



User instructions

CR38, CRS38, CR48, CR61, CR76

Scrubber/Polisher floor cleaning machines

CAUTION - READ THESE INSTRUCTIONS BEFORE USING THE MACHINE

03-7982-0000 Iss.1

07/04 http://www.truvox.com/Products/Three_Brush/Cyclone_Range



Fig 1



Fig 1a

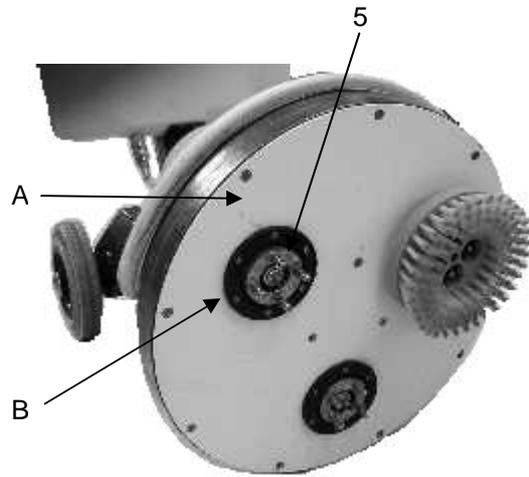


Fig 2

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IMPORTANT

READ THESE INSTRUCTIONS CAREFULLY AND RETAIN FOR FUTURE REFERENCE

1 Product information

These commercial three brush floor cleaning machines have been sold for many years into the most demanding of cleaning operations. Their inherent stability combined with an intense cleaning action make these machines specially suited to the following applications in hotels, schools, hospitals, factories, retail shops and supermarkets, leisure centres and offices.

- Carpet cleaning with "Cimex-Encap™"
- Heavy duty scrubbing
- Stripping hard floor seals
- Polishing vinyl and rubber studded flooring

Machines incorporate the very latest in triple head contra-rotating planetary technology, designed to maximise cleaning performance and minimise operator fatigue. The incorporation of modern manufacturing processes ensures years of trouble free service.

The following instructions contain important information about the machines and safety advice for the operator.

Equipment must be operated, serviced and maintained in accordance with the manufacturer's instructions.

If in doubt contact the supplier of your machine.

1.1 Important Safety Advice

When using electrical equipment basic safety precautions should be followed including the following.

- Read all instructions carefully before use.
- Keep children and unauthorised persons away from the machine when in use.
- **Do not** leave the machine connected to the electricity supply when not in use, always remove the plug from the socket-outlet.
- Switch off the machine before removing the plug.
- When unplugging pull the plug, not the supply cord.
- **Do not** allow rotating brushes to come into contact with the supply cord.
- **Do not** operate the machine with a damaged supply cord or plug, or after the machine malfunctions or is damaged in any way. Contact an authorised Service Agent for repair or adjustment.
- The plug of the power supply cord must be removed from the socket-outlet before commencing cleaning of the machine or undertaking maintenance operations.
- The power supply cord is to be regularly inspected for signs of damage. If damage is found, replace the cord before further use.
- **Do not** use where hazardous dust is present.
- **Do not** use in an explosive atmosphere.
- Take care when using a machine near the top of stairs to avoid overbalancing.

1.2 Guidelines for the operator

- Operators must be fully trained in the use of the machine in accordance with these instructions, able to perform user maintenance and the correct selection of accessories, i.e. brushes and pads etc.
- Operators should be physically capable to manoeuvre, transport and operate the machines.
- Operators should be able to recognise unusual operation of the machine and report any problems.
- Keep hands and feet well clear of rotating brushes.
- Wear suitable footwear to avoid slipping.
- Wear suitable clothing to keep dry and warm.
- Where possible implement job rotation and adequate rest periods to avoid continuous use of the same muscles.
- **Do not** smoke when using the machine.
- **CAUTION** - This machine is for dry indoor use only and should not be used or stored outdoors in wet conditions.

1.3 Transporting the machine

CAUTION - THIS MACHINE IS HEAVY

Do not attempt to lift the machine without assistance. Incorrect lifting techniques may result in personal injury. We recommend two people lift the machine using the front and rear handles.

CAUTION - When lifting the machine the brush head is free to tip backwards, ensure fingers are kept well clear of the side arms of the chassis.

When moving the machine the handle should be locked and the machine tilted back on its wheels.

2 Preparing for use

2.1 Electrical connection

Before connecting the machine to the power supply, check that your supply voltage corresponds with that marked on the rating label on the handle of the machine.

UK only

The supply cord is fitted with a non rewirable plug containing a 13 amp fuse. Should the fuse require replacement it must only be replaced by a 13 amp fuse conforming to BS1362, and the fuse cover must be refitted. If the fuse cover is lost the plug **must not** be used until the correct replacement cover is fitted.

IMPORTANT - If the supply cord is damaged, it must only be replaced by a special cord available from the manufacturer or an authorised service agent.

Should an extension cord be used, ensure cord rating is adequate for the equipment. Do not use extension cord in coiled condition as this could result in overheating of the cord.

WARNING - THIS APPLIANCE MUST BE EARTHED

2.2 Fitting brushes and pads

WARNING - This appliance has been designed for use with the brushes specified by the manufacturer. The use of other brushes may impair safety.

Always ensure machine is unplugged before fitting or removing parts.

- Tip the brush head backwards towards the handle, and push 3 brushes of the same type, or drive discs and pads, onto the four drive pins on each of the rotating heads (Fig.2).
- Return brush head to the floor.
- Remove brushes by simply pulling them off the drive pins.
- **IMPORTANT - Never allow the brush head to rest on the drive pins, always tip brush head back when not in use.**
- Always keep brushes and pads in sets of three, to ensure even wear prevent vibration.

2.3 Adjusting the handle height

Select the most comfortable handle height using the adjustment lever as previously described (see **Controls**) and lock in position.

2.4 Filling the solution tank

- Fill the solution tank with clean water using a bucket or hose, and an appropriate measure of detergent.
- **IMPORTANT** - Use only cleaning agents suitable for automatic machines i.e. low foaming, and follow the chemical manufacturer's directions regarding use, handling, disposal and health and safety provisions.
- The tank capacity is 25 litres. Do not overfill the tank as spillage may occur when in use.

3 Controls

The operating controls for all models are located on the handle (Fig.1, 1a & 2).

1 - Motor switch lever

Used to switch motor ON and OFF. Reverses the direction of brush rotation from previous ON use. Brush life is prolonged and the quality of cleaning improved by changing the direction of rotation.

2 - Solution feed lever

Operates flow valve in solution tank (if fitted).
- Pull lever to release solution.
- Release lever to stop flow.

3 - Handle adjustment lever

Used to adjust handle to comfortable working height.

4 - Solution pump switch (CR48/SPR only)

Operates pump to spray solution onto floor ahead of machine.

5 - Drive plates

Attachment point for brushes or drive discs and pads.

6 - Cable hooks

Used to hold supply cord in place on handle when machine is not in use.

4 Operation

4.1 Starting the machine

- Fully unwind the supply cord from the handle and plug in to a convenient socket outlet.
- With the handle set at a convenient working height and with both hands on the handle squeeze the motor switch lever to start the machine.
- To stop the machine release the switch lever.
- **WARNING - Never start the machine without brushes or pads fitted.**
- Normal movement of the machine is in a **forward and backward** direction.

4.2 Scrubbing and stripping

- Fit brushes or drive discs and pads suitable for the surface to be cleaned.
- Fill the solution tank with clean water and an appropriate measure of detergent.
- Before starting the machine release a liberal amount of cleaning solution from the tank to the floor. The flow of solution from the tank is controlled by lifting the left hand lever. Releasing the lever stops the flow.
- Proceed to operate the machine in the normal manner, releasing more cleaning solution from time to time as required.
- Dirty water should not be allowed to accumulate on the floor, it should be removed to prevent dirt from settling. We suggest using a **Wet & Dry vacuum** for this purpose.
- When scrubbing/stripping is complete, unplug the machine from the power supply, empty the solution tank and clean and dry the machine.
- **IMPORTANT** - Dispose of unused cleaning solution in accordance with the manufacturer's directions.

4.3 Polishing and buffing

- Fit drive discs and pads suitable for the surface to be polished.
- Ensure the floor is clean and dry.
- Walk slowly behind the machine, overlapping each pass to ensure an even finish.
- **Do not** keep the machine rotating on one spot for more than 10-15 seconds, as this could cause overheating and damage the floor surface.
- Should the machine start to vibrate, or resist the buffing action on the floor, check the cleanliness of the pads. When dirty on one side the pad may be reversed.

4.4 Cimex-Encap Carpet Cleaning

For more information on the Cimex-Encap™ low moisture carpet cleaning system see www.cimex-encap.com

- Model CR38 (620 rpm) is not suitable for use on carpets.
- Fit pad drives and pads or shampoo brushes.
- Fill the solution tank with clean water and an appropriate measure of Cimex-Encap™ Low Moisture solution.

CAUTION - Before cleaning, test a small area of carpet with the shampoo solution to ensure it is colour-fast.

- With the machine running, apply solution to the carpet until a thin white foam is obtained. Do not overwet the carpet.
- Carpet will dry to the touch in approx. 1 hour, but allow overnight drying for full encapsulation process to take place.
- Encapsulated dirt is simply removed by routine vacuuming.

4.5 Bonnet mopping (CR48SPR only)

- Fill the solution tank with warm water and add an appropriate measure of Bonnet Spray cleaner.
- Raise the brush head and fit a brush and two drive discs on to the drive pins of the rotating heads.
- Fit bonnets on to the drive discs, and return brush head to the floor.
- Switch on machine and spray pump. **Note** - Pump switch has two positions, momentary spray and continuous spray.
- Move machine forward and spray carpet with a light spray, **do not soak the carpet.**
- **IMPORTANT** - The solution feed lever on the handle should not be operated when spray cleaning carpet.
- Check the bonnets regularly and change when dirty.

4.6 When cleaning is finished

- When cleaning is finished, unplug the machine from the power supply, raise the brush head and remove brushes or pads, and wipe over the machine with a damp cloth.
- Wash brushes and pads in warm soapy water, rinse and allow to dry naturally.
- Empty the solution tank (if fitted), by pulling feed hose off brush head and direct over a suitable drain.
- **IMPORTANT** - Dispose of unused cleaning solution in accordance with the manufacturer's directions.
- Flush out solution tank with clean water.

5 Storage

After use always wipe down and dry the machine, and remove and clean the brushes or pads. Clean the rotating dust cover (A) and check the condition of the brush seals (B). The seals should be cleaned periodically to maintain their effectiveness (Fig.2).

The solution tank should be emptied and flushed out with clean water.

The machine should normally be stored with the handle in the raised position, with the brush head tipped back **Never leave the brush head resting on the drive pins.**

Wrap supply cord around the handlebar and cable winder ensuring that the plug is not trailing on the floor.

Store the machine in a dry indoor area only.

6 Maintenance

WARNING - Before undertaking maintenance operations or adjustments switch off machine and unplug from the electricity supply.

The machine requires minimum maintenance apart from the following checks by a trained operator.

- **Supply cord** - Regularly inspect sheath, plug and cord anchorage for damage or loose connection. Only replace the supply cord with the type specified in these instructions.
- **Solution Tank** - Check water flow, if restricted inspect hoses and tubes for blockage or kinks. Dismantle control valve to clean if necessary.
- **Brushes and Pads** - Inspect for wear and replace worn brushes. Clean under running water.

7 After sales service

Should you require after sales service please contact the supplier from whom you purchased the machine, who will arrange service. Repairs and servicing of Truvox products should only be performed by trained staff. Improper repairs can cause considerable dangers to the user.

Enquire about the Truvox low cost and efficient Maintenance Contract.

8 Technical specification

Machine is of Class I construction. Enclosure to IPX4. Supply cord and plug 15 metres.

Models - 110 & 230V~ 50 Hz. fitted with supply cord type H05VV-F 3 x 1.0mm² (10A).

Model - CR61 & CR76 @ 110V~ 50 Hz. fitted with supply cord type H05VV-F 3 x 1.5mm² (16A).

Model		CR38	CRS38	CR48	CR61	CR76
Motor rating	W	370	370	550	1100	1100
Pad/brush speed	rpm	620	400	400	400	300
Working width	cm	38	38	48	61	76
Pad/brush diameter	cm	16.5	16.5	20	25	30
Pad pressure	gm/cm ²	45	45	38	30	28
Solution tank capacity	ltr	25	25	25	25	25
Motor height - clearance	mm	42	42	45	48	55
Handle height	cm	112	112	112	112	112
Weight	kg	38	38	47	60	79
Length	cm	74	74	80	118	126
Width	cm	40	40	50	63	78
Sound pressure level (see note 1)	dB(A)	60	60	60	65	65
Handle vibration (see note 2)	m/s ²	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5
Theoretical coverage - Scrubbing	m ² /h	1140	•	1140	1830	2280
Polishing		1710	•	2160	2745	3420
Spray cleaning		850	•	1080	1372	1710
Shampooing		•	1140	1440	1830	2280

1 - Sound pressure levels measured at a distance of 1 metre from machine and 1,6 metres above floor, when scrubbing a hard floor. Measurements recorded using a hand held meter.

2 - Handle vibration does not exceed 2,5 m/s², when operating on any surface with brush or pads. Measurements recorded by an independent test laboratory.

9 Accessories

Brushes	Application	Part No. CR38	Part No. CR48	Part No. CR61	Part No. CR76
Fibre	General purpose scrubbing	11-1601-0500	11-2001-0500	11-2501-0500	11-3001-0500
Polypropylene	Light scrubbing	•	11-2003-0500	11-2503-0500	•
Polypropylene	Medium duty scrubbing	11-1604-0500	11-2004-0500	11-2504-0500	11-3004-0500
Nylon	Standard duty scrubbing	11-1605-0500	11-2005-0500	11-2505-0500	11-3005-0500
Tynex*	Heavy duty scrubbing	•	11-2013-0500	11-2513-0500	11-3013-0500
Tynex*	Extra heavy duty scrubbing	11-1616-0500	11-2016-0500	11-2516-0500	11-3016-0500
Shampoo	Light cleaning and carpets	11-1607-0500	11-2007-0500	11-2507-0500	11-3007-0500
Instalok drive disc	Using cleaning pads	11-1662-0500	11-2062-0500	11-2562-0500	11-3063-0500

Cimex-Encap™ Carpet Cleaning System	Description	Part No
Cimex-Encap™ Carpet Cleaner	4 x 5 litre	06-0307-0000
Cimex-Encap™ Carpet Spotter	6 x 1 litre	06-0308-0000
Cimex-Encap™ 8" Pads	Box of 15 (5 sets)	06-0309-0000
Cimex-Encap™ in progress sign	Warning sign	06-0312-0000
Edaina brush	For cleaning edges and corners	06-0314-0000

* - Unsuitable for Vinyl, Wood or Rubber surfaces.

NOTE - Brushes are supplied in sets of 3.

IMPORTANT - Genuine accessories are only available from authorised Service Agents or Truvox Customer Service Dept.

10 Fault diagnosis

The following simple checks may be performed by the operator.

Fault	Reason	Remedy
Motor not running.	Lack of voltage/electrical supply.	Check fuse *, supply cord, plug, socket outlet and circuit breaker.
Machine stalls during operation.	Damaged brushes / pads. Loose plug connection.	Replace brushes / pads. Check plug is fully inserted into mains socket.
Machine vibrates.	Damaged or dirty brushes / pads. Unequal thickness of brushes / pads.	Replace or clean brushes / pads. Replace with 3 brushes / pads of equal thickness.
Cleaning solution not flowing.	Dirt in tank, outlet blocked. Flow valve not open.	Flush out tank with clean water. Check all valves are open.

* If the fuse blows several times, the machine should be checked by an authorised Service Agent.

11 Guarantee

Your product is guaranteed for one year from the date of original purchase, or hire purchase, against defects in materials or workmanship during manufacture.

Within the guarantee period we undertake at our discretion, to repair or replace free of charge to the purchaser, any part found to be defective, subject to the following conditions.

CONDITIONS

1. Claims made under the terms of the guarantee must be supported by the original invoice/bill of sale issued at the time of sale, or the machine Serial No.
2. For claims under this guarantee contact the supplier from whom you purchased the product who will arrange the appropriate action. Do not initially return the product as this could result in transit damage.
3. Neither Truvox nor its distributor shall be liable for any incidental or consequential loss.

4. This guarantee is governed by the laws of England.
5. This guarantee does not cover any of the following:
 - Periodic maintenance, and repair or replacement of parts due to normal wear and tear.
 - Damage caused by accident, misuse or neglect, or the fitting of other than genuine Truvox parts.
 - Defects in other than genuine Truvox parts, or repairs, modifications or adjustments performed by other than a Truvox service engineer or authorised service agent.
 - Costs and risks of transport relating directly or indirectly to the guarantee of this product.
 - Consumable items such as, brushes, drive discs, filters and drive belts.

This guarantee does not affect your statutory rights, nor your rights against the supplier arising from their sales or purchase contract.

Truvox International Limited has a policy of continual product development and we reserve the right to alter specifications without prior notice.

12 Declaration of conformity

EC Declaration of conformity

We, Truvox International Ltd.

of Third Avenue
Millbrook Trading Estate
Southampton SO15 0LE
England

declare that the machinery

Make : Scrubber / Polisher floor cleaning machines
Type : CR
Model : CR38, CR38/P, CR38/110/50, CRS38, CRS38/110/50,
CR48, CR48/P, CR48/110/50, CR48/SPR, CR48/SPR/110/50
CR61, CR61/P, CR61/110/50
CR76, CR76/P

Serial Number :
Year of Construction : 2004

has been manufactured using the following transposed harmonized European Standards and technical specifications.

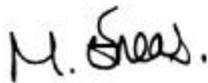
BS EN 60335-1 and BS EN 60335-2-67

and is in conformity with EC Directives, 98/37/EC, 73/23/EEC and 89/336/EEC and all amendments.

Signed in : SOUTHAMPTON, England

on the 30th day of July 2004

Signature :



Name : M R Eneas
Position : New Product Development Manager

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