

ORIGINAL INSTRUCTIONS

CAUTION – READ THESE INSTRUCTIONS BEFORE USING THE MACHINE

User instructions

TruSweep 460 – TRUS460

Commercial Sweeper



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IMPORTANT
BEFORE USE READ THESE INSTRUCTIONS AND RETAIN FOR FUTURE REFERENCE

1. Product information

The TruSweep 460 is designed exclusively for operation on solid, level and dry surfaces. It has been designed for the professional user to ensure long service life and safe operation.

These instructions only cover the operation of the machine and do not include information on the basics of sweeping. Any user not familiar with basic sweeping methods should contact their supervisor, supplier or Truvox International before proceeding.

This machine must only be used for the manufacturer's approved application. This sweeper is intended exclusively for operation on solid, level and dry surfaces.

 **Do not use** on a surface with a slope exceeding 2%. **Do not use** the machine where it is suspected that the surface contains health endangering dust or debris such as asbestos or chemical waste. If this is suspected **do not proceed**, contact your supervisor or Truvox International for advice.

The following instructions contain important information about the machine 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.**



These instructions are valid for the following model: **TruSweep 460 – TRUS460**

1.1 Important safety advice


When using the TruSweep 460 basic safety precautions should be followed including the following:

- Read all instructions carefully before use.
- Please note that the safety information described in the manual supplements and does not replace standards in force in the country in which the machine is used.
- This appliance is suitable for commercial use, for example in warehouses, hotels, schools, hospitals, factories, shops, rental businesses and other than normal housekeeping purposes.
- Do not operate machine:
 - Unless trained and authorized by a person responsible for their safety.
 - Unless operator manual is read and understood.


- Unless with mentally, physically and the sensory capability of following machine instructions.


- Keep children and unauthorised persons away from the machine when in use.
- All parts are to be positioned as indicated in the instructions before using the machine.
- Do not operate the machine if it malfunctions or is damaged in any way. Contact an authorised service agent for repair or adjustment.
- Keep hair, loose clothing, fingers and all parts of body away from openings and moving parts.
 -  • Do not use where hazardous dust is present.
 -  • Do not use in an explosive atmosphere.
 - Do not pick up oil or other flammable material.
- Take care when using a machine near the top of stairs to avoid overbalancing.

1.2 Guidelines for the operator

 **WARNING** - 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.

- Operators should be physically capable to manoeuvre, transport and operate the machine.
- Operators should be able to recognise unusual operation of the machine and report any problems.
- Only use the machine on firm level surfaces
- 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.
- Do not put any objects into openings. Do not use with any opening blocked: keep free of dust, debris, hair, or anything that may reduce air flow.
- Do not sweep over wet surfaces.

 **CAUTION** - This machine is for use in dry areas and should not be stored outdoors or in wet conditions.

 **CAUTION** - If it is suspected that there is hazardous dust or flammable materials stop cleaning the area immediately and consult your superior.

! WARNING - Only use accessories and spare parts provided with the machine or those approved by the manufacturer. The use of other accessories may impair the safety of the machine.

1.3 Transporting the machine

! CAUTION - Incorrect lifting techniques may result in personal injury, where applicable do not lift large and heavy machines without assistance. We advise that the manual handling regulations are followed. Please refer to the technical table for details on weight of machine.

When transporting the machine ensure that all components and removable parts are securely fastened.

Do not lift or transport the machine whilst containing dirt as this will add considerably to the weight.

Take extreme care when moving the machine up or down steps or stairs.

! CAUTION - Bumping over thresholds, kerbs and similar obstacles can damage the machine. Small obstacles can be overcome by pulling the machine backwards.

1.4 Symbols & markings

In order to highlight information and procedures regarding safety, maintenance etc, the following symbols have been adopted in the manual:

! WARNING

2. Preparing for use

- Please remove the TruSweep 460 from its packaging. Do not attempt to lift it out of the box.
- For ease of packing, the handle and side brush assembly are packed separately. The side arm brush is located within the dirt collector. These parts must be installed before the machine is put into operation.
- You will require the following tools to assemble the TruSweep 460:
 - 2x 10mm spanners
 - Phillips screwdriver
- For ease of assembly we advise to assemble the sweeper with two people.
- Assemble the handle in the upright position by attaching it to the brackets above the rear wheels. Tighten with the two thumbscrews (Fig. 1).



Fig.1

- The handle can be fixed in two different positions as shown below. We recommend handle position 1 for ease of use and improved pick-up (Fig. 2).

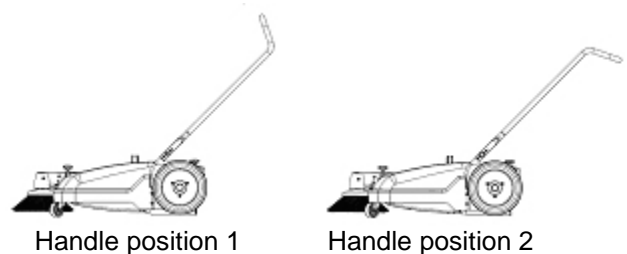


Fig. 2

2.1 Attaching the side brush assembly

- Attach the side brush to the brush plate on the side arm assembly using the hex head bolt and the nylock nut (Fig. 3).



Fig. 3

- Position the V-belt from the side arm assembly around the pulley attached to the back of the rear right wheel. In order to attach the V-belt it will be necessary to twist

it. Both sides of the V-belt should be positioned on the same side of the belt guide (indicated by arrow in Fig.4), not the brush pulley.

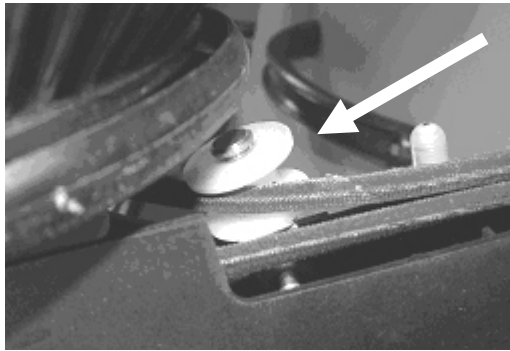


Fig. 4

- To attach the side arm assembly to the main frame remove the two screws that have already been inserted into the right side of the main frame. Align the bracket on the side arm assembly to the main frame and screw tightly into position (Fig. 5).



Fig. 5

- Check the rotation and operation of the side brush. The brush should rotate counter-clockwise when the TruSweep 460 is pushed forward. If this is not the case, the V-belt was installed incorrectly.
- If the V-belt is loose the tension can be adjusted by loosening the two screws that attach the support side arm to the main frame. Move the bracket forward then retighten screws.

3. Controls

3.1 Pressure adjustment knob for side brush (1 in Fig. 6 and Fig. 7)

Used for setting the height of the side brush. The side brush may touch the floor only by one third, so as to throw the swept debris into the machine.

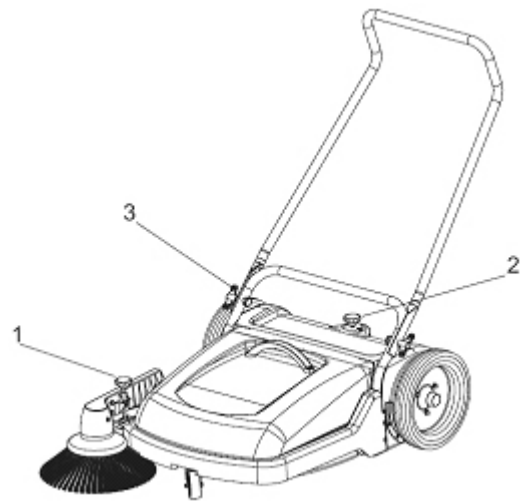


Fig. 6

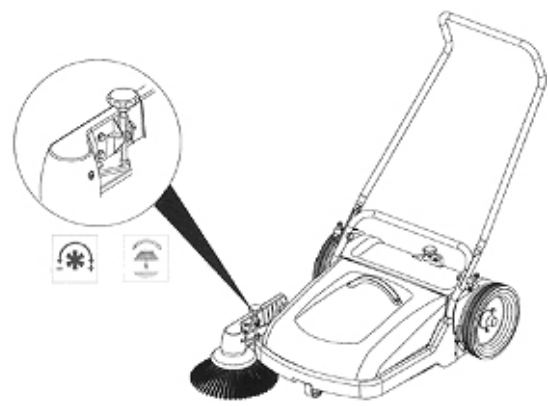


Fig. 7

3.2 Pressure adjustment knob for main brush (2 in Fig. 6 and Fig. 8)

Used for setting the pressure of the main brush. It must be set to assure an efficient cleaning operation (Fig. 8).

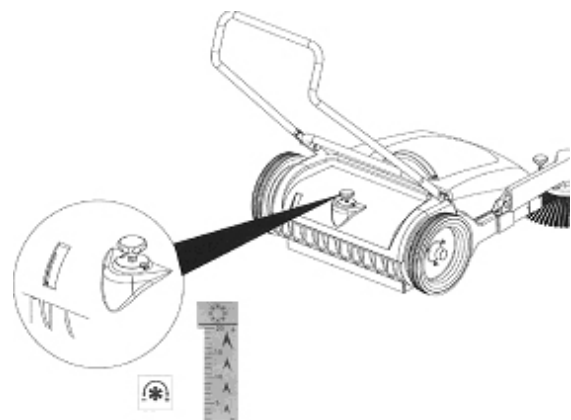


Fig. 8

3.3 Handle thumbscrews (3 in Fig. 6)

Used to secure the handle to the machine or to reposition it.

⚠ Excess pressure will cause unnecessary wear of the brush and increased load for the operator.

3.4 Main brush pressure reading scale (4 in Fig. 9)

Indicates the pressure at which the main brush has been set. Settings must be performed as described below:

- Set the main brush by turning the knob clockwise to increase the pressure.
Note: We recommend to set the pressure at '5'.
- Starting with this setting, the main brush pressure can be increased to meet the requirement for example as the main brush wears out. Lower pressure enables pick-up of smaller debris.
- If required, turn the knob in a counter-clockwise direction to reduce the main brush pressure.

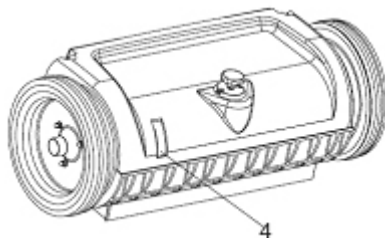


Fig. 9

4. Operation

4.1 Using the sweeper

- The sweeper operates with two brushes – The side brush takes dirt from the side into the reach of the main brush. The main brush maintains its direction of rotation to throw the dirt into the dirt collector when the TruSweep 460 is moved forward.
- To use the TruSweep 460, simply push it at a normal walking speed.

4.2 Overcoming obstacles

- To overcome small obstacles the TruSweep 460 should be pressed down at the handle. This will cause the two brushes to lift off from the floor and the machine can easily overcome these obstacles.

4.3 When cleaning is finished

The dirt collector can be easily lifted by using the handle. It is secured to the machine on the main frame and it must be in direct contact with the main brush compartment, in order to prevent dirt from falling out. To empty the dirt collector, simply lift it out and empty it into a suitable waste disposal bin.

5. Storage

- Lower and fold the handle down by loosening the thumbscrews slightly (Fig. 10).



Fig. 10

- Do not store outdoors. Store in a clean and dry location.

6. Maintenance

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

- Dirt collector
- Brushes
- V-belt

Maintenance Intervals

Daily

- empty dirt collector
- clean the unit
- check brushes and seals

Weekly

- remove any debris entangled in the main brush shaft

Monthly

- grease the track wheels
- check V-belt tension, if necessary, retighten

- To clean the machine wipe off with a dry or damp cloth.
- Do not wash the machine with direct or pressurised jets of water.
- Only replace damaged or worn parts with genuine original equipment parts in order to maintain safety and to protect your warranty.
- Contact an authorised service agent for repairs and request ORIGINAL spare parts only.

6.1 Replacement of the main brush

The main brush consists of a brush shaft with two brush core assemblies fastened with six self tapping screws.

The brush cores can be replaced as per below:

- Unscrew the self tapping screws
- Pull the brush core assembly to the front to remove it from the brush shaft (Fig. 11).

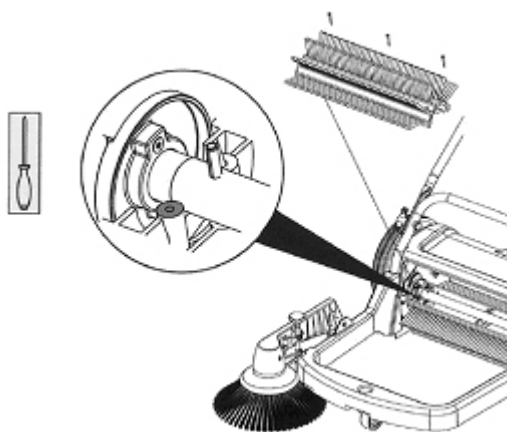


Fig. 11

⚠ When re-assembling the brush core assemblies ensure the split pins are fixed in the holes to guide the brush.

6.2 Rubber seals

The rubber seals situated on the rear of the main frame as well as on the dirt collector ensure that the dirt is kept within the sweeper. Damaged or worn seals that cannot fulfil this task any longer must be replaced (Fig. 12).

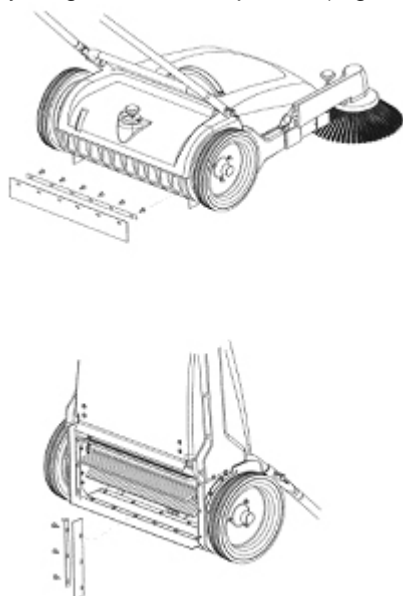


Fig. 12

6.3 Greasing of the main wheels

For cleaning and greasing of the wheel axle and the gear ring, the main wheels must be removed as per below (Fig. 13).

- Remove hub cap, remove the bolt and three domed cap nut from the wheel and remove the main wheel.
- Unscrew the gear cover and apply grease in the gear area.
- Reposition the main wheel.

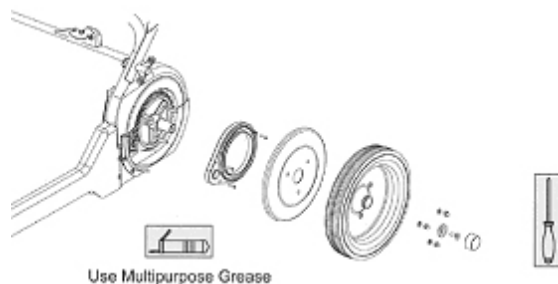


Fig. 13

6.4 Replacement of the V-belt

- Raise the side arm brush
- Loosen the hex head bolt and the nylock nut and remove the side brush from the brush arm.
- Place the V-belt through the brush arm and put it on the V-belt pulley on the brush shaft
- Push the side brush back into the brush arm and re-tighten the clamp screw.
- Place V-belt into the groove of the right-hand main wheel.
- When the brush arm is put down and if the V-belt is loose it must be tensioned to allow a perfect drive transmission. If necessary loosen the two screws that attach the support side arm to the main frame. Move the bracket forward then retighten screws.

6.5 Replacement of the side brush

The side brush can be replaced after removing the hex head bolts and the nylock nut from the side brush (Fig. 14).

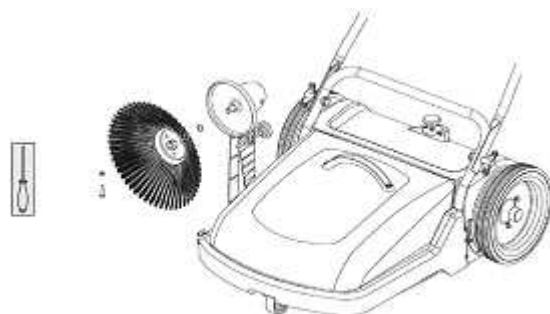


Fig. 14

6.6 Re-aligning of the bristles

- If the bristles have been bent inwards the side brush must be placed on a flat base, the bristles pointing outward and a weight must be placed on the plate. The bristles will re-align gradually. Once the bristles have been re-aligned, take the weight off and re-attach the brush.
- If the bristles have been bent outwards, bring them together by applying a rubber band around the bristles for some time. The bristles will re-align gradually. Once the

bristles have been re-aligned, take the rubber band off and re-attach the brush.

7. After sales service

Truvox machines are high quality machines that have been tested for safety by authorised technicians. It is always apparent that after longer working periods, mechanical components will show signs of wear and tear or ageing.

Under extreme or specialised conditions and/or insufficient maintenance, shorter maintenance intervals are necessary. Use only original Truvox spare parts. **Use of other spare parts will invalidate all warranty and liability claims.**

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. 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 Number.
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 distributors 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 and wear parts such as drive belts.

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

9. Technical specification

Model Product Code		TruSweep 460 TRUS460
Width	cm	72.5
Width with side brush	cm	78.5
Height with handle	cm	102
Height without handle	cm	40
Length with side brush	cm	100
Length without side brush	cm	80
Weight with side brush group	kg	26
Diameter of drive wheel	cm	28
Sweeping width without side brush	cm	46
Sweeping width with side brush	cm	65
Diameter of main brush	cm	23
Main brush bristle diameter	mm	0.18
Brush speed (theoretical)	rpm	273 at 4 km/h
Side brush bristle diameter	mm	0.4
V-belt (side brush) (W x L)	cm	0.8 x 168
Dirt collector capacity	l	40
Direction of rotating for sweeping		Forward
Area coverage		Up to 2600 m ² /hr at 4 km/h

Truvox International is a BSI Registered Company and our policy is one of continuous development. We reserve the right to change specifications without prior notification.

10. Accessories

Item	Part No.
Main brush	552180067
Side brush	923783

11. Individual spare parts

Item	Part No.
Main brush pressure knob assembly	921776
Hub cap	55321022000

IMPORTANT: Genuine accessories are only available from authorised Service Agents or Truvox Customer Services Department

12. Fault diagnosis

The following simple checks may be performed by the operator.

TROUBLE	REMEDIAL ACTION
1. Machine hard to push/pull	Decrease main brush pressure setting Grease main wheels
2. Sweeping unsatisfactory	Increase main/side brush pressure Clean main/side brush Check main brush for loose bristles
3. Traces of dirt left behind the machine	Check side/rear rubber sealings
4. Side brush not rotating	Check V-belt for transmission

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TRUSWEEP COMMERCIAL SWEEPER

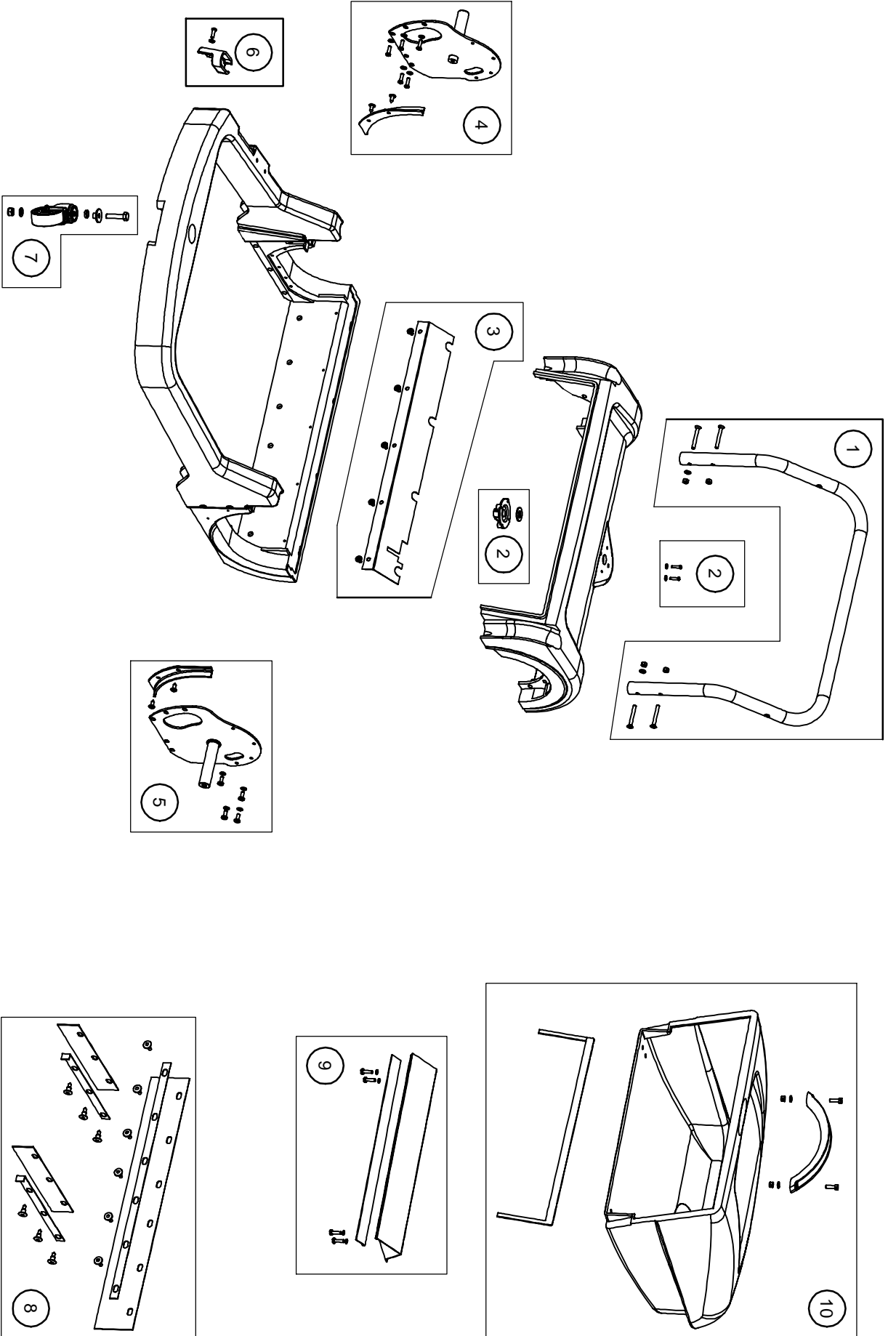
DRAWING NO: 09-1129-0000 SHEET 1 - FRAME AND HOPPER KIT LIST

MACHINE: TRUS460

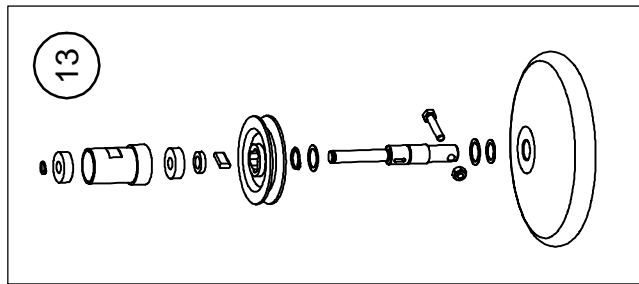
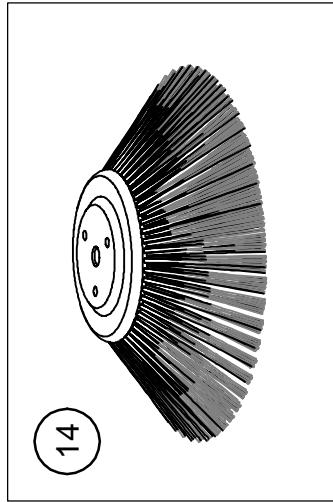
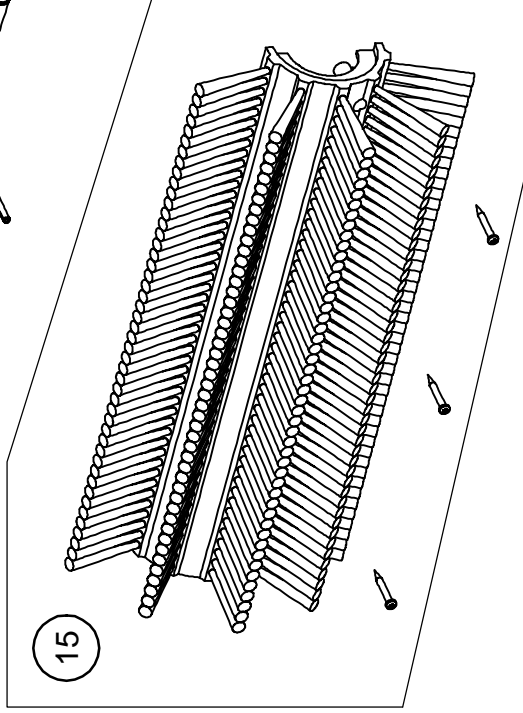
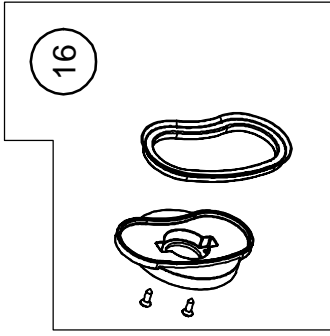
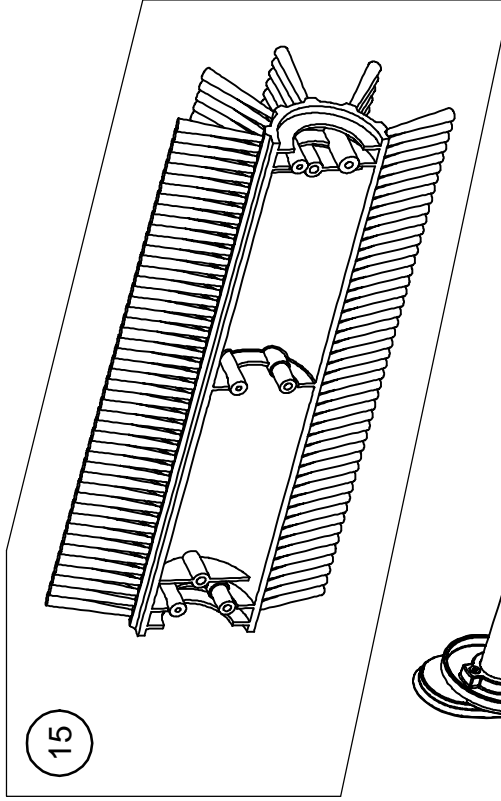
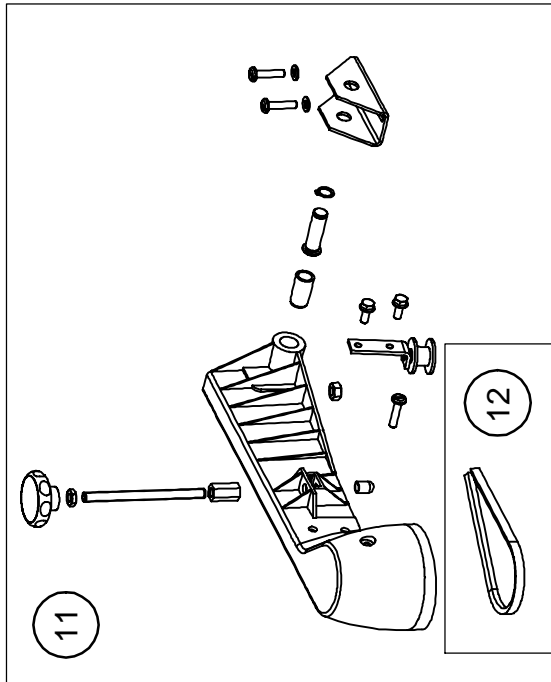
REF. PARTS LIST: TRUS460 ISSUE 1

SERIES: A

REVISION A ECN # DESCRIPTION OF CHANGE ORIGINAL ISSUE



MOD. BY DATE
- 04 JULY 2011



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TRUSWEEP COMMERCIAL SWEEPER

DRAWING NO: 09-1129-0000 SHEET 2 - MAIN AND SIDE BRUSH KIT LIST

MACHINE: TRUS460

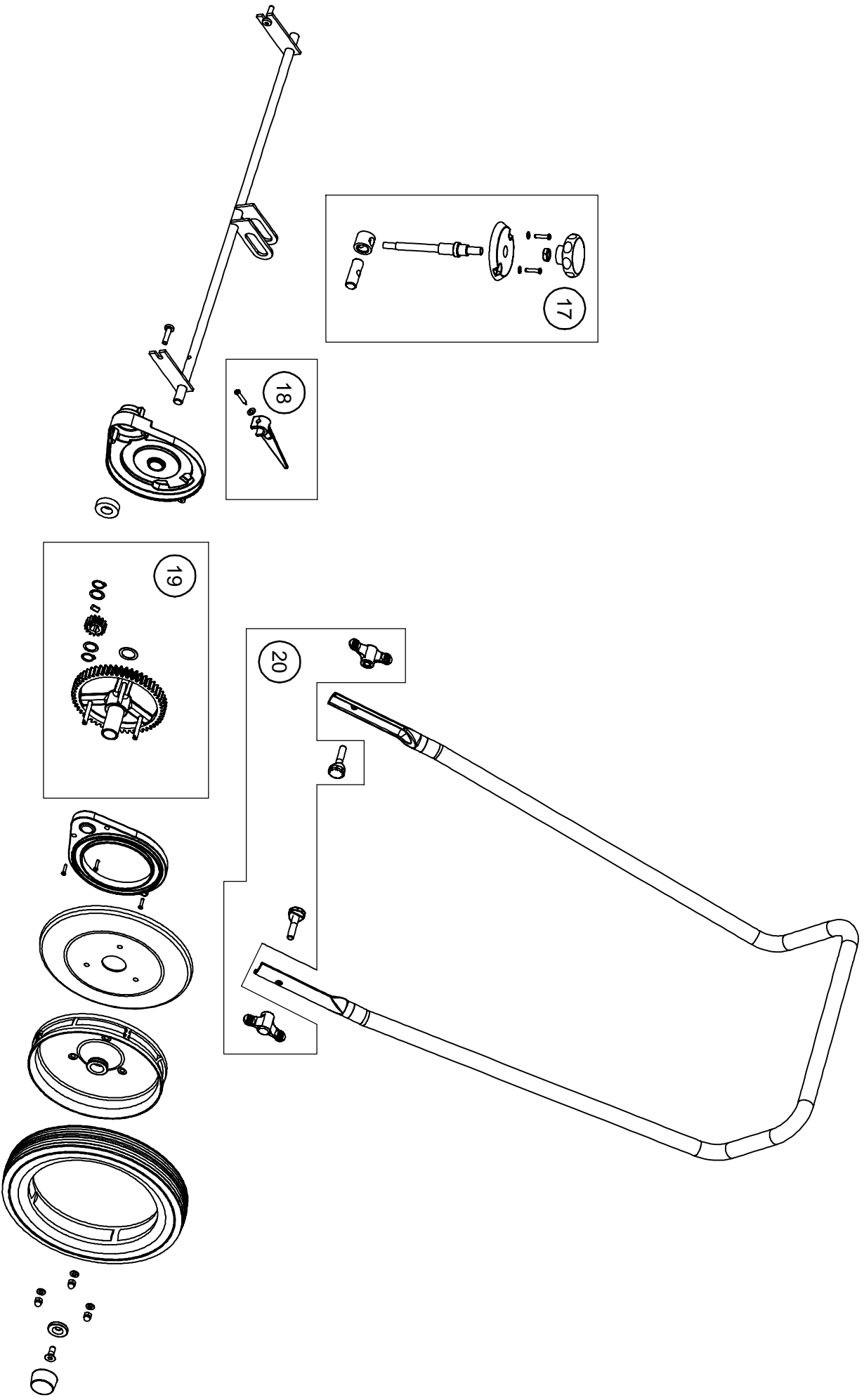
REF. PARTS LIST: TRUS460 ISSUE 1

SERIES: A

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A	-	ORIGINAL ISSUE

MOD. BY

DATE
04 JULY 2011



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TRUSWEEP COMMERCIAL SWEEPER

DRAWING NO: 09-1129-0000 SHEET 3 - BRUSH SHAFT, HANDLE AND GEAR KIT LIST

MACHINE: TRUS460

REF. PARTS LIST: TRUS460 ISSUE 1

SERIES: A

REVISION	ECN #	DESCRIPTION OF CHANGE	MOD. BY	DATE
A	-	ORIGINAL ISSUE	-	04 JULY 2011

14. EC Declaration of conformity

EC Declaration of Conformity

We, Truvox International Ltd.

of Third Avenue, Millbrook,
Southampton, Hampshire
England
SO15 0LE

declare that the machinery

Make : Sweepers
Type : TruSweep 460
Model : **TRUS460**


Serial Number : from 000001
Year of Construction : 2011

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

Ref No	Title
EN ISO 12100:2010	Safety of machinery – General principles for design – Risk assessment and risk reduction

Signed in : SOUTHAMPTON, England

on the 1st June 2011

Signature : 

Name : David Overell
Position : Managing Director



Technical file: TruSweep 460 Iss. 1
Mark Campbell
Product Support Manager

Authorised dealer:

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