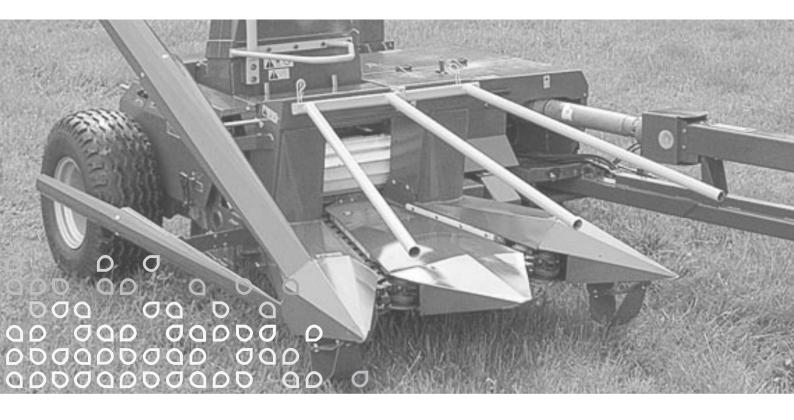
# Maize Unit 2 rows



### Directions for use

"Original instructions"

GB

Edition: I Ausgabe: Edition: I Udgave: **X02** 



# FOREWORD

#### DEAR CUSTOMER

Congratulations! You have just purchased a Corn Attachment, optional item of simple operation and maintenance of the FCT 1050 and FCT 900 machines.

We thank you for your choice of an attachment really suitable to your needs and made by a company that continuously searches for the improvement of its products.

This manual presents instructions referring to JF 1802 Z10 attachments, for correct operation, preventive maintenance and the procedure whenever you need technical assistance. Therefore, it is important to read the safety measures and all the other instructions enclosed in this manual carefully before operating the attachment for the first time.

In the event of any doubt, please contact any of our Authorized Dealers or our Sale Department. We shall be very pleased to help you whenever you need our assistance.

As Kongskilde Industries A/S wishes to constantly improve the technical standard in order to meet the requirements to a modern farm machine, the company reserves the right to make changes or improvements in the design or construction of any part without incurring the obligations to install such changes on any unit previously delivered.

We recommend you to keep this instruction manual so that it can be supplied with the machine in case it is sold later on.

FOREWORD	3
1. INTRODUCTION	6
SAFETY	6
Definitions	
When operating the attachment	7
When maintaining the attachment	9
2. ATTACHMENT PRESENTATION1	
COMPONENTS IDENTIFICATION1	
RUNNING1	
RUNNING1	
TECHNICAL SPECIFICATIONS1	2
3. ATTACHMENT PREPARATION1	
ASSEMBLY AFTER RECEIPT1	
Side deviator1	
Crop guard installation1	
CONNECTING THE ATTACHMENT TO FCT 1050 OR FCT 9001	
connection of Attachment1	
ASSEMBLY OF THE SPRINGS OF THE FLOATING SYSTEM1	
ASSEMBLY OF THE SPRINGS OF THE FLOATING SYSTEM	
Assembly of the transmission system1	
Disconnecting procedure1	
TRANSPORT AND WORKING POSITION1	
Procedure for transport position1	
Placing the attachment in working position	7
4. ADJUSTMENTS TO START OPERATING	
PTO SPEED1	
HARVEST GROUND SPEED1	
SPEED CHANGE OF THE GATHERING CHAINS	
Transmission gear change1	9
SIDE DEVIATOR ADJUSTMENT	
Adjustment	
ADJUSTMENTS ON THE FCT 1050 OR FCT 900	
FLOATING SKIDS ANGLE ADJUSTMENT	
FLOATING SKIDS ANGLE ADJUSTMENT	
Procedure:2	1
5. DESCRIPTION OF THE OPERATION	2

### Contents

6. MAINTENANCE INSTRUCTIONS	24
GREASE LUBRICATINGS POINTS	24
Recommended grease	24
GATHERING CHAINS MAINTENANCE	24
GATHERING CHAINS MAINTENANCE	25
TENSIONING	25
Procedure	25
Chain lubrication	
REPLACEMENT OF THE GATHERING CHAINS' PLASTIC BARS	26
Replacement procedure	26
MAINTENANCE OF CHAINS	
Play adjustment	27
Cleaning and lubrication	
REPLACEMENT OF THE SHEAR BOLTS OF THE DRIVE GEAR	
REPLACEMENT OF THE CUTTING KNIVES	28
ATTACHMENT STORAGE	
ATTACHMENT STORAGE	
MAINTENANCE BETWEEN HARVEST SEASONS	
Main items to be observed are:	
When you come back to work, observe the following items:	30
7. PROBLEMS AND SOLUTIONS	31
8. TECHNICAL ASSISTANCE	32
ATTACHMENT SERIAL NUMBER	

# **1. INTRODUCTION**

### SAFETY

The safety of persons and machines is an integral part of JF's development work. **We wish to ensure the safety of you and your family in the best possible way**, but this also requires an effort on your part. However, damage can occur as a consequence of misuse and insufficient instruction.

A Corn Attachment cannot be constructed in such a way that it guarantees the full safety of persons and at the same time performs an efficient piece of work. This means that it is very important that you as user of the machine pay high attention and use the machine correctly and thereby avoid exposing yourself and others to unnecessary danger.

The machine demands skilled operation, which means that <u>you should read the</u> <u>instruction manual before you connect the machine to the tractor</u>. Even though you have been driving a similar machine before, you should read the manual - this is a matter of your own and other persons' safety!

This is also the reason why you should **never** leave the machine to others before you have made sure that they have received the necessary instructions how to operate the machine correctly.

#### DEFINITIONS

The safety decals and the instruction manual of the machine contain a line of safety notes. The safety notes mention certain measures, which we recommend you to follow as to increase the personal safety as much as possible.

We recommend that you take the necessary time to read the safety instructions and inform your staff to do the same.



In the instruction manual this symbol is used where there are factors directly or indirectly of importance in regard to personal safety.

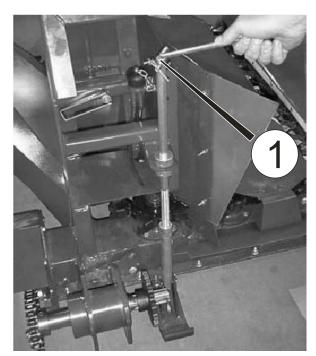
- **CAUTION:** The word CAUTION is used to ensure that the operator follows the general safety instructions or the measures mentioned in the instruction manual to protect himself and others against injuries.
- **WARNING:** The word WARNING is used to warn against visible or hidden risks, which might lead to serious personal injuries.
- **DANGER:** The word DANGER is used to indicate measures which, according to legislation, must be followed to protect oneself and others against serious injuries.

#### WHEN OPERATING THE ATTACHMENT

- 1 Avoid grease, oil or dust building up on the attachment.
- 2 Never feed the equipment manually.
- 3 Never attempt to adjust or repair components with the attachment in movement.
- 4 Do not start the equipment without the protecting covers.
- 5 Never get close to or operate the attachment wearing loose clothes or long hair as it might get caught by moving mechanisms.
- 6 Never allow unskilled people to operate the attachment or the tractor.
- 7 Do not allow children or other people to get close to the attachment when it is in operation or movement.
- 8 Never replace transmission gears with the attachment turned on.
- 9 Do not start or stop the engine with the PTO running.
- 10 Stand jack (1): Lower it to disconnect the attachment and do not forget to lift it back to operate again.







- 11 Be aware of the correct operation and maintenance of the attachment. Before using it for the first time, make sure the operators have seen this manual and are well instructed.
- 12 Always keep the attachment in perfect condition.
- Connection of the attachment should take place on flat and even ground to ensure safe and easy procedure.
- 14 In narrow passages, make sure there is enough width to pass without interference.
- 15 Never stay in front of or put your hands in the delivery chute when the attachment is turned on.
- 16 Only use tractors duly dimensioned for the attachment.
- 17 Never remove the decals from the attachment.
- 18 Remove the plates and protecting covers if necessary, but never work without them.
- 19 Always operate with the correct PTO speed (540 or 1000 rpm), according to the attachment standard.

Over speed means serious risks to your safety.







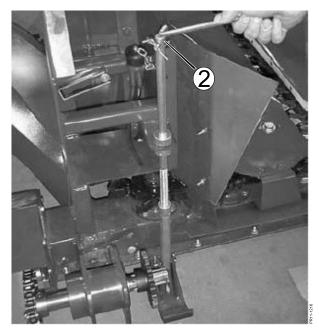
- 20 Mainly when you work on inclined or uneven ground, take all cautions to keep the directional steadiness and stability of the tractor, such as:
  - Use tractor's correct ballast.
  - Always adjust the speed according to the conditions.
  - Whenever you go down, use the same speed you would use to go up. Join the brake pedals.
  - -.When driving uphill with the tractor, never drive in sideward direction, but always straight upwards.

# WHEN MAINTAINING THE ATTACHMENT

- 1 Attachment must be turned off for any type of maintenance.
- 2 When disconnecting the attachment, always lower the stand jack (2) and lock it.
- 3 Observe the right types and amounts of the recommended lubricants to lubricate the different components.



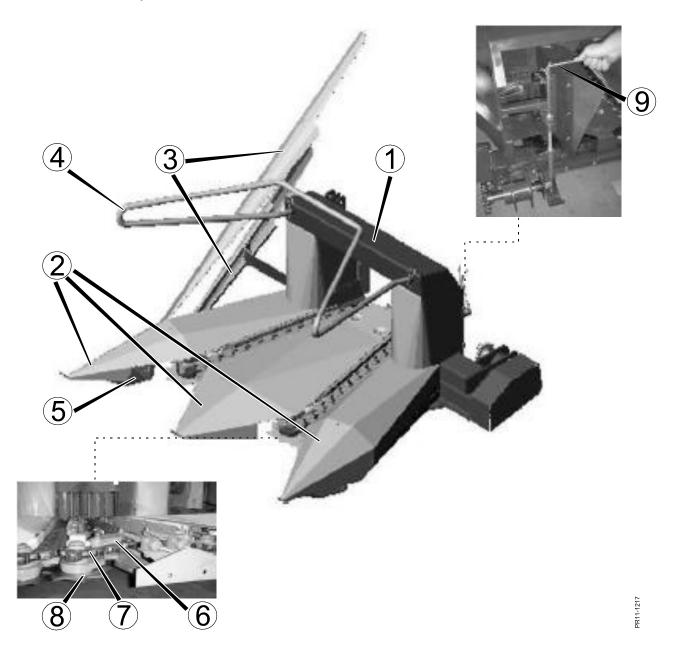




# 2. ATTACHMENT PRESENTATION

### **COMPONENTS IDENTIFICATION**

- 1 Main attachment
- 2 Aligning tips
- 3 Side deviator
- 4 Crop guide
- 5 Floating skids
- 6 Chain stretchers (7)
- 7 Gathering chains
- 8 Cutting knives
- 9 Stand jack



#### RUNNING

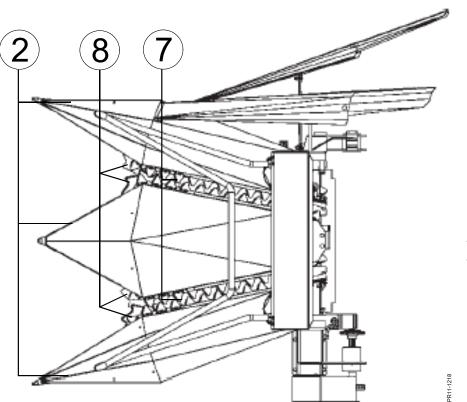
CAUTION: Whenever the terms "right" and "left" are used, it is considered the tractor's operating cab reference point.

The aligning tips (2) guide the crop, allowing the knives (8) to cut the plants. The gathering chains (7) grab and pull the plants to the feeding cylinder of the FCT 1050 or FCT 900.

From this point on, the harvest functions are carried out by the FCT 1050 or FCT 900 and are described in the specific manual.

The gathering chains (7) and the knives (8) have four speeds, through one gear change.

Chain lubrication is carried out with oil, through a centralized dosage unit.



Product inlet into the feed rollers of the FCT 1050 or FCT 900.

Front: crop inlet in two lines.

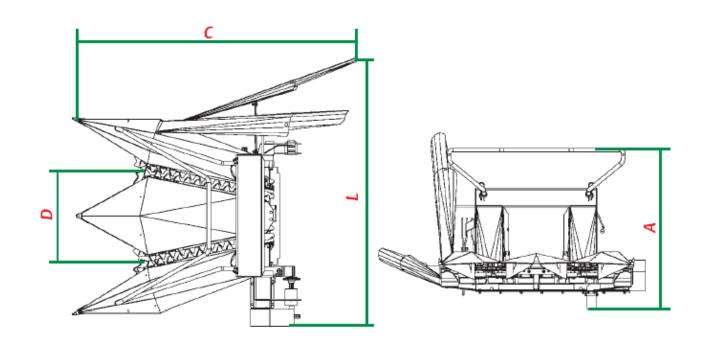
### **TECHNICAL SPECIFICATIONS**

Traction and drive Tractor required power Approximated weight Row capacity by gathering Space between rows PTO rotation Dimensions

C (length2L (width)2A (height)1D (Distance between rows center)7

Tractor Min.: 90 hp (66 kW)/ Max.: 120 hp (88 kW) 402 kg 2 rows From 70 to 90 cm 540 or 1000 rpm See drawings bellow

2341 mm 2195 mm 1159 mm 754 mm



# **3. ATTACHMENT PREPARATION**

### ASSEMBLY AFTER RECEIPT

Carry out the assembly on flat and even ground Assemblies to be carried out are as follows:

#### SIDE DEVIATOR

It aims to protect the plants from the right hand-side wheels.

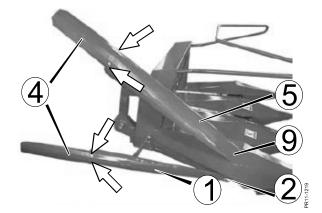
To install it:

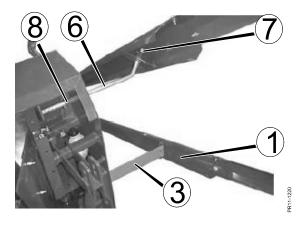
- a) Begin by the deviator (1) fastening the bolt (2).
- b) Fasten the plate (3) with four bolts.
- c) Assemble the extenders (4), fastening them with four bolts in the places indicated by the arrows.
- d) Fasten the bar (5) in the deviator (6), locking it with the pin (7).
- e) Fasten the other end of the bar (6) in the attachment according to illustration and lock it with the pin (8).
- f) For adjustment procedure see page 20.

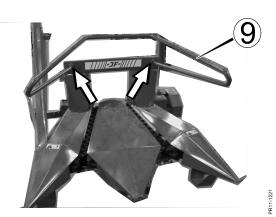
#### **CROP GUARD INSTALLATION**

Install the crop guard (9) for any crop.

Fasten it with the two "R" type pins, in the places indicated by arrows.





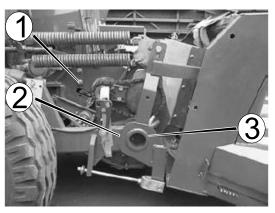


### CONNECTING THE ATTACHMENT TO FCT 1050 OR FCT 900

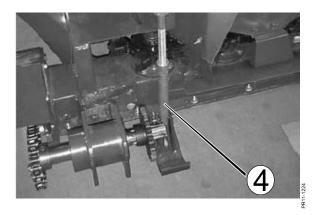
#### **CONNECTION OF ATTACHMENT**

- a) The connection must be done with machine and attachment on levelled ground.
- b) Dismount protective hoop (17) on FCT 900/1050. Slowly get the machine (1) close, aligning the clamps (2) with their respective connection points (3).
- c) Using the jack stand (4), adjust the height of the toggle-points (3) in a such way to put them in the clamps (2) height.
- d) Machine (1) must be approximated in aligned way, avoiding attachment dragging, what could damage the jack stand (4).



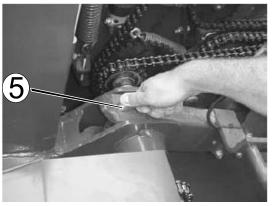


R11-1223

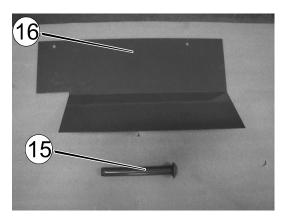


- e) Conclude installing the pins (5) in both sides and fastening the limiting rod (6) together with the stop (15).
- NOTE: The rod (6) and lowering stop (15) serves to limit the height in which the attachment must be when the springs' tensioning cylinder (7) is driven. The lowering stop (15) serves to limit when the attachment is lowered. (A maximum lowering security). See also description on page 16.

Replace guard (18) on FCT 1050 or FCT 900 with guard (16).

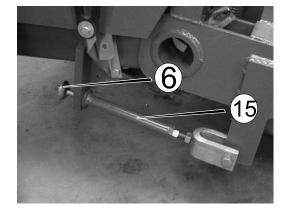


PR11-1225



PR11-1229

PR11-1264





PR11-1230

# ASSEMBLY OF THE SPRINGS OF THE FLOATING SYSTEM

The purpose of the springs (7) is to prevent the attachment weight from falling on obstacles as blocks, stones, etc.

- a) The attachment must be placed on firm ground. The plate (8) that fastens the springs (7) must be fastened to the attachment structure with the pin (9).
- b) Raise the attachment with the cylinder (12) so that it does not collide with the feed rollers and adjust the limiting rod (6) page 14.
- c) Lower the attachment completely (cylinder (12) in floating position). Adjust the springs (7) (counter clockwise (10)). Adjust the maize unit to the wanted stubble height so that the ground pressure is 0 kg. Adjust the stop (15) page 14 so that the attachment can go maximum 5 cm below the intended working height.
- e) Check the right tensioning according to procedure below.
- f) Test the attachment floating, trying to lift the central tip with your hands, as indicated by arrow. If you can not do it, increase the spring (7) tension, turning the shaft (10) counter clockwise, till you get the correct adjustment.
- g) Finish adjusting attachment.

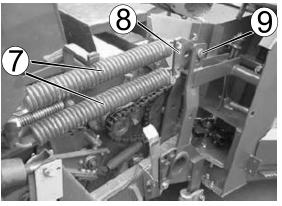
# ASSEMBLY OF THE TRANSMISSION SYSTEM

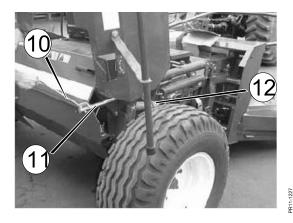
Position the chain (13), in the transmission gear (14).

Make the chain tensioning described in the FCT 1050 or FCT 900 Manual.

#### **DISCONNECTING PROCEDURE**

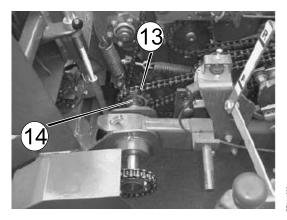
Follow the procedures in reversed way to disconnect the attachment.











PR11-12

Note:

Take care to use the stand jack (4) correctly. Page 14.

### **TRANSPORT AND WORKING POSITION**

WARNING: When you are not harvesting, avoid driving with the attachment in working position.

#### PROCEDURE FOR TRANSPORT POSITION

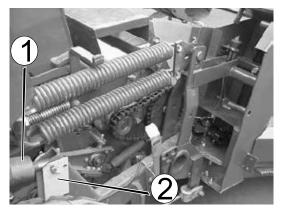
On a levelled ground, drive the cylinder (1) of the floating system springs to lift the attachment up to the maximum.

WARNING: Place the protecting gutter (2) in the cylinder (1) and mount the safety guard (3) when it is driven.

#### PLACING THE ATTACHMENT IN WORKING POSITION

Remove the protecting gutter (2) and lower the attachment to working position.







PR11-1232

# 4. ADJUSTMENTS TO START OPERATING

### **PTO SPEED**

During operation, the PTO speed must be constant at **540 or 1000 rpm**, according to your attachment configuration.

Refer to the FCT 1050 or FCT 900 Manual for guidance.

### HARVEST GROUND SPEED

Tractor correct ground speed is one of the factors that directly influences the attachment production and the triturated fodder quality.

About that, also refer to FCT 1050 or FCT 900 Manual.

### SPEED CHANGE OF THE GATHERING CHAINS

Gathering chains speed can be from 0 to 100% higher than FCT 1050 or FCT 900 ground speed.

Once the ground speed has been defined, check whether the chains are with the proper speed:

- Plants dropped forward indicate the speed is too low.
- Plants pulled out indicate over speed.

The gathering chains (1) have four options of rotation, set by the gear change (2, next page). See in the table the ratio gear and proportioned rotations:

**WARNING:** These four gears are free and are included in the table of the items that come along with the attachment on page 19.



Number of teeth of the gear (2)	Chains Speed (1)	
18	3 15 km/h <sup>o</sup>	
21*	12 km/h <sup>o</sup>	
25	10 km/h <sup>o</sup>	
30	9 km/h <sup>o</sup>	

\*Gear assembled in the factory <sup>o</sup>Depends on adjusted chopping length

**CAUTION:** See the section on chopping length in the instruction manual for FCT 1050 and FCT 900.

PTO speed

#### TRANSMISSION GEAR CHANGE

- a) Loosen the tension of the chain (3) according to description in the FCT 1050 or FCT 900 Manual.
- b) Remove the "R" pin (4) and remove the gear (2).

Replace it by the gear that provides the desired rotation, according to previous

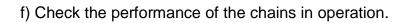
table.

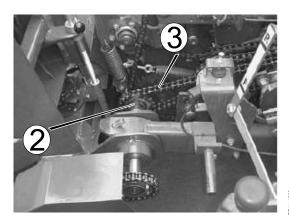
Note: With the gear diameter change, the chain length must also be changed, changing the amount of supplementary links - see table.

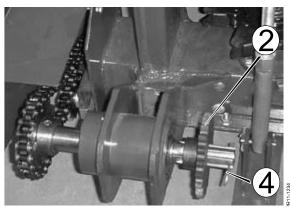
Number of teeth	Additional required	
of the gear (2)	splices	
18	8 No additional links	
21*	1 additional link	
25	2 additional links	
30	4 additional links	

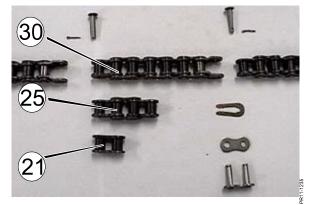
\*Leaves the factory assembled

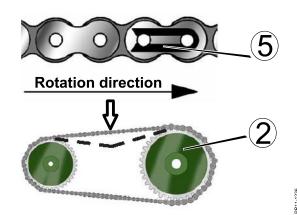
- c) Remove the clamp (5) to open the chain and check its length. Add or remove splices (or additional links) according to the selected gear (2); see previous table.
- d) Assemble the chain with the correct amount of links, observing the following: the clamp (5) must be put in such a way that the opening is to the opposite side of the rotation direction - see the figure.
- e) Adjust the chain play, in such a way that the deflection in the indicated point is around 5 mm. Stretch the chain (3) according to description in the FCT 1050 or FCT 900 Manual.











### SIDE DEVIATOR ADJUSTMENT

The deviators (1) and the extender (2) are used in case there is need, depending on the crop size and the distance between the rows.

They prevent the front wheel from dropping the plants of the adjacent row.

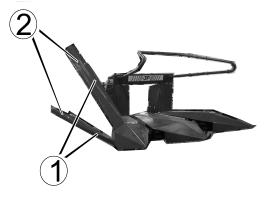
#### ADJUSTMENT

Top deviator (2) is the one that can be adjusted.

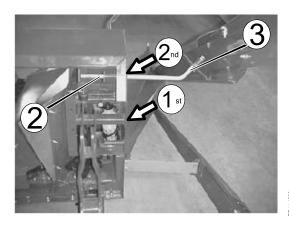
There are two holes in the right side of the attachment, which allow height adjustment:

- 1st Hole Position for large size plants.
- 2nd Hole Position for medium size plants.

Remove the pin (2) from the bar (3), and shift the bar to the selected hole.



R11-1237



### ADJUSTMENTS ON THE FCT 1050 OR FCT 900

Adjust the following items according to need and according to description in the FCT 1050 or FCT 900 Manual.



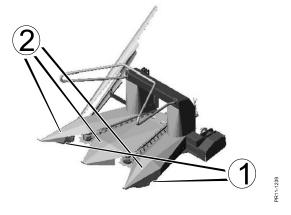
### FLOATING SKIDS ANGLE ADJUSTMENT

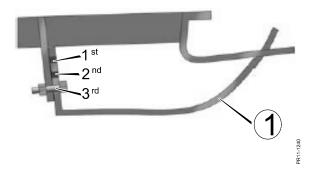
The function of the skids (1) is to prevent the aligning tips (2) from penetrating in the ground.

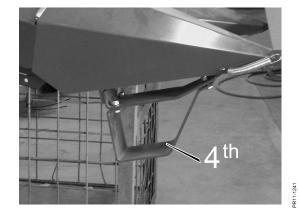
- 1<sup>st</sup> **Position:** Higher aligning tips. Used for more uneven ground and/or soft soil.
- 2<sup>nd</sup> Position: Aligning tips in an intermediate point from the ground. Used for intermediate situations.
- 3<sup>rd</sup> **Position:** Lower aligning tips. Used for even and/or harder ground.
- 4<sup>th</sup> Position: Gives a higher stubble height.

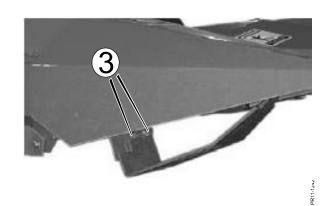
#### **PROCEDURE:**

- a) On flat and even ground, use the auxiliary hydraulic system to lift the attachment.
- b) Loosen the bolts (3) of both skids (1) and select the position.
- c) Retighten the bolts (3).









# **5. DESCRIPTION OF THE OPERATION**

In order to have no doubt concerning the attachment operation, it is presented step by step.

- WARNING: 1 It is up to the operator to fit these procedures to his reality.
  - 2 Be aware of all the safety measures before operating the attachment for the first time –see page 6.



1 - Before starting the attachment, check all the harvest conditions (see in the FCT 1050 or FCT 900), attachment preparation and initial adjustments.

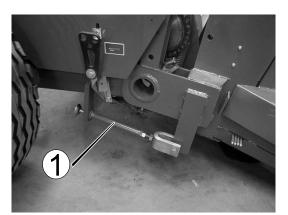
See the attachment preparation and adjustments from page 14 on.

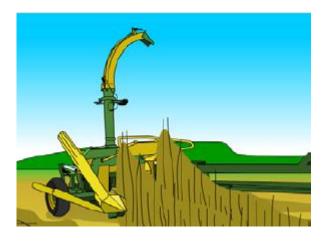
2 - It is recommended to carry out a preventive test before moving to the field, in the following way:



- a) Place the attachment at 15 cm from the ground.
- b) Start PTO and check the attachment running for one minute.
- c) Place the attachment in transport position according to page 17.
- 3 On a levelled ground, place the attachment in working position according to page 17.
- 4 Keep the delivery chute and chute flap correctly guided to the cart, coupled to the drawbar or at side.
- Note: Guidance must be done in such a way that the cart loading occurs from the rear to the front. Besides, turning the procedure easier, it helps to compact the load.

- 5 Through the hydraulic lifting, set the right attachment height, according to the desired lifting height and by the rod (1) adjusted length.
- 6 Begin the harvest, aligning the attachment aligning tips on the lines to be harvested, with the PTO rotation and ground speed adjusted.
- WARNING: Do not overload the attachment or the tractor. Reduce the harvest speed whenever there is need.
  - 7 During operation, concentrate your attention on the front wheels of the tractor. This will make it possible to avoid occasional obstacles such as stubs, stones or channels.
  - 8 Movements: always observe carefully the proximity of the cart or the trailer wagon.
  - 9 Always leave the field with the attachment in transport position.
- 10 Always keep the attachment in a dry place and protected from bad weather after every working day.







# 6. MAINTENANCE INSTRUCTIONS

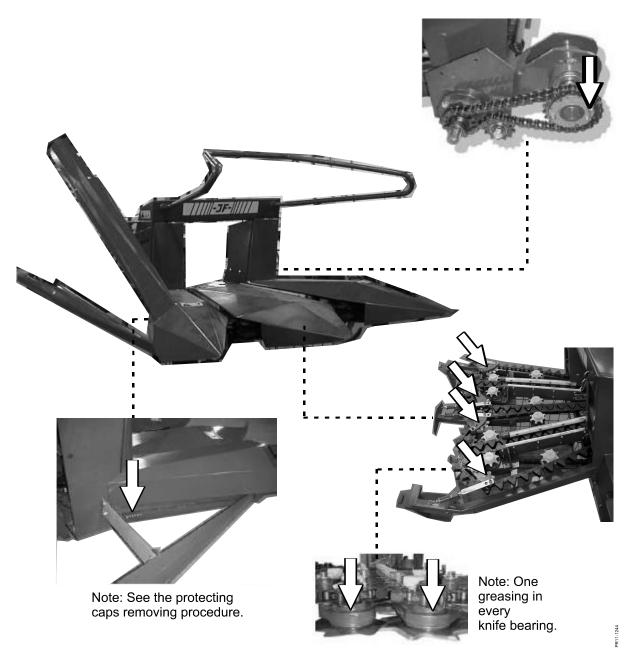
### **GREASE LUBRICATINGS POINTS**

Use the recommended grease at all points indicated by arrows. Use a greasing pump.

#### **RECOMMENDED GREASE**

Use grease of god quality.

Attachment grease points Lubricate every 2 hours at the indicated points.



### **GATHERING CHAINS MAINTENANCE**

### TENSIONING

The tensioning of the gathering chains (1) must be done at the following intervals:

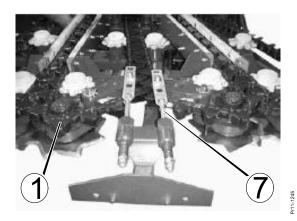
First tensioning: after the first 10 hours.

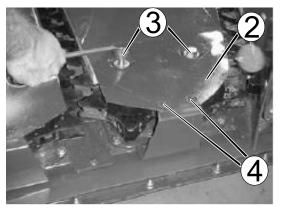
The other tensionings: after every 50 hours.

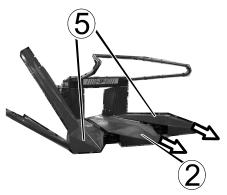
#### PROCEDURE

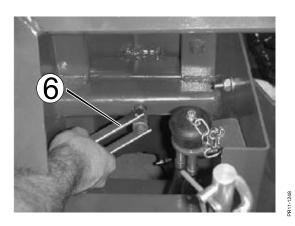
1st stage - Protecting plates removal

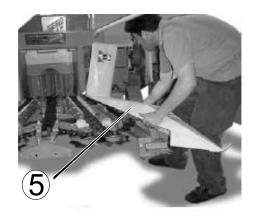
- a) The attachment has an adjusting rod(7) for each chain (1). To accessthem, remove the plates (2) and (5).
- b) Remove the plate (2) removing the bolts (3) and (4). Pull the plate in the arrow direction.
- c) To remove the plates (5), loosen them turning the lever (6), in both sides. Remove pulling them forward.











Pr11-1247

1-1246

R11-1237a

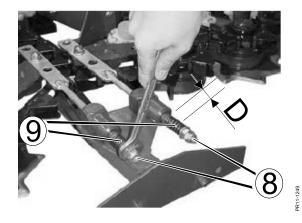
#### 2nd stage - Chain tensioning

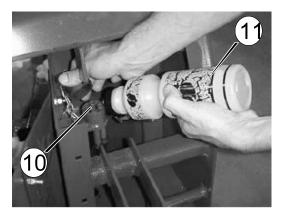
- d) Turn the nuts (8) clockwise to tension the gathering chains.
- IMPORTANT: The springs (9) of all the adjusting rods must have the same length (D), of 10 to 15 mm.
- e) Carry out a little test on the chains putting the tractor PTO in action. Check the chain tension. Correct, if necessary.
- f) Mount the protecting plates again.

#### **CHAIN LUBRICATION**

Every two hours of operation, fill the lubricators (10), of both sides, with the oil held in the plastic bottle (11).

That bottle must be filled up whenever there is need, with SAE 90 oil or any other type of oil specially made for chains.





### REPLACEMENT OF THE GATHERING CHAINS' PLASTIC BARS

The function of the bars (1) is to align the movement of the gathering chains. They must be replaced when they show excessive wear, that is, bar thickness is less than 2 mm.

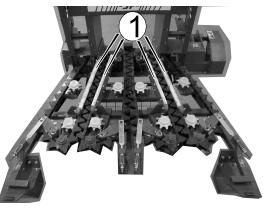
#### REPLACEMENT PROCEDURE

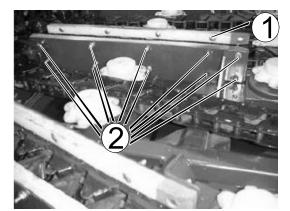
## 1st stage – Removal of protecting plates

a) See procedures on the previous page.

#### 2nd stage – Removal of bars

- NOTE: Use original bars.
- b) Replacement is made removing all the bolts (2), in all bars of the attachment.
- c) Mount the protecting plates again.





### **MAINTENANCE OF CHAINS**

#### PLAY ADJUSTMENT

A chain working with improper play, besides suffering a premature wear, causes noise and can escape from the gears.

The play of the chain (3) must be from **3 to 5 mm** in the point indicated by the arrow (opposite side to the adjusting rod).

Remove the cover (1) through the bolts (2) to access the chain (3).

Move the adjusting gear (4) according to need and re-tighten the bolt.

NOTE: The chain (5) adjustment is described in the FCT 1050 or FCT 900 Manual.

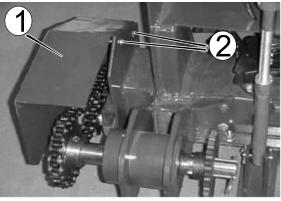
#### **CLEANING AND LUBRICATION**

Keep the chains clean. Whenever needed, wash them with a brush and kerosene or diesel oil. After that, dry them with compressed air or natural drying.

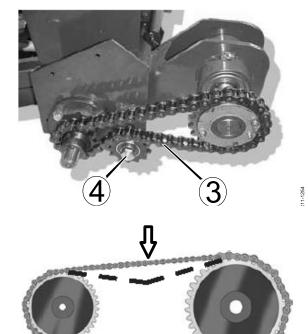
Apply a thin SAE 90 or 140 transmission oil coat.

If available, use a lubricant especially intended for chains (grease in spray). It provides more efficient lubrication between the pins and rollers of the chains.

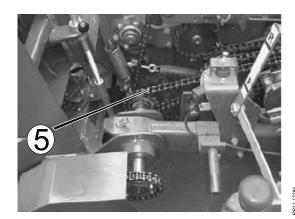
NOTE: Do not use ordinary grease in the chain, as it does not penetrate in the links and pins.











PIGB-102X-02 Maize Unit - 2 row 0610

### REPLACEMENT OF THE SHEAR BOLTS OF THE DRIVE GEAR

Replace the shear bolts (1) in case of breakage.

Note: Attachment JF 1802 has only one fuse pin (1).

It is a M8 x 30 bolt, Class 8.8.

### REPLACEMENT OF THE CUTTING KNIVES

Change the knives (1), located according to side arrow indication, when they present excessive wear as lack of sharpness or breakages.

Note: always change the knives in pairs.

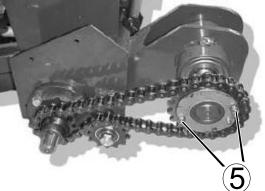
Remove the knives, removing the bolts (2).

When mounting the new knives, the torque setting recommended for the bolts (2) is **80 Nm**.

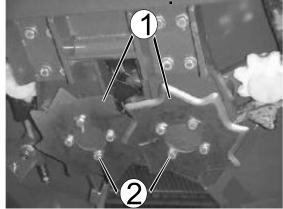
The clearance "D" between the discs must be 0,2 to 0,6 mm.

WARNING: Observe the side of the knife assembly: their flat face must be one on the other, according to illustration.

Check, turning by hand, with the drive chain removed, that there are no contact points. In case there are some contact points, use the supplied spacers to adjust the clearance.

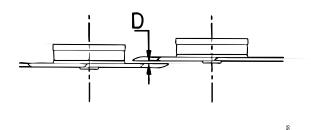








311-12548



### ATTACHMENT STORAGE

Correct storage is as important as preventive maintenance. Such care basically consists of protection of the attachment against bad weather and corrosive effect of some products.

After you have ended the harvesting works take the cares below, aiming to preserve workability and prevent future unnecessary maintenance:

- Remove all product waste that remained inside the attachment.
- Wash the attachment carefully. After that, allow it to dry in the sun.
- Retighten the nuts and bolts in general.
- Remake the painting where needed.
- Lubricate all the grease points mentioned on page 24.





- Very important: always keep the attachment in a dry place, protected from sun and rain. Without this care, there is no preservation.

### MAINTENANCE BETWEEN HARVEST SEASONS

When the attachment is not in use for a long period, some maintenance is required to get a longer useful life.

#### MAIN ITEMS TO BE OBSERVED ARE:

- Keep the attachment in a protected place.
- The attachment must be disconnected from the machine.
- Bear in mind that the period between harvest seasons is the best time to make preventive maintenance and, with that, to prepare for the next harvest.

#### WHEN YOU COME BACK TO WORK, OBSERVE THE FOLLOWING ITEMS:

- Retighten the nuts and bolts in general.
- Lubricate the points indicated on page 24.
- Check the adjustments for operation described from page 18 in this manual.
- If possible, make a full revision in a JF dealer or authorized workshop.



# 7. PROBLEMS AND SOLUTIONS

Problem	Causes	Solution
	Excessive speed of gatherer chains.	Check the proper speed instruction in the table on page 18.
Blockage of the machine	Tractor excessive speed.	Control the tractor speed according to the harvester intake volume.
	Gathering chain is often loose.	See gathering chains tension adjustment procedure.
Machine does not gather the	Cutting knife can be dull.	Replace the cutting knife
product.	Safety pin can be broken.	Replace the pin.
	Tractor PTO speed is lower than recommended.	See recommended rotation on page 12 or 13.
Excessive noise	Hardware (nuts and bolts) can be loose.	Retighten them.
	Product wound around the gathering chains return.	Clean and lubricate the gathering chains.
	Excessive working speed.	Reduce the speed.
Low efficiency at cutting.	Cutting knife can be dull	Replace it.
	Tension spring is not correctly tensioned.	Replace it.
Gathering chain is often loose.	Self-locking nut incorrectly fastened or loose.	Tighten or replace it.
	Lock-nut missing in the adjusting rod.	Replace it.
Harvester wheel is squashing the next row.	Product deviator is out of adjustment.	Adjust it according to page 20.

# 8. TECHNICAL ASSISTANCE

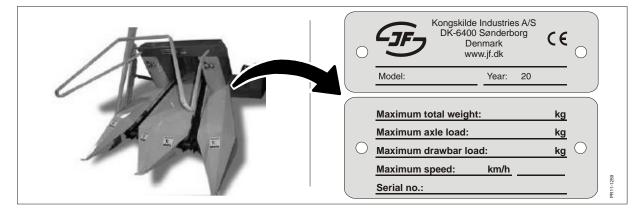
### ATTACHMENT SERIAL NUMBER

The attachment is identified through its Serial Number, located on identification plate.

Write down here the Serial Number of your attachment.

Whenever replacing parts, always use JF original items. Only original spare parts are made according to the drawings, materials and specifications with great quality control.

Whenever sending communication, or requesting help from JF Technical Assistance, always let us know the serial number and model of your machine that are on the identification plate.



### WARRANTY

**Kongskilde Industries A/S**, 6400 Sønderborg, Denmark, hereafter called **"Kongskilde"**, grants warranty to any buyer of new JF machines from authorised JF-dealers.

#### The warranty covers remedy of material and production faults. This warranty is valid within a year after date of sale to end-user.

- The warranty is invalidated in the following cases:

- 1. The machine has been used for other purposes than those described in the instruction manual.
- 2. Improper use.
- 3. Damage caused by external sources, e.g. lightning or falling objects.
- 4. Insufficient maintenance.
- 5. Transport damage.
- 6. The construction of the machine has been modified without Kongskildes written permission.
- 7. Unskilled repair of the machine.
- 8. Unoriginal spare parts have been used.

Kongskilde cannot be held responsible for loss of income or legal claim as a result of faults either of the owner or of a third party. Kongskilde is also not responsible for wages beyond current agreements in connection with replacement of warranty parts.

Kongskilde is not responsible for the following costs:

- 1. Normal maintenance such as expenses for oil, grease and minor adjustments.
- 2. Transport of machine to and from workshop.
- 3. The dealer's travelling expenses or freight charges to and from the user.

Warranty is not granted on wearing parts unless it can clearly be proved that Kongskilde has committed a fault.

The following is regarded as wearing parts:

Protective canvases, blades, blade suspensions, shearbars, guide shoes, stone protections, discs, rotor skirts, crimper parts, tyres, tubes, brake shoes, chain tightener parts, guards, hydraulic hoses, conveyors, wheel-fixing bolts and nuts, snap rings, sockets, PTO-shafts, clutches, gaskets and seals, tooth belts, V-belts, chains, sprocket wheels, carriers, conveyor chain slats, rake- and pick-up tines, rubber seals, rubber paddles, cutter blades, wearing plates and lining for spreading platform, shredding blades incl. bolts and nuts, spreading rotors and vanes for farmyard manure spreaders.

In addition, the user must note the following:

- 1. The warranty is only valid if the dealer has undertaken pre-delivery check and has given instruction to the end user in the use of the machine.
- 2. The warranty cannot be transferred to others without Kongskildes written permission.
- 3. The warranty can be nullified if the repair is not undertaken immediately.



