

INSTRUCTION MANUAL

CAUTION: Read these instructions before using this appliance.

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1.DuctDevil MODELS

SINGLE MOTOR VACUUMS

DD-10X



1 x 1200 Watt	Motors	1 x 1200 Watt
10.5KG	Weight	9.5KG
10 Litres	Capacity	10 Litres
50L/Sec	Flow	50L/Sec
H14	Filter Grade	H14
70cm x 35	Size H x W	59cm x 38cm



TWIN MOTOR VACUUMS

DD-15TX



2 x 1200 Watt	Motors	2 x 1200 Watt
15KG	Weight	14KG
15 Litres	Capacity	15 Litres
75L/Sec	Flow	75L/Sec
H14	Filter Grade	H14
72cm x 40cm	Size H x W	64cm x 40cm



DD-25TX DD-25T



2 x 1200 Watt	Motors	2 x 1200 Watt
17KG	Weight	18KG
25 Litres	Capacity	25 Litres
75L/Sec	Flow	75L/Sec
H14	Filter Grade	H14
74cm x 42cm	Size H x W	82cm x 40cm



DD-25TT



Motors	2 x 1200 Watt
Weight	23KG(Inc Trolley)
Capacity	25 Litres
Flow	75L/Sec
Filter Grade	H14
Size H x B x W	97cm x 58cm x 57cm

2. PRODUCT DESCRIPTION

General vacuum cleaner with a H Type filter, suitable for the collection of nuisance dusts and can be used where a clean dust free environment is essential.

These appliances are for <u>Dry use only</u> and must not be used for the collection of liquids or damp material. The appliance must never be operated or used in areas where there may be potentially explosive dusts, vapour, or gases.

They must not be used or stored outdoors in wet conditions.

These appliances are suitable for commercial and industrial use.

Part 1, Section 6 of the Health and Safety at Work Act 1974 requires manufacturers to ensure, so far as reasonably practicable, that the articles manufactured are so designed and constructed as to be safe and without risk to health when properly used.

All RPS DuctDevil products are manufactured and tested to the relevant British and European Standards where applicable and are accompanied by operating instructions which should be studied carefully by the person responsible for operation.

Additional copies of the operating instructions are available upon application, quoting model numbers.

If a change is made in the use of the product from that which it was originally supplied, consult Rotary Power Sweeping Ltd regarding the new use.

Before use, operators should be provided with information, instructions and training on the use of the appliance and the substances for which it is to be used, including the safe method of removal and the disposal of the substance collected.

Prior to use it is recommended that the following be observed-

If there is a plug fitted, which is incorrect for the socket outlet. It should be cut off and the correct plug fitted. The removed plug should be destroyed as it would be dangerous if plugged into a live socket.

The wires in the mains lead are coloured -

Blue - Neutral, Brown - Live, Green / Yellow - Earth

The wire that is coloured Green / Yellow must be connected to the terminal marked with the letter E or by the earth symbol.

The wire that is coloured Blue must be connected to the terminal marked with N.

The wire that is coloured Brown must be connected to the terminal marked L

All DuctDevil appliances must be earthed.

Care and attention must be exercised at all times during use. Supply cables should be situated such that possible damage to cables is at a minimum. Supply cables should be examined at frequent intervals for damage such as cracking or ageing, if damage is found replace the supply cable before further use.

During cleaning or maintenance, the appliance must be disconnected from the mains.

<u>Under no circumstances may the appliance be used in areas where there may be potentially explosive dusts or vapours.</u>

These appliances are fitted with HEPA filter cartridges, designed for use with hazardous or toxic dusts as defined in BS EN 60335-69:2012. The classification is H, high hazard, suitable for all small particle dusts including carcinogens and pathogens.

DESCRIPTION

Available in either 110 or 220/230/240 volt.

Vacuum cleaner for the collection of hazardous dusts, classification H, HIGH HAZARD, for separating all dusts with all limit values of occupational exposure, including carcinogenic and pathogenic dusts. It is also suitable for the collection of nuisance dusts and can be used where a clean dust free environment is essential.

Fitted with a 2.1 Amp USB Charging Port.

The USB port can be used to charge devices, but the charging speed may vary depending on the specifications of the device being charged.

Disclaimer

Rotary Power Sweeping - DuctDevil accept no liability for any loss or damage to any personal electrical equipment or property whilst using the USB charging port.

3. AIR FILTRATION

POINTS OF NOTE

Cooling of the motor relies on air being taken through the vacuum hose. A blocked hose, overfilled paper bag, blocked filter bag or HEPA filter cartridge will result in severe overheating causing the thermal trip to operate. The thermal trip will reset after a period of time, but the cause needs to be investigated.

The use of long extension cables may cause voltage drops with subsequent loss of performance.

THERMAL TRIPS

The motors on the vacuums are fitted with thermal trips. The operation of the vacuum relies on sufficient air being drawn through the vacuum hose, the HEPA woven bag, Pre-filter and then finally through the HEPA filter cartridge and onto the motor(s).

A blocked hose, full or part filled HEPA Bag due to dense coal soot or debris, blocked Pre-filter bag or filter cartridge will result in severe overheating causing the thermal trip on the motor(s) to operate. The thermal trip will reset after a period of time but the cause needs to be investigated.

VACUUM FILTERS

The DuctDevil vacuum filtration use 3 stages of filtration:

- 1. Paper Hepa-Flo closed bag
- 2. Satin zipped collection closed bag
- 3. Pre-filter Drop-In Dry Filter
- 4. H14 Rated HEPA Filter Cartridge

Keeping the airflow running free from the hose end through to the vacuum exhaust is paramount in maintaining the operation of the DuctDevil vacuum and getting the maximum performance from the vacuum cleaner.

*The DuctDevil Vacuum is designed to be used with all levels of filtration present. If there is no filtration present before the HEPA filter, the HEPA filter will become blocked and the efficiency will be compromised. This will invalidate the warranty.

HEPA-FLO WOVEN DEBRIS COLLECTION BAG

On occasion the HEPA bags will either burst, leak or leach through the woven material at the seams or near the bag inlet due to poor manufacturing. When this happens the HEPA bag contents will disperse into the drum or will cover the bottom of the Pre-filter Drop-In Dry Filter and therefore restrict the air flow and also possibly contaminate the HEPA filter. The manufacturing and quality of the HEPA bags is completely beyond the control of the Rotary Power Sweeping Ltd.

With each DuctDevil, a satin zipped reusable soot bag is supplied and it is highly recommended that this reusable bag is used at all times to ensure the vacuum pre-filter stays clean for when a bag may burst open.

Hepa-Flo bags are also a filter bag and are designed not to be filled up completely but to also allow air through to keeps the motors cool.

SATIN REUSABLE ZIPPED VACUUM BAG

Suitable for the RPS DuctDevil, these reusable bags are great for containing any soot that leaks or bursts from HEPA bags fitted to your vacuum, therefore stopping the drum being contaminated and more importantly the Pre-filter Drop-In Dry Filter

To use the satin reusable bag, place the rubber grommet opening onto the drum spigot, then place your HEPA bag also onto the drum spigot as normal, then zip up and close the reusable bag. Any leakages or bursts are then contained within the reusable bag, so this prevents any dirty filters or soot getting into the drum.



4. OPERATING INSTRUCTIONS

SWITCHING ON THE VACUUM

- 1. Ensure correct power supply is available, according to the voltage requirements indicated on the identification plate.
- 2. Ensure the electrical supply is safe and that the supply cable is not likely to be subjected to damage during use.
- 3. Ensure the blanking cap is removed before switching the vacuum cleaner on.
- 4. The vacuum cleaner is operated by means of one or two rocker switches situated on the front of the appliance.
- 5. The motors are individually switched and the vacuum can be operated with one or both motors running. On the twin motor vacuum, ideally only one motor is required for vacuuming and both motors are ideal for dust control i.e. birds nest removal or fireplace knockout.
- 6. The use of long extension cables may cause voltage drops with subsequent loss of performance.

CHANGING BAGS

The need to change bags is often indicated by a loss in performance, this will have an effect on the motors and will cause them to increase in pitch, the air non return valves opening and closing loudly can also be an indication that there is a reduced airflow throughout the vacuum.

To change the bag, adopt the following procedure -

- 1. Switch the vacuum cleaner off
- 2. Disconnect from mains supply
- 3. Open the 4 retaining locking clips.
- 4. Lift off the vacuum top and remove Pre-filter dry drop in filter, then remove the Cloth Soot Bag.



5. Remove HEPA filter bag by sliding it off the plastic spigot neck fitted inside the drum and place in a suitable disposal bag.

- 6. Fit a new bag by sliding it on to the neck of the spigot inside drum, ensuring that the bag is spread open.
- 7. Check if the Cloth Soot Bag is contaminated with soot and fit with a clean cloth soot bag if necessary. Fit a clean Pre-filter Drop-In Dry Filter.
- 8. Replace vacuum top on to the drum and ensure the 4 retaining locking clips secure the motor head to the drum.
- 9. Turn on the vacuum to ensure that performance is re-established.

HEPA FILTER CARTRIDGE REPLACEMENT

- 1. Switch off vacuum and disconnect the mains
- 2. Open the 4 retaining locking clips.
- 3. Unscrew the retaining knob and remove the HEPA filter.



- 4. Dispose of the used HEPA filter according to working procedures/risk assessment.
- 5. Fit new filter, ensuring that the gasket is present and that the new rubber and metal penny washer is fitted to ensure that a good seal is achieved.
- 6. Replace vacuum top on to the drum and secure using the 4 retaining locking clips.
- 7. Turn on the vacuum to ensure that performance is re-established.

<u>PLEASE NOTE</u> The HEPA filter cartridge cannot be cleaned as any damage which may not be easily visible will result in the loss of filtration quality.

*It is recommended that replacement of the HEPA Filter Cartridge is carried out every 12 Months or sooner if the performance is effected or it is contaminated or damaged.

6. TROUBLESHOOTING GUIDE

LOSS OF SUCTION & POWER

Listed below are the causes of loss of suction and power of the DuctDevil.

- Air Starvation
- Blocked or Dirty Filters
- Voltage Drop

There are obvious indicators prior to the vacuum struggling to perform efficiently:

- Losing suction at the hose nozzle
- An increase in vacuum noise
- A loud clattering/clicking noise from the motor head (See below ref non-return valves)
- Motors will not start up after operating the rocker switch(s)

AIR STARVATION

Cooling of the motor(s) relies on air being pulled through the vacuum hose. The motor(s) have thermal trip switches which will activate and shut the motor(s) down if they are overheating, these thermal trip switches stop the motor(s) from burning out.

Causes of the thermal trip switches to activate are usually due to the following factors:

- Blocked vacuum hose
- Full or nearly full HEPA bag
- Coal soot which is very dense and will block the air going through the HEPA bag before it is even 1/2 full on occasions
- Blocked or dirty Pre-filter or HEPA filter cartridge due to not using the Cloth Soot Bag.

The DuctDevil twin motor models have non-return return valves which allow the motors to be switched independently. These non-return valves can be heard 'clattering' open and shut when the vacuum is being starved of air to cool the motors. If this loud 'clattering' is ignored then the thermal trips will cut in and turn the vacuum off, this will happen to both motors.

The thermal trip switches will reset after a period of time, usually 45 - 90 minutes, but the cause will need to be investigated and the problem rectified to prevent the thermal trip switches activating again.

CONTAMINATED FILTERS

If changing the bag does not restore the full suction efficiency to the vacuum, the other filtration stages must be checked. Remove the vacuum top as previously described and clean the Pre-filter Drop-in Dry Filter (This can

be washed on a 30 degree wash with the inside frame removed).

If this does not restore suction power then either the Pre-filter Drop-in Dry Filter or the HEPA filter cartridge will

require replacement.

VOLTAGE DROP

The use of long extension cables may cause voltage drops with subsequent loss of performance.

PAT TESTING

PAT testing law requires that portable electrical appliances are safe and suitable for the purposes intend-

ed. These appliances should always be maintained properly and remain in good working order.

SAFETY

Rotary Power Sweeping Ltd assumes no responsibility for the consequences of operating in the above circum-

stances because actual use of the appliance is beyond the control of Rotary Power Sweeping Ltd.

LIMITED WARRANTY

The DuctDevil vacuums and all accessories are designed for professional use only. All components are

warranted for a period of **12 months** from date of purchase.

Should any part fail due to manufacturing defect, return the defective part to Rotary Power Sweeping Ltd and we will replace it free of charge. All parts must be returned and inspected to determine part failure.

Rotary Power Sweeping Ltd does not warranty failure of any part due to operator error or normal wear or where the correct filters have not been used or the vacuum has not been maintained. Be sure to read

all operating instructions and safety precautions.

The manufacturer accepts no liability for property damage or personal injury resulting from the operation of this equipment. This is the full extent of the warranty made by Rotary Power Sweeping Ltd. There

is no other expressed warranty. All implied warranties are hereby excluded.

SPARES

For Spares Contact: Rotary Power Sweeping Ltd, 3 Tiverton Way, Tiverton, Devon. EX16 6TG.

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