

***STARING* Mega Mixer 500**

Instruction manual



>> Before you use the Mixer, please read the Instruction manual

Dear STARING Customer,

STARING MEGA 500, is a pan mixer of the most advanced design in the market and easily meeting all site requirements of today. The maximum performance and the simple, easy operation of the STARING MEGA 500 are results of our recent development work within the mixer technology field.

In order to achieve safe handling of the STARING MEGA 500, we ask you to read the following instruction manual carefully.

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>> 1. Technical Data

| | |
|---|-------------------------------|
| Mixer Type | Mega 500 |
| Mixer Weight | Max 1000 kg |
| Gross Volume | 500 L |
| Net Volume | approx 300 L |
| Pan Diameter | 1400 mm |
| RPM | 35 rpm |
| No. of Mixer Arms | 3 |
| Discharge Height | adjustable from 625 to 800 mm |
| Electric Moter Output | 15kW with 10m cable (no plug) |
| Protection | IP 54 |
| Voltage | 3x400V |
| Power Consumption | 40 Amp |
| Frequency | 50 Hz |
| Noise Level at the Working Place (Mixing) | 78 dB(A) |
| Noise Level at the Working Place (Idling) | 53 dB(A) |
| Mixer Noise Level (Mixing) | <68 dB(A) |
| Mixer Noise Level (Idling) | <66 dB(A) |

Identification:

The Manufacturer's type sign states the mixer type. No. in the first field. The second field consists of seven figures of which the first three figures state the machine No., the next two figures the building year and the last two figures the month of the building year. The third field states the net weight in kg of the mixer.



>> 2. Safety and Prevention of Accidents

Instruction Manual

All persons dealing with the use, installation, operation, maintenance and repair must have read and understood the Instruction Manual.

Persons Responsible

The operator of the mixer is responsible for the fact that only persons who are qualified and have been instructed in the operation of the machine operate, maintain or repair the mixer.

Purposeful Use

Mixers are machines for production of concrete, mortar and for processing of refractory materials. The mixer can handle solid materials without adding water or aggregates.

The mixer may only be used in accordance with the intended purpose and may not be used for mixing of inflammable or explosive materials. The mixer is not suitable for mixing of foodstuffs.

Power Supply

The mixer may not be connected to wall sockets. The connection requires being wired into the supply provided. Cabling with a cross section of 5 x 2 mm² plus socket outlet and plug must be used.

If the cables are defective the mixer may not be operated. Defective cables can be a danger to life. Use only cables and plugs which are fault free.

Danger to Persons an Equipment

If the mixer is operated incorrectly and not in accordance with the intended purpose, damage to persons or equipment may result. **Therefor any incorrect use of the mixer is not allowed!**

>> 2. Safety and Prevention of Accidents

Safety Equipment

The mixer should only be operated using the safety equipment which is recommended. The mixer should only be operated with complete and undamaged safety equipment.

Maintenance and Repair Work

All work at power equipment should only be carried out by specialists observing the relevant safety requirements.

The machine should be checked daily by the operator for correct operation in order to check for wear and functional failures as early as possible.

This is especially important for:

movable parts

screw joints

safety equipment

protection equipment

cables, plugs and switches

excessive soiling

In connection with maintenance and repair work the power supply must be disconnected and arrangement made so that it is not possible to engage the mixer again.

Declaration of Conformity

The mixer is in conformity with the provisions in the Council Directive of 14. June 1989 on mutual approximation of the laws of the Member States on the safety of machines (89/392/EEC as amended by Directives 91/368/EEC, 93/44/EEC and 93/68/EEC) with special reference to Annex 1 of the Directive on essential safety and health requirements in relation to the construction and manufacture of machines.

>> 3. Special Safety Equipment

The mixer will be delivered with either a securely fastened or electrical secured safety cover and with safety screen under the discharge port.

Furthermore, we have for safety reasons installed a thermal relay. The thermal relay protects the electric motor when overheating occurs. The mixer is protected against automatic restarting and the thermal relay needs to be reset before the mixer can be used again.

The rated power is stated on the electric motor machine sign. In accordance with EN 60204-1 the machine is equipped with a main switch.

>> 4. Transport

When the mixer is transported by means of secured hoists it must only be lifted by the three lifting points.

Note

Pay attention that there is enough lifting capacity in the hoist being used.

Risk

Incorrect lifting of loads as well as damaged chains and ropes may cause serious accidents.

The mixer can be transported by means of forklift trucks.

Then the fork must be level (horizontally arranged) under the mixer pan in order to avoid any damage and that the mixer tips over.

Never lift the mixer from the discharge side with forklift trucks.

>> 5. Starting Procedure

Before the mixer is started the following instructions should be followed:

1. Check that the power cable is not damaged, if so, replace it.
2. Check the mixer and remove all major foreign matters.
3. Check that the mixer blades are correctly fastened in order to avoid damage to the mixer.
4. Place the mixer on a surface which is as level as possible.

>> 6. Using the Mixer

The mixer is started on the switch as follows:

Green pushbutton = Start

Red pushbutton = Stop

Red/Yellow button = Emergency stop

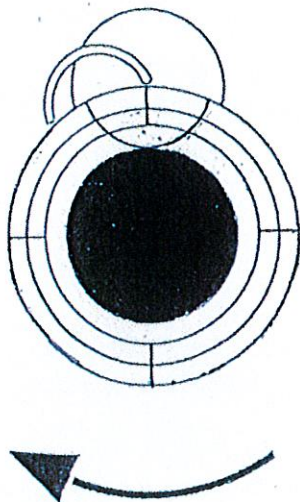


Fig. 2

This board is NOT included the supply from Staring.
After the engagement the direction of rotation should always be checked.

The mixer blades must rotate clockwise.

Fig. 2.

Where the direction of rotation is wrong this must be changed by the alteration of two of three phases.
This work must be carried out by a qualified electrician.

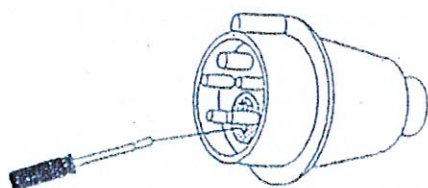


Fig. 3

If the machine is equipped with a directional switch the direction rotation can be changed by turning the switch with a screwdriver.

Fig.3.

Whenever the mixer has been moved to another place, the direction of rotation should be checked.

The filling and discharge of the mixer may only take place when the mixer is running so, that damage to the mixer is avoided.

>> 7. Adjustment of Discharge Height

For the adjustment of the required discharge height please follow the instructions below:

For the adjustment of the required discharge height please follow the instruction below:

The discharge height of the mixer should be set at the required height before starting the mixer.

Then the mixer is lifted by means of a crane or a forklift truck in order to relieve the telescopic legs. The cotter pins and bolts on the 4 telescopic legs are then removed and the mixer is lifted or lowered to required height.

After the discharge the cotter pins and bolts tightened again.

>> 8. Adjustment of Mixer Blades

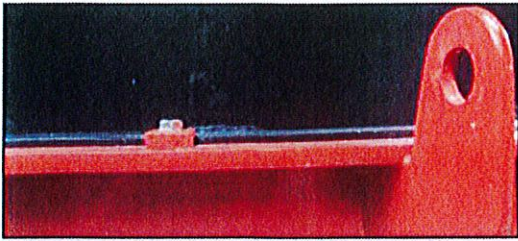


Fig. 4a

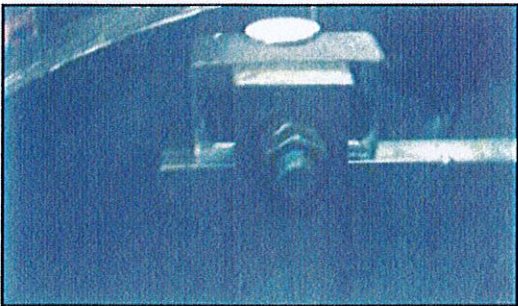


Fig. 4b

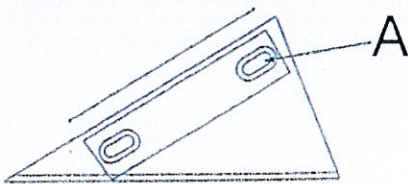


Fig. 4c

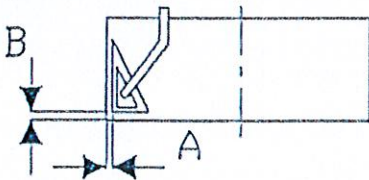


Fig. 4d

For an optimum adjustment of the mixer blades please follow the instructions below:

1. Disconnect the mixer from the power supply and ensure that it is not possible to engage it again.
2. Loosen the screws in the safety cover and remove the cover.
Fig. 4a.
3. Remove the centre cover.
Fig. 4b.
4. Loosen the four screws in the clamping device.
Fig. 4c.
5. Set the blades as below:

Dimension A = 0 – 2 mm and
Dimension B = 2 – 5 mm
and tighten the screws. Fig. 4d
6. Insert the Centre Bracket.
7. Place the cover and tighten the screws.

>> 9. Cleaning and Maintenance of the Mixer

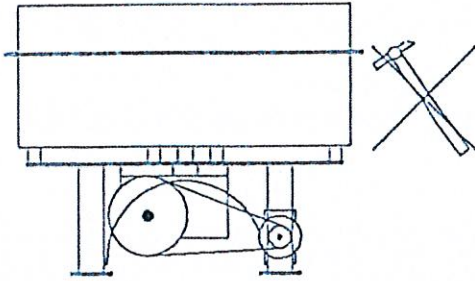


Fig. 5

For the cleaning and maintenance of the mixer please follow the instructions and recommendations below:

Cleaning Recommendation;

1. Adding of gravel will improve the cleaning effect.
2. Let the mixture run for a few minutes.
3. Empty the mixer.

Disconnect the mixer from the power supply and ensure that it is not possible to engage it again.

4. Clean with water.

Never direct the jet of water directly at the plug or control panel.

The gearbox of the mixer requires no maintenance.

If the mixer pan is damaged it will be difficult to clean it.

Fig. 5

>> 10. Maintenance for gearbox

Check after starting up (after about 50 hours).

Check fixing screw tightening and belt tension (if applicable)

Preventive maintenance (every 5000 hours)

1. For gearboxes lubricated with mineral oil, drain oil, while the gearbox is still warm and refill it to the correct level: refer to lubrication paragraph for oil type.

2. For gearboxes lubricated with "SHC" synthetic oil, check oil level and add oil if necessary.

3. Make sure the vent hole in the breather is not blocked.

4. Clean ventilation grilles of the motor

5. Grease bearings in motors equipped with grease nipples.

6. Check the air gap of brake motors.

>> 11. Spare Parts

Only approved STARING spare parts should be used for the mixer. The warranty will be void if spurious spare parts are used.

>> 12. Spare Part List

| No. | Name | Spare Part No. | Quantity |
|------------|-----------------------------|-----------------------|-----------------|
| 1 | Cover | 05102010 | |
| 2 | Centre Bracket | 05105300 | 1 |
| 3 | Water Dosage | VANDDOSERING2 | 1 |
| 4 | Mixer Head Bolt | 9625 | 1 |
| 5 | Mixer Head Wash | 03109170 | 1 |
| 6 | Power Transmission | 05101720 | 1 |
| 7 | Rubber Block | 00145210 | 9 |
| | Mixer Arm Hub | 05101740 | 1 |
| 9 | Rubber Sleeve | 9863 | 2 |
| 10 | External Mixer Arm | 05101310 | 1 |
| 11 | Centre Mixer Arm | 05101320 | 1 |
| 12 | Internal Mixer Arm | 05101330 | 1 |
| 13 | Mixer Blade External | 05001510 | 1 |
| 14 | Mixer Blade Centre/Internal | 05001520 | 2 |
| 15 | Mixer Pan, complete | 05105000 | 1 |
| 16 | Gear | 05103011 | 1 |
| 17 | Telescope Leg | 05106200 | 4 |
| 18 | Motor Protection | | 1 |
| 19 | Electric Motor | | 1 |
| 20 | Wear Plates Set, Complete | 05105200 | 1 |
| 21 | Safety cut out | 9116 | 1 |

>> 13. Guarantee

1. There will be a guarantee of 12 months from date of delivery.
2. The guarantee cover all operational failures due to material or fabrication defects.
3. The manufacturer can choose freely to remedy the damage by compensation, replacement or repair.
4. The costs of dispatch are on the account of the buyer.
5. Replaced parts belong to Staring Maskinfabrik A/S.
6. The manufacturer will undertake no responsibility with regard to consequential damages and possible loss of production.
7. In order for the guarantee to be complied with the defect must be reported immediately after it has occurred.

THE GUARANTEE DOES NOT COVER

1. Damages due to incorrect connection.
2. Repair executed by others.
3. Damage as a result of wrong operation, negligent treatment or transportation damages.
4. Natural wear and tear.
5. Only use approved Staring spare parts.

Where a complaint is forthcoming Staring Maskinfabrik A/S should be informed in writing together with all relevant information regarding the machine. Additionally, an, defective symptoms or cause must be informed.

>> 14. EC Declaration of Conformity

EC Declaration of Conformity

Manufacturer:

Company Name: Staring Maskinfabrik A/S
Address: Starengvej 9-11
9700 Brønderslev
Danmark

Tel.: +45 98821622

hereby declare that
Machine:

Name: **STARING MASKINFABRIK A/S**
Type: **MEGA 500**
Serial no.: **0419441**

- is in conformity with:

the COUNCIL DIRECTIVE of 17 Mai 2006 on mutual approximation of the laws of the Member States on the safety of machines (2006/42/CEEE as amended by directives EN 292-1, EN 292-2, EN 294, EN 418, EN 954-1, EN 1037, EN 10151, EN 60204-1) with special reference to Annex 1 of the Directive on essential safety and health requirements in relation to the construction and manufacture of machines.

Company:
Name:
Position:

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