

FUTERA III / FUSION STARTUP SHEET



DATE:	JOB NAME:
TECHNICIAN:	LOCATION:
COMPANY:	MODEL
PHONE NUMBER:	SERIAL #:

PRE-STARTUP CHECK LIST

- | | |
|--|--|
| <input type="checkbox"/> NO VISUAL DAMAGE TO UNIT | <input type="checkbox"/> INLET AIR FILTER INSTALLED AND CLEAN |
| <input type="checkbox"/> PIPING PROPERLY CONNECTED | <input type="checkbox"/> PROPER SERVICE CLEARANCE PROVIDED |
| <input type="checkbox"/> BOILER CIRCULATOR WIRED | <input type="checkbox"/> PUMP RUNNING, HEAT EXCHANGER FULL |
| <input type="checkbox"/> VENT/STACK CONNECTED | <input type="checkbox"/> GAS LINES PURGED, NO LEAKS, NO MISSING TEST PLUGS |

BOILER STARTUP SEQUENCE

Note: Locate the AA terminals in the bottom-right of the electrical panel on the control relay board and the min-hold switch located on the display board. Also locate the gas pressure tapping upstream of the main gas valve.

1. Cycle boiler and hold at trial for pilot ignition.
2. Set pressure to 2 - 2.5" W.C. (Flame signal should read 5.0 V DC)
3. Cycle boiler to main flame trial for ignition.
4. Place boiler to min hold (33%).
5. Record combustion and elbow pressure. (Reference factory start-up sticker)
6. Release boiler from min hold to run. (Jumper AA terminals for 100% input)
7. Record combustion and elbow pressure. (Reference factory start-up sticker)
8. Check all combustion results using a calibrated flue gas analyzer.
9. Remove jumper at terminals AA and release boiler to RUN mode.

COMBUSTION ANALYSIS	33% FIRE	100% FIRE
GAS PRESSURE (IN. W.C.)		
CO ₂		
O ₂		
CO (PPM)		
NET STACK TEMP.		

TESTING MODULATING BOILER CONTROL

Allow the boiler to control itself through the Modulating Boiler Control. Check sticker on the inside of the door or the Installation Manual for instructions on using the boiler control.

BOIL TARGET		TANK DIFF (MODE 3)		PUMP DELAY	
BOILER OUT		BOIL MAX		UNITS	
BOILER IN		BOIL MIN		SECONDARY INLET TEMP (FUTERA FUSION ONLY)	
MODE		BOIL MASS		SECONDARY OUTLET TEMP (FUTERA FUSION ONLY)	
TANK TARGET (MODE 3)		BOILER DIFF			

SAFETY TESTS CHECKLIST

- FLOW SWITCH AIR SWITCH FLAME SAFEGUARD
 LOW WATER CUTOFF HIGH-LIMIT

COMMISSIONING THE BOILER/WATER HEATER

<input type="checkbox"/> UNIT CYCLED MIN. OF 15 TIMES <input type="checkbox"/> CUSTOMER INSTRUCTED <input type="checkbox"/> ALL COVERS REPLACED <input type="checkbox"/> CUSTOMER GIVEN MANUAL <input type="checkbox"/> TARGET TEMP. SET PER CUSTOMER COMMISSIONED BY: _____ <div style="text-align: right;">(SIGNATURE)</div> DATE: _____	THE DELTA T BETWEEN THE HEATERS INLET AND OUTLET IS CRITICAL TO PROPER FLOW. BEFORE YOU LEAVE THE JOBSITE, YOU MUST RECORD THE DELTA T. THIS READING SHOULD NOT EXCEED 35 DEG F, 19.4 DEG C, OR BE LOWER THAN 20 DEG F, 11.1 DEG C. <div style="text-align: center;"> <input style="width: 80px; height: 20px;" type="text"/> DELTA T </div>
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ADDITIONAL NOTES AND COMMENTS
