

VU 202

Logmax



Page 2-3: Vu 202 in cabin
Page 4: Break point calibration.
Page 5-6: Schematic on Vu202 card
Page 7-8: Installation
Page 9: Cable number from cabin-head

Function buttons on VU 202 card

Yellow button: Move to next function. Flashbulb F1 to F8, Indicates which are actuated, and Then F1 to F8 is off, you are in working position.

Black button: reduce parameter value.

Red button: Increase parameter value.

F1: Showing pulses from head cut out sensor. Important.

Led in 1(saw home) must be out for the counter to start.

Then led in 1 is on again then counter sets to 0. Normal value 28.

F2: Sender 1 (Left). After closing and opening the head it will show 999 and counting down to around 650. If it starts with 0 and count the other direction you have to reverse the pulstrain.

F3: Sender 2 (Right). After closing and opening the head it will show 999 and counting down to around 650. If it starts with 0 and count the other direction you have to reverse the pulstrain.

F4: Knife diameter value(close 114- open 936)

If this is not correct, you have to adjust in the box in head.

F5: Knife diameter output value. (adjustable)

If you under F7 choose to drive with diameter only from bottom knife. The “curve” could be calibrated here. Observe that bottom knife will be calibrated here and not in maxi. Read page breakpoint calibration. To make breakpoint calibration on only bottom knife the value under F7 has to be 2.

F6: % of knife diameter (normal around. 25 %)

F7: Diametermode:

0: Rollers + knife diameter

1: Only rollers diameter

2: Only knife diameter

F8: Saw chain greasing 300-700 higher value less greasing

Low value high greasing

F1+F2: Output diameter value/breakpoint calibration

We can see puls train from diameter sender 1 and 2.

Led dia 1A and 1B= Left sender.

Led dia 2A and 2B=Right sender.

Fuse for all senders are on top of vu202. (1amp). in cabin.

In 1 = Saw home sender (wire 15). If led not light. Check In 2. If that one works + and - is correct. Same feeding. The signal is wire 15. So, shortcut 15 in the head and see if the led lights. If not shortcut closer to cabin. We can do this way because in 1, 2, 3 is NPN. And please check that the saw is really home.

In 2 = Saw counter. (Wire 16). If led not lights. Check In 1. If that one works + and - is correct. Same feeding. The signal is wire 16. So, shortcut 16 in the head and see if the led lights. If not shortcut closer to cabin. We can do this way because in 1,2,3 is NPN.

In 3 = Knife sensor. (wire 14). If led not lights. Check In 1. If that one works + and - is correct. Same feeding. The signal is wire 14. So, shortcut 14 in the head and see if the led lights. If not shortcut closer to cabin. We can do this way because in 1,2,3 is NPN.

Breakpoint calibration

Alternative function on button F1+F8

Touch **yellow** button until F1+F8 is actuated.

1. Hold **red** and **black** button at the same time in two seconds and the display will show 0. The program will lock on the actual breakpoint. With **red** and **black** button you can now change value up or down on this breakpoint. The result will be shown in the maxi computer. It will be saved then you leave F1+F8.
2. The basic curve for the actual head can always be brought back. Go to F1+F8 Hold both **black** and **red** button at the same time for ten seconds and you will see 999 in the display. You can now release the buttons and the basic curve is back.

Example

Under F1+F8 the cross measured value to the Valmet is shown. From 0-999. Different heads have different curves so if ex. The diameter is wrong at 100 mm we shall take a tree in the harvester head which will be exactly 100 mm. in the maxi. You have to zero the computer by reset length and diameter. Now you will see 100 mm. in the maxi. If you don't, try again.... You know that the tree is 90 mm. (example). At normal calibration in maxi, if there is 10 mm. wrong you will start calibrate 5 mm. You will do the same here. Then go to F2 and hold both **black** and **red** button for one second and you will see 0 in Vu 201 display. Push the **black** button and look at the same time in the maxi display - hold the **black** button until the maxi will show 95 mm. Now you are done. Push the **yellow** button to all the leds are put out (F1-F8). And the breakpoint is saved.

If you fail you can always go back to the basic curve (See above at #2)

VU201 Logmax

| P1 Molex 12 pins | | led | Logmax cranecablel |
|-------------------------|------------------------|-----|-----------------------|
| 1 | GND (jord) | | |
| 2 | | V7 | |
| 3 | Feeding forward signal | V5 | 9 |
| 4 | Knives close signal | V3 | |
| 5 | Knives open signal | V1 | 1 |
| 6 | Diameter signal | | |
| 7 | Rollers close signal | V8 | |
| 8 | Rollers open signal | V6 | |
| 9 | Sawchain greasing | V4 | |
| 10 | Saw bar out | V2 | |
| 11 | | | |
| 12 | | | |

P2 Molex 14 pins

| | | | |
|----|-------------------|-----|----|
| 1 | GND(Earth) | | |
| 2 | Reserve | V9 | |
| 3 | Cut home sender | IN1 | 15 |
| 4 | Cut out sender | IN2 | 16 |
| 5 | Sensor Knives | IN3 | 14 |
| 6 | | | |
| 7 | GND(Earth) | | |
| 8 | 24V supply output | | |
| 9 | Reserve | V10 | |
| 10 | Diameter 1A | D1A | 21 |
| 11 | Diameter 1B | D1B | 20 |
| 12 | Diameter 2A | D2A | 22 |
| 13 | Diameter 2B | D2B | 24 |
| 14 | 24V supply output | | |

P3 Molex 24pins

Led

Logmax MHC
Cranecable K1

| | | | |
|----|--------------------|----|----|
| 1 | GND (jord) | | |
| 2 | GND (jord) | | |
| 3 | GND (jord) | | |
| 4 | GND (jord) | | |
| 5 | GND (jord) | | |
| 6 | GND (jord) | | |
| 7 | GND (jord) | | |
| 8 | GND (jord) | | |
| 9 | GND (jord) | | |
| 10 | GND (jord) | | |
| 11 | GND (jord) | | |
| 12 | GND (jord) | | |
| 13 | Diameter 1a | 1 | 2 |
| 14 | Diameter 1b | 2 | 3 |
| 15 | zeroreferens dia 1 | 3 | 4 |
| 16 | Diameter 2a | 4 | 8 |
| 17 | Diameter 2b | 5 | 9 |
| 18 | zeroreferens dia 2 | 6 | 10 |
| 19 | Såggivare a | 7 | 14 |
| 20 | Såggivare b | 8 | 15 |
| 21 | zeroreferens såg | 9 | 16 |
| 22 | knives stäng | 10 | 2 |
| 23 | rollers stäng | 11 | 3 |
| 24 | Chain greasing | 12 | 23 |

P4 Molex 4 pins

| | |
|---|-------------------|
| 1 | 24V module supply |
| 2 | GND module supply |
| 3 | 24V module supply |
| 4 | GND module supply |

Electric installation(901.3)

Before start changing head disconnect X137 and mount Vu 202 then the wires is installed all the way out. This contact are located in the right corner inside covers 2dm. from gas/inch pedal.

Crane cable are connected in X70,X71,X72,X73. These comes from Vu202 system. Mount MHC under VBU (use p.n.6013) Connect MHC to Vu202 system. Mount VU202 between door and Maxi. There is ready 2*M8.

Electric installation (901.4)

Before start changing head disconnect main switch. Cut crane cable 7dm. meter from cabin. Put the cutted cable into the cabin. Mount contact on cable (contact including).

Pin 1= White

Pin 2=Blue

Pin 3=Wire nr.1 (+24volt)

Pin 4=Wire nr2 and 3 (+ 24volt.)

Pin 7=Cable nr.4 (ground)

Pin 8=Wire nr.5 and 6 (ground)

This will fit contact X137 on VU202.

Crane cable are connected in X70,X71,X72,X73. These comes from Vu202 system. Mount MHC behind chair on plastic cover on right side. (use p.n.6011) Connect MHC to Vu202 system. Mount VU202 under Maxi screen. (use p.n.6012)

Maxi settings

Ground settings/configuration/Logmax 928, 3000, 4000, 5000 should have 350 settings. Logmax 6000=360, and 7000=370

Open and close head. If diameter don't work. Check first in Vu that senders start on 500 and goes down. If they start on 0. Change diameter puls train.

On Logmax dia sender left is on left side.

If they start on 500 and it says no referens change puls out on P3. This is from vu and in to MHC. Now diameter is reversed. Left dia sender is on right side as In Valmet system.

Try the sawbar. If cutting control is reversed change puls train in P3. This is outputs to MHC.

2 In Valmet machines you can adjust low pressure in maxi.

You have to log in by code. Go to base machine/Machine settings/
Low pressure out, Standard 26%. Adjust to 50 %(around 170bar)

3 Go in to head adjustment/feed roller. Higher pressure feed rollers.
Standard 40%.Adjust to 0%. We don't use that in Logmax.

4 Go in to head adjustment/sawchaingreasing. Adjust the flow to 00.
We adjust the sawchaingreasing in Vu202. Under F5.

5 Go in to head adjustment/knives. Knives closing then feeding backwards=yes.
Go to pulsopening and set knives opening pulses then feeding close and open to 0. Then go back and set knivesopeningpulses then feeding backwards to No.
This is for not get the knives to puls then feeding backwards. Knives opening diameter should be on 0. Otherwise the knives will open all the time than you release the button because the diameter is in the rollers. Adjust manual feeding backwards to 8. Then you test drive you will feed first forward. Than backwards. You only push button and hold it and the knives will open 3-5 centimeters and the head will feed backwards 3-5 meters without problem. The settings can be 8-12 normally.

Use the same settings on automatic feeding.8-12.

6 Go to head adjustment/feeding. Start with min current. Engine running on Working R.P.M.Adjust so the rollers move 1lap on 4-5 seconds. Forward and backwards. Normal 60-80. If we get this right we don't have to change the crawl speed. Normal crawl speed is forward -15 and backwards -10. You have to have – before the speed. Otherwise it won't work. We also change brakelenght from 60cm. standard to 45 cm. So, from from full feeding to crawling speed it will be 45 cm. And the stop length is 5cm. we don't change that. That means from crawl speed to stop its 5 cm.

Other tips

If the fuse will go so is the Vu 202 feed by the same fuse as the Valmet head. (Senders). F26 at machines from 2000. 7,5 amps. Do not forget that the fuse also feeds the senders for the crane.

There is an automatic fuse on Vu 202(1 amp). It feeds cable number 11. (+ to senders in head).

Hydraulic installation.

Find pressure and return line and mount the hoses.

On later machines you can find leak line to the head you replace.

And always check installation by checking the pressures according to Logmax installation cheat.

Cable number in head

- 1 Knives open
- 2 Knives closed
- 3 Rollers Closes
- 4 Tilt up
- 5 Tilt down
- 6 Saw motor
- 7 Bottom knife open
- 8 Bottom knife closed
- 9 Feed forward
- 10 Feed backwards
- 11 + to senders
- 12 Lengthpuls 1
- 13 Lengthpuls 2
- 14 Sender signal knife
- 15 Sender signal saw home
- 16 Sender signal saw out
- 17 Saw bar out 2000 hydraulic, others saw bar home
- 18 Colour 1
- 19 Colour 2
- 20 Diameter signal left 1
- 21 Diameter signal left 2
- 22 Diameter signal right 1
- 23 Easy greasy
- 24 Diameter signal right 2
- 25 Rotator left
- 26 Rotator right
- 27 Accumulation
- 28 4 point measuring