



200-2000
RUSTIBUS® 2000 DIESEL
(mk2)

HELPFUL IDENTIFIERS

In addition to information on installation and operation, this instruction manual may contain WARNINGS and CAUTIONS pertaining to user safety, and NOTES on important, useful operating guidelines.

A **WARNING** indicates a potentially hazardous situation, which if not avoided, could result in death or serious injury.

A **CAUTION** indicates a potentially hazardous situation, which, if not avoided may result in minor or major injury.

A **NOTE** is to alert the operator to important operating information.

ANSI Z535.5-1997 Definitions

IMPORTANT








The safeguards and instructions in this manual cannot cover all possible conditions and situations, which may occur. As we cannot control the correct mounting, usage and utilization of this product, we can not be responsible or liable for any injuries, damages, losses or costs, which result from using our products in any way.

Do not attempt to operate this tool until you have read and understood all safety precautions and instructions listed in this manual.








Incorrect operation of this unit can cause serious injury.

Maintain your company's fire and safety procedures while operating this tool.

WARNING

-  Rotating equipment may cause serious injury – protect hands, feet, eyes and hearing.
-  The Chain drum is rotating at high RPM, show outmost care when connecting cable and when operating machine. **ALWAYS THINK SAFETY FIRST!**
-  Debris from scraping action may be scattered.
-  **Rustibus®** de-scaling machine may produce low energy sparks.
-  Respiratory protection should be considered depending on material being removed.
-  Before starting **Rustibus®** de-scaling machine, ensure that all fixing screws, bolts, fittings and chain drum are locking devices are in safe usable condition, fitted correctly and correctly tensioned.
-  Never attempt to de-scale an area when its mechanical integrity is in doubt, according to ASME/API specifications or other applicable codes and standards.

CAUTION

-  Never install, remove or perform any maintenance on the **Rustibus®** de-scaling machine when it is on.
-  **ALWAYS** lift up machine(push down the handle) in order for the chain drum to rotate freely when starting the machine.
-  Always keep both hands on handles when operating the **Rustibus®** de-scaling machine.
-  Never operate the **Rustibus®** de-scaling tool while wearing loose hanging chains, hanging ID/security badges or garments that may be caught in the rotating parts.
-  Never start the **Rustibus®** de-scaling machine before it's cables or hoses are properly secured and safely located.
-  **Rustibus®** de-scaling Tool should be properly maintained and stored when not in use to avoid damage to parts.
-  Never use non Ex/Atex certified machines in potentially explosive atmospheres.

SAFETY CONSIDERATIONS

The machine is intended to be operated by qualified personnel who are familiar with relevant safety requirements. Safety equipment necessary for the prevention of accidents at the mounting and operation of machine shall be applied at all times.

It is the duty of the safety officers in charge to make sure that all personnel operating the machine meet these demands.

The machine is operates using Diesel power. The transmission of these powers to the mechanical drum represents a certain danger and must be maintained continuously.

- It is advised to wear ear protection when operating machine.
- It is advised to use air filters and lubricators on the motor when applicable.
- Always make sure the equipment on machine is in good condition.
- Always stop the power supply when maintaining or working on the machine.
- Use only original Rustibus® spare parts on the machine.

• **ALWAYS THINK SAFETY FIRST WHEN OPERATING MACHINE.**

BEFORE STARTING THE OPERATION

Congratulations on your new **Rustibus®** de-scaling machine. In order to ensure your full benefit and safety of operation we recommend you to read this operation manual carefully before starting. Always lift up machine in order for chain drum to rotate freely when starting the machine.

- (i) Make sure all safety measurements are being considered.
- (ii) Check oil level.
- (iii) Start and stop the machine and check that rotation is correct according to marking on machine.
- (iv) Scaling can start. Run machine forward and backward to achieve the best result.
- (v) Do not run machine over sharp edges, but along these. The chain drum will last longer by working the machine with care.
- (vi) Use the Disposable Chain Drum until it is completely destroyed and then replace the entire drum with a new one.

INSTALLATION AND SETUP

RUSTIBUS® 2000 DIESEL

Before you begin.


Step 1: VERIFY THE COMPLETENESS OF YOUR RUSTIBUS® MACHINE.

- Check that all components are attached properly and in a proper / safe working order.
(Check that there are no loose wires, guards or parts on the machine)

Step 2: ASSOCIATED EQUIPMENT.

- Ensure that you have the correct Fuel (Diesel) for the engine on the machine.
- Ensure that you have the correct Lubrication oil for the engine on the machine.
SAE 15/40 is recommended

Step 3: BEFORE COMMENCING THE OPERATION.

- Always make sure that you fill the oil up to the mouth of the filler port with engine placed level.
It is essential that the engine is filled with the correct and correct amount of lubricating oil.
- Locate the section to be cleaned / de-scaled and determine if the area needs to be cleaned.
Excessive grease, dirt and other hazardous material should be cleaned from the surface area before operation of the **Rustibus®** machine.
-  The Chain drum is rotating at high RPM, show utmost care when connecting cable and when operating machine. **ALWAYS THINK SAFETY FIRST!**
- Adjust power control handle to "start" position.
- **ALWAYS** lift up machine (push down the handle) in order for the chain drum to rotate freely when starting the machine.
- Start and Stop the machine and check that rotation is correct according to marking on machine.

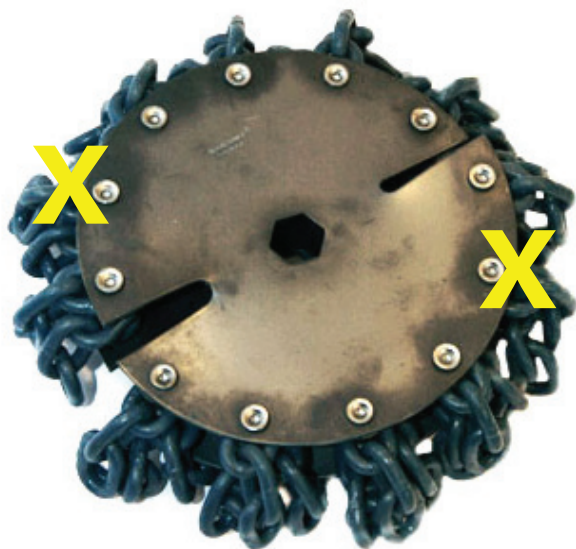
Step 4: OPERATION OF RUSTIBUS® MACHINE.

- For the best results from your **Rustibus®** machine you should run the machine forward and backward over the area until appropriate result is achieved
- **Do not run the machine over sharp edges, but along them. Your machine will last longer if operated with care.**
- Do not operate your Diesel Rustibus® 2000 machine in poorly ventilated spaces.

Step 5: MAINTENANCE OF RUSTIBUS® MACHINE.

- **ALWAYS** stop the machine and disconnect it from its power source before carrying out any maintenance on the machine.
- Use the Disposable Chain Drum until it is completely destroyed and then replace the entire drum with a new one.
- Keep the engine clean to prevent corrosion and remove any sediment.

RUSTIBUS® DISPOSABLE CHAIN DRUM



Rustibus® 2000 unit uses Disposable Chain Drums. The Chain Drums is designed for one-time-use only and does not require any spares replacement. Simply use the Chain Drums until they are completely destroyed and then replace them with new ones. This makes the **Rustibus® 2000** fast and efficient!

If one of the pins on the Disposable Chain Drums should brake, it might create an unbalance in the rotation. To calibrate/repair the balance, the pin opposite to the broken one should be removed.

Item : 200-0156

Disposable Chain Drum - Set

Weight: 19 kg / 42 lbs

IMPA: 59.12.09



Item: 200-0151

Disposable Chain Drum Assembly Incl.:

- Disposable Chain Drum Set (200-0156)
- 17mm Bearing (200-0170)
- 20mm Bearing (200-0180)
- Shaft for Head (200-2300)

Weight: 22,5 kg / 50 lbs



SPARE PARTS FOR CHAIN DRUM SYSTEM



Item : 200-2300
Shaft to Chain Drum and
Wire Brush
Weight: 1,1 Kg / 2,4 lbs
ISSA: 55.306.14



Item : 200-0170
Bearing 17mm (Incl. Casing)
Weight: 0,235 Kg / 0,51 lbs
ISSA: 55.306.03



Item : 200-0180
Bearing 20mm (Incl. casing)
Weight: 0,615 Kg / 1,35 lbs
ISSA: 55.306.04

Item : 200-2220
Pulley - w/Bush
Weight: 2 kg / 5 lbs
ISSA: 55.306.12

*For use on shaft to chain drum and wire brush.
There are a series of select Pulleys / Bushes
available to fit each type of power unit.*



BUILDING A DISPOSABLE CHAIN DRUM FROM SCRATCH

DISPOSABLE CHAIN DRUM FOR RUSTIBUS® 2000

Information guide for use and installation of the system.

The rotation unit to the **Rustibus® 2000** is now more efficient with the new Disposable Chain Drum system. This new one-piece unit is delivered complete and therefore does not require further replacement of spare parts. Simply use it until it is totally destroyed and then replace it with a new one.

The **Rustibus® 2000** should only be used on a flat horizontal surfaces. All sorts of obstacles should be avoided at all times such as sockets, edges etc. De-scaling should be done along side weldings NOT across. If one of the chain links / pins should brake and create an unbalance in the machine, simply cut the chain links on the opposite side of the broken one.

1.



Part Numbers:

200- 0156 - Disposable Chain Drum Set

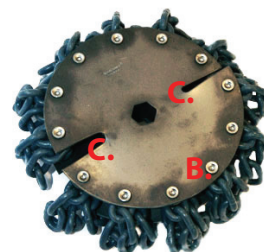
200- 2300 - Shaft for Head (Incl.Washer & Nuts)

2.



Firstly place one of the Chain Cassettes on the shaft until it contacts with the shaft base **(A)**

3.



The next step is to place the other Disposable Chain Cassettes on the shaft, making sure the rivet heads **(B)** are facing in the same direction towards the base and that the Cleft sections **(C)** line up with each other accordingly.

4.



When mounting the Chain cassettes on the shaft make sure that the rivets of each cassette are in contact with those of the next, this ensures that ALL the chain links are free and not caught between the Chain Cassette sections.

5.



You are then able to fasten it all in place with the TWO nuts and washer. First place the washer **(D)**.

We recommend that you use Loctite.

6.



- The order of assembly is clearly shown in pictures 1 – 6.

REMOVING THE CHAIN DRUM

REMOVING THE DISPOSABLE CHAIN DRUM

Information guide on how to remove the Chain Drum.



1. Removing the Chain Drum from Rustibus® 2000 Series is the same for all types : low, standard, electric, pneumatic and our Atex/Ex Certified machines.



2. Remove belt cover



3. Lay down machine like the picture so the chain drum is free to rotate.

(On the LOW machine you have to put the machine in a upright position (on the power weight/flat front) so the chain drum is free to rotate).



4. With use of a screw driver and rotating the chain drum with your hand you can remove both belts. **DO NOT PUT YOUR FINGERS IN BETWEEN!**



5. Put the machine on a support that stops the chain drum rotating. Remove pulley (see explanation on the next page how to)



Watch your fingers!

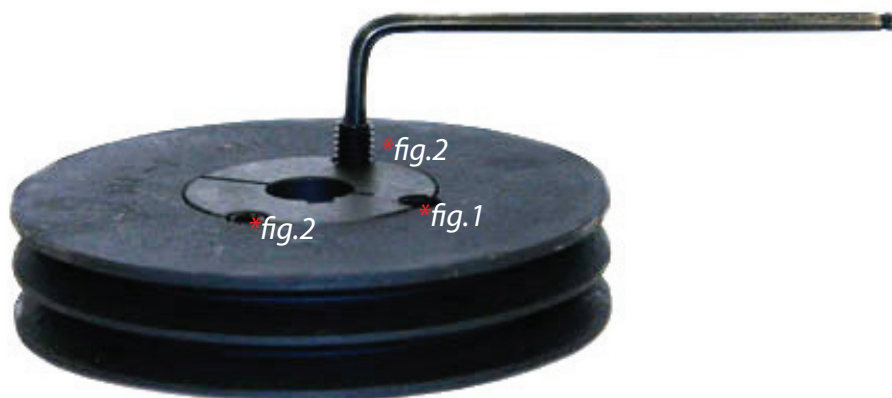
REMOVING THE CHAIN DRUM

REMOVING THE PULLEY

Information guide on how remove the Pulley.

Take off the pulley: loosen the 'umbrako-bolts' (* fig.2) in the Bush. (See picture below) Place one of these bolts in the 'Third hole' (* fig.1) and tighten up the bolt until the Pulley is loose. Pull off the pulley by hand or use light tools.

Do not use an Adjustable Bearing Puller to do this!



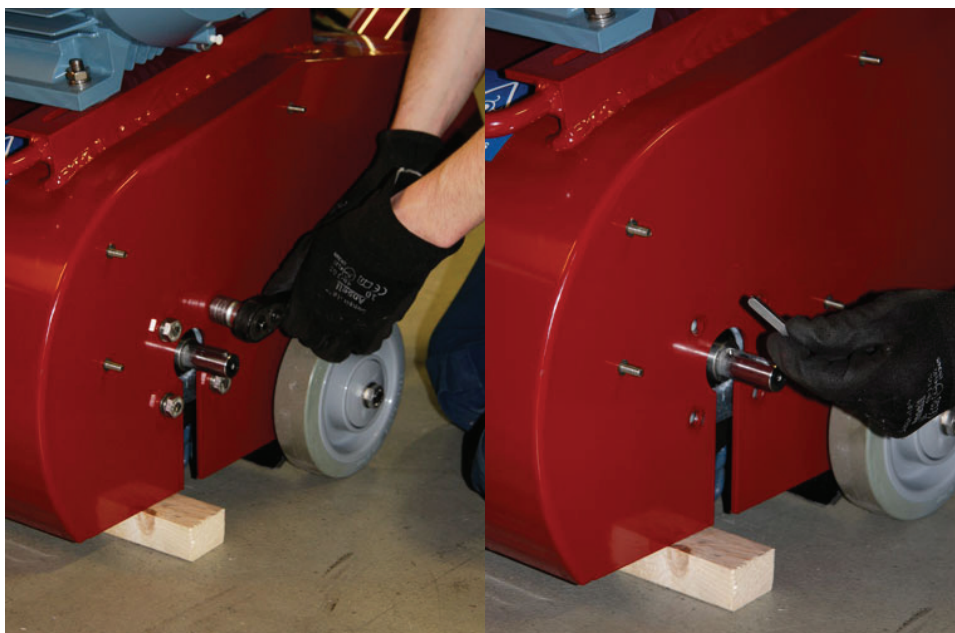
NOTES ON BELT REMOVAL.

TAKING OFF AND REINSTALLING THE BELTS CAN BE DONE BY TURNING THE CHAIN DRUM AND USING A SCREWDRIVER TO LEVER OFF THE BELTS.

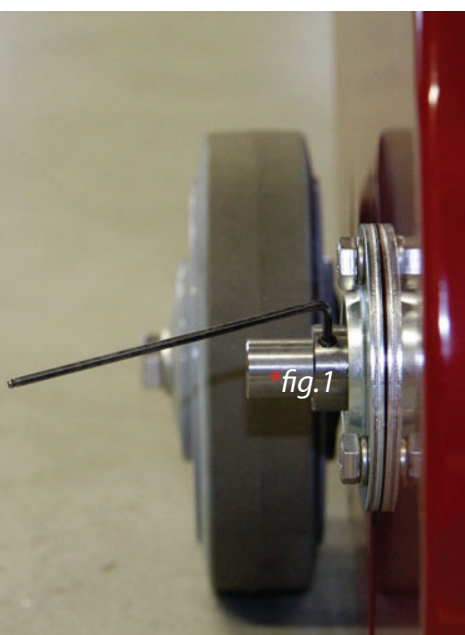
REMOVING THE CHAIN DRUM

REMOVING THE DISPOSABLE CHAIN DRUM

Information guide on how to remove the Chain Drum.



6. Remove bolts and take out the "key".



7. Remove bolts on the other side of the chassis and loosen the allen screw (*fig.1) like picture above.

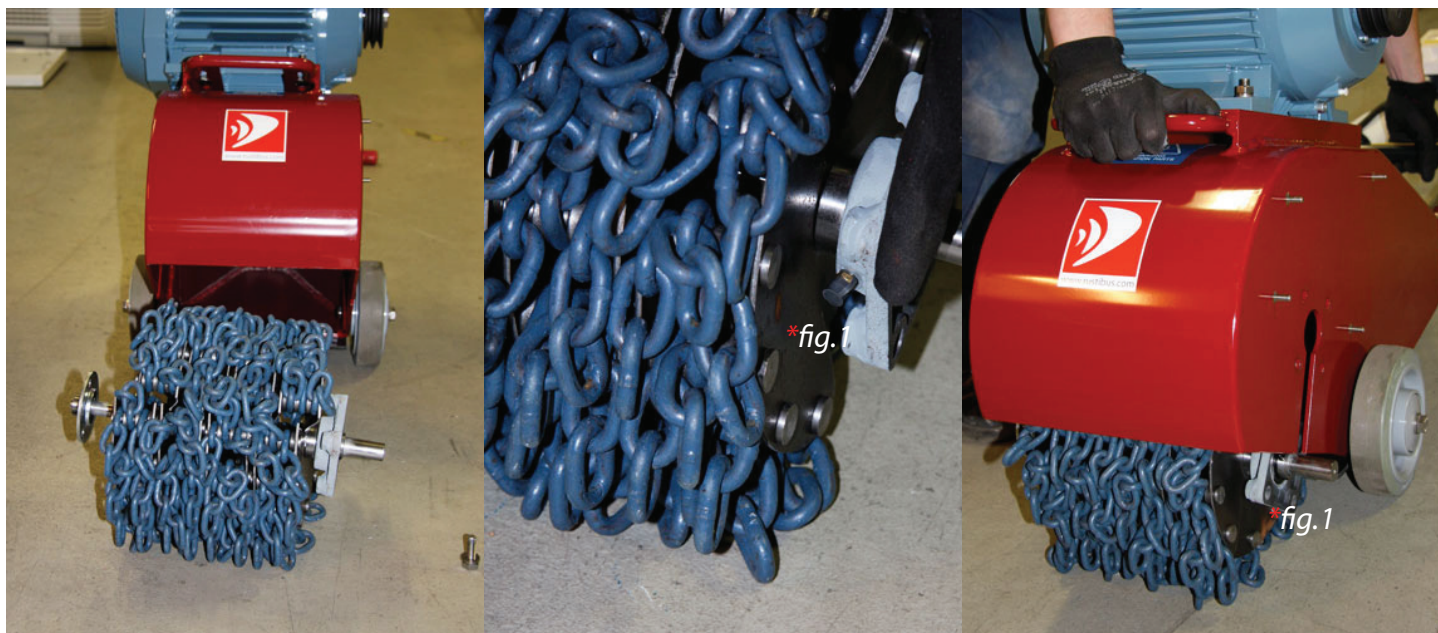


8. Remove Chain drum.

REPLACING THE CHAIN DRUM

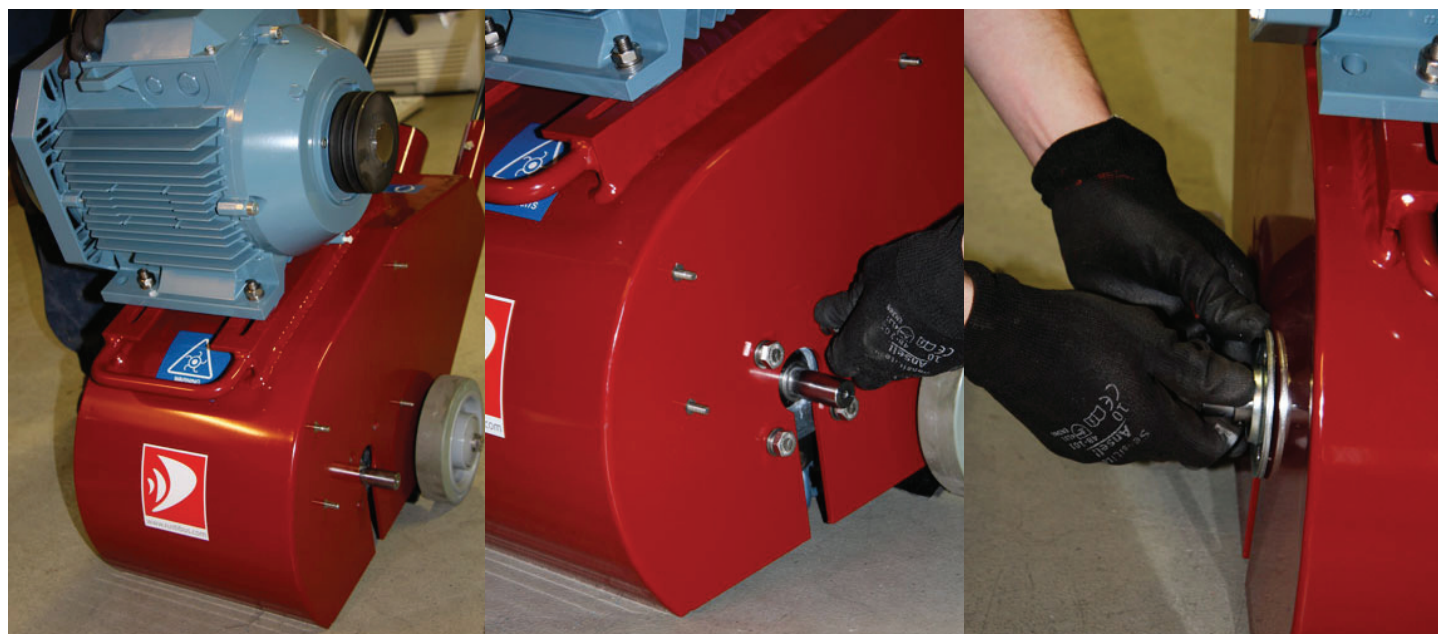
REPLACING THE DISPOSABLE CHAIN DRUM

Information guide on how to replace the Chain Drum.



1. Replacing the Chain Drum on Rustibus® 2000 Series is the same for all types : low, standard, electric, pneumatic and our Atex/Ex Certified machines.

2. Make sure that the grease nipple (*fig.1) is pointing down when you are putting the chain drum inside the chassis.



3. Make sure that the square bearing is on the inside and the round bearing is on the outside.

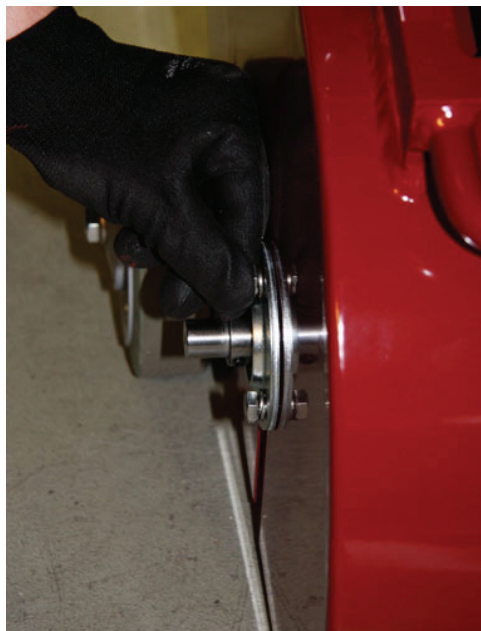
4. Put on the bolts but don't fasten them more than necessary.

5. Go on the other side of the chassis and make sure the round bearing is on the correct spot.

REPLACING THE CHAIN DRUM

REPLACING THE DISPOSABLE CHAIN DRUM

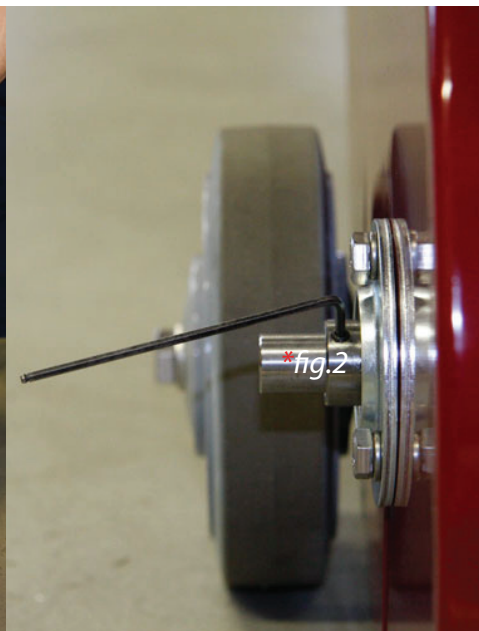
Information guide on how to replace the Chain Drum.



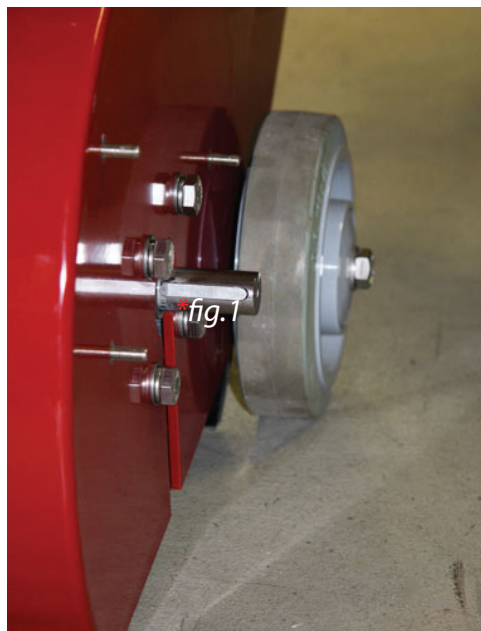
6. Put on the bolts, but don't fasten them more than necessary as well.



7. Now fasten the bolts on the square bearing tight.



8. Go back and fasten the round bearing completely. Also the allen screw (*fig.2).



9. Position the *key*(*fig.1) on the shaft with the square bearing.



10. Put on the Pulley and make sure its level. Cross tight the pulley in the 2 *umbrako-holes.



11. Lay down machine like the picture so the chain drum is free to rotate.

(On the LOW machine you have to put the machine in a upright position (on the power weight/flat front) so the chain drum is free to rotate).

REPLACING THE CHAIN DRUM

REPLACING THE DISPOSABLE CHAIN DRUM

Information guide on how to replace the Chain Drum.



12. Put on the first belt. To get it in the track closest to the chassis use a screwdriver while you rotate the chain drum. Put then on the second belt using your hands. **DO NOT PUT YOUR FINGERS IN BETWEEN!**



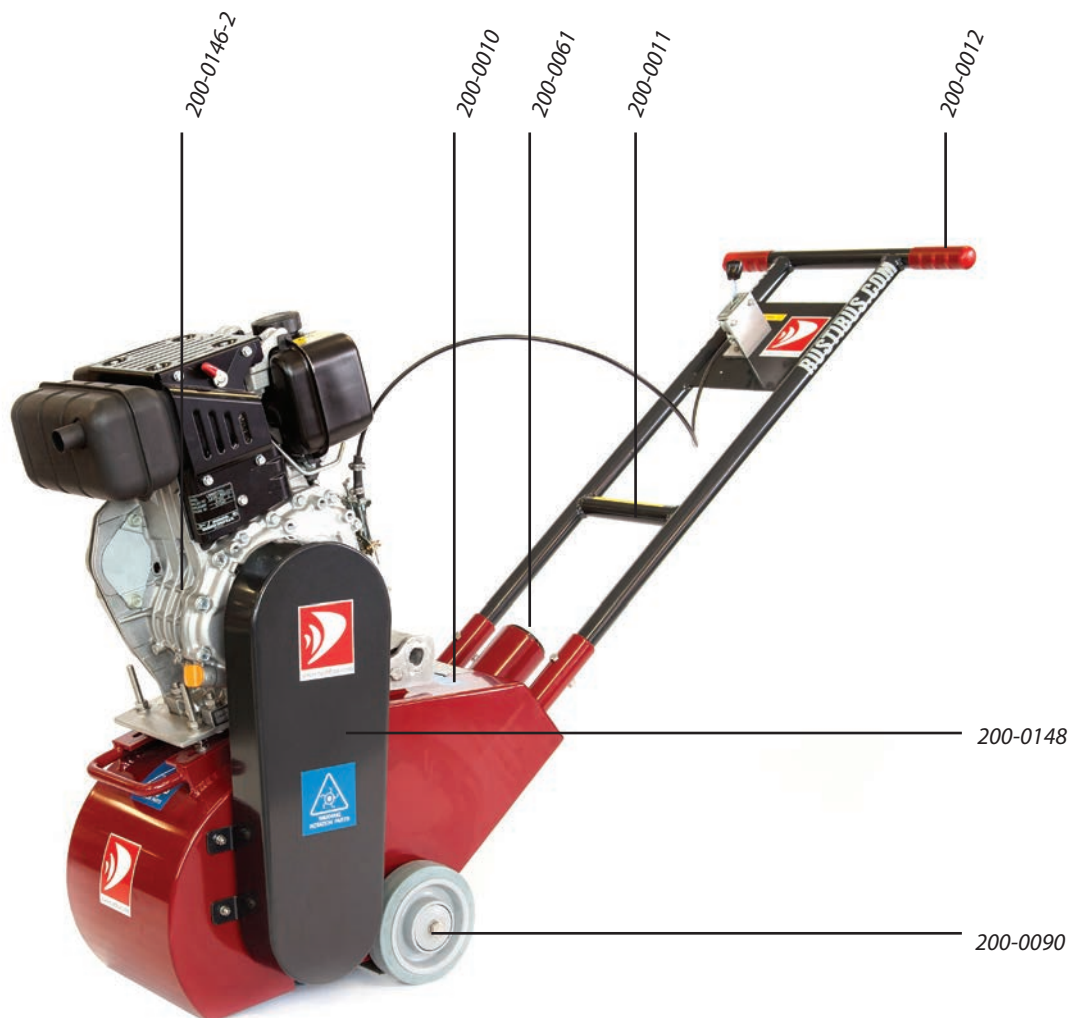
Watch your fingers!



13. Then put the belt cover back on.

Ready for use.

SPARE PART LIST – RUSTIBUS® 2000



Item:200-0158
Replacement Wire Brush
(Brush Only)
Weight: 16 kg / 35 lbs
ISSA: 55.315.04



Item : 200-0155
Wire Brush Assembly Incl.:
- Replacement Wire
Brush(200-0158)
- 17mm Bearing (200-0170)
- 20mm Bearing (200-0180)
- Shaft for Head (200-2300)
- **Weight:** 20,0 kg / 44,0 lbs
- **ISSA:** 55.315.02



SPARE PART LIST – RUSTIBUS® 2000 ELECTRIC

PARTS TO CHASSIS

		UNIT
200-0010	CHASSIS	PCS
200-0011	HANDLE	PCS
200-0012	PLASTIC GRIPS FOR HANDLE (2 PCS)	SET
200-0060	DUST COLLECTOR	PCS
200-0061	DUST COVER	PCS
200-0062	WATER NOZZLE SYSTEM	PCS
200-0090	WHEELS (2 PCS)	SET
200-0148	COVER FOR BELTS new model	PCS
200-0112	BELTS (2 PCS) (1077)	SET
200-0144	BASE PLATE FOR MOTOR (DIESEL)	PCS
200-0145	THROTTLE LINE TO MOTOR (DIESEL)	PCS
200-0146 -2	DIESEL ENGINE MK2	PCS

PARTS TO HEAD (ROTATION PART)

		UNIT
200-0151	DISPOSABLE CHAIN DRUM ASSEMBLY	PCS
200-0155	WIRE BRUSH - ASSEMBLY	PCS
200-0156	DISPOSABLE CHAIN DRUM (4 PCS)	SET
200-0158	REPLACEMENT WIRE BRUSH	PCS
200-0170	BEARING 17MM INCL. CASING	PCS
200-0180	BEARING 20MM INCL. CASING	PCS
200-0211	WASHER FOR SHAFT	PCS
200-2220	PULLEY SPZ 132-2 W/BUSH 20mm (On Rotation Head)	PCS
200-2221	BUSH 20mm	PCS
200-2224	PULLEY SPZ 50/2 W / BUSH 1" (On DIESEL MOTOR MK2	PCS
200-2225	BUSH 1" (1008)	PCS
200-2300	SHAFT FOR HEAD	PCS

ADDITIONAL FEATURES

RUSTIBUS® 2000 VACUUM SYSTEM

The **Rustibus**® 2000 machine features a newly modelled vacuum system attachment. It is built right into the very foundation of the machine itself. Its vacuum port has been designed to be easy to use and not get in the way or hinder the operation of the machine. You simply plug your vacuum hose directly on to the machines vacuum port. It could not be easier than that! Inlet underneath the chassis and the Outlet as shown on picture (A).



WATER NOZZLE SYSTEM

In order to reduce potential dust, a Water Spraying System has been installed on the front of your machine, which sprays the surface wet before going over with the chain links. (Part number: 200-0062)



RUSTIBUS® 2000 MODELS AVAILABLE

200-1000	<i>Rustibus® 2000, Complete</i> 3X220/380/440V - 50/50/60 Hz – 5,5/5,5/6,4 kW 50 M Cable 3X2, 5 + E
200-2000	<i>Rustibus® 2000 Diesel, Complete</i> Dieselpower / 7,0 / 5,2 kW
200-X3000	<i>Rustibus® X2000 Air (EX), Complete</i> W/Air filter-Lubricator & Regulator
200-3000	<i>Rustibus® 2000-Air, Complete</i> W/Air filter-Lubricator & Regulator
200-4000	<i>Rustibus® 2000 Low, Complete</i> 3X220/380/440V - 50/50/60 Hz – 5,5/5,5/6,4 kW Incl. 50 M Cable 3X2, 5 + E
200-6000	<i>Rustibus® 2000 Remote controlled</i> 3X220/380/440V - 50/50/60 Hz – 5,5/5,5/6,4 kW 50 M Cable 3X2, 5 + E
200-9000	<i>Rustibus® 2000 Low, Air driven Complete</i> W/Air filter-Lubricator & Regulator
200-X9000	<i>Rustibus® X2000 Low Air (EX), Complete</i> W/Air filter-Lubricator & Regulator

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