



Operation & Maintenance Manual

NOL10N
NOL10NF
NOL10NV

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Node	Code_all	Alarm displayed on console	comments	Warning	Stored	To not display	CODE ON MDI_CAN
Combi ac master	228	"TILLER OPEN"		x		x	02A51
Combi ac master	229	"POS AUX SHORT"			x		02A86
Combi ac master	231	"COIL SHORT HW KO"			x		02A76
Combi ac master	232	"WRONG SETPOINT"			x		02A78
Combi ac master	233	"POWER MOS SHORT"			x		02A89
Combi ac master	236	"CURRENT GAIN"			x		02A92
Combi ac master	237	"ANALOG INPUT"			x		02A96
Combi ac master	239	"PUMP WARNING"		x			NOT DEFINED
Combi ac master	240	"HARDWARE FAULT"			x		NOT DEFINED
Combi ac master	246	"AUX DRIV. OPEN"			x		NOT DEFINED
Combi ac master	247	"DATA ACQUISITION"		x			NONE
Combi ac master	248	"NO CAN MSG. N."			x		02A67
Combi ac master	249	"CHECK UP NEEDED"		x			02A99
Combi ac master	250	"THERMIC SENS KO"		x	x		02A61
Combi ac master	251	"WRONG SET BAT."			x		NOT DEFINED
Combi ac master	253	"SLIP PROFILE"			x		02A99
Combi ac master	254	"AUX DRIV. SHRT."			x		NOT DEFINED
Combi ac slave	0	" NONE "					NONE
Combi ac slave	1	"CHOPPER RUNNING "		x			NONE
Combi ac slave	2	"NO COMMUNICATION"		x			NONE
Combi ac slave	8	" WATCHDOG "			x		05A08
Combi ac slave	13	" EEPROM KO "		x	x		05A13
Combi ac slave	19	"LOGIC FAILURE #1"			x		05A19
Combi ac slave	28	" PUMP VMN LOW "			x		05A28
Combi ac slave	29	" PUMP VMN HIGH "			x		05A29
Combi ac slave	52	" PUMP I=0 EVER "			x		05A52
Combi ac slave	56	"PUMP STBY I HIGH"			x		05A56
Combi ac slave	64	"PUMP TEMPERATURE"		x	x		05A64
Combi ac slave	227	"ENC CAN KO"	*NSR12/16/20N only	x			05A70
Combi ac slave	228	"ACC OUT OF RANGE"	*NSR12/16/20N only	x			05A80
Combi ac slave	229	"WRONG ZERO"			x		05A67
Combi ac slave	230	"OUT. MISMATCH"			x		05A53
Combi ac slave	231	"SAFETY FEED"			x		05A54
Combi ac slave	232	"WRONG SETPOINT"			x		05A56
Combi ac slave	233	"RESET ENCODER"		x			05A57

controlled safety switch to close. Therefore, traction is disabled.
ABSENT: Inhibit supervisor microprocessor functions (Not in use!).
PRESENT: Enable diagnostic interaction between the main and supervisor microprocessors.
Factory default is "PRESENT". Do not change the default value!

ENCODER CONTROL

This parameter is not used in this application. Factory default value is "OFF". Do not change the default value!

FEEDBACK DEVICE

This parameter controls what kind of feed back device is used.
Factory default value is "OP #4". Do not change the default value!

AUTOCENTERING

This parameter controls the automatic steering centring at key-on. Value range setting:
ON: The steering centring is activated at key-on.
OFF: The steering centring is not activated at key-on.

RECOVERY AT REST

This parameter controls the steering recovery at rest, which is not used in this application. Factory default is "OFF". Do not change the default value!

AUX FUNCTION 1

This parameter sets the steering mode after the feedback signals has reached the final position. The steering motor is turned on when a travel demand is active. Factory default setting is "0". Do not change the default value!

DIAG MOTOR TEMP

This parameter controls the steering motor overheating alarm (MOTOR TEMPERAT) enabling or disabling. ON: the detection of the alarm. OFF: Disables the detection of the alarm. Factory default setting is "ON". Do not change the default value!

SUBMENU: SET MODEL

SYSTEM CONFIG

MAX EVP2	-	-	60								68.2	0-100	Proportional valve maximum voltage for forks lower
MIN EV1	6.3	6.3	6.3								6.3	0-100	Not in use.
MAX EV1	97.6	97.6	97.6								97.6	0-100	Not in use.
EVP OPEN DELAY	1	1	1								1	0,1-5	Proportional valve opening valve. 0,1 = fastest
EVP CLOSE DELAY	0.5	0.5	0.1								2	0,1-5	Proportional valve closing ramp. 0,1 = fastest
EVP2 OPEN DELAY	-	-	1								x	0,1-5	Proportional valve opening valve. 0,1 = fastest
EVP2 CLOSE DELAY	-	-	0.1								x	0,1-5	Proportional valve closing ramp. 0,1 = fastest
EV1 OPEN DELAY	1	1	1								1	0,1-5	Not in use.
EV1 CLOSE DELAY	2	2	2								2	0,1-5	Not in use.
CONFIG MENU/ SET MODEL:													
CONNECTED TO	5	5	5								5	5	2 = traction controller, 5 = pump controller, 6 = steering controller, 10 = encoder card
SET OPTIONS:													
HOURLY COUNTER	RUNNING	RUNNING	RUNNING								RUNNING		Factory setting
EVP TYPE	DIGITAL	DIGITAL	ANALOG								DIGITAL		Proportional valve output type, analog = proportional, digital = on/off
EV1 TYPE	DIGITAL	DIGITAL	DIGITAL								DIGITAL		Proportional valve output type, analog = proportional, digital = on/off
SET TEMPERATURE	NONE	NONE	NONE								NONE		Factory setting
AUX OUTPUT #6	7	7	7								3		Output XA1/14 0 = disabled 1 = Drive Forward active 2 = Drive Backward active 3 = Drive Forward OR Backward active 4 = Lift active 5 = Lower active 6 = Lift OR Lower active 7 = Forward OR Backward OR Lift OR Lower active

AUTO REQ TYPE	0	0	0	0							0		Factory setting
CONNECTED TO	EPS	EPS	EPS	EPS							EPS		2 = traction controller, 5 = pump controller, 6 = steering controller, 10 = encoder card
MODEL TYPE	x	x	x	x							x		
ADJUSTMENTS:											0		
ADJUSTMENT #01	0	0	0	0							0		Factory setting
SET CURRENT	0	0	0	0							0		Factory setting
ADJUSTMENT #02	x	x	x	x							90		Factory setting
ADJUSTMENT #03	x	x	x	x							x		Factory setting
ADJUSTMENT #04	x	x	x	x							x		Factory setting
SET BATTERY TYPE	24V	24V	24V	24V							24V		Factory setting
SET SAT. FREQ.	90 Hz	90 Hz	90 Hz	90 Hz							90Hz		Factory setting
OVERSAT FREQ.	1 Hz	1 Hz	1 Hz	1 Hz							1Hz		Factory setting
MAXIMUM SLIP	5,00 Hz	5,00 Hz	5,00 Hz	5,00 Hz							5Hz		Factory setting
AUX VOLTAGE #1	x	x	x	x							x		Factory setting
AUX VOLTAGE #2	x	x	x	x							x		Factory setting
NO LOAD CURRENT	24 A	24 A	24 A	24 A							24A		Factory setting
ZERO SP POT	x	x	x	x							x		Factory setting
SET STEER 0-POS.	x	x	x	x							x		Straight ahead steering position adjustment
SET STEER 180	x	x	x	x							x		Factory setting
SET ENC AT 180	x	x	x	x							x		Autoteaching sets this parameter. Value is about 1,6 - 1,7V
SET ENC AT 360	x	x	x	x							x		Autoteaching sets this parameter. Value is about 3,3 - 3,4V
SPECIAL ADJUST:											0		
SET TEMPERATURE	x	x	x	x							x		Factory setting
HIGH ADDRESS	0	0	0	0							0		Factory setting
DEBUG OUTPUT	15	15	15	15							15		Factory setting
HARDWARE SETTINGS:											0		
MAXIMUM CURRENT	50 A	50 A	50 A	50 A							50A		Factory setting
CAN BUS	PRESENT	PRESENT	PRESENT	PRESENT							PRESENT		Factory setting
SET HI RESOL AD	1	1	1	1							1		Factory setting
AUTOTEACHING	OFF	OFF	OFF	OFF							OFF	ON / OFF	OFF = Automatic teaching for steering disabled. ON = Automatic steer teaching activated on next truck startup.
AUX FUNCTION 11	5	3	5	5							x		Defines steering motor and feedback sensors positions

Repairs and structural modifications

Do not modify the truck without the manufacturer's express permission. Do not add or remove, weld or bend any parts, as the modifications could affect the operation of the truck and might weaken its construction.

NOTE

Only in the event that the truck manufacturer is no longer in business and there is no successor in the interest to the business, the user may arrange for a modification or alteration to a powered industrial truck, provided, however, that the user shall:

- *arrange for the modification or alteration to be designed, tested and implemented by an engineer(s) expert in industrial trucks and their safety;*
- *maintain a permanent record of the design, test(s) and implementation of the modification or alteration;*
- *approve and make appropriate changes to the capacity plate(s), decals, tags and instruction handbook;*
- *affix a permanent and readily visible label to the truck stating the manner in which the truck has been modified or altered together with the date of the modification or alteration, and the name and address of the organization that accomplished the tasks.*

Overhead guard and load support (applies only to trucks with mast)

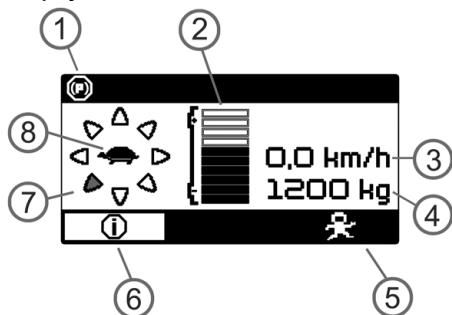
Trucks driven sitting or standing that are capable of lifting a load higher than 1.8 m must be equipped with an overhead guard. Modifications to the overhead guard that could possibly weaken its structure are not allowed. If it is possible for objects to fall through the openings in the overhead guard, the size of the openings must be reduced. Trucks used for transporting small objects or unstable loads must be equipped with a load support.

Driving on loading bridges

Always check the bearing capacity and the fastening of the bridge before loading or unloading. If you need to drive the truck onto another vehicle, ensure that the vehicle cannot move during this procedure. Do not drive to the edges of a loading bridge because there is always the risk of overturning.

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Main display.



- Alert symbols (1).
- Battery charge display (2).
- Speed display (3).
- Weight display (4).

Available for order picker trucks equipped with extra lift.

- Performance mode selection (5).
- Information menu (6).
- Travel direction display (7).
- Crawling mode symbol (8).

For more information about alarms and warnings, see the description of the message center below.

Full Version Available

Caterpillar NOL10NV Order Picker Operator Manual (SWHOU-00011)

Caterpillar NOL10NV Order Picker manual, covers controls, battery care, lift systems, alarms, and safety checks. Downloadable PDF format.

[VIEW THE FULL MANUAL](#)