

# *POMI*

English

## *Kombi-Pack*

### *Instructions Manual 1999/2000*



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Updated 13.06.2000

## 1. Pomi Kombi-Pack Wrapper

Congratulation – You have chosen a sausage-wrapping machine, only to be used for wrapping silage and straw. If required used for any other product you will need the manufacturer's written authorization.

The bales are set onto the machine the bar pushes the bales into the wrapping unit. Foil is wrapped around the bales making a long sausage.



## 2. Precaution

FOR YOUR SAFETY!

Always make sure that the motor is stopped and the emergency button is activated before effectuating any work on the machine.

Unauthorized persons are not allowed within a distance of 10 m from the machine when in operation, partly due to the sudden movements of the machine and partly due to the fact that oil may suddenly spray from a damaged hose. At the same time there is a risk that the first bales coming out of the machine might tip over.

The yellow shackles must be down during operation.

Make sure that nobody is present that might get under the rear flap when being lowered.

One might be squeezed at the bar. Warning signs are fitted onto the bar.

The tower must be lowered when being on the road, if a hydraulic lift is fitted.

Keep the machine clean, especially around the motor to avoid fire risks. Spillage of oil in the motor compartment must be cleaned before the motor is restarted.

The pull is checked for damage. The cotter bolt is locked with split-pin.

Light must function according to the Road Traffic Act.

Make sure that the remote control is positioned at a safe place so that you do not by accident push one of the buttons. E.g., if the remote control is in a pocket when changing the foil roller then leaning against the machine, you might push one of the buttons, starting the machine.

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**Tel. 0045 98552000**

|          |                        |                        |
|----------|------------------------|------------------------|
| Machine: | <u>Wrapper machine</u> |                        |
|          | Make                   | Type, series no., year |

- a) is manufactured in accordance with decisions made in the Council's Directive of 14<sup>th</sup> June 1989 about mutual approach of the member states' legislation as regards machines (89/392/EØF) changed on 20<sup>th</sup> June 91 (91/368/EØF) (93/44/EØF) and (93/68/EØF), under special reference to exhibit I of the directive of severe safety and health requirements in connection with design and manufacturing of machines.

b) is manufactured in accordance with the following harmonized standards (Directive article 5, paragraph 2).

c) is manufactured in accordance with other standards and/or technical specifications.

Poul Mikkelsen  
Manager  
POMI ApS

#### 4. Identification of the machine

When ordering spare parts, make sure to give the serial number of the machine. This is written on the left side of the machine, as shown on the picture below. The motor's number is written on its left side.



Serial number: \_\_\_\_\_

Motor number: \_\_\_\_\_

#### 5. Some advise before starting wrapping silage

Plan the mowing time so that it is possible to have a total solids percentage of app. 50%.

Make sure the bales are made accurately, firm in both bottom and top.

Move the bales as little as possible in order to keep the shape.

#### 6. Before start

Tank fuel.

Check that the hydraulic oil is at the middle of the glass on the tank.

Go through the manual for the motor before starting and heating of the motor.  
Revolutions are set at max. 2800.

## 7. Rearrangement from transport to wrapping

A tractor drives the machine in correct position so that the machine stands where the stack must be.

Unhitch the tractor and remove the light wire.

Check the distance between sensors (see section 11) and adjust the support beneath the bales (see section 12).

Put down the guarding shackles.

Press the emergency stop push-button.

Start the motor according to the manual.

Switch the emergency stop out of lock position.

Lift the rear flap (see hydraulic section 14.3). The tractor pull is removed and the rear flap is lowered. Make sure that nobody stands behind the rear flap when lowering.

Lubricate the plastic plate with silicone.

Lift the machine on the supports so that the first bales are not sliding out of the machine.

The machine is ready.

## 8. Wrapping

### ➤ **Wrapping of silage**

Place end plastic on the bale it is easy done when the bale hangs on the front loader, then place the bale in the machine.

When 5 bales are on the ground behind the machine the machine is braked to push the bales together (the hand brakes are at the front wheels).

### ➤ **Wrapping of straw, big-bales with ammoniac**

First position a bale in the machine, and then 2 bales are positioned on top of each other with end plastic.

### ➤ **Wrapping of mini-big-bales with ammoniac**

First one bale is positioned in the machines then 2 bales, and then 3 bales with end plastic are positioned.

### ➤ **Wrapping of straw for storage**

As described above, however it can be done without the end plastic.

It is important that the bales are positioned between the two yellow plates on the bar in order

to be guided in position.



When the bales required wrapped are at the wrapper section, then start wrapping 10 laps around the bale to fix the plastic. More bales are fed into the machine, please check that the required layer of plastic is wrapped around the bale. Then the machine can be switched into automatic mode. Change of foil rollers (see section 13).

## 9. Closing

When the last bale is positioned on the machine the machine runs till it reaches the foil. Then the bar is moved back and the bale is lifted with the front loader so that the end plastic can be pulled beneath it. The bale is lowered and tractor and front loader is removed. The plastic is wrapped around the bale and fixed with tape. The first push out pole and bracket is fixed (see illustration below) and the wrapping is finished. Tear off the foil when going up the stack and push the last bales out. When the first push out pole cannot reach anymore the second pole is fixed.

**Remember!** If you have a hydraulic lift the tower must be lowered before road transport.



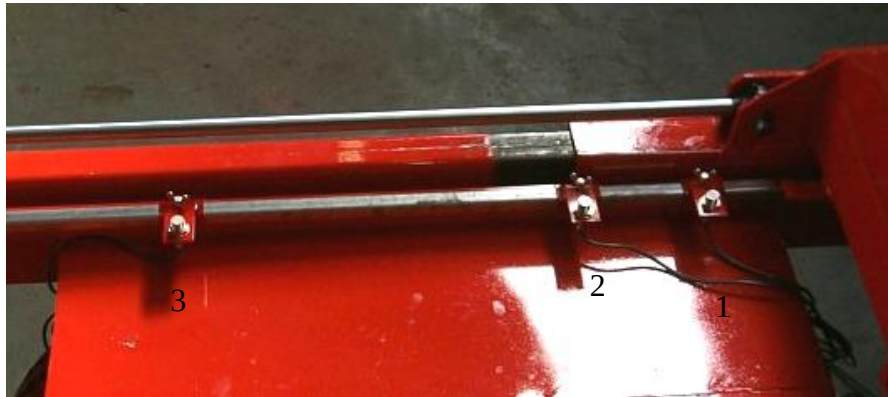
## 10. Change from silage over to straw wrapping.

Detach the chain and make it longer with the extension piece delivered together with the machine. Take the silage equipment off. Put the chains on the rails of the tower and tighten them.



### 11. Adjusting of the sensors

The sensors for the bar must be adjusted so that the distance between sensor 2 and 3 is equal to the width of the bale. The distance between sensor 2 and 1 must be set so that space for entering the bale in position is sufficient.



### 12. Adjustment of the support under the bales.

The support under the bales must be adjusted in that way that the support plate is placed 2-4 cm above the rolls.



### 13. Change of foil roller

Make sure that the foil roller holder is positioned so that you can reach it.

Push the emergency stop.

Change the foil roller

Switch off the emergency stop



## 14. Function of the machine.

### 14.1. Electrical box



#### **Emergency stop.**

A simple pressure on this contact stops all functions in the electrical box. To start again, turn it out of its lock position and activate the needed function.

#### **Ready**

A release from the emergency stop and the lamplights up showing that everything is ready.

#### **Start**

This contact starts the wrapping program. Another pressure on the contact to stop the program.

#### **Forward**

A pressure on this contact and the pushing bar moves forward.

#### **Backward**

A pressure on this contact and the pushing bar moves backward.

#### **Film**

A pressure on this contact and the film wrapping starts.

#### **Auto**

A pressure on this contact, the lamp lights up and the machine starts the wrapping as soon as a bale is put on the table. Another pressure and it stops.

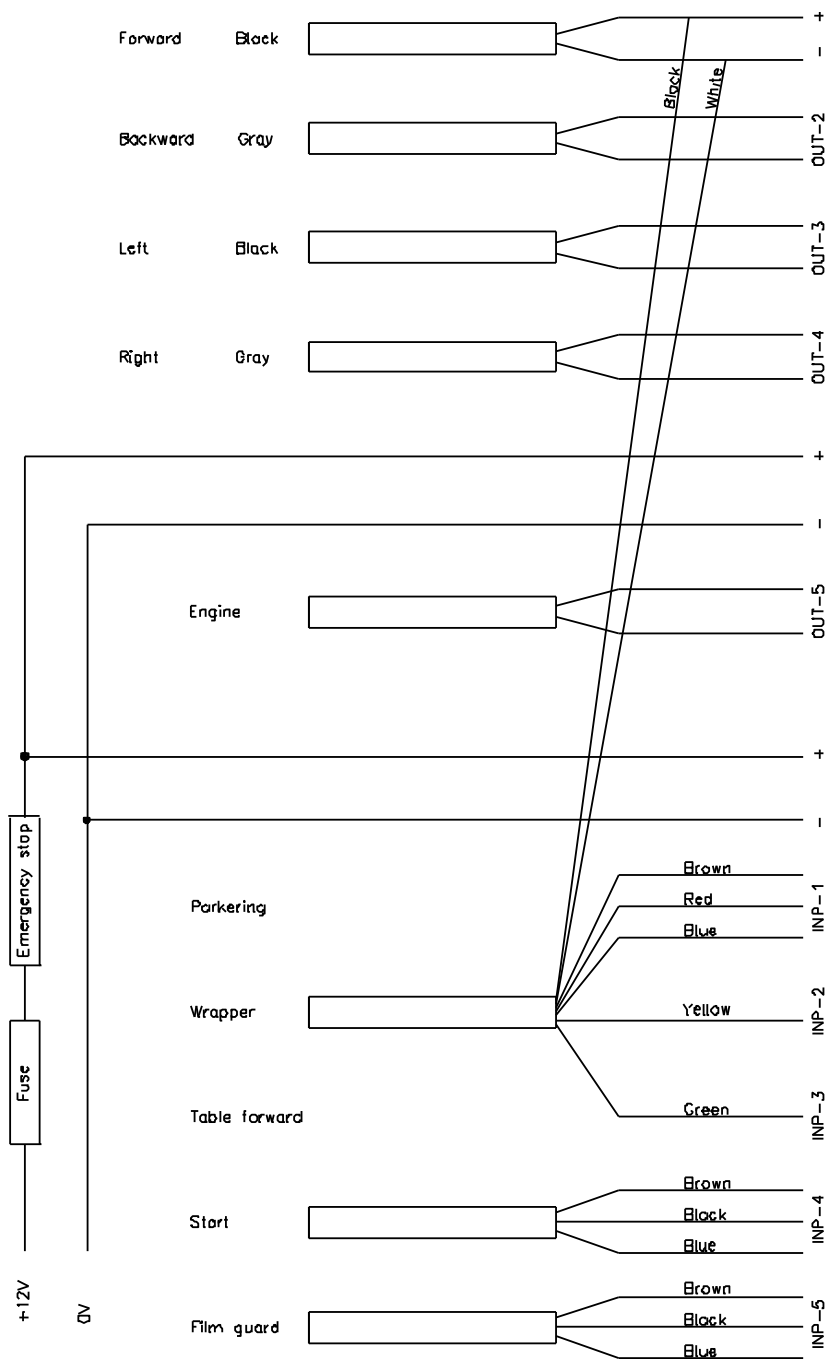
#### **Left**

The machine turns to the left.

#### **Right**

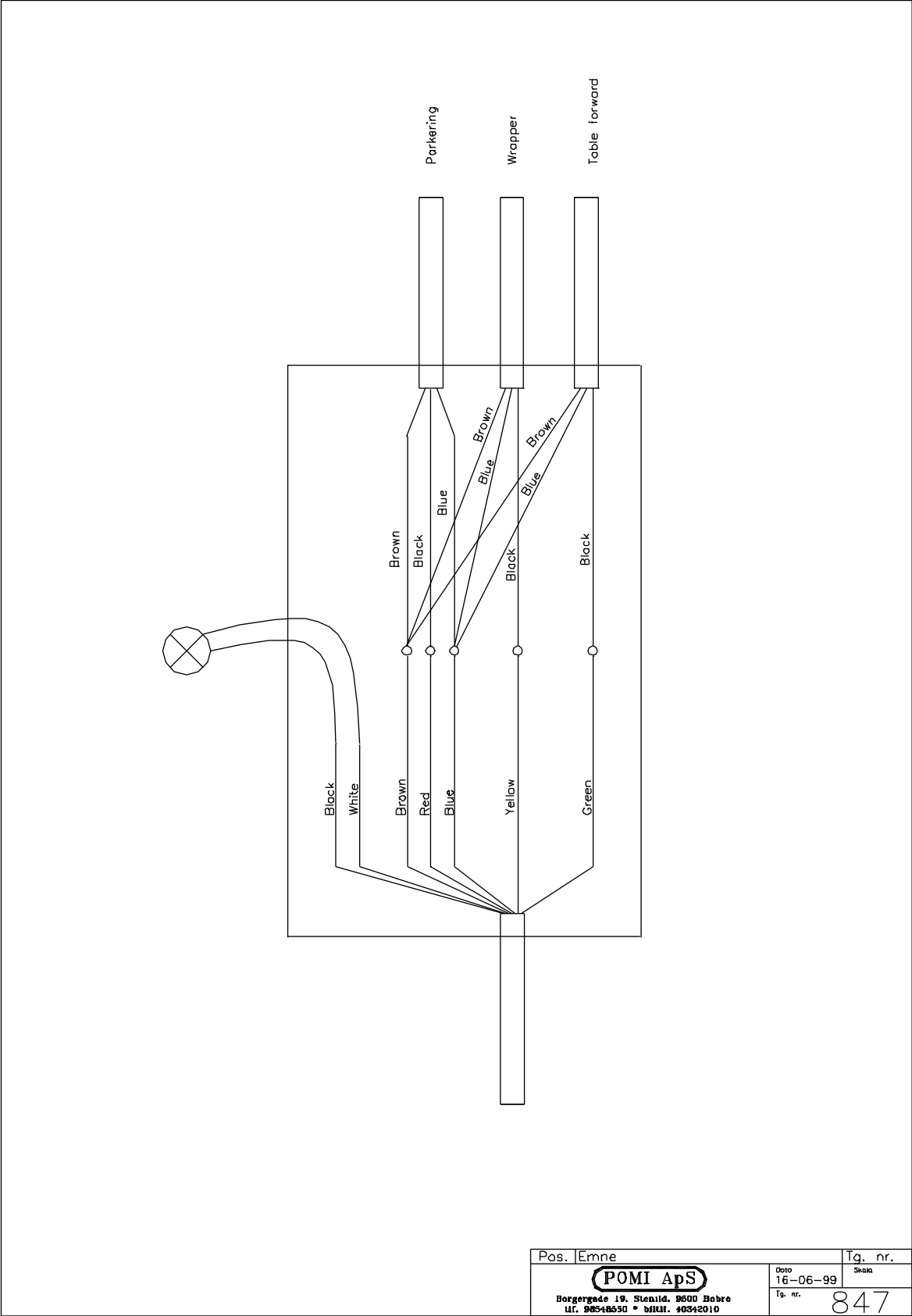
The machine turns to the right.

#### 14.1.1. El-diagram – Box



|                                                                    |                  |      |
|--------------------------------------------------------------------|------------------|------|
| Pos. Emns                                                          | Tq. nr.          |      |
| <b>POMI ApS</b>                                                    | Data<br>09-06-99 | Shab |
| Bozorgade 18, Stenlid 0600 Malmö<br>Tlf. 90648060 • BILUL 40328010 | Tq. nr.          | 845  |

14.1.2. Electric diagram – Junction box



#### 14.2. Remote Control



**Red** is the same as **start**

**Grey** is the same as **film**

**Green** is the same as **left**

**Yellow** is the same as **right**

#### 14.3. Hydraulic system



Before the machine, there is a flow regulator, one ball valve and 2 or 3 hydraulic handles. The flow regulator is to adjust the speed of the pushing bar, which means at the same time to adjust the plastic quantity needed. Open the ball valve to empty the machine, and the pushing bar is then thrown forwards at a high speed. The first hydraulic handle is to pull the rear door down, which has a lock system, and to give it then a floating position when down. The second hydraulic handle is to get the legs down. The third hydraulic handle is to adjust the high of the frame (Hydraulic lift, see section 14.2).

The hydraulic oil used is Hydro Texaco HD Z LT 46 DIN HLP 46.

Hydraulic pressure: pushing bar 210 bar  
Wrapper 150 bar

#### 14.4. Film guard



A film guard is placed under the support plate; it is consisting of a bar, which is touching the wrapped film at the place where there is only one lay. If the film brakes, the bar will fall down, activating a contact, which stops the machine. The machine re-starts with one pressure on the remote control, keeping the finger on the button until the film guard is in contact with the film.

## 15. Maintenance.

Clean the motor compartment daily or when needed to avoid fire.

Bearings are lubricated with grease daily.

Bar and chains are lubricated with chain oil.

When changing chains, please only use original chains.

After day one the wheels are tightened after that 2 times a year.

Revolutions = 100 Nm

### 15.1. Checkpoints before season start

- ☐ The machine is stopped and the emergency stop is activated.
- ☐ Oil change
- ☐ Change of oil filter
- ☐ Change of fuel filter
- ☐ Change of air filter
- ☐ Change of hydraulic filter
- ☐ Check the hydraulic oil level
- ☐ Pre-stretchers
- ☐ Wrapper chains are tightened
- ☐ Check the distance between the chain rails  
(Machine W = 1177 mm / Round bale unit W = 928 mm).
- ☐ Pull chains for wrapper is tightened
- ☐ Wheels are tightened. Revolutions = 100 Nm
- ☐ Pull is checked for damage

The machine is started.

- ☐ The foil watch is tied.
- ☐ Electric box and remote control are checked on all channels.

## 16. Equipment in option

### 16.1. Round bales equipment

Before mounting the equipment for round bales, dismount the steering brackets from the top of the unit as well as spear and support plate. The stretching roller must be correctly placed (see below picture).



With the help of the front loader, raise the unit above the rear-door and put it down on place, screwing it fast. Move the hoses from the machines' oil motor to the round bales' equipment. Mount the spear, the support plate and the steering brackets on again.



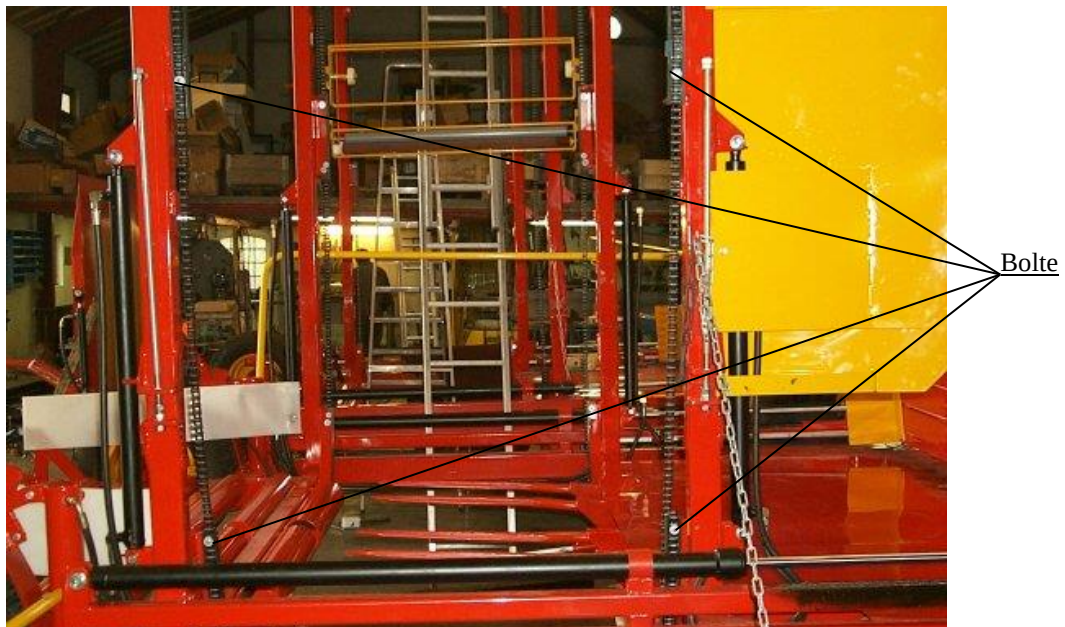
## 16.2. Hydraulic raising of the frame

When the frame is up, adjust the bolt of the threaded bar in that way that the chains are tightened just at the moment where the pistons are pressed at the top.



8 bolts are necessary to fix the chains when sinking the frame. Get the stretching rollers into the position shown on the below picture. Fix the 4 bolts at the bottom. Pull the frame down and fix the 4 bolts at the top.

The frame **must** be pulled down during the transport.





### 16.3. Silage box



This box is needed when superposing 2 bales in silage wrapping. The idea is to get the film around the bales to create a barrier avoiding the air to penetrate the stack.

### 16.4. Equipment for silage

The equipment for silage is composed of 2 bars as shown on the picture. They can be mounted at two different highs on the frame.



The 2 chains must be of equal length and symmetrical with respect to the location of the carrier brackets.

#### 16.5. Rack for bottom foil



Consist of 2 holders placed on the pushing bar giving space to a roll of film in between. The film is carried under the pushing bar, over the support plate, the rolls and the rear-door.

#### 16.6. Basket for rolls of film



The basket can take approx. 15 rolls and 1 roll of end plastic  
Inner measure: 1000 x 1100 mm - High = 620 mm

To be placed on the machine with the help of a front loader. The two angle supports are to be hooked over the pushing bar.

## 17. Problems

| Problems                                            | Solution                                                                                                                                                                                                                                                                                                                                                                                                             |
|-----------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Machine</b>                                      |                                                                                                                                                                                                                                                                                                                                                                                                                      |
| The motor does not pull out                         | <ul style="list-style-type: none"> <li>– Remove the fuel filter</li> <li>– Remove the air filter</li> </ul>                                                                                                                                                                                                                                                                                                          |
| The pushing bar doesn't push the bales              | <ul style="list-style-type: none"> <li>– Check the hydraulics (210 bar)</li> </ul>                                                                                                                                                                                                                                                                                                                                   |
| The driving chain brakes                            | <ul style="list-style-type: none"> <li>– Make sure that the safety rails have the correct distance.<br/>Machine W=1177 mm<br/>Round bale unit W=928 mm</li> <li>– Mind the chain travel at the bottom</li> </ul>                                                                                                                                                                                                     |
| The wrapper stops                                   | <ul style="list-style-type: none"> <li>– The bales are too big</li> <li>– Check the oil pressure (150 bar)</li> <li>– The chains are not lubricated</li> <li>– The chains are too tight</li> <li>– The chains are out of their rails</li> </ul>                                                                                                                                                                      |
| <b>Straw</b>                                        |                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Holes in the plastic, at the bottom                 | <ul style="list-style-type: none"> <li>– Not enough silicone on the plastic surface</li> <li>– The spear supporting the bales under the wrapping are too low (see instructions)</li> </ul>                                                                                                                                                                                                                           |
| Humidity at the bottom of the stack                 | <ul style="list-style-type: none"> <li>– Use more bottom plastic</li> </ul>                                                                                                                                                                                                                                                                                                                                          |
| Humidity on the top of the bales                    | <ul style="list-style-type: none"> <li>– The straw must be dry and mature before pressing and wrapping</li> <li>– Making holes in the sides could help</li> <li>– The sooner the straw is used, the less problems. We recommend that the straw is used before mid April.</li> </ul>                                                                                                                                  |
| <b>Ensilage</b>                                     |                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Moistness between and on the bales                  | <ul style="list-style-type: none"> <li>– The bales are not pushed against each others; brake the machine</li> <li>– Use more plastic around the bales</li> <li>– Too small consumption of the stack</li> <li>– Cut the grass at the right time</li> <li>– Press the bales to make them firm</li> <li>– If the bales are not pressed hard enough, throw some earth on the stack to press the air out of it</li> </ul> |
| The bales are moist before the opening of the stack | <ul style="list-style-type: none"> <li>– Use more plastic around the bales</li> <li>– Close the ends with some scotch</li> <li>– Cut the grass at the right time</li> <li>– Sift some sand along the stack to avoid mouths and other vermin to dig under</li> </ul>                                                                                                                                                  |

| Problems                                                            | Solution                                                                                                                                                                                                                                                                          |
|---------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>2 superposed silage bales</b>                                    |                                                                                                                                                                                                                                                                                   |
| Moistness at the end of the stack                                   | – Make an end cap with some plastic and scotch it.                                                                                                                                                                                                                                |
| Moistness on the bales when picking up the first bales of the stack | <ul style="list-style-type: none"> <li>– It is possible to put some end pieces between the bales when wrapping</li> <li>– It is possible to choose to put only one bale instead of two</li> <li>– Use the silage box to avoid the air to penetrate the stack sideways.</li> </ul> |