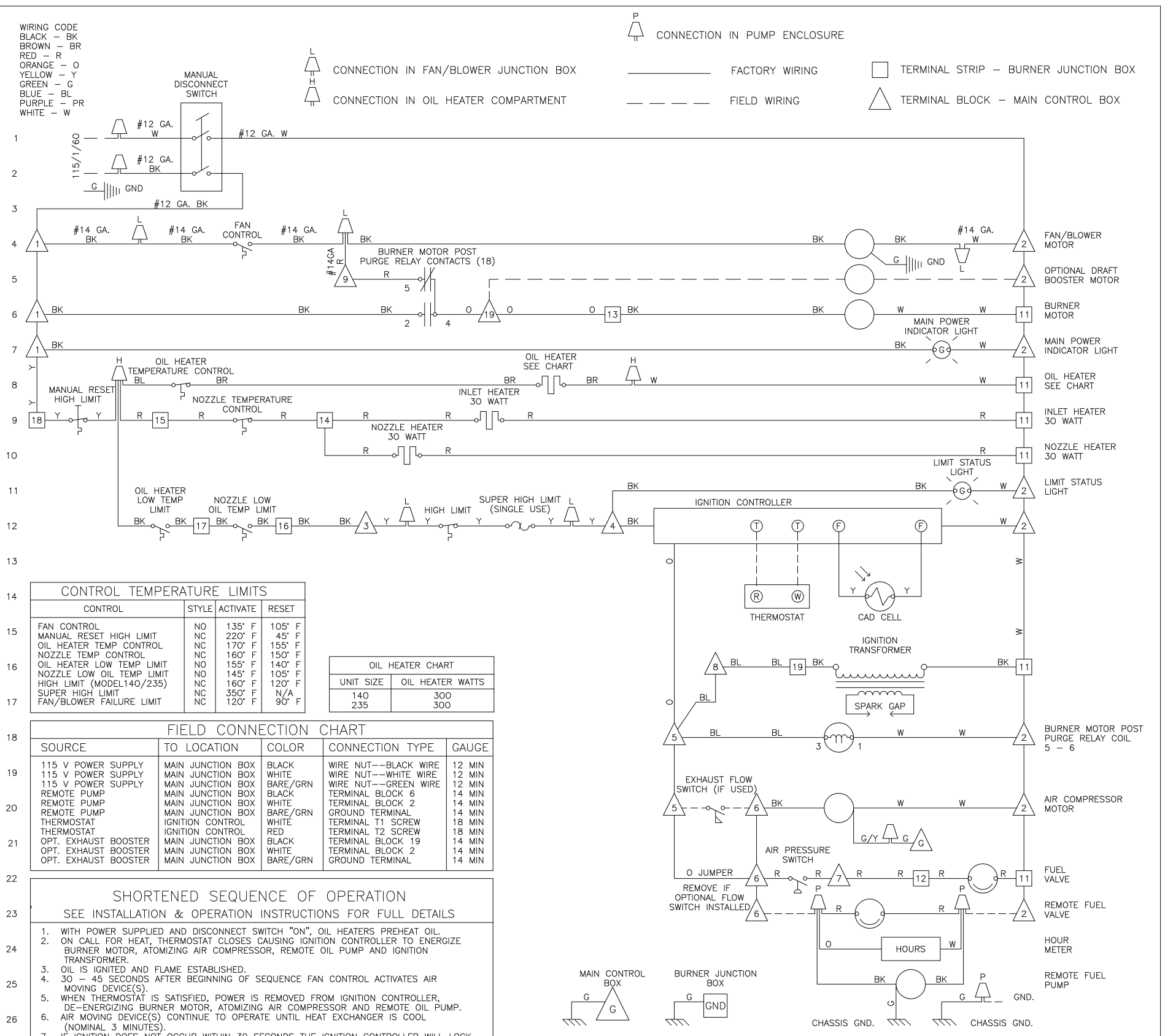
NUMBER 144851

8"

7 1/2"



CONTROL TEMPERATURE LIMITS

CONTROL	STYLE	ACTIVATE	RESET
FAN CONTROL	NO	135° F	105° F
MANUAL RESET HIGH LIMIT	NC	220° F	45° F
OIL HEATER TEMP CONTROL	NC	170° F	155° F
NOZZLE TEMP CONTROL	NC	160° F	150° F
OIL HEATER LOW TEMP LIMIT	NO	155° F	140° F
NOZZLE LOW OIL TEMP LIMIT	NO	145° F	105° F
HIGH LIMIT (MODEL140/235)	NC	160° F	120° F
SUPER HIGH LIMIT	NC	350° F	N/A
FAN/BLOWER FAILURE LIMIT	NC	120° F	90° F

OIL HEATER CHART	
UNIT SIZE	OIL HEATER WATTS
140	300
235	300

FIELD CONNECTION CHART

SOURCE	TO LOCATION	COLOR	CONNECTION TYPE	GAUGE
115 V POWER SUPPLY	MAIN JUNCTION BOX	BLACK	WIRE NUT--BLACK WIRE	12 MIN
115 V POWER SUPPLY	MAIN JUNCTION BOX	WHITE	WIRE NUT--WHITE WIRE	12 MIN
115 V POWER SUPPLY	MAIN JUNCTION BOX	BARE/GRN	WIRE NUT--GREEN WIRE	12 MIN
REMOTE PUMP	MAIN JUNCTION BOX	BLACK	TERMINAL BLOCK 6	14 MIN
REMOTE PUMP	MAIN JUNCTION BOX	WHITE	TERMINAL BLOCK 2	14 MIN
REMOTE PUMP	MAIN JUNCTION BOX	BARE/GRN	GROUND TERMINAL	14 MIN
THERMOSTAT	IGNITION CONTROL	WHITE	TERMINAL T1 SCREW	18 MIN
THERMOSTAT	IGNITION CONTROL	RED	TERMINAL T2 SCREW	18 MIN
OPT. EXHAUST BOOSTER	MAIN JUNCTION BOX	BLACK	TERMINAL BLOCK 19	14 MIN
OPT. EXHAUST BOOSTER	MAIN JUNCTION BOX	WHITE	TERMINAL BLOCK 2	14 MIN
OPT. EXHAUST BOOSTER	MAIN JUNCTION BOX	BARE/GRN	GROUND TERMINAL	14 MIN

SHORTENED SEQUENCE OF OPERATION

SEE INSTALLATION & OPERATION INSTRUCTIONS FOR FULL DETAILS

1. WITH POWER SUPPLIED AND DISCONNECT SWITCH "ON", OIL HEATERS PREHEAT OIL.
2. ON CALL FOR HEAT, THERMOSTAT CLOSES CAUSING IGNITION CONTROLLER TO ENERGIZE BURNER MOTOR, ATOMIZING AIR COMPRESSOR, REMOTE OIL PUMP AND IGNITION TRANSFORMER.
3. OIL IS IGNITED AND FLAME ESTABLISHED.
4. 30 – 45 SECONDS AFTER BEGINNING OF SEQUENCE FAN CONTROL ACTIVATES AIR MOVING DEVICE(S).
5. WHEN THERMOSTAT IS SATISFIED, POWER IS REMOVED FROM IGNITION CONTROLLER, DE–ENERGIZING BURNER MOTOR, ATOMIZING AIR COMPRESSOR AND REMOTE OIL PUMP.
6. AIR MOVING DEVICE(S) CONTINUE TO OPERATE UNTIL HEAT EXCHANGER IS COOL (NOMINAL 3 MINUTES).
7. IF IGNITION DOES NOT OCCUR WITHIN 30 SECONDS THE IGNITION CONTROLLER WILL LOCK OUT. IF THE UNIT LOCKS OUT, RESET THE CONTROLLER BY PRESSING AND HOLDING DOWN ON THE RED RESET BUTTON FOR FOUR (4) SECONDS AND THEN RELEASING IT. DO NOT RESET MORE THAN ONE TIME !

E.C.O. NO.	REVISION	BY	DATE
6	CHANGE CAUTION NOTE	MLC	10/98
5	CHANGE NOTE #7	MLH	9/10
4	REMOVE BL WIRE FROM IGNITION CONTROLLER	MLH	5/98
	ADD BL JUMPER BETWEEN 5 & 8		
3	ADD GRD WIRE & REMOVE 350	MLH	11/96
2	REMOVED FAN TIME DELAY	BABS	4/96
1	MADE 8" 7.5" AND BK WIRE O	KJR	3/96
7	ADD TERMINAL STRIP AND REMOVE PLUG CONNECTION	RDC	6/99

MERCER, PA. 16137

DRAWN BY RSO DATE 11/16/95 PROD. ENG. DATE SCALE

USED ON USED OIL NO. REQ'D.

TITLE WIRING DIAGRAM

NUMBER 144851

ARCHIVED