Maintenance Manual



SC3200 Series

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MidWestTech | Crown SC3200 Forklift Service Manual | Publication 812548-006

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Counterweight

WARNING

Trapping hazard!

The counterweight weighs at least 800 kg. Hands and feet can be trapped.

Only use levers and suitable tools when assembling and disassembling. Never use hands or feet.

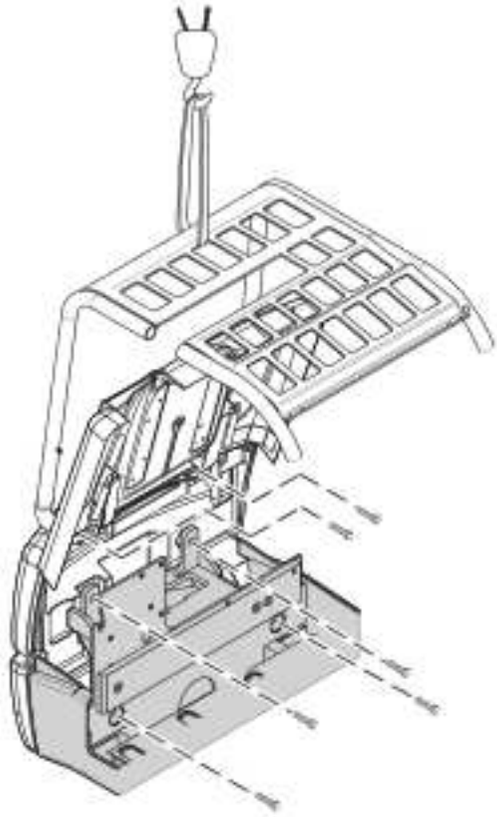
WARNING

Falling load hazard!

A falling counterweight can result in serious trapping.

Prevent the counterweight from falling.

To do this, use a load sling suspended to a crane. The load sling must be pulled through the hole for the tow pin. The crane must have a minimum capacity of 1000 kg.



Disassembly

Tools required:

1. For disassembly you will need a crane or forklift (minimum capacity 200 kg at 2.5m elevation) to support the overhead guard.
2. A second crane or forklift (minimum capacity 1000 kg at 2m elevation) to prevent the counterweight from tipping.
3. A pallet truck (minimum capacity 1000 kg) with forks that will lower to fit under the counterweight.
4. Hard wooden blocks to fit under the outer mast stages.

- Drive the truck into a secure maintenance area.
- Tilt the mast back as far as it will go (in the direction of the driver).
- Lower the mast and fork carriage fully.
- Place two wooden blocks, one on the left and one on the right hand side underneath the outer mast stage. This will prevent the truck from tilting onto the fork tips.
- Remove the battery.
- Attach a load sling to the rear of the overhead guard. This will secure the overhead guard when you loosen the attachment. Alternatively, you can support the overhead guard from the side using a forklift.
- Remove the tow pin from the counterweight.
- Remove the mounting screw of the electrical base plate from the counterweight.
- Remove the mounting screws of the overhead guard from the counterweight.
- Raise the back of the overhead guard 1 – 2 cm and pull a load sling through the hole for the tow pin in the counterweight.
- Insert the load sling into a crane hook (crane minimum capacity 1000 kg). If you are using a forklift instead of a crane, prevent the load sling on the fork of the truck from sliding.
- Tighten the load sling slightly.
- Drive a pallet truck (minimum capacity 1000 kg) underneath the counterweight. The forks must be positioned under the flat surfaces of the counterweight.
- Raise the forks of the pallet truck until they are touching the counterweight.
- Remove the mounting screws of the counterweight.
- Pull the counterweight approx. 10 cm away from the forklift, using the pallet truck.
- Raise the counterweight off the pallet truck using the crane, and place it of a flat surface.

ALARMS Menu

The pump controller can detect and store any faults which occur during operation. The ALARMS menu can be used to call up and read the respective fault codes.

The programmer can display 5 different types of fault codes up to 99 times together with the applicable number of service hours.

ALARMS Menu (Pump controller)

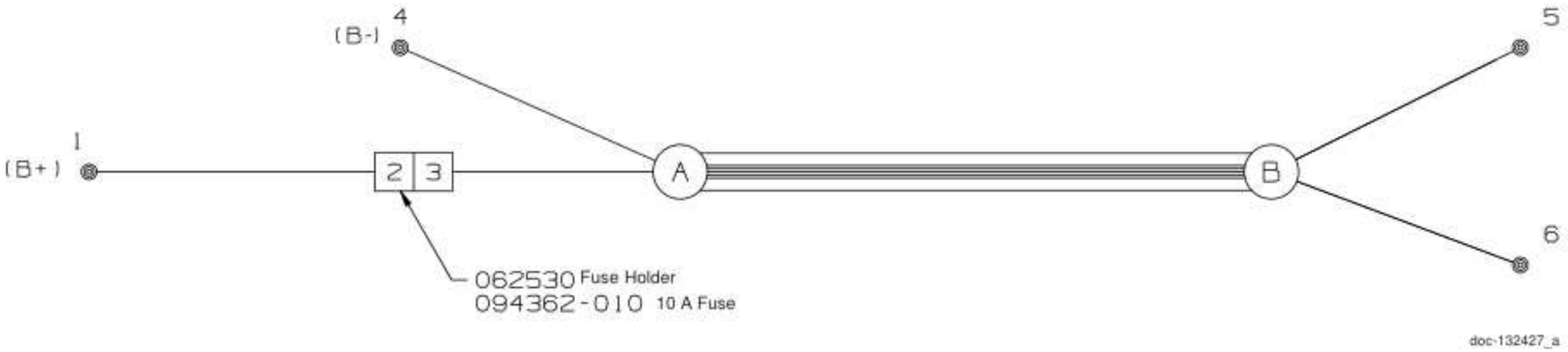
Error code	Description	Possible cause
STAND BY VMN LOW	The test is performed in standby mode or during operation at 100% to 80% of the PWM signal. The alarm sounds when the VMN falls to below 1/3 of the battery voltage.	- Motor wiring faulty - Motor insulation between armature and field faulty - Logic error
No FULL COND	The test is performed in standby mode. The alarm is activated when the VMN exceeds 2/3 of the battery voltage.	- Short circuit between battery + and VMN - Logic error
I=0 EVER	The test is performed in operational mode. The alarm is activated when the minimum supply level is exceeded and travelling is inhibited.	- Current sensor faulty. - Power supply fault
EEPROM DATA KO	Displays fault in hourmeter memory range. Followed by reset to zero, traction controller continues to operate however.	- Logic section error (not permanent)
EEPROM KO	Shows fault in controller memory range	- Logic section error

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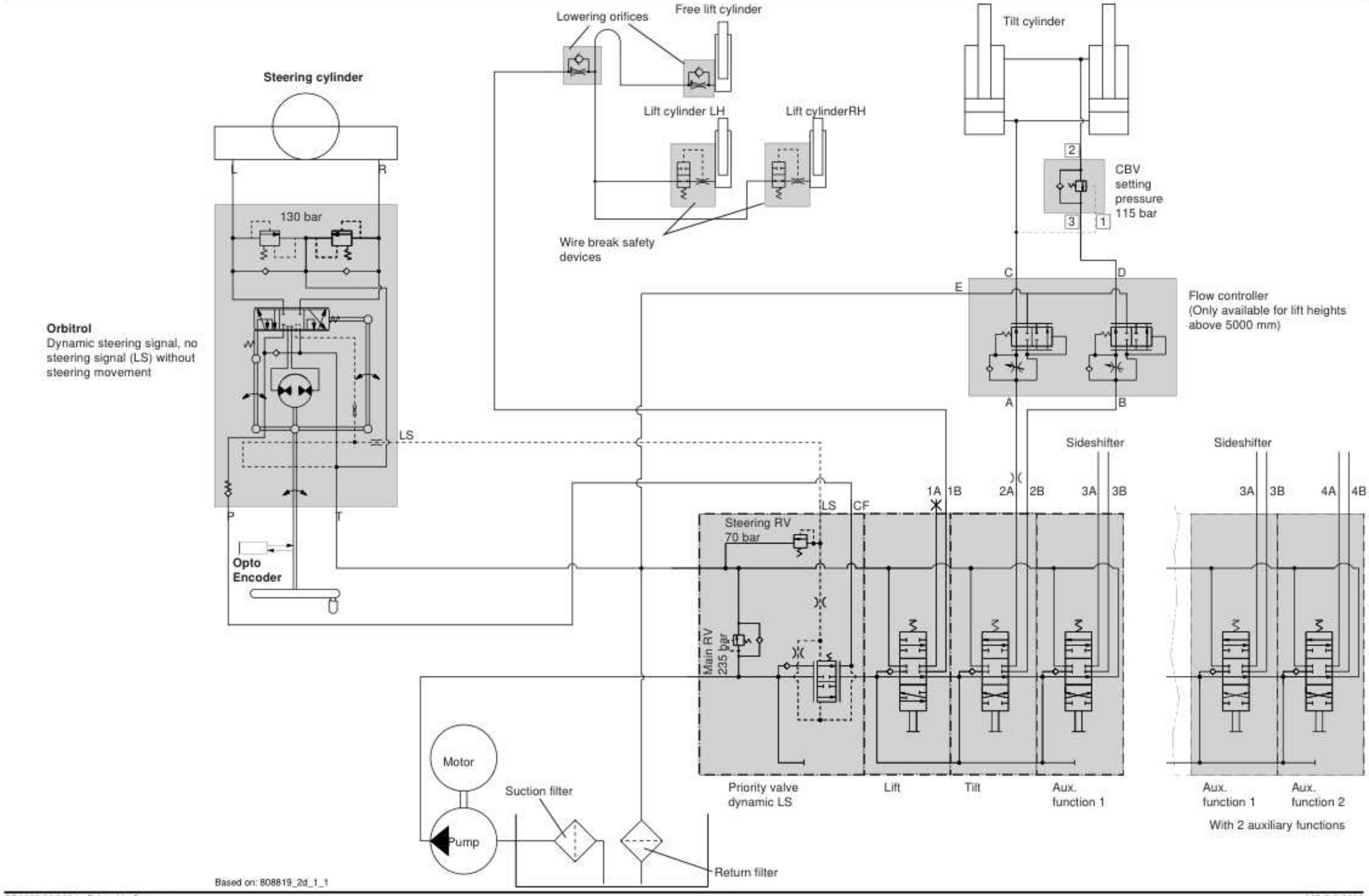
CONNECTS	LEAD DATA		LEFT TERMINAL DATA		RIGHT TERMINAL DATA	
	LEAD	COLOR	NO.	PART #	NO.	PART #
1 TO 2	201	RED/WHT	1	062007-003	2	062530
3 TO 6	202	RED/WHT	3	TO 062530	6	062007-063
4 TO 5	2903	GRN	4	062007-003	5	062007-050

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Steering cylinder
L
R
130 bar
LS
P
T
Opto
Encoder
Orbitrol
Dynamic steering signal, no steering signal (LS) without steering movement
Lowering orifices
Free lift cylinder
Lift cylinder LH
Lift cylinderRH
Wire break safety devices
Tilt cylinder
2
3
1
CBV setting pressure 115 bar
C
D
E
A
B
Flow controller
(Only available for lift heights above 5000 mm)
Sideshifter
Sideshifter
1A 1B 2A 2B 3A 3B
3A 3B 4A 4B
LS
CF
Steering RV
70 bar
Main RV
235 bar
Motor
Pump
Suction filter
Return filter
Priority valve dynamic LS
Lift
Tilt
Aux. function 1
Aux. function 1
Aux. function 2
With 2 auxiliary functions
Based on: 808819_2d_1_1