IR Scan Testing
Scope of Work
Attachment L-9

This scope of work is shared by UPS, Eaton DC, Eaton STS, Flywheel, Non Eaton UPS and Distributed Bypass. The following is an outline of general procedures and tests, if applicable, that are normally performed by Field Service Personnel during the course of IR Scan Testing. All checks and processes may not be applicable to all equipment models. Method of procedure is written assuming a UPS is being tested.

IR SCAN

During the course of the testing an infrared (IR) camera will be used to identify any hotspots within the UPS and battery cabinets that show a higher temperature than normal. Any visible hotspots will be noted, and the actual temperatures are recorded for future reference. Thermographs (infrared photographs) will be taken and included in a subsequent written report.

METHOD OF PROCEDURE

1. Receive approval from the electrician and/or site personnel to proceed with transferring the UPS off line.
2. Transfer critical load to bypass.
3. Transfer critical load to maintenance bypass (if applicable).
4. Shut down UPS module(s)
5. Lockout tag-out performed (if applicable).
6. Remove covers from the UPS module to safely expose portions of the UPS to be scanned.
7. Restart UPS module(s) and transfer to bypass.
8. Transfer critical load from maintenance bypass to bypass.
9. Restart UPS module(s) and transfer to normal mode.
10. Perform IR scan to identify any hotspots
11. Perform a battery discharge (period of up to 4 minutes is recommended) by opening the rectifier input to the UPS system.
12. Perform IR scan to identify any hotspots during the battery discharge.
13. Monitor the UPS operating parameters during the battery discharge.
14. Restore rectifier input to the UPS system and allow for battery recharge.
15. Perform IR scan to identify any hotspots
16. Transfer UPS system to bypass.
17. Perform IR scan while in bypass to identify any hotspots
18. Transfer critical load to maintenance bypass (if applicable).
19. Shut down UPS module(s)
20. Lockout tag-out preformed (if applicable).
21. Replace covers to the UPS module(s) removed in step 6.
22. Restart UPS module(s) and transfer to bypass.
23. Transfer critical load from maintenance bypass to bypass.
24. Restart UPS module(s) and transfer critical load to normal mode.
25. Procedure is complete.

A report shall be provided to the customer documenting test results.