE		LAST		
	BIAS IN1	<u>0.0</u>	0	SHED SP		TO LSP		
	FILTER 1	<u>0</u>	1	UNITS		PERCNT		
	BURNOUT	<u>UP</u>	NONE	ALARMS	A1S1 VAL	<u>0.0</u>	90	
	EMISSIV		0		A1S2 VAL		10	
	PWR FREQ.	<u>60HZ</u>	60HZ		A2S1 VAL	<u>20.0</u>	95	
	LANGUAGE	<u>ENGLIS</u>	ENGLIS		A2S2 VAL	<u>10.0</u>	5	
	INPUT 2	XMITTER 2			LINEAR	A1S1TYPE	<u>DEV</u>	NONE
IN2 HI			1000		A1S2TYPE	<u>NONE</u>	NONE	
IN2 LO			0		A2S1TYPE	<u>DEV</u>	NONE	
FILTER 2			1		A2S2TYPE	<u>DEV</u>	NONE	
					A1S1 HL	<u>HI</u>	HI	
					A1S1 EV		—	
					A1S2 HL		LO	
			A1S2 EV			—		
			A2S1 HL		<u>LO</u>	HI		
			A2S1 EV		—			
			A2S2 HL	<u>HI</u>	LO			
			A2S2 EV		—			
			AL HYST	<u>0.1</u>	0.1			

UDC 2000 CONFIGURATION RECORD SHEET

GROUP DESCRIPTION	FUNCTION DESCRIPTION	VALUE OR SELECTION	FACTORY SETTING	GROUP DESCRIPTION	FUNCTION DESCRIPTION	VALUE OR SELECTION	FACTORY SETTING
TUNING	GAIN	_____	1.0	CONTROL	SP.SRC	120C	1LOC
	PB	0.1	_____		RATIO	_____	1.0
	RATE T	2.00	0.00		BIAS	_____	0.0
	I MIN	_____	1.0		PWR UP	ALSP	ALSP
	I RPM	_____	_____		SP HI	1800	2400
	MANRST	0	0		SP LO	1600	0
	GAIN 2	_____	5.0		ACTION	REV	REV
	PB 2	_____	_____		OUT HI	100.0	100
	RATE2T	_____	0.0		OUT LO	0.0	0
	I2 MIN	_____	0.2		DBAND	_____	2.0
	I2 RPM	_____	_____		HYST	_____	0.5
	CYC TI	2	20		FAILSF	0.0	0
	CYC2TI	_____	20		PB or GN	Pb	GAIN
	LOCK	ALL	CAL		MIN RPM	MIN	MIN
ALGORITHM	CTRALG	PDMR	PIDA	OPTIONS	AUXOUT	_____	NONE*
	INPUT 2	_____	ENAB*		0 PCT	_____	0
	OUTALG	RLY	**		100 PCT	_____	1000
			REM SW		_____	NONE*	
SP RAMP	SPRAMP	DIS	DISABL	ALARMS	A1S1VA	1800	90
	TI MIN	_____	0		A1S2VA	_____	10
	FINLSP	_____	0		A2S1VA	1000	95
SP PROG	_____	DISABL	A2S2VA		1525	5	
A TUNE	AT ENB	DIS	DISABL		A1S1TY	PROC	PROC
	OUTSTP	_____	10		A1S2TY	NONE	PROC
	AT ERR	_____	NONE		A2S1TY	PROC	PROC
INPUT 1	DECMAL	8888	8888		A2S2TY	PROC	PROC
	UNITS	F	NONE		A1S1HL	HI	HI
	IN1TYP	K H	K H		A1S1EV	_____	BEGN
	IN1 HI	2400	2400	A1S2HL	_____	LO	
	IN1 LO	0	0	A1S2EV	_____	END	
	BIAS 1	0.0	0	A2S1HL	LO	HI	
	FILTR1	0	0	A2S1EV	_____	BEGN	
	EMISS	_____	1.0	A2S2HL	HI	LO	
	BRNOUT	Up	UP	A2S2EV	_____	END	
	FREQ	60	60	Note:	0.1	Fixed Alarm	
	DISPLY	PR N	PR N			Hysteresis of 0.5% of (PV) Input Span	
	LNGUAG	ENGL	_____				
	INPUT 2	IN2 HI	_____	1000			
IN2 LO		_____	0				
FILTR2		_____	0				

\*Appears only if model number allows

\*\*Selected according to model number

PARTS LIST  
 STEELMAN INDUSTRIES  
 BURN-OFF OVEN

MODEL NO. 555 , SERIAL NO. 95B0081

PART NO.	DESCRIPTION	USED
	BURNER, 82 MVTA	
	BURNER, 200 JIB	
	BURNER, 210 JIB	✓
	BURNER, 236 JIB	✓
	BURNER, RM-100	
	BURNER, RM-150	
	BURNER, RM-200	
	BURNER, RM-300	
33C832	CASTER BEARING	
33C831	CASTER, 6" "V" GROOVE	✓
33C300	FLAME ROD - 200/210/236 JIB	✓
33C360	GAGE, GAS PRESSURE	✓
33C361	GAGE, WATER PRESSURE	✓
33C350	GASKET, DOOR	✓
33C363	GREASE, NEVER-SEEZ	✓
33C199	HIGH LIMIT CONTROL	✓
33C401	IGNITION SYSTEM AMPLIFIER (FIREYE)	✓
33C403	IGNITION SYSTEM BASE (FIREYE)	
33C402	IGNITION SYSTEM CHASSIS (FIREYE)	
33C400	IGNITION SYSTEM PROGRAMMER (FIREYE)	
33C404	IGNITION SYSTEM UNDER 400,000 (FENWAL)	✓
33C773	IGNITION TRANSFORMER	
	IGNITOR - 200 JIB	
33C406	IGNITOR - 210/236 JIB	✓
33C405	IGNITOR/FLAME ROD - RM BURNERS	✓
33C952	INSULATION CLIPS	✓
33C951	INSULATION PIN CAPS	✓
33C950	INSULATION PINS	✓
33C450	LAMP, TRIP	✓
33C461	LENS, YELLOW	✓
33C595	LIGHT, PILOT-GREEN	✓
	MOTOR, 1 1/2 HP, 3 PHASE (RM-300)	✓
33C550	MOTOR, 1/2 HP, 1 PHASE (RM-100)	
	MOTOR, 1/2 HP, 3 PHASE (RM-100)	
	MOTOR, 200/210 JIB (GRAINGER)	✓
	MOTOR, 200/210 JIB (OLD)	
	MOTOR, 236 JIB	
	MOTOR, 3/4 HP, 3 PHASE (RM150,200)	
	MOTOR, JIB 50 HZ.	
33C587	NOZZLE, BACKUP WATER SPRAY	✓
33C586	NOZZLE, PRIMARY WATER SPRAY (0.2 GPM)	✓
33C588	NOZZLE, PRIMARY WATER SPRAY (0.3 GPM)	✓
33C622	REGULATOR, GAS 1 1/4" (RV81-1010)	
33C620	REGULATOR, GAS 3/4" (RV53-66)	✓
33C623	REGULATOR, GAS 3/8" (R400S-33)	
33C630	REGULATOR, WATER 1/4"	
33C762	RELAY, 4PDT	✓
33C760	RELAY, 2PDT	✓
33C767	RELAY, TRIP	✓
	STACK, EXHAUST, 8" I.D.	
	STACK, EXHAUST, 10" I.D.	✓
	STACK, EXHAUST, 12" I.D.	
	STACK, EXHAUST, 14" I.D.	
	STACK, EXHAUST, 16" I.D.	
	STACK, EXHAUST, 18" I.D.	
	STACK, EXHAUST, 20" I.D.	
	STACK, EXHAUST, 22" I.D.	
33C651	STRAINER, 100 MESH	✓
33C650	STRAINER, WATTS	✓
33C689	SWITCH, AIR FLOW	✓
33C691	SWITCH, DOOR	✓

