



## **User instructions**

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**R48HD and R76HD**

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**Heavy Duty Scarifier**

**CAUTION - READ THESE INSTRUCTIONS BEFORE USING THE MACHINE**



## DIAGRAMS

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# IMPORTANT

**READ THESE INSTRUCTIONS CAREFULLY AND RETAIN FOR FUTURE REFERENCE**

## 1 Product information

Heavy Duty Three Brush machines will cut through dirt on some of the very hardest to clean surfaces. They are perfect for tackling jobs like impacted grease on old flooring surfaces or adhesive residues, or even ice build-up in cold store floors. The Heavy Duty machines are ideal for scarifying concrete industrial floors.

**Cimex** machines incorporate triple head contra-rotating planetary technology, producing a stable machine with no pulling action thereby reducing operator fatigue. It also maintains an even pressure, minimising the risk of cutting or scoring the floor. 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 the rotating heads 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.
- Only replace the cord with the type specified in the instructions.
- **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. scarifying brushes.
- 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 heads.
- 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 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 mechanical assistance.** Incorrect lifting techniques may result in personal injury. We recommend the machine is lifted by two people.

**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 to and from the working area 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.

**WARNING - THIS APPLIANCE MUST BE EARTHED**

## 2.2 Fitting accessories

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

Always ensure machine is unplugged before fitting or removing parts.

### 2.2.1 Fitting scarifying brushes

- Tip the machine brush head backwards towards the handle, and push three scarifying brushes of the same type onto the four drive pins on each of the rotating heads (Fig.2).
- Fit retaining clip onto pins, ensuring it is located in the groove on each pin.
- Return brush head to the floor.
- Remove brushes by simply removing retaining clip and pulling brush off the drive pins.
- Always keep brushes in sets of three, to ensure even wear and prevent vibration.

### 2.2.2 Fitting heavy duty tools

- Heavy duty tools (such as star-wheels carbide blocks and scrapers) must be bolted onto the machine.
- To bolt tool to machine two drive pins (diagonally opposite each other) must be removed from each of the rotating heads.
- Fit three matching heavy duty tools over each pair of drive pins
- Secure each tool using two M5 bolts. Always use spring washers with bolts to minimise chance of tools working itself loose.

**IMPORTANT – regularly check that bolts are tight.**  
**IMPORTANT – Never allow the brush head to rest on the drive pins, always tip brush head back when not in use.**

## 2.3 Adjusting the handle height

From the upright position, lift the handle adjustment lever and pull the handle backwards to a comfortable working height, then press lever down to lock handle in position.

## 3 Controls

The operating controls are located on the handle (Fig.1).

### 1 - Start/stop lever

When raised switches motor ON and starts the rotating heads, when released switches motor OFF and stops the heads. Each time the lever is operated the direction of head rotation is reversed, improving the quality of cleaning and prolonging disc/pad life.

### 2 - Handle adjustment lever

Used to adjust handle to a comfortable working height.

## 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 comfortable working height, and with both hands on the handle, lift the start/stop lever to START the machine. Releasing the lever will STOP the machine.
- **WARNING - Never start the machine without brushes or heavy duty tools fitted.**
- Normal movement of the machine is in a **forward and backward** direction.
- Always work away from the supply socket to avoid running into the supply cord.

### 4.2 Using the machine

- Fit brushes or tools suitable for the surface to be cleaned / prepared.
- Adjust handle to suit operator
- Tilt the machine slightly backwards so that the brushes / tools are clear of the floor and wheel the machine to the area to be cleaned.
- Switch on the machine. Always work away from the mains socket – this will help to avoid running into the cable.
- Scarifying is normally a dry process. Because of the extremely harsh abrasive action of scarifying brushes and heavy duty tools, only resilient floors such as concrete, metal tile etc. should be scarified
- Walk slowly behind the machine, overlapping each pass to ensure an even finish.
- **Do not** keep the machine rotating on one spot as this could damage the floor surface.
- Should the machine start to vibrate, or resist the cleaning action on the floor, check the brushes / tools for wear.
- Each area of the floor should be covered at half walking pace. Some floors may require extra passes to process it thoroughly.
- On reaching the original starting point, position the machine to process another path parallel to the first and overlapping by 50mm.
- When the entire floor area has been covered, clear debris using suitable vacuum cleaner or sweeper.

### 4.3 Adding weights

- Before adding additional weights switch off the machine.
- Unscrew knob and lift off clamping bar.
- Add additional weight as required, and refit clamping bar.

### 4.4 When work is finished

- When work is finished, unplug the machine from the power supply, remove weights, raise the brush head and remove the drivebacks, and abrasive discs or pads. Wipe over the machine with a damp cloth.
- Remove and clean brushes or tools.

## 5 Storage

After use always wipe down the machine, and remove and clean the drivebacks discs and 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 machine should normally be stored with the handle in the fully upright position, with the brush head tipped back. **Never leave the brush head resting on the drive pins.**

Wrap supply cord around the cable storage hooks 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 hose for blockage or kinks. Dismantle control valve to clean if necessary.

## 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.

## 8 Technical specification

Machine is of Class I construction. Enclosure to IP2X.

Models - 230 V ~ 50 Hz. fitted with 15m supply cord type H05VV-F 3x1.0mm<sup>2</sup> (10A), and plug.

Model		R48HR	R76HD
Motor rating	W	1500	1500
Head speed	rpm	400	300
Brush / tool diameter	cm	20	30
Working width	cm	48	76
Weight ( <i>machine only</i> ) ( <i>see note 3</i> )	kg	60	68
Length	cm	75	
Width	cm	48	76
Height ( <i>handle upright</i> )	cm	112	112
Sound pressure level ( <i>see note 1</i> )	dB(A)	65	65
Handle vibration ( <i>see note 2</i> )	m/s <sup>2</sup>	< 2.5	< 2.5

- 1 - Sound pressure levels measured at a distance of 1 metre from machine and 1,6 metres above the floor, when used on a hard floor. Measurements recorded using a hand held meter.
- 2 - Handle vibration does not exceed 2,5 m/s<sup>2</sup>, when operating on any surface.  
Measurements recorded by an independent test laboratory.
- 3 - All machines supplied with two 17kg weights.

## 9 Accessories

Items	Application	Part No. For use with R48HD	Part No. For use with R76HD
Horseshoe weight	Spare weights 17kg each	03-7004-0000	03-7004-0000
Retaining clips	Hold brushes nto HD machiens	03-6938-0000	
Crimped wire brush	Chequer plate cleaning	11-2041-0500	11-3041-0500
Concrete finishing brush	Steel wire 18G	11-2043-0500	11-3043-0500
Spark free scarifying brush	Bronze wire 18G	11-2045-0000	
General scarifying brush	Steel wire 3x16G	11-2049-0500	11-3049-0500
Heavy duty scarifying brush	Steel wire 2x14G	11-2051-0500	11-3051-0500
Rubber removal	Starwheels	05-4084-0000	02-3980-0000
Concrete removal	Widea wheels	05-4083-0000	
Concrete preparation	Fine carbide block	05-4078-0000	
Paint removal	Medium carbide block	05-4079-0000	
Coatings removal	Coarse carbide block	05-4080-0000	
Foam removal	Twisted wire	05-3886-0000	05-3893-0000
Flat tip scraper	Ice breaking	05-4082-0000	

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
Machine not working.	Lack of voltage/electrical supply.	Check fuse *, supply cord, plug and socket outlet.
	Safety cut-out switch faulty.	Contact Service Agent.
Motor running, but brushes not rotating.	Loose or broken drive belt.	Remove rotating dust cover and fit new drive belt, or call Service Agent.

\* 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, drivebacks, abrasive discs, pads 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 : Heavy duty scarifier  
Type : Heavy Duty  
Model : R48HD, R76HD

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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