



StoneMax



EN
160/210
Serial no.: 100-XXX

StoneMax

Type 160/210

Congratulations on the purchase of your new StoneMax. For **safety reasons** and to achieve optimum service from the product, please read the User Guide **before use**.

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This product has:

Type no.: _____ Serial no.: _____
Month of manufac- _____
ture: _____ Net weight kg: _____

If contacting the manufacturer regarding spare parts or service, please state type and serial number. A spare parts list is included at the back of this manual.

EU DECLARATION OF COMPLIANCE

DAL-BO A/S
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declares herewith that the above machine is manufactured in accordance with the provisions of directive 2006/42/EC, which replaced directive 98/37/EC and change directives 91/368/ECC, 93/44/ECC and 93/68/ECC on harmonization of member state legislation concerning health and safety requirements related to the construction and manufacture of machines.

CE

This machine corresponds to the safety requirements in the European Safety Guidelines.

DAL-BO A/S

Date: _____

Managing Director Kaj Pedersen

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Safety



This symbol appears in the instruction manual each time there is a safety warning concerning your safety, the safety of others or functionality of the machine. All safety instructions must be observed and made available to all users of the machine.

General

- Ensure you are familiar with all aspects of the machine before use
- There are safety stickers on the machine containing important instructions for the safety of yourself and others, and correct use of the machine.
- Do not carry passengers during operation or transport.
- Ensure there are no personnel within the machine's working radius before operating. Operate machine only from inside the tractor.
- Before leaving the tractor or making adjustments, performing maintenance or repairs on the machine, extend fully and lower to ground, or maintain in transport position, apply tractor handbrake, switch engine off and remove ignition key to secure the machine against accidental operation.
- Remember to secure support leg and pins with split rings.
- Never leave driver's seat whilst machine is moving.
- Always adapt speed to conditions.
- Do not use machine unless all safety devices are in place. Defective safety devices must be replaced immediately.

Hydraulics

- Lower machine fully for any repair work on the hydraulic system. Relieve hydraulic pressure, switch engine off and remove ignition key.
- Clean hydraulic connections thoroughly before reconnecting. When connecting hydraulic hoses to tractor hydraulics, ensure they are not under pressure.
- Bleed the hydraulic system thoroughly after any repairs.
- Check hydraulic hoses regularly for defects such as cracks, splits, crimps, wear or breaks. Defective hoses must be replaced immediately.
- Avoid spilling oil on the ground. If oil is spilt, collect and deliver to a destruction point.
- Clean hands thoroughly after contact with oil and grease. Change oil-stained clothing immediately. Hydraulic oil can be harmful to the skin.
- Hydraulic oil released under high pressure can penetrate the skin and cause severe injury. In the event of injury, seek medical help immediately.

Assembly

- Danger of crushing! Ensure no personnel are between implement and tractor, or between the parts to be connected.

Maintenance and repair

- Ensure machine is adequately supported or fully extended for all repair and maintenance work. Ensure tractor and machine are properly braked, engine stopped and ignition key removed.
- Tighten all screw connections after a few hours use. Check all screw connections regularly and tighten as required. Check all split pins and bolts to avoid mechanical failure.
- Dispose of oil, grease and filters in accordance with local environmental protection rules.

Road transport

- All safety and warning precautions mandatory by law must be fitted and tested before transporting the machine on public roads. The driver is responsible for fitting the correct lighting and number plate required in accordance with applicable legislation.
- Check with local traffic authorities whether transport on public roads is allowed given the machine's dimensions.

- When transporting, ensure permitted total weight for tractor is not exceeded and that loading on tractor front axle is not less than 20% of tractor net weight. If this is the case, use weights on tractor front

Correct use

- Correct use of the machine includes observing the manufacturer's operating, maintenance and repair instructions, and that original spare parts are always used.
- StoneMax may only be used, maintained or repaired by personnel familiar with it and who are aware of the risks that can be involved.
- The manufacturer cannot be held liable for injury or damage arising from modifications made to the machine performed without prior permission from the manufacturer. Neither can the manufacturer be held liable for injury or damage arising from incorrect use. Such liability rests solely with the user.
- Do not add extra weight to the machine.

How to use this manual

The sequence of subject matter in this manual can seem illogical. Please refer to the table of contents for page numbers for individual items.

The manual is divided into 5 main sections:

- Safety
- Starting routine and running
- Accessories
- Maintenance
- Repairs

The following symbols represent:



Points which are important to functionality and service life.



Points relevant to safety.

Delivery

The machine is delivered complete on a trailer.

If lifting the machine, we recommend the use of straps on the mid-section and drawbar to maintain balance.

Description of the machine

The machine described in this manual consists of three fundamental parts:

1. CHASSIS
2. EXCAVATING SHOVEL
3. HOPPER

1. CHASSIS:

The other elements are mounted on the chassis, which is made of structural tubing. There two wheels located at the rear end and an attachment for coupling the machine to the tractor.



2. EXCAVATING SHOVEL:

This is provided with teeth in the form of a comb which collect surface stones which enter the bucket through the action of two double effect cylinders. The working depth varies between 5 and 15 cm, and is remotely controlled from the tractor. The hydraulic cylinders also serve to unload the stones in the bucket when it is full. When the size of stones makes it necessary, an optional detachable grille may be fitted to the teeth.



4. HOPPER:

Carrying capacity is a function of the model, and is mounted to the chassis by two rotating bolts. It is unloaded by means of two simple effect hydraulic cylinders controlled from the tractor.

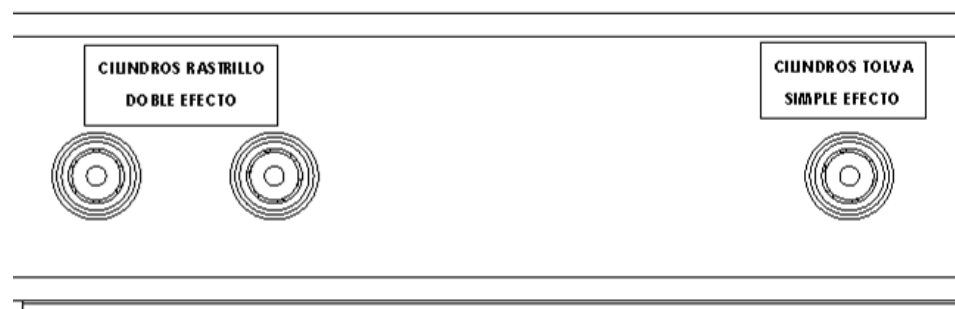
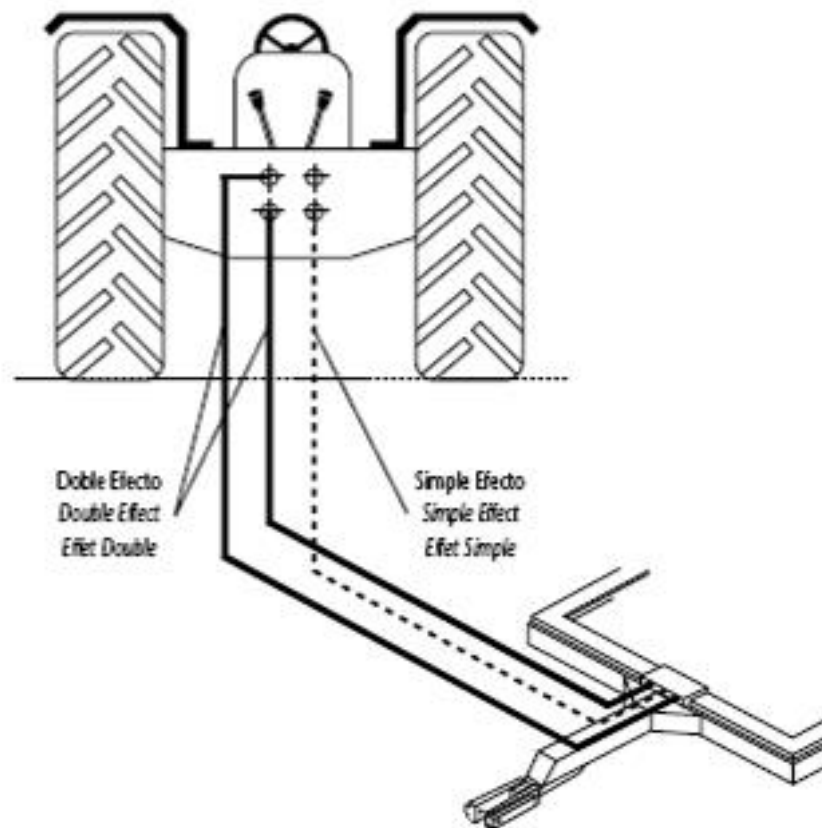


Coupling the machine to the tractor

Bear in mind the following:

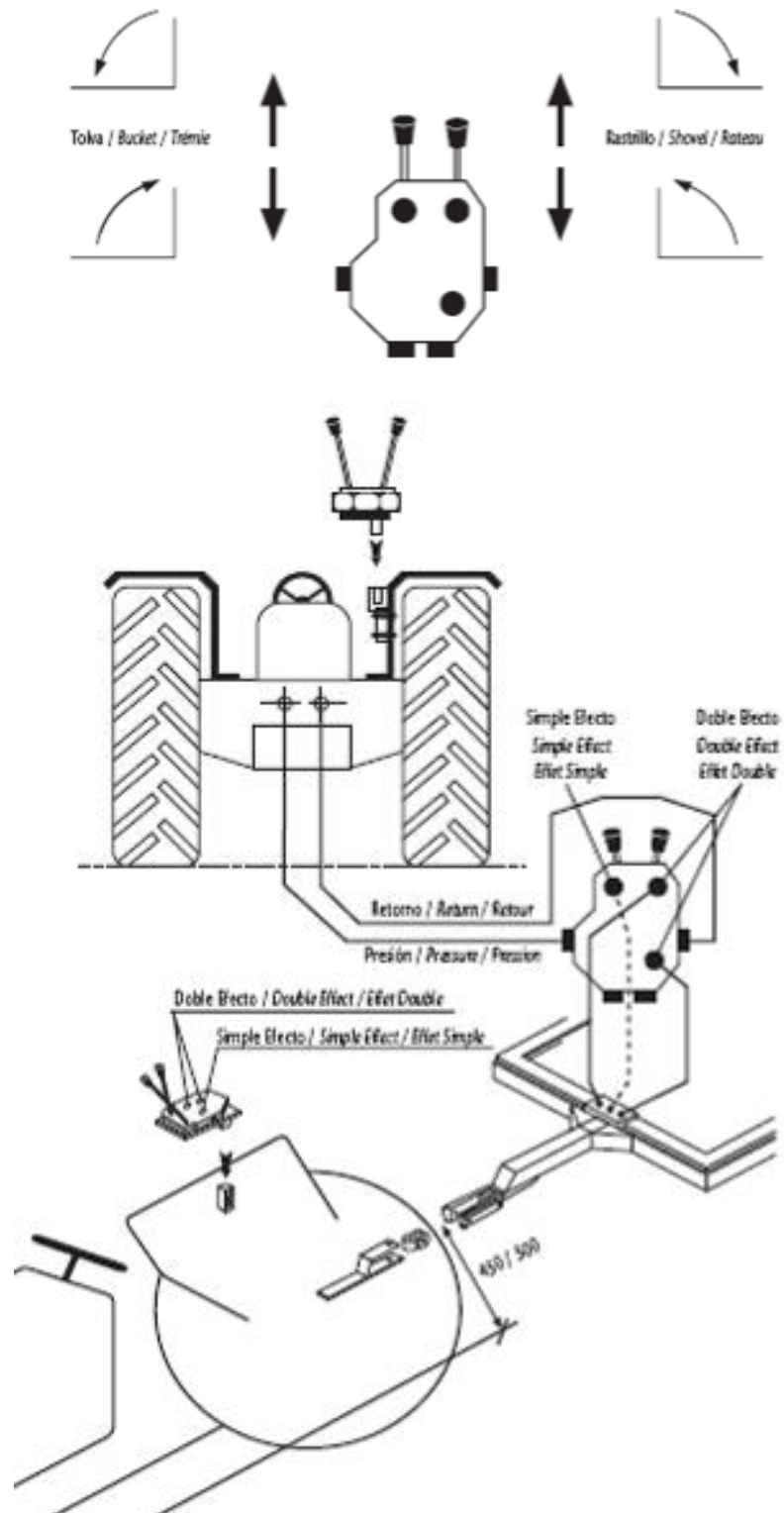
1. The height of the tractor coupling attachment should be between 450 and 500 mm.
2. Hydraulic coupling with two possible situations:

When there are sufficient oil outlets on the tractor connect the two double effect plugs to one attachment on the tractor distributor, and the simple effect plug to the other, as in the diagram on the right. The figure inferior shows the movements produced by working the distributor.

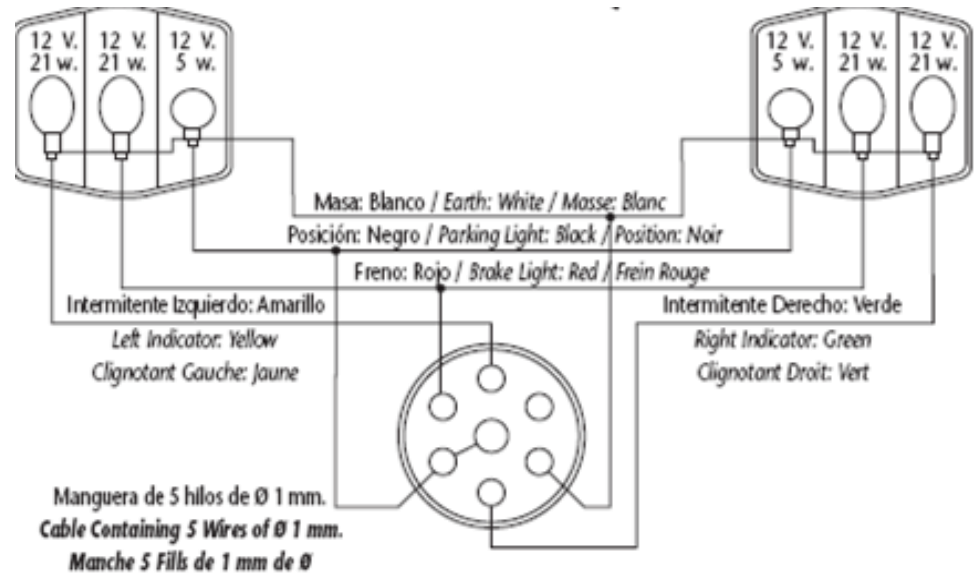
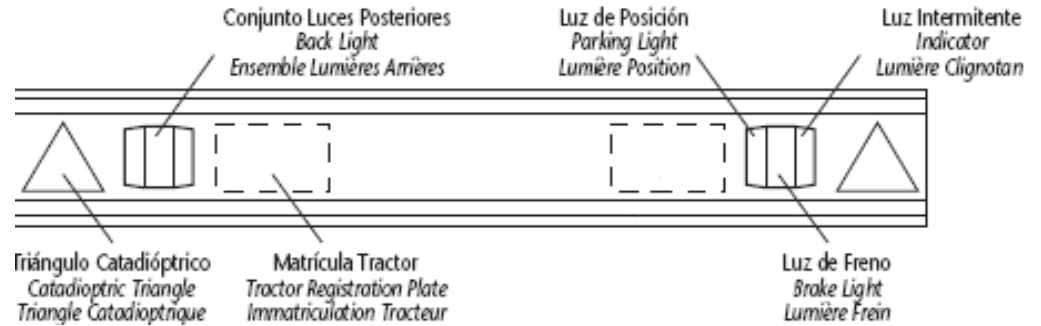


Fitting the distributor

If the tractor does not dispose of three oil outlets attach a distributor as shown in the diagram on the right.



Detailed description of the rear lights, which follow the norms required for use on the road.



Maintenance

Due to its extremely simple mechanism this machine merely requires the periodical greasing of all moving parts. This should be carried out with the bucket at rest and the tractor engine stopped.

Before beginning work

Follow the instructions below in order for the machine to work to its specifications:

1. Examine the terrain to ascertain dangerous areas and method of working.
2. Verify that there are no oil leaks from any of the pistons, oil tubes or the remote control. This could make the bucket or shovel drop suddenly and cause an accident.
3. Check the hydraulic oil level of the tractor.
4. Check the machine by working it while empty.
5. If there is anything unusual about the function of the machine, eliminate the problem before use.
6. It is forbidden to transport stones or other material by road. This applies to people also.

The terrain and work capacity of the machine

The following recommendations will help you to work correctly:

1. The ground should be dry.
2. The stone(s) should be loose on top of the earth. It is useful to bring them to the surface with a cultivator or rotavator.

Do not work on slopes at an angle of more than 15%.

The working depth is operator controlled using the lever on the remote control. It varies between 5 and 15 cm.

The size of stone picked up may vary from 7 or 8 cm to stones weighing between 200 and 300 kg. Drive the tractor slowly.

While working

1. No one should be allowed near or on the machine.
2. When working always use the tractor's lowest gears.
3. Avoid starting or turning quickly.
4. Always unload the machine when at a standstill.
5. Avoid unloading on transversal slopes of more than 15%.

Maintenance precautions

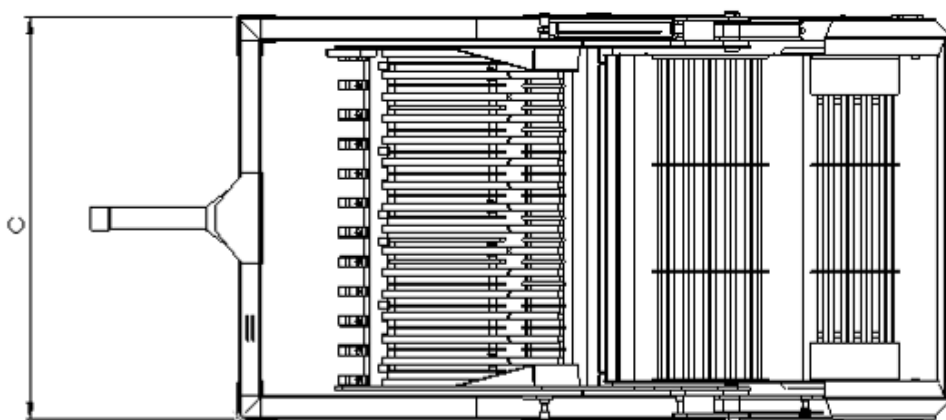
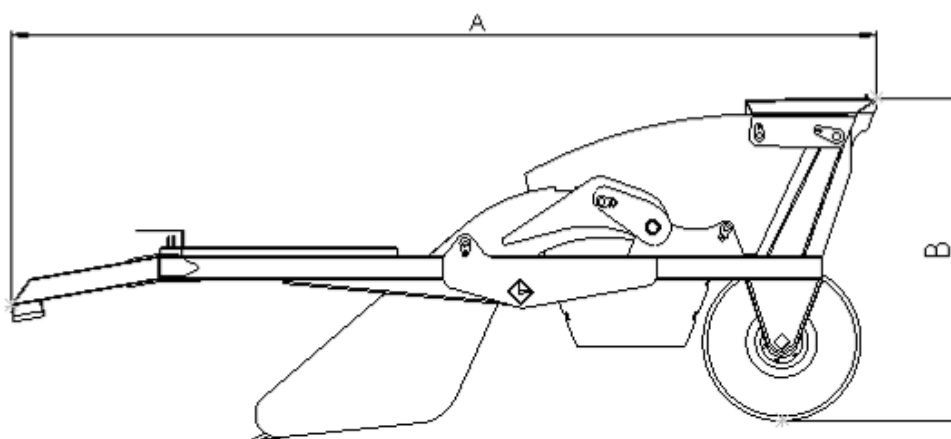
Only specialized personnel should carry out the maintenance of this machine.

1. Follow the correct safety measures for each task.
2. Diesel and oil are hazardous substances. Do not use in the presence of fire or flames.
3. Unless otherwise stated maintenance will carried out with the motor at rest.
4. In case of a fault in the bucket or shovel, never repair from underneath the machine.
5. Take particular care of the electrical installations.
6. Check the hydraulic oil level of the tractor.
7. Check daily the safety of the bolt mountings to avoid their release.
8. The machine may not be modified without the consent of the manufacturer. Contravention will entail loss of the guarantee and EEC certification.
9. The speed limit for the tractor and machine when coupled is 25 km/h, according to the Highway Code.

Do not exceed this limit.

Technical sheet

	160	210
A (mm)	4150	4890
B (mm)	1660	1740
C (mm)	1930	2330
Peso/Weight/Poids (Kg)	1580	2400
Volumen tolva/hopper volume/ volume de la trémie (m³)	1.58	2.87



Guarantee

Dal-Bo A/S provides a 1 year guarantee on all new machines sold by an authorised Dal-Bo dealer. The guarantee is valid for 1 year from date of delivery to the end-user.

The guarantee covers material and manufacturing defects.

The guarantee will become invalid in the following instances:

- **The machine is used for purposes other than those described in the user guide**
- **The machine is misused or treated negligently**
- **Lack of maintenance**
- **Unrelated incidents such as weather, falling objects etc.**
- **Transportation damage**
- **Unauthorised repairs**
- **Modifications to the machine without the written consent of Dal-Bo A/S**
- **Non-original spare parts used**

Dal-Bo A/S cannot be held liable for consequential damage, loss of earnings or production as a result of defects. Dal-Bo A/S cannot be held liable for the cost of labour apart from that reasonably incurred for repair or replacement covered by the guarantee.

Dal-Bo A/S cannot be held liable for the following costs:

- **Setting the machine**
- **The cost of normal maintenance, cleaning, lubrication and replacement of wear parts**
- **Transportation of the machine to and from a repair workshop**
- **The dealer's expenses, such as transportation of personnel or parts to and from the machine and/or repair workshop**

The guarantee is conditional on the following:

- **The guarantee will become invalid if the dealer has not prepared the machine and instructed to owner in its use.**

Spare parts