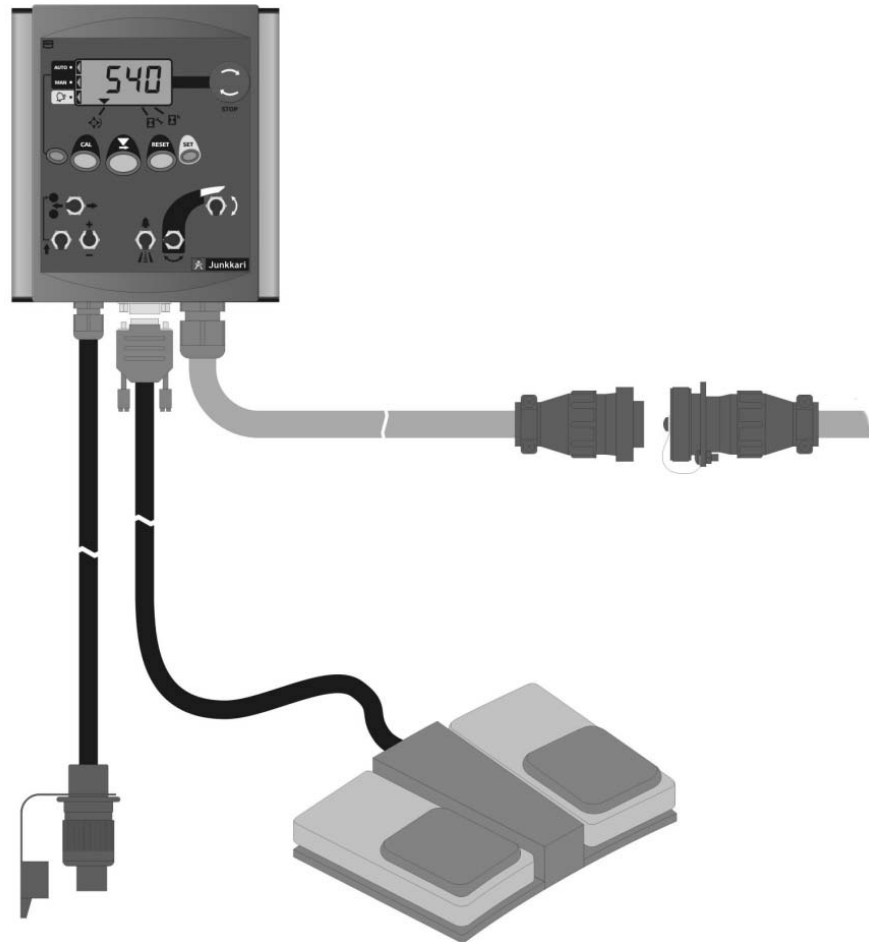


1 WIZARD C+ CONTROLLER



Junkkari chipper Wizard C+ controller is equipped with illuminated 4 number digital display, with the following functions:

- Blow chute transportation/working positions
- Blow chute rotation right/left
- Visor adjustment up/down
- Log feed direction selection: feed in - stop - feed reverse
- Log feed control also with foot pedal
- Top feed roll lift/push with foot pedal/switch (option)
- Knife disk speed (rpm)
- Feeder speed adjustment (%) (option)
- Maintenance frequency display (h)
- Working time (h), Time 1 and 2
- No-Stress speed setting (rpm)
- No-Stress delay setting (%)
- Feed reverse delay setting (s)
- Feed reverse time setting (s) (pulls the logs away from the knives during no-stress situation)
- Max knife disk rotation speed setting (rpm)
- Emergency stop / main power switch.

Controller has two memory registers that store the working time 1 (tot1) and working time 2 (tot2)

The knife disk speed is default display unless the feeder speed, time to next maintenance, or working time 1 or 2 is active.

2 BASIC SETTINGS

Wizard C+ controller has three types of basic settings:

Wizard internal basic settings (first basic setting)

- when the controller is reset back to the initial settings, it will resume these default values.

Values programmed by Junkkari (second basic setting)

- programmed by the machine manufacturer
- Junkkari modifies the values to suit specific machine

User programmed values (third basic setting)

Programming state 1:

Press and hold CAL for five (5) seconds during the selected function, set the value with button.

Function	Programmed value	Basic setting (Wizard)	Basic setting	Basic setting (User)
Channel 2. %	No-Stress delay	10	10	-----
Channel 5. H	Maintenance interval	100	100	-----

Programming state 2:

Turn on the power and simultaneously press and hold CAL for five (5) seconds, the display shows "CAL2". Select the function with CAL button. Set the value with button, the flashing number changes when button is held down.

Function	Programmed value	Basic setting (Wizard)	Basic setting	Basic setting (User)
Channel 1. Rpm	max. Knife disk speed	1500	1500	-----
Channel 2. Rpm	No-Stress setting	400	400	-----
Channel 3. %	Feed speed top limit	80	80	-----
Channel 4. %	Feed speed bottom limit	20	20	-----

Programming state 3:

Turn on the power and simultaneously press and hold RESET for ten (10) seconds, the display shows "CAL3". Select the function with RESET button. Set the value with button, the flashing number changes when button is held down.

Function	Programmed value	Basic setting (Wizard)	Basic setting	Basic setting (User)
Channel 2. Ppr	Pulses / revolution	2.000	2.000	-----
Channel 3. S	Feed reverse delay	0,2	0,2	-----
Channel 4. S	Feed reverse duration	0,3	0,3	-----
Channel 5. On / off	Emergency Stop	on	on	-----
Channel 6. H	Total working time			-----

3 FUNCTION SUMMARY

Knife disk speed, as a default view

Function display channel ▼

AUTO / MAN operating mode

Feed in- stop-reverse

Emergency stop / main power switch

No-Stress setting

Visor up / down

To start programming press and hold RESET button and turn the power on.

CAL button navigates between TOT 1 and TOT 2 hour displays.
 RESET button resets the counter to zero
 Or
 Press and hold during power up to start programming.
 Or
 Press and hold for 5s when power is on to start programming.

Blow chute right/left

Blow chute up / down

Feeder speed +/-

Feeder top roll lift/ Push


FUNCTION SELECTION ▼

- Channel 1. Used during programming state, changes the maximum rotating speed
- Channel 2. Knife disk speed ⚙️
- Channel 3. Feed speed ⚙️%
- Channel 4. No function
- Channel 5. HMaintenance interval hour counter ⚙️↶
- Channel 6. Operating hour counter ⚙️^h

4 DISPLAY VALUE DURING CHIPPER

4.1 KNIFE DISK SPEED



When the power is turned on, the controller display default is knife disk speed rpm.

This is displayed when the pointed is at channel 3.  Channel can be changed using arrow button.

If arrow button is used to change the channel the controller will return after 10 seconds to the channel that displays the rotation speed.



4.2 FEEDER SPEED

Arrow button  may be used to move to the channel 3 that shows the feeder speed in Percentage. 




4.3 NEXT MAINTENANCE

When arrow button is used to move to channel 5 location, the display shows the hours remaining till the next maintenance.



4.4 WORKING TIME HOUR COUNTER

Wizard C+ controller has two hour counters, tot 1 and tot 2.

Use arrow button to move to channel 6.  CAL button can be used to select either tot.1 or tot.2.

Holding RESET button down will cause the counter in question to reset to zero.



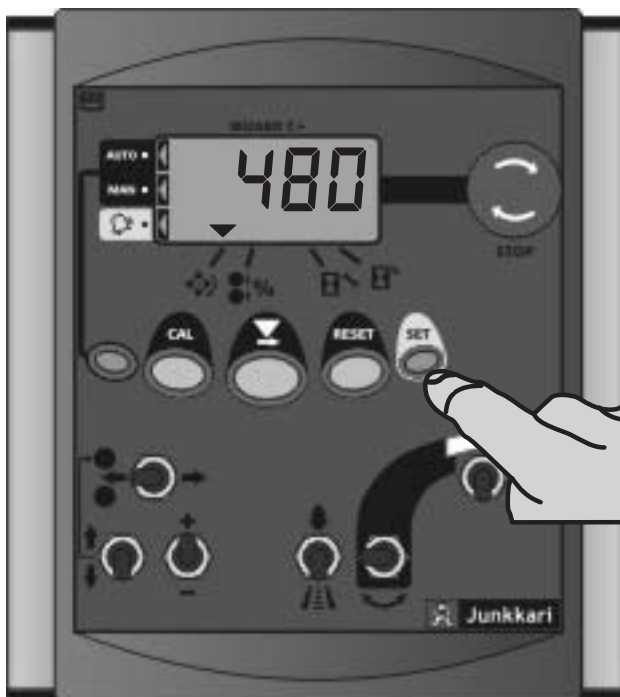
5 NO-STRESS

5.1 NO-STRESS SPEED LIMIT SETTING




5.1.1 METHOD a

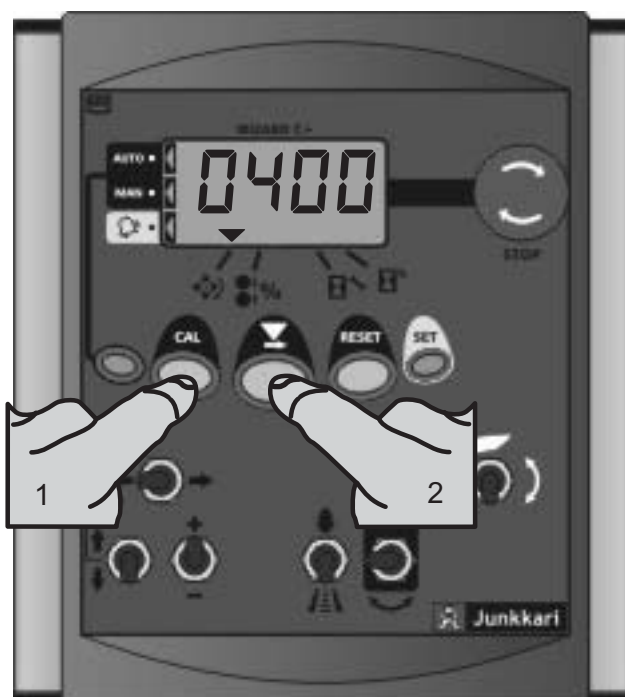
1. Adjust the tractor PTO speed to a level where the feeder should stop.
2. Press and hold “SET” button until the display shows “done”
3. Increase the PTO speed to normal working level.

This way the value will remain in the controller memory even when the power is turned off.




5.1.2 METHOD b

1. Hold CAL button pressed and turn the power on, the display shows CAL2
2. Release CAL button
2. Use CAL button to move the pointer to channel 2 location 
3. Use button  to select the required value. Hold button  pressed to change the value. Release the button when the the required button is shown.
4. Turn the power off at which time the value will be stored into the memory.



5.2 NO-STRESS DELAY SETTING

When the power is on.


1. At channel 2  hold "CAL" button pressed for 5 seconds.
2. Hold CAL button pressed while using arrow button to change the value.

This % value can be chosen between 1 - 25.
The larger the value, the longer the delay in feed restart.



5.3 FEED REVERSE DELAY

When No-stress stops the feed, the system will reverse the logs away from the knives. The delay and duration of this feature can be adjusted to user's preference.

1. Hold RESET button pressed and turn the power on, hold RESET button pressed for 10 seconds and the display shows CAL3.
2. Use RESET button  to move to channel 3 this value is the reverse delay.
3. Value can be changed using arrow button, hold the button pressed and the flashing value is selected.
4. Use RESET button to select channel 4, this value is the reverse duration. The value is changes



6 FEED CONTROL

6.1 FEED DIRECTION SELECTION

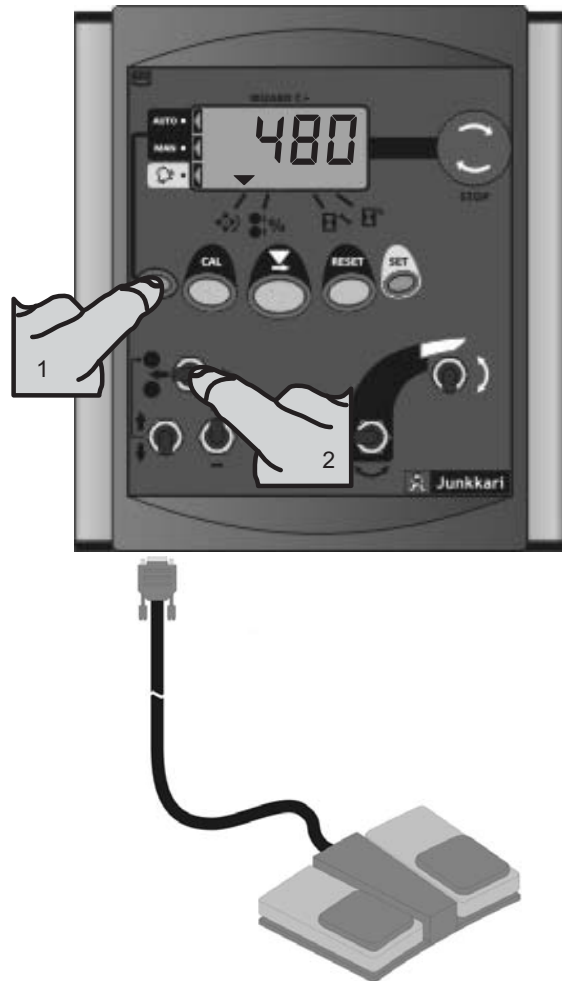
The controller has two modes for the feed operation, AUTO and MAN. The mode is selected 1.

With push button on the left, hold button pressed for 5 seconds and the pointed switched between the AUTO/MAN modes. Default mode is MAN when the power is turned on.

MAN mode requires that the rocker switch 1 is pressed to continue feed, and when released the feed stops.

In AUTO mode the feed stays on 2 but it has a small delay in start and stop .

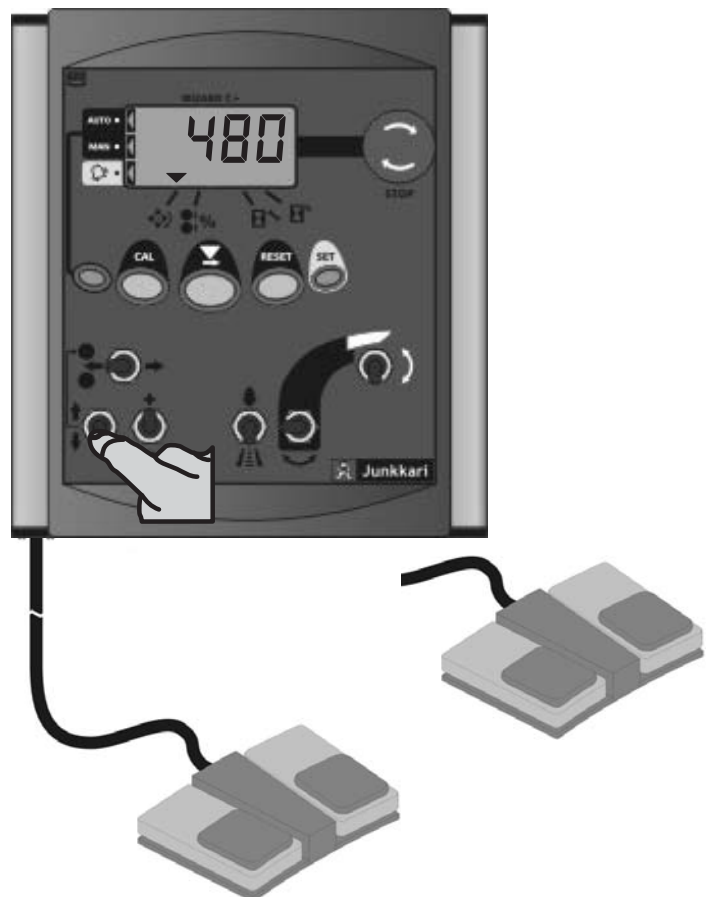
Feed direction can be controlled with the rocker switch or foot pedal. One pedal will feed in, and the other pedal reverses.



6.2 TOP FEED ROLL LIFT / PUSH (OPTION)

When the fed material is large, it is good to open the feed spout more so the material flows better in, and when feeding sparse stick bales, it is good to apply more pressure by pressing the top roll down.

Chipper models Hj350 and Hj500 can be equipped with optional top roll lift / push (item 45315). This feature can be operated with a controller rocker switch, or with separate foot pedal. In that case both the feed direction and the top roll has their own foot pedal.





6.2 MAXIMUM KNIFE DISK ROTATING SPEED

When chipping dry hard food it is recommended to limit the disk maximum speed to for example 750rpm.

Then the feeder is stopped when the 750 rpm is exceeded and the burning of the knives is prevented.

Setting the maximum knife disk speed:

1. Hold CAL button pressed and turn the power On, the display shows CAL2
2. Release CAL button
2. Use CAL button to move the pointer to channel 1 location
3. Use button  to select the required value. Hold button  pressed to change the value. Release the button when the the required button is shown.
4. Turn the power off at which time the value will be stored into the memory.



13. TROUBLESHOOTING CHART

ERROR	CAUSE	CORRECTIVE ACTION
The chipper does not pull logs in.	Worn knives Wrong cutting angle Upside down knife.	Sharpen and install knives according to manual.
Uneven chip size.	Knife clearance (B.) is too great. Single logs turn sideways after passing the feed Rollers.	Adjust knife clearance according to manual. Feed logs as continuous flow.
The discharge spout gets blocked.	Too low rpm.	Increase the rotation speed to 540-1000 rpm.
High power requirement - compared to the machine.	Power supply too small Knife setting (A) too large.	Decrease the knife setting
Lack of feed roll power	Oil level too low. Hydraulic pump belts loose. Hydraulic pressure too small	Add hydraulic oil. Tighten the V -belts. Check pressure 210 bar.
Feed rolls don't turn.	Water in the tank (winter) Emergency stop button pressed. PTO rpm < No-stress set rpm. Sensor detection distance too large.	Unfreeze, remove water, and change oil. Release emergency stop button. Increase PTO rpm or adjust NO-Stress Adjust distance to 2-5mm
Feed rolls stop	Loose electrical connection No-Stress sensor too far Rocker switch broken Hydraulic pressure too low.	Check electrical connections Adjust distance to 2-5mm Replace switch Adjust pressure to 210bar
Fed logs shake.	Feed rolls are not in sync.	See synchronization instruction.

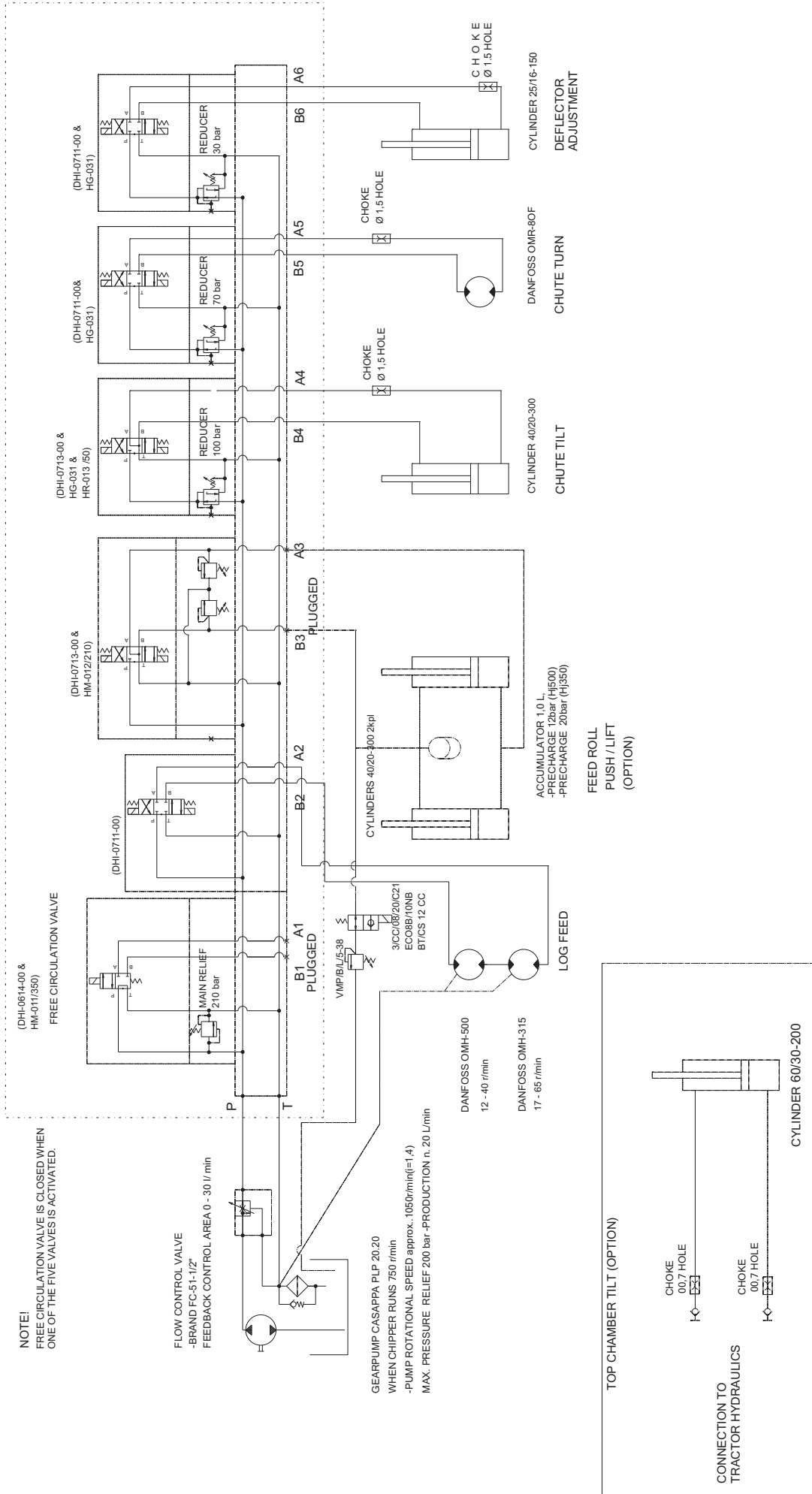
Chipper normal wear occurs safely and does not cause dangerous situations. In practice only wear items are knives. If the bearings show axial clearance, the adjustment should be performed by an expert.



NOTE THAT THE MACHINE IS INTENDED FOR A PROFESSIONAL OPERATOR. THEREFORE THE USE OF THE MACHINE ASSUMES SUFFICIENT GENERAL KNOWLEDGE AND SKILLS.



14. HYDRAULIKAAVIO 47290



15 REMOVING MACHINE FROM SERVICE

READ THE SAFETY INSTRUCTIONS

Removing the machine from service as a whole is the responsibility of the end user, or the person or company that owns the machine at the time of the removal. The removal of the machine from service and

the handling of the resulting waste are controlled in all countries by national laws, instructions, and regulations that must be followed. Most of the chipper parts do not disintegrate in the nature by themselves and therefore the chipper must be disassembled and different material must be disposed according to national regulations.

Steel and other metals are recycled via junk yards to be reused again. Waste oil, plastics, and other rubber parts such as tires and handled as hazardous materials and disposed either by recycling or transporting as appropriate to the junk yards, or disposed by other means as per the national regulations. Additional information regarding disassembly and waste handling can be requested from environmental authority.

16 WARRANTY POLICY

- Warranty period is 12 months in agricultural use in work for which the equipment is intended.
- In municipality, industrial and professional contracting, or similar use the warranty period is 6 months.
- Warranty period starts on the date when the authorized retailer releases the equipment.
- Warranty covers material and manufacturing flaws. Damaged parts are repaired or changed to operational parts at the factory or authorized repair shop. Subcontracted parts have warranties provided by their manufacturers.
- Warranty repairs do not extend the warranty period.
- Warranty does not cover damages caused by the use or maintenance against the instructions in the manual, excessive loading, or normal wear. Warranty does not cover consequential damages, shut-downs, travel expenses, freight, daily allowances, overtime, or change of the machine original structure.

For warranty claims contact the retailer that sold the machine and they will complete the claim. Before taking any action, the actions and possible costs must be agreed upon with the manufacturer in advance.

The warranty is in effect only if the warranty card in appropriately filled and returned to the manufacturer within 14 days of the delivery date.

17 SCOPE OF LIABILITY

The manufacturer shall not be responsible, if the machine is not used in compliance with the applicable law, safety regulations or instructions under this manual. Because it is possible that the user faces situations when using the machine that are not instructed or regulated, the action of the operator should comply with the general machine safety directions and directives.

The manufacturer is not responsible for the damages caused by the use of other manufacturer's components. The manufacturer is not responsible for the damages caused by the use of the chipper to the other machines or equipment. The manufacturer reserves all rights.

The owner is responsible for operating the machine, care, and maintenance, unless agreed otherwise. The owner is responsible for providing enough information regarding the handling and use of the machine to the machine operators.

EY -VAATIMUSTENMUKAISUUSVAKUUTUS KONEESTA**(FI)**

Valmistaja Junkkari Oy
Osoite Pohjanmaanväylä 5, FIN-62375 YLIHÄRMÄ

Vakuutamme yksinomaan omalla vastuullamme, että markkinoille saatettu kone

JUNKKARI HJ 350 PUUHAKKURI

valmistenumeroista **101** alkaen on soveltuvilta osin rakennettu normatiivisten asiakirjojen ohjeiden mukaan ja noudattaa direktiivien 2006/42/EY määräyksiä

EG- FÖRSÄKRAN OM ÖVERENSSTÄMMELSE FÖR MASKINELL UTRUSTNING**(SE)**

Tillverkare Junkkari Oy
Adress Pohjanmaanväylä 5, FIN-62375 YLIHÄRMÄ

Försäkrar härmed enbart på vårt eget ansvar, att för marknader tillverkad maskin

JUNKKARI HJ 350 FLISHUGG

f.o.m tillverkningsnummer **101** är tillverkad i tillämpig mängd i överensstämmelse med instruktioner av det normativa dokumentet följer bestämmelser av följande direktiver: 2006/42/EY

EC DECLARATION OF CONFORMITY FOR MACHINERY**(EN)**

Manufacture Junkkari Oy
Address Pohjanmaanväylä 5, FIN-62375 YLIHÄRMÄ

Herewith declare on our sole responsibility that for the market produced machine

JUNKKARI HJ 350 WOODCHIPPER

from the manufacturing number **101** is manufactured, where applicable, in conformity with provisions of the instructions of the normative document according to the following directive: 2006/42/EY

DECLARATION CE DE CONFORMITE POUR LES MACHINES**(FR)**

Fabricant Junkkari Oy
Adresse Pohjanmaanväylä 5, FIN-62375 YLIHÄRMÄ

Certifions á nos propres risques, que la machine suivante commercialisée

JUNKKARI HJ 350

et ce depuis le numéro de série **101** est en conformité avec les normes applicables et les dispositions de la directive 2006/42/EY

EG-KONFORMITÄTSEKTLÄRUNG FÜR MASCHINEN**(DE)**

Hersteller Junkkari Oy
Adresse Pohjanmaanväylä 5, FIN-62375 YLIHÄRMÄ

Erklären hiermit ausschließlích auf eigene Verantwortung, daß die Maschine

JUNKKARI HJ 350

von der Herstellungsnummer **101** konform mit den einschlägigen Bestimmungen von dem normativen Document hergestellt ist und Bestimmungen von Direktiven: 2006/42/EY

EC SAMSVÆRSERKLÆRING OM MASKINER**(NO)**

Produsent Junkkari Oy
Adresse Pohjanmaanväylä 5, FIN-62375 YLIHÄRMÄ

Erkærer at produktet beskrevet heretter

JUNKKARI HJ 350

f.o.m Tillverkningsnummer **101** Som omfattes av denne erklæringen, er i samsvar med instruksjonene i dokument samt bestemmelsene i følgende direktiv: 2006/42/EY

EY-vaatimustenmukaisuusvakuutus

TOEND MASINA NOUTELEVASTAVUSE KOHTA

(EE)

Valmistaja Junkkari Oy
Address: Pohjanmaanväylä 5, FIN-62375 YLIHÄRMÄ

Kinnitamme ainuüksi omaenda vastutus el, et turule lastud masin

JUNKKARI HJ 350

valmistusnumbrid 101 on ehitatud normatiivsete dokumentide juhiste kohaselt ja vastab direktiivi 2006/42/EY nõustele

ZAPEWNIEŃIE ZGODNOSCI URZĄDZENIA Z WYMAGANIAMI

(PO)

Producent Junkkari Oy
Adres: Pohjanmaanväylä 5, FIN-62375 YLIHÄRMÄ

Zapewniamy wyłącznie na własną odpowiedzialność, że wprowadzona do sprzedaży

JUNKKARI HJ 350

począwszy od nr fabrycznego 101 jest skonstruowana w zakresie stosowalności zgodnie z normatywną dokumentacją i przepisami dyrektywy: 2006/42/EY

CEE DECLARACIÓN DE CONFORMIDAD PARA MAQUINARIA

(ES)

Fabricante: Junkkari Oy
Dirección: Pohjanmaanväylä 5, FIN-62375 YLIHÄRMÄ

Declara en su misma responsabilidad que la máquina construida modelo:

JUNKKARI HJ 350

con el numero de fabricación 101 está fabricada con conformidad a las prescripciones de la normativa referente a la siguiente directiva: 2006/42/EY

Ylihärmässä 1.1.2010



Pekka Himanka
Toimitusjohtaja
Technical Director