MicroM
SERVICE GUIDE

SITUATION #1
NORMAL LOCKOUT

IF ALL LIGHTS BLINKING AND ALARM LIGHT STEADY
THEN SYSTEM ERROR REPLACE PROGRAMMER

LOCKOUT MESSAGE
OP CTRL INTRLK PTFI FLAME
LINE FREQUENCY NOISE ⬜ ⬜ ⬜ ●
FLAME FAIL - PTFI ⬜ ⬜ ⬜ ●
FAULT UNKNOWN ⬜ ⬜ ⬜ ●
AMPLIFIER COUNT FAI ⬜ ⬜ ⬜ ●
FLAME FAIL MTFI ⬜ ⬜ ⬜ ●
FALSE FLAME IDLE ⬜ ⬜ ⬜ ●
INTRLK OPEN ⬜ ⬜ ⬜ ●
INTRLK CLOSED ⬜ ⬜ ⬜ ●
CHASSIS OPTO ⬜ ⬜ ⬜ ●
FLAME FAIL-AUTO ⬜ ⬜ ⬜ ●
CHECK CHASSIS ⬜ ⬜ ⬜ ●
CHECK PROGRAMMER ⬜ ⬜ ⬜ ●
CHECK AMPLIFIER ⬜ ⬜ ⬜ ●
AMPLIFIER AUTO CHECK ⬜ ⬜ ⬜ ●
CHECK BLOWN FUSE ⬜ ⬜ ⬜ ●
CHECK SCANNER ⬜ ⬜ ⬜ ●

MP100 4-7 SECONDS
MP230 PREPURGE DELAY TIME

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NO HEAT

REFER TO LOCKOUT CODES

NO

OP CTRL

ALARM BLINKING

INSTALL DC VOLTMETER IN TEST JACKS

SHUT FUEL SUPPLY ODOX

WAIT 5 MIN

RESET CONTROL (See Note 1)

YES

CHECK SCANNER

NO

MAKE IT CALL FOR HEAT

NO

SEE SITUATION #2

NO

SEE SITUATION #3

NO

CHECK SCANNER

YES

IS FLAME LED ON?

NO

IS HEAT BEING CALLED FOR?

YES

CHECK SCANNER

NO

MAKE IT CALL FOR HEAT

NO

SEE SITUATION #2

NO

SEE SITUATION #3

NO

PROGRAMMER OR MEC120 DEFECTIVE

NO

AMPLIFIER OR MEC120 DEFECTIVE

REPLACE SCANNER

UV = 570 VAC
FR = 270 VAC
IR = 15 VDC

Note 1:
TO RESET THE CONTROL POWER MUST BE ON TERMINALS 1 & 2

RESET SUCCESSFUL

REPAIR WIRING

S1 & S2 WIRING & TERM CONTACTS OK? YES

ALIGN SCANNER

NO

S1 & S2 REPAIR WIRING

YES

MAKE PROPER BURNER ADJUSTMENT

NO

IS THERE A GOOD FIRE?

YES

CHECK FUSE IN CHASSIS

NO

PROPER VOLTAGE ACROSS S1 & S2

YES

CHECK OUTPUT WIRING

NO

REPLACE MEC120

NO

CHECK SCANNER POSITION OK?

YES

CHECK OUTPUT WIRING

NO

REPLACE MEC120

NO

MAKE PROPER BURNER ADJUSTMENT

NO

IS SCANCR POSITION OK?

YES

CHECK OUTPUT WIRING

NO

REPLACE MEC120

NO

CHECK SCANNER POSITION OK?

YES

CHECK OUTPUT WIRING

NO

REPLACE MEC120

NO

MAKE PROPER BURNER ADJUSTMENT

NO

DID INTRLK LED COME ON?

YES

DID OPERATE CONTROL LED COME ON?

NO

DID INTRLK LED COME ON?

NO

DID PTFI LED COME ON AFTER SUITABLE DELAY?

YES

DID PTFI LED COME ON AFTER SUITABLE DELAY?

YES

DID PTFI LED COME ON?

YES

DID PTFI LED COME ON?

YES

DID PTFI LED COME ON?

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YES

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YES

DID PTFI LED COME ON?

YES
SITUATION #2

NO HEAT

1. Verify that there is a solid earth ground wire brought to the panel that the Fireye base is mounted to.
2. In a rectification system, verify that terminal S1 is solidly earth grounded, and confirm that the flame rod is aligned so it doesn’t droop near the ignition spark.
3. Confirm that there is no measurable voltage present between the ground screw and terminal 2 (neutral).
4. Confirm that the 120 volt AC supply has its neutral leg earth grounded at the supply, (floating isolation transformers can cause problems).
5. Confirm that the ignition transformer’s secondary winding is solidly earth grounded. The grounding method is usually through the transformer case. Dirt, paint, loose mounting hardware, etc., can all be factors.
6. There may be a problem with transients in the main power supply. If you think this may be the problem, you may want to run a ground wire directly from the pilot assembly back to the electrical panel where the Fireye control is mounted.

MicroM Fuse 10 amps
Fireye Part Number: 23-197
(or Wickmann older Part Number: 19373-071-K)

SITUATION #3

NO HEAT

1. Verify that there is a solid earth ground wire brought to the panel that the Fireye base is mounted to.
2. In a rectification system, verify that terminal S1 is solidly earth grounded, and confirm that the flame rod is aligned so it doesn’t droop near the ignition spark.
3. Confirm that there is no measurable voltage present between the ground screw and terminal 2 (neutral).
4. Confirm that the 120 volt AC supply has its neutral leg earth grounded at the supply, (floating isolation transformers can cause problems).
5. Confirm that the ignition transformer’s secondary winding is solidly earth grounded. The grounding method is usually through the transformer case. Dirt, paint, loose mounting hardware, etc., can all be factors.
6. There may be a problem with transients in the main power supply. If you think this may be the problem, you may want to run a ground wire directly from the pilot assembly back to the electrical panel where the Fireye control is mounted.

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SITUATION #4

NO HEAT

1. Verify that there is a solid earth ground wire brought to the panel that the Fireye base is mounted to.
2. In a rectification system, verify that terminal S1 is solidly earth grounded, and confirm that the flame rod is aligned so it doesn’t droop near the ignition spark.
3. Confirm that there is no measurable voltage present between the ground screw and terminal 2 (neutral).
4. Confirm that the 120 volt AC supply has its neutral leg earth grounded at the supply, (floating isolation transformers can cause problems).
5. Confirm that the ignition transformer’s secondary winding is solidly earth grounded. The grounding method is usually through the transformer case. Dirt, paint, loose mounting hardware, etc., can all be factors.
6. There may be a problem with transients in the main power supply. If you think this may be the problem, you may want to run a ground wire directly from the pilot assembly back to the electrical panel where the Fireye control is mounted.

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