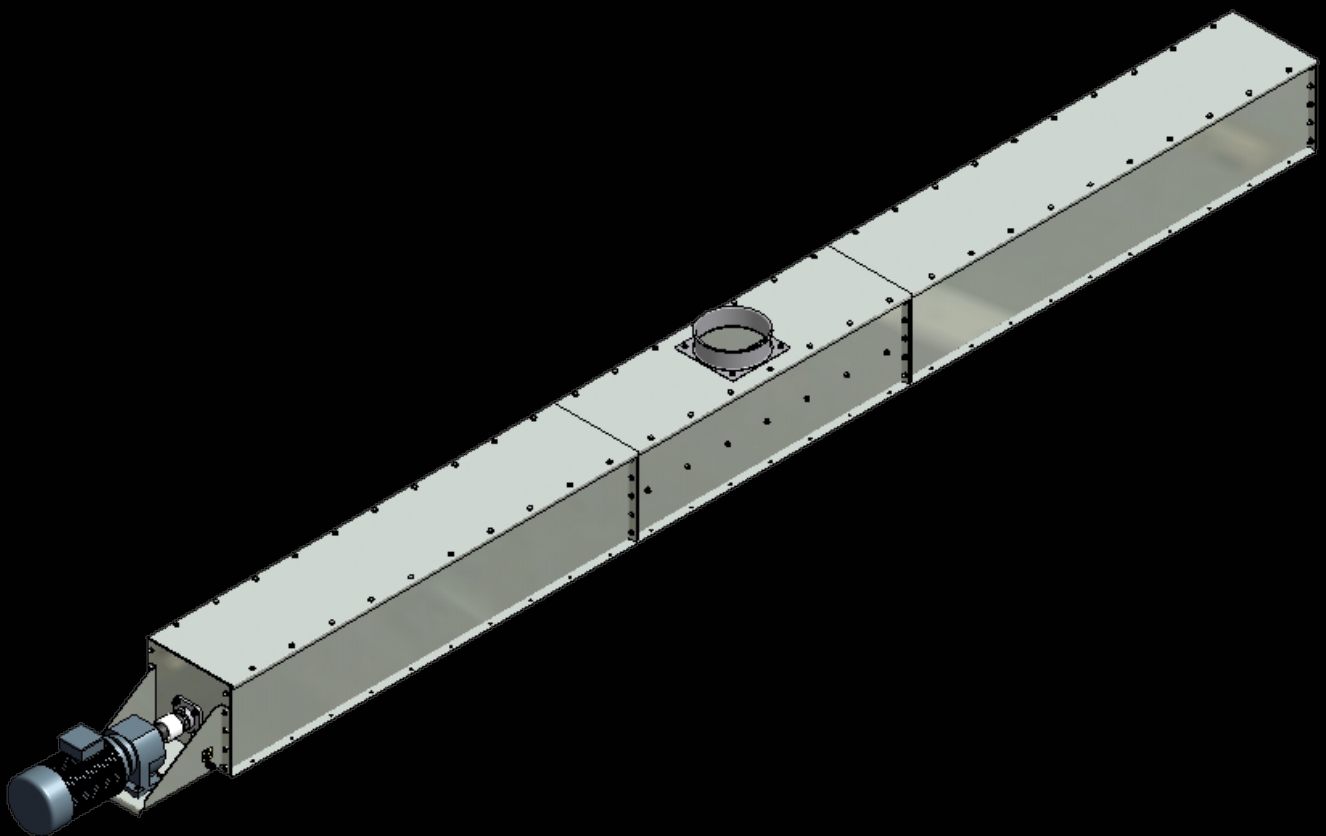


Manual Delivery auger T32

Version 70514.1



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Forward

JEMA AGRO A/S is a modern factory that manufactures and supplies equipment for transport of grain, seeds and fertilisers.

JEMA AGRO A/S' current product portfolio is the result of more than 60 years of experience in the development of agricultural machinery, in close cooperation with our customers, which, through quality and flexibility, helps keep us on the cutting edge.

JEMA AGRO A/S' conveyors and transport systems are suitable for assembly with ALL brands of drying and silo systems.

Important!

It is important to read this manual before assembly and commissioning.

EU Declaration of conformity

Manufacturer: JEMA AGRO A/S
Kløservejen 2, Sahl
DK-8850 Bjerringbro
Tlf. +45 86 68 16 55

Hereby declares that:

Machine: Delivery auger
Type: T32
Year of production: 2006

- is in accordance with the Machinery Directive 2006/42/EC, with special direction to appendix 1 concerning essential health and safety requirements in connection with the design and manufacture of machinery:

EN ISO 12100-1:2005 Basic Terminology and methodology.
EN ISO 12100-2:2005 Technical principles.
EN 1050:1997 Principles for risk assessment.

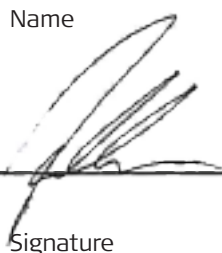
- is in conformity with EMC Directive 04/108/EC of 15. December 2004 concerning electromagnetic compatibility.

Director Jens-Peter Pedersen

Title Name

11.01.2011

Date Signature

A handwritten signature in black ink, appearing to be "Jens-Peter Pedersen", written over a horizontal line.

Conditions for use

JEMA AGRO A/S' delivery auger T32 is designed for transport of grain and seed mixtures.

- Delivery auger T32 must only be used for the product(s) in the contract.
- Electrical connection should only be performed by a certified electrician.
- Delivery auger T32 must be earthed in accordance with existing national regulations.
- During assembly, maintenance, or repair, the electrical supply to the delivery auger shall be disconnected and locked out.
- Operating instructions must be placed / available in the vicinity of delivery auger T32

General information

Delivery

The delivery auger is packed in a disassembled state. For shipping, standard packaging is used (pallets/wooden boxes and lattice boxes, etc.). There are no special considerations necessary with regard to actual transport other than normal care.

Delivery includes the parts described in the order confirmation.

Before assembly and commissioning this manual must be read carefully.

Preservation plan

No measures have been taken for long term storage.

After receipt, the parts should be kept in a suitable, dry room until assembly.

Noise Measurement

A noise test has been performed for the delivery auger. The sound level is measured at a distance of 1 m. from the delivery auger's surface at a height of 1.6 m. from the floor. During measurement the delivery auger ran without products, which is the operating mode where the delivery auger makes the most noise.

Noise levels were measured to be less than 70 dB.

Identification Plate

The identification plate is fastened to the delivery auger.



Construction

The delivery auger T32 is built from standard elements, which in combination can readily be incorporated into any grain transport system.

The major part of the delivery auger is made of galvanised steel.

The delivery auger T32 consists of:

- Motor base
- Extension with inlet
- Extensions
- Auger
- Support bearing and shaft
- Endplate with bearing and drive shaft
- Endplate with bearing and tap
- Motor.

Capacity

Capacities for various densities are given in the following table:

Specific weight	T32 (60 m ³ /h)	T32 (140 m ³ /h)
650 kg. pr. m ³	39 t/h	91 t/h
700 kg. pr. m ³	42 t/h	98 t/h
750 kg. pr. m ³ (Wheat)	45 t/h	105 t/h

*Measured in cleaned, storable material at a power supply of 50 Hz
The capacity varies according to the nature of the material.*

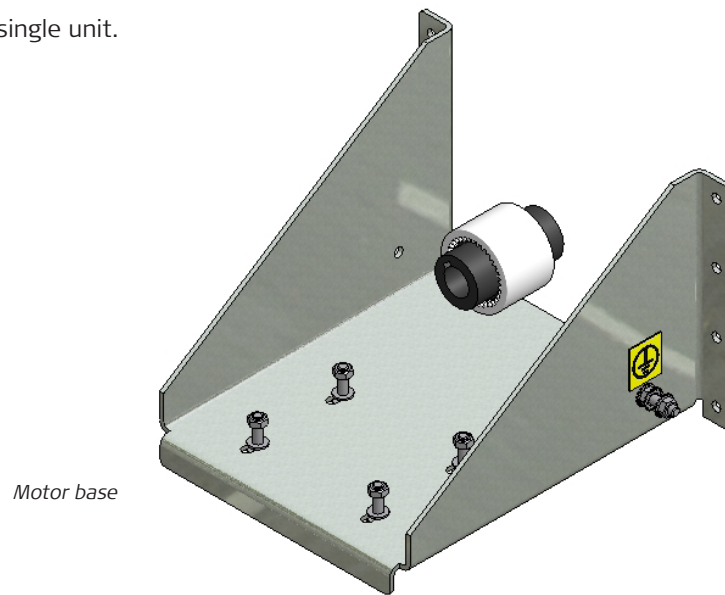
Technical specifications - power requirements

Delivery auger T32 power usage kW:

Length	45t/h	105t/h
3,0	3,0	3,0
4,0	3,0	3,0
5,0	3,0	3,0
6,0	3,0	3,0
7,0	3,0	3,0
8,0	3,0	3,0

Motor base

Motor base is supplied as a single unit.

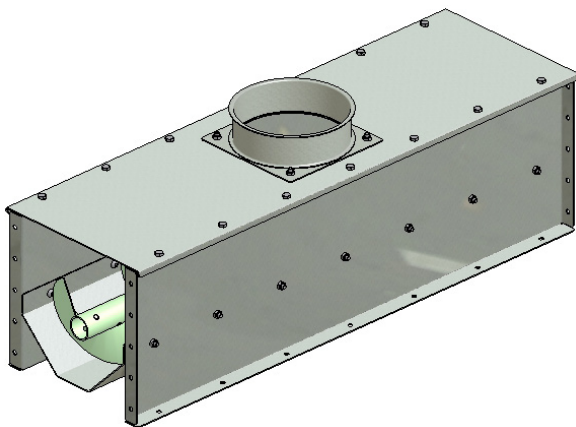


Motor base

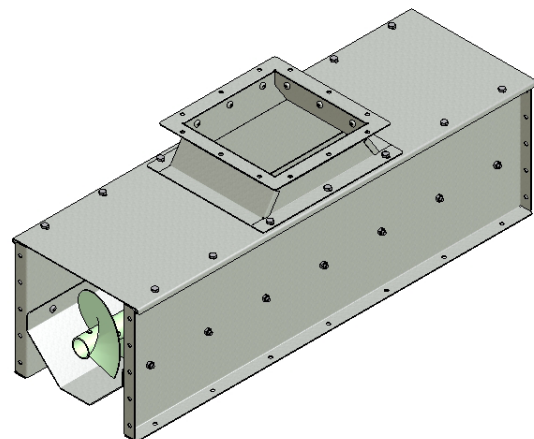
Extension with inlet

The length of extension with inlet is 1000 mm. The extension is available with a Ø200 inlet or with 240 x 240 inlet.

The extensions are supplied as complete units, with the auger loose in the extension.



Extension with inlet Ø200



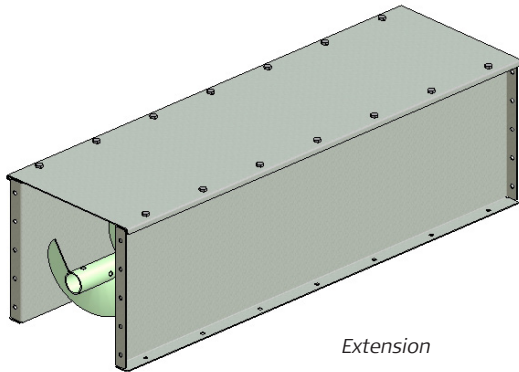
Extension with inlet 240 x 240

Extension

Extensions are available in the following lengths:

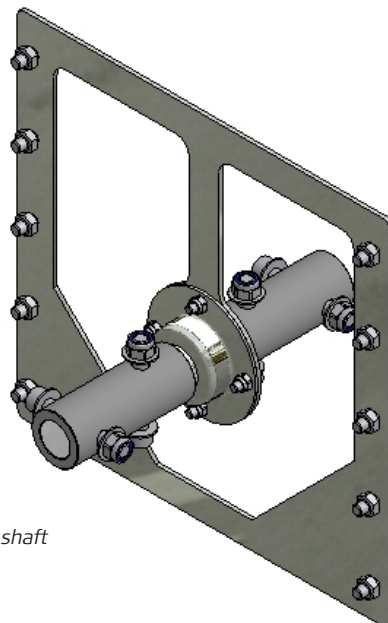
2,0m. - 1,5m. - 1,0m.

The extensions are supplied as complete units, with the auger loose in the extension.



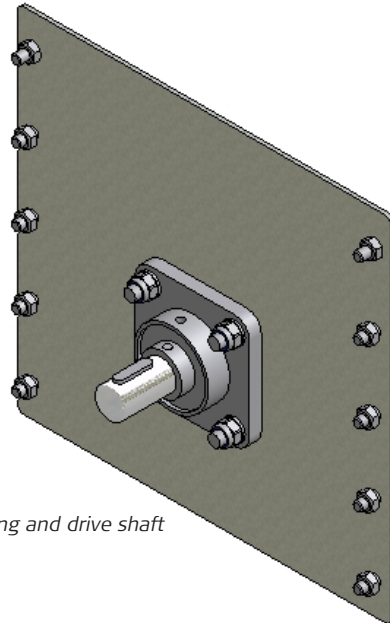
Support bearing with shaft

Support bearing with shaft is supplied as a unit.



Endplate with bearing and drive shaft

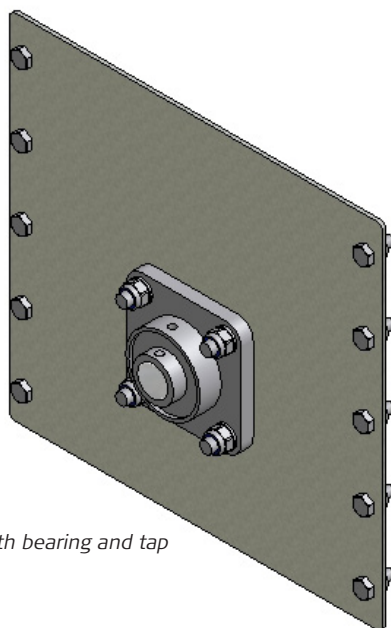
Endplate with bearing and drive shaft is provided as a single unit.



Endplate with bearing and drive shaft

Endplate with bearing and tap

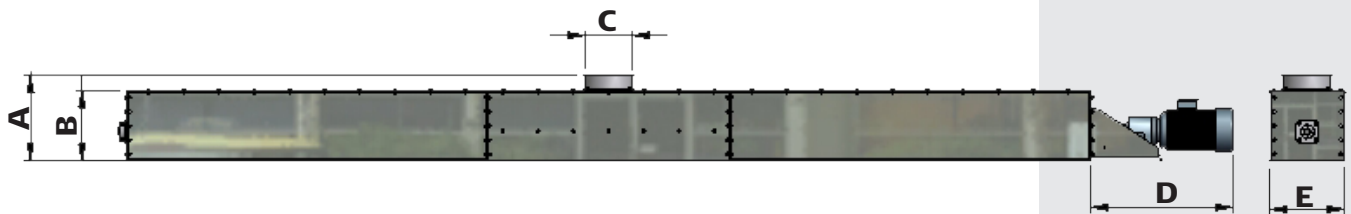
Endplate with bearing and tap is provided as a single unit.



Endplate with bearing and tap

Dimensional drawing

	A	B	C	D	E
T32 45t/h	365	305	Ø200	610	330
T32 105t/h	385	305	240 x 240	610	330



Receipt

At the time of receipt, check that all parts and components are included and check for shipping damage.

NOTE! Check that supplier documentation is attached to the gear and the motor. If documentation is missing, contact JEMA AGRO A/S. Please also submit order no.

Remember the necessary safety equipment before start of assembly.

It is important to read the manual thoroughly before beginning assembly.

Warning signs

There are warning signs fastened to the delivery auger, which indicate danger.

Warning!

Inspection doors and shields must not be opened or removed while the machine is in operation.

Warning!

Never reach into rotating auger/propeller.

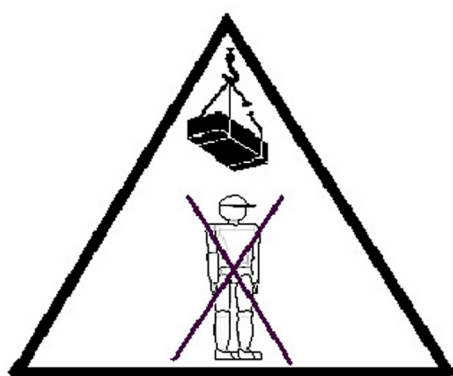


Lifting gear

Make sure to have the necessary SWL-marked hoisting/crane which is required for the given situation.

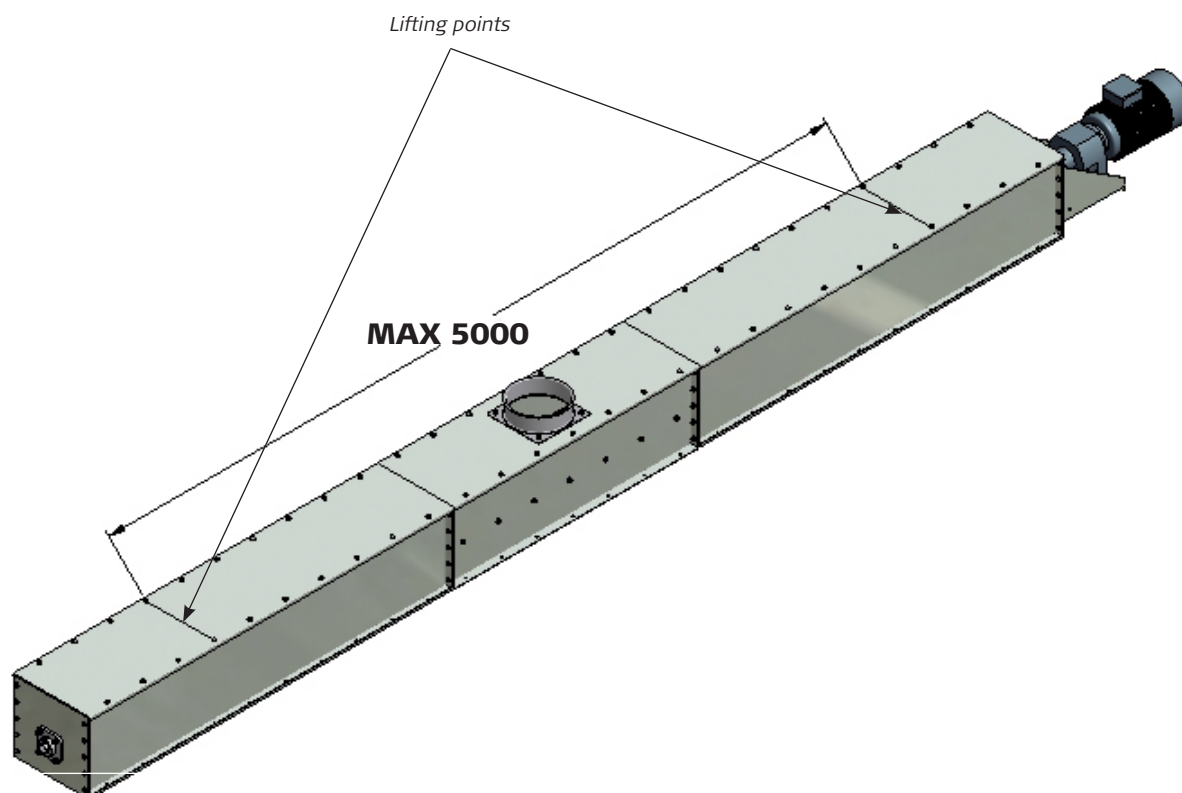
The lifting gear must be approved for the actual load. Weight of each piece can be found under "Weight Chart for sub-assemblies" in this manual.

Machine weight is specified in the section "Weight chart for T32 delivery auger".

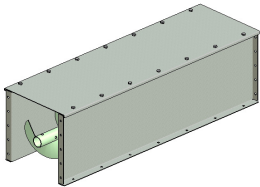
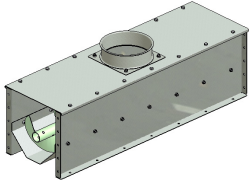
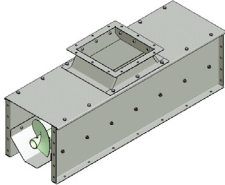
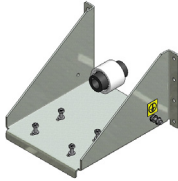
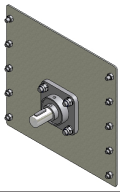
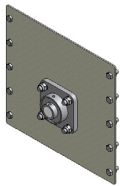
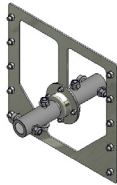


Lift requirements

The image below shows how the delivery auger shall be lifted. There must be max 5000 mm. between designated points
See also the section "Weight chart T32 delivery auger".



Weight charts for sub-assemblies

	Description	Product No	Weight
	Extension 1,0 m.	32302	23,17
	Extension 1,5 m.	32303	34,21
	Extension 2,0 m.	32308	45,26
	Extension with inlet Ø200	32301	30,13
	Extension with inlet 240 x 240	32309	31,56
	Motor base	32307	5,83
	Endplate with bearing and Drive shaft	32306	4,69
	Endplate with bearing and tap	32305	4,45
	Support bearing with shaft	32304	3,44

Weight chart for T32 Delivery auger

Length in metres	Total kg
3,0	125
4,0	147
5,0	168
6,0	190
7,0	212
8,0	234

Assembly



Check the level of the foundation and transport surface (placement of input and output) before beginning assembly.

It is important to read the whole manual thoroughly before installation/beginning assembly.

Make sure that site conditions are in order.

Electrical connection must only be performed by a certified electrician.

Remember!

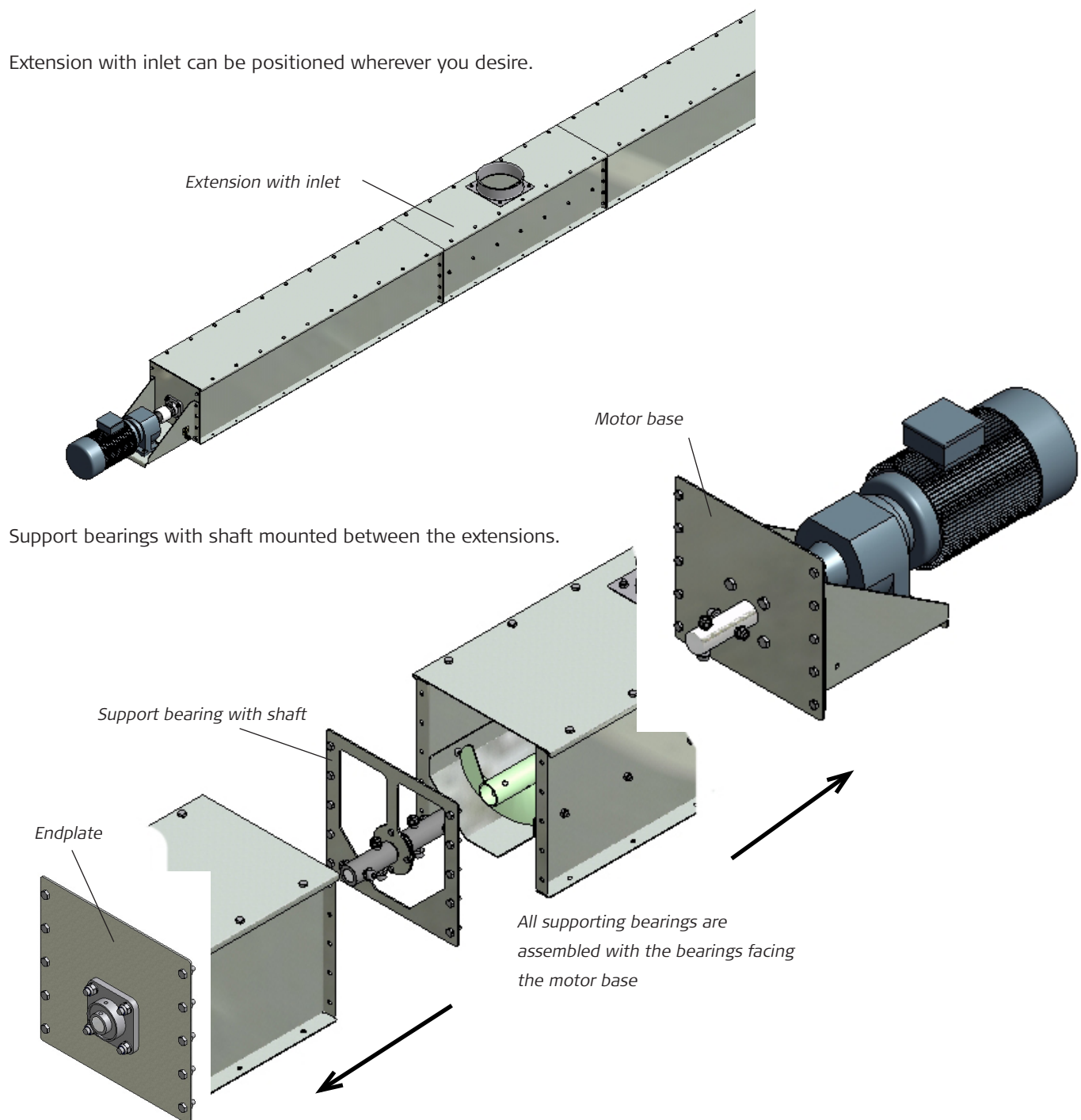
Before beginning installation, use necessary safety equipment for assembly such as gloves, safety shoes, helmet, glasses and necessary lifeline. None of these parts are standard.

Assembling of delivery auger

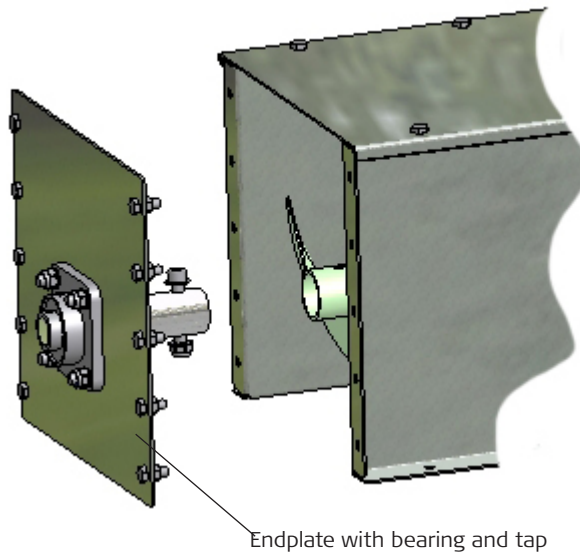
For assembly of delivery auger use proper and approved SWL;-lifting equipment. Thoroughly read the following section "Receipt" before beginning assembly of delivery auger

The simplest method to assemble the delivery auger is to assemble it on the floor in full length, space permitting.

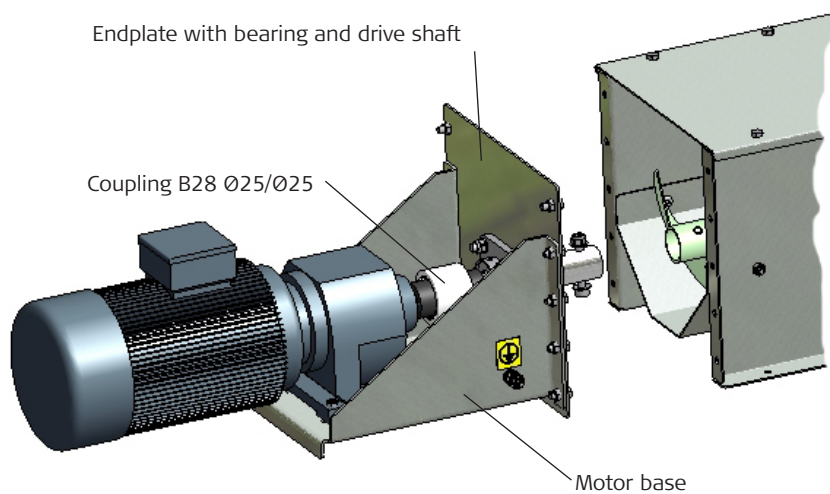
Refer to the following drawings for assembling the delivery auger.



Endplate with bearing and tap is mounted at opposite end of motor base.



Endplate with bearing and drive shaft and motor base is mounted to the extension and then the motor is installed.

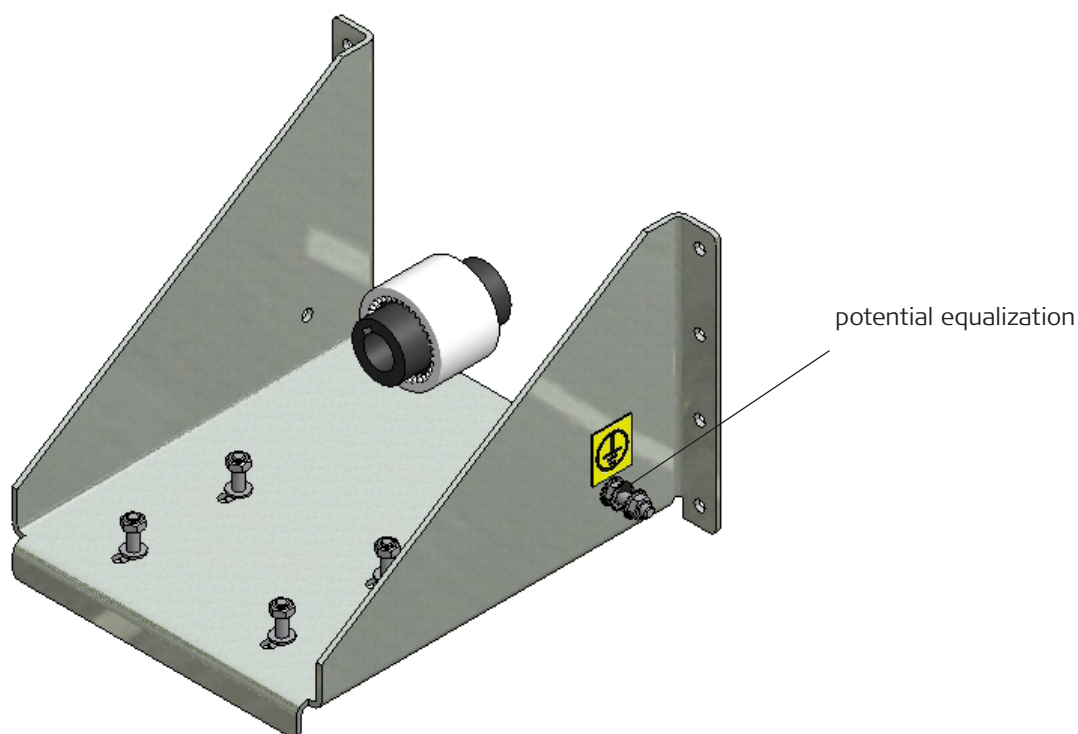


Potential equalization

Potential equalization is performed according to local regulations.

A mark has been made on the drive base which indicates where the delivery auger must be potential equalization. It is important that the machine be potential equalization to ensure that it's metallically connected.

The mark shows where delivery auger must be potential equalization.



Start-up

Before starting the delivery auger check the following:

- Ensure that all access doors are installed.
- Ensure that no one is working in/on/near the machine.
- Ensure that the rotation direction of the motor is correct.
- All bolts are installed and tightened in the delivery auger.
- Check the attachment/stability of the delivery auger.
- After start-up, check that all assemblies are tight.

Troubleshooting

For stops, first check whether the delivery auger can be started up again after the relay has cooled. If it can, the fault is either a relay set too low, or a too small dimensioned motor.

Maintenance

Refer to the service guide, as well as the supplied documentation for cleaning and maintenance intervals.

Warning!

- During cleaning, and maintenance work, the electrical supply to the delivery auger shall be disconnected and locked out.
- After repair and maintenance ensure that inspection doors and shields are mounted before start-up.

Only original parts must be used.

Use of non-original spare parts will void the warranty and the basis and responsibility for CE marking will be voided from JEMA's side.

Gear motor

Check the gear in accordance with the attached documentation.

Motor

Bearing noise from the motor; see attached supplier documentation.

Inspection of the engine; see attached supplier documentation.

The motor shall be torqued according to the maintenance schedule.
For the procedure - see the assembly instructions.

Bearings

The bearings shall be checked for wear/burring, and shall be lubricated according to the maintenance schedule.

Lubrication of the bearings

Important!

It is very important to lubricate with the correct amount of grease, since too much grease will break the bearing seal, and result in leaks, with subsequent overheating of the bearing.

Check out how many grams of grease your gun provides per push.

Endplate with bearing and drive shaft

The bearing in the endplate with bearing and drive shaft shall be checked and replaced according to the maintenance schedule.

Endplate with bearing and tap

The bearing in the endplate with bearing and tap shall be checked and replaced according to the maintenance schedule.

Support bearing with shaft

The bearings in the support bearing and shaft must be checked and replaced according to the maintenance schedule.

Strange sounds and vibrations

Immediately stop the delivery auger and identify the source.

Disposal

Disposal must be carried out in accordance with the relevant national rules.

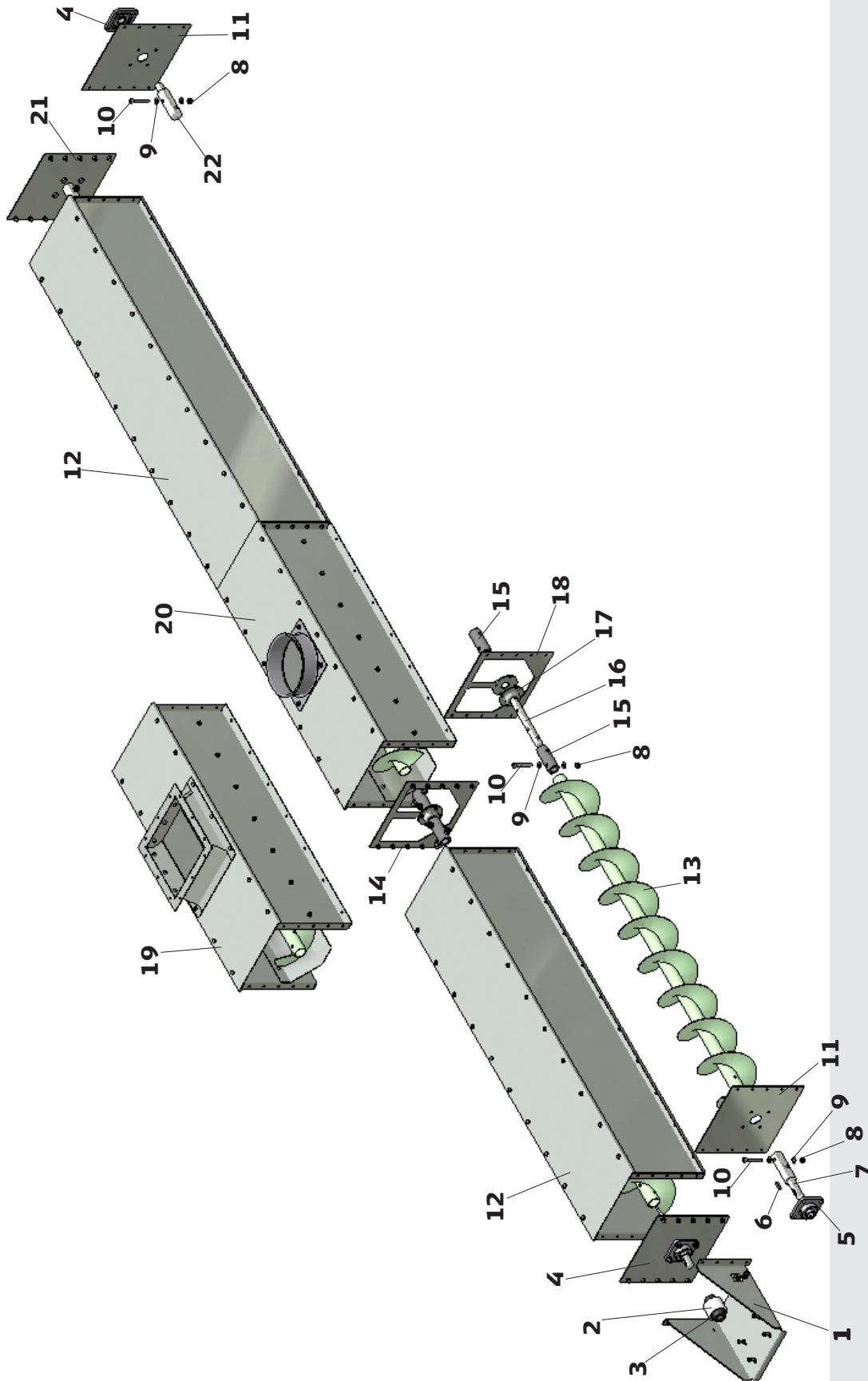
Warning!

Electrical supply to the engine must not be connected during disassembly.

If space allows, disassemble delivery auger on the floor in the reverse order that the assembly instructions describe it.

The delivery auger contains a number of materials, which can be recycled. All metal parts should be delivered to metal recycling plants.

Spare Parts T32



Parts list T32

Pos.	Text	Product No	Kg.
1	Motor base with coupling B28 Ø25/Ø25	32307	5,83
2	Plastic part F. B28 Coupling	87181	0,08
3	Steel part Syntex coupling B28 Ø25	87182	0,35
4	Endplate F. drive with bearing and drive shaft	32306	4,69
5	Bearing UCF 205, 25mm m. Flange	85133	0,79
6	Pass feeder 8x7x30mm	87079	0,01
7	Drive shaft	32011	1,35
8	Washer M10 FZB	87286	-
9	Lock Nut M10 FZB	86609	-
10	Screw, indiv. 6. kt M10 x 65 black CH 12.9	86105	-
11	Endplate	32008	2,09
12	Extension 1.0 m	32302	23,17
	Extension 1.5 m	32303	34,21
	Extension 2.0 m	32308	45,26
13	Auger 1.0 m. Ø180 Right	94168	5,50
	Auger 1,5 m. Ø180 Right	94169	10,00
	Auger 2.0 m. Ø180 Right	94170	14,00
14	Support bearing with shaft	32304	3,44
15	Bushing for shaft support bearing	32014	0,52
16	Shaft for support bearing	32013	0,82
17	Open flange for ball bearing 6205	10020	0,12
18	Flange for support bearing	32009	1,04
19	Extension 1.0 m. with inlet 240 x 240	32309	31,56
20	Extension 1.0 m. with inlet Ø200	32301	30,13
21	Endplate with bearing and tap	32305	4,45
22	Shaft for endplate	32012	1,13

When ordering spare parts please supply part number.

JEMA AGRO A/S

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