

**Betriebsanleitung  
Rundballenpresse**

**Instruction Manual  
Round Balers**

**Notice de Fonctionnement  
Presses à balles rondes**

**DEUTZ  
FAHR**

**RB 3.20/OC  
RB 3.50/OC**



## D

Lesen und beachten Sie die Informationen in dieser Betriebsanleitung. Sie vermeiden Unfälle, erhalten sich die Garantie des Herstellers und verfügen immer über eine funktions-tüchtige und einsatzbereite Maschine.

Die Maschine ist ausschließlich für den üblichen Einsatz bei landwirtschaftlichen Arbeiten gebaut (bestimmungsgemäßer Gebrauch). Jeder darüber hinausgehende Gebrauch gilt als nicht bestimmungsgemäß. Für hieraus resultierende Schäden haftet der Hersteller nicht.

Das Risiko hierfür trägt allein der Benutzer.

Zur bestimmungsgemäßen Verwendung gehört auch die Einhaltung der vom Hersteller vorgeschriebenen Betriebs-Wartungs- und Instandhaltungsbedingungen. Die Maschine darf nur von Personen genutzt, gewartet und instandgesetzt werden, die hiermit vertraut und über die Gefahren unter-richtet sind.

Die einschlägigen Unfallverhütungsvorschriften sowie die sonstigen allgemeinen anerkannten sicherheitstechnischen, arbeitsmedizinischen, straßenverkehrsrechtlichen Regeln sind einzuhalten.

Eigenmächtige Veränderungen an der Maschine schließen eine Haftung des Herstellers für daraus resultierende Schäden aus.

DEUTZ-FAHR-Konstrukteure haben Ihre Maschine zu einem leistungsstarken und sicheren Gerät gemacht. Jetzt liegt es an Ihnen, mit der Maschine sicher zu arbeiten, ihre Leistung zu erhalten und somit für einen störungsfreien Betrieb zu sorgen.

DEUTZ-FAHR gibt Ihnen hier die dazu nötigen Hinweise.

## GB

Please read thoroughly and comply with the information provided in this instruction book. By doing this you will avoid accidents, preserve the manufacturer's warranty and always enjoy the advantages of an efficient and reliable machine.

The machine is designed solely for normal agricultural use (operated in accordance with specifications). Use of the machine for any other purpose is considered as operation which is not in accordance with specifications and is under-taken as such at the owner's risk.

Observation of the operating and maintenance instructions specified by the manufacturer shall also be taken to be a part of operation in accordance with specifications. The machine may only be operated, serviced and repaired by personnel who are familiar with these functions and who have been instructed of the inherent dangers.

All relevant accident, safety, health and highway regulations must be complied with.

Never carry out any changes yourself; otherwise no warranty will be assumed for resultant damage.

During the design of DEUTZ-FAHR machines special emphasis has been placed on safety and efficiency. It is now up to you to operate your machine safely, to maintain its efficiency and performance and thus ensure smooth operation.

For this purpose, DEUTZ-FAHR provides you here with the necessary instructions.

## F

Lisez attentivement et respectez les instructions du présent Manuel. Vous éviterez des accidents, conserverez le bénéfice de la garantie et disposerez toujours d'une machine fonctionnelle et en parfait état de marche.

La machine a été conçue pour une utilisation agricole usuelle, à l'exclusion de toute autre (utilisation conforme à l'affectation).

Toute utilisation autre que celle définie ci-avant sera considérée comme non-conforme à l'affectation et dégagera le constructeur de toute responsabilité en cas de préjudice; l'utilisateur supportera seul les risques résultant d'une telle utilisation.

L'utilisation conforme à l'affectation suppose l'observation des règles d'utilisation, d'entretien et de remise en état stipulées par le constructeur.

L'utilisation, l'entretien et la remise en état de la machine ne devront être confiés qu'à des personnels familiarisés et informés des dangers potentiels.

Il convient de respecter en outre les consignes particulières de prévention des accidents, ainsi que les règles générales en matière de sécurité technique, de médecine du travail et de législation routière.

Le constructeur décline toute responsabilité en cas de préjudice résultant d'une modification apportée à la machine sans son agrément.

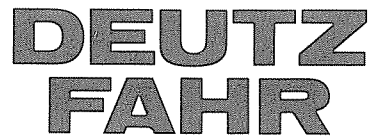
Les Services d'Etude de DEUTZ-FAHR ont fait de votre machine un outil performant et fiable.

C'est à vous qu'il appartient désormais de l'utiliser en toute sécurité, de la conserver en bon état de fonctionnement et de performance et de lui assurer un service sans problème.

Pour ce faire, consultez les conseils pratiques d'utilisation et d'entretien fournis par DEUTZ-FAHR.







## Instruction Manual Round Balers

### Contents

---

General safety and accident prevention regulations	GB 1-I
Road traffic regulations (Germany only)	GB 1
Your safety	GB 2
Mode of working of the Round Balers	GB 3
Main components of the Round Balers	GB 4
Adapting to tractor	GB 5
Controls and operating instructions	GB 7
– Fitting reels of twine	GB 9
– Threading binding twine	GB 9
– Binding the bale	GB 10
Hitching to tractor and transporting	GB 12
Field operation	GB 13
Opticut cutter mechanism (optional extra equipment)	GB 15
Bale ejector (optional extra equipment)	GB 17
Net wrapping (optional extra equipment)	GB 18
Net wrapping maintenance	GB 21
Maintenance of the machine	GB 24
Lubrication schedule	GB 28
Technical data	GB 29
Trouble-shooting	GB 30
Wiring diagramm PilotBox T	GB 32





## General safety and accident prevention regulations.

### Rule:

Before the start of operations check both implement and tractor for working and road safety.

### General

1. In addition to the instruction given in the present manual all relevant safety and accident prevention regulations must be complied with.
2. Pay special attention to the warning advice and safety decals which will instruct you of the safe operation of your implement. Observe them on your own interest.
3. Take account of the Road Travel Regulations in force in your country when travelling on public roads.
4. Before starting work make yourself familiar with all elements and controls of the machine, as well as with their function. This will be too late during operation.
5. The user of the machine should only wear well-fitting clothes.
6. Keep the machine clean at all times (fire precaution).
7. Before starting the tractor make sure that nobody, particularly children, is in the danger area. Good visibility is essential.
8. No persons are allowed on the implement, neither at work nor during road transport. Persons required on the implement during work must not leave their work place and may only carry out the job which requires their presence on the implement.
9. Couple the implement to the tractor according to the instruction given in this manual, using exclusively the devices provided for this purpose.
10. When mounting or removing the implement set the parking stand to the position required to assure sufficient stability.
11. Proceed with special care when mounting and removing the implement on/from the tractor.
12. Ballast weights are to be installed exclusively to the points destined for this purpose.
13. Take notice of the permissible axle load and total weight.
14. Take notice of the permissible transport dimensions.
15. Inspect and install all equipment required for transportation such as lighting, warning and protective devices.
16. All operating devices such as ropes, chains, rods, etc. which act on remote-controlled machine elements, have to be installed in such a way that any unintentional movement is excluded in all possible transport and working positions.
17. Before any transport on public roads bring the implement to the position prescribed and lock it in accordance with the instructions given by the manufacturer.
18. During travel never leave the driving position.
19. Always select the speed according to the travel conditions. When travelling up-hill, down-hill or across a slope avoid sudden turns.
20. The behaviour of the tractor at travelling, steering and braking can be influenced by mounted or trailed implements and ballast weights. It is therefore essential that a sufficient steering and braking property is available at all times.
21. When negotiating curves take notice of the overhang and/or flywheel mass of the implement.
22. Before operating the implement make sure all protective devices are installed and in position.
23. Keep clear of the working and danger area of the implement.
24. Keep clear of the swinging area of the implement.
25. Caution when working on machine elements operated by additional driving systems (e. g. hydraulics). Squeezing and shearing points!
26. Prior to leaving the tractor secure the implement. Mounted implements have to be lowered completely to the ground. Stop the engine and remove the ignition key.
27. Nobody is allowed to step between tractor and implement as long as the vehicle is not secured against unintentional movement by means of the parking brake and/or wheel chocks.

### Mounted implements

1. Prior to mounting or uncoupling implements on/from the three-point linkage, all controls have to be positioned in such a way that any unintentional lifting or lowering of the machine is precluded.
2. In case of three-point mounted implements it is essential that the hitch category of the implement matches that of the tractor.
3. Danger of squeezing or sheering in the area of the three-point linkage.
4. When operating the outer controls of the three-point linkage do not step between tractor and implement.
5. When the implement is in transport position assure at all times a sufficient lateral limitation of the tractor three-point linkage.
6. When travelling on public roads with implement lifted, make sure the control lever is secured against lowering.

### Trailed implements

1. Secure implements against unintentional movements.
2. Take notice of the maximum load permissible on the linkage, swinging drawbar or automatic pick-up hitch.
3. In case of trailed implements sufficient freedom of motion must be provided at the linkage point.

### Power take-off operation (only for p.t.o.-driven implements)

1. Do not use other p.t.o. shafts than those specified by the manufacturer.
2. The guard tube and the funnel-shaped guard of the p.t.o. shaft as well as the p.t.o. guard must be installed. All guards must be in irreproachable condition.
3. Take notice of the overlap prescribed for p.t.o. shaft tubes, both in transport and working condition.
4. Before installing or removing the p.t.o. shaft, disengage the p.t.o., stop the engine and remove the ignition key.
5. Should overload or overrunning clutches not be covered by the tractor guards, the p.t.o. shaft has to be installed with the safety clutch at the implement side.
6. Make sure at all times that the p.t.o. shaft is properly installed and secured.
7. Hook in the chain to secure the p.t.o. shaft guard against rotation.
8. Before engaging the p.t.o. make sure the selected tractor p.t.o. speed and sense of rotation corresponds with the permissible speed and sense of rotation on the implement.
9. Before engaging the p.t.o. be sure that nobody stays in the danger area of the implement.
10. Never engage the p.t.o. while the engine is stopped.
11. Keep any persons clear of the p.t.o. and p.t.o. shaft while the driving system is engaged.
12. Always disengage the p.t.o. for very sharp turns or when p.t.o. operation is not required.
13. Danger! Working elements continue to rotate after the p.t.o. is disengaged. Keep clear of rotating parts at all times. Be sure the implement has stopped rotating before carrying out any work.
14. Before cleaning, lubricating or adjusting the implement or the p.t.o. shaft, disengage the p.t.o., stop the engine and remove the ignition key.
15. Place the detached p.t.o. shaft onto its support.
16. After the p.t.o. shaft is detached slide the protective caps over the p.t.o. stub.
17. Repair at once any damage prior to setting the implement into operation.

## Hydraulics

1. Caution! The hydraulic system is under high pressure.
2. When connecting hydraulic rams and motors be sure the hydraulic hoses are properly coupled.
3. Prior to coupling hydraulic hoses to the tractor hydraulics pressure should be released from the system both at the tractor and implement side.
4. In case of hydraulic connections between tractor and implement it is advisable to mark the coupling sleeves and plugs to exclude any erroneous control. Should hydraulic lines be confused this can cause the inverse function to be actuated (e. g. lifting/lowering). Danger of accident!
5. Check the hydraulic hoses at regular intervals and renew them when damaged or worn. The spare hoses must comply with the technical requirements laid down by the manufacturer of the implement.
6. When tracing leakages use appropriate protective devices. Danger of injury!
7. Hydraulic oil forced out under high pressure can break the skin and cause severe damage to health. In case of injury by hydraulic oil report immediately to a doctor as there is a grave risk of infection.
8. Before working on the hydraulics lower the implement, release pressure from the system and stop the tractor engine.

## Brakes and tyres\*

1. Check the brakes for proper function before every travel.
2. The braking systems should be thoroughly checked at regular intervals.
3. Adjustment and repair work on the braking system may only be carried out by specialist workshops.
4. Prior to working on the tyres make sure the machine is standing safely and secured against unintentional movements (wheel chocks!).
5. The installation of tyres presupposes special knowledge as well as the availability of all necessary tools.
6. Repair work on tyres and wheels may only be carried out by skilled workers who dispose of the appropriate tools.
7. Check the inflation pressure at regular intervals. Take notice of the inflation pressure laid down.

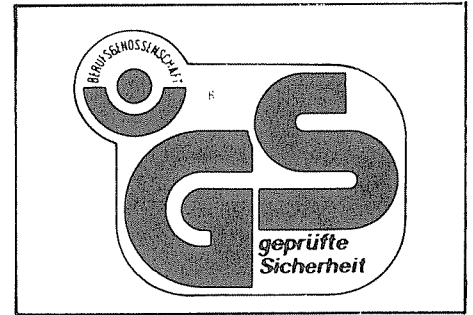
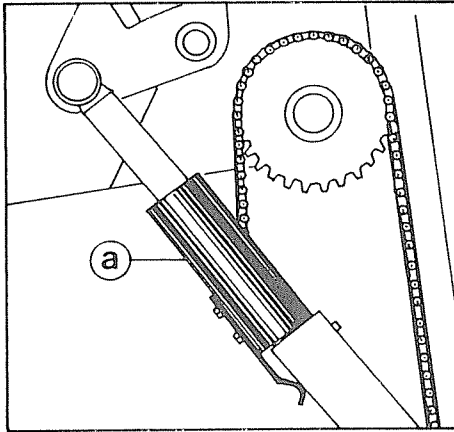
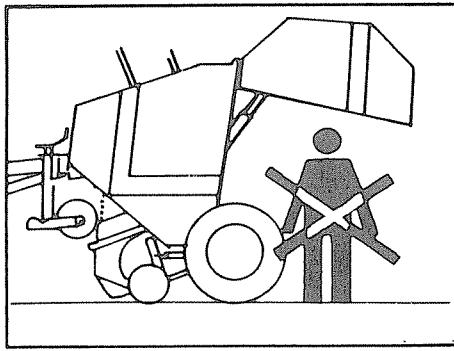
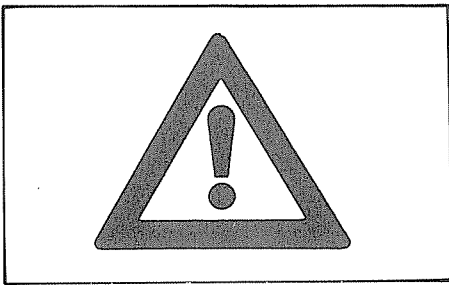
## Maintenance

1. As a rule, disengage the driving system and stop the engine prior to carrying out any maintenance, servicing, cleaning or repair work. Always remove the ignition key.
2. Check all bolts and nuts at regular intervals and retighten as required.
3. Prop the implement with appropriate supports before carrying out maintenance work on the lifted machine.
4. When changing working elements use appropriate tools and protective gloves.
5. Discard used oil, grease and filters according to regulations.



**RB 3.20/OC**

**RB 3.50/OC**



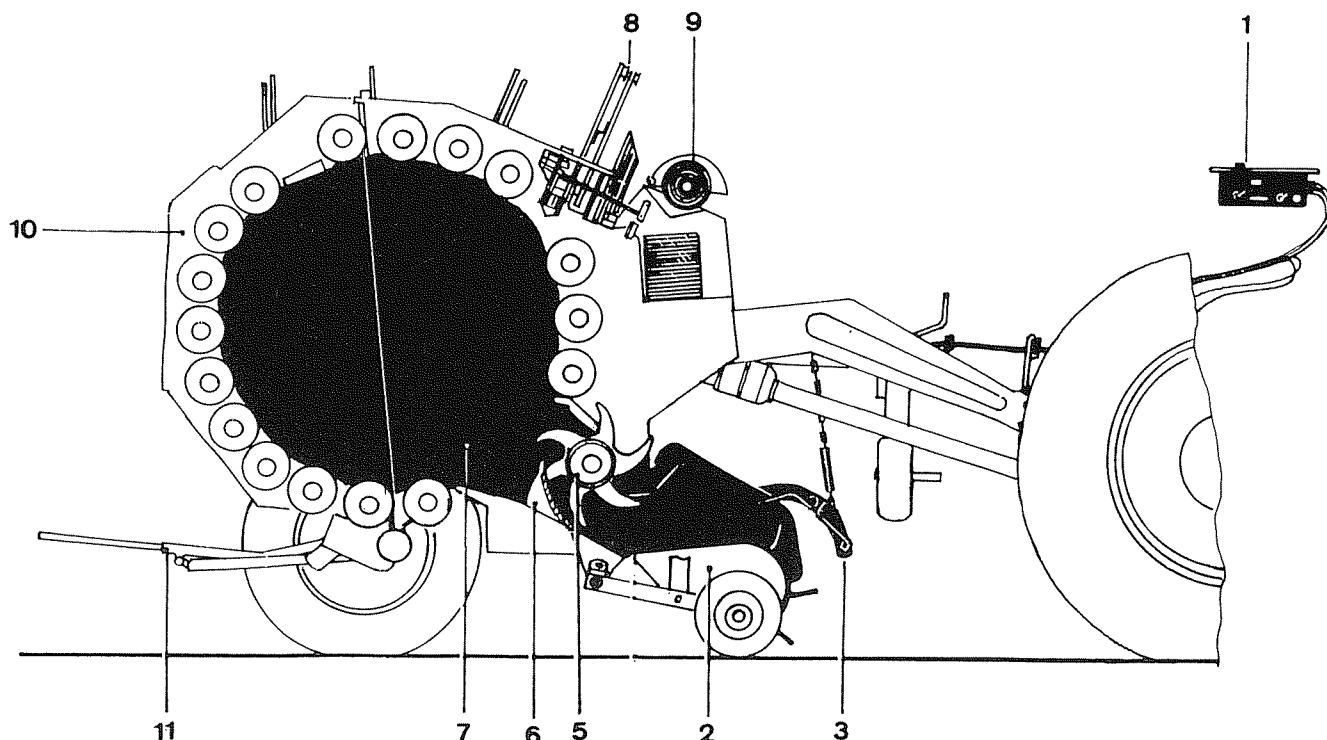
## Your safety

The baler is exclusively appropriate / designed for collecting and compressing cut grasses lying on the ground

**DANGER!** You will find this symbol next to all safety instructions in this manual. Pay special attention to these instructions and take particular in all the case mentioned.

The main points are summarized below: –

- In addition to the warnings given in this manual you should observe all statutory safety precautions and accident prevention regulations. These may vary from country to country.
- The round baler has been safety-tested by the German agricultural employers' liability insurance association. This does not, however, preclude the possibility of accidents in the case of improper use.
- Never start or use the round baler without the guard devices. Secure the drive shaft guard tube to prevent its rotating.
- Maintenance and repairs may be carried out only when the machine is at a complete standstill with the engine stopped.
- The only person allowed on the tractor during operations is the driver. Never carry passengers on the baler.
- Never stand on the drawbar frame, steps or any other part of the baler while it is in operation. Keep steps clear of the pick-up and the rollers.
- The machine should be detached from the tractor and parked after the tail gate has been closed.
- If the baler is parked on a slope, secure the road wheels with chocks. Wheel chocks must always be carried with the machine.
- Adjustments to the drawbar must be carried out by specialist workshops.
- Stand outside the range of the swing arms when the stepped twine pulley is turning.
- The drive shaft must always be coupled to the tractor's p.t.o. when travelling on public roads.
- Never attempt to remove hay or straw from the pick-up or intake opening while the machine is running. Always disengage the p.t.o. and stop the engine first.
- Bystanders must keep clear of the tail gate while it is being opened or closed. Furthermore, keep clear of the tail gate when it is open and unlocked.
- Set tail gate strut (a) to the locked position before entering the baling chamber.
- Depressurize the hydraulic system before starting assembly work or adjustments.



## Mode of working of the Round Balers

All functions are controlled from the tractor cab and checked on the controller (PilotBox T) (1).

The PilotBox T allows the following functions to be operated:

- Pick-up raising and lowering
- Cutter mechanism on and off
- Tail gate opening and closing.

Visual and acoustic signals show the operator that:

- Set bale density is reached
- Twine binding is running

The RB forms silage, hay and straw into highly compressed round bales.

The crop to be baled is taken up by the pick-up (2). The baffle plate (3) located above the pick-up ensures an accurate intake of the crop.

The pick-up direct the crop towards the conveyor drum (5) composed of offset double tines.

The crop is reduced by the 14-knife cutter mechanism (optional) to 7 cm long batches before entering the baling chamber.

Each knife can deflect individually if a foreign object is encountered, and automatically swings back to the cutting position.

In the baling chamber the crop is rolled up into tight bales which retain their shape. Bale density can be pre-selected to match the crop to be baled.

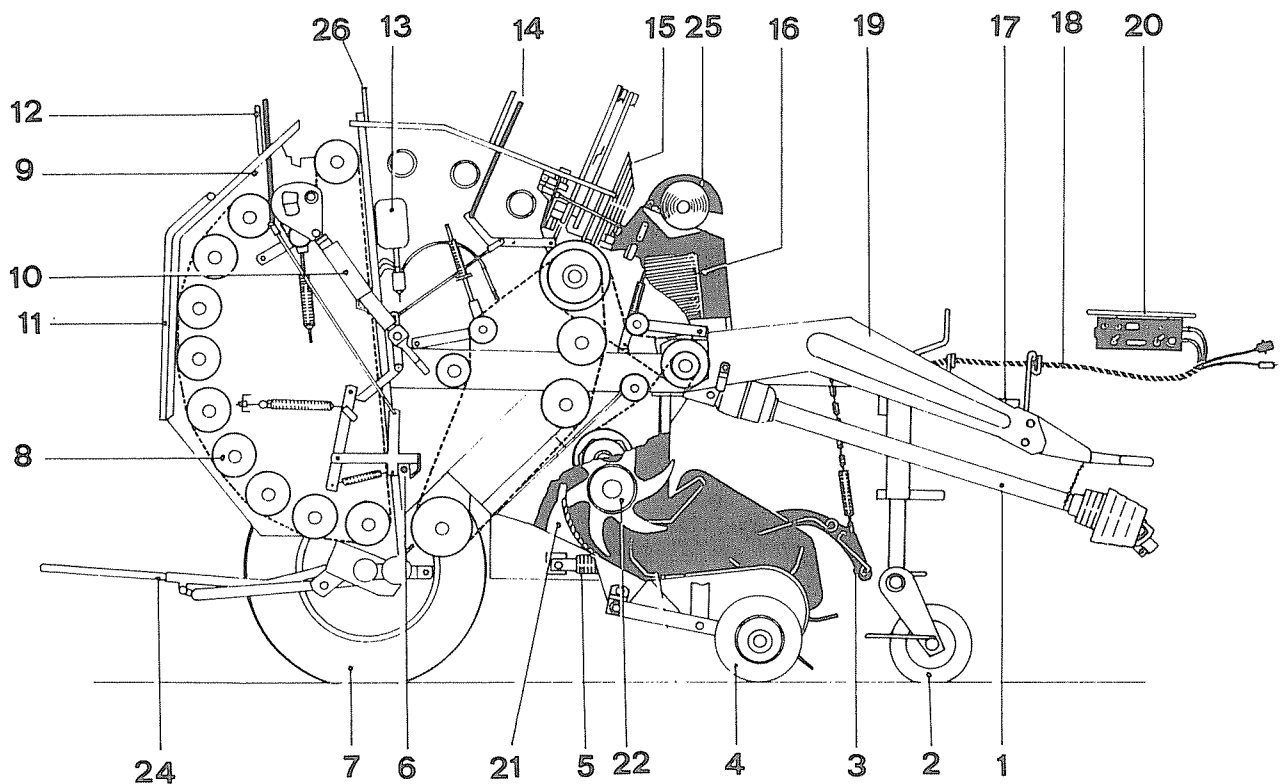
When the preset bale density is achieved, this is signalled to the driver. The twine binding mechanism (8) is tripped automatically – the driver has only to stop the tractor. The bale can be wrapped with twine or net (optional) or simultaneously with both systems.

Net wrapping mechanism (9) must be connected to the PilotBox T.

If the bales have to be wrapped only with net, the machine has to be switched over accordingly.

When the binding process is completed, the driver opens the tail gate (10) using hydraulic power – the bale rolls over ejector (11) (optional) onto the field.

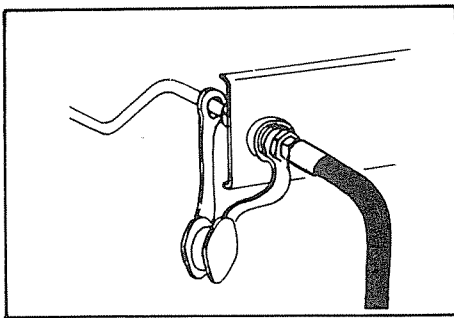
The tail gate is closed again, and the next baling process can start.



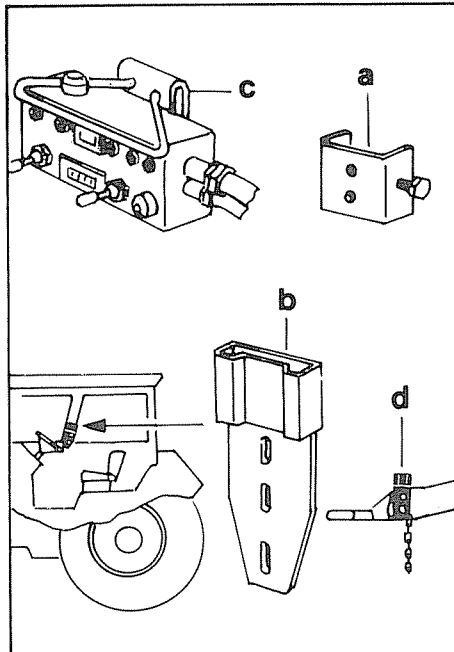
## Main components of the Round Balers

- 1 Wide-angle drive shaft, single-sided
- 2 Jockey wheel
- 3 Baffle plate with tines
- 4 Pick-up feeler wheel
- 5 Hydraulic cylinder with weight compensating springs for pick-up
- 6 Tail gate lock
- 7 Wheel with 11.5/80-15.3 Impl. 10-ply-tyres  
or special tyres 15.0/55-17.0 Impl. 10-ply
- 8 Baling rollers
- 9 Tail gate
- 10 Tail gate hydraulic cylinder
- 11 Hinged cladding for access to rollers for cleaning
- 12 Monitor bar for tail gate lock
- 13 Oil tank for central lubrication system
- 14 Contents indicator
- 15 Binding mechanism
- 16 Twine box
- 17 Support for PilotBox T with parked machine
- 18 Operating lines
- 19 Height adjustable drawbar
- 20 Controller PilotBox T
- 21 Opticut cutter mechanism (optional)
- 22 Rotary conveyor
- 24 Bale ejector (optional)
- 25 Net wrapping mechanism (optional)
- 26 Lift eyes

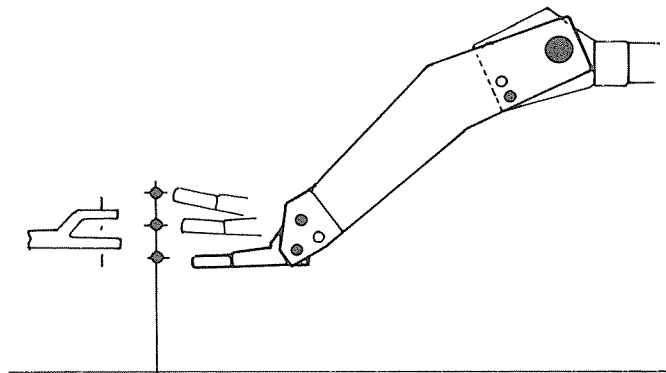
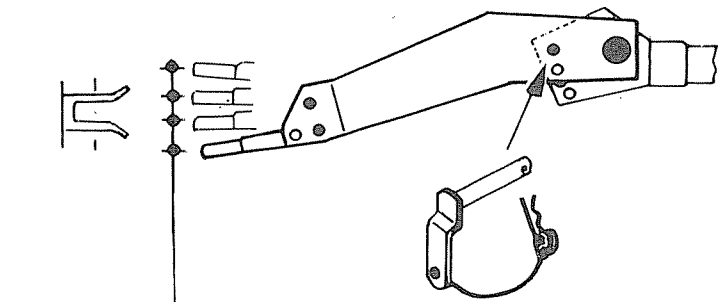




1



2



3

## Adapting to tractor Tractor equipment required

(fig. 1)

The round baler may only be operated at a p.t.o. speed of 540 rpm.  
The p.t.o. should preferably be independent of the clutch.  
The tractor must be equipped with a controller and a hydraulic scroll valve (remote control connection) for operation of the baler.

## Mounting the controller (Pilotbox T)

(fig. 2)

Attach the clamp (a) to the safety frame or to the central supporting beam of the tractor cab.

Fix the bracket (b) to the clamp and transfer the controller (c) from its stowage on the drawbar (d) to the bracket (b).

Please ensure that the controller is not affected by moisture.

## Fitting the drawbar

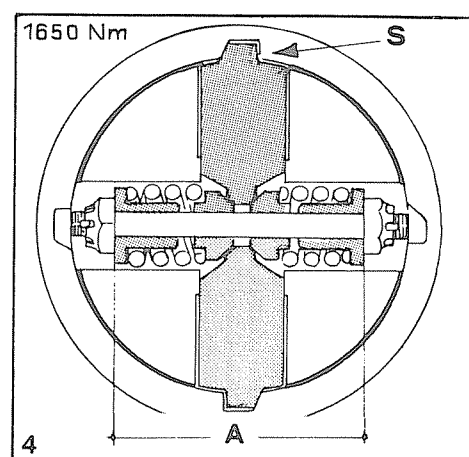
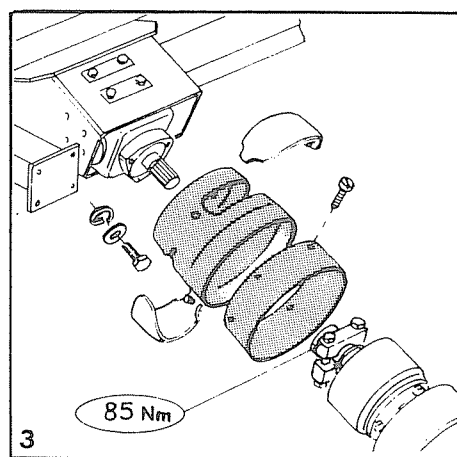
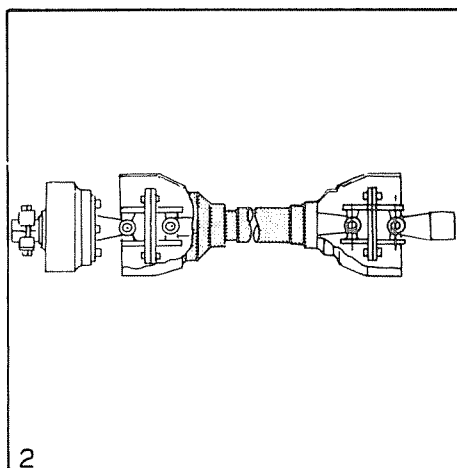
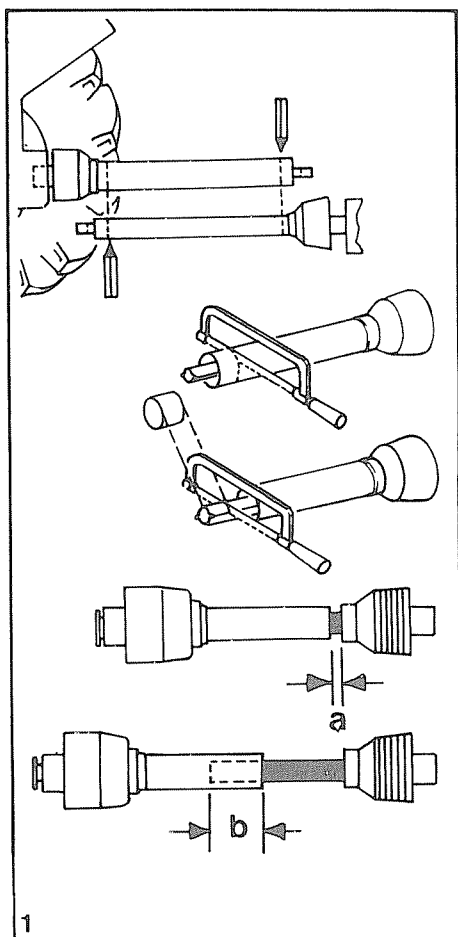
(fig. 3 and 4)

Hitch the baler to the tractor so that it is approximately horizontal.

For this purpose the drawbar can be set:  
to 4 different positions of the top hitch (a) and  
to 3 different positions of the bottom hitch (b)

- Initially position baler with jockey wheel so that the lower edge of the guard panel is horizontal.
- Lift drawbar to height of towing jaw and secure with bolts left and right at (c) or (d).
- Secure both pins with spring clips.

To change over from a top to a bottom hitch, move the towing eye pin from hole (e) to hole (f).



## Fitting the drive shaft

(fig. 1)

Since the position of the p.t.o. varies on different tractors it may be necessary to alter the length of the drive shaft.

Determine the exact length as follows:

- Hitch the round baler to the tractor.
- Pull the drive shaft apart and hold the two sections of the shaft above one another.
- Check when cornering and travelling straight ahead that
  - there is still a minimum overlap (b) of 200 mm and the drive shaft end has a minimum clearance (a) = 20 mm
  - there is sufficient clearance for the drive shaft in case of a bottom hitch.
- If it is necessary to shorten the shaft, cut both sliding and guard tubes by the same amount.
- Deburr ends of tubes, clean away swarf and thoroughly lubricate the friction faces.

## Wide-angle drive shaft with cam-type cut-out clutch for Round Balers with cutter mechanism

(fig. 2)

The cam-type cut-out clutch is an overload protection which switches the torque to »0« in case of overload. To switch on the clutch again, disengage the P.T.O. at low speed.

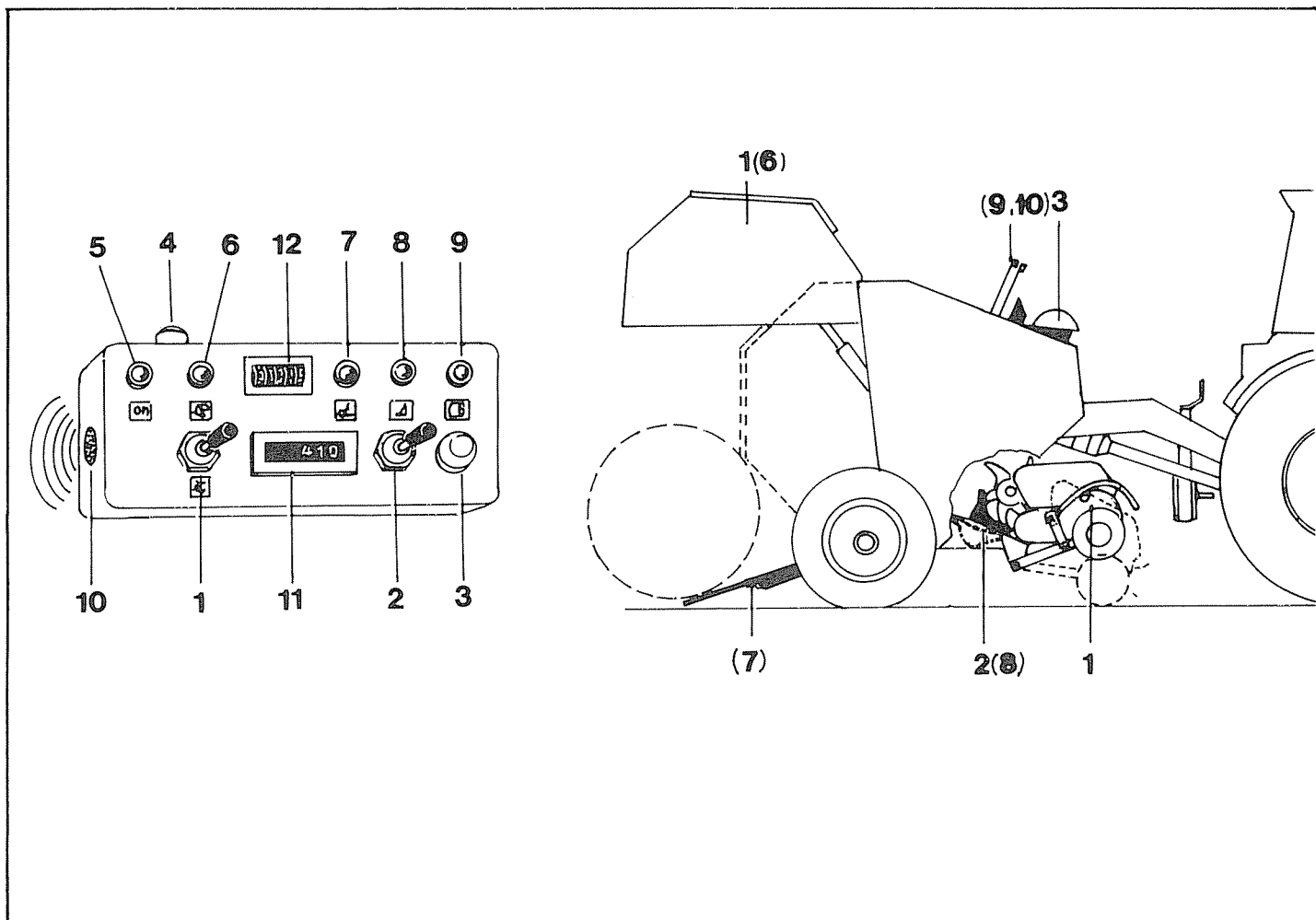
The speed at which the clutch is re-engaged, is below 200 r.p.m.

The drive shaft guard has openings which ease its coupling to the P.T.O. stub shaft. Pull up screws to 85 Nm torque. Close openings again with both covers (fig. 3).

The clutch may only be dismantled with locking cams (S) engaged. To ensure proper functioning after the replacement of clutch components, be sure that measurement (A) of the spring bolt remains unchanged and the threaded portions are projecting by the same amount at either side (fig. 4).

Never exceed the permissible clutch torque (1650 Nm).

Otherwise your machine is no longer protected against overload.



## Controls and operating instructions

### Controller PilotBox T

Attach the PilotBox T to the bracket provided for this purpose in the tractor cab.

#### Control:

The hydraulically operated functions »pick-up«, »tail gate« and »cutter mechanism« are selected with toggle switches. Always pre-select one function only.

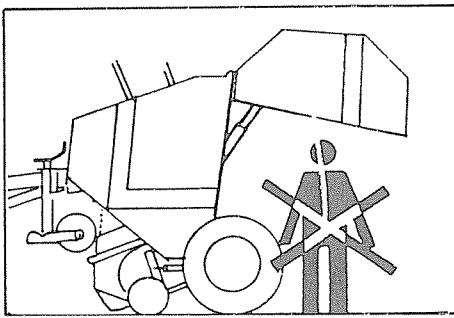
The selected function can then be actuated with the single-acting control unit of the tractor.



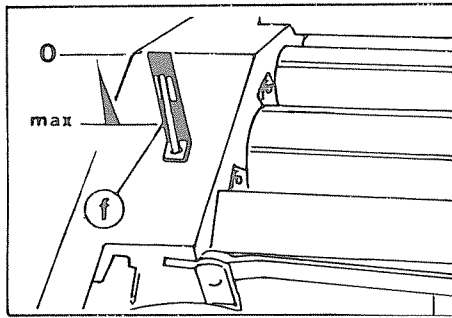
Please ensure that the controller is not affected by moisture.

#### Control and monitoring elements:

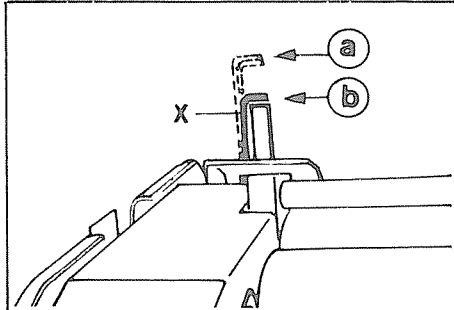
- 1 Tail gate
- 1 neutral
- 1 Pick-up
- 2 Cutter mechanism
- 2 neutral
- 3 Push button »net wrapping mechanism on«
- 4 Push button »setting the trip bale counter to zero«
- 5 Indicator light »current supply«
- 6 Indicator light »tail gate opened«
- 7 Indicator light »bale ejector on ground«
- 8 Indicator light »cutter mechanism not engaged«
- 9 Indicator light »binding process«
- 10 Acoustic signal »binding process«
- 11 Trip bale counter
  - current for the trip bale counter is supplied by an alkali battery, type LR 1. Average life time: approx. 4 years.
- 12 Permanent bale counter



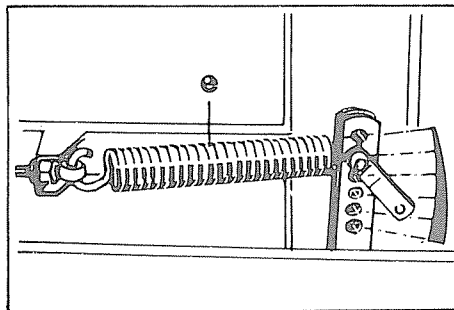
1



4



2



3



Exercise care when opening and closing the tail gate!  
Bystanders must keep well clear of the tail gate.  
(Fig. 1)

For road travel lift pick-up to the stop (see controller PilotBox T).

## Locking the tail gate

(fig. 2)

The tail gate must be properly locked before you start to collect fodder and after each bale is ejected. To do this, set toggle switch (1) of the controller to "tail gate" position, keeping the tractor control unit on "lowering". By this means the tail gate will be automatically locked. This is signalled to the operator when the tail gate lock indicator (x) is in position (b). Simultaneously indicator light (6) of the controller goes out. When the tail gate is open or not properly locked, the indicator (x) is in position (a) and indicator light (6) of the controller is lit.

## Adjusting baling pressure

(Fig. 3)

The density of the bale is dependent on the type of fodder and the baling pressure. The pressure can be adjusted in steps by lever (d).

Hook tension spring (e)

– to a higher hole to increase baling pressure

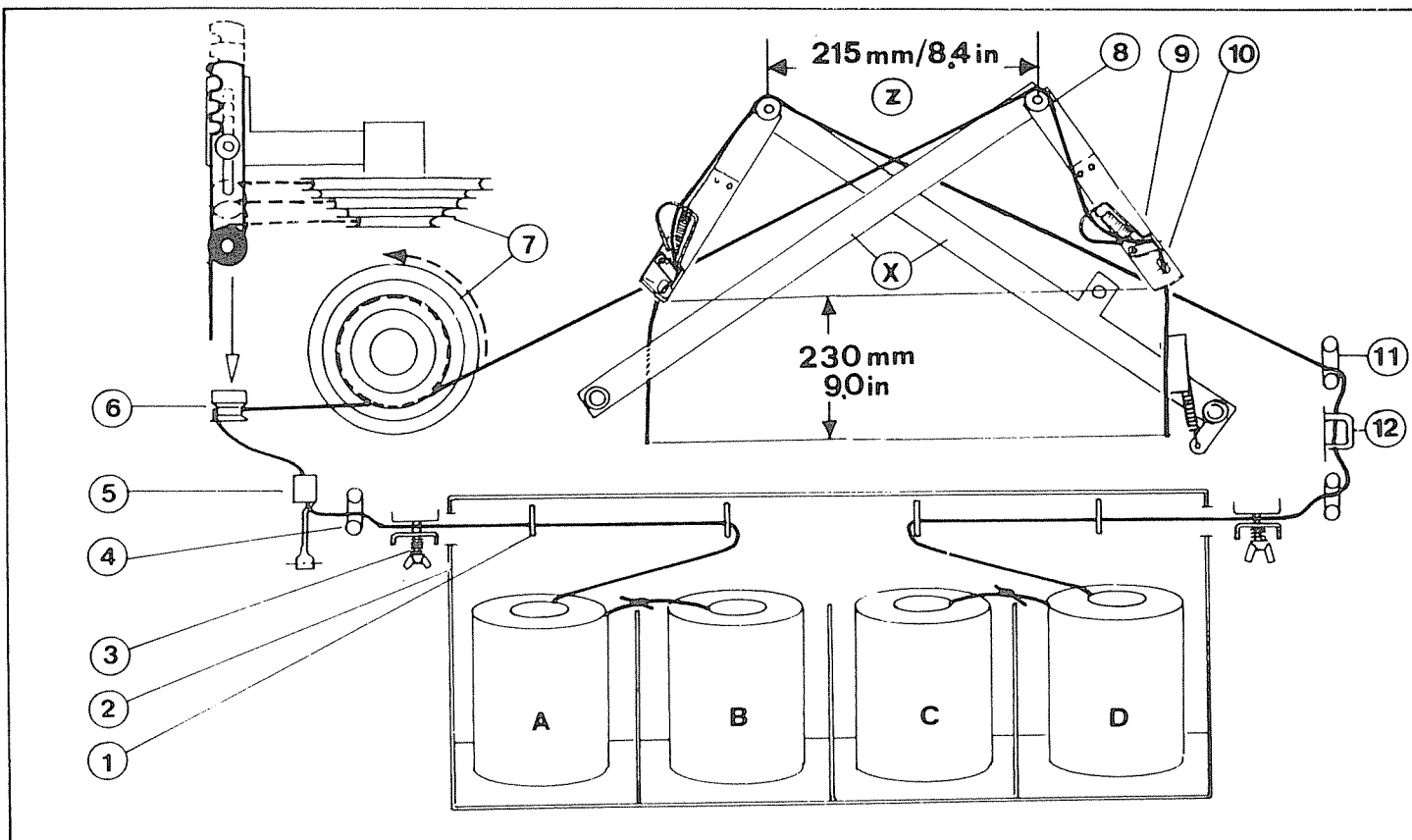
– to a lower hole to reduce baling pressure

### Important:

Set baling pressure uniformly on the left and right sides of the machine. The pressure can be adjusted only when the baling chamber is empty.

The contents level in the baling chamber can be checked at any time, within the preselected range, from the driver's seat by means of the charge indicator (f) (fig. 4).





## Fitting reels of twine



### WARNING!

Fit new reels of twine and thread the twine only when the machine is at a complete standstill.

Use good quality binder twine only:

- a) Sisal twine with running lengths of 200 to 330 m/kg
- b) Synthetic twine with running lengths of 400 to 700 m/kg

It is advisable to use synthetic twine if the bales are stored outside.

Stand the 4 reels of twine upright next to one another in the twine box. Pull outer end of twine from reel (A) upwards and tie it to the inner end of reel (B) (simple reef knot). Tie reel (C) to (D) in the same way.

## Threading binding twine

**IMPORTANT:** Before you start threading the twine, make sure that the swivel arms (x) are in the position shown in the illustration. The distance (z) should be approx. 215 mm (8.4") and can be adjusted by turning the stepped pulley (7) in the direction of the arrow. The binding mechanism will be in the starting position if the swing arms move downwards as soon as the stepped pulley is turned in the direction of the arrow.



### WARNING:

While turning the stepped twine pulley, keep out of range of the swing arms.

Refer to the illustration on the right when threading the twine. There is also an instruction label on the baler.

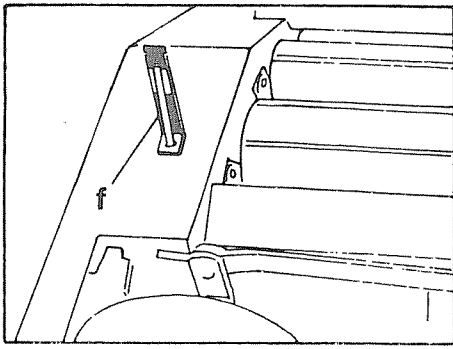
Thread the end of the twine from reel (A) through the following points:

- 1 Guide
- 2 Side wall of twine box
- 3 Twine brake (set spring length to approx. 30 mm (1.2"))
- 4 Eye
- 5 Twine tensioner
- 6 Guide pulley: align with the appropriate groove on the stepped pulley which has to be encircled.
- 7 Wind twine once round stepped pulley.
- 8 Guide pulley
- 9 Twine brake
- 10 Guide arm

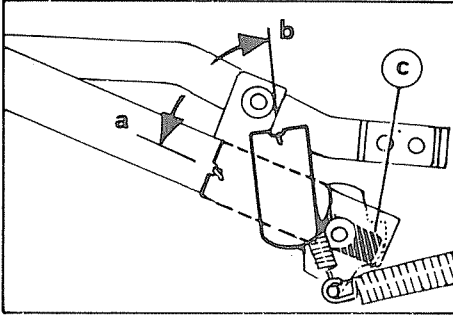
**Important:** The binding twine must project only so far from the guide arm (approx. 230 mm) that it cannot be caught in the rotating bale before the binding process takes place.

Please note, as a rule, that the loose end of the twine should lightly touch the top edge of the press roller.

Thread up binding twine from reel (D) similarly on the other side of the machine. In this case there is no stepped pulley to be encircled and instead of points (5) and (6), (11) and (12) have to be used.



1



2

#### Tip for easier threading of the twine brake (3) (fig. 1)

Release the binder by pressing downwards on the indicator (F) so that the twine brake opens. Then move the swing arms (x) to the position described above and continue threading.

### Binding the bale

The binding process starts and runs automatically, i.e. the binding mechanism is actuated automatically as soon as the preselected density of the bale is reached. Simultaneously a buzzer signal sounds and the red monitor lamp (9) on the controller panel lights up.

#### IMPORTANT:

After the buzzer sounds or the lamp lights up drive on for 5 – 10 m so that the twine is engaged in the crop material. Then stop the tractor.

Allow the baler to continue running without picking up any more fodder. Binding is then performed automatically. During this process the machine can be reversed or driven to the edge of the field to eject the bale.

If the twine is not cleanly cut remove the knife and turn or replace it (see also p. 41 – knife adjustment).

At the same time the twine tensioner on the left side of the machine can be tightened by 3 – 4 mm.

### Single or double binding

(fig. 2)

Single or double windings of twine can be selected to suit the condition of the fodder, i.e. short or long or very dry:

(a) lever to left = single binding

(b) lever to right = double binding



#### WARNING!

Never adjust when the mechanism is operating.

Block (c) must be horizontal.

Clean this area regularly, preferably at each change to avoid trouble.

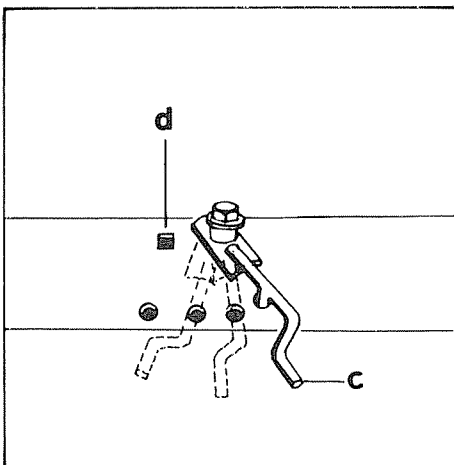
#### Manual actuation of binding mechanism (fig. 1)

Binding can be started manually by pressing down the indicator rod (f).



#### WARNING! IMPORTANT!

First stop the engine and wait till the machine has completely stopped.



## Adjusting the clearances

Twine guiding on the outer edge of bales is adjustable by distance arms (c). For this adjustment lift distance arms (c) by hand to unlock and push it towards the inside or towards the outside, then relock. Each guide arm can be locked in three positions.

In extreme crops the distance from the end of bales may be reduced by relocating guides (c) to position (d).

## Ejecting the bale

While the binding operation is taking place back up the machine approx. 5 metres. After binding is completed, open the tail gate hydraulically with the p.t.o. engaged so that the bale rolls out. Drive machine forwards before closing the tail gate since it might otherwise come down on top of the ejected bale. Hold the tractor's control valve in the »lower« position until the tail gate is closed and locked properly. Machine is now ready to make the next bale.

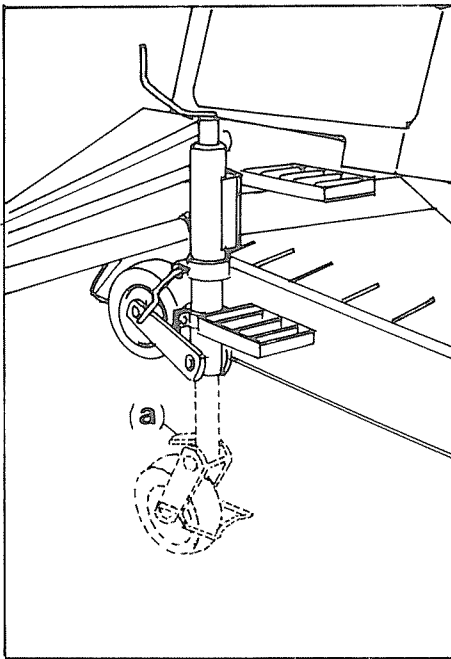
**IMPORTANT!** Only roll out the round bale with the machine running.

A bale ejector is available as extra equipment.



**WARNING!** When working in hilly terrain, always eject the bale across the gradient so that it cannot roll away. Take particular care when opening and closing the tail gate. Bystanders must keep clear of the machine.

Never try to stop bales rolling downhill!! Danger of accident!



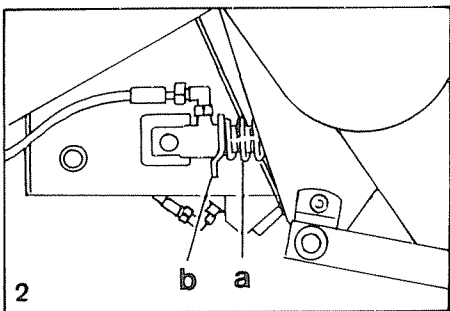
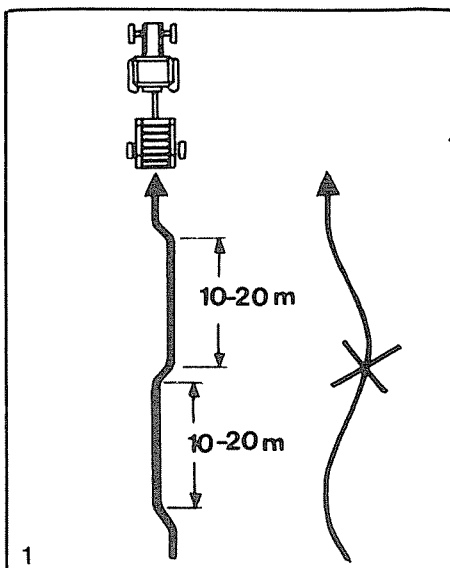
## Hitching to tractor and transporting

- Hitch the baler horizontally to the tractor so that
  - the pick-up has sufficient ground clearance
  - the opened tail gate leaves sufficient space for the bale to roll clear.
- Connect the drive shaft with wide-angle universal joint towards the tractor and secure the guard tube with restraining chain to prevent rotation.
- Connect hydraulic hose and electrical cable to the tractor.
- Wind up the jockey wheel a little, press down catch (a) and swing the jockey wheel up until it locks.  
Now wind up jockey wheel completely turning it until it is locked against rotation, by the catch (b).
- For road travel raise the pick-up to the stop.

**IMPORTANT!** When driving round tight bends, make sure that the wide-angle joint (tractor end) is not deflected more than 70° as there is otherwise a risk of its breaking whether driven or stationary.

With a trailed machine heavy swaths can cause heaps of crop to form. A guard located below the swinging drawbar can help to prevent this.





## Field operation



**WARNING!** The round baler is protected against foreseeable accidents to large extent. However, this does not mean that the necessary caution should not be exercised while operating the baler. Check that all guards are attached to the machine and in good condition before starting work. Never attempt to rectify faults while the machine is running. Take particular care when opening and closing the tail gate. Bystanders must keep clear of the tail gate. Always secure tail gate brace before entering the baling chamber.

### Before baling

- Set bale counter to »zero«
- Select bale density
- Lower pick-up so that tines are approx. 2 cm from ground
- Lock the tail gate
- Thread up twine

### P.t.o. speed

Operate the round baler at the standard p.t.o. speed of 540 rev/min. The p.t.o. speed may be reduced (350 – 450 rev/min) to bale extremely short and brittle fodder. The p.t.o. should not be disengaged while baling short and dry materials.

### Cornering

When driving round tight bends, make sure that the wide-angle joint (tractor end) is not deflected more than 70° as there is otherwise a risk of its breaking when either driven or stationary.

### Driving (fig. 1)

The whole width of the baling chamber must be filled uniformly to achieve a high output and well-shaped round bales. If the windrow is narrow, a uniform baling chamber charge can be obtained by driving alternately to the right and left of the windrow as illustrated.

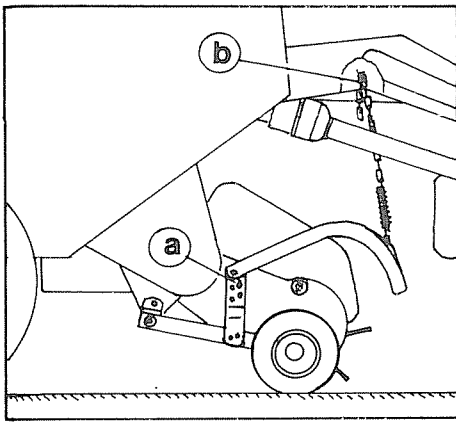
### Adjustment of pick-up weight compensation (fig. 2)

The pick-up weight can be compensated to a greater or lesser extent by the relief springs (a) which the two hydraulic cylinders act upon, by selecting any one of three slots provided for location of the shackle (b).

The normal position is the central one.

To relocate the shackle first raise the pick-up.

- When the pick-up »jumps« on uneven terrain reduce the tension
- When equipped with feeler wheels (extra equipment): –  
on soft soils = increase tension  
on hard soils = reduce tension

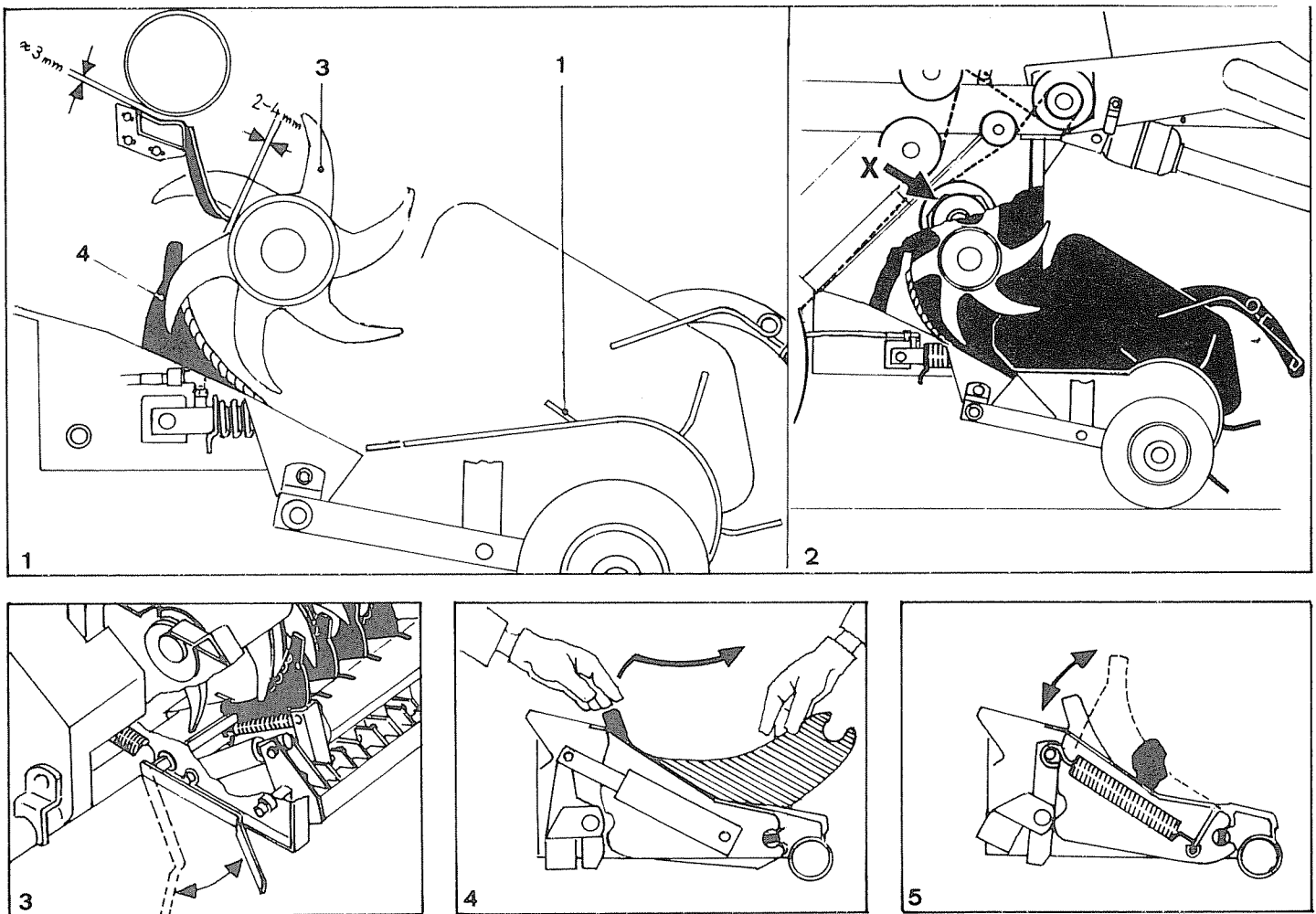


### Feeler wheels for pick-up

Six different holes of the feeler wheel control arms (a) allow the ground clearance of the tines to be varied. The tine tips should not touch the ground.

### Adjustment of the baffle plate

The baffle plate can be attached at different heights with chain (b). In this way the baffle plate can always be set to match the crop density.



## Opticut cutter mechanism (optional extra equipment)

The crop is cut uniformly before entering the baling chamber. Cutting and baling take place in a continuous flow: the pick-up (1) collects the crop to be baled and directs it, towards the conveyor drum (3). This forces the crop through the cutter mechanism (4) before it enters the baling chamber.

The cutter mechanism is engaged and disengaged hydraulically.

The cutting length depends on the number of knives engaged in the cutter mechanism. If all 14 knives are engaged, the crop is cut to 74 mm long batches. All knives can be removed individually. To do this, pull knives rearward from behind until they come free of the shaft and move them forward. The knives can then be removed from the front.

Each knife can deflect individually if a foreign object is encountered, and automatically swings back to the cutting position (fig. 5).

### Shear bolt for the pick-up drum

The pick-up drum is protected against overload with a shear bolt M 8 x 35,8.8 DIN 933 on the right-hand side (see »X« in fig. 2). To replace the bolt unscrew the guard.

### How to use the Round Baler with Opticut cutter mechanism

When baling dry and brittle crops it is advisable to lower the cutter mechanism hydraulically a short time before the baling process is completed. This will cause a layer of long crop to envelop the bale which helps to avoid loss of short crop. The cutter mechanism should likewise be lowered if a blockage occurs in the conveyor channel. Keep cutter mechanism lowered until the channel is free again.

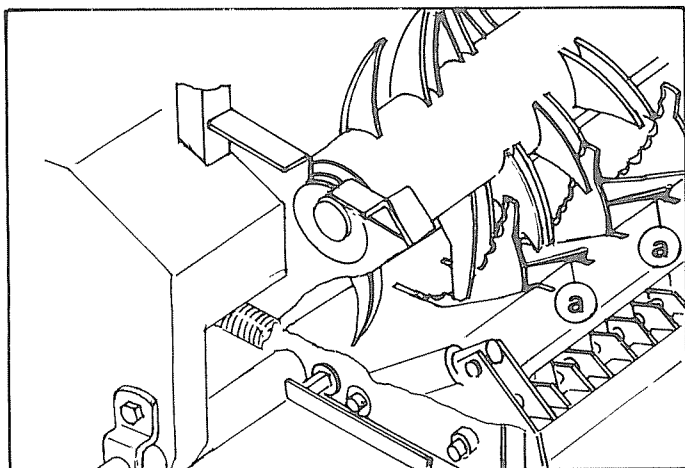
### Removing and re-installing knives

- Lower the cutter mechanism using hydraulic power.
- Open tail gate hydraulically and **look**.
- Stop the tractor engine. **Warning! Never perform any work on the machine while the engine is running.**
- Push down knife securing lever (5) on the left-hand side of the cutter mechanism (fig. 3).

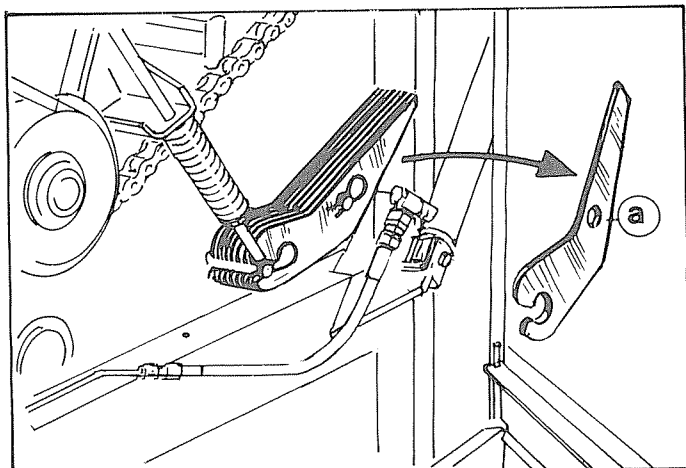
- Grasp protruding ends of the knives and remove (fig. 4). To re-install engage knives into the slots on the knife shaft.

### Warning! Danger of injury!

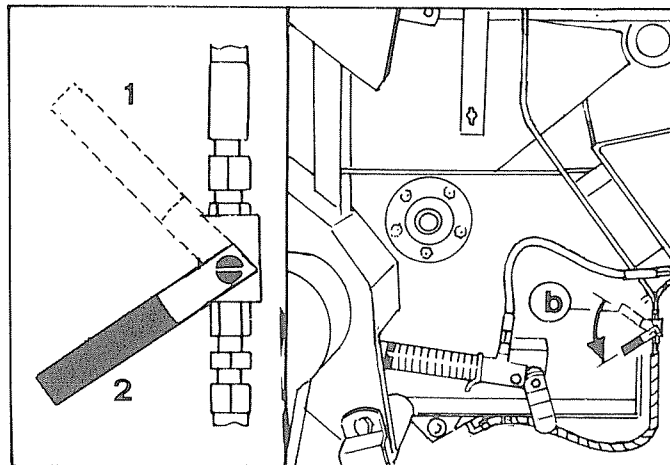
- Pull knife securing lever to the top again.
- Raise cutter mechanism to the working position.
- **Warning! When carrying out work in the area of the knives use protective gloves. Keep hands clear of the cutting edge.**
- The knives can only be sharpened when removed.



1



2



3

## Installation of filler plates

Should not all knives be installed in the cutter mechanism, filler plates (a) must be fitted in place of the removed knives to avoid obstructions in the channel (fig. 1). The filler plates are stowed on the side wall under the left-hand front guard (fig. 2).

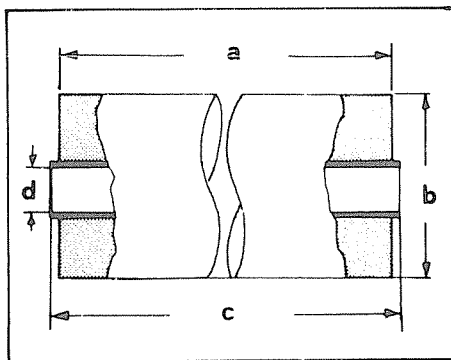
The removed knives can be fixed at the place of the filler plates.

The filler plates have to be installed in the same way as the knives.

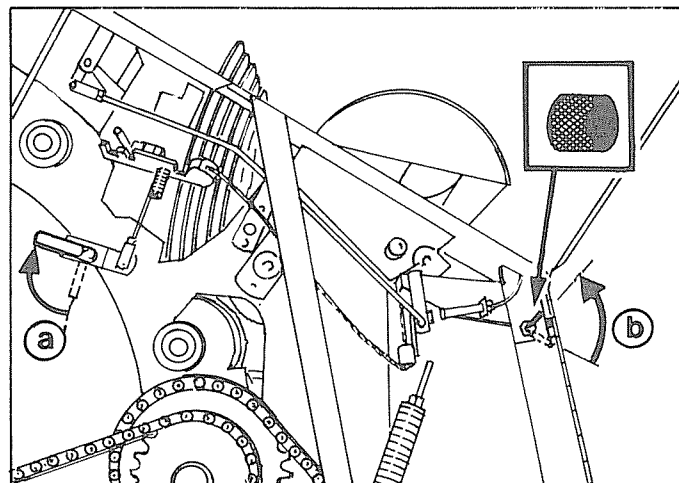
### Hydraulics for the cutter mechanism (fig. 3)

Before using the baler for a prolonged time without cutter mechanism, close the hydraulic shut-off tap (b) on the left (1 = open; 2 = closed).

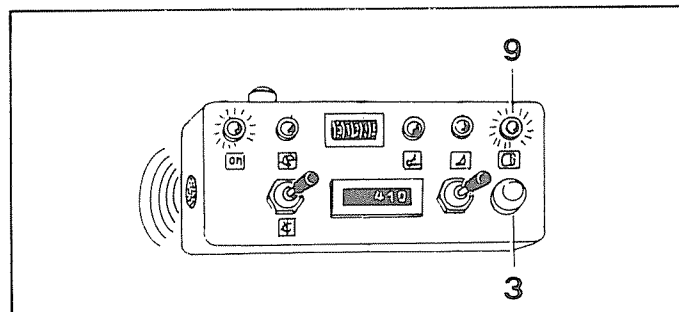
A line drawing of a hand saw. Label 'x' points to the handle, 'y' points to the blade, and 'c' points to the adjustment screw on the handle.



1



2



3

## Net wrapping (optional extra equipment)

You have purchased a big round baler with a net-wrapping facility.

The net rolls which you need for this handling method must conform to the following (fig. 1):

Net width a = 1230 – 1255 mm

Roll diameter b = max. 320 mm

Tube length c = 1225 – 1260 mm

Tube diameter d = 76 mm

Weight of net = 10 – 16 g. per running metre

We recommend Polydress netting MX 1000

The net can be obtained from the trade or from Polydress at the following addresses:

### North Germany

Firma  
Polydress Plastic GmbH  
Postfach  
2350 Neumünster

### South Germany

Firma  
Polydress Plastic GmbH  
Postfach 7309  
7417 Pfullingen

With the additional net wrapping equipment your big round baler has the following capabilities:

- Net wrapping
- Twine binding
- Combined net and twine binding

## Net wrapping

### Twine binding disconnection

If your machine is threaded with twine the twine binding mechanism must be disconnected in the following manner to ensure effective net wrapping (fig. 2):

Pull out lever (a) on the right and lock.

Press toggle switch (b) to the top («net wrapping» position).

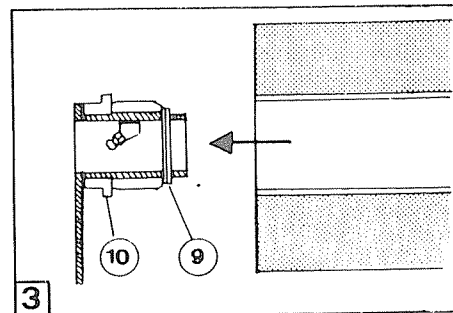
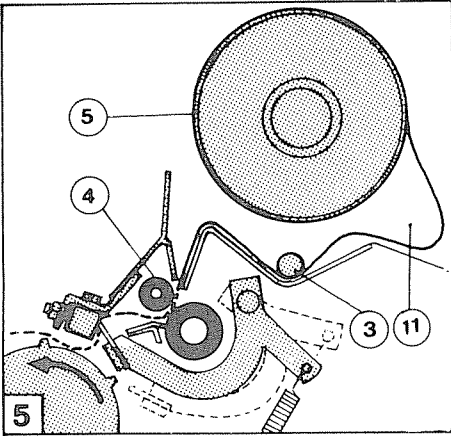
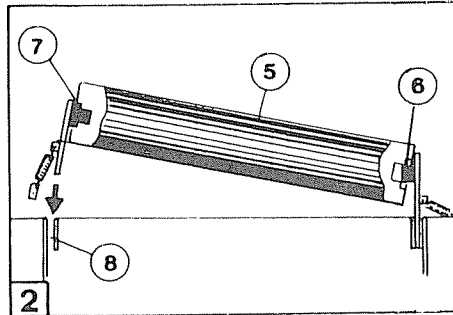
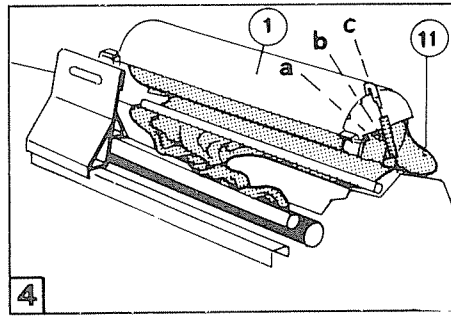
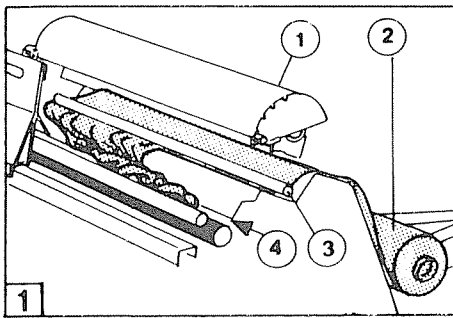
Swing back the lateral distance arms.

### Tripping the net wrapping (fig. 3)

Indicator light (9) on the PilotBox starts to flash and the buzzer sounds to warn the operator that the preset bale density will soon be reached. Only if the indicator light lights up permanently and the audible warning starts to buzz at intermittent intervals, the driver should stop the tractor and press push button (3) on the PilotBox to trip the net wrapping process.

### Attention!

Voltage required for operation of net wrapping mechanism: 12 V.



## Installing the net roll

**Fig. 1:**

Disengage the cover (1) and remove.  
Lay the roll on the drawbar (2).  
Pull the end of the netting under the guide bar (3) gather, twist and press it over the intake roller (4).

**Fig. 2 and 3:**

Slide the roll (5) into the fixed left-hand bearing (6) then with the right-hand bearing inserted engage it in the guide slot (8).  
For wider net rolls remove the spring bush (9) and turn flange (10) round.  
Replace the bearing and secure with spring bush. Lubricate each time a new roll is fitted.

**Fig. 4 and 5:**

So that the net is grasped firmly by the intake roller it must be inserted so that:

- In the area (11) it is loose and bulky
- In the area in front of the intake roller it is gathered into the middle and pushed into contact with the intake roller.

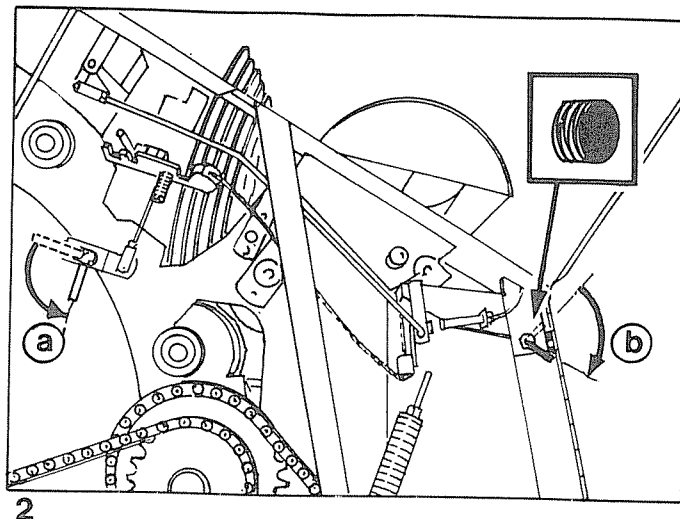
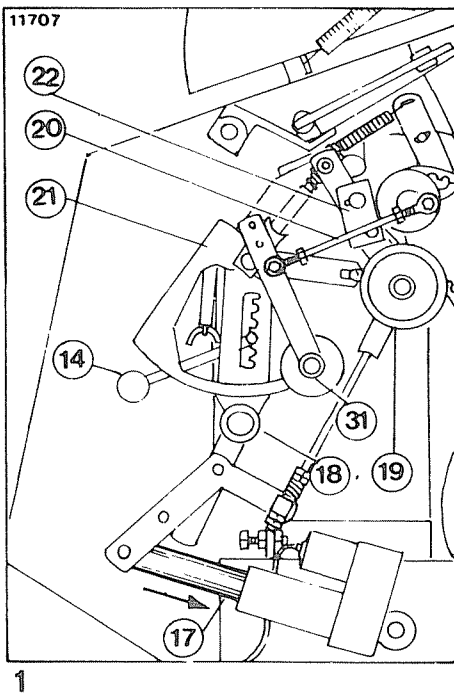
Replace the cover (1). Lock the springs on both sides into one of the slots (a, b or c).

### **IMPORTANT!**

If the tension springs are hooked into different slots there is a possibility that after it is cut the netting may decelerate unevenly. The spring tension must be chosen so that as the netting slows down it sags and adopts the form (11) depicted in the diagram.

Normal settings are as follows:

- large rolls (a)
- small rolls (b)



## Net wrapping adjustment

The number of wrappings round the completed bale can be pre-selected with the stop lever (14).

Setting the lever in the bottom detent gives  $1\frac{1}{4}$  turns while the top position gives about  $3\frac{1}{2}$  turns.

The number of turns required depends on the type of crop material.

### The net wrapping process

When the push-button is pressed the lifting motor (17) runs, tensioning the cutter by means of the trip lever (18) and tensioning the drive belts by means of the tensioning roller (19) before returning to the start position.

In this way the netting in intake roller is driven and the quadrant (21) is moved downwards by the push-rod (20).

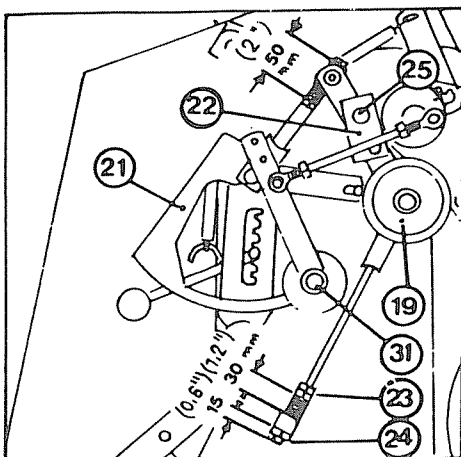
At the end of the quadrant, when the pre-selected number of turns is reached, the cutter is released to cut the netting over its entire width against the cutter bar. Simultaneously, the drive belt is locked by the brake-block (22) bringing the intake roller to a standstill.

If the bale is to be tied with twine instead of net wrapping, it is only necessary to thread the twine as described in the manual, to set lever (a) and toggle switch (b) to the twine binding position (fig. 2) and to swing the lateral distance arms into position.

### Combined net wrapping and twine binding

In special cases where particularly firm and durable binding is required, it is possible to wrap the bale with net in addition to the twine binding. In this case leave lever (a) and toggle switch (b) in the **twine** binding position. A short time after the start of the twine binding process, net wrapping can also be actuated with push button (3) on the controller. **Important!** We recommend that the push button is operated at a time which ensures that the net and the twine are cut as nearly as possible simultaneously.





## Maintenance

The net wrapping equipment is generally maintenance-free. After a long period of service, however, some re-adjustment may be necessary.



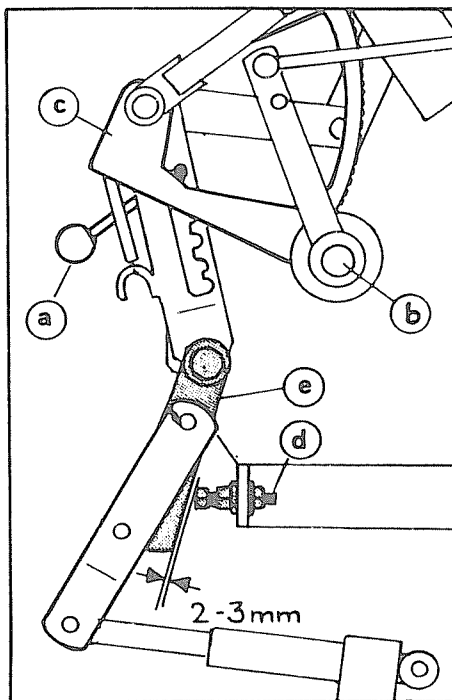
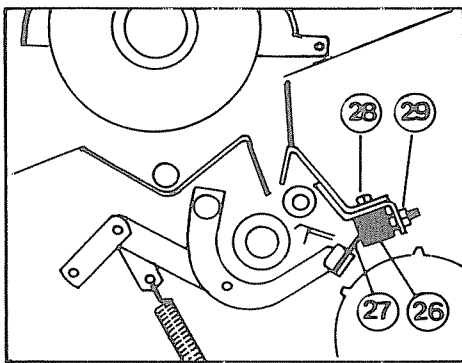
**WARNING!** All adjustments, repairs and maintenance work must only be carried out with the machine stationary. Stop the tractor engine and remove the ignition key.

### Tensioning the V-belts

The tensioning roller (19) for the V-belt can be adjusted by the nuts (23) and (24). Re-tighten lock-nuts. The basic settings are shown in the diagram.

The brake-block (22) stops the netting intake after the netting has been cut.

If the braking effect is insufficient the block (22) can be adjusted by the screw (25). Move the block towards the belt to increase the braking effect on the netting intake roller.



## Setting the cutterbar and anvil parallel

If the cutting of the netting at the end of the wrapping process is incomplete check that the cutterbar (27) and anvil (26) are parallel and adjust if necessary.

- To adjust, loosen those fixing bolts (28) of the anvil which affect the clearance between anvil and cutterbar.
- Move the anvil parallel to the cutterbar (27) by means of the adjusting screws (29).
- Lock the adjusting screws with hexagon nuts.
- Re-tighten the fixing bolts (28).

The cutterbar can be used three times.

The cutting surface must be kept free from paint residues.



### **WARNING!**

Never reach into the cutterbar area as there is a danger of injury.

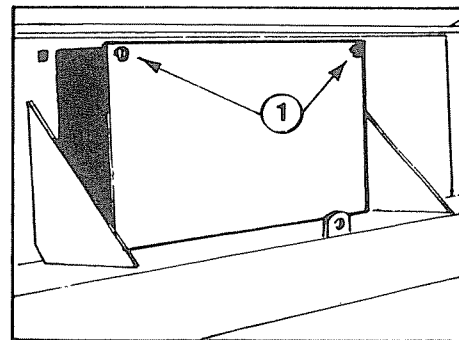
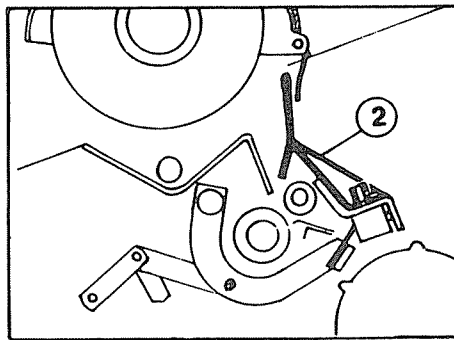
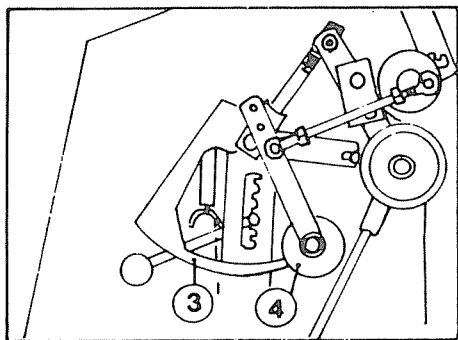
Whenever there is work to be done in the cutterbar area the cutter mechanism must not be cocked.

The following check is recommended: – the quadrant (21) must not rest on the knurled shaft (31).

### **Adjusting the set screw for the lifting motor**

In case of problems with the net wrapping mechanism the set screw may need to be adjusted as follows: –

- Move the stop lever (a) to the top slot
- Switch on the lifting motor so that the quadrant (c) springs up into contact with the knurled shaft (b).
- After the lifting motor switches off automatically, adjust the set screw (d) to give a clearance of 2 – 3 mm from the trip lever (e) and tighten the lock-nut.



## Opening the rear wall of the twine box, removing the baffle deflector.

To clean the netting feed channel the rear wall of the twine box can be removed and lifted out when the locks (1) are unscrewed.

For this purpose and to locate the netting the deflector plate (2) must be removed by gripping it at the aperture provided and pulling it upwards.

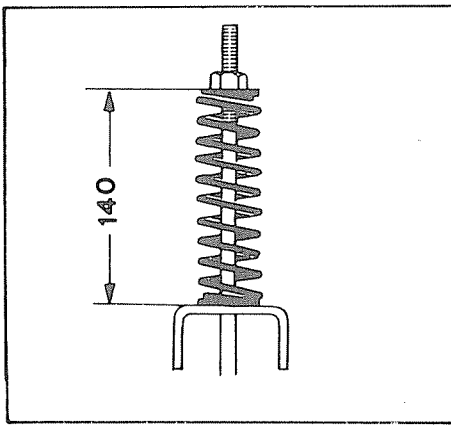
When replacing the deflector ensure that it engages in the spring catches and that the protective cloth lies on the deflector.



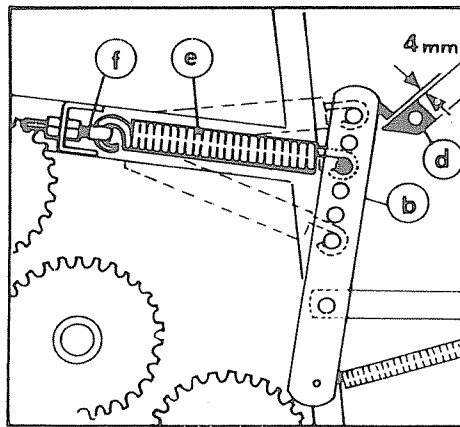
### **WARNING!**

Before carrying out any repairs, maintenance or cleaning, etc., stop the machine, switch of the tractor engine and remove the ignition key.

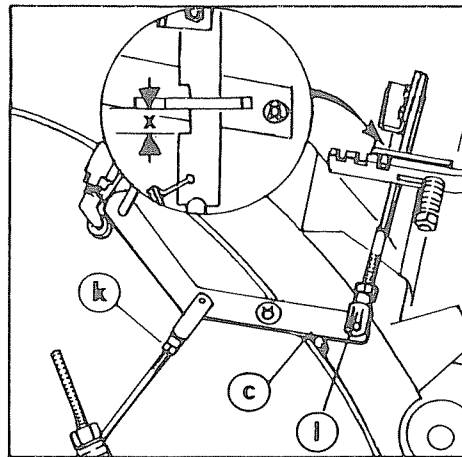
When work is being carried out in the area of the cutterbar, the mechanism must not be cocked. To check this ensure that the quadrant (3) is not in contact with the knurled shaft (4).



1



2



3

## Maintenance of the machine



### WARNING!

Never carry out adjustments, repairs, servicing or maintenance work on the machine while the drive is running. Switch off the tractor's engine, remove the ignition key and wait for the machine to come to a complete standstill before starting work on moving parts.

Move the tail gate stay into the locked position before entering the baling chamber. Take particular care when opening and closing the tail gate. Bystanders must keep clear of the machine!

The prescribed servicing and maintenance operations should always be performed in good time in order to preserve the value of your round baler and keep running costs as low as possible without the need for premature repairs.

### Re-tightening bolts

Re-tighten all bolts and nuts after approx. 20 hours of operation.

### Checking road wheels

Check tightness of wheel nuts and hub caps.  
Check tyre pressures: for both this is 1.5 bar.

### Tensioning drive chains (fig. 1)

All drive chains are spring tensioned. Check tension of chains from time to time, and readjust spring length to 140 mm (5.5") when necessary (see diagram and stickers on the machine).

### Fitting freewheel of binding mechanism drive

In the event of a repair, the freewheel and the parts of the freewheel in the binding mechanism drive must be fitted particular care in order to avoid the risk of damage. Use only KP-F2K multi-purpose grease to pack the binding mechanism drive.

This work is best left to your Deutz-Fahr service shop since it has the experience and all the special servicing tools that may be required in such cases.

### Adjustments for baling pressure and actuating the binding mechanism (fig. 2)

The baling pressure can be adjusted by moving the left and right tension springs. Adjust the length of the tension springs by rotating the eyebolts (f) so that they can be moved without tools to the highest and lowest positions on lever (b) when the tail gate is closed. Both sides must be set to the same position and the locknuts of the eyebolts retightened.

The linkage for the baling pressure indicator and binding mechanism actuation is correctly set when the upper lever (c) abuts against the stop, the distance between the lower lever (d) and adjusting lever (b) is 4 mm and the clearance (x) is 12 mm.

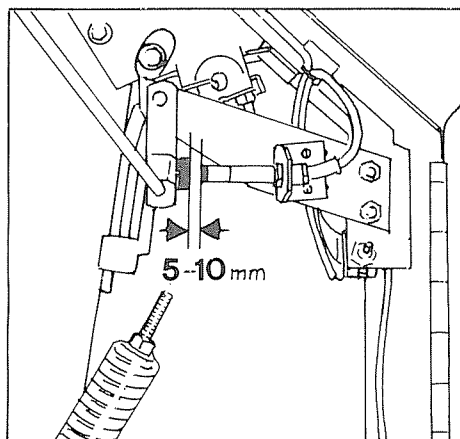
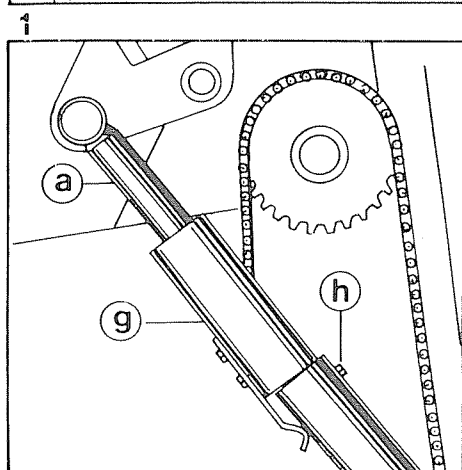
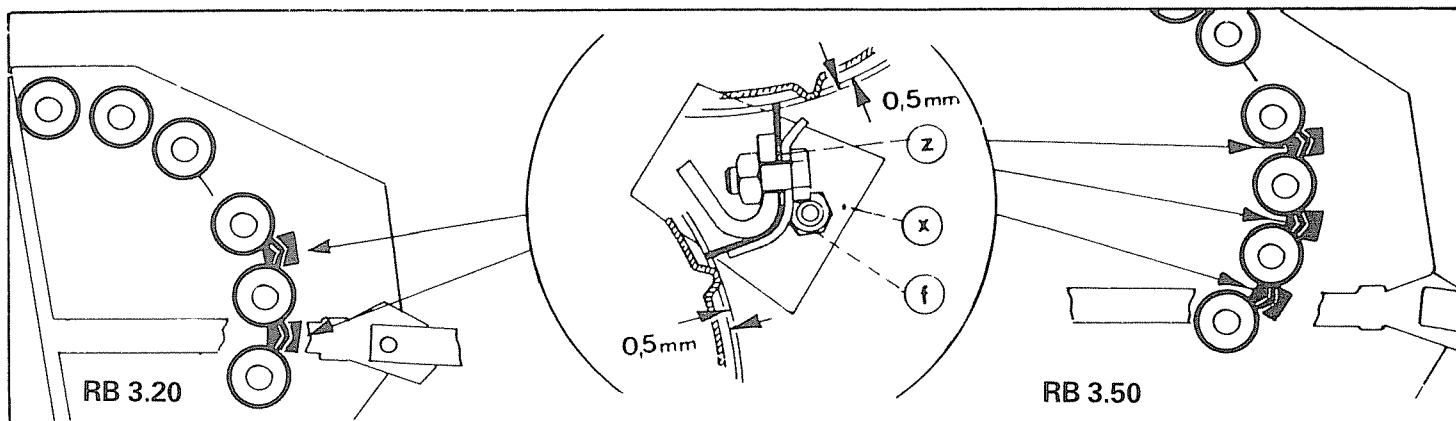
Adjustment for the 4 mm clearance is effected at the clevis (k).

Adjustment for the clearance (x) is effected at the clevis (l) (fig. 3)

### Adjustments for special crops

If, with special crop material, the bale density required to actuate the binder mechanism is not achieved, the clearance may exceptionally be increased from 4 to 10 mm or reduced to 1 mm.

Thereafter it should be reset to 4 mm in order on the one hand to avoid frequent shear pin replacement and on the other to achieve the required firm bales.



## Adjusting strippers

(fig. 1)

To avoid twine emergence from the baling chamber, full-length plastic strippers are fitted in such a way that they lightly touch the rotating rollers over all their width or project into the roller path by max. 0.5 mm (0.02")

**RB 3.20:** 2 strippers (x)  
**RB 3.50:** 3 strippers (x)

The stripper can be adjusted by slackening the bolts (f). Re-tighten the bolts and nuts after carrying out adjustment. For a better fit of plastic strippers, and to avoid deformation when tightening screws, adjusting shims (z) have been inserted between support and clamping strip.

## Bleeding the hydraulic ram for the tail gate

(fig. 2)

The normal total operating time for the tail gate closing process is at most 13 secs, i. e. 8 secs for lowering and 5 sec for locking.

If these times are exceeded the reason may be that there is air in the hydraulic ram (a).

If necessary it should be bled:

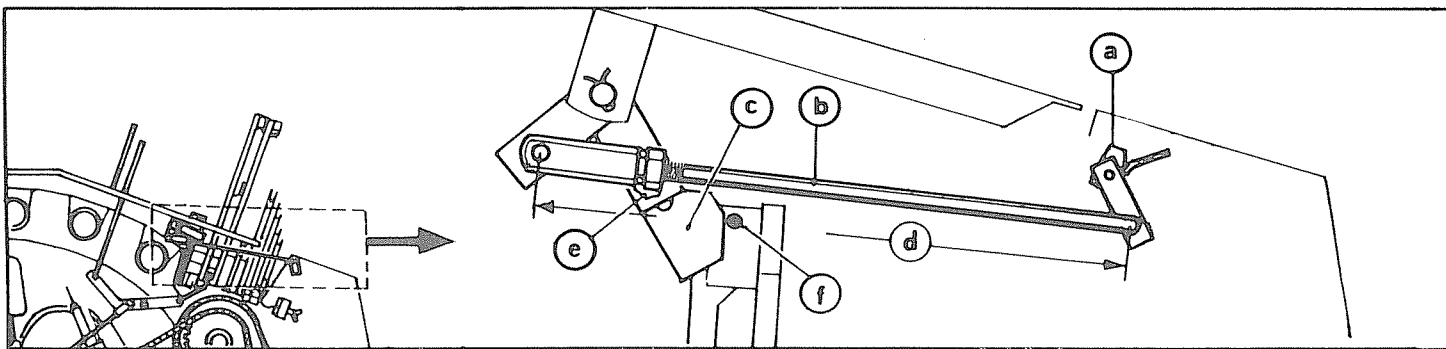
- Open the tail gate
- Secure in the open position with the locking stays
- Unscrew the bleed nipple (h) only by approx. one half-turn to enable air to be bled
- Re-tighten bleed nipples
- Fold away the locking stays
- Close the tail gate

## Adjusting the solenoid switches

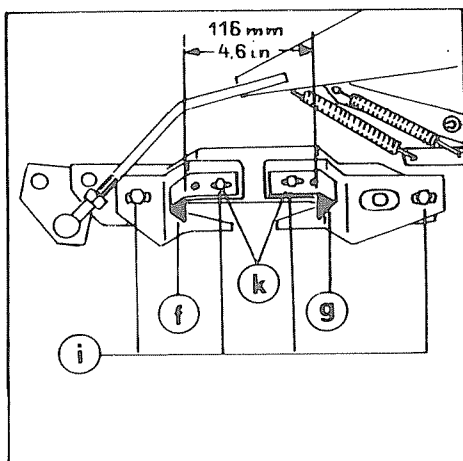
(fig. 3)

There must be a 5 to 10 mm clearance between the solenoid switches and the solenoids. Check this clearance from time to time. Adjustment is possible on the cable connections (screw in or out as required).

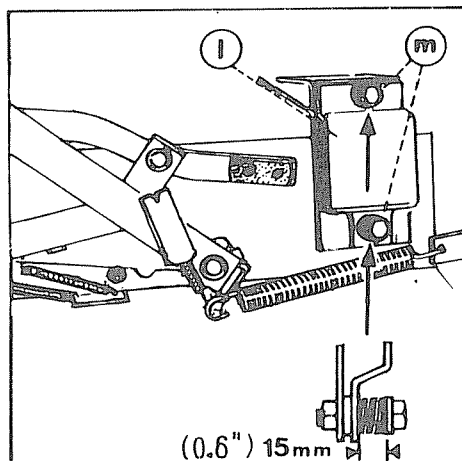
Make sure that the solenoid switches are facing the center of the solenoids. If this should not be the case, the solenoid switches can be moved in the slotted holes of their supports.



1



2



3

## Adjustment of the twine brake

(fig. 1)

When the required bale density has been achieved the pressure actuates the binder mechanism and the twine brake is released by the cam (a) so that the twine can be drawn in freely by the rotating bale.

Insufficient or delayed opening of the twine brake can lead to faulty binding. If necessary adjust the pushrod (b) or the lever (c).

- The pushrod length (d) should be 514 mm for the RB 3.20 and 628 mm for the RB 3.50
- The lever (c) should be set so that after the release of binding the pin (f) is in the position shown in the diagram  
The lever (c) can be adjusted after loosening the nut (e).  
Re-tighten after adjustment.

## Setting twine knives

The knives are adjusted for trouble-free operation at the factory. If readjustment has to be made, e. g. after repair of the machine, proceed as follows:

After each binding operation the twine at the right-hand knife (f) must be cut first, and then that at the left-hand knife (g), but make sure that the time difference is as small as possible.

Adjustment is by the fixing bolt (i).

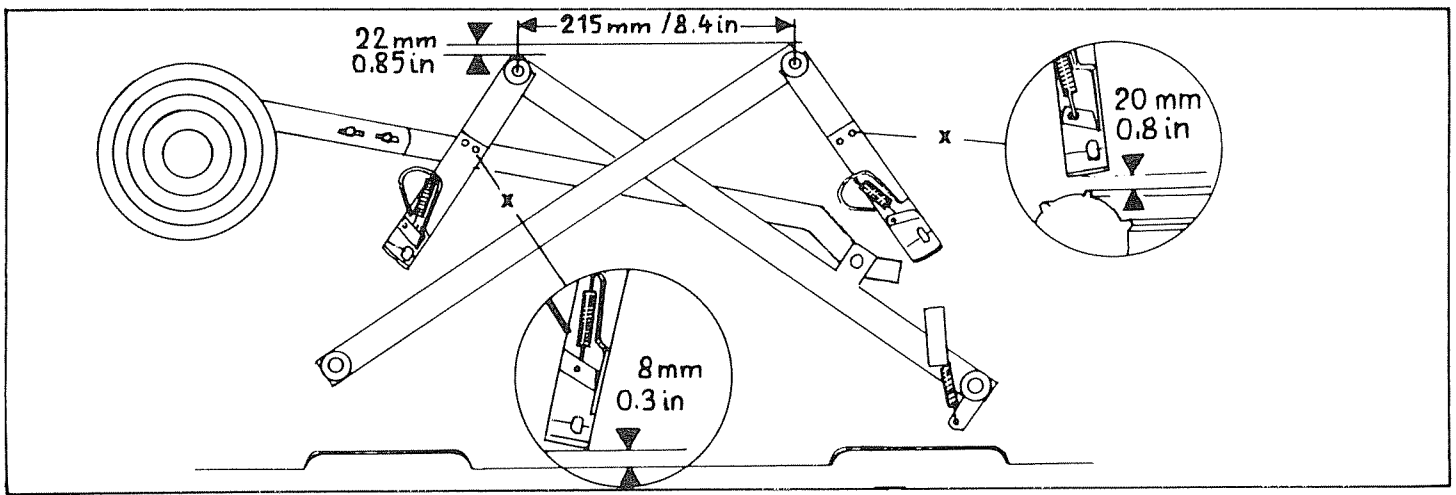
In case of blunt twine cutting knives loosen clamp (k), move knives longitudinally and fix on the next detent or replace knives by new ones.

## Adjustment of swing-arm brake

The swing-arm brake (l) ensures a continuous binding operation and uniformly distributed twine windings round the bale.

In case of irregular jerking movement – particularly in the outer area – readjust swing-arm brake by screws (m).

The standard setting of the spring length is 15 mm.



## Twine shuttle adjustment

After releasing the binding mechanism the left-hand twine shuttle should have a clearance of 8 mm from the compaction rollers and the right-hand shuttle a 20 mm clearance. It is important that the swing arm and shuttle are in the lowest position.

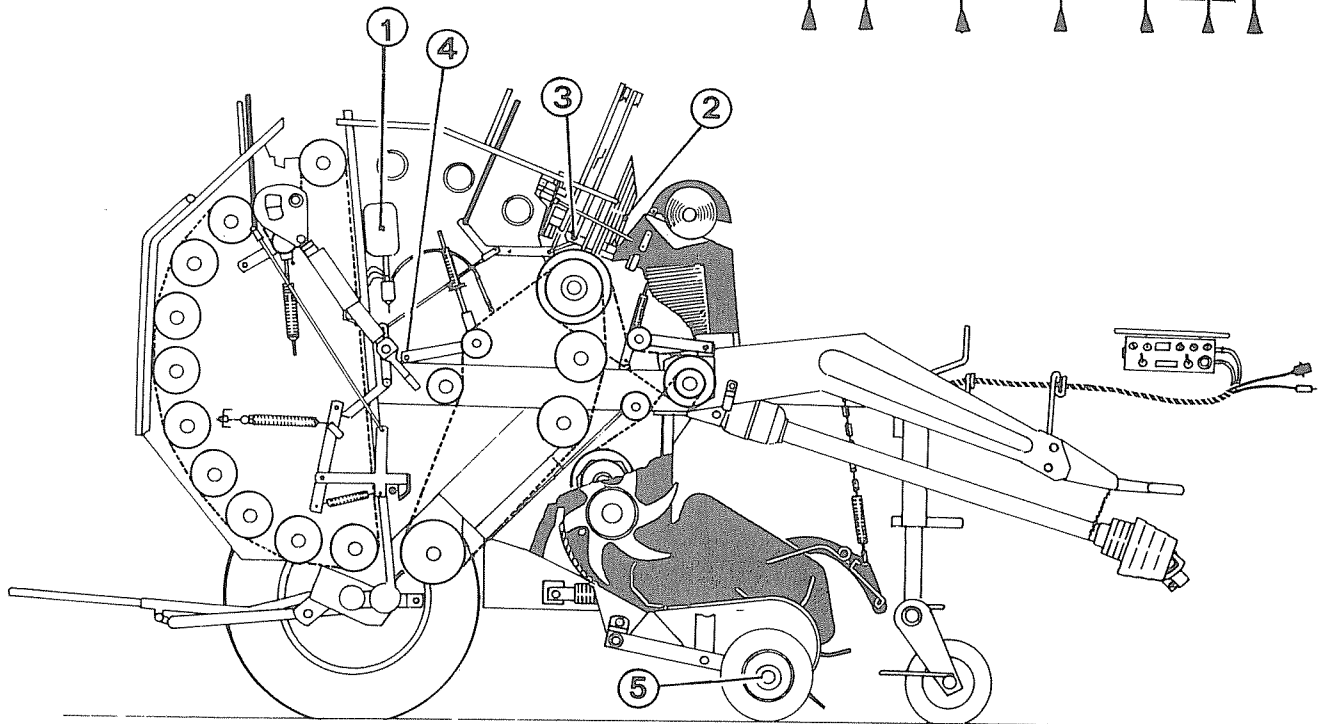
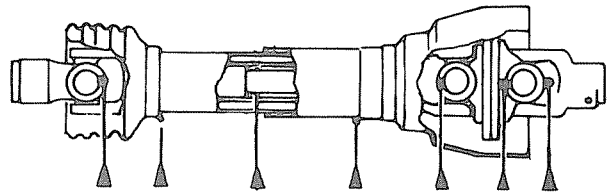
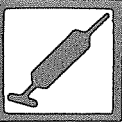
Adjustments are made at the screws (x).

### Adjusting the swing arms

Before threading the twine ensure that the swing arms are in the position shown in the diagram above (z = 215 mm).

The distance (y) should be 22 mm.

Adjustments are made by lengthening or shortening the connecting rod with the screws (y).



## Lubrication schedule

### Lubricating roller chains

All the baler's roller chains must be lubricated at regular intervals. Use chain oil for this purpose.



**WARNING!**  
Never allow chains to run dry!

With the machine at a standstill, open the side guards and lubricate the chains with a brush or oil can. Close the guards and secure them with the twist catches. The central lubrication system, available as an optional accessory for automatic lubrication of the chains considerably reduces the servicing time. Check the level in the reservoir (1) daily and top up with chain oil as required. Adjust the brushes of the central lubrication system so that they touch the chains.

### Greasing

Lubricate the drive shaft, binding mechanism drive (2), binding arms (3), all chain tensioners (4) and the feeler wheel (5) with grease once a week.

Use only clean K 2 k lubricating greases (DIN 51825) e. g. Deutzer oil, HFI 300 W or Shell Retinax A.

Clean grease nipples and the nozzle of the grease gun before starting this work.

### Changing gearbox oil

Change the oil in the gearbox after about 50 hours of operation.

To do this, unscrew the oil filter cap, unscrew the oil drain plug and drain off old oil into a suitable container.

Clean the drain plug and refit it.

Fill up with approx. 0.5 litres SAE 90 gear oil.

Fit filler cap and tighten down securely.

Thereafter change the oil at the end of each campaign.

### Winter storage

Clean down the baler so that it is free from crop residues and dirt.

Clean and relubricate all roller chains.

Grease machine according to lubrication schedule and change gearbox oil.

Allow the machine to run for a brief period.

Inspect machine for signs of wear and damage and rectify as necessary.



## Technical data

### RB 3.20/OC

### RB 3.50/OC

#### Dimensions and weights

Bale diameter	m	1.20	1.50
Bale width	m	1.20	1.20
Pick-up width	m	2.10	2.10
Weight	kg	2000	2280
Power requirement	kW/PS	40/55	48/65
Overall length	m	3.62	3.94
Overall width	m	2.49	2.49
Overall height	m	1.95	2.25
Track width	m	2.01	2.01

#### Hitch

Clevis hitch and swingsing drawbar	●	●
Rotatable hitch eye	O	O
Hitch eye for connection to swinging drawbar	O	O
Hitch eye for automatic pick-up hitch	O	O

#### Transmission

P. T. O. speed 540 r. p. m.	●	●
Wide-angle universal drive shaft single-sided, with cam-type cut-out clutch	●	●
Conversion kit for reduced roller speed	O	O

#### Pick-up

Number of time rows	5	5
Galvanized stripper loops	●	●
Baffle plate	●	●
Hydraulic lift	●	●
2 pneumatic-tyred land wheels	●	●

#### Opticut cutter mechanism

Conveyor drum with offset double tines	●	●
Cutter mechanism including 14 knives, with obstacle protection, hydraulics and cover plates	O	O
Cutting length	mm	70
1 set of spare knives (14)	O	O

#### Baling chamber

Steel rollers with ribbed profile	Number	17	22
Automatic chain lubrication		●	●
Bale ejector		0	0
2 feed slates for intake roller (for smooth crops)		0	0

#### Binding mechanism

TwinFix – automatic double tying system	●	●
Net wrapping	O	O

#### Control and monitoring devices

Pilot-Box T – central electrohydraulic remote control for all hydraulic functions (equipment required on the tractor: 1 single-acting control unit with remote connector)	●	●
Visual and acoustic warning signals	●	●

#### Tyres

11.5/80-15.3 Imp. 10-ply	●	●
15.0/55-17 Imp. 10-ply with inner tube	O	O

#### Lighting equipment

Tail light, stop lights and direction indicators	●	●
--------------------------------------------------	---	---

● = standard

O = optional

## Trouble-shooting

The great variations in operating conditions make it impossible to give general rules to cover all situations. The nature of terrain, density of windrow, condition of the crop, improper handling or poor maintenance can all lead to breakdown. Our service support is available to deal with difficult problems that you cannot rectify yourself. However, you will generally be able to solve most problems with the aid of the following table.



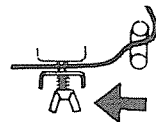
### WARNING !

Always switch off p.t.o. and tractor engine and wait for all moving parts to come to a complete standstill before working on the machine. For example, never attempt to rectify faults in the area of the intake while the machine is running

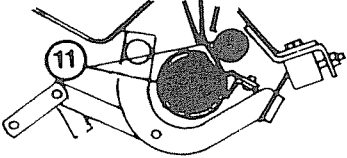
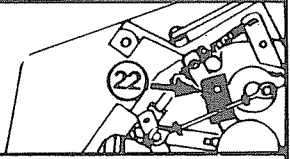
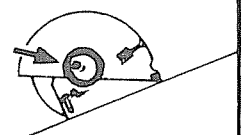
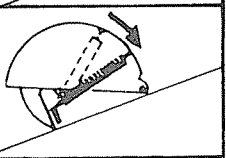
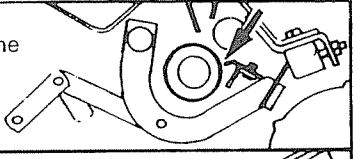
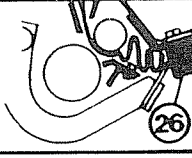
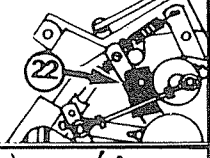
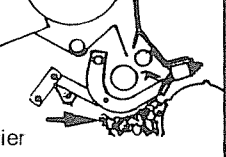
## General troubles

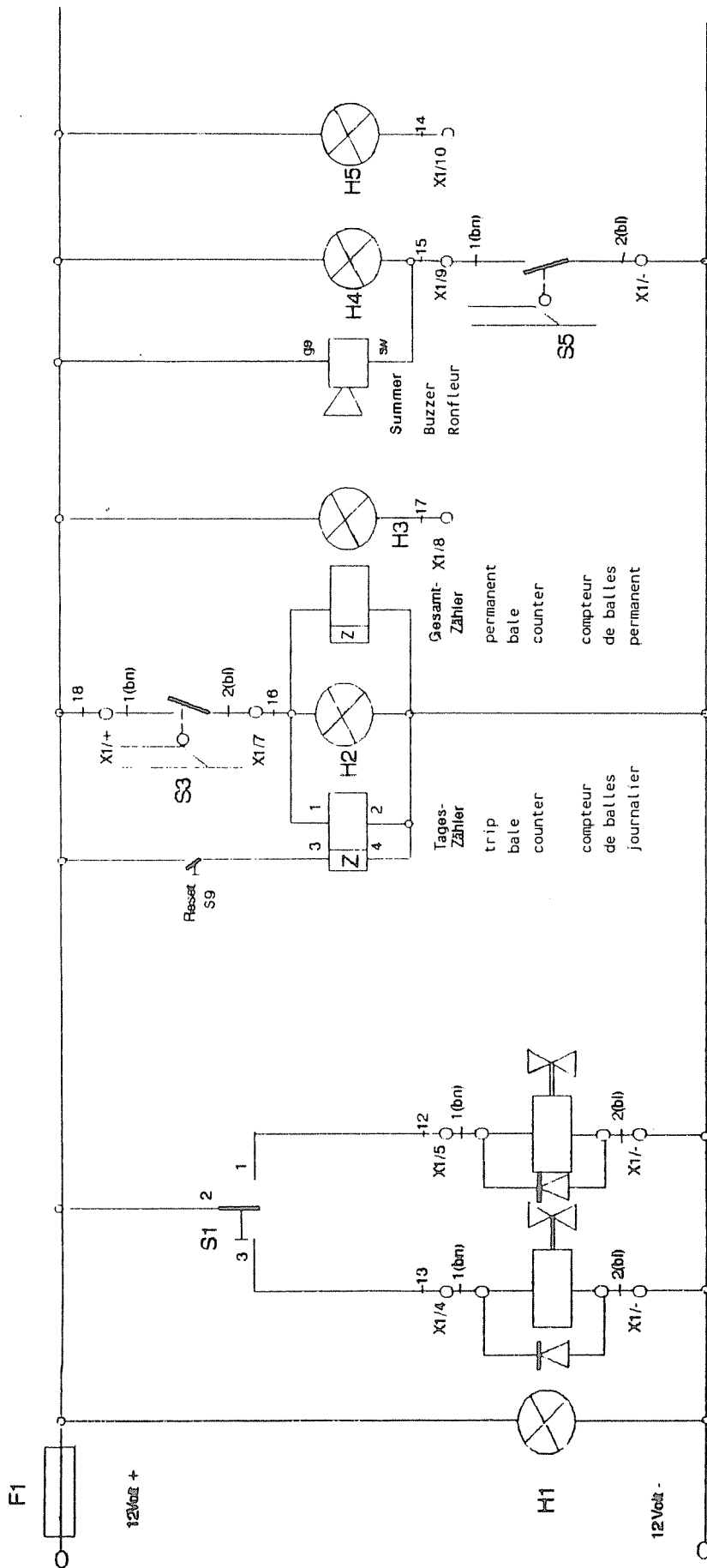
No.	Fault	Possible cause	Remedy	Remarks
1	Inadequate crop clearance	Pick-up not low enough	Adjust height of pick-up	Adjust height of pick-up
		Baffle plate (optional) too high for short crop material	Lower baffle plate	Adjust baffle plate
		Poor adaptation of pick-up to ground contours in uneven terrain	Re-adjust pick-up	Adjust pick-up or feeler wheels for pick-up
2	Fodder jams between pick-up & baling chamber	Travel speed too fast Irregular swaths	Reduce speed until intake operates smoothly	
3	Tailgate opens and fodder drops out of chamber	Tailgate not properly locked	Observe mechanical tailgate lock indicator Hold tractor control for tailgate in "lower" position longer	Lock tailgate
4	Slip between bale and baling chamber – Bale stoppage	Extremely dry and slippery fodder (Barley straw)	Reduce baling pressure	Adjust baling pressure
5	Irregularly shaped bales	Tractor not driven as specified	Follow driving instructions in manual	See driving
6	High crumbling crumbling losses	P.t.o. speed too high in very dry conditions	Work with lower p.t.o. speed (approx 350-450rev/min)	See p.t.o. speed (see also No. 4)
		Travel speed too low	Select higher gear	
		Windrow too thin	Make denser windrows	
7	Stiffness, shear bolt broken in main drive	Baling pressure too high	Change setting	See adjusting baling pressure
		Beginning to slip	Reduce density	See adjusting baling pressure
		Actuation of binding mechanism	Check settings, correct if necessary	See baling pressure and actuation of binding mechanism
		Wrong grade of bolt	Use only original D-F parts	Order as per parts list

## Problems with twine binding

No	Fault	Possible cause	Remedy	Remarks
1	Twine slipping sideways off bales	Irregular bale shape	Correct driving	See driving
		Unsuitable binding for short crop	Do not set windings so near the outer edges of bales	Adjust edge clearances
2	Binding is actuated but does not operate Twine not drawn in	Binding twine not properly threaded	Check twine threading. Twine must hang 200/230 mm from guide arm	See threading binding twine
		Twine brake does not open	Adjust twine brake or pull rod or adjusting lever	Adjust twine brake
3	Binding twine runs out of baling chamber	Scrapers heavily or not properly adjusted	Clean, replace or adjust scrapers	Adjust scrapers
4	Binding mechanism runs sluggishly	Needle bearing tight	Lubricate bearing at grease nipples	See binding mechanism drive
5	Twine from left swing arm poorly cut	Left twine brake not tight enough	Left twine brake - re-set to 3-5 mm	

## Problems with net binding

Fault	Possible cause	Remedy
 <p>Netting wraps round the intake roller (11)</p>	Insufficient braking of V-belt or intake roller	Adjust block (22) 
	Soiled or damaged roller surface	Clean and smooth surface
	Netting roll runs sluggishly on bearing	Grease the left and right netting roll bearings 
	Cover over netting roll too tightly tensioned	Hook the tension springs on the rear detent large roll = back small roll = front 
	Guide (see arrow) too far from the roller	Adjust the clearance of the guide from the intake roller to about 0.3 mm 
 <p>The netting is not drawn in by the bale</p>	Netting jams before the anvil (26) and stops	Adjust block (22). Use the reversing device M 10 screw on the stub 
<p>Net wrapping fails to operate</p>	Lifting motor does not put the quadrant into contact with the knurled shaft (31)	Check electrical installation see wiring
	V-belt too tightly tensioned	Relieve V-belt tension
	Space behind the knife carrier is blocked (see arrow)	Clean the space behind the knife carrier from below 



Garn-Bindung  
Bindung auslösen  
Twine binding -  
tripping the  
binding process  
Liage ficelle -  
déclencher le  
processus de liage

Klappe  
geöffnet  
Tail gate  
opened  
Porte arrière  
ouverte

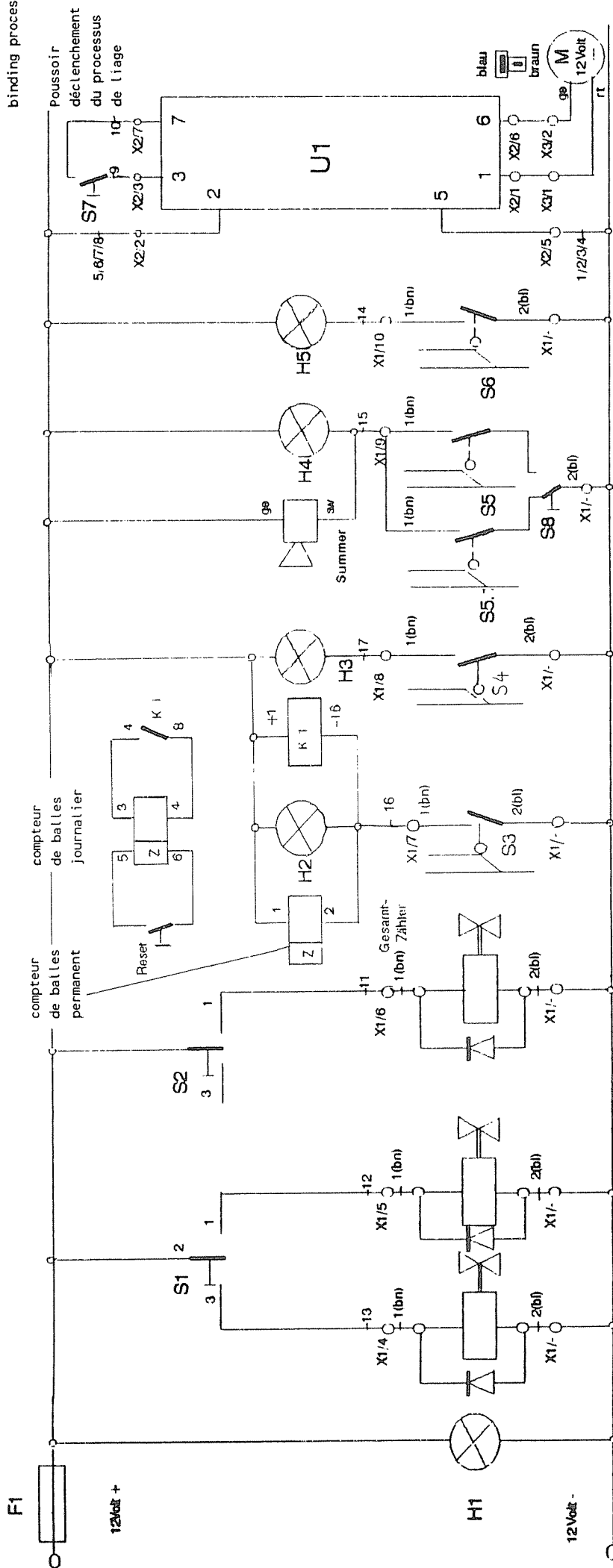
On  
Pick-Up  
heben/senken  
Raising/  
lowering  
the pick-up  
Relever/  
abaiss  
le pick-up  
Klappe  
öffnen/schliessen  
Opening/closing  
the tail gate  
Ouvrir/fermer la  
porte arrière

ohne Zusatzausrüstung  
without optional equipment  
sans équipements complémentaires

PILOTBOX T

Taster  
Bedienung  
auslösen

Push button  
tripping the  
binding process



On	Pick-Up heben/senken Raising/ lowering the pick-up	Klappe öffnen/schliessen Opening/closing the tail gate	Messer ein/aus Engaging/ disengaging knives	Klappe gedfnst Tail gate opened	Messer ausgeschwenkt Knives disengaged	Netz-Bindung Bindung auslösen Net wrapping tripping the binding process	Garn-Bindung Twine binding	Ballenroller unten Bale ejector in lower pos.	Hubspindel Steuerung Lifting spindle control	Hubspindel Motor Lifting spindle motor
	Relever/ abaisser le pick-up	Ouvrir/fermer la porte arrière	Embrayer/ débrayer les couteaux	porte arrière ouverte	Couteaux débrayés	Liage filet déclencher le processus de liage	Liage ficelle	Ejecteur de balles abaissé	Vis de montée commande	Vis de montée moteur

mit Zusatzausrüstung  
with optional equipment  
avec équipements complémentaires

PILOTBOX T





The descriptions in this manual cover all equipment and versions as well as special and optional accessories not normally included as standard equipment.

No claims in respect to the equipment level of machines delivered or to be delivered can be derived from the descriptions contained in this manual.

DEUTZ-FAHR's philosophy is to continuously improve all its products. Therefore, the technical data and illustrations in this instruction manual are not binding and subject to change without prior notice.

In dieser Betriebsanleitung sind alle Ausrüstungen und Varianten beschrieben, wobei auch Sonder- und Zusatzausrüstungen, die nicht zum normalen Lieferumfang gehören, berücksichtigt wurden.

Aufgrund dieser Beschreibung lassen sich keinerlei Ansprüche bezüglich der Ausstattung von gelieferten oder zu liefernden Maschinen ableiten.

DEUTZ-FAHR-Maschinen werden ständig weiter entwickelt. Die technischen Angaben und Abbildungen in dieser Betriebsanleitung sind daher unverbindlich und Änderungen vorbehalten.

Cette "Notice de fonctionnement" décrit toutes les versions et variantes disponibles en tenant compte également des options et accessoires qui ne font pas partie de la définition normale de cette machine.

La présente description ne permet pas de déduire des droits à un certain équipement des machines livrées ou à livrer.

Les machines "DEUTZ-FAHR" subissent une évolution constante. Les indications techniques et illustrations données dans cette "Notice de fonctionnement" s'entendent donc sans engagement et sous réserve de modifications.





0295 3159 · 11.92 · WI

**DEUTZ  
FAHR**

**DEUTZ-FAHR  
LANDMASCHINEN-  
VERTRIEBS GMBH**