



fantini

SUNFLOWER HEADERS USE AND MAINTENANCE INSTRUCTION MANUAL

Read this manual carefully and thoroughly before the use and maintenance operations of your header. Store the manual in a safe and secure place for future reference.

For any question related to this manual contact your distributor or visit the website: www.fantinisrl.it



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Introduction

>> IMPORTANT

BEFORE STARTING ANY OPERATION ON THE HEADER, OPERATORS AND TECHNICIANS SHOULD CAREFULLY READ THE USE AND MAINTENANCE INSTRUCTION MANUAL (AND ITS APPENDICES) AND FOLLOW THEM THOROUGHLY.

All sunflower headers must be accompanied by the Use and Maintenance Instruction Manual. This manual has been written to facilitate use and maintenance tasks in conditions of absolute security.

The owner should make sure that each operator reads this manual and understands each part of it.

Store the manual in a safe and secure place for the entire productive life of the header until the machine is dismantled and disused. If the header is sold, transfer the manual and all its attachments (electrical and hydraulic drawings, etc.) to the new owner.

All the instructions contained in this handbook are **Fantini S.r.l.** exclusive property. They cannot be copied, disclosed, used, registered, filed, reproduced, altered or sold to third parties without **Fantini S.r.l.** authorized permission.

It is responsibility of the owner to ensure that the operator reads and understands the manual in all of its parts.

Fantini S.r.l. is confident of your satisfaction and remain at your complete disposal for any further assistance and cooperation.

Fantini S.r.l. wish you a pleasant work!

THE TERMS “HEADER” AND “MACHINE” ARE USED AS SYNONYMOUS IN THIS HANDBOOK AND ESCLUSIVELY REFER TO THE SUNFLOWER HEADER.

01. General Information

This instruction manual refers to:

HEADER MODEL:

DESIGNATION OF SERIES OR TYPE:

YEAR OF PRODUCTION:

This manual contains general information about headers transport, lifting, installation, maintenance, storage, scrapping and disposal.

THE OFFICIAL LANGUAGE OF THIS HANDBOOK IS ITALIAN.

As per Machinery Directive 2006/42/CEE, the original instructions in Italian will accompany any translation upon specific request.

Fantini S.r.l. will not have any liability in case of improper use of the machine due to:

- Inaccurate use and/or use carried out by not trained or unskilled personnel;
- Non-compliance with relevant legislation;
- Incorrect installation;
- Combine power defect;
- Serious maintenance defect;
- Unauthorized modifications or interventions;
- Use of unoriginal or of non-specific spare parts;
- Total or partial unobservance of the instructions;
- Exceptional events.

The purpose of this manual is to provide assistance to the user. It also represents a valid tool to guide the operator in the use of **Fantini S.r.l.** machines, to improve their performances, to work in safety conditions and to guarantee a perfect maintenance .

>> Fantini S.r.l. remind you that this document should be stored in a safe place all the time.

This handbook cannot compensate for operators technical skills gaps or intellectual deficiencies. It is therefore advisable that operators possess the minimum competency level required for the use and maintenance of the product.

For obvious reasons, the instructions provided in this handbook cannot be exhaustive. It is assumed that operators of the machine be in possession of relevant skills and know-how to perform the proper activities and be at the same time prepared to face any eventuality.

02. Compliance Requirements

This manual has been written in conformity with the Machinery Directive **2006/42/CEE**, together with the requirements defined by the following norms:

UNI EN 12100:2010: Safety of machinery. Basic concepts, general principles for design.

UNI EN 14121-2:2010: Safety of machinery. Risk Assessment. Part 1: Principles.

UNI EN 4413:2012: Safety of machinery – Security requirements about systems and their components for oleohydraulic and pneumatic transmissions. Oleohydraulics.

UNI EN 349: Safety of machinery – Minimum gaps to avoid crushing of parts of the human body.

UNI EN 13857: Safety of machinery – Safety distances to prevent hazard zones being reached by upper and lower limbs.

The manual is also in conformity with the European Directives 89/391/CE, 89/655/CE, 89/656/CE, and their modifications and integrations.

03. List of Appendices

The following documents are delivered with the header together with the Use and Maintenance Instruction Manual:

- Electric drawings
- Spare parts catalogue
- EC declaration of conformity
- General security manual



04. Handbook Recipients

This document and the relevant appendices are addressed to operators who perform different specialized tasks related to:

- Handle/transport
- Lift
- Use
- Maintenance
- Repair
- Demolition

As this document cannot be exhaustive and cannot compensate for professional deficiency of operators, it is advisable that the users possess the technical competence required to carry out their tasks.

For general safety information prescriptions, read the attached section: Sunflower Headers General Safety Precautions and Hazard Protection.

For any further clarification or instruction required, operators can liaise directly with **Fantini S.r.l.** or with the relevant authorized distributor. In any case, it is necessary that the operator:

- has a **complete awareness of what he is doing** and has the professional specific experience to carry out the manoeuvre he is about to take;
- **has adequate capability and training;**
- **does not act in a deliberately harmful way.**

05. Operator Skills

Council Directive 89/391/CEE on the introduction of measures to encourage improvements in the safety and health of workers at work, states that:

- **the workers designated must have the necessary capabilities and the necessary means**
- **the external services or persons consulted must have aptitudes and the necessary personal and professional means**

It is therefore essential that operators have adequate knowledge or experience to guarantee their safety and the safety of those who liaise with them. Furthermore they also have to use the machine with the best possible care.

Wherever user and owner of the machine are not the same person, the owner must

ensure that the operator has appropriate skills and training to carry out his tasks.

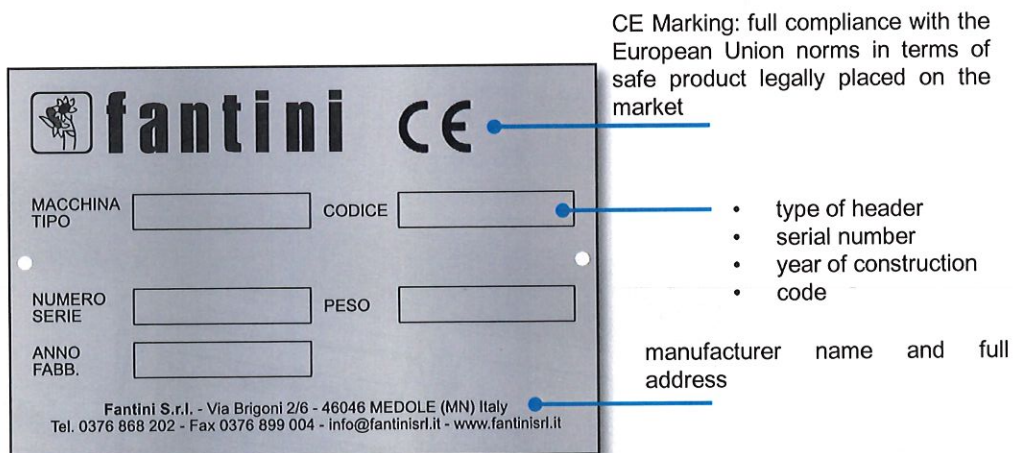
The staff operating this machine must receive a specific professional training. This is not required for personnel with direct experience on the combine.

Fantini S.r.l. is available to supply any technical information, training and additional documentation that may ease the task of the operators.

Council Directive 89/391/CEE concerning the minimal prescription in the safety and health of workers at work requests the staff to wear appropriate personal protection equipment (PPE).

06. Marking

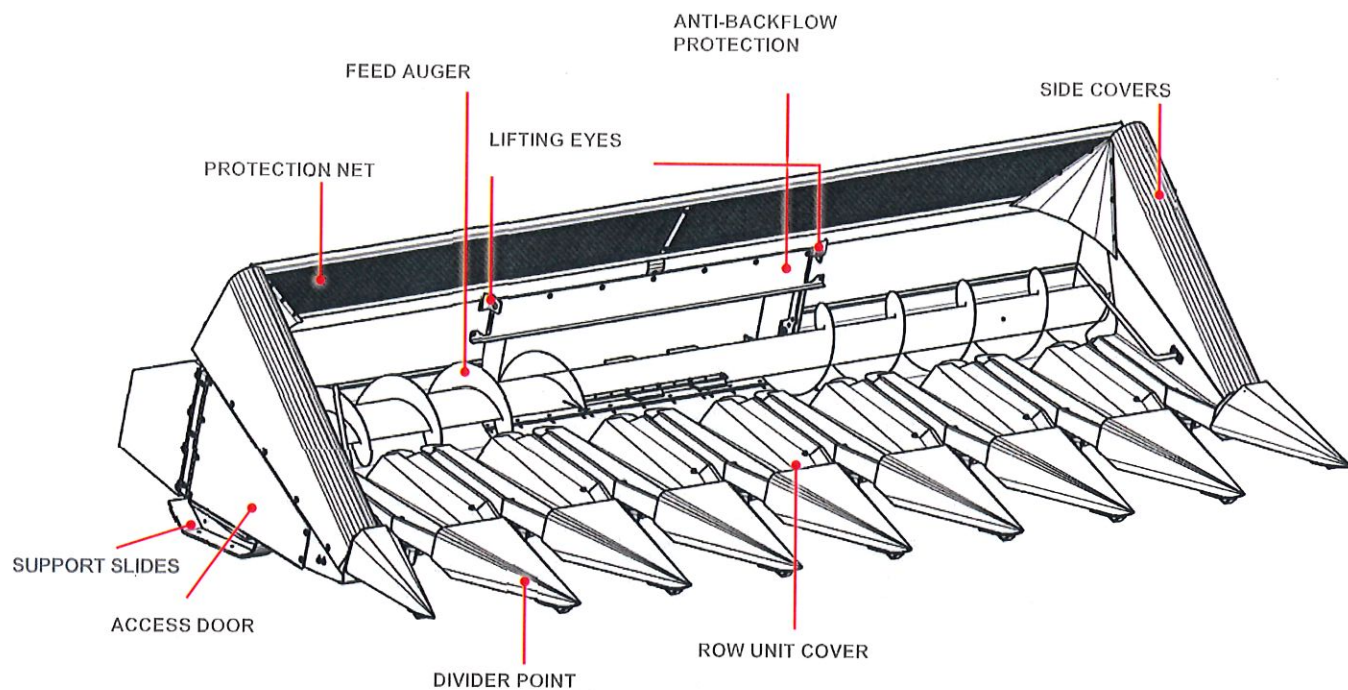
The label positioned on the back of the machine shows:



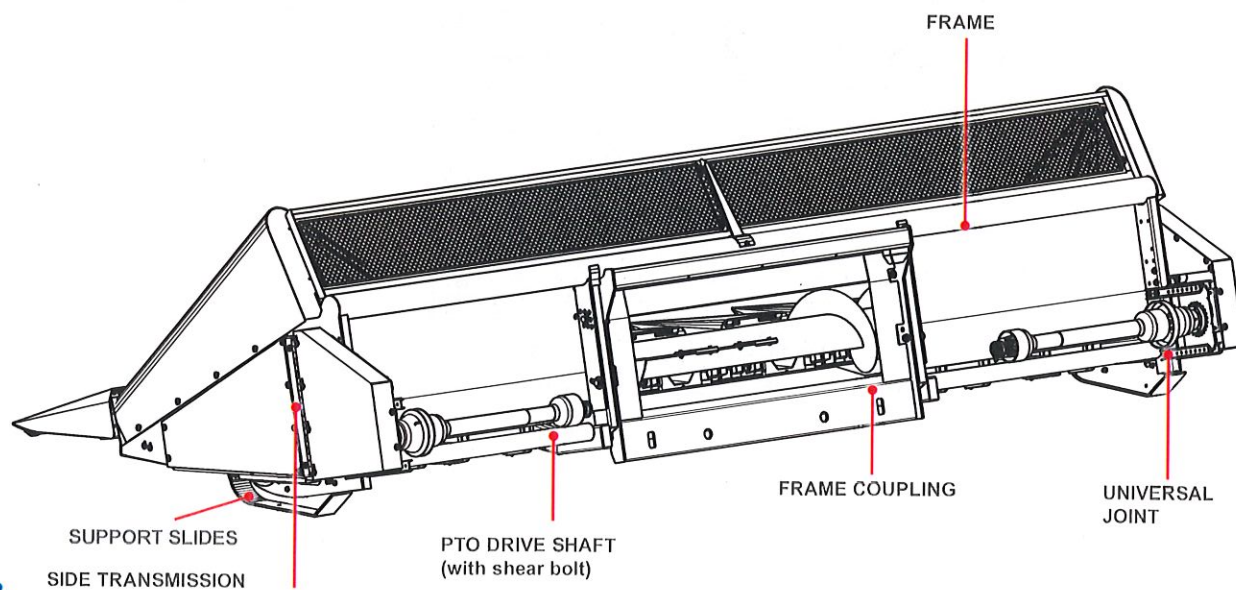
>> The label should never be removed or damaged.

07. Technical Glossary

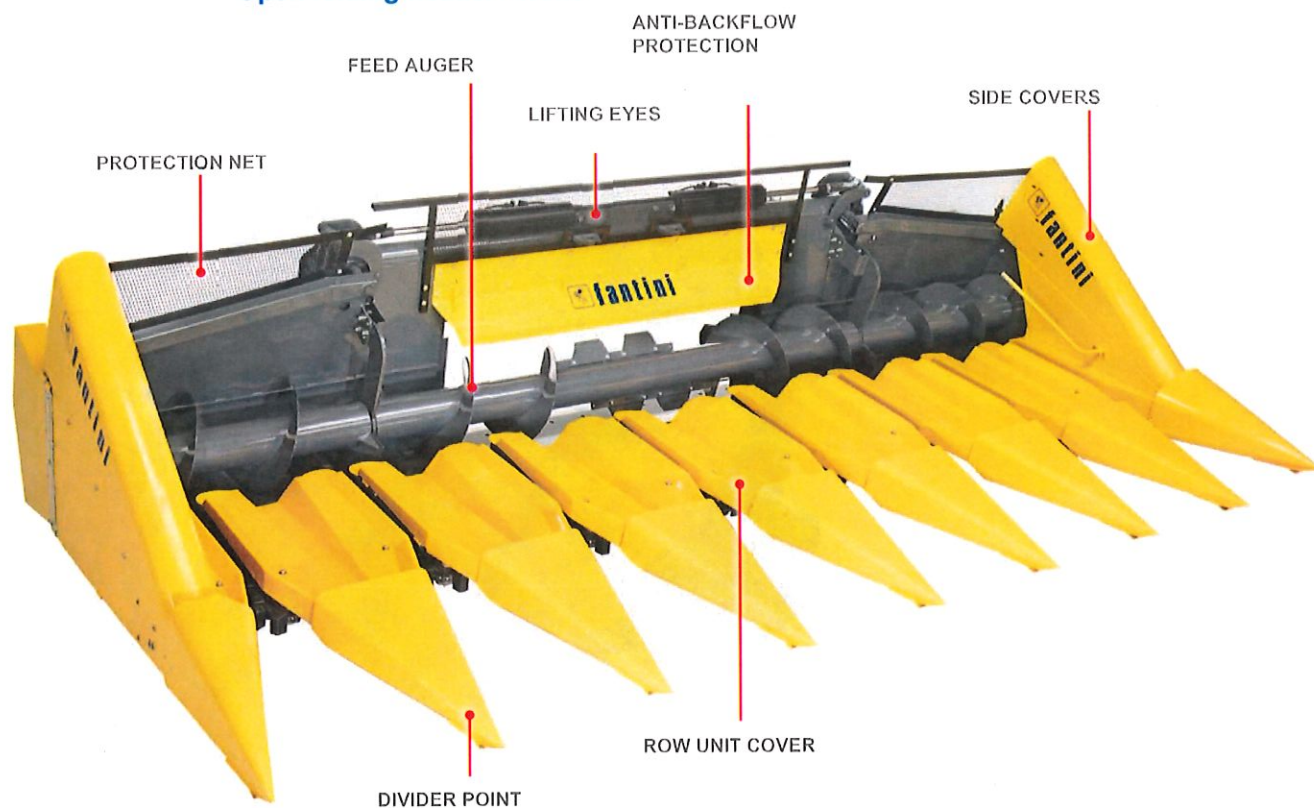
Fixed header - front



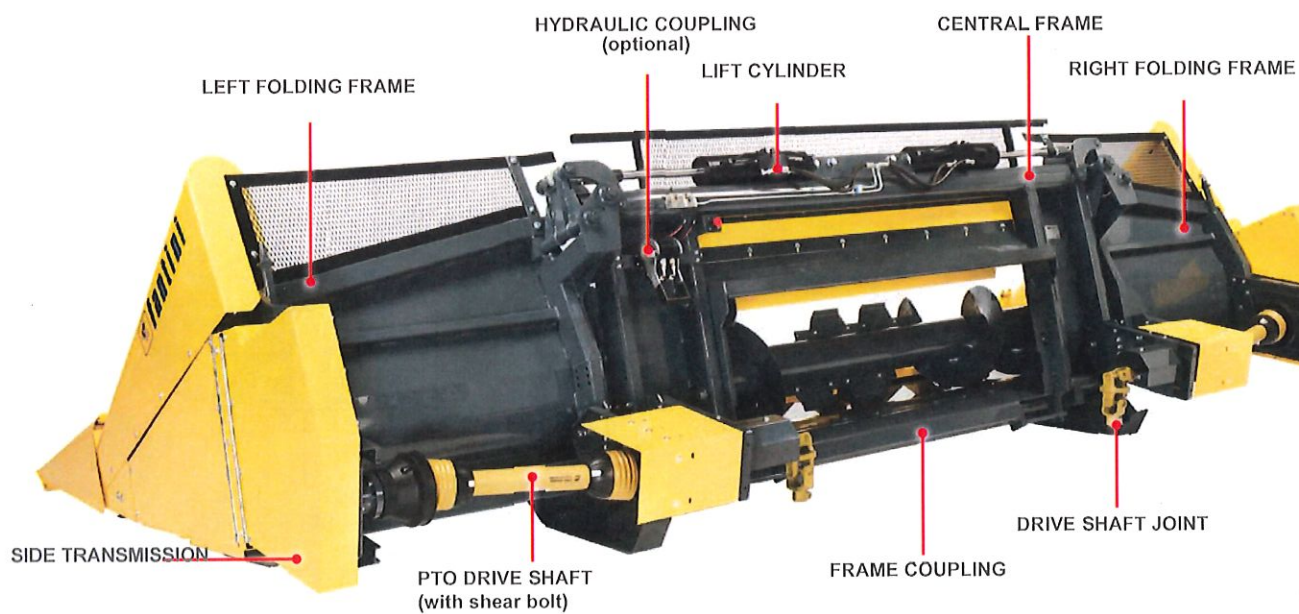
Fixed header - rear



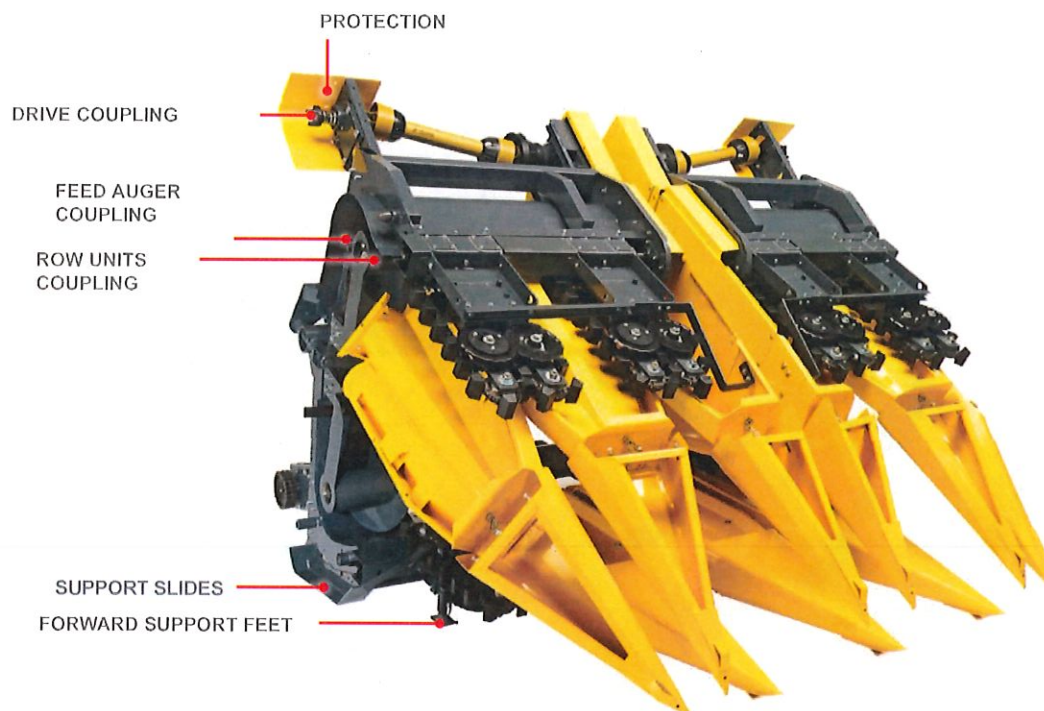
Open folding header - front



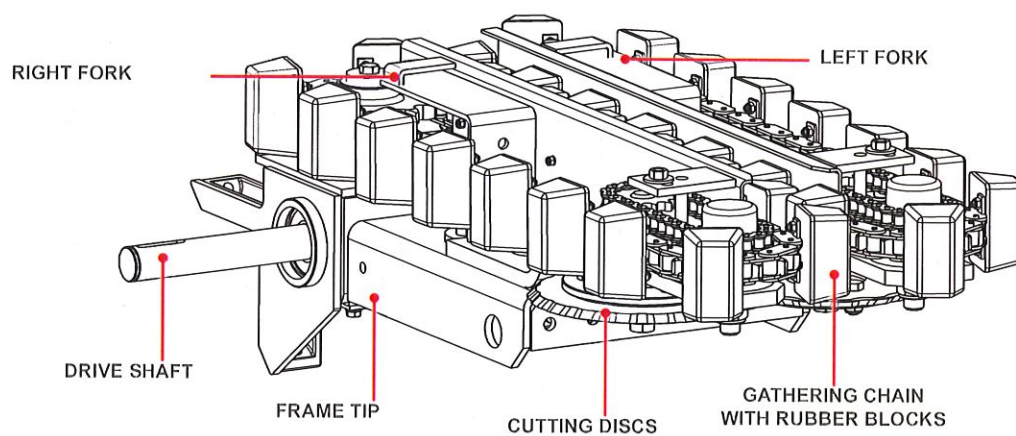
Open folding header- back



Folding header - folded



Row Unit



08. Description of the Machine



The folding and fixed sunflower headers are machines designed to work attached to a combine harvester. The combine harvester is a self-propelled machine that harvests crops.

The sunflower header produced by **Fantini S.r.l.** does not work independently; it works only attached to a combine harvester, from which it receives motion and all commands.

The use of the sunflower header must be carried out according to its characteristic (see chapter 09 -Technical Specifications).

The sunflower header has been designed to work outdoor, subject to any weather condition (sun, rain, snow, frost, wind).

The header can operate with the support slides in direct contact with the ground. It can also work at night, using an adequate lighting that makes the entire work area visible.

The header is activated only from the combine cab.

09. Technical Specifications

The sunflower header can be supplied with equipments so that to work from 2 to 16 rows. The distance between rows is defined as inter-row spacing.

FIXED MOD.		INTER-ROW SPACING (cm./inches)													
		18" (45)	50	20" (51)	55	22" (56)	60	70	75	30" (76)	80	90	36" (91,5)	38" (96,5)	
NUMBER OF ROWS	2	Width (mm)	-	-	-	-	-	-	1600	1650	1660	1700	1800	1815	1865
		Weight (kg)	-	-	-	-	-	-	565	575	580	580	600	600	610
	4	Width (mm)	-	-	-	-	-	-	3000	3150	3180	3300	3600	3645	3795
		Weight (kg)	-	-	-	-	-	-	1150	1180	1185	1200	1245	1250	1275
	5	Width (mm)	-	-	-	-	-	-	3700	3900	3940	4100	4500	4560	4760
		Weight (kg)	-	-	-	-	-	-	1450	1505	1515	1560	1665	1680	1730
	6	Width (mm)	-	-	-	-	-	-	4400	4650	4700	4900	5400	5475	5725
		Weight (kg)	-	-	-	-	-	-	1690	1755	1770	1820	1945	1960	2025
	8	Width (mm)	4050	4400	4470	4750	4820	5100	5800	6150	6220	6500	7200	7305	7655
		Weight (kg)	1830	1920	1940	2010	2025	2100	2150	2235	2250	2315	2475	2500	2580
	12	Width (mm)	5850	6400	6510	6950	7060	7500	8600	9150	9260	9700	10800	10965	11515
		Weight (kg)	2920	3045	3110	3240	3270	3395	3530	3620	3645	3760	4045	4085	4230
	16	Width (mm)	7650	8400	8550	9150	9300	9900	11400	12150	12300	-	-	-	-
		Weight (kg)	3840	4055	4095	4265	4310	4480	4905	5115	5155	-	-	-	-

FOLDING MOD.		INTER-ROW SPACING (cm./inches)								
		18" (45)	50	55	60	70	75	80	38" (96,5)	
NUMBER OF ROWS	6	Width (mm)	-	-	-	-	4400	4650	4900	5725
		Width close (mm)	-	-	-	-	3150	3150	3450	3800
		Weight (kg)	-	-	-	-	2100	2190	2280	2565
	8	Width (mm)	-	4400	-	5100	5800	6150	6500	-
		Width close (mm)	-	3150	-	3800	3150	3450	3450	-
		Weight (kg)	-	2270	-	2460	2695	2810	2925	-
	10	Width (mm)	-	5400	5850	6300	-	7650	-	-
		Width close (mm)	-	3150	3450	3800	-	4650	-	-
		Weight (kg)	-	2640	2775	2850	-	3245	-	-
	12	Width (mm)	5850	-	6950	-	8600	-	-	-
		Width close (mm)	3800	-	4550	-	4500	-	-	-
		Weight (kg)	3050	-	3395	-	3925	-	-	-

Recommended working speed:

- with dry non laid down sunflower.....7 km/h
the speed decreases if the sunflower lies down or if the harvesting occurs in a transversal direction to the sowing one

Power Supply:

Standard Electrical equipment (unless differently specified on the plates).....12 V.
Minimum Pressure (on hydraulic systems).....140 bar
Maximum Pressure (on hydraulic systems).....180 bar
Temperature allowed in the work environment.....-20°C ÷ +40°C

10. Use of The Machine

Fantini S.r.l. sunflower header is equipped with row units that are suitable to work on several sunflower rows at the same time.

Row units are hereby described in their parts, together with their function and their purpose:

- the gathering chains block the product. They are equipped with rubber blocks or reinforced belt;
- the cutting discs cut the sunflower stalk at the desired height;
- the gathering chains guide the sunflower into the feed auger avoiding vibrations that may damage the flower head;
- the row unit covers pick up fallen seeds and, when the row units lift up, convey them into the auger.
- **Folding header:** lift cylinders fold the side row units. These cylinders are activated directly from the cab through the combine harvester hydraulic system.

11. Improper Use of the Machine

The use of the sunflower header for purposes that differ from what described in this manual is strictly forbidden.

Furthermore, it is strictly **FORBIDDEN** to use the header in an improper way such as:

- immersed into water, even if partially;
- in the presence of people in the working area;
- to push other vehicles;
- to lift external bodies (people, objects, etc..)
- to pick up products different than sunflower.

When driving on road a combine with a folding header attached, it is required operate in conformity with the Rules of the Road of the country involved.

12. Movement and Transport

The transport of the header should be carried out by authorized staff. See chapter 05 - Operator Skills.

It should be performed carefully and with adequate support in order to avoid any damage on the machine.

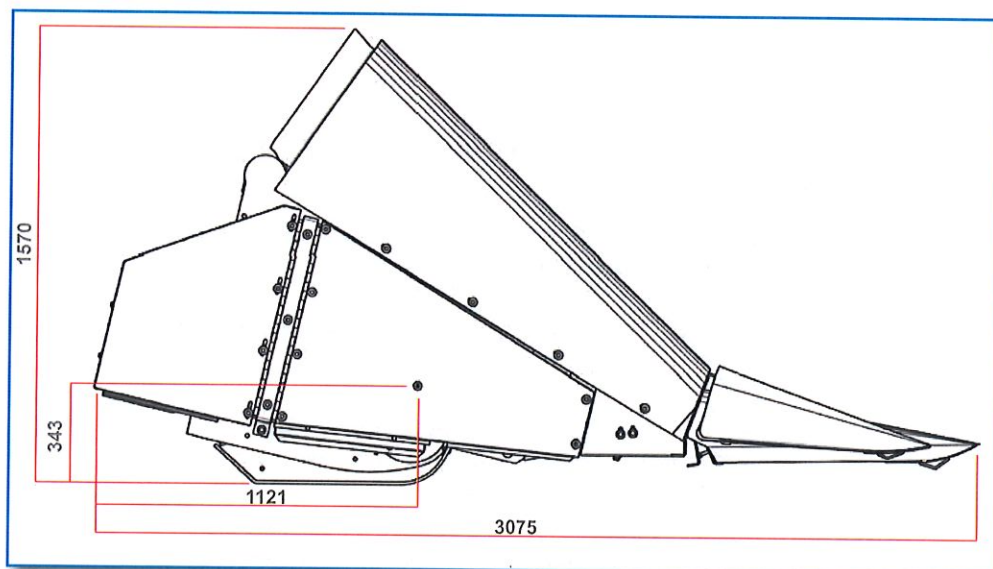
Lift and transport should be carried out with the use of adequate equipments able to support the weight of the different components.

DIMENSIONS AND WEIGHTS

For weight and dimensions see chapter 09 - Technical Specifications.

For machine weight check CE marking shown in chapter 06 - Marking.

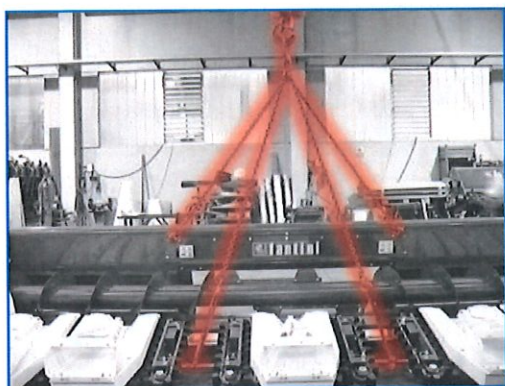
BARYCENTRE OF THE HEADER



>>WARNING: The position of the barycentre can vary depending on the type of transmission installed.

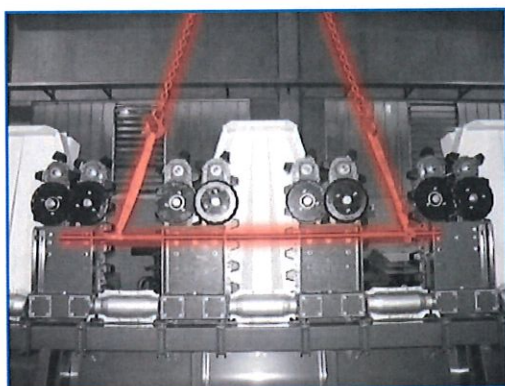
ON RECEIPT OF THE MACHINE

FIXED HEADER



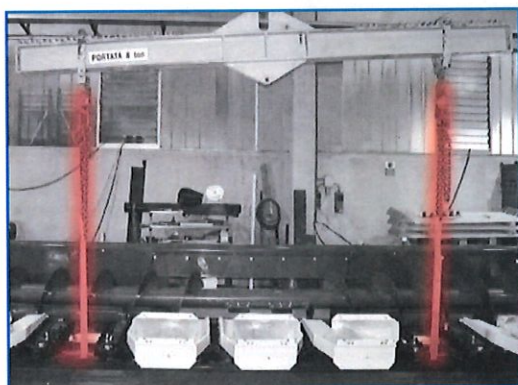
Lifting in horizontal position

To lift the machine, fit a 30 mm bar into the holes of the row units frame and hook on the front of it and on the relevant lift rings.



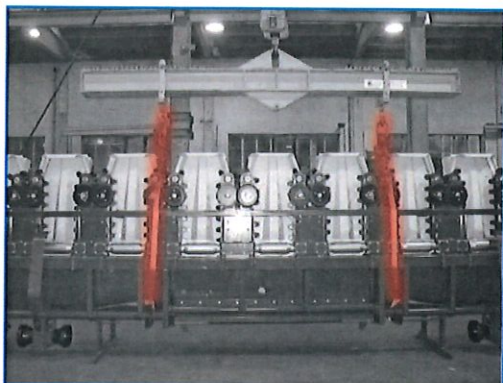
Lifting in vertical position

To lift the machine, fit a 30 mm bar into the holes of the row units frame and hook on the front of it.



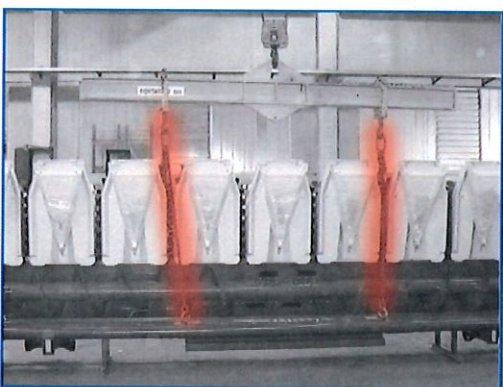
Lifting a 10-12 row header in horizontal position

10-12 row headers are equipped with a front support that allows the transport of the header using lifting rings.

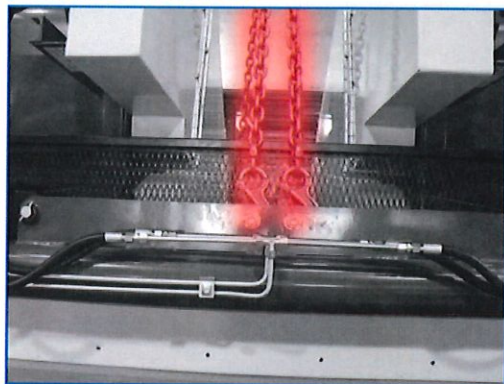


Lifting a 10-12 row header in vertical position

Use the supplied belts and fold them around the rings of attachment of the header frame, as in picture.

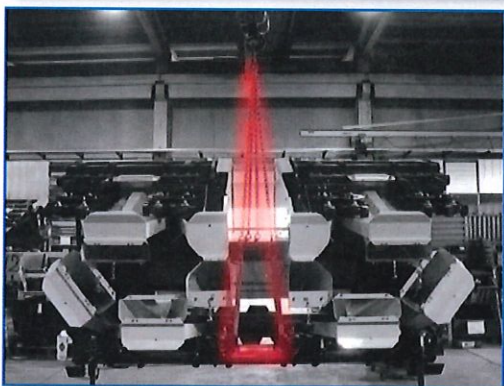


FOLDING HEADER



Lifting an open header

The folding header is equipped with 2 lifting pins at the back, placed between 2 lifting cylinders.



Lifting a folded header

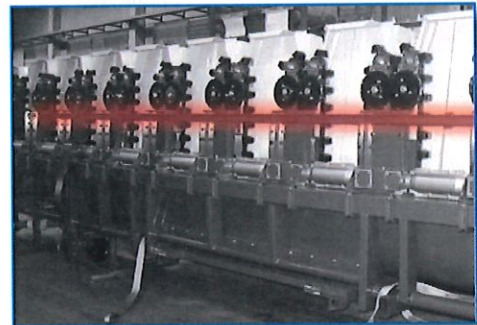
Position the ropes as shown in the picture. Ensure that the lifting ropes have a vertical trajectory, (not inferior at 45°) and that they are able to support the weight of the machine.

>> **WARNING:** While lifting machines or parts of them, avoid sudden or hazardous rocking that may put machine and staff in danger.

>> **WARNING:** DO NOT stand or walk under suspended loads.

>> **WARNING:** To transport the machine on a truck, carefully follow the instructions of the machine carrier in order to place the header properly.

13. Packing



The header can be equipped with iron supports to facilitate the transport in vertical position.

The folding header can be equipped with plates or support bars that can be used for transport.

It is recommended to store these supports for future use or transport.

If not properly handled, the packing materials (wood, nail, paper, cellophane, metal parts, adhesive tape, strapping, rope....etc.) could cut or hurt the worker. Therefore they should be removed with the use of proper tools and should not be left at the disposal of vulnerable people (such as children). The same guidelines should be applied when handling tools for packing removal (scissors, hammer, pincers, knives, etc..).





In any circumstance, it is vividly recommended to wear appropriate personal protective equipment (PPE).

14. Packing Disposal

The client is responsible for the disposal of packing used for the sunflower header transport and delivery.

The packing materials can be grouped into regular waste materials, such as paper, wood, polyethylene, etc..

>>Fantini S.r.l. is not in liable for any costs of the above waste disposal.

Waste Material	Composition	Recycling/disposal codes
Packaging	Polyethylene low density and various plastics	
Nails etc.	Iron	
Packaging	Cardboard	
Packaging	Wood	

15. Installation and Assembly

The installation must be carried out exclusively by specialized and expert personnel (see chapter 05 - Operator Skills) who should:

- verify that the header has arrived in perfect conditions and has not been damaged during transport. Should any unpleasant event have occurred, contact the manufacturer or the authorized local distributor immediately;
- know the contents of this manual and refer to the TECHNICAL SPECIFICATIONS of the machine (see chapter 09);
- ensure that the power supply complies with what indicated on the labels on board of the machine and/or with the enclosed electric diagrams;
- avoid any temporary repair. Repairs must be carried out with original spare parts only.

In order to attach the sunflower header to the combine, use the appropriate connections as follows:

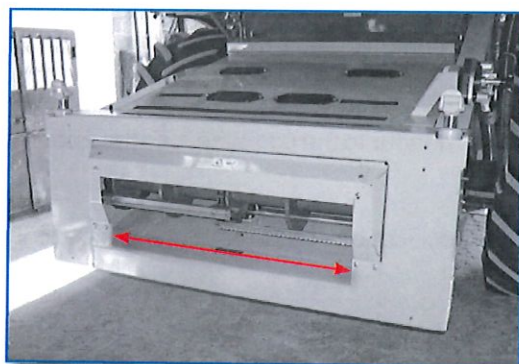
- verify the technical specifications of the combine. Abide to the manual of both combine and header;
- contact **Fantini S.r.l.** or your area dealer for any technical operation not specifically described in any of the two manuals (combine and header).

Verify that the combine harvester is equipped with:

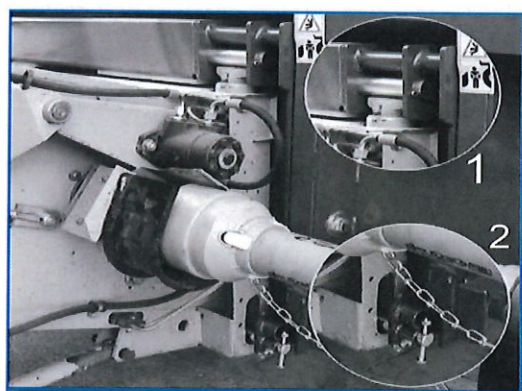
- an emergency stop control as per 2006/42/CEE directives and as per directives on road circulation of ground movement machines;
- a motion inversion device near the operator seat, to use in case of feed auger blockage;
- an acoustic signaling device to precede the start up of the header;
- an automatic protection device to stop the header if the operator leaves the combine cab;
- a protection device of the machine controls to avoid any accidental start up;
- a loading channel (feeding compartment of the combine) and an adequate transmission system suitable for assembling the header.

In order to proceed with the assembly, comply with the following guidelines:

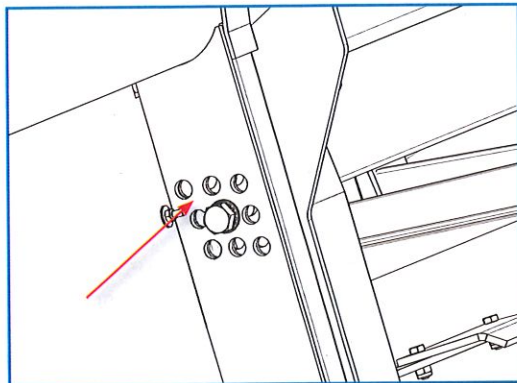
- measure the width of the combine harvester loading channel and compare it with the feeding plate one assembled on the header. In some cases the headers assembled on pivoting ducts are not equipped with a feeding plate. If the measures are compatible but the plate is wider it is sufficient to take it off, to cut it on the sides and to reassemble it. Sometimes it is necessary to remove the plate completely to avoid the anti-back flow (outflow) of the product from the combine harvester channel;



- bring the combine close to the header;

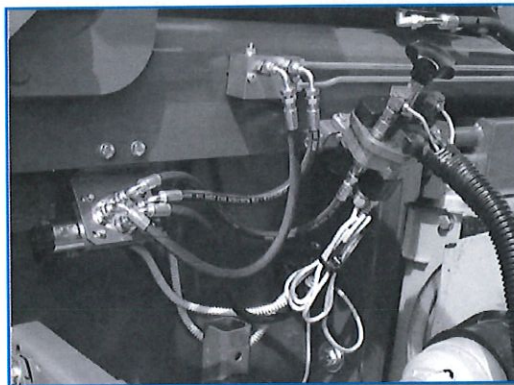


- connect the header to the combine harvester, using the upper hooks. Then lift it gently and attach the lower hooks. The attachment kits can be of different types. The header is equipped with attachments that fit the kind of combine ordered;



- to position the header properly, place it on a level ground, verify its incidence on the ground and regulate it by using the appropriate holes. In case of folding header, realign all the transmissions.

>> Before applying pressure to the hydraulic connections, remove transport and assembly support.



- make the hydraulic connections (fluids);
- use the hydraulic controls to fold the side parts; **ensure that neither obstacles nor people are in the work area;**
- connect the lights bar and disconnect the lights of the combine harvester. We remind you that the lights bar, supplied by **Fantini S.r.l.** as an **OPTIONAL**, is required by law for headers road transport.

The fixed header can be placed on a carrier truck for road transport.

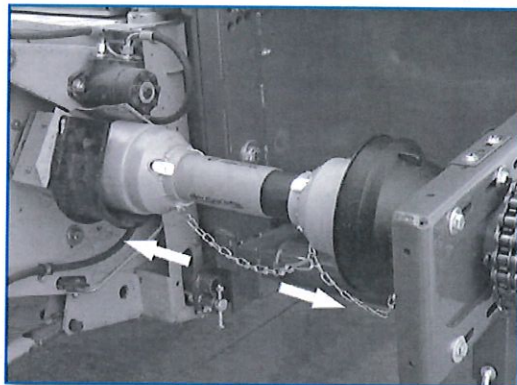
The folding header can circulate attached to a combine harvester as per Rules of the Road of the country involved.

During the driving of the combine with the header attached, pay particular attention to the combine rear ballasts in order to maintain an appropriate adherent mass to the posterior board (directional board).

16. Transmission Connection with PTO Drive Shaft

This is the most popular transmission used by the majority of combine harvester producers. The transmission is usually placed on the left side of the header (it can be put on both left and right side, if required). In order to proceed with the connection, follow the below guidelines:

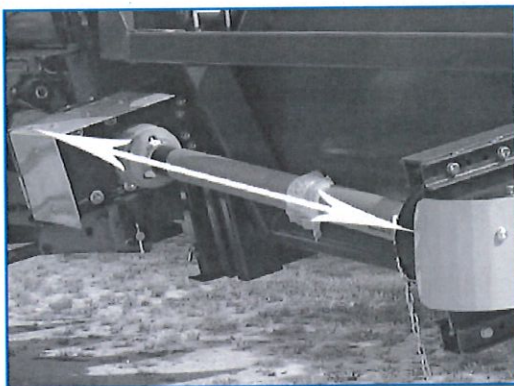
- verify that the length of the PTO drive shafts is correct; the telescopic joint, must overlaps for at least 1/3 of their length;
- if the drive shaft is too long, the telescopic joints must be cut accordingly. To verify the length, check the distance between the two splined shafts;



- if the drive shaft is too short, check and/or adjust the alignment of the two splined parts;
- connect the drive shaft to both header and combine harvester; if a safety clutch is assembled on the drive shaft (shear bolt), it must be placed on the header side;
- connect the two drive shaft protection chains to a fixed part; always connect protections.

17. Transmission Connection

The transmission can be found on the right and/or the left side of the header, looking at it from the combine harvester. In order to proceed with its connection, comply with the following guidelines:



- **Fixed version:** adapt the length of the PTO drive shaft, paying attention to the proper alignment between the header transmission and the combine harvester transmission.

- **Folding version:** follow the procedure described above for all the machines equipped with external transmission. For all the machines equipped with internal transmission, align the header transmission with the combine harvester transmission acting on the support plates. If necessary,

shorten the splined shaft to assemble the joint. In some cases it might be necessary to use an adapted drive shaft. **The maximum angle of inclination of an universal joint is 15°.**

- re-assemble the protection casing and the universal joint protection.

18. Disassembly

The header can be detached from the combine harvester following this procedure: lay the front part of the header on the ground, unhook the duct on the lower side, lower the support feet and lay the rear part on the ground; finally, unhook the upper part of the header from the duct of the combine harvester.

>> N.B. The motion of the sunflower header is driven from the combine harvester.

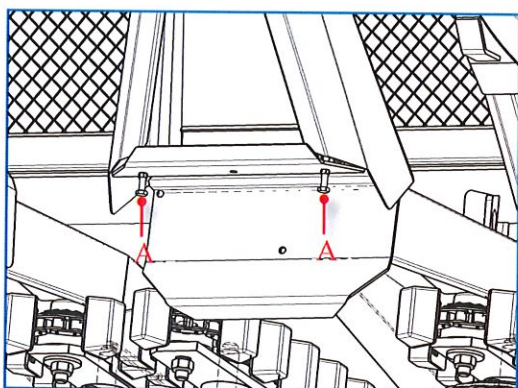
19. Start up, Adjustments and Functioning

As the sunflower header receives motion and control commands from an operating machine (combine harvester), refer to the combine manual for its correct functioning.

The start-up should be performed at a low rpm and continue with a progressive speed increase in order to avoid transmission strain.

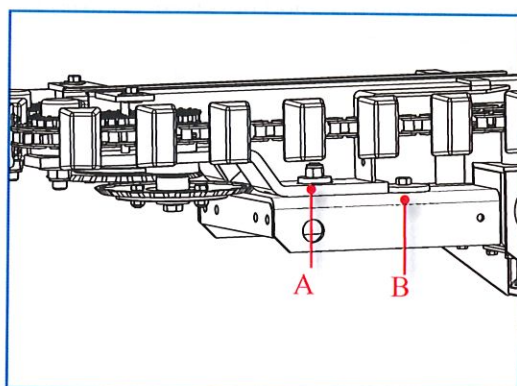
Once the header is in motion, enter the field and adjust the height of the row units according to the condition of the soil and of the product to harvest. The correct height is achieved using the combine commands, by either lifting or lowering the duct.

The working speed (see chapter 09 – Technical Specifications) is determined by the condition of the soil and of the product to harvest.



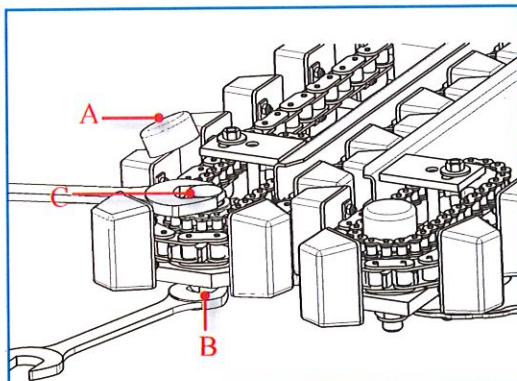
DIVIDER POINTS ADJUSTMENT

The row dividers must be regulated at the same height adjusting the bolts (A).



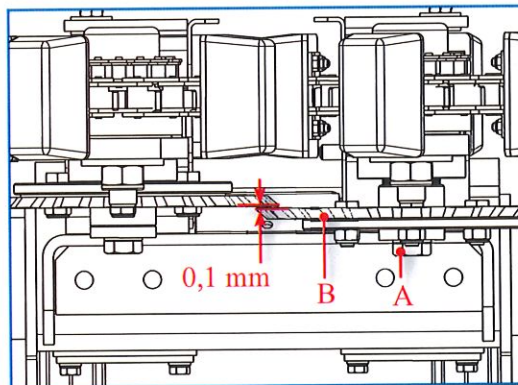
CHAINS TENSION ADJUSTMENT

Loosen the screw (A) and act on the eccentric pin (B) to move the fork. When the tension desired has been achieved, tighten all the screws.



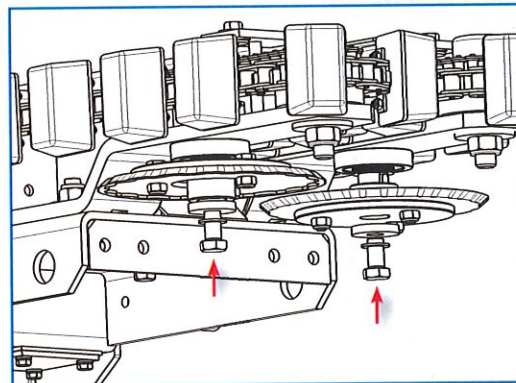
TENSION ADJUSTMENT OF THE CUTTING DISCS TRANSMISSION

Remove the cover (A) and loosen the nut. Rotate the eccentric pin (C) up to the desired tension. Block the pin tightening the nut (B) and place the cover.



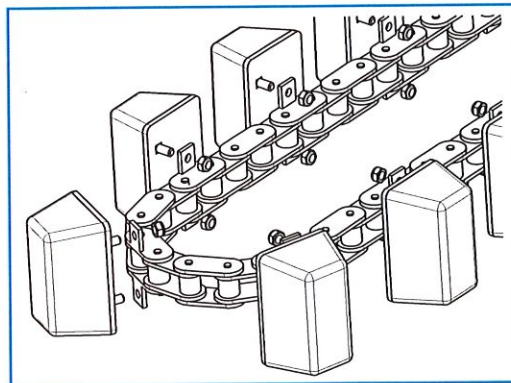
CLEARANCE ADJUSTMENT OF THE CUTTING DISCS

Loosen the screw (A) and remove the disc (B). To regulate the clearance between the discs, reduce or add spacing. After regulating it, tighten replace the disc and tighten the screw. Cutting discs spacing should be left at 0,1 mm.



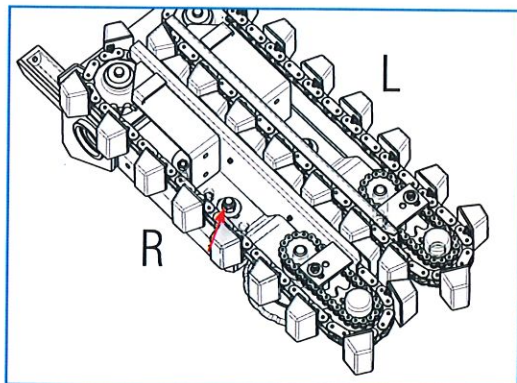
CUTTING DISCS REPLACEMENT

They need to be replaced when they cannot be sharpened or their distance cannot be regulated anymore. Loosen the bolts in figure and place new discs paying attention to the guidelines provided above.



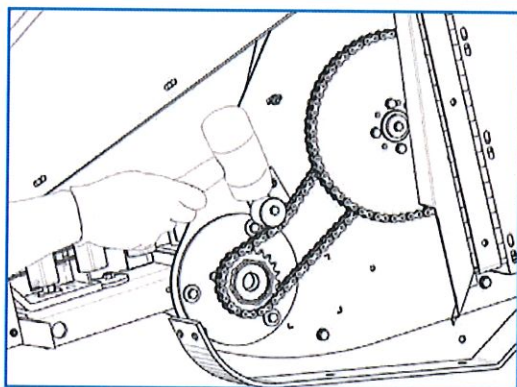
RUBBER BLOCK REPLACEMENT

Loosen the nuts and remove the block. Place the new block and tighten it up using new self-blocking nuts.



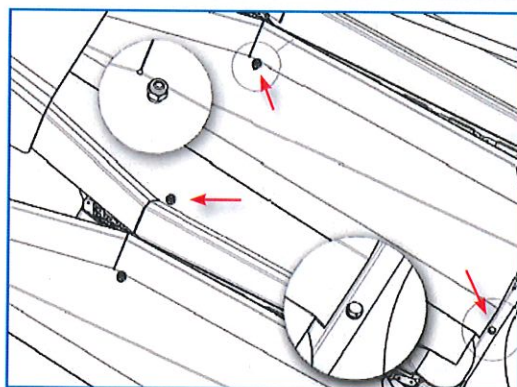
COLLECTION BELT ADJUSTMENT

Disassemble the forks, first the right one and then the left one. To disassemble them, loosen the washer screw.



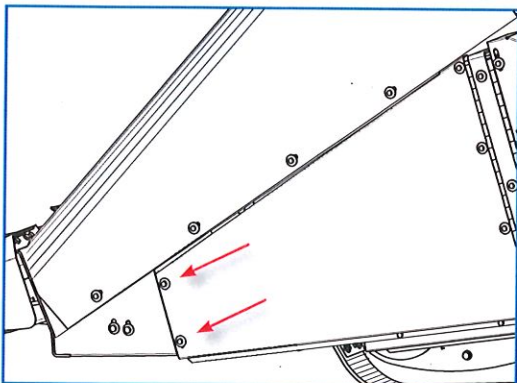
TENSION ADJUSTMENT OF THE TRANSMISSION CHAIN

Loosen the blocking bolt of the stretchers. Using a mallet, tighten the chain and check the tension. Tighten the blocking bolts of the stretchers (the chain should be slightly stretched).



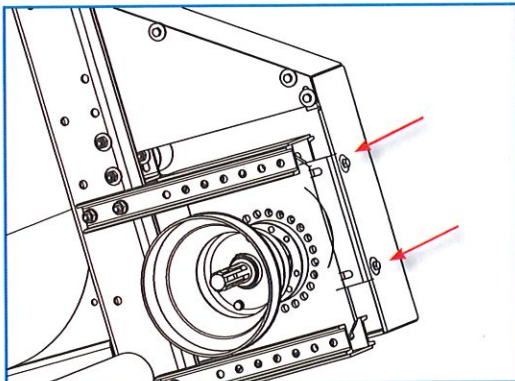
CENTRAL ROW UNIT COVER DISASSEMBLY

Loosen the front nuts and the back screw. Lift the cover sliding it towards the lift auger.



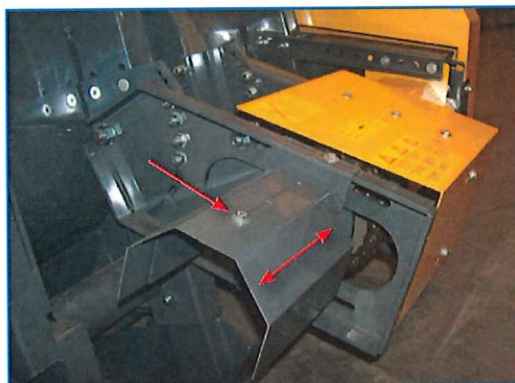
SIDE COVER OPENING

Loosen the screw as in picture.



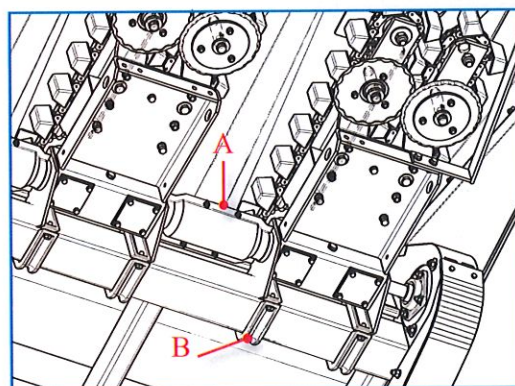
REAR TRANSMISSION OPENING

Loosen the screw as in picture.



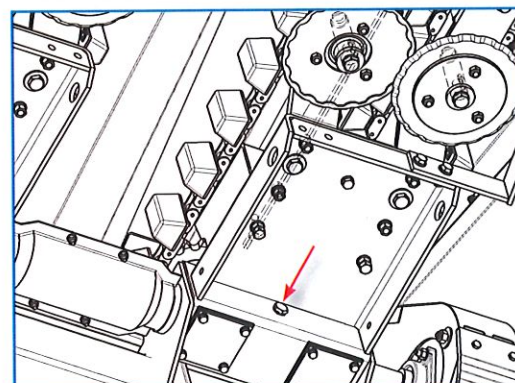
INTERNAL TRANSMISSION PROTECTION (FOLDING)

Loosen the screw as in picture and slide the protection. Replace the protection as required.



COLLECTION PART DISASSEMBLY

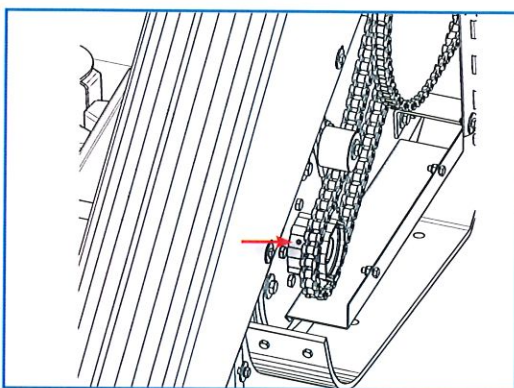
Remove the covers, open the inter-row transmission (A) and disassemble the chain joint of connection among row units. Remove the mounting brackets. In case of side row unit, it is necessary to remove the chain of transmission, the relevant support and the side transmission.



CONTROL OIL OF ELEMENT OF COLLECTION

The oil level can be checked loosening the cap in figure. The part involved should be kept horizontally.

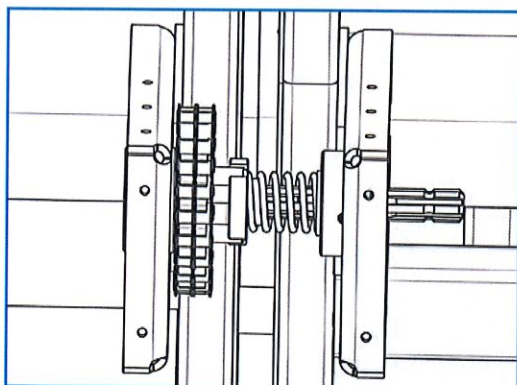
Oil to be used: 220 EP.



CLUTCHES GREASING OF COLLECTION ELEMENTS

Grease with the appropriate greasing.

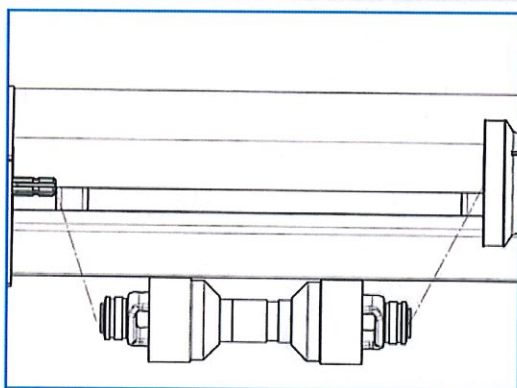
Grease to be used: multifunction lithium grease.



LUBRICATION SUPPORT OF TRANSMISSION JOINT (FOLDING)

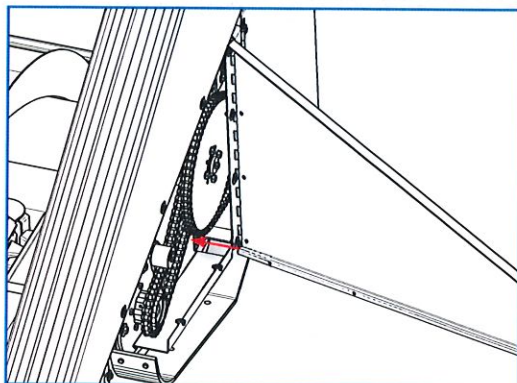
Grease with the appropriate greasing as in picture.

Grease to be used: multifunction lithium grease.



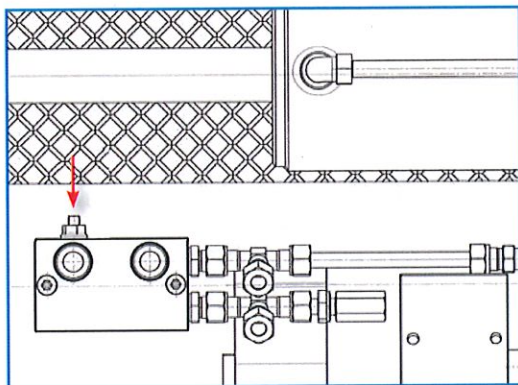
GREASING OF PTO DRIVE SHAFT

The header can be equipped with one, two or more PTO drive shafts or joints that have to be regularly greased. For use and maintenance refer to the producer manuals.



LUBRICATION OF TRANSMISSION CHAINS

To access the transmission lift the side transmission cover.



ADJUSTMENT OF THE OPENING/CLOSING SPEED (FOLDING HEADERS):

To reduce the opening/closing header speed adjust the screw as in picture. Loosen the blocking nut. Unscrew or screw to regulate. Tighten the blocking nut keeping the screw at the regulation reached. This adjustment has to be performed with warm hydraulic oil.

>> The header motion does not stop immediately. Row units and the feed auger turn on inertia for few seconds before stopping completely.

20. Residual Risks

The residual risks are all those risks or dangers that cannot be eliminated after planning or after using appropriate security measures. These risks can also include not clearly visible dangers.

Example of residual risks:

- **divider points**, as they are pointed and very dangerous objects both in lower and upper position (horizontal or vertical). It is necessary to remember that the divider points are mobile and that during the opening of the folding header they move from one side to the other;
- **collection chains**, as they can drag any external object and parts of the human body (arms, legs etc.) into the header and crush it violently;
- **cutting discs**, as they are sharpened and move in opposite directions, therefore have a huge sharpening potential with violent effect on any external object that would be introduced;
- **feed auger**, as it can drag and crush bodies of huge dimensions, such as people or animals. It is recommended not to touch it or to walk on it if not after ensuring that the header is stopped and detached from the combine.

- **the header and the side folding row units (folding header)**, as they can move and crush any object or person that may come across. The area of the system of levers (folding) is also extremely at risk for the closing/opening of the frame.
- **protection covers and divider points**, as they are resistant but not able to bear weight superior to 150 Kg. In working phase they are clean, lucid, humid and slippery and it is therefore **FORBIDDEN** to walk on them.

21. Maintenance: General Tips

Fantini S.r.l. declines any kind of responsibility in any of the following scenarios:

- should the maintenance cycles described in this manual and in the enclosed documentation not be observed properly;
- should the maintenance work be assigned to unqualified staff;
- should the appropriate procedures not be observed;
- should any lubricant be incompatible with the one we prescribe;
- should any temporary repair be carried out without using original spare parts and/or adequate equipments

>> Warning: All maintenance and operations are to be carried out with the machine power and the engine switched off and the key removed from the control panel of the combine.

In case of working under the header while still connected to the combine, ensure that the security of channel lift cylinders is on. Alternatively, use adequate systems to avoid the fall of the machine.

>> Warning: Always use the appropriate personal protective equipment (PPE).

The machine is potentially dangerous even when not in use: please see the Safety Precautions and Hazard Protection section, here enclosed.

Maintenance	Frequency
Grease the row units clutches	8 h

Review the chain transmission tension	8 h
Grease the main PTO drive shaft or joint	8 h
Grease the transmission supports of folding header with internal transmission	8 h
Control that there is no oil spill that could cause danger on roads or that could pollute the soil. The hydraulic oil has to be checked at the beginning of the working season and it should not have foam or water. Recommended oil: OSO 46 .	24 h
<p>Check the picking-up chains every 24 working hours.</p> <p>If one of the below problems occurs, it is necessary to replace the chains:</p> <ul style="list-style-type: none"> • high clearance between roller and pin • extremely oxidized chains • extremely worn blocks or belt <p>The assemble of new chains has to be carried out as per instructions: check the blocks directions and mount them staggered, so that the right chain blocks are placed between the left chain blocks.</p>	24 h
The picking-up chains do not normally require lubrication. However, to ensure a longer life and an easier cleaning operation, it is recommended to lubricate them every 24 working hours with appropriate anti-dust spray: Teflon spray .	24 h
On a daily basis clean signposting, instruments and auger and remove products waste. It is also recommended to lubricate parts of the header using appropriate anti-dust spray: Teflon spray .	24 h
<p>Every 24 working hours carry out the greasing of those components equipped with appropriate greasers, as well as of the joints, the drive shafts and of the clutches.</p> <p>If necessary consult the Tables of the spare-parts catalogues. Recommended lubricant: multifunction lithium grease.</p>	24 h
At the beginning of any working season or at the appearing of malfunctions, control the regulation of cutting discs.	Beginning of the working season and every 250h.

Maintenance	Frequency
Folding header: the side parts of the feed auger and divider points are activated by an appropriate transmission equipped with sliding joints. Carry out a daily lubrication with lubricant oil type: Teflon spray . The action is carried out manually sliding the joint back and forth.	Daily
Folding header: the lifting cylinders must be reviewed at least every two years ; the revision consists on the replacement of all the gaskets.	At least every 2 years

>>A working season is the period of use of the header and it consists of approximately 2000 annual hours.

22. Recommended Maintenance Products

Product	Name
GREASE Multifunctional lithium	GREASE L2
GREASE Lithium and molybdenum disulfide	MOLYTEX EP-2
OIL Oil for hydrostic system	HD 46
OIL Oil for heavily loaded gears	220 EP
SPRAY Anti-dust Teflon spray	Spray al teflon

>> **Warning:** Any intervention of adjustment, cleaning, refloating, etc. must be carried out with the machine power and the engine switched off and the key removed from the control panel of the combine.

The machine is potentially dangerous even when it is not in use: please see the Safety Precautions and Hazard Protection section, here enclosed.

23. Troubleshooting Table

PROBLEM	PROBABLE CAUSE	REMEDY
The clutch clicks and blocks the row units	<ul style="list-style-type: none"> an external object such as iron rods, stones, poles etc., has been dragged in 	remove the external object
	<ul style="list-style-type: none"> something is wrapped on cutting discs 	remove the material
	<ul style="list-style-type: none"> the clutch is misaligned 	replace the pawls and the springs
	<ul style="list-style-type: none"> the shaft of the row unit or parts of the boxes are broken 	identify and repair the failure or replace the broken parts

PROBLEM	PROBABLE CAUSE	REMEDY
The row unit does not pick up efficiently	• the cutting discs are worn out	replace or sharpen the discs
	• the cutting discs are too distant between each others	adjust the spacing between the discs
	• the chain are too loosen	adjust the chain tension
	• the blocks or the belts are worn out	replace blocks or belts

24. Storage

Should the machine need to be stowed or stored for a long period of time, it is recommended to proceed as follows:

- ensure the suitability of the pavement/ground where the machine will be placed;
- clean the machine with air pressure jets;









>> WARNING: Avoid to use high pressure water jets as they may damage the oil retainer and other protections









- Remove the protective casing for a general service and replace the parts which are worn out;
- Remove all the chains and verify their wear and tear status. Immerse them in a container with diesel oil or used oil in order to protect them from oxidation;
- Store the machine indoors and do not expose it to weather conditions.

25.Scraping and Disposal

Should the machine be dismantled, abide by laws and regulations in place in the country of use:

- Disconnect all connections: electrical, hydraulic, etc.;
- Dispose all the various materials in appropriate waste dumps:

Part	Material Composition	Scraping/Disposal Code
Frame and feed augers	Electro-welded steel	
Paints	Synthetic varnish/ Polyester	
Row unit cover	High density Polyethylene	
Adapters	Steel/Cast iron	
Pinions	Steel/Cast iron	
Tighteners	Nylon/Teflon	
Chains	Steel	
Chain slides	Nylon/Wood	 

Supports	Cast iron/Steel	
Bearings	Steel	
Gaskets	Rubber/Teflon	
Electric wires	Copper/Rubber	
Flexible pipes (low pressure)	Nylon	
Flexible pipes (high pressure)	Steel/Rubber	
Lights/Rear reflectors	Glass/Polycarbonate	 

>> Fantini S.r.l. shall not be liable for any cost associated with the above waste disposal.

26. Accident Prevention and Safety

The header is designed in compliance with Health and Safety Machinery Directives and is equipped with appropriate workers protection devices, safety warning labels and pictograms.

Users are responsible for the correct use and maintenance of protection devices as well as for the regular cleaning of safety warning labels.

Fantini S.r.l. sells headers with CE Marking only. These machines are subject to a laborious mounting process and to a wide variety of uses and operations that cannot eliminate intrinsic dangers. Therefore users and operators must **ABSOLUTELY** use common sense and precautionary measures when handling the products.

Users must carefully read this handbook as well as the health and safety manual enclosed.

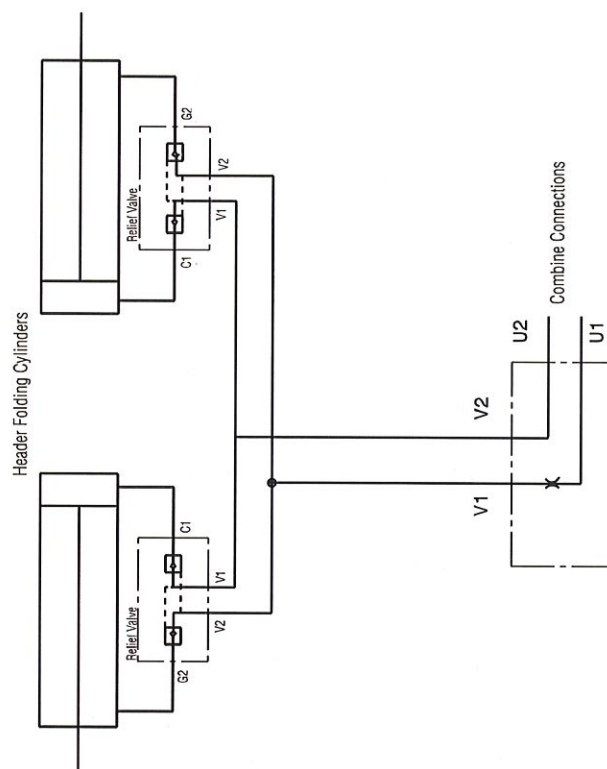
The operator shall not wear clothes with long sleeves, belts or traps but shall always wear personal protective equipments (gloves, helmet, etc...).

The machine has edges and points that cannot be eliminated and that can constitute a risk when passing by in their vicinity. **Therefore be careful not to lose the balance** in their proximity.

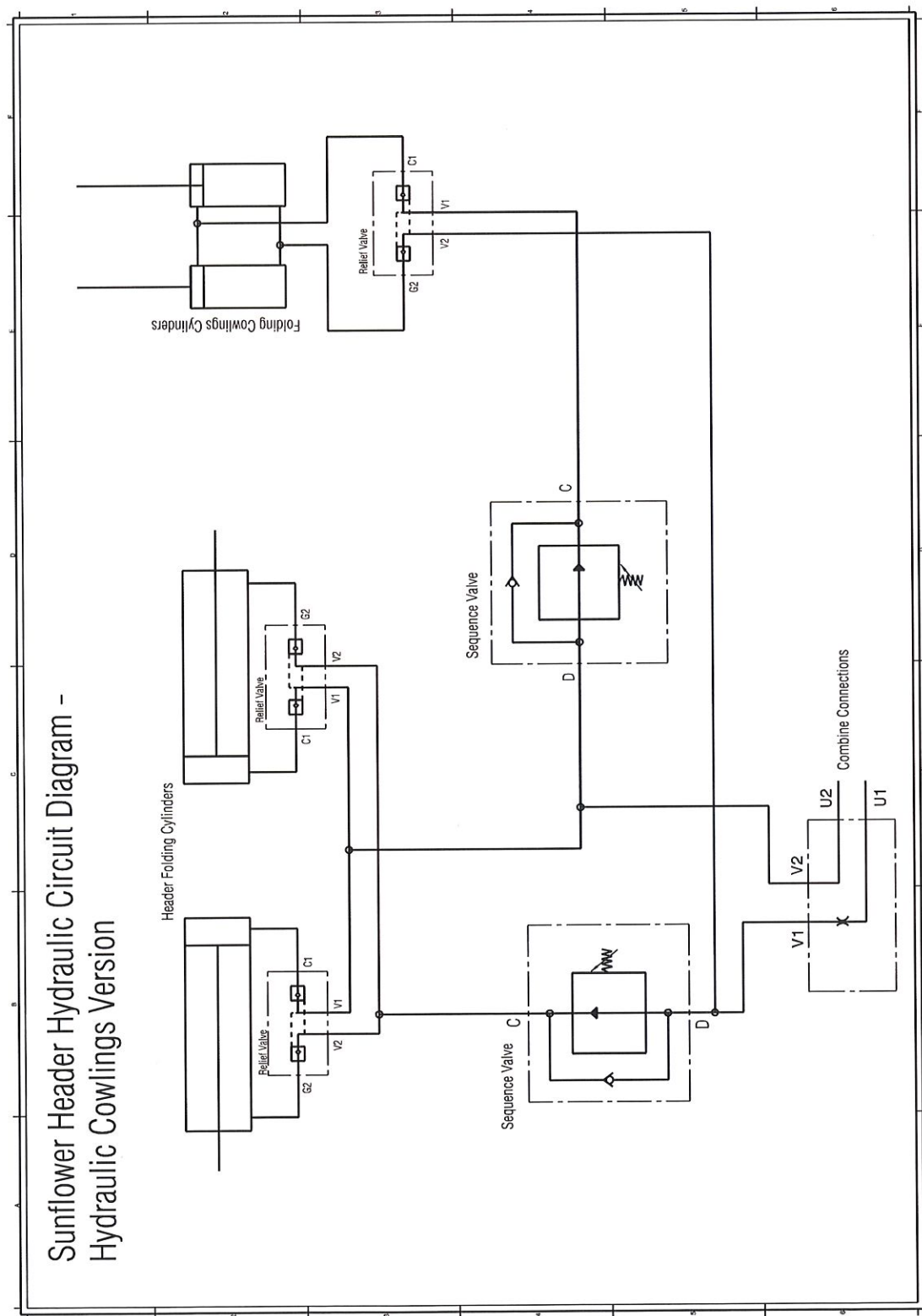
Reminders:

- The divider points constitute residual risks and represent a potential danger;
- DO NOT maneuver in the presence of people in the working area;
- DO NOT stand or walk under a suspended header or in the vicinity of folded side covers;
- Header maintenance, cleaning and preparation shall be performed with engine power switched off and key removed from the control panel;
- Header at work represents a potential danger. It is therefore required to approach the machine with caution and attention. The combine noise may also generate situation of danger;
- Any external body, such as wrenches, screwdriver, bolts, etc, placed on moving parts shall be removed before the startup;
- During the functioning, it is **STRICTLY FORBIDDEN** to remove products waste from the machine, or/and to clean augers and other parts of the header;
- **NEVER** use the machine if not all the protective casings are not mounted.

Sunflower Header Hydraulic Circuit Diagram



Sunflower Header Hydraulic Circuit Diagram - Hydraulic Cowlings Version





fantini

SUNFLOWER HEADERS

GENERAL SAFETY PRECAUTIONS AND HAZARD PROTECTION

Read this manual carefully and thoroughly before the use and maintenance of your header and store it in a safe and secure place for future reference.

For any question related to this manual contact your distributor or visit the website: www.fantinisrl.it

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Preface

This handbook contains information about sunflower headers technical details and safety requirements.

A. General Information

Fantini headers are intended to harvest sunflower and they are designed to be attached to any make of combine via a proper adapter.

B. Description and Functioning

The combines are mobile machines used for agricultural purpose only, specifically intended to harvest grain crops.

Fantini S.r.l. headers do not work independently. They receive their motion and all their control commands from the combine cab.

The headers should be used according to their potentiality (see Chapter 09 - Technical Specifications - in Use and Maintenance Instruction Manual).

C. Use Safety – General Precautions

For security reasons, the driving should be done by expert, duly trained and prepared personnel.

It shall be pointed out that all the directives regarding workers' health and safety, modifications and integrations included, must be respected during the use of the header.

Before starting any operation on the header, **Fantini S.r.l.** vividly suggest to consult the Use and Maintenance Instruction Manual and to strictly comply with the guidelines provided.

Fantini S.r.l. also recommend to pay attention to the safety warning images and pictograms placed on the header in the vicinity of residual risks.

Table 1 describes general precautions that must be respected while operating with a sunflower harvesting header.

Table 1 - GENERAL PRECAUTIONS

- When the header is delivered, verify that it is in perfect conditions and that has not been damaged during transport. Should any unpleasant event have occurred, contact the manufacturer or the local distributor immediately.
- Do not remove, modify or tamper parts of the header. Read this manual carefully before any operation on the machine.
- Before using the header, ensure that all the protection devices are properly placed and in good state. Should the devices be damaged, replace them immediately, as described in the Instruction Manual. Alternatively, contact your local distributor.
- Use original spare-parts only.
- For any further information about functioning and maintenance, contact the manufacturer or the authorized dealers.
- Before using the header, familiarize with the control devices and their functions.
- Before driving on public roads, double-check that the header complies with traffic standards.
- Wear appropriate clothing that do not get entangled in moving parts. Wear also personal protective equipments (PPE) prescribed by the manufacturer.
- Keep people and animals away from the manoeuvring and working area.
- While working on the combine, forbid any parking in the range of motion of the machine and ensure that people maintain a sufficient safety distance.
- Keep the header clean and remove material (debris, soil, oil waste etc) which could damage the functioning or cause harm to operators.
- Before operating on the moving parts of the header, stop the engine of the combine, remove the key from the control panel and check the stability of the machine.
- It is strictly forbidden to carry people, animals or goods on the header.
- Check the tightening of screws and nuts periodically and, if necessary, replace them.
- Carry out regular maintenance and replacement of the safety warning labels (pictograms). See the specific paragraph (p. 53).

D. Operations and Risk Assessment

Here below are described the different stages of use of the machine, as well as the risks that may be encountered during them and their possible solutions:

1.0 Stages of use of the machine

1. The preparation of the header (attachment to the combine, attachment to the motion transmission, detachment from the combine);
2. Adjustments;
3. Use of the header in the field;
4. Handling and transportation;
5. Cleaning and maintenance.

1. THE PREPARATION OF THE HEADER

1.1 Attachment to the combine

The attachment of the sunflower header to the combine takes place via a specific attachment kit.

Check if the attachment equipment is locked.

Risks	Directives	Solutions
Crushing during the attachment caused by instability of the header.	Machinery Directive 2006/42/CE ISO 11684:1995	<p>The header must be installed in order to avoid rocking or vibrations, that may harm the stability of the combine-header.</p> <p>Operate with the machine power and the engine switched off and the key of the combine removed from the control panel; put appropriate safety warning labels on the header in the vicinity of hazard zones; wear appropriate personal protective equipments (PPE); operate in conformity with the directions written in the instruction manual.</p>
	UNI EN 4254 - 1 Machinery Directive 2006/42/CE	<p>The header is equipped with appropriate lock devices to avoid overturning and sudden unexpected movements during the attachment.</p> <p>The devices should be mounted to be able to fix the header to the combine.</p>

Risks	Directives	Soolutions
Risks resulting from hydraulic systems	Machinery Directive 2006/42/CE UNI EN 4413:2012	The electric and hydraulic couplings of the header and the oil collector of the combine are equipped with an identification code in order to avoid any mistake or confusion during the connection.
		Each hydraulic part is protected by security valves, so that losses (internal or external) will not cause risks. The system is designed and constructed in such a way to make components accessible and to allow adjustment operations to be carried out in safety conditions.
		The hydraulic systems have resistance and suitability required for their intended use.
		The hydraulic pipes are protected in order to avoid spills in case of break.
		The header is equipped with appropriate devices, to support all the hydraulic pipes, when it is not attached to a self-propelled vehicle.

1.2 The attachment to the motion transmission

The combine-header motion transmission takes place with the use of a PTO drive shaft connected to the power take-off.

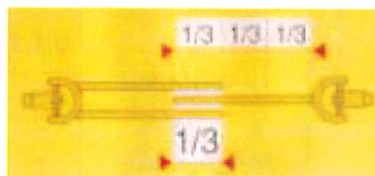
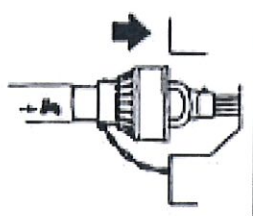
The PTO drive shaft (provided with CE marking and EC declaration of conformity) must be correctly fixed to the power take-off (the side of the security bolt must face the header, the other side must face the combine).

Moreover:

- Retention devices (chains) must be attached to the appropriate places in order to avoid the rotation of protections (Figure 2);
- While working, overlap the telescopic pipes along at least 1/3 of their length (Figure 3);
- Keep the coupling angles within the values provided by the manufacturer.

In any case the PTO drive shaft must be adapted to the combine/sunflower header attachment.

Any operation on it must comply with the directions described in the instruction manual.



Risks	Directives	Solutions
Entanglement, dragging, wrapping caused by incomplete PTO drive shaft protection.	Machinery Directive 2006/42/CE	Assemble adequate casings and protections along the length of shaft and universal joints.
	UNI EN 5674	Blockage devices and guards/protective devices must be in good conditions.
	UNI EN 4254-1	<p>The guard on the header side must overlap the guard of the PTO drive shaft (off-centre) along at least 50 mm in order to avoid contact with the moving parts.</p> <p>The header must be equipped with appropriate attachment devices to avoid the rotation of PTO drive shaft.</p> <p>The header must be equipped with a support for the PTO drive shaft when the machine is not attached to the combine (this support does not correspond to the above mentioned devices).</p>

1.3 Detachment from the Combine

The detachment of the header from the combine, should be performed placing the machine on a compact, flat surface with the power off and the exit openings closed.

Risks	Directives	Solutions
Crushing during detachment caused by instability of the header. Entrapment between header and combine.	Machinery Directive 2006/42/CE UNI EN 4254	If necessary, provide the header with appropriate supports in order to avoid the overturning. Except for the wheels, the support devices must limit the contact pressure with the ground to 400 kPa (maximum).
		The machine is specifically designed to keep the stability (when not attached to a combine) on a hard surface with an inclination of about 8.5° in all directions.
		The header is equipped with appropriate safety warning labels positioned in the vicinity of hazard zones. Comply with the directions given in the instruction manual.

2. ADJUSTMENTS

The header can be adjusted manually from the ground or automatically from the driver seat. When the adjustments are performed manually, comply with the following directives.

Risks	Directives	Solutions
Crushing, entrapment between header and combine caused by header fall or movement.	Machinery Directive 2006/42/CE ISO 11684:1995	Operate with the engine switched off and the key removed from the control panel of the combine; use appropriate safety warning labels on the header, near hazard zones; use appropriate personal protective equipment; provide the header with the instruction manual and operate in conformity with its directions.
		All the control commands must be clearly visible and properly marked. They also have to be conveniently placed outside of hazard zones.

3. USE OF THE HEADER IN THE FIELD

During the use, the sunflower header may be subject to different types of risk. **Table 2 shows some precautions to adopt in the different working phases.**

Table 2 - Precautions to adopt in the working phases

1. Proceed with cautions during transfers, in particular on uneven ground.
2. Should unusual bumps or vibrations occur, stop the combine immediately and search for the cause.
3. Ensure that there are no people around the machine or in its vicinity. Pay particular attention to young children and pets. It is recommended that third persons stay some tens of meters away from the header.
4. Before switching on the combine engine, ensure that all the protections are properly positioned in their intended places.
5. Choose a suitable operating speed that suits ground condition and that is in conformity with the directions given in the instruction manual.
6. The dust generated from the use of the header may cause breathing difficulties to the operator. It is strictly recommended to keep cab doors and windows closed while working. In the absence of the cab, it is recommended to adopt respirator masks and adequate clothing able to cover the body as much as possible in order to avoid skin rashes.
7. Sunflower plants may reach considerable heights. While working, pay particular attention to people and pets.
8. In case of engine flooding, proceed with repair operations ensuring that the engine is switched off.

3.1 Protection against accidental contact with tools

Before starting to work, replace in their original position the protections that have been removed.

Operators should wear suitable protective clothing (not resistant or swirling), such as tight working coveralls with elastic at wrist and ankle.

Risks	Directives	Solutions
Crushing, shearing or entrapment caused by contact with moving parts.	Machinery Directive 2006/42/CE UNI EN 12100 UNI EN 14121	<p>The moving parts of the machinery must be designed and constructed in such a way as to prevent risks of contact which could lead to accidents. Where risks persist, the moving parts must be fitted with guards or protective devices.</p> <p>It is always recommended to wear personal protective equipments (PPE).</p> <p>Any residual risk is adequately shown by pictograms.</p>

3.2 Exposure to Hazard from Flying Objects

During the use of the header, hazard material may be accidentally hurled.

Risks	Directives	Solutions
Hazardous objects flying towards operator working area.	ISO 11684:1995 Machinery Directive 2006/42/CE	<p>The combine must be equipped with proper shields or protective devices to protect workers and operators from any risk of being hit.</p> <p>The sunflower header is equipped with appropriate pictograms to remind the operators on the ground to keep an adequate safe distance during harvesting operations.</p>

4. ARRANGEMENTS FOR ROAD CIRCULATION AND TRANSPORT

According to the Rules of the Road, the sunflower harvesting header constitutes an integral part of the combine. For any further information about road circulation and use of the combine in safety conditions, please refer to the specific directives.

The Rules of the Road of agricultural machine on public roads are the same that regulate the traffic of other vehicles and should be followed in the farm area too.

Once the header is attached to a combine, it can alter its stability and make the driving and the working difficult.

Combine and header together form a large complex vehicle, which can give rise to risks, in particular on bends and narrow roads.

The folding headers, even when folded, could take up the entire road and constitute a danger.

It is therefore essential to comply with the following basic safety rules:

- a) before starting any operation, verify the appropriate blockage of the header;
- b) in order to facilitate their transport, folding headers must be equipped with:
mechanical and/or hydraulic blockage devices;
removable guards;
panels to grab attention on lateral burdens;
- c) transport in reduced or low visibility conditions is permitted only if guided by assistants on the ground;
- d) pay attention to safety warning labels and follow their directions;
- e) slow down in the vicinity of crossroads, bends, entrances, level crossings, crosswalks, and along ramps, on wet/slippery floors and in the presence of uneven ground, holes, obstacles or slopes.

Risks	Directives	Solutions
Crushing caused by moving parts of the header.	UNI EN 4254 Machinery Directive 2006/42/CE	The mechanism and the operating parts of the header must be protected or equipped with safety devices.
		Stabilizers or similar devices must be possibly blocked in the transport position. The driver/operator should be in condition to visually check if stabilizers are in their proper transport position.
		Moving parts of folding headers stop automatically in case of breakage of hydraulic items.

5. CLEANING AND MAINTENANCE

Cleaning and maintenance operations include removal of sunflower harvesting waste, greasing of moving parts, etc.

Cleaning and maintenance operations must be carried out in conformity with the directions given in the instruction manual (which accompanies the header) and in respect of the requirements to wear personal protective equipments (boots, gloves, helmets etc.).

When not in use, it is recommended to park and store the header indoors and in a dry place, placing it on a flat and solid ground with the help of appropriate supports.

Table 3 shows the main safety precautions to adopt during cleaning and maintenance operations, as well as during the other stages of use of the header.

Table 3 – Precautions during cleaning and maintenance operations

To carry out any operation, operators should wear suitable protective close-fitting clothing. Never wear dangling items such as scarves or bracelets. Avoid clothes that can easily get entangled in juts or in moving parts.

Keep the working area clean, dry and free from burdens in order to guarantee complete freedom of movement to the maintenance operator.

Use appropriate means (crane, jack) to lift parts of the header. Keep in mind that an operator can lift or move manually a weight of 30 kg maximum.

As concerns operations on hydraulic circuit, ensure that the circuit is not under pressure. To identify possible losses with the circuit under pressure, use appropriate personal protective equipments such as shields, glasses, gloves.

In the event of grease or oil outflow, remove it with proper blotting material and stock it in appropriate containers for disposal.

After a long period of non-use of the machine, ensure that safety devices are properly installed. Reassemble the safety devices that have been removed for warehousing purposes.

WARNING: in order to avoid damages to the plastic and/or metallic guards of bearings do not use high pressure pumps (cleaners) to clean headers.

Here below are listed the main risks related to cleaning and maintenance operations.

Risks	Directives	Solutions
Risks arising from maintenance operations.	ISO 11684:1995 UNI EN 4254 Machinery Directive 2006/42/CE	<p>The operators must be properly informed via clearly visible warnings that it is strictly forbidden to carry out any repair operation or adjustment on working parts.</p> <p>Any repair and maintenance operation should be carried out with the machine power and engine switched off.</p> <p>Use appropriate personal protective equipments (PPE).</p>
	UNI EN 4254	<p>For safety reasons, carry out repair and maintenance works under the header, using mechanical supports or blockage devices in order to avoid a sudden and unintentional fall of the machine.</p>

E. Standard Requirements

CE marking, ID plate, pictograms and EC declaration of conformity shall be affixed on sunflower harvesting headers before being placed on the market, as per Machinery Directive in force from 21 September 1996.

- **CE marking**

The CE marking implies compliance of the headers with certain common EU standards and specifically with the Directive 2006/42/CE, which substitutes the Directive 98/37/CE and its correlations.

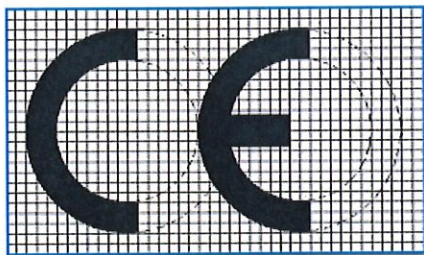


Fig. 4 - CE marking: it shall be affixed on all headers placed on the market later than 21 September 1996.

- **ID Plate**

Sunflower harvesting headers must be provided with ID plate. The mark must comply with EN 12100:2. The following information must be marked visibly, legibly and indelibly:

- business name and full address of the manufacturer;
- year of construction, that is the year in which the manufacturing process is completed;
- designation of series or type;
- serial number, if any;

The above mentioned information, except for the serial number, must also be provided in the instruction manual of the header.









- **Pictograms**

The header must be equipped with safety warning labels (pictograms – Fig. 5) in the vicinity of hazard zones to capture the operator attention on residual risks.

These labels should cover the following aspects:

- Risks caused by the rotation of tools during work;
- Risks caused by the hurl of objects from the combine harvester;
- Risks caused by the transition of the header from the transport to the working position and vice versa.

Below are listed the pictograms affixed to the header.

	<p>Read the Use and Maintenance Instruction Manual carefully. Observe instructions and safety rules when operating.</p>		<p>Risk of entanglement and dragging. Do not use PTO drive shaft or power take-off without guards or with guards kept in bad condition. Respect the sense of rotation and the number of revolutions.</p>
	<p>Pay attention to the moving parts inertia. When operating on the header, ensure that augers are not in movement, that the engine is switched off and that the key of the combine is withdrawn.</p>		<p>Risk of pinching between fixed and moving parts of the header. Risk of pinching in the augers mechanism.</p>
	<p>Prior to performing maintenance and repair work, turn off the motor and withdraw the key.</p>		<p>Risk of crashing caused by fall of parts lifted off the floor. During maintenance stay clear of the lifted header if hinge fixing devices are not installed.</p>
	<p>Risk of throwing fluids under pressure. Adopt precautions. Carry out ordinary maintenance and replacement of hydraulic pipes, according to the directions given in use and maintenance manual.</p>		<p>Risk of contact between feet and sharp rotating parts. Keep a sufficient safety distance to the header.</p>

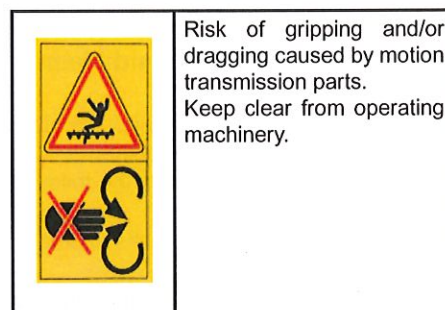
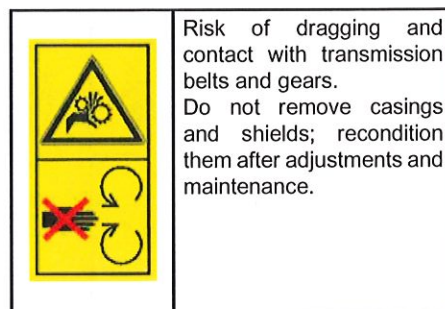
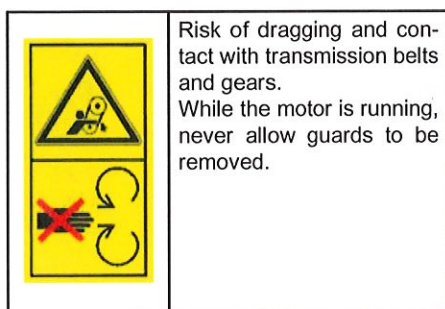


Fig. 5 – Examples of pictograms affixed to headers (from ISO 11684).

					
Body protection must be worn	Hand protection must be worn	Footwear protection must be worn	Hearing protection must be worn	Hard hat protection must be worn	Respirator protection must be worn (in case that combine's booth has no guards)

Fig. 6 – Examples of PPE pictograms

• Use and Maintenance Instruction Manual

The Use and Maintenance Instruction Manual must provide exhaustive information about ordinary maintenance operations and use of the header in safety conditions (UNI EN 4254). It also covers the following aspects:

- Risks arising from combining or assembling different equipments;
- Requirement to mount alternative guards if the usual protection equipments are removed;
- Instructions on the correct combine/header attachment in transport position;
- Requirement to use a PTO drive shaft equipped with well-kept guards;
- Risks arising from tools rotation;
- Risks arising from the hurl of material;
- Risks arising from the inertial rotation of tools after the switching off the combine power;
- Prohibition to climb on the header while working or during transport;
- Requirement to keep third persons away from the working area;
- Risk arising from working under the header without blockage devices installed;
- Requirement to switch off the combine engine before starting any adjustment, maintenance and cleaning operation on the header;
- Risk arising from possible ejection of worn-down or damaged knives. Requirement to give detailed information about the procedure of tools replacement and the materials to use;
- Instructions about adjustments and controls of working;
- Instructions about parking the header properly in order to ensure its stability.

- **EC - Declaration of Conformity**

By means of EC - Declaration of Conformity, the manufacturer or his authorized representative, established within the Community, declares that the header complies with EC regulations in terms of safety standards and operators health requirements prescribed by the Directive 2006/42/CE. Therefore the EC - Declaration of Conformity must report the manufacturer identification data, the applicable standards and the directives involved.

The EC - Declaration of Conformity must accompany the header for the entire working life of the machine.

EC - Declaration of Conformity

Compliance with Directive 2006/42/CEE

The undersigned company Fantini S.r.l.

Hereby declares under their sole responsibility that the below product:

(Header's description – brand name, type, model, serial number)

To which this declaration relates, is in conformity with the provisions of:

Machinery Directive 2006/42/CE, on Operators Health and Safety Requirements

Harmonised Standards:
(Type, number and date of Harmonised Standards)
(If needed)

ISO 11684:1995, on National and International Technical Standards

Example of EC - Declaration of Conformity



F. Compliance Requirements

Machinery Directive 2006/42/CEE, provides the harmonisation of the essential health and safety requirements for machinery;

SO 11684:1995: Tractors, Machinery for Agriculture and Forestry, Powered Lawn and Garden Equipment - Safety Signs and Hazard Pictorials – General Principles;

UNI EN 4254: Agricultural Machinery – Safety;

UNI EN 4413: Safety of Machinery – Security Requirements about Systems and their Components for Oleohydraulic Transmissions. Oleohydraulics;

UNI EN 5674:: Guards for PTO Drive Shaft;

UNI EN 12100: Safety of Machinery;

UNI EN 14121: Safety of Machinery.



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