

Infrared Thermographic Report
For



Report done by
John Cannamela
Level II Thermographer

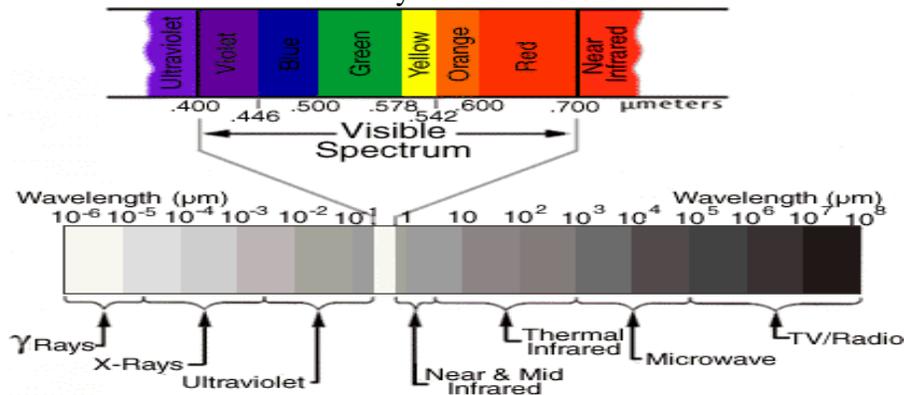
Sample Customer

ELECTRICAL SURVEY

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What is Infrared?

- IR is part of the electromagnetic spectrum discovered in the 1800's
- By William Hershel



IR 101

- The IR imager sees emitted energy in the IR spectrum range from (shortwave) 3-5 microns (longwave) 7-13 microns.
- The amount of energy is seen through the imager. The reason everything is colored is to give the eye something to interpret.
- Interpretation is key with Thermography.

How Infrared can help Commissioning

Commissioning is the process where by the system is put through its sequence of operation at its design. There are many tools and techniques to start up and check out systems. Buildings all have their own special issues not in the design, that's why we commission.

- Infrared Thermography can help as a great tool to help locate and even show why certain things don't work properly.

Building HVAC 101

Heating Ventilation & Air Conditioning

Buildings are conditioned by adding or removing heat from a given space through a medium. In this case the medium is air. The air is circulated through a refrigerated coil or DX coil or chilled water coil, which removes heat and transfers the heat through the refrigerant/water to the condenser coil/cooling tower, via a fan/pump. Dirty filters or poor air flow causes coils to freeze and Compressor failure.

Why can we see water?

Water is a conductor and transfers heat. Heat or the lack of heat is what thermal imagers see. When water, a conductor, contacts a non-conductor such as wood or sheetrock-we see the heat transfer which can be colder or hotter than the surface of which it contacts. The color of choice for cold is blue and red for hot.

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TABELS OF CONTENTS

SURVEY WAS DONE WITH ESCORT *name here* (OWNER REPRESENTATIVE).
ANY PANELS NOT WITNESSED OR POWERED AT THE TIME OF SURVEY IS
NOT RESPONSIBILITY OF THERMOGRAPHER.

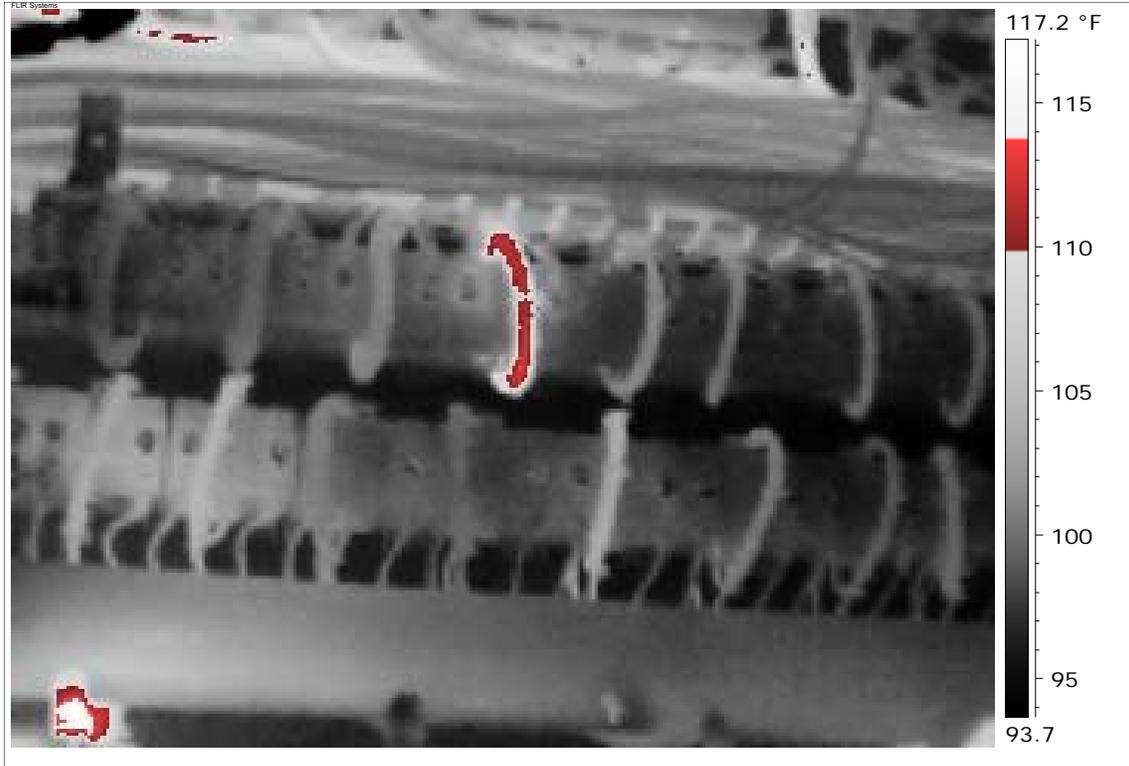
PANELS ESCORTED TOO ARE IN ORDER OF SURVEY:

- | | |
|------------------------------------|------------------------------------|
| 1. CAB 102 | 43. CAB 216 |
| 2. CAB 103 | 45. CAB LINE 2 GODET 2 |
| 3. CAB 104 | 46. LINE 3 DIST PANEL |
| 4. CAB 105 | 47. CAB 212 |
| 5. CAB 106 | 48. CAB 213 |
| 6. CAB 107 | 49. CAB 214 |
| 7. CAB 201 | 50. CAB 318 |
| 8. CAB 202 | 51. CAB 317 |
| 9. CAB 203 | 52. LINE 3 GODET 3 |
| 10. CAB 204 | 53. LINE 3 GODET 4 |
| 11. CAB 205 | 54. LINE 3 GODET 5 |
| 12. CAB 206 | 55. LINE 4 GODET 5 |
| 13. CAB 207 | 56. LINE 4 ANNEALING OVEN |
| 14. CAB 301 | 57. LINE 4 GODET 3 OIL HEATER |
| 15. CAB 302 | 58. LINE 4 GODET 1 |
| 16. CAB 303 | 59. DRYER 4 MAIN LINE 4 |
| 17. CAB 304 | 60. LINE 3 DRYER MAIN |
| 18. CAB 305 | 61. LINE 2 DRYER 2 |
| 19. CAB 306 | 62. LINE 1 DRYER 1 |
| 20. CAB 307 | 63. CHILL WATER PANEL THERMAL CARE |
| 21. CAB 308 | 64. LIGHTING 1 & 2 |
| 22. CAB 309 | 65. MAIN DUCT DISTRUBUTION |
| 23. CAB 310 | 66. GRINDER 2 SOTAKE |
| 24. ZONE LINE 4 MCC | 67. GRINDING ROOM PANEL |
| 25. CAB 401 | 68. LINE 3 GRINDER PANEL |
| 26. CAB 402 | 69. CAB 122 |
| 27. CAB 403 | 70. CAB 222 |
| 28. CAB 404 | |
| 29. CAB 405 | |
| 30. CAB 406 | |
| 31. DRYER 0002 HOPER | |
| 32. CAB 112 | |
| 33. CAB 113 | |
| 34. CAB 114 | |
| 35. CAB 115 | |
| 36. CAB 116 | |
| 37. CAB PANEL UNMARKED NEXT TO 118 | |
| 38. CAB 119 | |
| 39. CAB 121 | |
| 40. CAB 221 | |
| 41. CAB 219 | |
| 42. LINE 2 ANNEALING OVEN | |

ACTION : NEXT SHUT DOWN
IMMEDIATE

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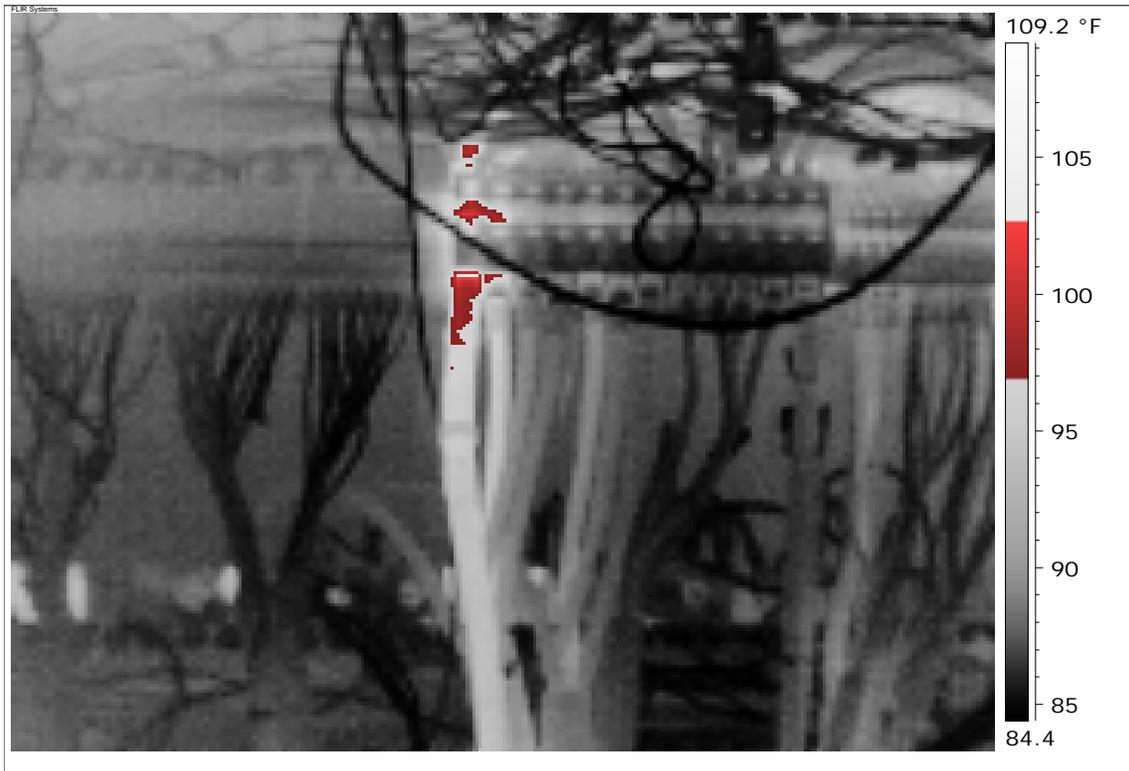


Description: CAB 105 CHECK LOAD TN162 CURRENT TRANS

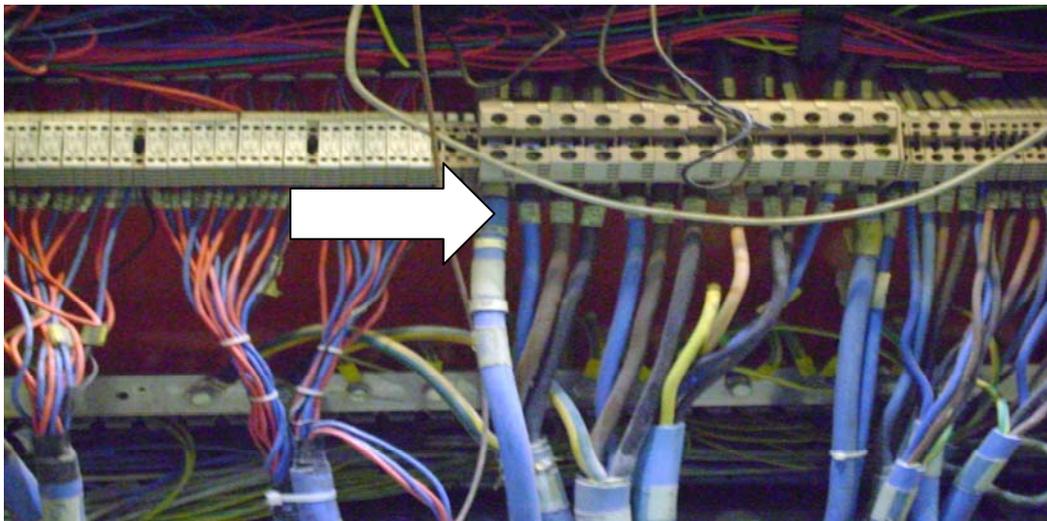


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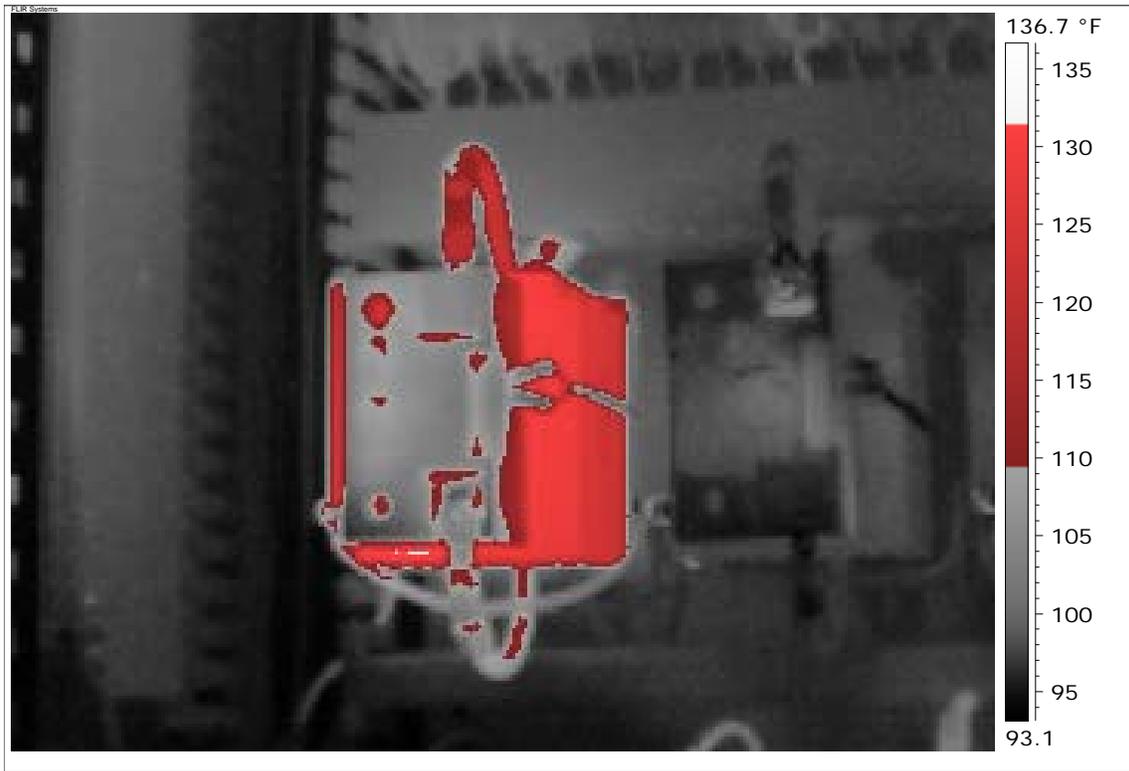


Description: CAB 106 CHECK NEUTRAL CONNECTION

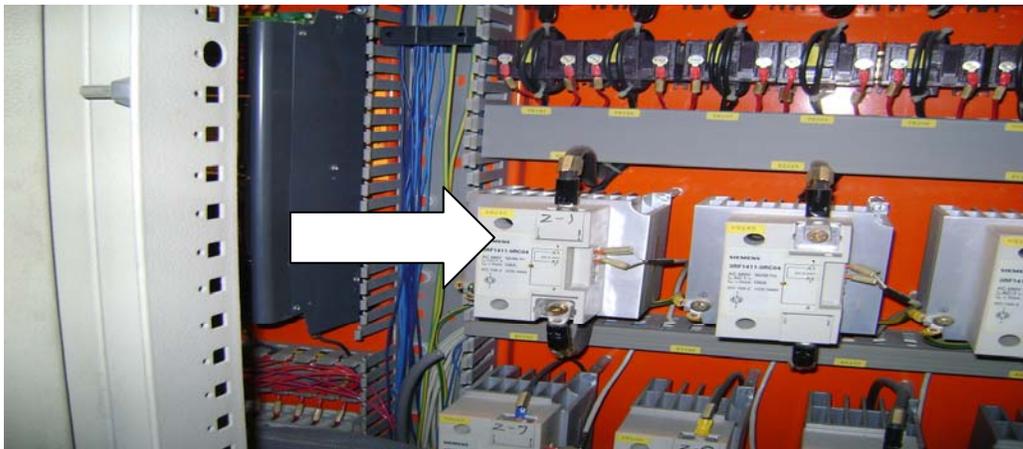


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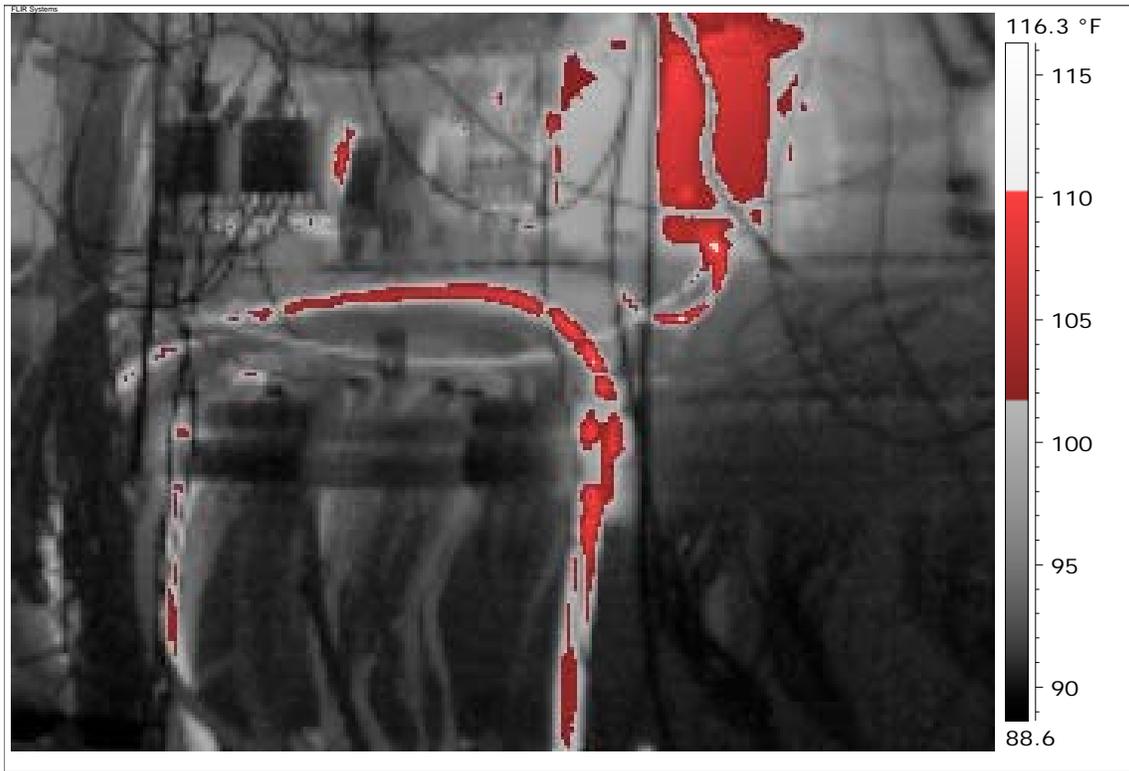


Description: CAB 205 CHECK HEATER BLOC CONNECTIONS

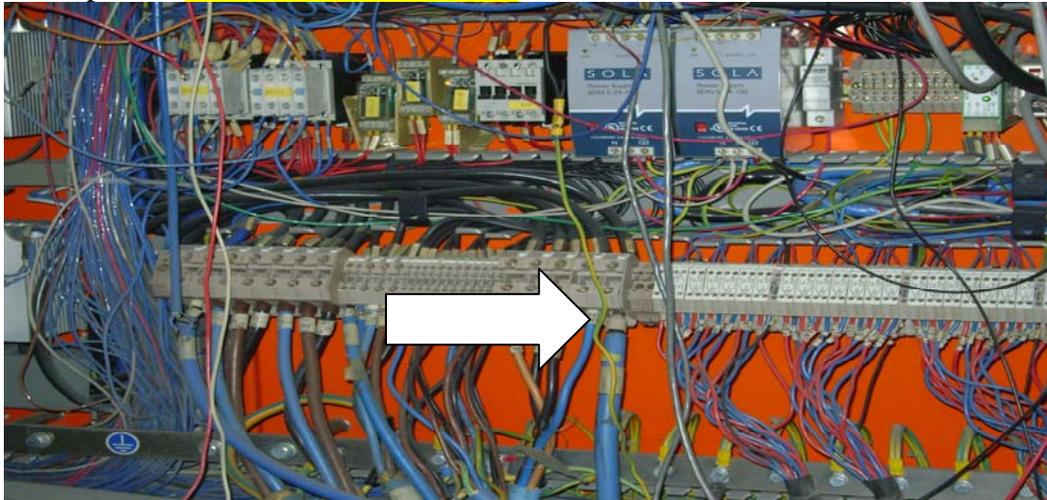


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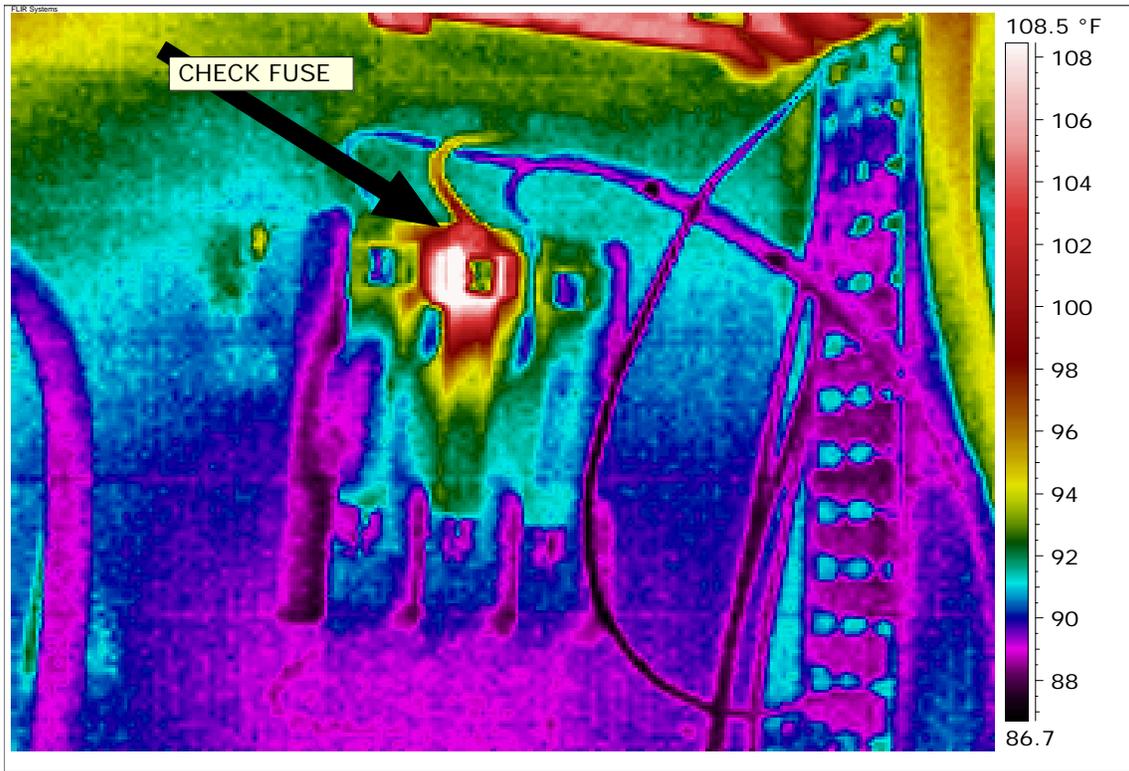


Description: CAB 206 CHECK LOAD



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Description: CAB 304 CHECK FUSE CONNECTION

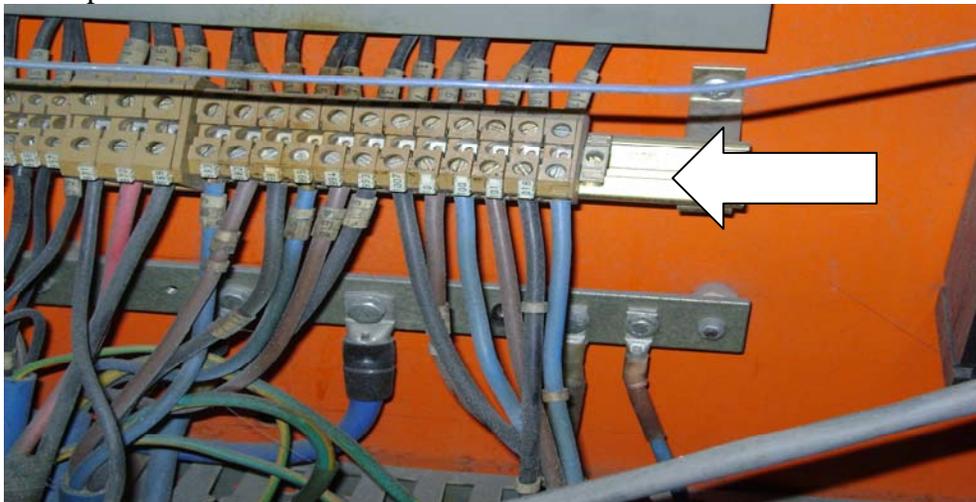


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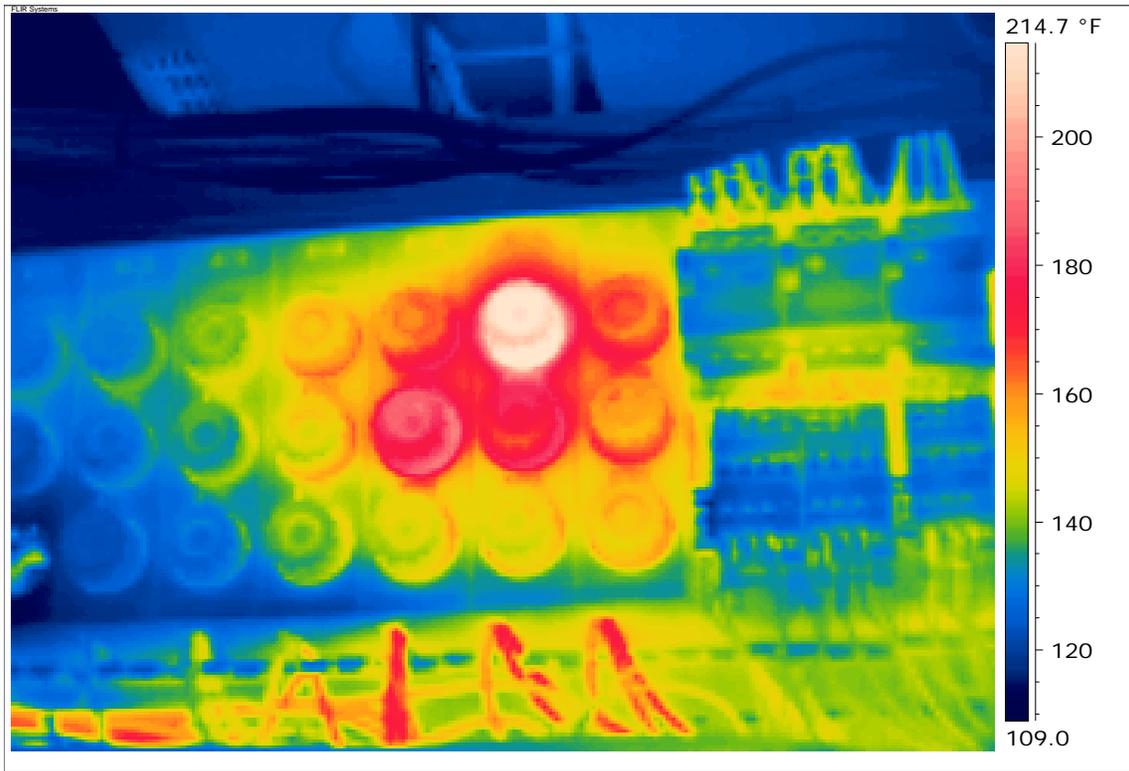


Description: CAB 8 CHECK CONNECTIONS

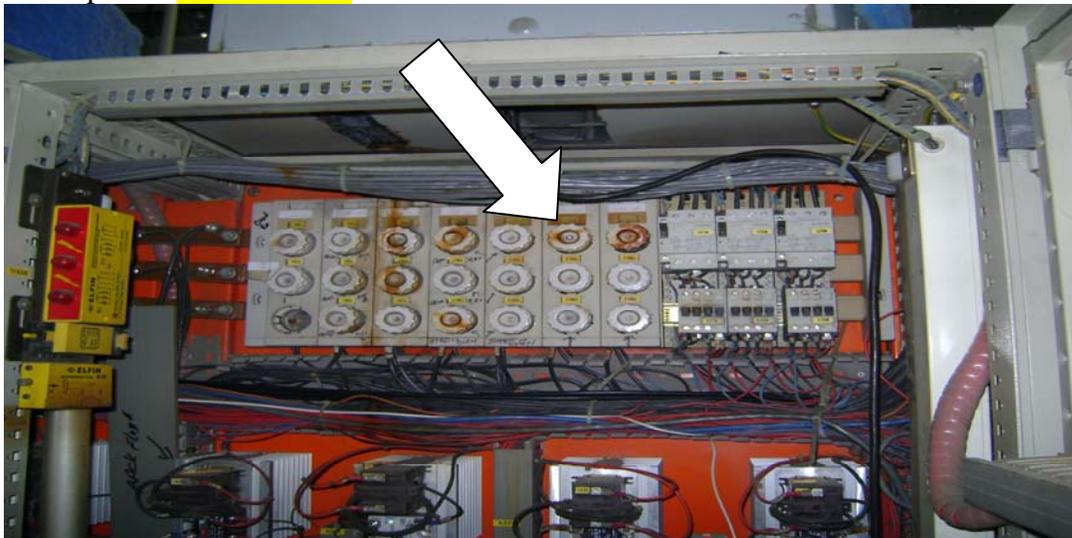


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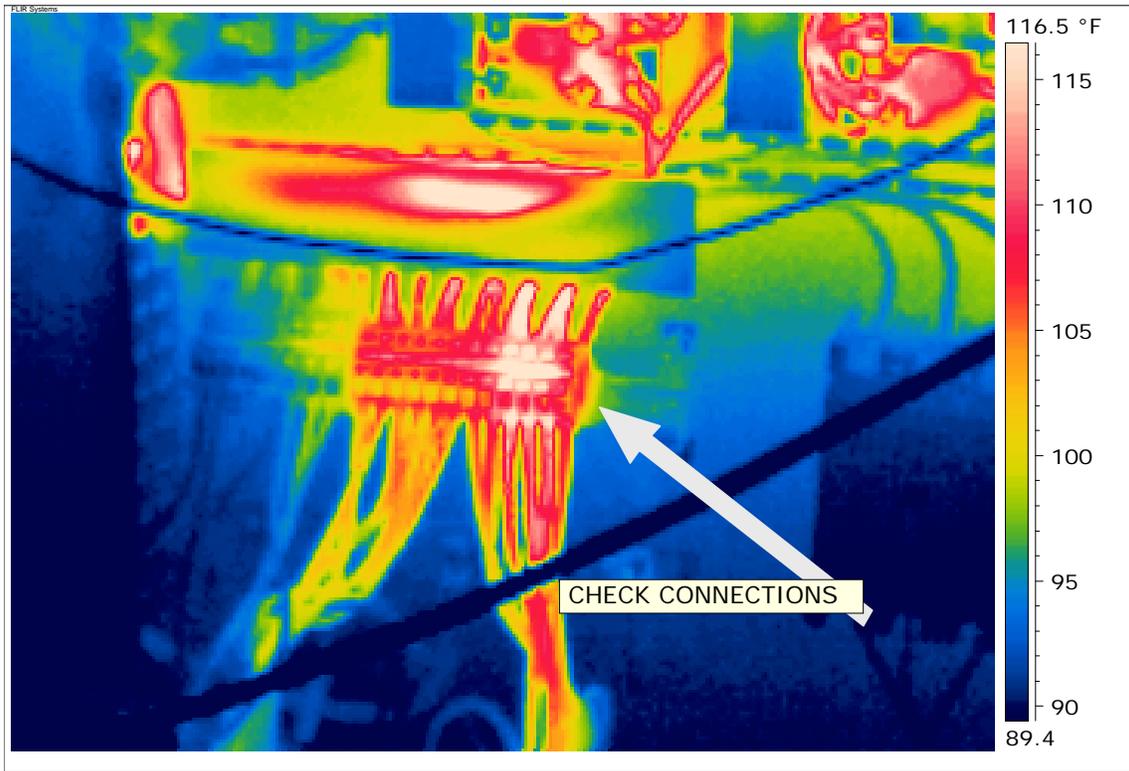


Description: CAB 8 FUSE

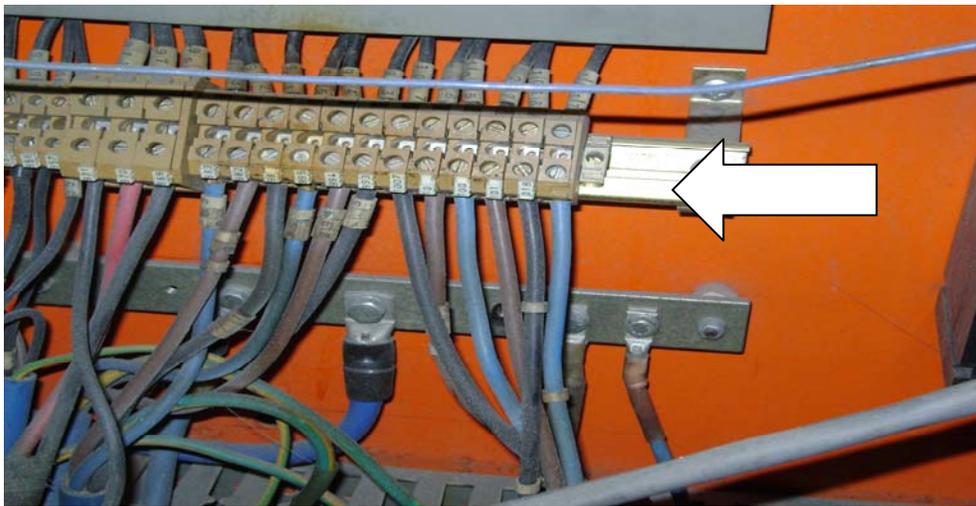


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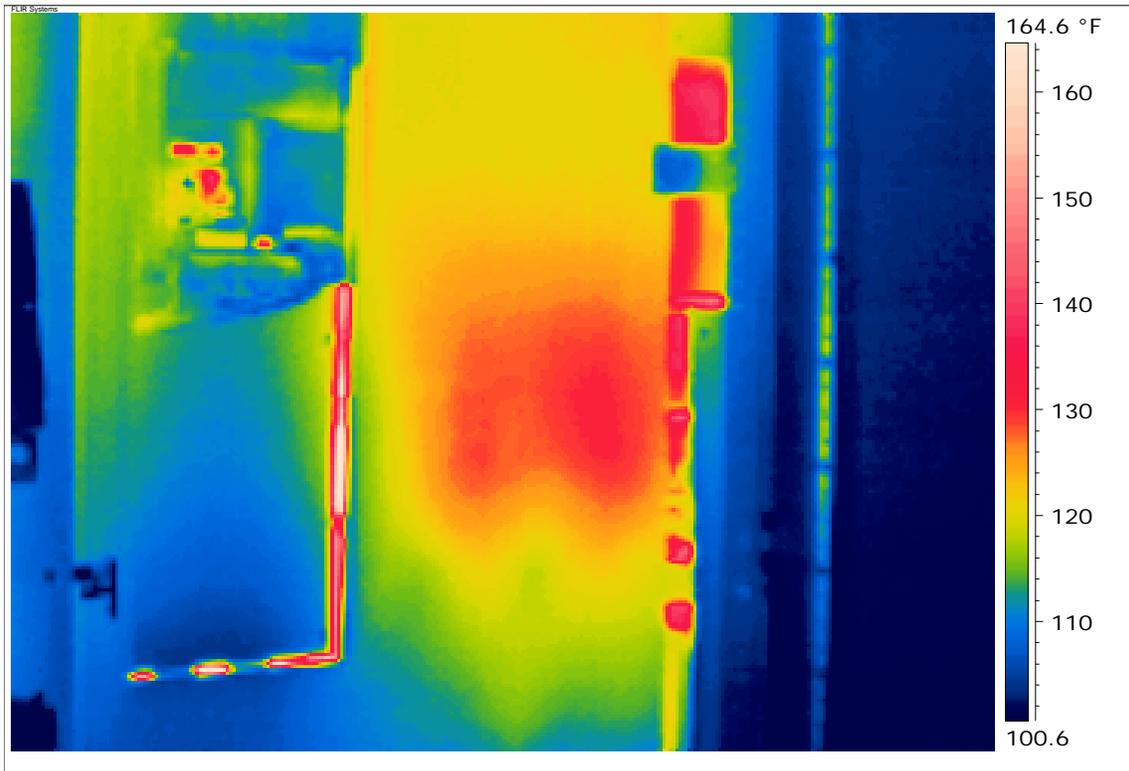


Description: CAB 8



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Description: CAB 401 MAJOR PROBLEM CORRECT IMMEDIATLY

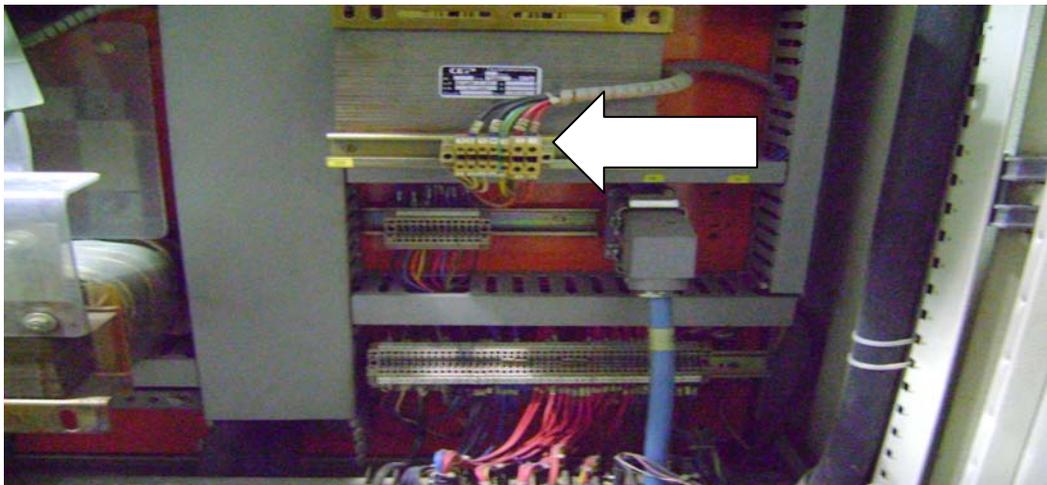


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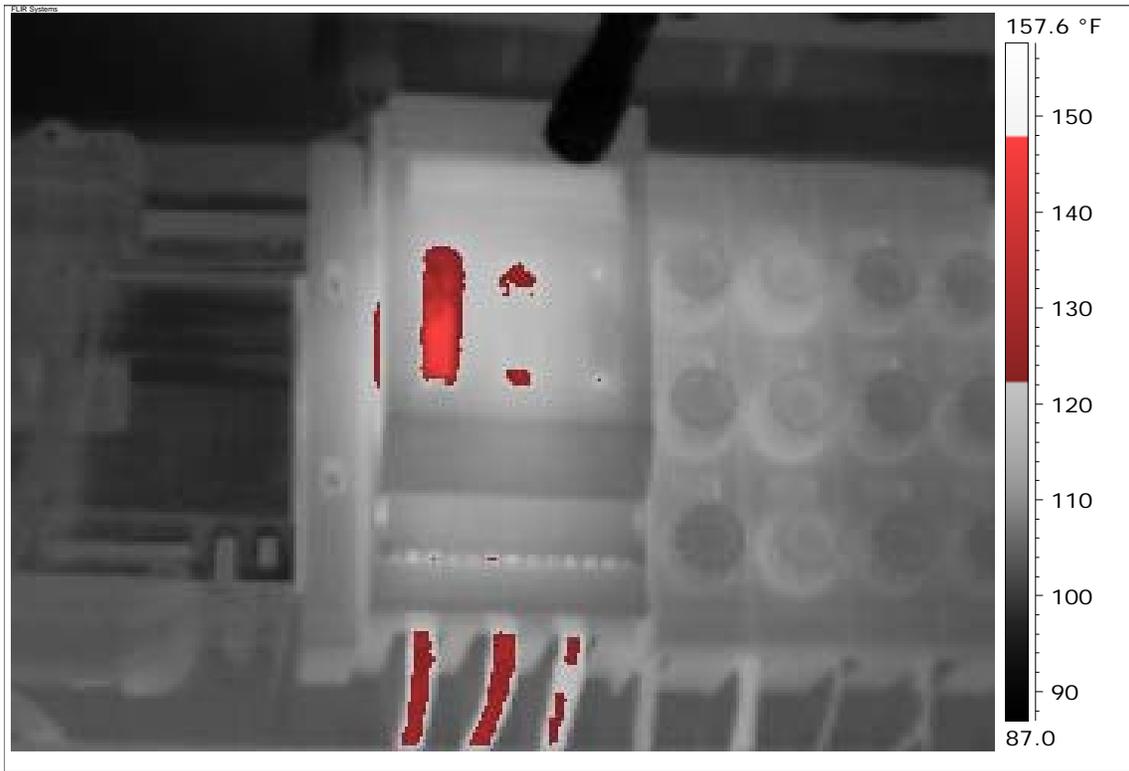


Description: CAB 115 TRANSFORMER CHECK LOAD

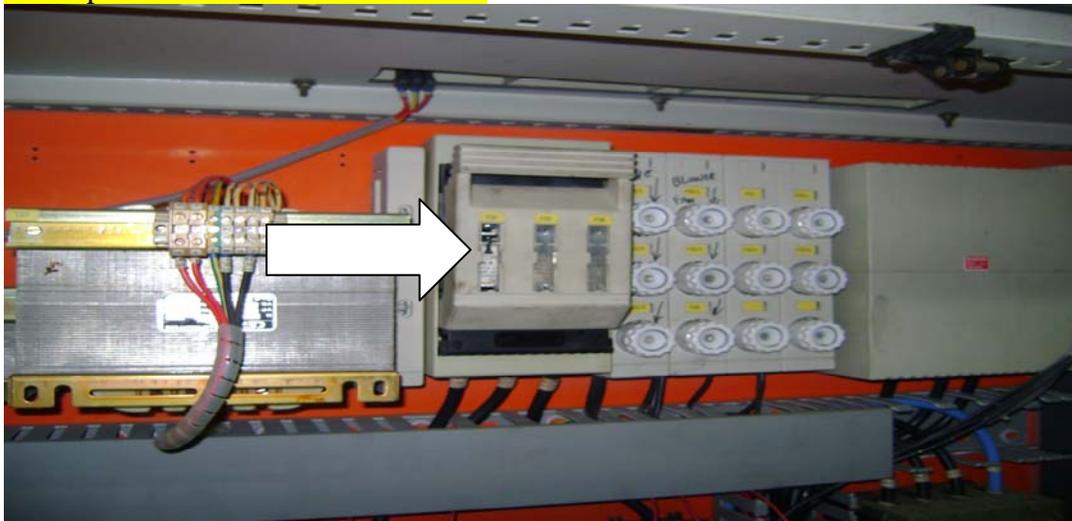


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Description: CHECK FUSE BLOCK

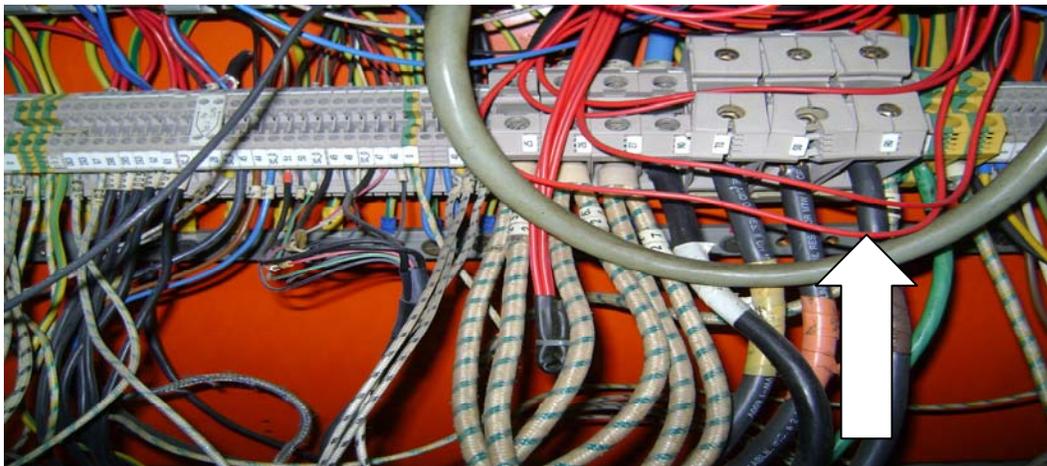


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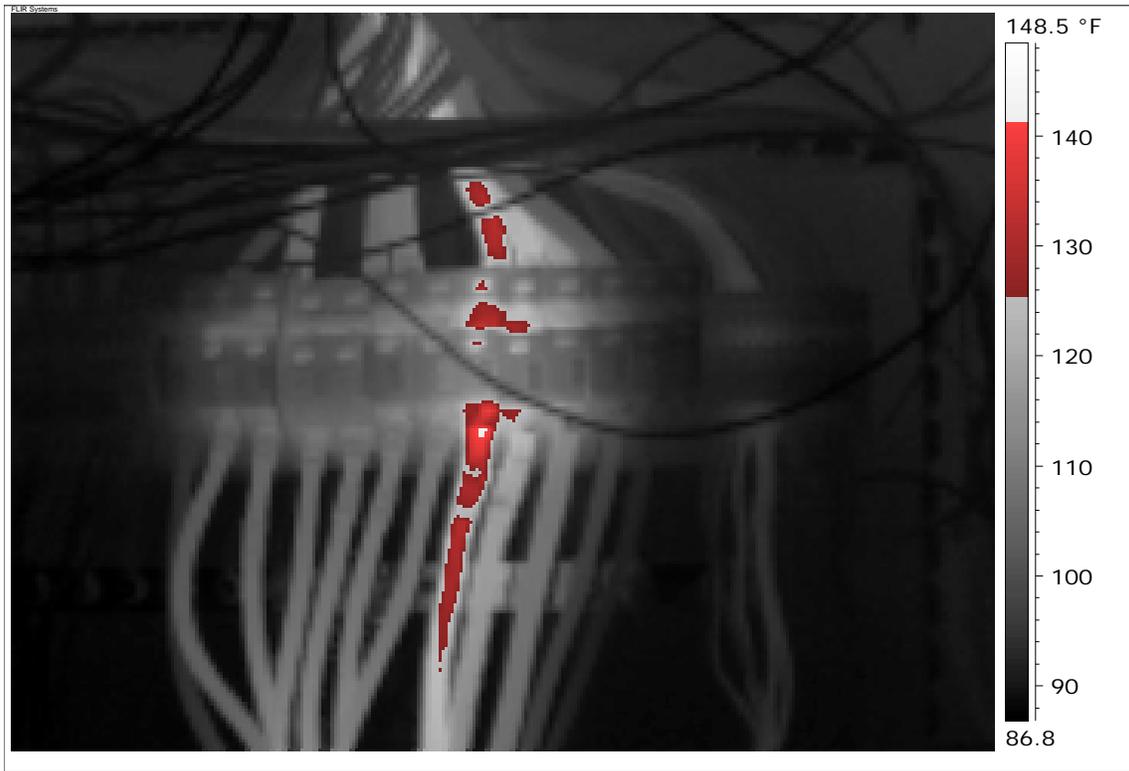


Description: PANEL NEXT TO CAB 118 CHECK CONNECTIONS

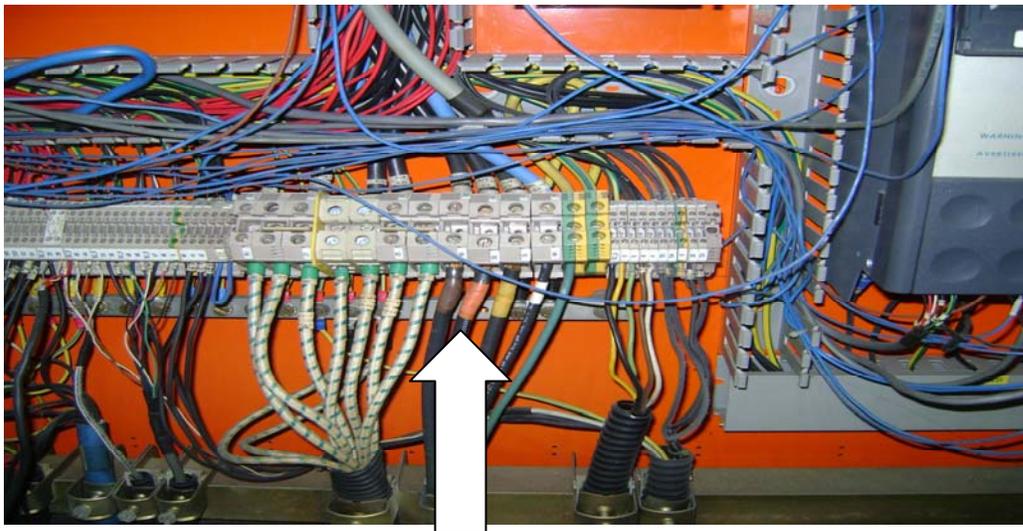


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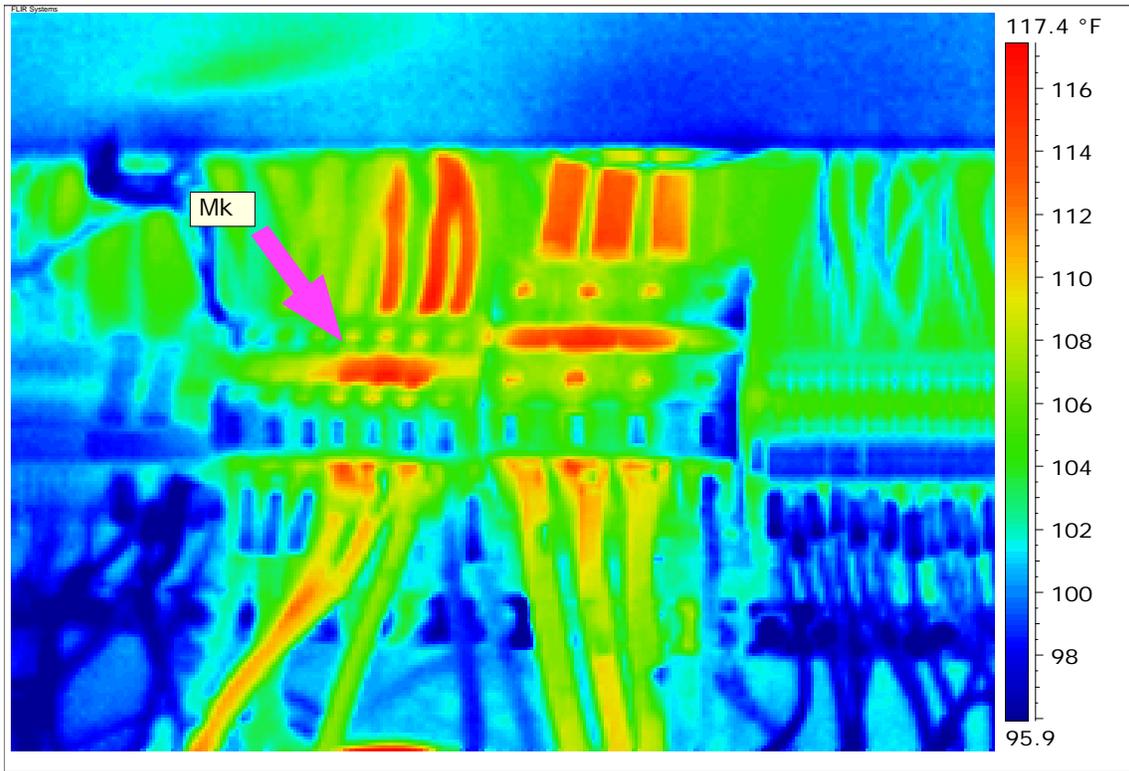


Description: **LINE 2 ANNEALING OVEN CHECK CONNECTIONS**

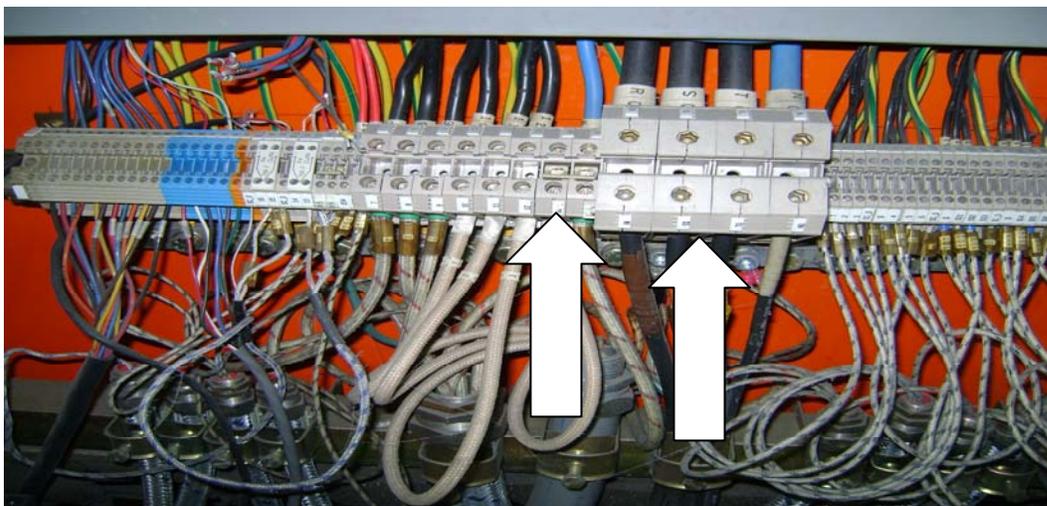


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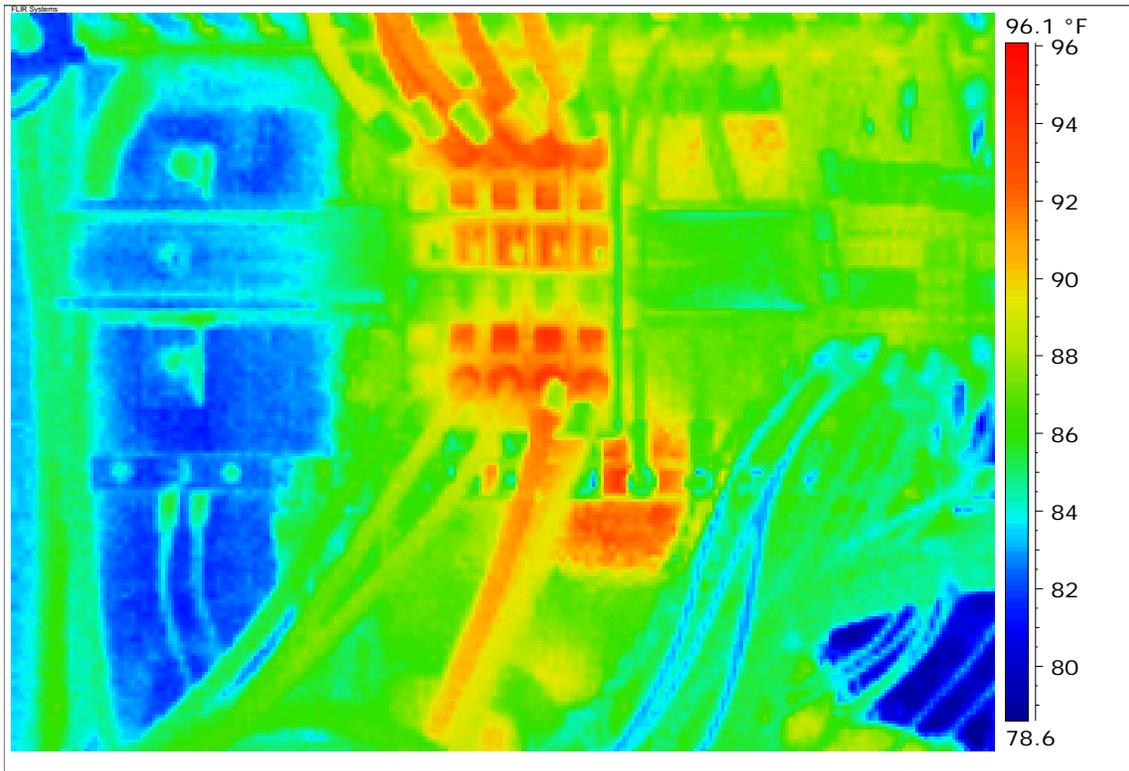


Description: CAB 214 CHECK CONNECTIONS

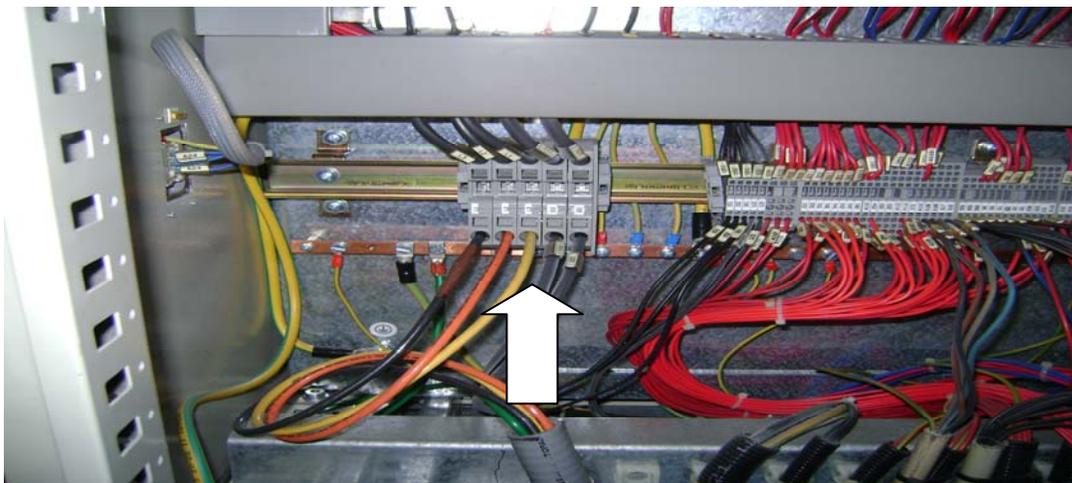


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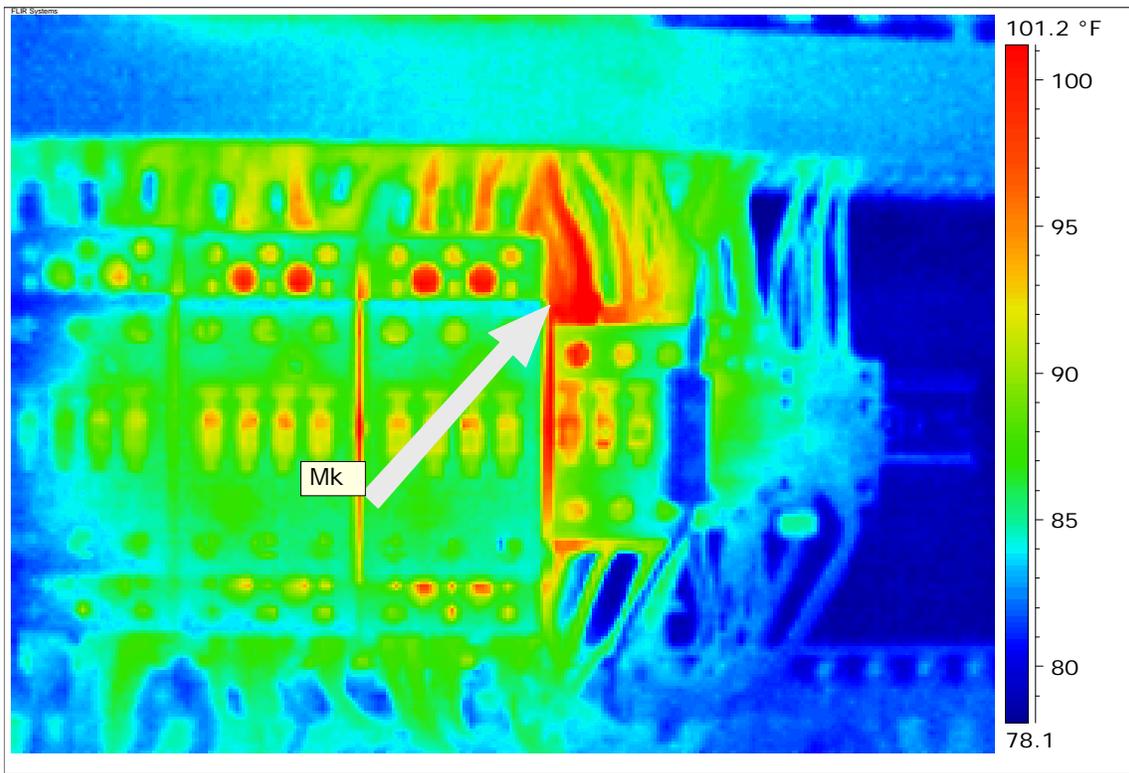


Description: **LINE 4 GODET 5 CHECK CONNECTIONS**

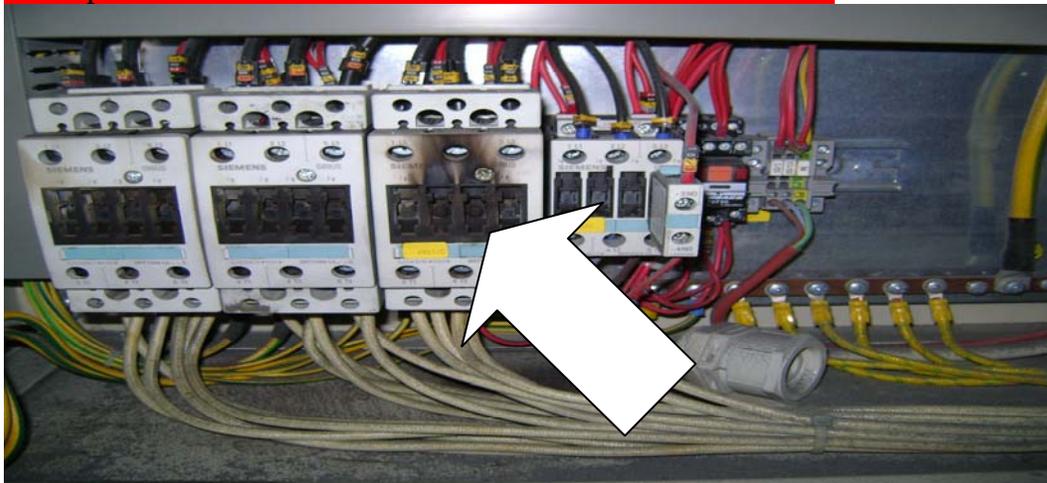


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Description: LINE 4 GODET 3 OIL HEATER VISIBLE BURN

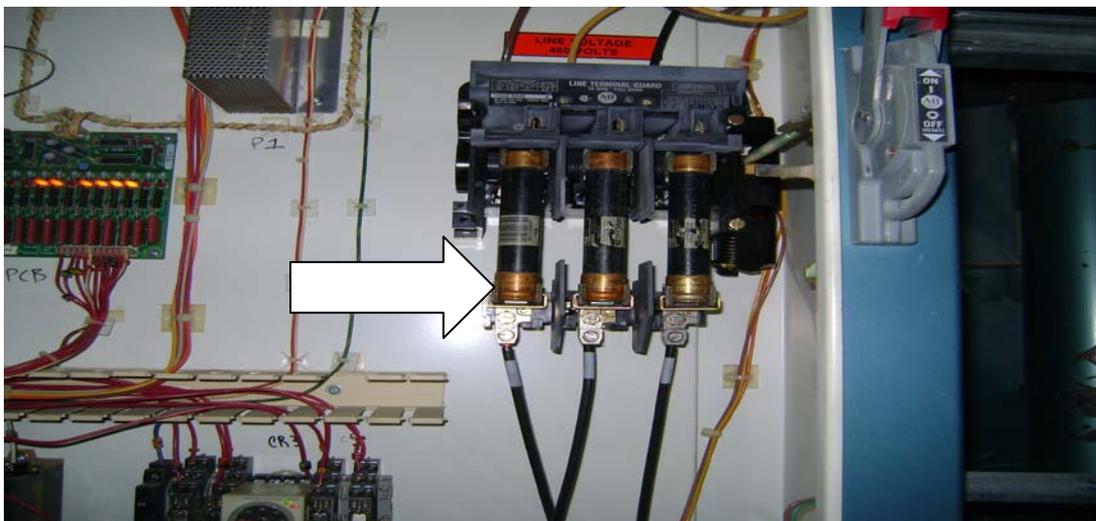


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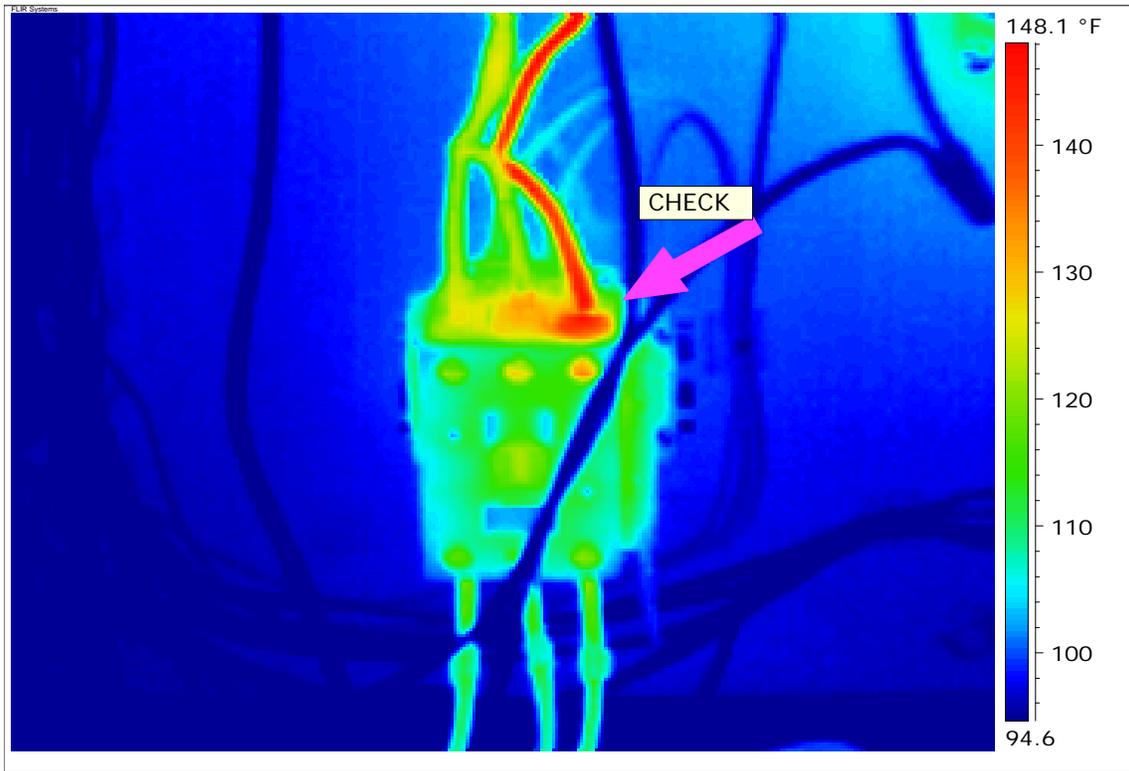


Description: **LINE 3 DRYER MAIN PANEL FUSE CLIP**

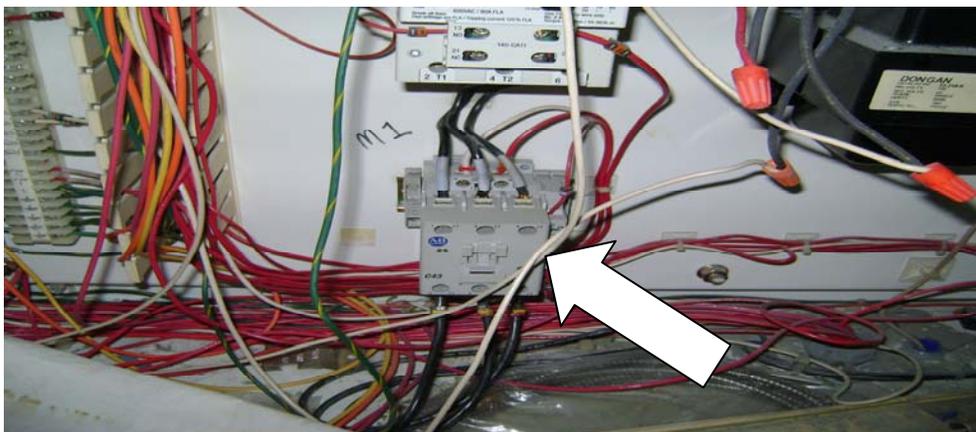


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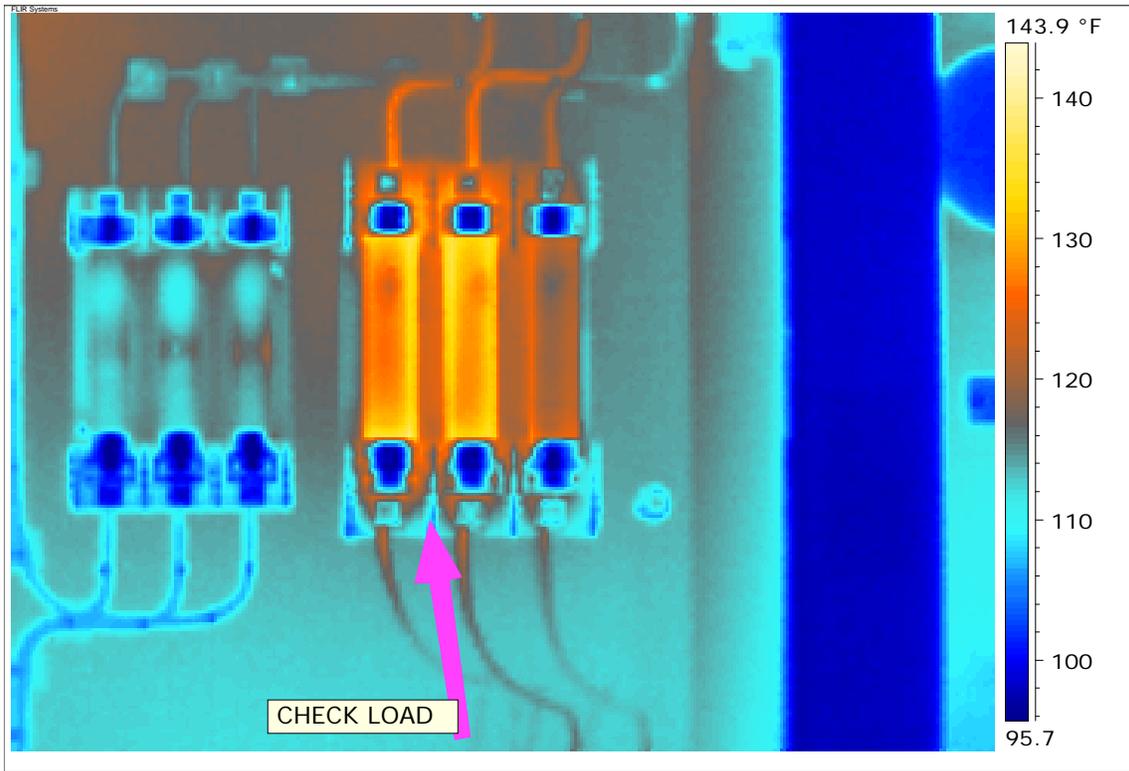


Description: **LINE 3 DRYER MAIN CHECK CONNECTION**



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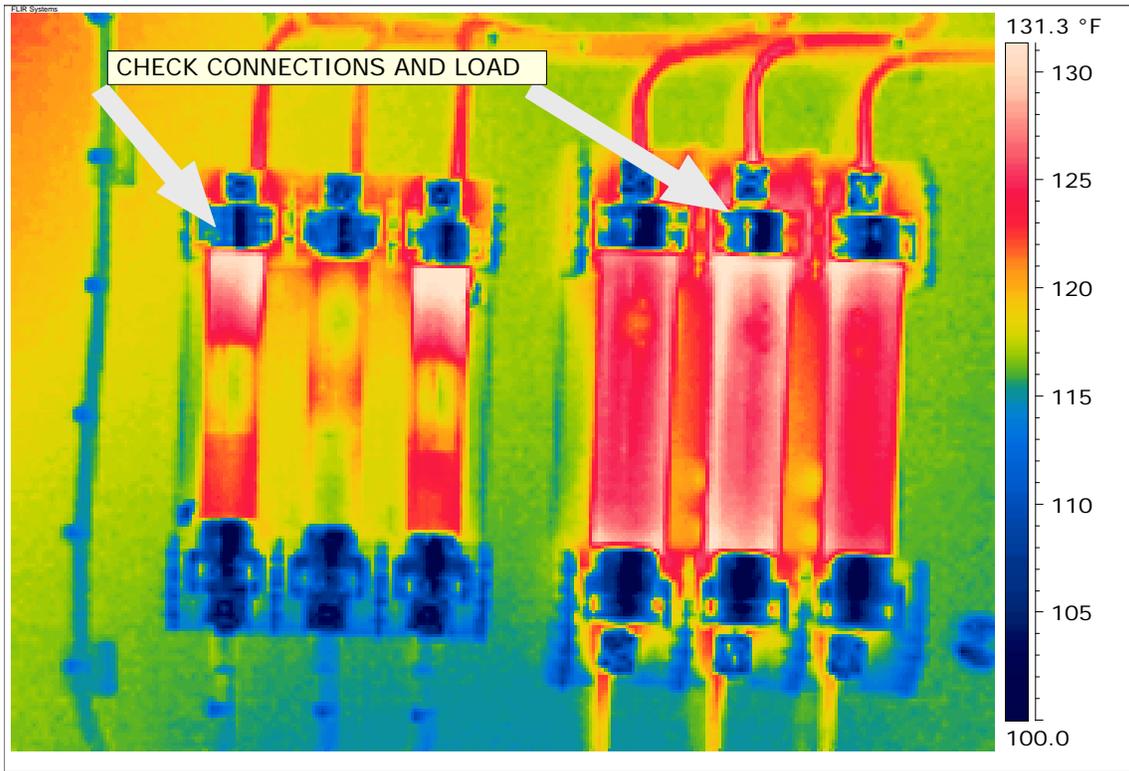


Description: **LINE 2 DRYER 2 FUSE CHECK LOAD**

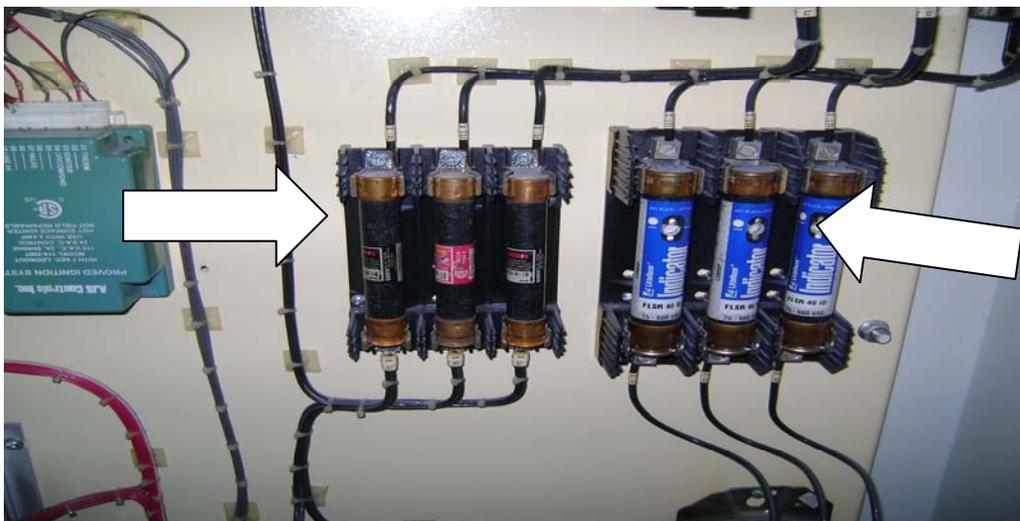


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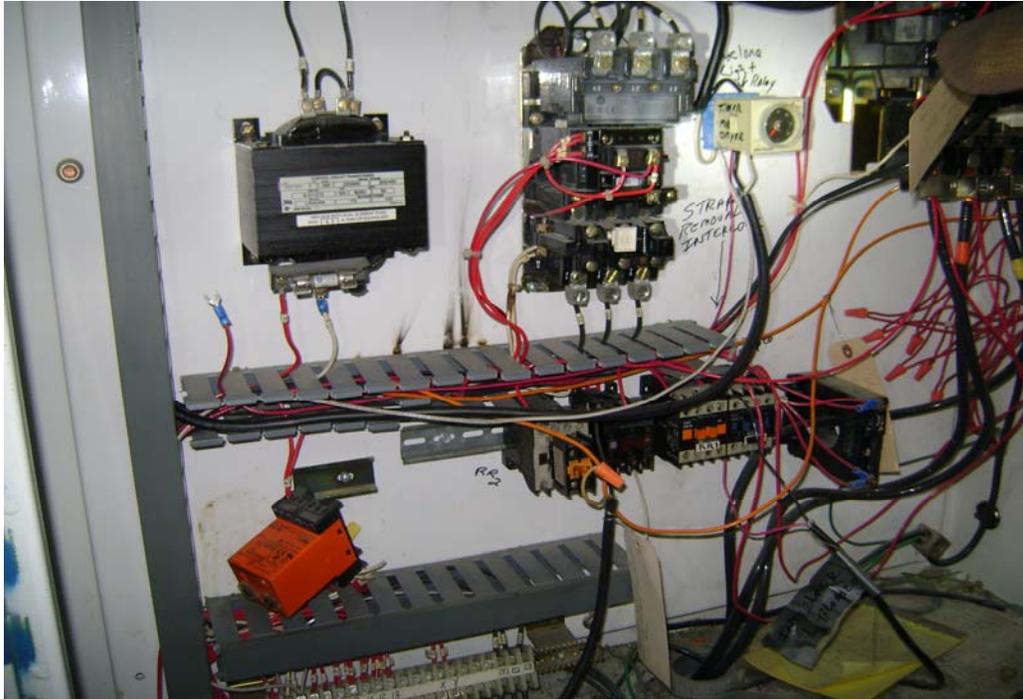


Description: LINE 1 DRYER 1 CHECK LOAD AND CONNECTIONS

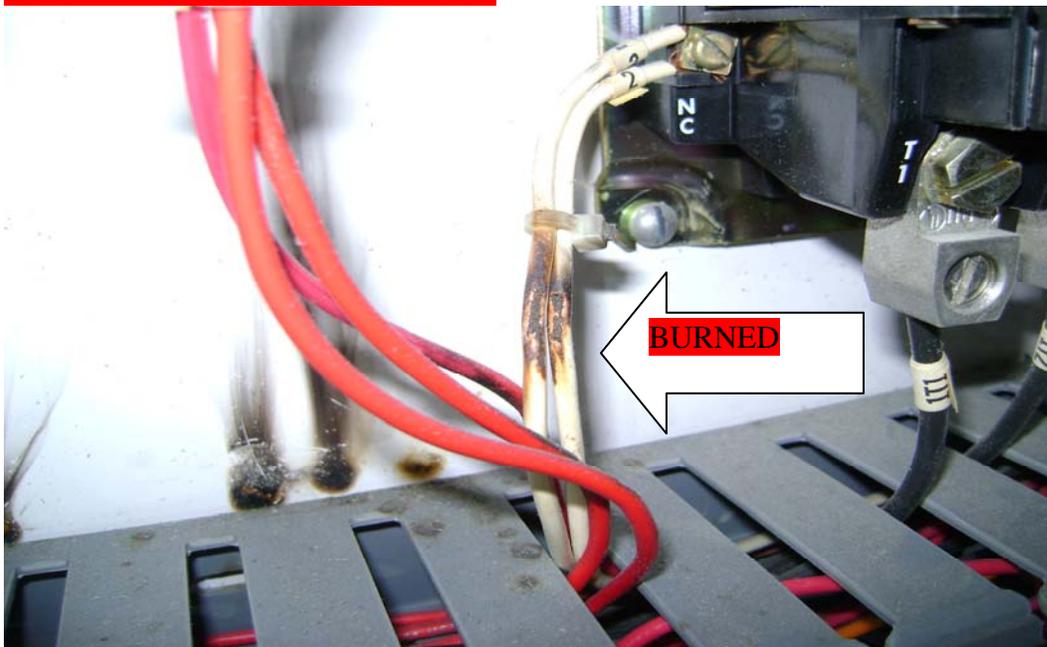


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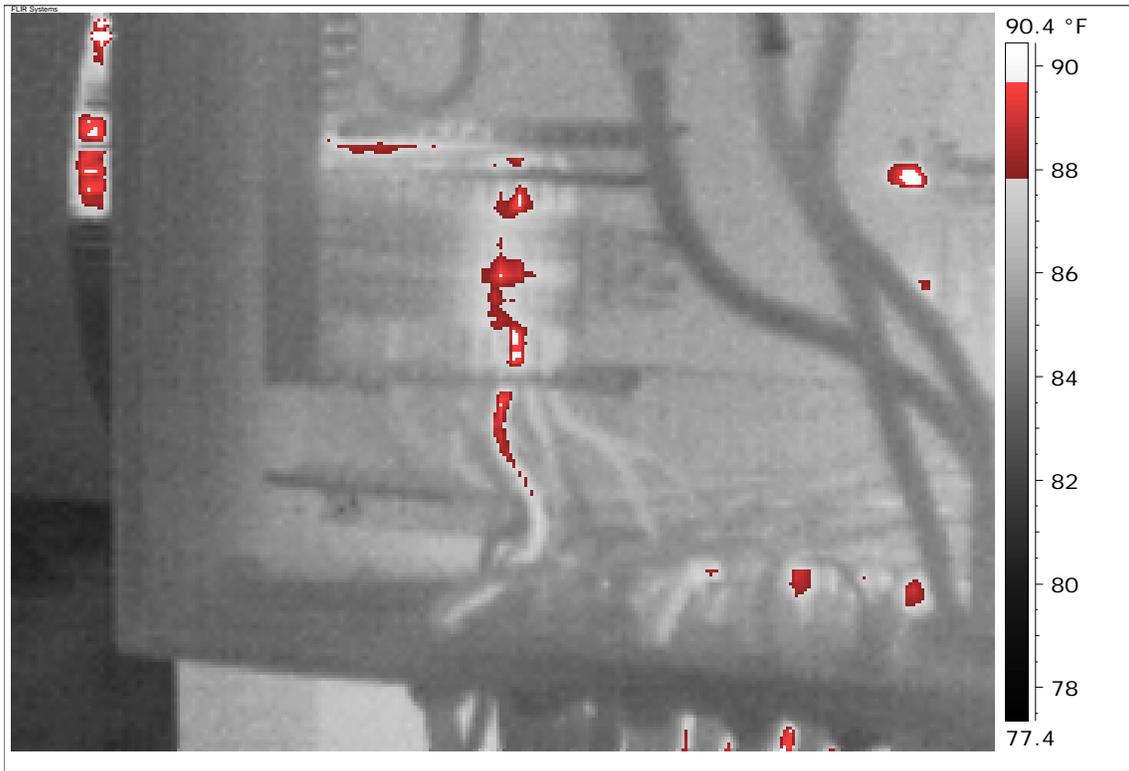


LINE 3 GRINDER BURNED WIRES

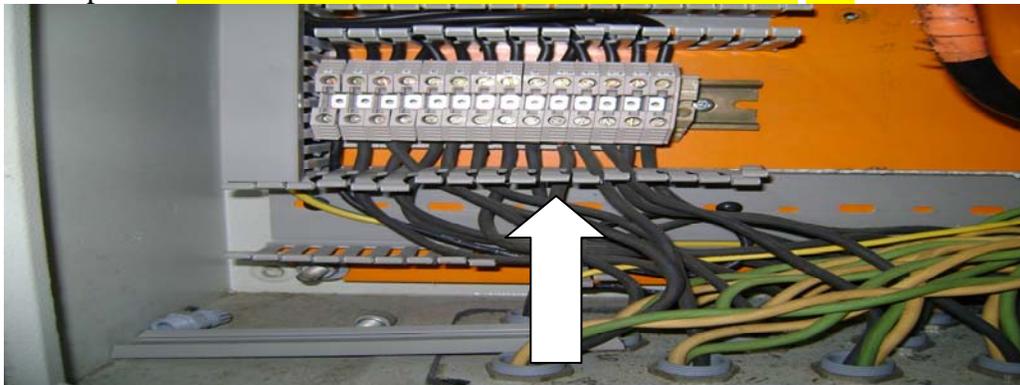


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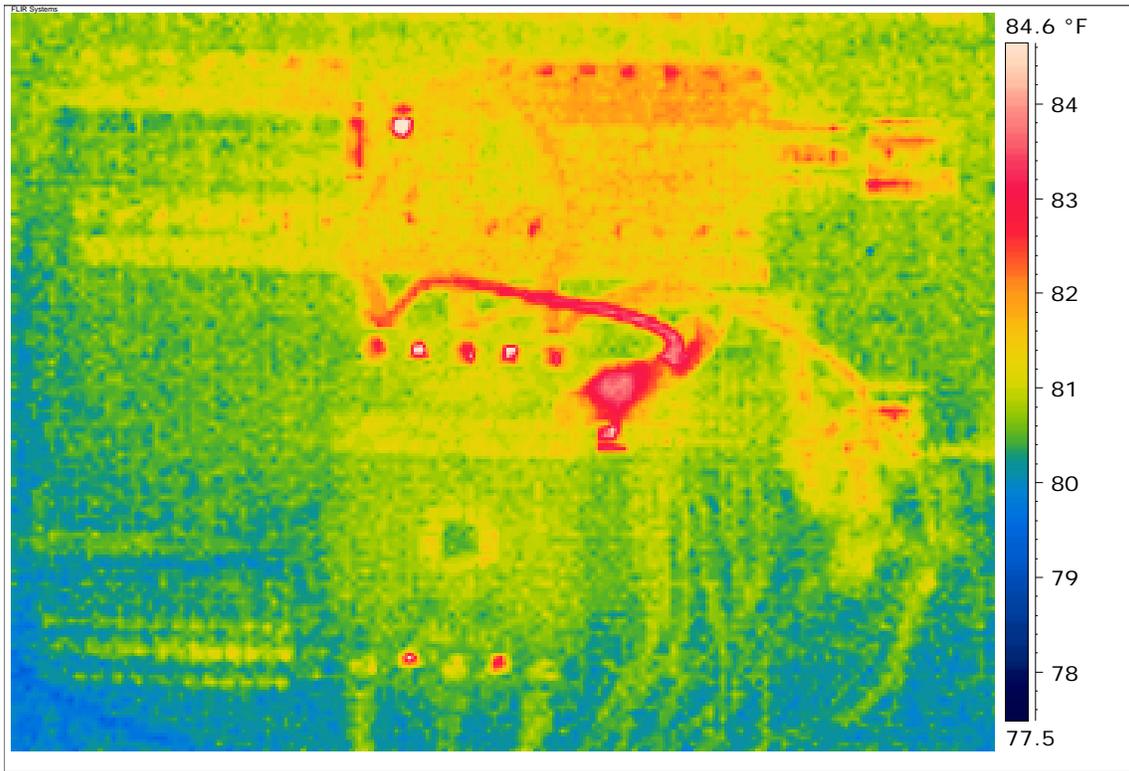


Description: CAB 122 WINDER WIRE OR CONNECTION #10

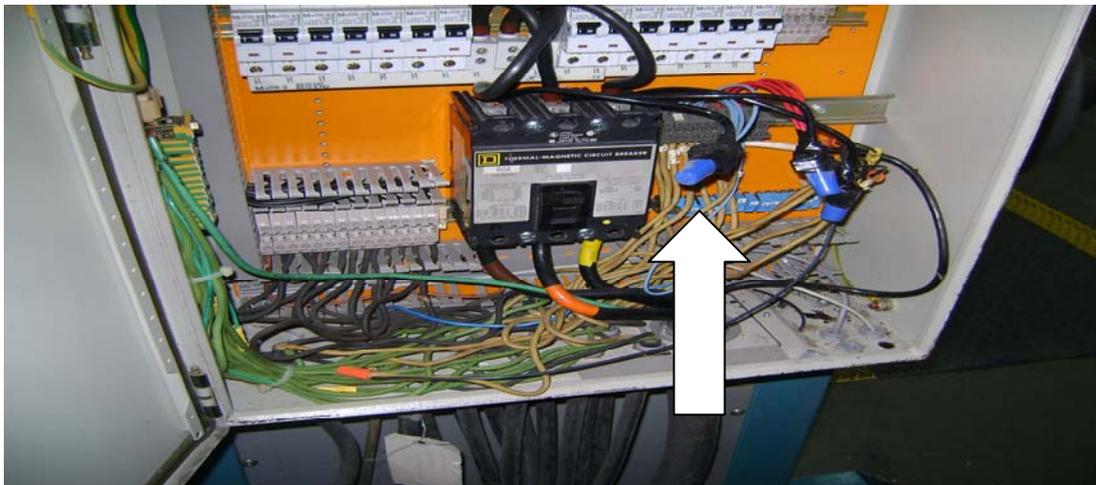


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Description: CAB 222 WINDER WIRE NUT CONNECTION



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