pat-test.me.uk

Portable Appliance Testing

Customer information & Overview of Pat testing service

Please be aware that Pat Testing is not intended to remove from the users of electrical equipment their responsibilities which include ensuring the equipment they use has:

- No obvious visual damage or defects.
- The equipment should be installed and used in accordance with the manufacturer's instructions.
- All requirements for ventilation or heat dissipation should be met.
- Equipment should only be used in the environment and used for the purpose it was designed for.

User Checks (made by the appliance user) should be carried out before using an item of equipment. The user check is a vital safety precaution and many faults can be found by a visual inspection by the user, because the user is the person most familiar with the equipment and may be in the best position to know if it is in a safe condition and working properly. No records need be made of the user checks unless some aspect of the equipment is unsatisfactory.

Users should be instructed to remove from service and report any defective equipment.

The Formal Visual Inspection is done without the dismantling of the equipment and isolated from the power source before testing please see listed items 1 to 8

1) Manufacturer's instructions

- The equipment should be installed and used in accordance with the manufacturer's instructions.
- The correct voltage, frequency and current requirements should be verified.
- Requirements for ventilation or heat dissipation should be met.

2) Environment

Suitability of the equipment for the environment or purpose for which the equipment is being used e.g. risk of mechanical damage, exposure to weather, temperature, fluids, corrosives, flammable materials.

3) Switching of equipment

The inspector should determine whether there are suitable means of disconnecting the equipment from the mains supply under normal use, to carry out maintenance and in the event of an emergency.

4) User feedback

Where possible the user of the equipment should be consulted as to whether there are any known problems or faults. The user may be aware of intermittent problems that may not be apparent during the inspection.

5) The equipment enclosure/casing

- Physical damage such as cracks or chemical corrosion. Particular attention should be paid to areas around switches, fuses, protective covers and mains couplers where damage may result in live parts becoming exposed.
- Signs of overheating.
- Signs of ingress of fluids or foreign bodies.

6) Mains plugs

- Correct fit in the mains outlet – not loose and can be removed without difficulty.
- Cracks or damage.
- Signs of overheating.
- Properly tightened terminal screws on rewirable plugs.
- Correct wiring on rewirable plugs.
- Mains flex is properly secured by the cable grip.
- Correct fuse rating and type.

7) Mains cords

- Damage, cuts or fraying. Extension leads should be checked along the entire length.
- Joints or connections which are unsafe e.g. taped joints.
- Appropriate length.
- Correct rating for the equipment.

8) RCD protected adaptors or extension leads

Operation of the RCD should be confirmed. Operator accessible fuses on the outside of the equipment should be checked for correct type and rating. If the equipment manufacturer has specified a particular rating for the plug fuse, this should also be checked. If the manufacturer has not specified a fuse rating for the plug the preferred fuse size is detailed in Table H related to the cross-sectional area of the cord conductors. Ensure that properly manufactured cartridge fuses are used and that fuses have not been replaced with a metal bar, wrapped in metallic foil or similar non standard method.

In Service Tests (electrical tests made using pat tester) please see listed items 9 to 11

9) Class I Appliances (equipment that relies on a connection with Earth for its safety or function)

Earth continuity test.
Insulation resistance test or protective conductor current test or alternative/substitute leakage tests.
Functional checks.

Class II Appliances (has no reliance upon Earth connection for safety)

Insulation resistance test or touch current test or alternative/substitute leakage test.
Functional checks.

10) Appliance cord tests

A 3-core appliance cord should be tested as a Class I appliance and the following tests should be made:

- Earth continuity.
- Insulation resistance.
- Wiring polarity check.

A 2-core appliance cord should be tested as a Class II appliance and the following tests should be made:

- Insulation resistance.
- Wiring polarity check.

11) Extension leads, multiway adaptors and RCD adaptors.

Extension leads and multiway adaptors are tested as a Class I appliance and the following tests should be performed:

- Earth continuity.
- Insulation resistance.
- Wiring polarity check.

All test results are then recorded and the appliance labelled, any failed items are labeled as "Failed" then removed from service and the failed item is then reported to the responsible person on site.
After testing a full report of all items tested is composed and supplied for your records.