

Skinning Machine T3

User manual

Skinning Machine T3



1. Declaration of Accordance

Declaration of accordance with European standards

Manufacturer: Jasopels Production A/S Phone + 45 76 94 35 00
Address: Fabriksvej 19 7441 Bording

Machine: Skinning Machine T3

Type: 18-0000

Jasopels Production A/S declares that this product is in accordance with the following EU directives:

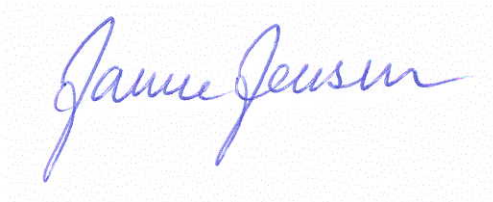
89/336 EEC
98/37 EEC

Furthermore it is declared that the following harmonised standards have been used:

EN 60204-1
EN 983

Place and date: Frederikshavn, July 1, 2005

Name: Managing Director Janne Jensen



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3. Preface

- This User's Manual is an important part of your new machine. Read this manual thoroughly and use it as a reference book.
- This manual contains important information about the safety and the use of the machine.
- The manual should be stored with the machine. It is important that the user's manual is enclosed in the resale or lending of the machine to third parties.
- The user of the machine is to ensure that operator, service personnel, and others who have access to the machine have been instructed in the correct operation and handling of the machine.
Refer to this user's manual for further information.

4. Explanation of Symbols

Please read this user's manual and follow the instructions given. In order to stress certain parts of the information the following expressions are used:



- Note!!

A triangle containing an exclamation mark is a warning symbol that warns you of important instructions or information concerning this machine.



- Danger!!

A triangle containing a lightning bolt is a warning symbol that warns you of "High Voltage".



- Warning!!

Triangle containing a warning about the risk of danger of crushing.

5. Introduction to the Machine

- The Skinning Machine T3 has been designed for the relief of the skinning personnel and take over the hard work of pulling the skins of the minks' bodies.
- The machine has been designed to give plenty of room for the cuttings around eyes and ears. The great freedom of movement makes it easy to move mink bodies and skins.
- The machine's drive is hydraulic, which has increased the pull and made it possible to stop very accurately at the eyes and ears.
- The machine can be adjusted in both height and slope, which makes it easier to achieve the perfect work posture.
- The machine is simple and easy to operate but the user's manual ought to be read before the machine is started up.

Note!!

- **The user of the machine is to ensure that operator, service personnel, and others who have access to the machine have been instructed in the correct operation and handling of the machine. Refer to this user's manual for further information.**
- **The machine may only be used for the purpose for which it has been constructed.**
- **Under no circumstances may faults in the machine or its operation - no matter what they are - corrected before the machine has been properly switched off.**



6. Start-Up

- Before starting-up the skinning machine make sure that it has been placed on a strong and stable base.
- The hydraulic station fig.1 that is part of the delivery is connected to the skinning machine by connecting the 2 hydraulic tubes from the skinning machine to the two quick couplings on the hydraulic station. Afterwards the 2 air tubes on the control valve of the hydraulic station are mounted. **Remember to check the oil level before start-up.**
- In the factory the hydraulic station has been assembled with a 5-poled 16 A CEE plug on the power supply cable and has to be connected to an external socket with 3*400V + PE.. Immediately after a new connection it has to be checked that the hydraulic station's motor runs in the right rotational direction.



If the rotational direction is wrong the pump is not able to create pressure. Disconnect the power supply and reverse two of the phases on the thermal relay in the hand-operated motor protection, and repeat the test so it is true to spirit level.

Note!!

Never let the hydraulic station run without oil or in the wrong rotational direction. This can cause damage to the pump.



1. On the skinning machine's right side a compressed air filter has been installed with a quick coupling where the compressor's tube is connected.

Note!!

Keep a safe distance from all the movable parts under the connection of pressed air because there may occur unintended cylinder movements during this process.



- Skinning machine T3 is now ready to use.



Figure 1. Hydraulic station.

7. Operation

Assuming that power and compressed air are connected correctly as described earlier the machine is started by pressing the black button on the hydraulic station's hand-operated motor-protector.

- Start by pulling the skin off the hind part of the mink. Now put the hind part of the body into the upper holder (hind part holder) figure 3, belly down.
- By activating the green button on the control panel figure 2, the upper holder closes itself around the hind part of the mink.

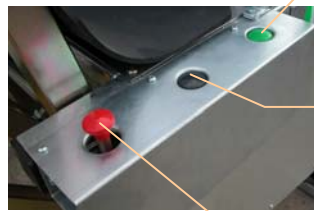


Figure 2.

- Start. When pressing on this button the hind part holder closes
- Shoulder holder. When pressing on this button the shoulder holder closes
- Stop. All holders open and return to their original position

Warning!!

Since there is a RISK of crushing when the control panel is activated, the free hand must be outside the operational area of the hind part and shoulder holders.



- The freed skin is now pulled manually so far down that the back skin can be put between the holding rubber in the lower holder (skin holder). **Note: Only the skin of the back may be placed in the skin holder, never the belly side skin.**
- 4. Close the skin holder by stepping onto the foot pedal. The hind part holder moves upwards, and the skin holder starts to pull at the skin.
- 5. Let go of the foot pedal when the skin has been pulled past the middle holder (shoulder holder), press the black button on the control panel, figure 2, and the shoulder holder will be closed.
- 6. With slight pumping movements on the foot pedal you now can release the skin with precise tugs. Cut the skin free around the eyes and ears.
- 7. When the whole body has been freed from the skin press the red button on the operating panel fig. 2, which makes all the holders open and return to their original position.



- 8. When skin and body are removed the skinning machine is ready for the next repetition.

Stop!

By pressing the red STOP button on the operating panel the machine will stop the on-going process and return to its original position.



7.1 Adjustment of the End Stop

Depending on the length of the minks it is necessary to adjust the movement of the hind part holder. This is normally done when switching between males and females.

Under point 4 of the part on operation it is described how the hind part holder moves backwards when the foot pedal is activated. The movable end stop has to be adjusted so that the hind part holder stops when the shoulders of the mink are right above the shoulder holder. Loosen the two bolts at the end stop with an M 17 key, move it behind the hind part holder and tighten the bolts again.

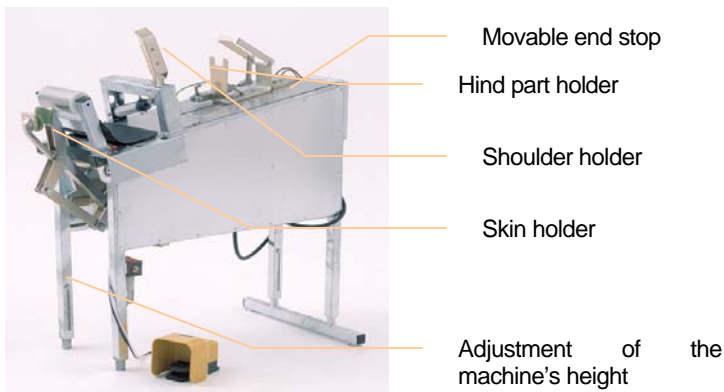


Figure 3. Skinning Machine

7.2 Adjusting the Height of the Machine

In order to achieve the optimal ergonomic work posture for the operator the skinning machine has been designed with height adjustable legs. The height can be adjusted through the 4 bolts shown in figure 3., and can be adjusted to between 98 and 117 cm measured at the supporting roller.

8. Maintenance

DANGER!

Switch off the compressed air and the power supply before starting on any maintenance, cleaning or other service on the machine.



- Check the oil level in the hydraulics container every day before start. The container has to be about $\frac{3}{4}$ filled. Check of the oil level and refilling of oil is done by removing the red stopper on top of the hydraulics container figure 1. Refill with Statoil Hydraway HM 32 oil or a similar hydraulics oil.
- Empty the water emitter of the filter for the compressed air for water daily by pressing the button under the glass until the glass is empty. The water emitter can empty itself if the pressure tube on the quick coupling is removed. If there are oil residues or other impurities in the filter the glass should be removed and cleaned with warm soapy water.
- The skinning machine should be cleaned every day with compressed air and maybe hot water, where there is a lot of blood. Especially the movable parts at the skin holder figure 3 have to be kept free from sawdust and dirt. It is likewise important in order to avoid unintended interruptions to keep the space under the movable hind part holder clean. This can be done with hot water and a thin filling knife.
- The oil in the hydraulics container ought to be changed once a year.
- After the skinning is over the machine should be cleaned, and the compressed air and power connections disconnected.

9. Technical Data

Skinning Machine:

- Air connection Quick coupling
- Air consumption Max 8 bar, 2 l/min
- Measurements

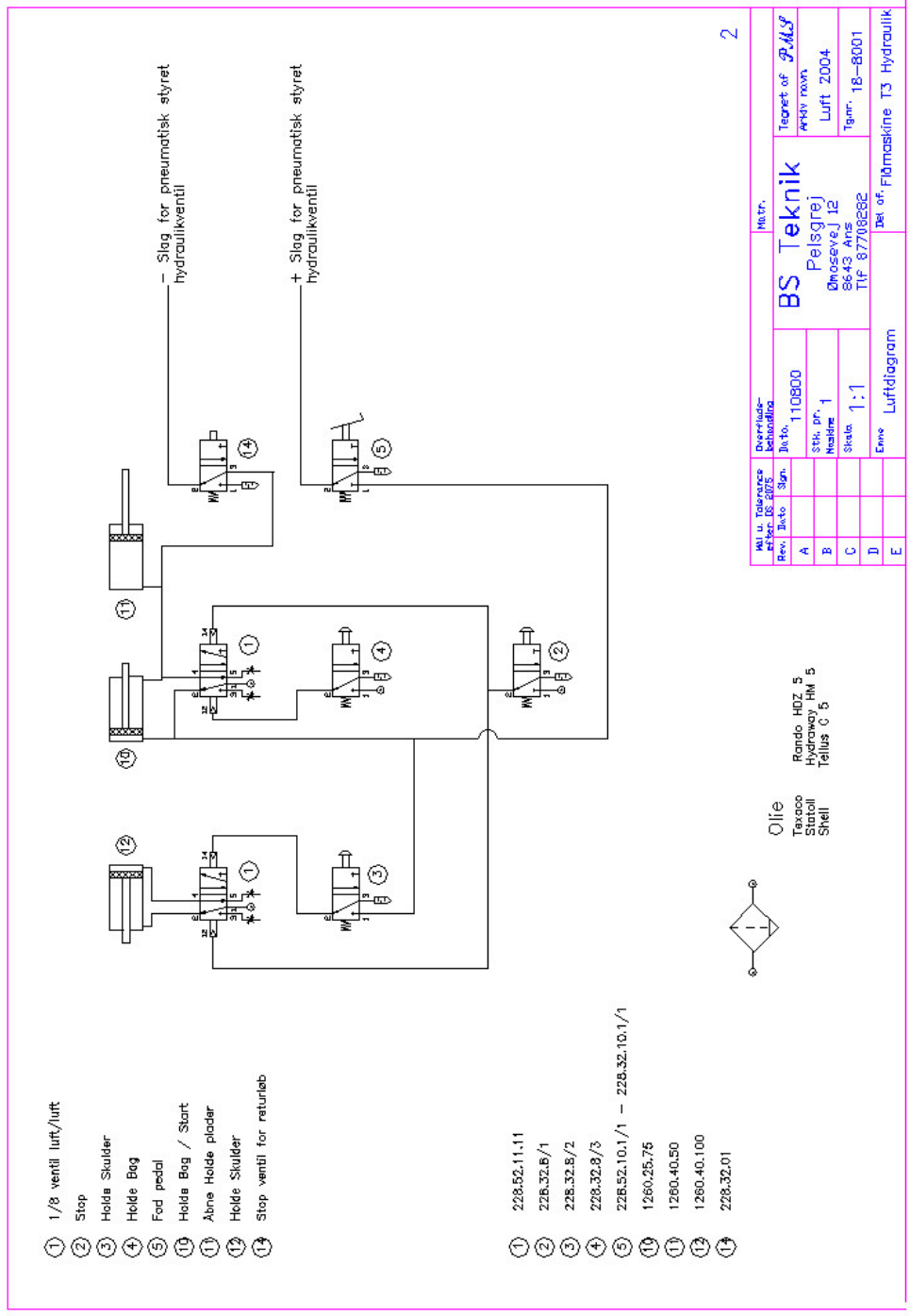
Height	115 cm
Length	135 cm
Width	65 cm

Hydraulic station:

- Power connection 5 poled CEE plug 3 x 400 V + PE
- Power consumption 3.7 A
- Oil container 25 l
- Oil flow 4 l/min
- Oil pressure 85 bar
- Measurements

Height	49 cm
Length	56 cm
Width	27 cm

10. Air diagram



11. List of Spare Parts

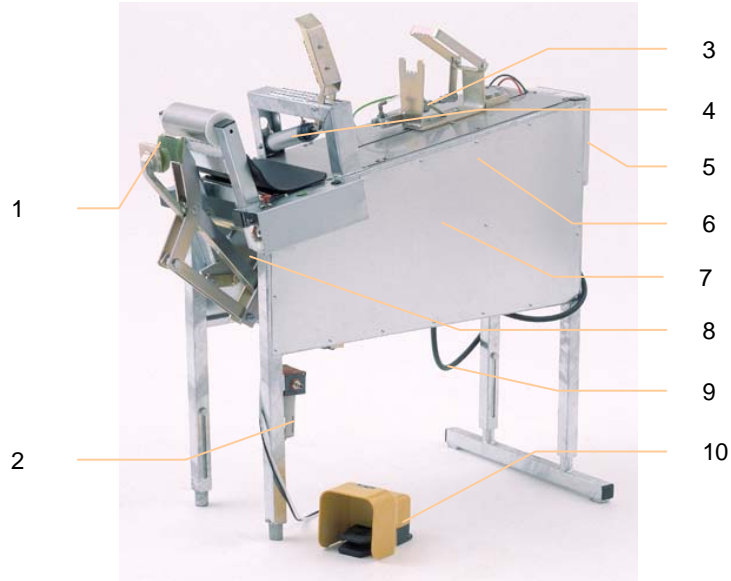


Figure 4. Skinning Machine

Fig. No.	Item no.	Spare part no.	Name
4.1	5140-00172018		Gripper rubber / pin plate 13x62x96
4.2	5914-32001630	3580002 3/8 200	3 / 8 200 Compressed air filter
4.3	5912-31025075	1260,25,75	Cylinder
4.4	5912-31040050	1260,40,50	Cylinder
4.5	5911-5228521111	228,52,11,11	Valve
4.5		GW 44 207 190*140*70	Mounting box
4.6	5911-522832001	228,32,0,1	Stop valve
4.7	5140-00185300	SNH21-AD-40/25x300-G	Hydraulic cylinder
4.8	5912-31040100	1260,40,100	Cylinder
4.9	5140-00000004		Hydraulics tube Male
4.9	5140-00000004		Hydraulics tube Female
4.10	5911-5228521011	228.52.10.1/1 foot	Foot pedal



Figure 5. Hydraulic station

Fig. No.	Item no.	Spare part no.	Name
5.1	5140-00010106	QRP-06-FBF	Europower quick coupling Male
5.2	5925-24021300	MU25A-055	B&J motor protector box IP55
5.2	5925-24021050	MU25A-4,0	B&J motor protector Man. 2,5-4A
5.3	5140-00185224		Pneumatically controlled Cetop Valve
5.4	5140-00010206	QRC-06-FBF	Europower quick coupling Female
5.5		MAA-00069	Overflow valve 50-210 Bar
5.6		Pump 5,8 cc = 8 L/min.	Hydraulic pump
5.7		1,5 Kw 400V/50 Hz -	Motor 3 Phases (submerged)
5.8		MP-25-90L4-0-58-SR	Hydraulic pump stations
5.9	5140-00188032		Hydraulic oil Spinway HM 32

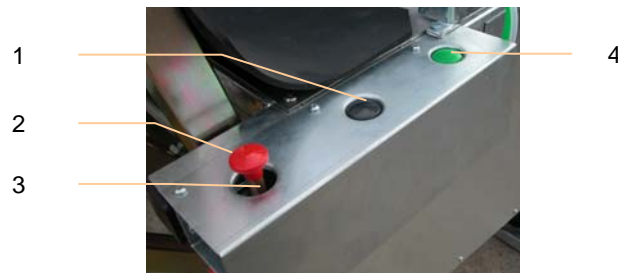


Figure 6. Operating panel

Fig. No.	Item no.	Spare part no.	Name
6.1	5911-5228320812	228,32,8,1/2 Black	Valve Black Pressure
6.2	5911-5228320811	228,32,8,1/1 Red	Valve Red Pressure
6.3	5911-5228320821		Button extension
6.4	5911-5228320813	228,32,8,1/3 Green	Valve Green Pressure
6.5	5911-5228327300	Collar for pushbutton valve	
6.6	5911-5228327400	Coupling nut for pushbutton valve	

12. Trouble Shooting

This part describes how some general problems can be solved by the user. This is not as description of how the machine can be repaired but more an orientation about how to fix some minor problems. It is advisable to contact BS Teknik's Service Department in connection with problems that cannot be solved immediately or maybe agree on a service visit.

DANGER!

Switch off the compressed air and the power supply before starting on any maintenance, cleaning or other service on the machine.

12.1 The hydraulic pump runs but the skinning machine does not work.

If the two air tubes on the control valve of the hydraulic station Figure 1 are interchanged the skin holder will not move when the foot pedals activated. The air tubes are removed by pressing the collar of the air fitting closest to the air tube while slightly tugging at the tube. When the tubes are interchanged they are fastened again by pressing them back into the air fitting.

If the rotational direction of the electric motor is wrong the hydraulic pump is unable to create pressure. Disconnect the power supply, reverse two of the phases on the thermal relay and repeat the test.

12.2 The hydraulic pump does not shut off.

When the skin holder returns to its original position, a stop bolt has to activate a valve that is placed under the hind part holder. If this valve is not activated when the skin holder is in place again the hydraulic pump will go on pumping. While **electricity and air are disconnected** adjust the stop bolt so that it hits the valve when the skin holder is without pressure and returns to its original position.

12.3 The skins slide out of the skin holder.

If the skin holder and the hind part holder are not closed and move as described in part 7.4, this can be due to the fact that the connecting arms in the scissors-shaped skin holder cannot move freely. This can be due to the fact that dirt has come in between the movable parts, or that the bolts over time have become too tight. It can also be due to that fact that dried blood etc. under the slider to the hind part holder or the two bolts are tightened so much that the hind part holder cannot move freely. As described in part 8 it is important to keep the machine clean in order to avoid breakdowns.

12.4 The skin holder moves on its own accord.

If the foot pedal is not continuously kept clean of sawdust, there is a risk that over time the valve is packed in so much dust that it gets blocked. This can lead to the skin holder moving downwards immediately after the green button has been activated. Clean the foot pedal thoroughly with compressed air before the machine's functions are tested.

12.5 The machine does not work at all.

If none of the machine's functions work this can be due to the fact that the stop button has been stuck in a pressed down position. Often this problem can be solved by lubricating the valve shaft with some light-fluid lubrication oil, e.g. WD 40, and afterwards move the stop valve a couple of times.