

SKALS

- we'll sort it out!

INSTRUCTION MANUAL

Unloader type AB



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1.0 Purpose and scope of operations

The machine is used as a receiver for dosing potatoes, onions and similar products.

2.0 Installation

The machine must be supported evenly on all four legs in order to maintain a smooth operation.

Connect the electricity supply in accordance with local regulations. The supply is connected through a motor protection relay, which corresponds to the size of the motor. If the machine is supplied with a relay, connect the supply to this.

2.1 Installation of accessories

Extra sides:

Extra sides are bolted on to the rim of the hopper. When fitting the extra construction shown on page 6 fig. 4, it is important to ensure that the machine is supported evenly on the two adjustable legs at the rear, in order to avoid twisting.

3.0 Operation

Check that the machine is correctly placed in relation to other machines in the sequence.

4.0 Pictograms

Danger! Keep a safe distance from the outlet when in operation.

5.0 Lubrication and maintenance

All bearings are lubricated for life and require no further maintenance.

Type NMRV75/90 worm reduction gear is lubricated for life with IP TELIUM VSF, a synthetic grease for operation in the -15°C to + 40°C temperature range.

Quantity of lubricant: NMRV750,55 L.
NMRV90 1,0 L.

Type NMRV110 and NMRV130 worm reduction gears are supplied filled with IP MELLANA OIL 220, a mineral oil for operation at temperature range 0°C to 35°C.

Quantity of lubricant:
NMRV110 2,5 L.
NMRV130 3,5 L.

	Synthetic	Mineral
IP	Telium VSF	Mellena oil 220
Shell	Tivela oil SC320	Omala oil 220
Agib	Blasia S320	Blasia 220
Mobil	Glygoyle 30	Mobilgear 220
Castrol	Alphasyn PG 320	Alpha 220

The variator is fitted between the worm drive and motor and is always supplied ready-filled with lifetime oil to at least the middle of the inspection glass.

The oil should be changed every eight years.

It is very important that there is a sufficient quantity and correct type of oil in the variator

Recommended oils:

IP	Transmission V. E.
IP	A.T.F. Dexron Fluid
AGIP	A.T.F. Dexron
BP	Autran DX
Chevron	A.T.F. Dexron
ESSO	A.T.F. Dexron
Fina	A.T.F. Dexron
Mobil	A.T.F. 220
Shell	A.T.F. Dexron
Castrol	TQ Dexron II.

Rollers are lubricated for life and require no further maintenance.

Defective rollers must be removed and returned to the factory for repair.

The conveyor should run evenly and be kept sufficiently taut by regulating the adjusting bolts of the conveyor.

5.1 Cleaning the machine

With reference to the Danish Plant Directorate's Order No. 965 of 13 December 1993 (p. 6).

- 2.3.3. Seed potato growers with contained propagation must clean and disinfect all sorting and ancillary equipment after each new variety. Disinfecting should be carried out using a product approved by The Danish Institute of Plant and Soil Science.
- 2.3.4. Companies authorised to sort potatoes and who also have the authorisation to propagate potatoes, must clean and disinfect sorting machinery etc. which is under the control of The Danish Plant Directorate before the sorting of own propagation is commenced. Disinfecting should be carried out using a product approved by The Danish Institute of Plant and Soil Science.
- 2.3.5. Premises and machinery etc. must be cleaned and disinfected each year before 30 June. Disinfecting must be carried out using a product approved by The Danish Institute of Plant and Soil Science.

In other countries, customers must conform to relevant, local food and hygiene regulations.

When cleaning under high pressure it is important to cover up the motor, variator, worm drive, rollers, motor relay and all bearings.

Careful lubrication, maintenance and cleaning is very important in order to run the machine safely and to keep maintenance costs down.

6.0 Packing and transport information

Packing/packageing: The machine is shrink wrapped.

Number of units:

The hopper is packed as one complete unit.

Weight (incl. conveyor, excl. extra sides)

AB430	235 kg.
AB630	255 kg.
AB460	410 kg.
AB660	450 kg.

Dimensions in mm: (incl. conveyor, excl. extra sides)

	Length	Width	Height
AB430	3200	1300	760
AB630	3200	1300	760
AB460	6200	1300	760
AB660	6200	1300	760

7.0 Transport and lifting instructions

Should it be necessary to lift the unloader, this must be carried out by attaching nylon straps to all four legs as shown in the illustration below (fig. 1).

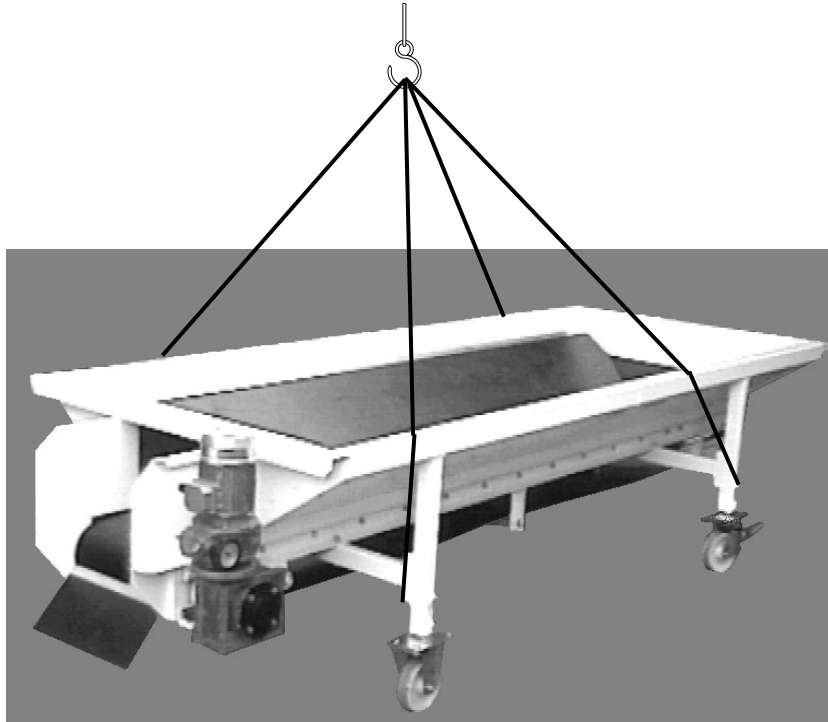


fig. 1

8.0 Accessories

The following accessories are available for the unloader:

Item no.

4 25 00 000 Ends for upper construction (all models).

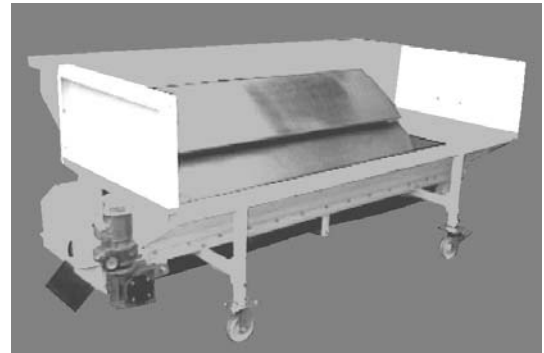


fig. 2

4 25 00 050 Side unit for upper construction 500 mm. (AB430/630)

4 25 00 250 Side unit for upper construction 500 mm. (AB460/660)

4 25 00 150 Wing unit of wood (for 500 upper construction)

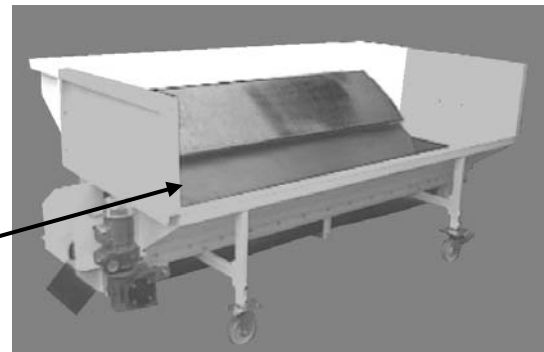


fig. 3

4 25 00 100 Extra side unit for upper construction 970 mm. (AB430/630)

4 25 00 300 Extra side unit for upper construction 970 mm. (AB460/660)

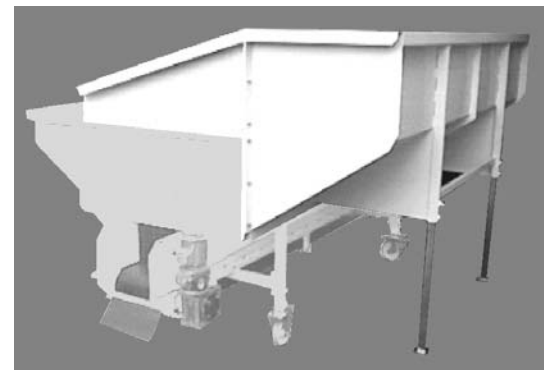


fig. 4

4 25 00 200 Conveyor protector (AB430/630)

4 25 00 300 Conveyor protector (AB460/660)

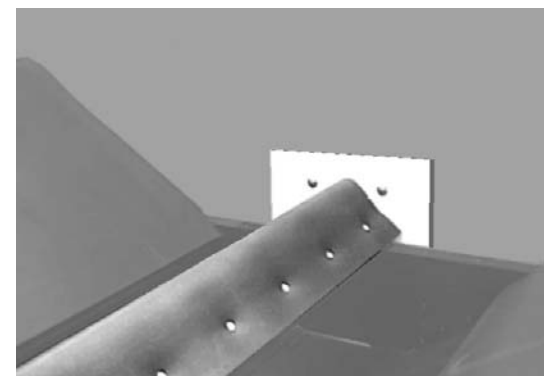


fig. 5

Fall damper for box tipper (straps at top of unloader)

4 36 20 000

FD1 1200

(AB400)

4 36 22 000

FD1 1400

(AB600)

9.0 Spare parts

When ordering spares quote the machine type, serial number and, if possible, position number.

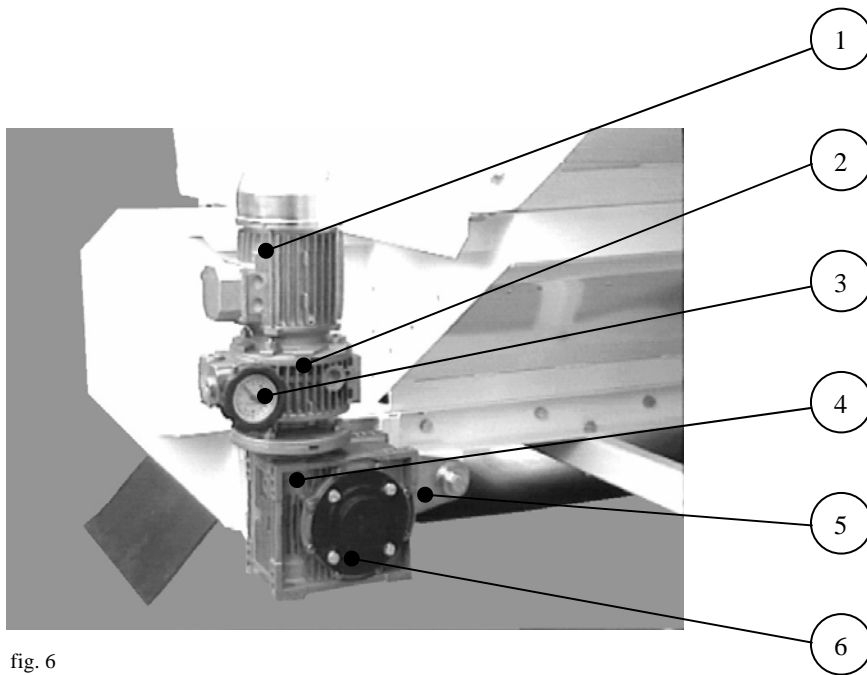


fig. 6

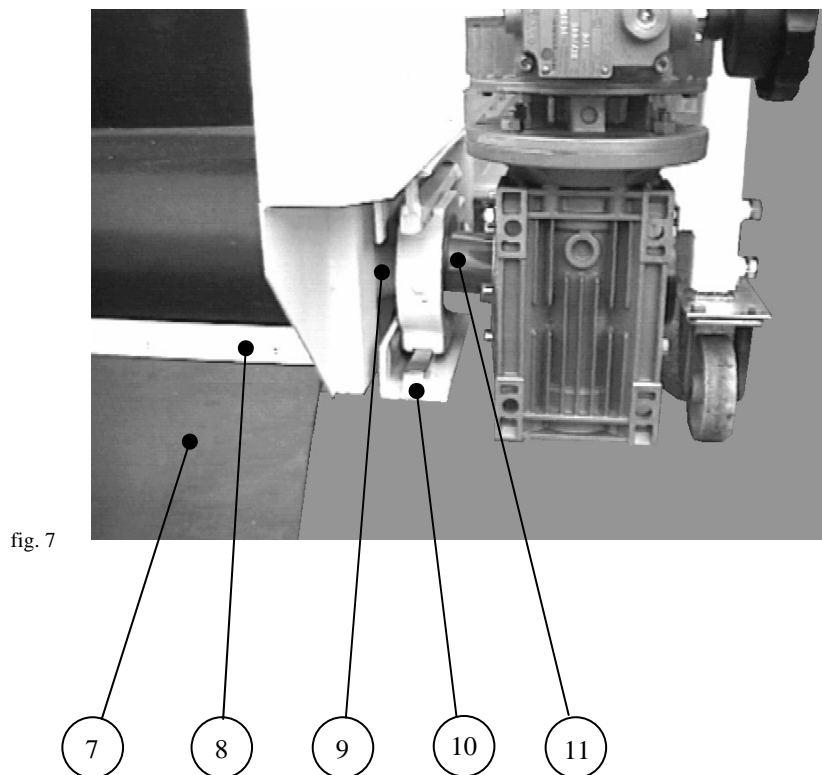


fig. 7

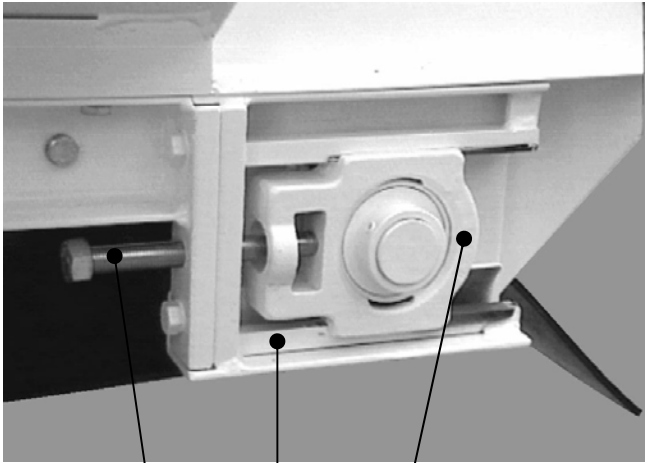


fig. 8

- 12
- 13
- 14

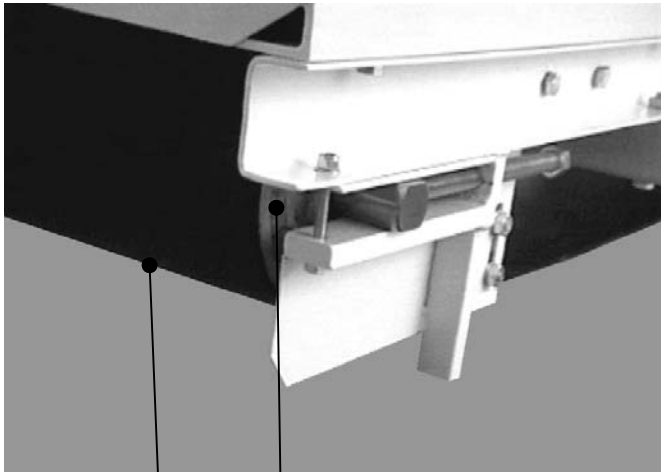


fig. 9

- 15
- 16

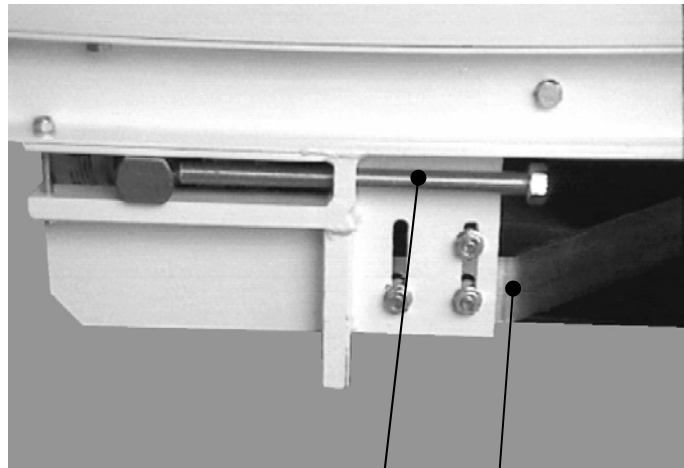


fig. 10

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- 18

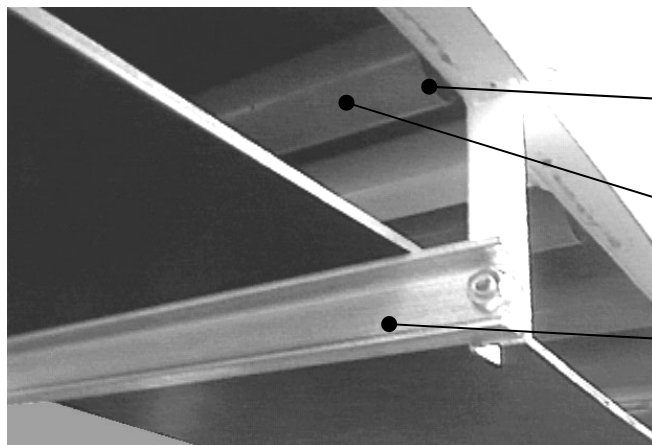


fig. 11

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- 20
- 21

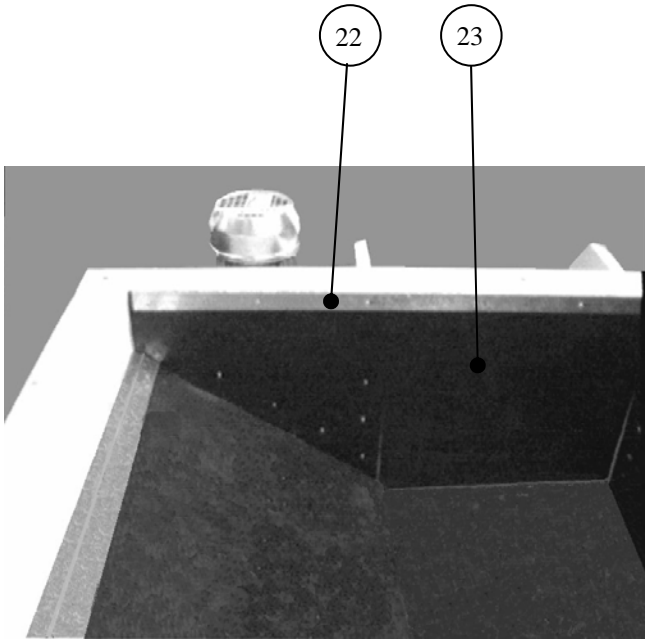


fig. 12

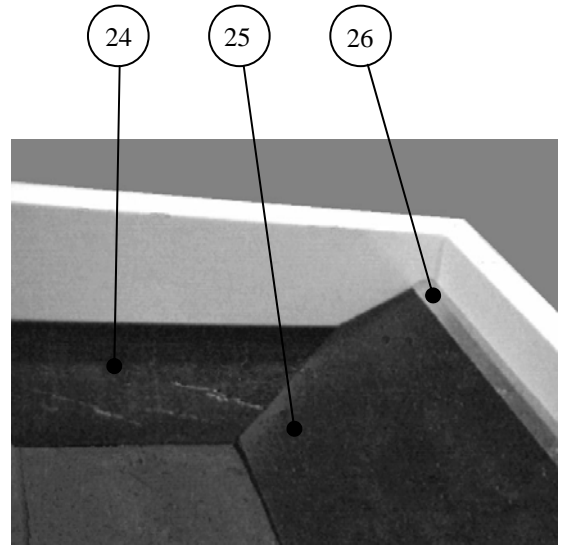


fig. 13

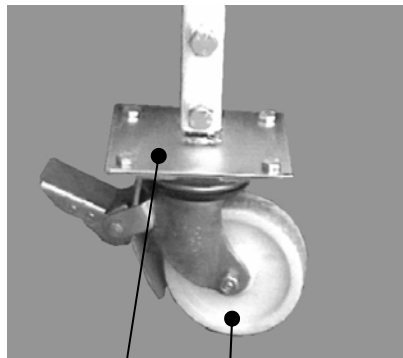


fig. 14

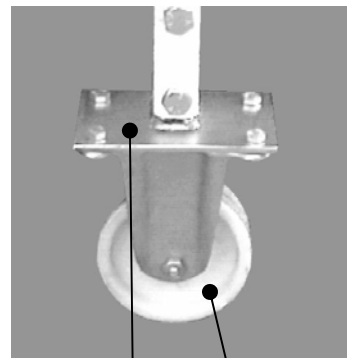


fig. 15

27 28

29 30

Page	Fig. no.	Pos. no.	Description
7	6	1	Motor
7	6	2	Variator
7	6	3	Clock/timer
7	6	4	Gear
7	6	5	Gear motor mounting
7	6	6	Cover
7	7	7	Rubber flap
7	7	8	Strip
7	7	9	Driving roller
7	7	10	Bearing guide
7	7	11	Shield
8	8	12	Conveyor tension
8	8	13	Bearing guide
8	8	14	Bearing with housing
8	9	15	Conveyor
8	9	16	Roller
8	10	17	Conveyor tension
8	10	18	Conveyor scraper
8	11	19	Transom bearing
8	11	20	Roller unit
8	11	21	Conveyor scraper
9	12	22	Strip
9	12	23	Rubber flap
9	13	24	Rubber inlet plate
9	13	25	Rubber side plate
9	13	26	Strip
9	14	27	Adjustable legs
9	14	28	Swivel wheels
9	14	29	Adjustable legs
9	14	30	Fixed wheel



10.0 Declaration of conformity with EU

Manufacturer	
Firm:	A/S Skals Maskinfabrik
Address:	Hovedgaden 56 8832 Skals, Denmark
Telephone:	87 25 62 00

declares herewith, that

Machine:	Unloader
Brand:	AB
Type, serial no., year:	

Is manufactured in accordance with the decisions of the Councils Directives:

- 1 Machinery Safety – Directive 98/37/EC
- 2 Low Voltage Equipment Directive (LVD) 2006/95/EEC
- 3 Electromagnetic Compatibility (EMC) Directive 89/336/EEC and 93/68/EEC as amended.

Title:	Productions Manager
Name:	Søren Lund Madsen
Firm:	A/S Skals Maskinfabrik

Date: _____

Signed:  _____