



OPERATING INSTRUCTIONS 2-20DT TruBrand

VERSION 1.0







EC DECLARATION OF CONFORMITY

in accordance with Appendix II sub A of Directive 2006/42/EC

We,

BLASTRAC B.V. Utrechthaven 12 NL - 3433 PN NIEUWEGEIN The Netherlands

Declare under our sole responsibility that the blast cleaning machine as described below,

Model: 2-20DT Serial number:

satisfies the conditions set out in the:

Machine Directive Low voltage directive EMC directive (2006/42/EC); (2006/95/EC); (2004/108/EC);

Where appropriate, are in conformity with the following harmonized standards:

NEN-EN-ISO 12100:2010

NEN-EN-IEC 60204-1:2006/C11:2010

In case of changes to the machine without our written authorization this declaration loses its validity.

Nieuwegein 17-11-2015

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Michiel Kalisvaart Operational Manager



Original operating instructions

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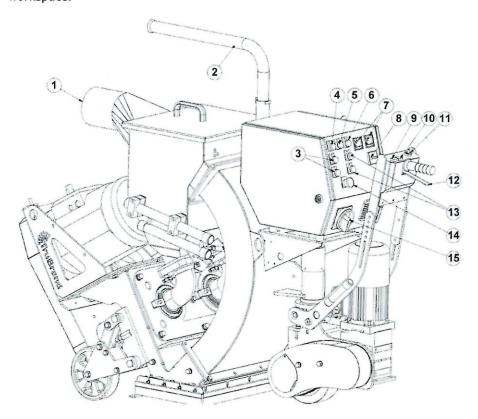
1. Introduction

Before use, operators must be provided with information, instruction and training for the use of the machine and the substances for which it is to be used, including the safe method of removal and disposal of the material collected. All persons who are working with or maintaining this machine must read the manual carefully and understand it fully. In case you sell the unit, hand it on to the next owner. Keep this manual always with the machine, to enable it to be referred to at any time. Any other work not covered by this operating manual must not be carried out.

This machine is designed for industrial use by professionals. Only authorized and trained personnel may operate this machine. This machine is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge.

2. Machine description

The **TruBrand** blast cleaning machine 2-20DT is a downward blasting machine with a closed abrasive circuit designed for the pre-treatment of horizontal surfaces. The bouncing impact of metallic abrasive onto the surface to be treated thoroughly removes surface contaminants, coats of paint, sealants and thin coatings. A suitable filter unit must be connected to the machine in order to separate the dust from the abrasive. A specially designed dust collection system ensures dust-free operation of the machine and clean air at the workspace.



1	Connection pipe for dusthose	6	Control lamp BLASTMOTORS ON	11	Speed control
2	Cable guide	7	Ammeters left & right blast motor	12	Travel switch
3	Drive control ON and OFF	8	Hour counter	13	Blast motors ON and OFF
4	Control lamp CONTROL VOLTAGE ON	9	Overdrive	14	Emergency shutdown
5	Control lamp FAULT	10	Move forwards	15	Main switch



3. Safety

Warning!

Read all safety warnings and all instructions. Failure to follow the warnings and instructions may result in electric shock, fire, explosions and / or serious injuries.



3.1 Work area safety

- a) Do not use the machine in rain, damp or wet locations.
- b) Avoid dangerous environments: do not work in the presence of explosive atmospheres, in the presence of flammable liquids, gases or dust. Remove materials or debris that may be ignited by sparks.
- c) The surface to be treated must be clean, make sure to remove all stones, screws etc.. Any stones, screws, bolts, pieces of wire etc. could cause serious damage to the machine if it gets inside the machine!
- d) Make sure there is enough ambient light on the work area. Cluttered or dark areas invite accidents.
- e) Keep children and bystanders away while operating the machine. They are likely not to foresee the potential dangers of the machine. Distractions could cause you to lose control of the machine.
- f) Persons who are not operating the machine must not be permitted to stay in the surrounding area of at least 5 meter from the machine.
- g) Never use the machine when the surface is not clear and if there is a risk of stumbling or tripping.
- h) Remove electrical cables and dust hose(s) from the surface to be treated.
- i) Make sure that there is nothing standing or situated on the surface to be treated.
- j) Make sure the machine can travel over all inequalities on the surface, small inequalities like weld seams or (floor) joints are no barriers for the machine.
- k) Never operate the machine when workplace is wet. Never stay in the rain with the machine.
- 1) Check if there are any obstacles that can snag the cables when the machine is moving.
- m) Remove all objects from the surface that can damage the machine. Remove reinforcing steel or other objects protruding from the surface in order to prevent damage to the machine.
- n) The work area must be sealed off using a red and white safety chain and a danger sign.

o) Warning!

Make sure that the surface to be treated does not contain dangerous materials such as:

- combustible or explosive dusts or substances.
- carcinogenic or pathogenic substances.

3.2 Electrical safety

- a) Use only extension cables for extending the main cable that are sized and marked in accordance with the overall power consumption of the machine. Do not use damaged extension cables.
- b) Electrical cables must be rolled entirely off of the reels.
- c) Any damage to the electric cables and/or electrical components is not permitted.
- d) The voltage on the identification plate must comply with the power supply.
- e) Use an electrical power supply connection with earth connection and earth leakage circuit breaker.
- f) The circuit breaker of the power supply must have a ''D" characteristic. Circuit breakers with a "C" or "B" characteristic can give problems when switching the blastmotor on.
- g) Keep the machine original; The machine is always equipped with an earthed connection, do not change this and always use earthed cables with an earthed plug.
- h) Inspect and test the electrical components regularly. The electrical components have to satisfy with the requirements set out in the harmonised norm EN60204-1.
- Always call a skilled electrician or your distributor when you have questions about the safety of the electrical components.
- j) Work on electrical equipment or operating materials may only be undertaken by a skilled electrician or by trained persons under the guidance and supervision of a skilled electrician as well as in accordance with the electrical engineering regulations.
- k) Do not abuse the cables. Never use the cables for carrying, pulling or unplugging the machine. Keep cables away from heat, oil, sharp edges or moving parts. Damaged or entangled cables increase the risk of electric shock.
- 1) Be careful with water on the treated surface. Electrical cables must not come into contact with water.
- m) The main power switch on the machine must be in the "Off" position before connecting to the power supply.



- n) During a long standstill of the machine, pull out the main plug.
- o) If the machine is to be operated using power from a generator, the generator must be operated in accordance with the current legal regulations and directives in force. (this applies to the protective earth conductor in particular) in order to ensure that all safety devices are functioning and to eliminate possible damage to electrical components.

3.3 Personal safety

- a) Always wear Personal Protective Equipment while working with the machine.
- b) Dress properly. Do not wear loose clothing or jewellery. Keep your hair, clothing and gloves away from moving parts.
- c) Stay alert, watch what you are doing and use common sense when operating the machine.
- d) Persons surrounding the machine should wear Personal Protective Equipment.
- e) Always seek professional medical attention immediately in case of injury.

3.4 Machine safety general

- a) Safety functions and operating functions must work correct.
- b) No loose bolts and nuts are permitted.
- c) Never operate machine without the guards and/or safety devices in place.
- d) Never change anything on the safety devices on the machine!
- e) Do not open or remove protective guards while driving gears are running.
- f) The machine, specially the handle grip(s) must be free of fats/oils and has to be dry.
- g) If the length of the seal-brushes is, due to wear, are less than 5mm or they are extremely deformed, the brushes have to be replaced. Check the Service Manual for the order numbers.
- All repair work has to be done by qualified TruBrand personnel, this guarantees a safe and reliable machine.
- i) Always use original TruBrand spare parts and abrasives. This will ensure the best performance. Only original parts meet the factory specifications and quality. Otherwise TruBrand cannot guarantee the safety of the machine. The part numbers can be found in the Service Manual.
- Check the rotating direction of the motor. The correct direction is given with an arrow on the housing of the motor.
- k) If safety-critical changes occur to the machine or its working method, the machine must be shut down immediately! The cause of the fault must be established, and rectified.
- In the event of operational malfunctions the machine must be shut down immediately and secured!

3.5 Shot/steelblasting safety

- a) Never lift the blast head during blasting! This could cause serious injury to yourself and others around you!
- b) Abrasive can escape from the sides of the blast head at high speed. Everybody in the surrounding of the machine must wear safety glasses with lateral protection and close-fitting protective clothing.
- c) Be very careful when inserting the quick release pin into the traction wheel.
- d) Check the following parts daily for damage and wear to avoid unsafe operation: blastwheel, feed spout, liners, magnet- and brush sealing; Replace the parts when you can see obvious signs of wear and tear.
- e) Check the parts of the separator on wear and defects. Remove foreign bodies and dust deposits to prevent clogging of the separator.
- f) The cover of the separator and separator tray must be closed to keep the vacuum in the machine.
- g) The machine will heat up during blasting, don't risk getting burned, always wear gloves and only touch the handle grip(s).
- h) Remove the abrasive from the abrasive storage hopper before storage.
- i) Check the level of abrasive in the storage hopper regularly. Refill if necessary.
- j) In some cases sparks could be created by shot / steel blasting.

3.6 Maintenance safety

- a) Pull out the main plug before starting inspections and repairing on the machine.
- b) Wait for standstill of all drives before any inspections, adjustments and/or maintenance work is started.
- c) Block the machine in a stable position before doing any maintenance work.



- d) Failures due to inadequate or incorrect maintenance may generate very **high repair costs** and long standstill periods of the machine. **Regular** maintenance therefore is imperative.
- e) Operational safety and service life of the machine depends, among other things, on proper maintenance.
- f) Prevent premature wear by keeping the machine as dust free as possible. Clean the machine for this reason regularly with a dust collector and non-aggressive materials. Never use a high pressure water cleaner to clean the machine.
- g) It is advisable to stock all spare parts or wear parts that cannot be supplied quickly. As a rule, production standstill periods are more expensive than the cost for the corresponding spare part.

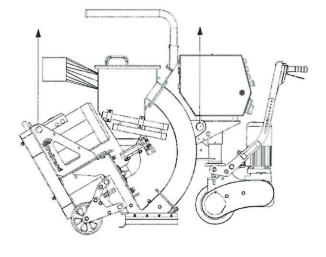
3.7 Dustcollector safety by a machine

- a) Always use an approved dust cleaner to ensure a dust-free operation of the machine and clean air at the workspace. Also the airflow helps to cool the machine and prevents overheating.
- b) Read the operating instructions of the dust collector before using it.
- c) The dust container/bag of the dust collector must be emptied regularly. Comply with the local waste treatment regulations considering the removed material.
- d) The dust hose must be connected properly with a hose clamp and industrial tape.
- e) The dust hose must be undamaged and free of obstructions.
- f) Always switch on the dust collector first!

3.8 Transport safety

- a) Be aware of your surroundings and machine operating level. Do not side hill, do not run on steep incline, this could cause machine to tip over.
- b) Pay attention that the drive unit does not turn away during lifting of the machine. Hold on to the steering handle until the machine is of the ground.
- c) When lifting the machine from the ground, always use the lowest lifting speed. The cables must first be tensioned at this speed; they must not be slack when the machine is lifted from the ground.
- d) During hoisting make sure to be at a safe distance from the machine with the most optimal view on the machine and working environment.
- e) Never stand directly below the machine.
- f) When transporting the machine do so in such a manner that damage due to the effects of the use of force or incorrect loading and unloading is avoided.
- g) The lifting eyes can also be used to fasten the machine on a pallet or during transport.
- h) Always drive backwards when driving up to a ramp or grade, and forwards when driving of the ramp.
- i) Chock wheels for transport and keep control handle in neutral position.
- j) Don't leave the machine unsecured on jobsites.
- k) Park the machine always on a flat horizontal and levelled surface.
- I) Make sure the electrical cable and dust hose are disconnected between the fan unit and filter unit.
- m) Store the cleaned and dry machine in a humid free room. Protect the electrical motor from moisture, heat dust and shocks.
- n) Never use the machine for lifting persons or items.
- o) The weight of the 2-20DT is 630 kg. By transport the machine with a crane or lift, use the lifting eyes of the machine.
- p) Before every use check the lifting eyes and welds for:
 - deformation, damages, cracks, corrosion and wear.
- q) Only lift the machine as shown in the picture.







3.9 Signs on the machine

The following stickers are placed on the machine. Meanings of these symbols are:



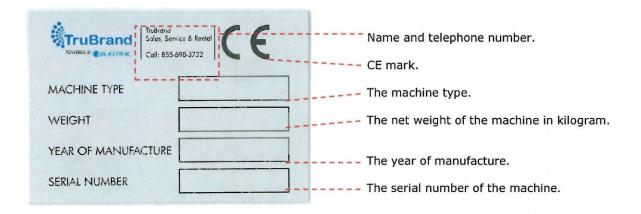
- Wear a dust mask class FFP2 or higher
- Ear protection is obliged
- Safety glasses with lateral protection are obliged
- CE-mark on this machine
- Wear protecting gloves
- Safety shoes obliged
- Consult the manual before operating the machine



! Danger Hazardous voltage in motor even when solid state controller is OFF.
 Disconnect main power before servicing motor, controller or associated wiring.



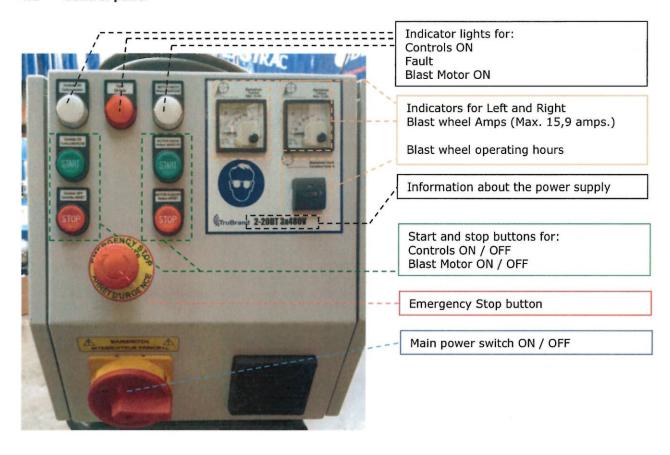
Danger of crushing



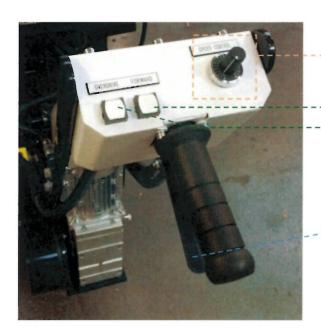


4. Initial operation

4.1 Control panel



4.2 Drive control



Dial for setting the drive speed

Buttons for: Forward driving Overdrive

Drive handle (Hold to run) to activate the drive motor.



Before using the machine it is of great importance to inspect the machine. It is not permitted to use the machine if the machine safety is not according the checkpoints below.

4.3 Checkpoints power supply

- Use only extension cables for extending the main cable that are sized and marked in accordance with the overall power consumption of the machine.
- Electrical cables must be fully unwind of them reels.
- No damage is permitted for electrical cables.
- Use an electrical power supply connection with earth connecting.

4.4 Checkpoints of machine

- Safety functions and operating functions must work correct.
- Check the following parts for damage and wear: blastwheel, feed spout, liners, magnet- and brush sealing.
- No loose bolts and nuts permitted
- No any damage of electrical components permitted.
- Dust hose must be undamaged and the connection must be reliable.
- Check de parts of the separator on wear and defects. Remove foreign bodies and dust deposits.
- Clean the separator tray.

Make sure the dust collector is in perfect working order and the dust hoses are fastened correctly with hose clamps and industrial tape.

5. Operating

During operating the 2-20DT, the following additional safety instructions must be followed closely.

5.1 Before switch on

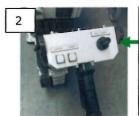
- Check if the distance from magnet to the floor is 8 10 mm. Check this height with aluminum strips.
- Check the distance from brush sealing to the floor. This may be max. 1 mm.
- Fill the separator equally with the selected abrasive up to the bottom of the separator tray. The magnetic valve must be closed whilst doing this.
- Connect the blast machine and filter unit with the dust hose. This connection must be reliable.
- Connect the power supply cable of the filter unit with the generator / power supply. Be sure that electrical power supply is correct.



5.2 Connecting the drive motor to the traction wheel

Make sure the magnetic valve is CLOSED.

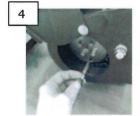
Make sure the Blast motor is OFF.



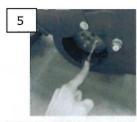
Set the drive speed to the lowest possible setting, approximately 0,5.



Open the wheel guard.



Insert the quick release pin inside the hole.



!WARNING! Use **only 1 finger** to press the button of the quick release pin, and keep applying pressure.



Use your other hand to operate the drive-motor handle.



When the drive-motor and wheel are aligned, the quick release pin will lock into place. Close wheel guard.



Danger of crushing! Use common sense, do not get distracted during the activities!

5.3 Driving with connected drive motor

Set the driving speed at the desired speed using the speed control knob. Place 1 hand on the handle grip and squeeze the switch lever, this will move the machine towards you, this is the normal working direction for blasting. Release the switch lever to stop. The driving speed can be adjusted while driving by turning the speed control knob.

The OVERDRIVE-button makes it possible to drive at maximum speed without having to adjust the speed control knob. To do so, press and hold the OVERDRIVE-button while driving. **WARNING!** Mind your surroundings at maximum speed!

The FORWARD-button is used to drive forward, press and hold the button to do so. **WARNING!** Do not drive forward while blasting! This function is only used for maneuvering without blasting. Make sure the dust hose and electrical cable are out the way when driving forward.





5.4 Driving without connected drive motor

When the traction wheel is not connected to the drive motor you can tilt the complete drive unit downwards, by pressing down on the control handle. This will lift the blast house off the ground and makes it easier to move the machine around.

When you have to move the machine over larger distances it is possible to tilt the complete blast mouth off of the









Use the special tool, slide it around the 2 bolts as shown in the picture above and press the tool down. Perform this action on both wheels. This will jack up the machine making it easier to move around.

WARNING! Never lift blast house of the ground while blasting! This could cause serious injury to yourself and others around you! Always make sure the blast mouth is on the surface before blasting!

5.5 Switching the machine on

- Before switching on the blast machine, switch the dust collector on. The dust collector is needed to vacuum off all the created dust and helps to cool the blast machine.
- Press the green push button "Blast wheel ON" and check the rotating direction of the blast motor. The correct direction is given with an arrow on the housing of the motor. If the blast motor turns the wrong way, correct this immediately.
- Select the speed using the speed control knob. (item 11 of machine description)
- When the machine is traveling pull the abrasive control cable to open the magnetic valve. Observe the ammeter. It may indicate the full load amperage. After having blasted approx. 2 m, close the abrasive valve, stop the machine and check the blasted surface.
- If the 'hotspot' is too much on the right, turn clockwise the cage a little bit. Loose the cage clamps and turning the control cage in the suitable direction. The cast grooves on the control cage show the position of the control cage opening. Tighten the nuts of the cage clamps after adjusting. Never adjust the cage during blasting!

5.6 Switch off the machine

- Close the abrasive valve
- Press the red button "Blast wheel STOP"
- Press the red button "Controls STOP"
- Switch the main switch to position "OFF"
- Pull out the connector of the main power supply of the machine.
- Switch off the filter unit.
- Wait for standstill of all drives before any inspection or maintenance works are started.



6. Maintenance

Pay attention to Chapter 3 "Safety" during maintenance and repair works.

Failures due to inadequate or incorrect maintenance may generate very **high repair costs** and long standstill periods of the machine. **Regular** maintenance therefore is imperative.

Operational safety and service life of the blast machine depends, among other things, on proper maintenance.

The following table shows recommendations about time, inspection and maintenance for the normal use of the blast machine.

Operating hours/ time period	Inspection points, maintenance instructions
12 h after repairing	Check all accessible screw connections for tight seat.
Daily and prior to starting work	Check that all safety devices working adequate. Check the feed spout, magnet- and brush sealing. Check the blast wheel, control cage and liners. Check the electric connections for sediments of dirt or foreign bodies. Check the electric motors for dirt and other contaminants.
Annually	Full overhaul and cleaning of the complete machine.

Due to different working conditions it can't be foreseen how frequently inspections for wear check's, inspection, maintenance and repair works ought to be carried out. Prepare a suitable inspection schedule considering your own working conditions and experience. However a full overhaul must be carried out at least once a year.

Our specialists will be happy to assist you with more advice.

Prior to any repair works on the machine and its drives, secure the machine against unintentional switching on.

Follow additional operating and maintenance of OEM if included during your service and maintenance work.

Further is advised:

Clean the machine every day with air and non-aggressive materials. Never use a high pressure water cleaner to clean the machine.

Store the cleaned and dry machine in a dry and humid free room. Protect the electrical motors from moisture, heat, dust and shocks.

Remove the abrasive out of the abrasive storage hopper.

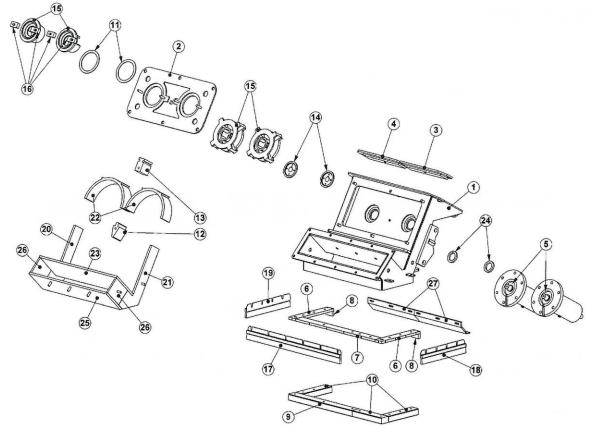
All repair work has to be done by qualified TruBrand personnel, this guarantee a save and reliable machine. Any guarantee on the machine is expired when:

- By not using original TruBrand spare parts and abrasive.
- When repair work is not done by qualified TruBrand personnel.
- When changes, add ons or conversions are undertaken without written permission of TruBrand.

Replace the parts when you can see obvious signs of wear and tear.

Wear grooves are acceptable until 75% of blade thickness has been worn away. When this point is reached, replace all blades as a set.





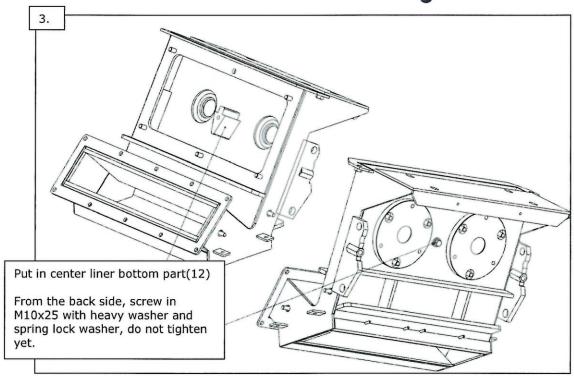
6.1 Changing the liners

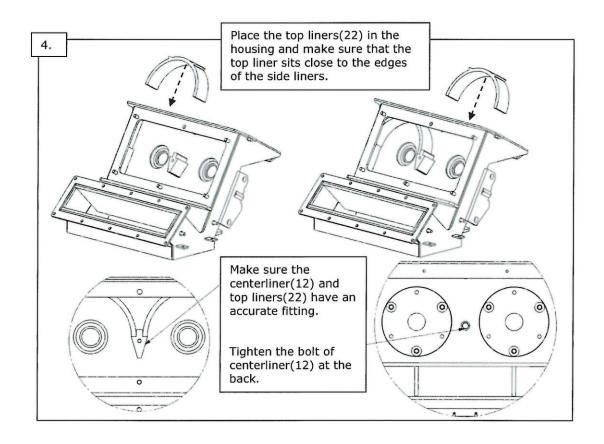
- Loosen the control cage clamps(16) and remove the control cages(15) and shims(11).
- Remove the blast wheel cover plate (2).
- Loosen the press bolt of the top liners and remove the blasthousing covers (3+4).
- Remove: center liner top part(13), top liners(22) and center liner bottom part(12).
- Loosen the nuts of the side liners(20+21) and plenum liners(23+25+26). Take them out at the bottom of the housing.

To mount the liners, keep on the following sequence:

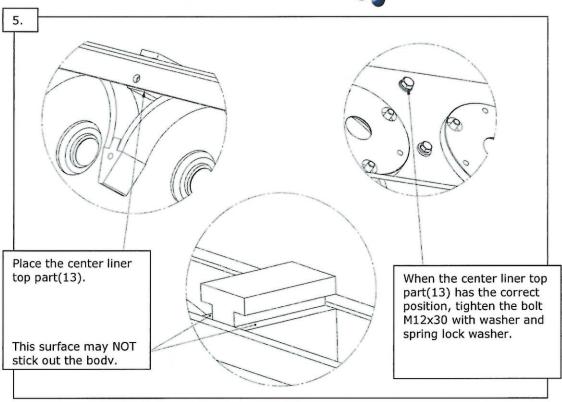
- 1. First place the plenum liners(23+25+26) and fasten them with the nuts.
- 2. Place the side liners side liners(20+21) inside the housing. The sideliners may stick out the body for max. 1mm. Tighten the nuts.

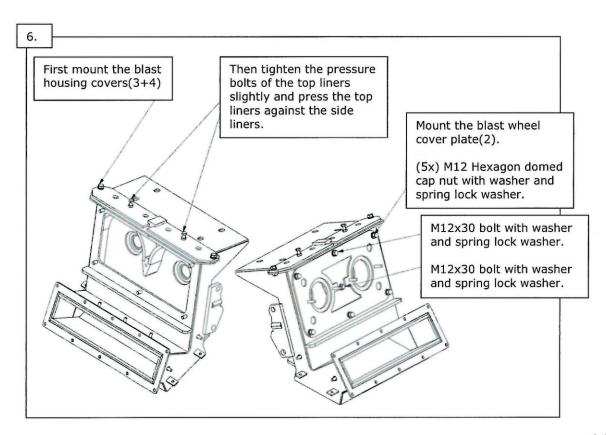








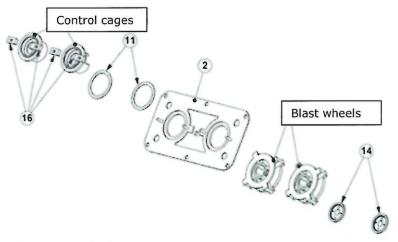






6.2 Changing the tune-up kit

The tune-up kit consists of a blastwheel, control cage and a bolt.



- Remove the feed spout
- Remove the cage clamps(16)
- Remove the control cages and blastwheel cover plate(2)
- Block the blastwheel and remove the central fixing bolt
- Take the blastwheel out of the housing

Use a new central fixing bolt when mounting a new blastwheel

- Place the blastwheel on the hub(14) and tighten the central fixing bolt.
- Fix the blastwheel cover plate(2) with the 5 nuts and 2 bolts.
- Insert the control cage in the center and clamp the cage with the control clamps so that the blastwheel can rotate freely
- Turn the blastwheel manually. It must rotate freely.
- Place the feed spout between the abrasive valve and the cage.

6.3 Adjusting the blast pattern

Correct adjustment of the control cage and thus of the blast pattern is a very important factor for optimum working with the blast cleaning machine.

Incorrect adjustment of the control cage results in very high wear and premature blasting-through of the liners in the blast wheel housing, as well as reduced blasting performance, uneven cleaning and a possible loss of the rebounce energy of the abrasive.

The adjustment is effected by removing the feed spout, loosening the cage clamps (16) and turning of the control cages.

The control cage has a lateral window. The position of the window determines where the abrasive is fed onto the blast wheel blades and where the abrasive hits the surface to be treated.

Every time the control cage is adjusted or replaced, the thread of the blast wheel fastening screw should be checked. Make sure that this screw will be tightened correctly. In addition, absolute care must be taken to clean the thread from dust and abrasive.



6.4 Setting the control cages:

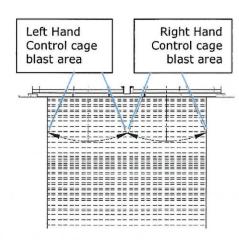
The cast grooves on the control cage show the position of the control cage opening. The following adjustment standard value is valid: the control cage opening is approximately opposite to the throwing angle. The abrasive grain size plays an important role here. Different types of abrasive have different throwing characteristics due to their different weights and frictional resistance. This means that you must never use different types of abrasive at the same time.

The adjustment can be carried out as follows:

- Determine the upper and lower edges of the windows. (watch the cast groove)
- Set the lower window edge of the left-hand control cage to imaginary 9:00 of a dial.
- Set the right-hand control cage exactly in a laterally inversed way at 3:00 of a dial.
- Move the blast head onto a 5-8 mm thick steel plate and blast for 45 seconds at full power without moving the machine from the spot.
- Stop the abrasive flow and move the machine until the blasted area is accessible.

With both hands **carefully** feel the temperature of the blasted area. The hot spot will be where the machine has developed the highest blast cleaning intensity. An even temperature from left to right indicates that the control cages are correctly positioned.

- Each control cage has its own blast area. They both have to be adjusted separately.
- Looking from the front of the machine onto the control cage: If the left side of the blasted area is warmer, turn the lower edge (cast groove) of the control cage anticlockwise for 3-6 mm. If the right side of the blasted area is warmer, turn the lower edge of the control cage clockwise for 3-6 mm.
- This process has to be repeated until an even temperature across the blast pattern is achieved.



Notes:

With increased wear of the blast wheels, blades, impellers and control cages, the blast pattern will change.

The size of the abrasive affects the blast pattern. With every exchange of abrasive, the blast pattern must be re-adjusted. The same applies for blasting on another type of surface.

Different types of abrasive have different throwing characteristics due to their different weights and frictional resistance. This means that you must never use different types of abrasive at the same time.

WARNING! Never loosen the cage clamps or try to adjust the control cage when the machine is in operation.



7. Selection of abrasive

Media nr. 3 (# 999-0330)

- creates a fine to medium texture on concrete.
- removes glazing from tiles prior to subsequently coating with antiskid floor sealing's
- removes old impregnations and coatings about 1 mm thick

Media nr. 4 (# 999-0390)

Standard abrasive, suitable for about 50-60 % of all applications. Creates a medium profile on concrete. Fulfils the same purpose as Media No. 3 when a higher speed of the machine is required, e.g. on asphalt, in order to keep the thermal load low.

- removes laitance from new concrete
- roughening of smooth concrete or natural stone
- removes coatings with a thickness of 1-3 mm
- cleaning of steel surfaces

Media nr. 5 (# 999-0460)

This media is used to create a coarse profile or to increase the work speed in the case of surfaces hard to treat

- removes sediments on concrete prior to coating
- removes thick paint coatings or rust from steel surfaces, bridges, tanks, etc.
- removes flexible coatings on parking house decks
- removes road markings and retexturing of asphalt and concrete roads

Media nr. 6 (# 999-0550)

Standard abrasive, suitable for about 40 % of all applications.

This media is used to create a coarse profile or to increase the work speed in the case of surfaces hard to treat.

- removes sediments on concrete prior to coating
- removes thick paint coatings or rust from steel surfaces, bridges, tanks, etc.
- removes flexible coatings on parking house decks
- removes rubber deposits
- removes road markings and retexturing of asphalt and concrete roads



8. Technical data

	2-20DT TruBrand
Power consumption blast motor	2x 11KW
Electrical connection (voltage is given on the control box)	3x 460V / 60Hz / 63A
Blast width	550 mm
Drive speed	0 – 33 m/min
Length	1950 mm
Width	720 mm
Height	1400 mm
Weight	630 kg
Noise level (under load)	83dBa Sound levels can vary in different circumstances, area influences like open outside or closed inside space, the surface to be treated etc. will give different values at all time.
Vibration level	Less than 2.5 m/s ² Allows working continuously with the mentioned equipment without having to use anti vibration precaution measures.
Dust hose connection	Ø150 mm

The electrical diagrams of the electrical system are placed inside of the control panel.

Design and specifications are subject to change without notice by TruBrand

Old equipment contains valuable materials which are valuable for re-processing. **The machine parts must not be thrown away in the normal household waste,** but should be disposed of at a suitable proper collection system, e. g. via your communal disposal location. This way the materials can be re-used in an environmentally responsible manner.





SERVICE MANUAL 2-20DT TruBrand VERSION 1.0



1. Spare Parts

Fig. 01

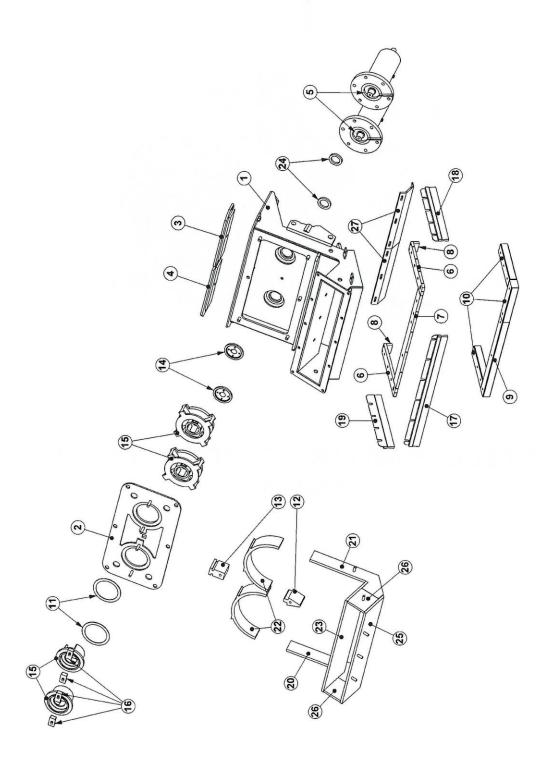




Fig. 01

Item	Part number	Description	Qty.
1	E03022/TB	Blasthousing 2-20DT	1
2	B21317/TB	Blastwheel cover plate	1
3	B21319/TB	Blasthousing cover RH	1
4	B21318/TB	Blasthousing cover LH	1
5	E00842/BLACK	Bearing unit complete	2
6	489945	Insulator side	2
7	B21309	Insulator front	1
8	481350	Spacer side magnet rear	2
9	B20804	Magnet side	1
10	490047	Magnet side	3
11	972781/TB	Control cage shim	2
12	B21316-1	Centerliner bottom part	1
13	B21316-2	Center liner top part	1
14	B20397	Hub	2
15	B20536K	Tune up kit	2
16	969803/TB	Control cage clamp	4
17	B21330	Front brush	1
18	E00457	Side strip brush LH	1
19	E00458	Side strip brush LH	1
20	B21313	Side liner LH	1
21	B21312	Side liner RH	1
22	B20325	Top liner	2
23	B21315	Plenum top liner	1
24	B20295	Felt seal Ø60x8	2
25	B21314	Plenum bottom liner	1
26	970153	Plenum bottom side liner	2
27	B21320	Skid seal	2



Fig. 02

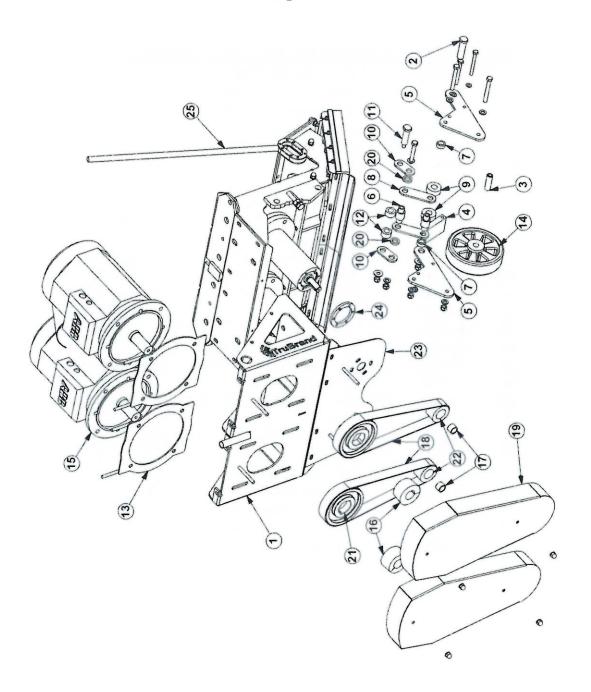




Fig. 02

Item	Part number	Description	Remarks	Qty.
1	E10687	Motor bracket 2-20DT TruBrand		1
2	E06468	Bottom bolt		2
3	E06470	Idler wheel bush		2
4	E06475	Distance plate		2
5	E06465/TB	Wheel bracket side plate		4
6	E06471	Lever shaft		4
7	E06473	Lever bush bottom		4
8	E06466/TB	Bottom lever		4
9	E06472	Wheel bracket bush		4
10	E06467/TB	Top lever		4
11	E06469	Top bolt		2
12	E06474	Lever bush top		4
13	E00838/TB	Fill up plate blastmotor		2
14	B20842	Wheel		2
15	E04642-IE3/WEG/GREY	Wheel motor 11 kW		2
	E04642-IE3/WEG/1/GREY	Fan cover		2
	E04642-IE3/WEG/2	Fan		2
	E04642-IE3/WEG/3/GREY	Therminal box compl. with cover		2
	E04642-IE3/WEG/4	Therminal block 6 pins		2
	E04642-IE3/WEG/5/GREY	Therminal box cover		2
16	DG15	Taper lock		2
17	222-2172-V	Taper lock		2
18	E00468	Poly V belt		2
19	E08864/TB	Pulley guard		2
20	E06855	Lever bush middle		4
21	491523/1	Poly V pulley Upper		2
22	E00466-1	Poly V pulley Lower		2
23	E00837/TB	Back plate belt guard twin		1
24	E00864/TB	Fill up ring bearing unit		2
25	B21917/TB	Lever		1



Fig. 03

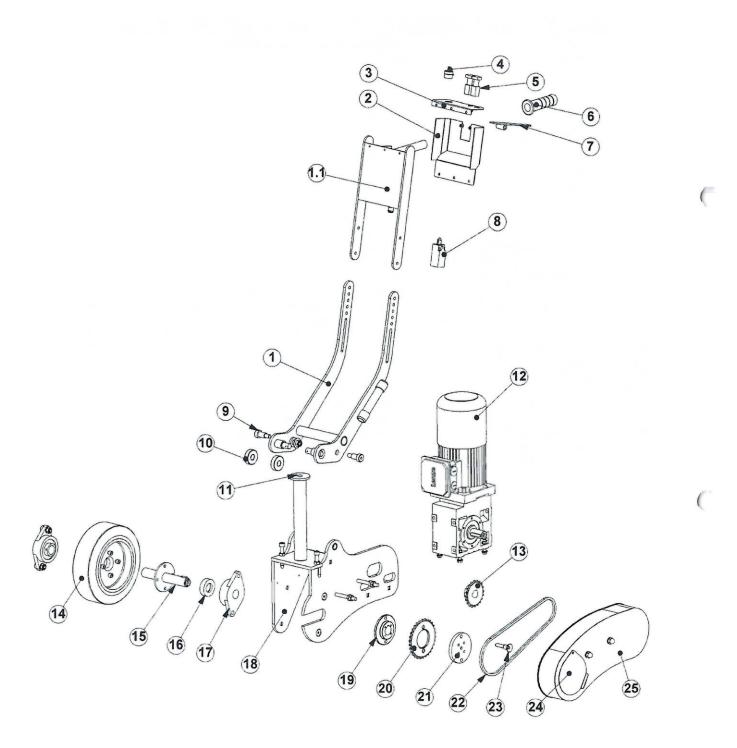




Fig. 03

Item	Part number	Description	Remarks	Qty.
1	E10579/TB	Handle lower part		1
1.1	E06143/TB	Handle top part		1
2	E00740	Control box		1
3	E00741	Control box top plate		1
4	E00866	Potention meter complete (consists out of item 4.1 & 4.2)		
4.1	E00866/1	Potmeter only with soldered contact block		1
4.2	E00866/2	Potmeter holder		1
5	E00867	Switch		2
6	453290	Handle grip		1
7	E00743/TB	Switch lever		1
8	454796	Limit switch		1
9	E00738	Handle pin		2
10	B20517	Bearing		2
11	971860/TB	Washer for yoke shaft		1
12	E00664-1	Drive motor		1
	E00664/1	Brake complete for drive motor		
	E00664/2	Cooling fan for drive motor		
	E00664/3	Fan cover for drive motor		
	E00664/4	Screw M5x60 for brake		
	E00664/5	Bearing plate for drive motor		
13	E00732	Sprocket		1
14	476405-1	Traction wheel		1
15	E00742	Drive wheel shaft		1
16	E07293	Distance bush drive wheel		1
17	009324	Bearing drive wheel		2
18	E00739/TB	Drive wheel bracket		1
19	488551	Hub		1
20	477631	Idler sprocket		1
21	477630	Sprocket retainer		1
22	E00237	Chain		0.9m
22.1	E00238	Chain link		1
23	478198	Quick release pin		1
24	979971/TB	Cover plate chain guard		1
25	E00744/TB	Chain guard		1



Fig. 04

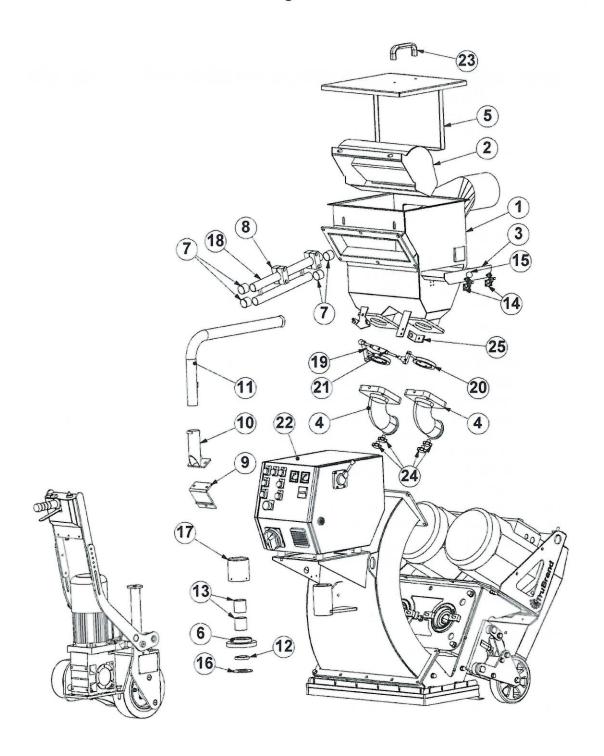




Fig. 04

Item	Part number	Description	Qty.
1	B21303/TB	Separator	1
2	B21297/TB	Deflector	1
3	B21304/TB	Separator tray	1
4	970192/GREY	Feed spout	2
5	B20263/TB	Separator cover	1
6	B20511	Lifting plate	1
7	E00337	Cable protection cap	4
8	B21338	Pipe clamp.35mm (set of 2)	2
9	979994/TB	Cable pillar bracket	1
10	B20426/TB	Cable guide support	1
11	B20425/TB	Cable guide	1
12	B20295	Felt seal	1
13	971341	Oilite bush	2
14	001084	Clamp for separator tray	2
15	B21325	Ball head for separator	1
16	B20512/TB	Seal retainer	1
17	B20515/TB	Shaft cover	1
18	E00839/TB	Cable guide twin & cable adaption plate	1
19	B21295	Magnetic valve assembly	1
20	B21295R	Magnetic valve assembly	1
21	B21329	Turnbuckle	1
22	E10789	Electrobox 2-20DT TruBrand	1
23	970385	Handle	1
24	000213	Clamp knob M8	4
25	B21327/TB	Hold angle cable 2-20DT	1



Fig. 05

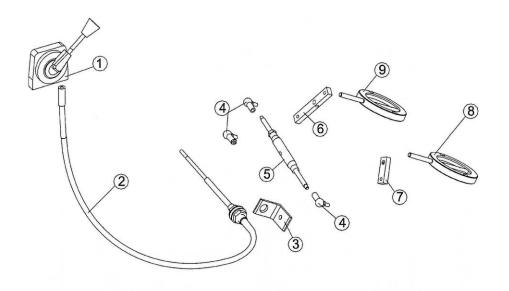
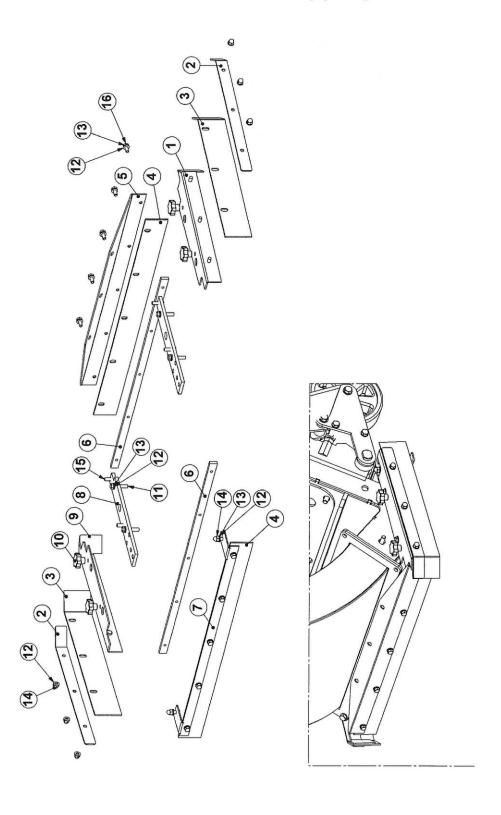


Fig. 05

Item	Part number	Description	Qty.
1	B20519	Lever for control cable	1
2	B20520	Control cable	1
3	B21327/TB	Hold angle	1
4	COZ9/1	Angle joint	3
5	B21329	Turnbuckle	1
6	B21326/TB	Lever magnetic valve long	1
7	B21296/TB	Lever magnetic valve	1
8	B21295R	Magnetic valve assembly	1
9	B21295	Magnetic valve assembly	1



Protection seal kit E06510 (option)





Protection seal kit E006510 (option)

Item	Part number	Description	Qty.
1	E06501	Seal plate left	1
2	E06505	Clamp strip side	2
3	E06508	Side seal	2
4	E06509	Front / rear seal	2
5	E06503	Angle profile front	1
6	E06506	Clamp strip front	2
7	E06504	Angle profile rear	1
8	E06507	Mounting plate	2
9	E06502	Seal plate left	1
10	E03693	Disc knob plastic M8	4
11	BE0015	M8 x 40 hexagon bolt	4
12	BE0003	M8 washer	22
13	BE0005	M8 spring lock washer	16
14	BE0001	M8 hexagon domed cap nut	8
15	BE0204	Hexagon socket thin head cap	4
16	BE0009	M8x20 hexagon bolt	10