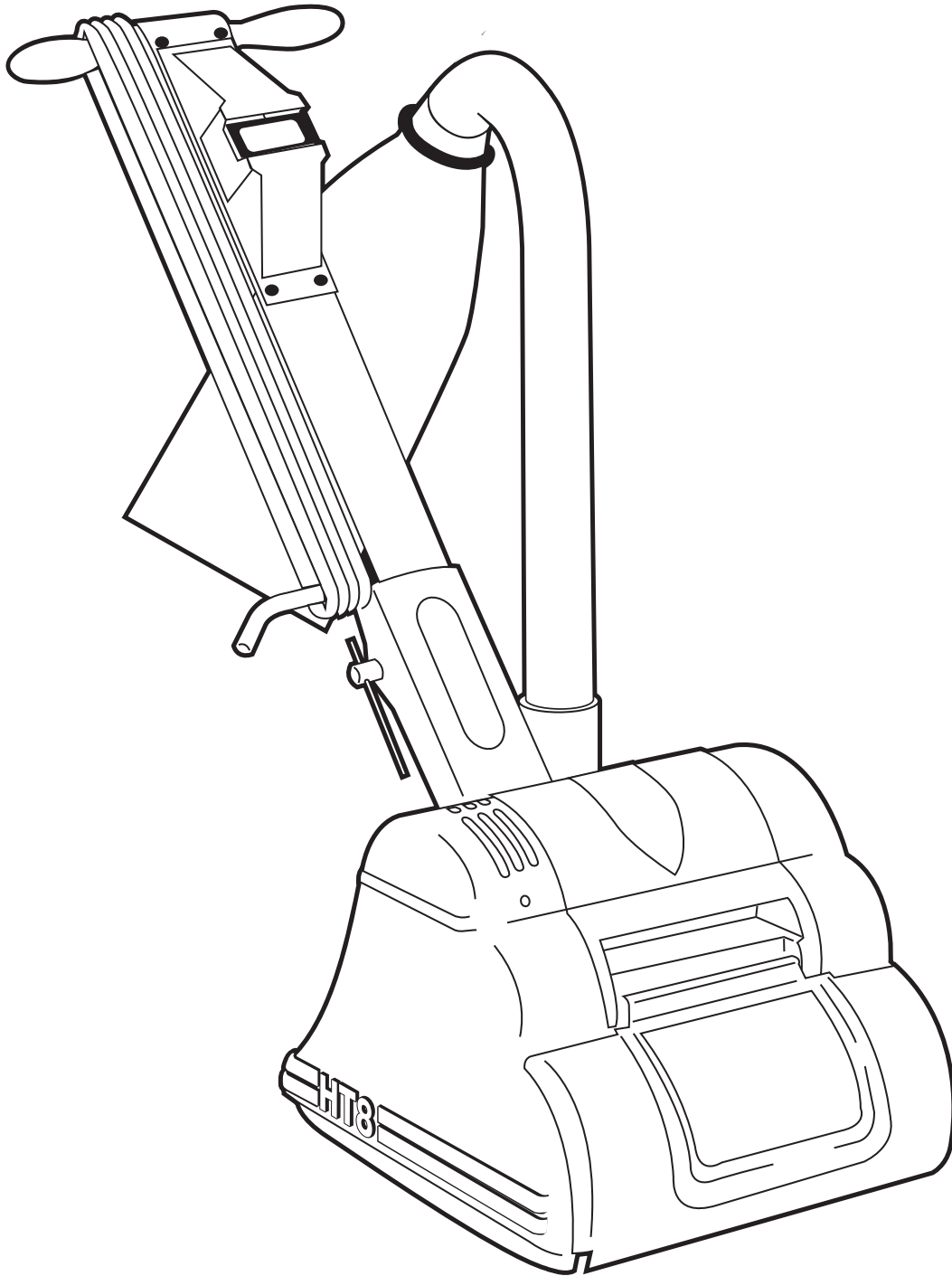


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HT8-1 & HT8-1.2 FLOOR SANDER



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INSTRUCTIONS FOR TESTING ELECTRICAL SAFETY

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THE FOLLOWING PROCEDURES ARE STRICTLY FOR THE SUPPORT AND INFORMATION OF COMPETENT PERSONS TRAINED AND CERTIFIED IN ELECTRICAL TESTING.

VISUAL INSPECTION

1. Examine power cables for damage, if the outer insulation shows more than the slightest of abrasions then the cable must be replaced. If any inner conductors (coloured) are exposed the cable must be condemned immediately.

It is not permissible to repair cables with tape or heat shrink tubing.

2. Examine all guards and mechanical parts which may become loose or dangerous, ensure that they are intact and secure.
3. Open and check mains plug and interconnecting socket (Ref.24) for condition, loose connections, damaged wires etc.
4. Ensure that the strain relief is correctly secured to the outer cable insulation.
5. Open and examine the switch housing for loose connections, damaged wires, and general condition. Pay special attention to any gaskets,'O' rings and seals intended to exclude dust from the switch and switch housing area, these must be in good order.



WARNING: HT8 and HT8-1 sanders are fitted with various types of circuit breakers or switches, all of which incorporate 'Low Volt Protection'. This means that should the mains supply be interrupted during use then the switch will immediately go to the 'OFF' position to protect the operator. This feature by preventing a circuit through the switch unless mains voltage is present also prevents a full insulation (Flash) test unless the switch is bypassed. Carrying out the standard dielectric (flash) test without these instructions will result in the test only being applied to the handle assembly only, as the test cannot pass through the switch. The specific instructions for testing each type of machine are detailed in Owners and Operating Instructions supplied with the machine.

TESTING METHOD 1 (BASIC)

NOTE:

For the oldest model machines fitted with an auxiliary relay connected to a contactor use a trailing test lead that connects directly to the machine body base twist lock electrical inlet this will enable you to electrically test the machine separately from the handle assembly.

This modern type of trailing test lead does not have the LIVE conductor connected. Only the NEUTRAL and EARTH are connected at the plug end and the NEUTRAL AND EARTH connected at the body twist lock end. There is also a shunt fitted in the body twist lock to short the LIVE and NEUTRAL terminals to allow a full dielectric test.

THIS TRAILING TEST LEAD CANNOT BE USED FOR FUNCTIONAL TESTING.

6. Replace the switch cover taking care to avoid trapping leads and ensuring that all dust gaskets are correctly positioned.
7. Examine the soft dust membrane that is located in the switch cover. It is important that all gaskets and dust exclusion measures are in good order. These items are inexpensive to replace and will ensure trouble free operation for many years.
A damaged gasket or cover may result in a costly repair !
8. Place the handle assembly on the test bench then using standard procedure test for electrical safety;

(CLASS 1 EARTHED APPLIANCE)

DO NOT EXCEED 1250 VOLT FLASH DURATION 3 SECONDS.

RECORD THE TEST RESULTS.

9. Now Place the machine body safely on the test bench and connect the trailing lead to the electrical inlet twist lock socket and connect the other end to the test station. Then using standard procedure test for electrical safety.

CLASS 1 EARTHED APPLIANCE

DO NOT EXCEED 1250 VOLT FLASH DURATION 3 SECONDS.

RECORD THE TEST RESULTS.



WARNING: *If you intend to carry out a functional test at this point then take care to secure the machine in a safe position. THE SANDING DRUM WILL ROTATE.*

Note: It is recommended that a functional test is carried out with the handle attached to the body of the machine which is secured for testing.

10. You have now tested both the handle assembly and the machine body, if both show good test results then you can carry out a functional or run test if required by placing the complete machine in a secure position and switching the machine on.



WARNING: *Secure machine before testing take care when running machine.*

11. Ensure that the switch trips to 'OFF' when the current is interrupted. During complete machine functional test with the machine switched on and running. Switch off the electrical supply at the supply socket then when the machine has stopped switch it back on. Note that the machine has tripped to the 'OFF' (0) position and requires that the machine's 'ON' (1) is pressed to re-start the machine. If you note any problem with this function then the machine will require repair. **DO NOT RELEASE THE MACHINE FOR USE.**

TESTING METHOD 2

Note: HT8-1 models manufactured after February 1985 will be fitted with and illuminated toggle switch which incorporates 'Low Volt Protection' (this means that should the mains supply be interrupted during use then the switch will immediately go to the 'OFF' position) to protect the operator. This feature, by preventing a circuit through the switch unless mains voltage is present, also prevents a full insulation (Flash) test unless the switch is bypassed.

1. Examine power cables for damage, if the outer insulation shows more than the slightest of abrasions then the cable must be replaced. If any inner conductors (coloured) are exposed the cable must be condemned immediately.

It is not permissible to repair cables with tape or heat shrink tubing.

2. Examine all guards and mechanical parts which may become loose or dangerous, ensure that they are intact and secure.

3. Open and check mains plug and interconnecting socket (Ref.24) for condition, loose connections, damaged wires etc.
4. Ensure that the strain relief is correctly secured to the outer cable insulation.
5. Open and examine the switch housing for loose connections, damaged wires, and general condition. Pay special attention to any gaskets, 'O' rings and seals intended to exclude dust from the switch and switch housing area, these must be in good order.
6. Whilst you have the switch housing open for visual inspection disconnect both incoming power leads from the switch terminals P1 and P2 and fit one 'parallel spade connector' to each lead.
7. Disconnect both leads from the other side of the switch; leads to motor (Cable Ref.20) and connect them to the spade connectors colour to colour. The switch is now bypassed.
8. Put the switch and housing to one side. Before carrying out an insulation (Flash) test ensure that the motor is connected by the twist lock socket and that all safety measures have been taken.
9. Using standard procedure test for electrical safety;

CLASS 1 EARTHED APPLIANCE

DO NOT EXCEED 1250 VOLT FLASH DURATION 3 SECONDS.

RECORD THE TEST RESULTS.



WARNING: *If you intend to carry out a functional test at this point then take care to secure the machine in a safe position. THE SANDING DRUM WILL ROTATE*

10. After having carried out the tests disconnect the machine from the tester, remove the spade connectors and reconnect the switch ensuring that the leads are reconnected to the correct terminals from which they were removed.
11. Replace the switch cover taking care to avoid trapping leads and ensuring that all dust gaskets are correctly positioned.
12. Examine the soft dust membrane that is located in the switch cover. It is important that all gaskets and dust exclusion measures are in good order. These items are inexpensive to replace and will ensure trouble free operation for many years.

A damaged gasket or cover may result in a costly repair.

13. Finally test the machine once again to ensure good earth and insulation of the mains cable and switch.

CLASS 1 EARTHED APPLIANCE

DO NOT EXCEED 1250 VOLT FLASH DURATION 3 SECONDS.

RECORD THE TEST RESULTS.

14. Ensure that the switch trips to 'OFF' when the current is interrupted. During complete machine functional test with the machine switched on and running. Switch off the electrical supply at the supply socket then when the machine has stopped switch it back on. Note that the machine has tripped to the 'OFF' (0) position and requires that the machines 'ON' (1) is pressed to re-start the machine. If you note any problem with this function then the machine will require repair. DO NOT RELEASE THE MACHINE FOR USE.

TESTING METHOD 3

Note: HT8-1.2 Machines manufactured after September 1993 from Serial Number 00532 (110V) and 00779 (240V) are fitted with the latest heavy duty design Hire and Rental switch and the following method of testing is required. This information is also included in Service Bulletin 163880-0 and the Owners Manual and Operating Instructions supplied with the machine.

1. Examine power cables for damage, if the outer insulation shows more than the slightest of abrasions then the cable must be replaced. If any inner conductors (coloured) are exposed the cable must be condemned immediately.

It is not permissible to repair cables with tape or heat shrink tubing.
2. Examine all guards and mechanical parts which may become loose or dangerous, ensure that they are intact and secure.
3. Open and check mains plug and interconnecting socket (Ref.24) for condition, loose connections, damaged wires etc.
4. Ensure that the strain relief is correctly secured to the outer cable insulation.
5. Open and examine the switch housing for loose connections, damaged wires, and general condition. Pay special attention to any gaskets, 'O' rings and seals intended to exclude dust from the switch and switch housing area, these must be in good order.
6. Whilst you have the switch housing open for visual inspection remove the circuit breaker cover to expose the 'Low Volt' release coil. DO NOT disconnect or disturb any cables.

7. Carefully detach the 'low volt coil' from the circuit breaker by pulling away and down and leave the coil resting in place.

SEE OWNERS MANUAL AND OPERATING INSTRUCTIONS.

8. Before carrying out an insulation (Flash) test ensure that the motor is connected by the twist lock socket and that all safety measures have been taken.
9. Using standard procedure test for electrical safety;

CLASS 1 EARTHED APPLIANCE

DO NOT EXCEED 1250 VOLT FLASH DURATION 3 SECONDS.

RECORD THE TEST RESULTS.



WARNING: If you intend to carry out a functional test at this point then take care to secure the machine in a safe position. THE SANDING DRUM WILL ROTATE

10. After having carried out the tests disconnect the machine from the tester, and snap the 'low volt coil' back into position.

Check that the 'ON' button cannot be locked in unless current is present.

11. Replace the switch cover taking care to avoid trapping leads and ensuring that all dust gaskets are correctly positioned.
12. Examine the soft dust membrane that is located in the switch cover. It is important that all gaskets and dust exclusion measures are in good order. These items are inexpensive to replace and will ensure trouble free operation for many years.

A damaged gasket or cover may result in a costly repair.
13. Finally test the machine once again to ensure good earth and insulation of the mains cable and switch.

CLASS 1 EARTHED APPLIANCE

DO NOT EXCEED 1250 VOLT FLASH DURATION 3 SECONDS.

RECORD THE TEST RESULTS.

14. Ensure that the switch trips to 'OFF' when the current is interrupted. During complete machine functional test with the machine switched on and running. Switch off the electrical supply at the supply socket then when the machine has stopped switch it back on. Note that the machine

has tripped to the 'OFF' (0) position and requires that the machines 'ON' (1) is pressed to re-start the machine. If you note any problem with this function then the machine will require repair. DO NOT RELEASE THE MACHINE FOR USE.

TESTING METHOD 4

Note: HT8-1.2 Machines manufactured after August 2000 from serial numbers 3415 (110V) and 7294 (240V) are fitted with SM1 circuit breaker. This information is also included in Service Bulletin 163880-0 and the Owners Manual and Operating Instructions supplied with the machine.

1. Examine power cables for damage, if the outer insulation shows more than the slightest of abrasions then the cable must be replaced. If any inner conductors (coloured) are exposed the cable must be condemned immediately.

It is not permissible to repair cables with tape or heat shrink tubing.

2. Examine all guards and mechanical parts which may become loose or dangerous, ensure that they are intact and secure.
3. Open and check mains plug and interconnecting socket (Ref.24) for condition, loose connections, damaged wires etc.
4. Ensure that the strain relief is correctly secured to the outer cable insulation.
5. Open and examine the switch housing for loose connections, damaged wires, and general condition. Pay special attention to any gaskets,'O' rings and seals intended to exclude dust from the switch and switch housing area, these must be in good order.6.
6. Whilst you have the switch housing open for visual inspection remove the circuit breaker cover and the 'Low Volt' release coil. DO NOT disconnect or disturb any cables. The 'low Volt' coil will normally come away from the breaker and remain inside the breaker cover.

The circuit breaker can now be switched on without power being present.

7. Before carrying out an insulation (Flash) test ensure that the motor is connected by the twist lock socket and that all safety measures have been taken.

8. Using standard procedure test for electrical safety;

CLASS 1 EARTHED APPLIANCE

DO NOT EXCEED 1250 VOLT FLASH DURATION 3 SECONDS.

RECORD THE TEST RESULTS.



WARNING: If you intend to carry out a functional test at this point then take care to secure the machine in a safe position. THE SANDING DRUM WILL ROTATE

9. After having carried out the tests disconnect the machine from the tester, and replace the breaker cover together with the 'Low Volt' relay. Check that the 'ON' button cannot be activated unless current is present.

10. Replace the switch cover taking care to avoid trapping leads and ensuring that all dust gaskets are correctly positioned.

11. Examine the soft dust membrane that is located in the switch cover. It is important that all gaskets and dust exclusion measures are in good order. These items are inexpensive to replace and will ensure trouble free operation for many years.

A damaged gasket or cover may result in a costly repair.

12. Finally test the machine once again to ensure good earth and insulation of the mains cable and switch.

CLASS 1 EARTHED APPLIANCE

DO NOT EXCEED 1250 VOLT FLASH DURATION 3 SECONDS.

RECORD THE TEST RESULTS.

13. Ensure that the switch trips to 'OFF' when the current is interrupted. During complete machine functional test with the machine switched on and running. Switch off the electrical supply at the supply socket then when the machine has stopped switch it back on. Note that the machine has tripped to the 'OFF' (0) position and requires that the machines 'ON' (1) is pressed to re-start the machine. If you note any problem with this function then the machine will require repair. DO NOT RELEASE THE MACHINE FOR USE.