

VU 201A

LOGMAX with Multitree



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VU 201A Adjustments Logmax

Funktionbuttons on VU 201 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.

F2: Showing diameter after cross measuring/Breakpoint calibration. Then you open the head the value will start at 999 and go down than you close the head.

F3: Showing diameter sender left. It vill start at 500 then you open the head. Then you close the head it vill count down. If it start at 0 and counts the other direction you have to reverse the pulstrain.

F4: Showing diameter sender Right. It vill start at 500 then you open the head. Then you close the head it vill count down. If it start at 0 and counts the other direction you have to reverse the pulstrain.

F5: Adjustment of sawchaingreasing. Lower value gives more greasing and hire value gives less greasing. Normal 350-700

F6: Adjustment of saw engine speed. (0-100%) Normal 44-50

Logmax 4000, 5000:3, 7000

(F6): Adjustment of sawhomespeed. (0-100%)

Logmax 928, 3000, 5000:2,750

F7: Colour time Normal 20-40

F8: At which flank the colour vill mark. Normal 5

F1+F2: Bad delimiting 0,1,2 0=Off, 1= off after tilt up(on with pedal)
2= on after tilt up(off with pedal).

F1+F3:Bad delimiting pulse opening 0-999 (10ms step).

F1+F4: Rear knife pulse opening then start feeding

F1+F5: Rear knife pulse closing after opening then start feeding

F1+F6: Rear knife in then feeding forward.

0=closing all time, 1=steered by sensor after pulse open and close.

F1+F7:Pushing head close this time will actuate multitreehandling 10ms step .
0 = No multitreehandling , normal 100=1second.

F1+F8: Multitreehandling arm opening after cutting time(10ms step)

F1+F2+F3: Multitreehandling arm out pulsetime 0-999(10 ms step)

F1+F2+F4: Aut. Head opening after tilt down 0=off. 1= on

F1+F2+F5: Loggcounter * 1 (reset by holding black button)

F1+F2+F6: Loggcounter* 1000

F1+F2+F7: Logmax head 0=928,1=3000,2=4000,3=5000,4=6000,5=7000

Breakpoint calibration

Alternative function on button F2

Touch **yellow** button until F2 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 F2.
2. The basic curve for the actual head can always be brought back. Go to F2 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 F2 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)

VU201A Logmax

<u>P1 Molex 12 pins</u>		led	Logmax Crane cable	Minifit 8pol	Maxi
1	GND (Earth)				X72-2 20
2	Saw feeding	V7			X70-6 6
3	Feeding forward signal	V5	9	1	X70-4 4
4	Knives close signal	V3			X71-4 13
5	Knives open signal	V1	1	8	X71-5 14
6	Diameter signal				X70-9 9
7	Rollers close signal	V8			X71-7 16
8	Rollers open signal	V6			X71-6 15
9	Pressure red. knives	V4			X70-3 3
10	Cut out	V2	17	3	X71-2 11
11	Cut home sender				X71-3 12
12	Cut out sawcontrol				X71-1 10

P2 Molex 14 pins

1	GND(Earth)			
2	Tilt up	V9	4	
3	Cut home sender	IN1	15	
4	Cut out sender	IN2	16	
5	Sensor Knives	IN3	14	
6				
7	GND(Earth)			
8	24V 1 amp fuse senders			
9	Bad delimiting	V10	(pedal)	
10	Diameter 1A	D1A	21 (left)	
11	Diameter 1B	D1B	20 (left)	
12	Diameter 2A	D2A	22 (right)	
13	Diameter 2B	D2B	24 (right)	
14	24V supply bad delimiting			

P3 Molex 24pins		led	Logmax Cranecable	Minifit 8pol	Maxi
1	GND(Earth)				
2	GND(Earth)				
3	GND(Earth)				
4	GND(Earth)				
5	GND(Earth)				
6	GND(Earth)				
7	GND(Earth)				
8	GND(Earth)				
9	GND(Earth)				
10	GND(Earth)				
11	GND(Earth)				
12	GND(Earth)				
13	Knives close	1	2		
14	Sawbar out	2	17	Logmax 4000,5000:3,7000	
15	Bottom knife close	3	8		
16	Bottom knife open	4	7		
17	Feedrollers close	5	3		
18	Colour 1	6	18		
19	Colour 2	7	19		
20	Multitreehandling	8	25		
21	Chain greasing	9	23		
22	Top knives open	10	1		
23	Saw engine speed	11	6	Logmax 4000,5000:3,7000	
24	Saw home speed	12	17	Logmax 928,3000,5000:2	

P4 Molex 4 pins

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

Electric installation

Before start changing head disconnect X70, X71, X72 and mount Vu 201 then the wires are installed all the way out. These contacts are located in the right corner inside covers 2dm. from gas/inch pedal.

Electric installation on crane. Only mount cables 1-24. A is 1 and B is 2 a.s.o. Number 25 is extra. Don't use.

Maxi settings

1 Ground settings/configuration/Logmax 928, 3000.4000 should have 945B settings. Logmax 5000, 6000, and 7000 should have 965B settings.

2 In later 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 Vu201. Under F5.

5 Go in to head adjustment/knives. 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. We also change start forward from 3 to 5.

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 23 cm. So, from from full feeding to crawling speed it will be 23 cm. And the stop length is 1cm. we don't change that. That means from crawl speed to stop its 1 cm.

7 Go to work position. Take a log and push crawl speed forward and backward .It should feed on a log without branches 0,5-0, 6 meter per second. If you log in on service level you have a speedometer in working position. If it's not the right speed you adjust the crawl speed.

If the crawl speed is OK and the maxi doesn't find the cutting window you can adjust the brake length. If it's stop to early and go slowly to the cutting window you make brakelenght shorter and if maxi passes the window and go back you vill make the brakelenght longer. But always check the crawling speed before changing brakelenght.

8 Colourmarking (if there is one) should be set to time 25. Actuating vill be set to 201 in maxi.

Other tips

If the fuse will go so is the Vu 201 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 201(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.

On earlier machines we use one of two hoses witch valmet uses for feed rollers open/close. If they are in use you also have to disconnect the wires to the presteeringvalves for rollers open and close. In the other end of these hoses you must plug them on the L90 and connect the one you use to the return block on crane foot. If you have higher pressure than 2 bar on the leak line you may need to connect both hoses. They are normally 3/8" hoses on 998, 1400 and 1600 cranes. 1/2 "hoses on CRH cranes. From 2004 they are 3/4". 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 closed
- 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 Multitree handling