

UNIPLUS

CAN-bus OPERATING INSTRUCTIONS

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SYSTEM DESCRIPTION

The electro-hydraulic control system used on the UNIPLUS is a CAN-bus system where all the control signals are carried by one pair of wires. The 12 Volt, 30 Amp power supply is taken directly from the tractor battery to the machine fuses, as the in-cab power plugs on some tractors may not be capable of supplying an adequate amperage. Additional wires are used to power the control box and an auxiliary power supply.

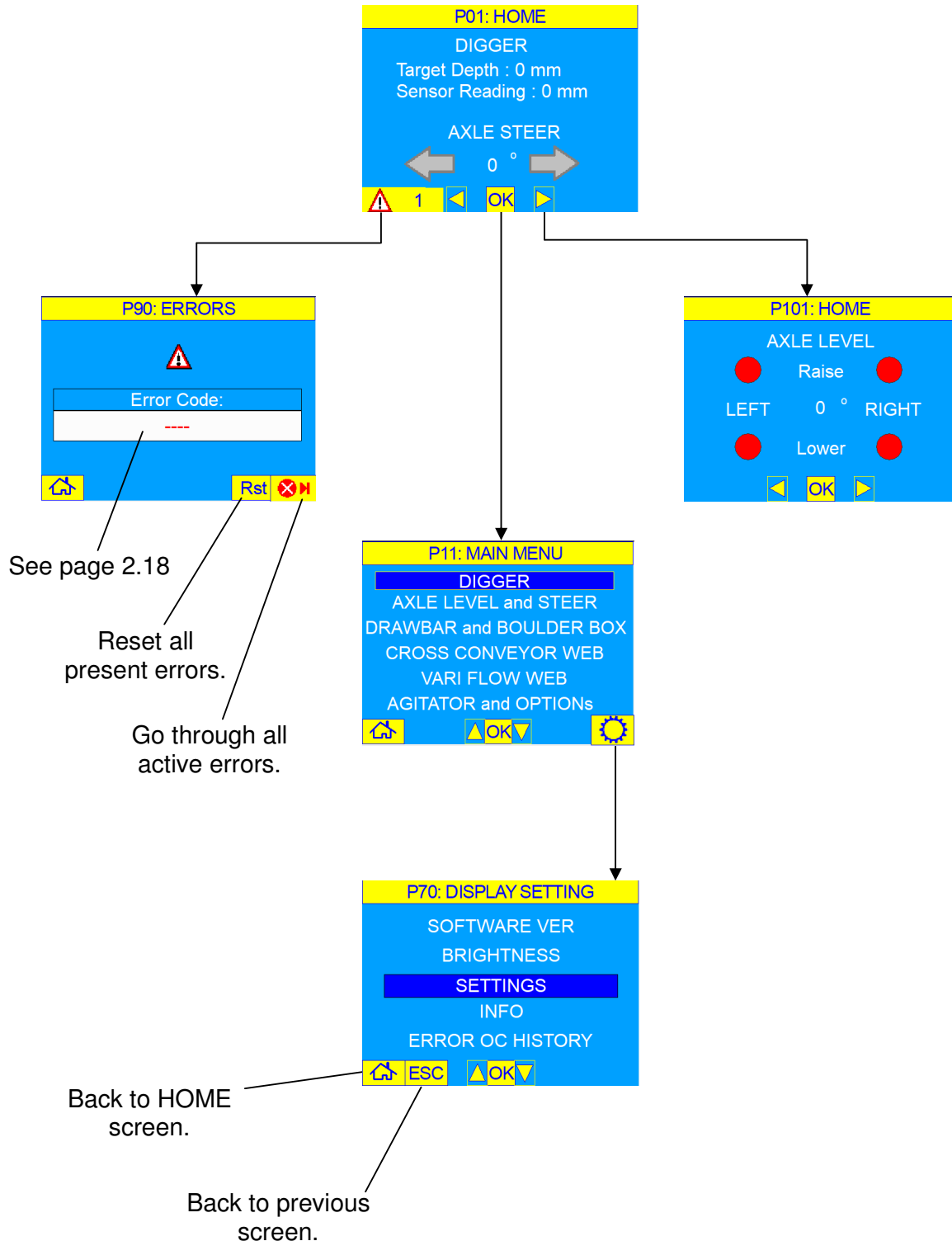
The system comprises of the control fascia which is connected to the input circuit board. The control box screen displays an overall illustration of the system and allows access to select and set operating parameters. The screen also gives access to a service menu which will allow the status of each function to be displayed.

On the machine, the power and control wires are taken onto a distribution board which allows the connection of the various control sensors and the fuses which cover all the power outputs. From the distribution board the master processor module is connected into the wiring loom which connects all the individual hydraulic valves.

The switches on the control panel are designed to cover all build options. Depending on the specification of the machine, some functions will not be active.

HOME SCREEN

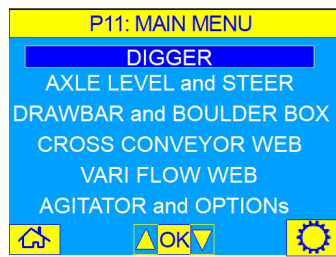
HOME screen is displayed after start-up.



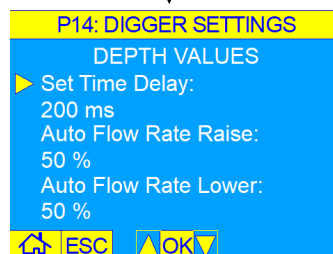
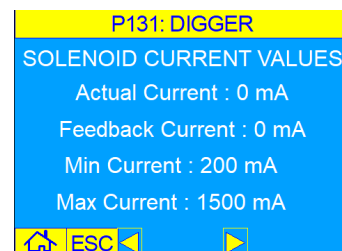
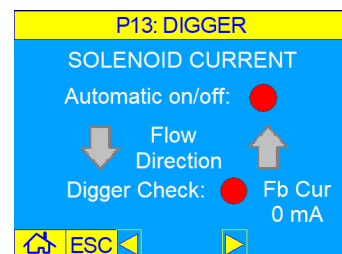
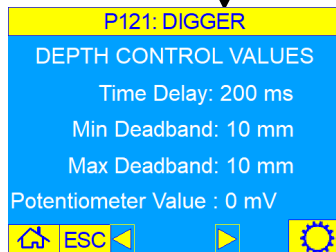
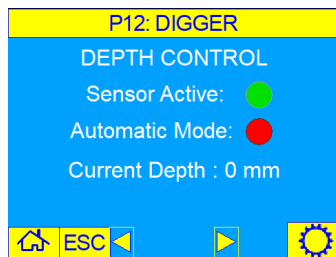
2.3

CAN-bus OPERATING INSTRUCTIONS

MAIN MENU - DIGGER



Select DIGGER with up/down buttons and press OK.

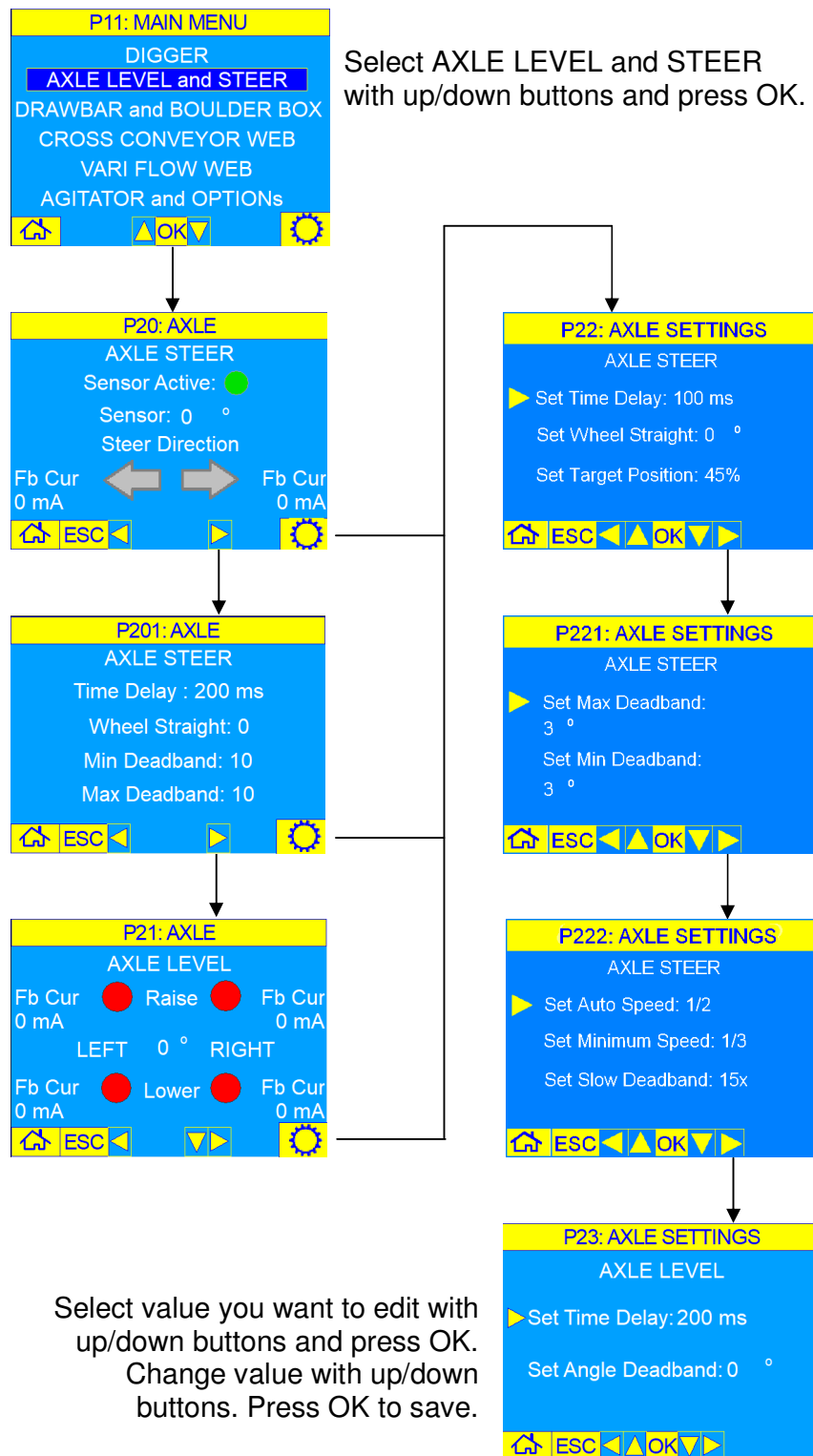


Select value you want to edit with up/down buttons and press OK. Change value with up/down buttons. Press OK to save.



Min & max figures added together create total deadband (eg. 10+10 =20mm)

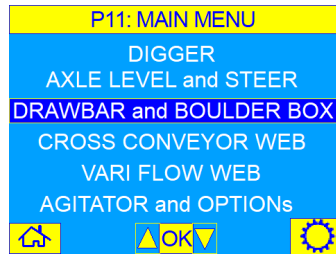
MAIN MENU – AXLE LEVEL and STEER



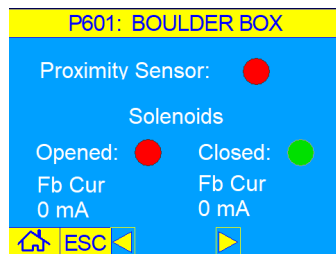
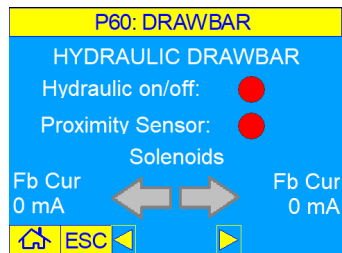
2.5

CAN-bus OPERATING INSTRUCTIONS

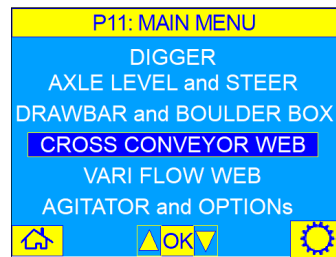
MAIN MENU – DRAWBAR and BOULDER BOX



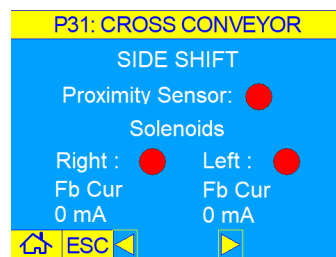
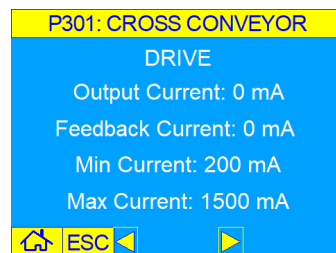
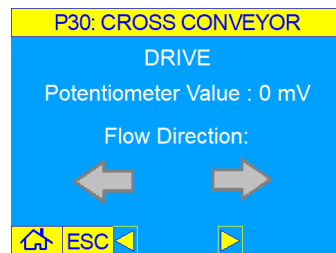
Select DRAWBAR and BOULDER BOX with up/down buttons and press OK.



MAIN MENU – CROSS CONVEYOR WEB



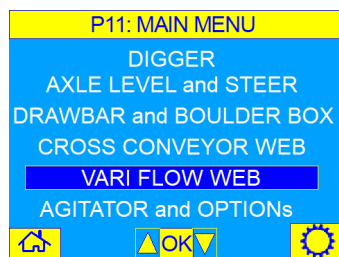
Select CROSS CONVEYOR WEB
with up/down buttons and press OK.



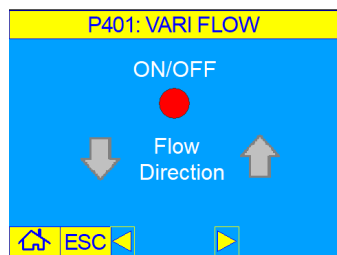
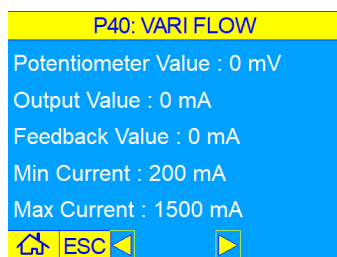
2.7

CAN-bus OPERATING INSTRUCTIONS

MAIN MENU – VARI FLOW WEB



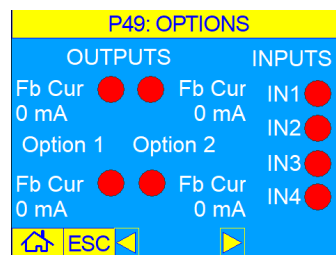
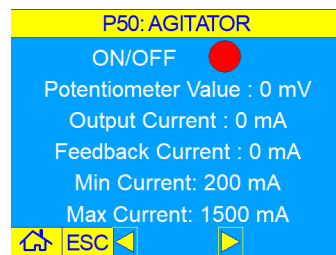
Select VARI FLOW WEB with up/down buttons and press OK.



MAIN MENU – AGITATOR and OPTIONS



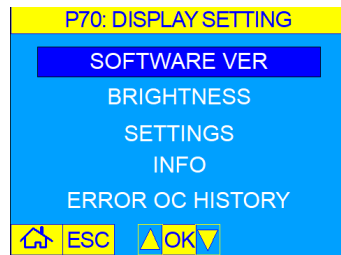
Select AGITATOR and OPTIONS
with up/down buttons and press OK.



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CAN-bus OPERATING INSTRUCTIONS

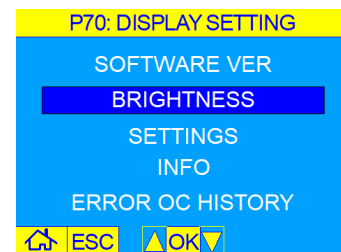
DISPLAY SETTING – SOFTWARE VERSION



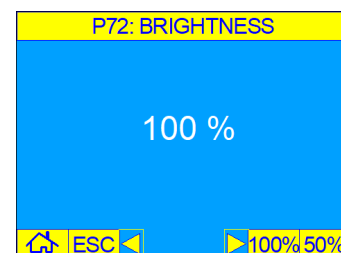
Select SOFTWARE VER with up/down buttons and press OK.



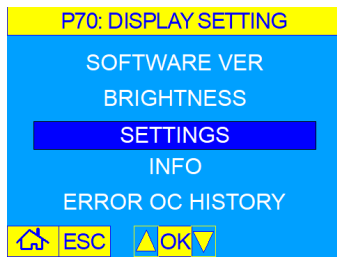
DISPLAY SETTING – BRIGHTNESS



Select BRIGHTNESS with up/down buttons and press OK.



DISPLAY SETTING – DEALER SETTINGS



Select SETTINGS with up/down buttons and press OK.



Enter password to access dealer settings in the SERVICE MENU.
(Contact Standen Engineering).



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CAN-bus OPERATING INSTRUCTIONS

DISPLAY SETTING – INFORMATION

P70: DISPLAY SETTING

SOFTWARE VER
BRIGHTNESS
SETTINGS
INFO
ERROR OC HISTORY

ESC OK

Select INFO with up/down buttons and press OK.

P80: INFO

HMI CR0452:

h: 4.4
Ct: 16.047 ms
Temp.: 37 °C

ESC

P81: INFO

CANBus 1:

Bus Load: 33%
BaudRate: 250

ESC

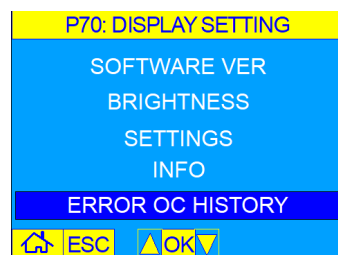
P82: INFO

Master DSE640 - 01:

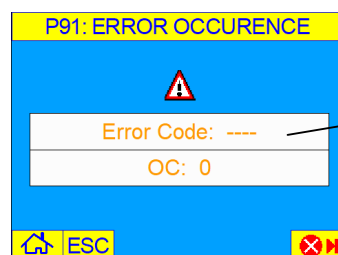
h: 0.0
n: 0
Ct: 0 ms
Temp.: 0 °C

ESC

DISPLAY SETTING – ERROR OCCURRENCE HISTORY



Select ERROR OC HISTORY with up/down buttons and press OK.



See page 2.18

Go through all errors.

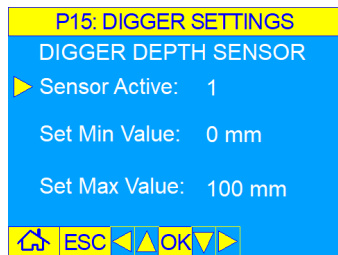
2.13

CAN-bus OPERATING INSTRUCTIONS

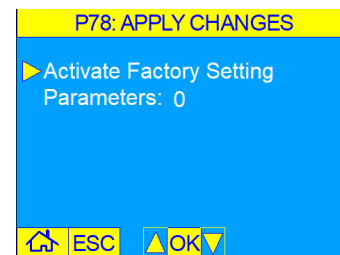
SERVICE MENU – DIGGER (dealer settings)



Select DIGGER with up/down buttons and press OK.

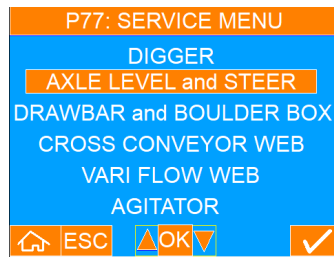


Select value you want to edit with up/down buttons and press OK. Change value with up/down buttons. Press OK to save.



Default settings for all machine parameters set to 1.

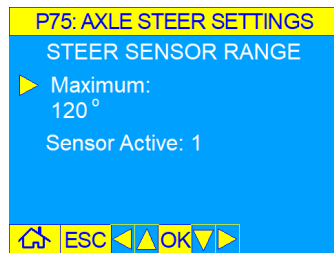
SERVICE MENU – AXLE LEVEL and STEER (dealer settings)



Select AXLE LEVEL and STEER with up/down buttons and press OK.



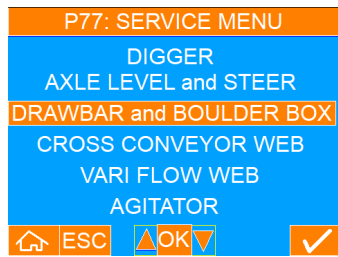
Select value you want to edit with up/down buttons and press OK. Change value with up/down buttons. Press OK to save.



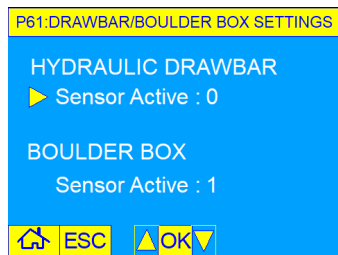
2.15

CAN-bus OPERATING INSTRUCTIONS

SERVICE MENU – DRAWBAR and BOULDER BOX (dealer settings)

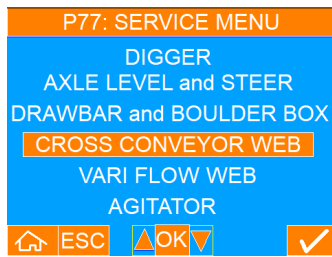


Select DRAWBAR and BOULDER BOX with up/down buttons and press OK.

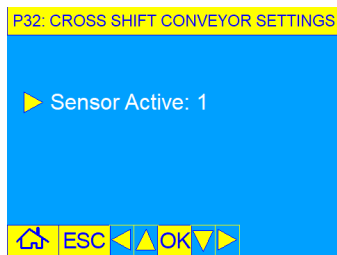


Select value you want to edit with up/down buttons and press OK. Change value with up/down buttons. Press OK to save.

SERVICE MENU – CROSS CONVEYOR WEB (dealer settings)



Select CROSS CONVEYOR WEB with up/down buttons and press OK.



Select value you want to edit with up/down buttons and press OK. Change value with up/down buttons. Press OK to save.

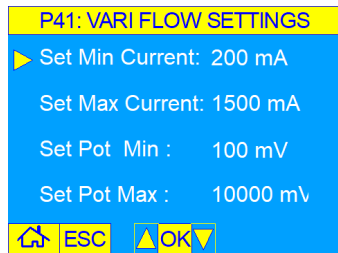
2.17

CAN-bus OPERATING INSTRUCTIONS

SERVICE MENU – VARI FLOW WEB (dealer settings)

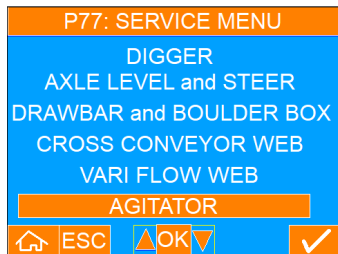


Select VARI FLOW WEB with up/down buttons and press OK.

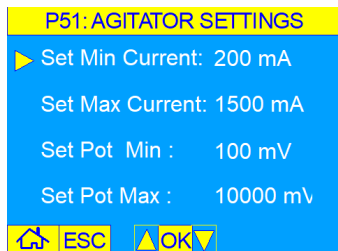


Select value you want to edit with up/down buttons and press OK. Change value with up/down buttons. Press OK to save.

SERVICE MENU – AGITATOR (dealer settings)



Select AGITATOR with up/down buttons and press OK.



Select value you want to edit with up/down buttons and press OK. Change value with up/down buttons. Press OK to save.

ERROR CODES

Error code	Description	Cause	Action
1000			
1001	VB Voltage below normal or shorted low	Supply voltage out of range	Check the supply voltage of outputs
1002	Can Network 1 loss of communication; Wurth device or Master M640	CAN bus busy, error state or devices switched off	Check wiring, line resistors or supply voltage
1003	Depth sensor has an issue or out of range	Possible situation open circuit, supply range or device defect	Check the wiring or supply connectors
1004	Digger Raise solenoid has an issue	Possible situation of short circuit or open circuit	Check the wiring or solenoid connector
1005	Digger Lower solenoid has an issue	Possible situation of short circuit or open circuit	Check the wiring or solenoid connector
1006	Digger Check solenoid has an issue	Possible situation of short circuit or open circuit	Check the wiring or solenoid connector
1007	Digger potentiometer has an issue or out of range	Possible situation open circuit, supply range or device defect	Check the wiring or supply connectors
1008	Axle level sensor has an issue or out of range	Possible situation open circuit, supply range or device defect	Check the wiring or supply connectors
1009	Axle Level left solenoid has an issue	Possible situation of short circuit or open circuit	Check the wiring or solenoid connector
1010	Axle Level left check solenoid has an issue	Possible situation of short circuit or open circuit	Check the wiring or solenoid connector
1011	Axle Level right solenoid has an issue	Possible situation of short circuit or open circuit	Check the wiring or solenoid connector
1012	Axle Level right check solenoid has an issue	Possible situation of short circuit or open circuit	Check the wiring or solenoid connector
1013	Axle Steer sensor has an issue	Possible situation open circuit, supply range or device defect	Check the wiring or solenoid connector
1014	Axle Steer left solenoid has an issue	Possible situation of short circuit or open circuit	Check the wiring or supply connectors
1015	Axle Steer right solenoid has an issue	Possible situation of short circuit or open circuit	Check the wiring or solenoid connector
1016	Vari flow web forward solenoid has an issue	Possible situation of short circuit or open circuit	Check the wiring or solenoid connector
1017	Vari flow web reverse solenoid has an issue	Possible situation of short circuit or open circuit	Check the wiring or solenoid connector
1018	Vari flow web potentiometer has an issue or out of range	Possible situation of short circuit or open circuit	Check the wiring or solenoid connector
1019	Agitator solenoid has an issue	Possible situation open circuit, supply range or device defect	Check the wiring or supply connectors
1020	Agitator potentiometer has an issue or out of range	Possible situation of short circuit or open circuit	Check the wiring or solenoid connector
1021	Cross Drive web left solenoid has an issue	Possible situation open circuit, supply range or device defect	Check the wiring or supply connectors
1022	Cross Drive web right solenoid has an issue	Possible situation of short circuit or open circuit	Check the wiring or solenoid connector
1023	Cross Drive web potentiometer is out of range	Possible situation of short circuit or open circuit	Check the wiring or solenoid connector
1024	Drawbar Right solenoid has an issue	Possible situation open circuit, supply range or device defect	Check the wiring or supply connectors
1025	Drawbar Left solenoid has an issue	Possible situation of short circuit or open circuit	Check the wiring or solenoid connector
1026	Drawbar sensor has an issue or out of range	Possible situation of short circuit or open circuit	Check the wiring or solenoid connector
1027	Cross Shift web left solenoid has an issue	Possible situation open circuit, supply range or device defect	Check the wiring or supply connectors
1028	Cross Shift web right solenoid has an issue	Possible situation of short circuit or open circuit	Check the wiring or solenoid connector
1029	Boulder Box open solenoid has an issue	Possible situation of short circuit or open circuit	Check the wiring or solenoid connector
1030	Boulder Box close solenoid has an issue	Possible situation of short circuit or open circuit	Check the wiring or solenoid connector
1031	Boulder Box sensor has an issue or out of range	Possible situation of short circuit or open circuit	Check the wiring or solenoid connector
1032	Loss of communication with Wurth device	Possible situation open circuit, supply range or device defect	Check the wiring or supply connectors
1033	Option1 output has an issue	Wurth device switched off, device defect or CANbus error state	Check wiring, line resistors or supply voltage
1034	Option2 output has an issue	Possible situation of short circuit or open circuit	Check the wiring or solenoid connector
1035	Option3 output has an issue	Possible situation of short circuit or open circuit	Check the wiring or solenoid connector
1036	Option4 output has an issue	Possible situation of short circuit or open circuit	Check the wiring or solenoid connector
1037			
1038			
1039			
1040			