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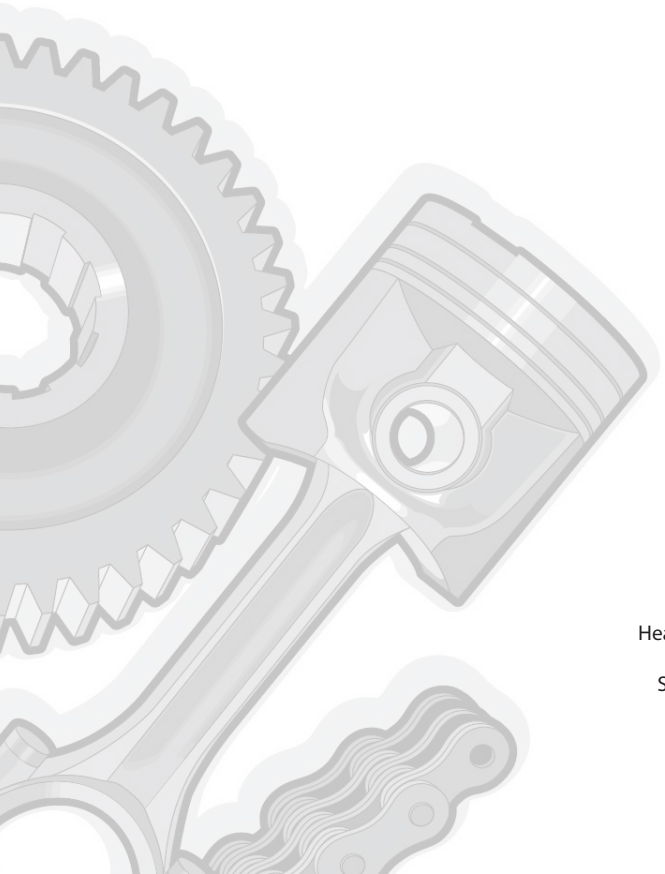

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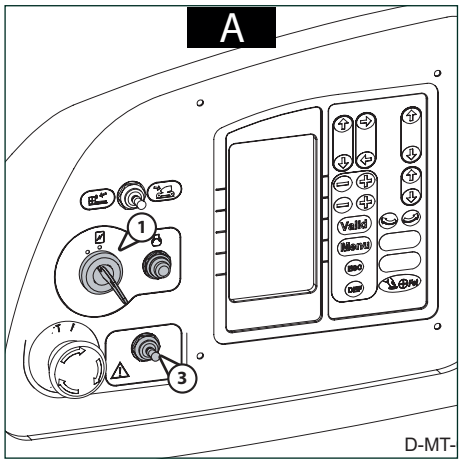
A



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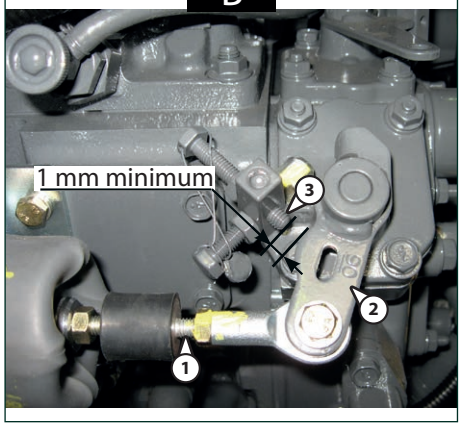

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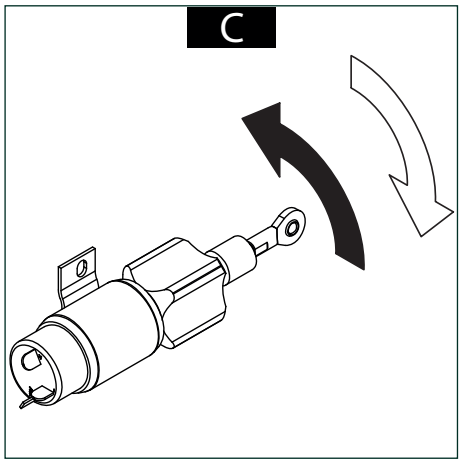

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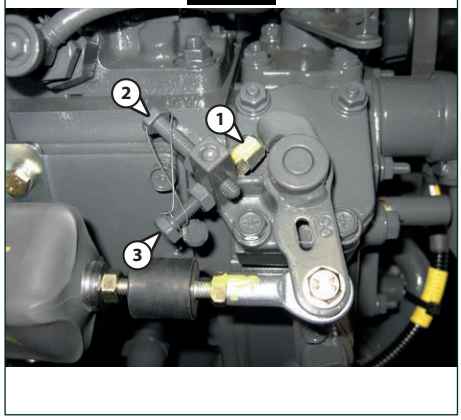


PROPORTIONAL ENGINE SPEED BLOCK ADJUSTMENT

SOLENOID VERSION (up to No. 949266)

Switch on the access platform with the starter key (A-1).
In order to avoid injury, keep the hands away from the solenoid and the engine speed adjustment lever stops during this phase.

MAXIMUM ENGINE SPEED SETTING (SNOW POSITION).

– SNOW position = 2,500 rpm ± 50.

On the base console, locate the engine start assist button (A-2) and switch it to the SNOW* position: the solenoid will move to the left (B).
Adjust the length of the solenoid's threaded rod (B-1 and C) to obtain the desired maximum engine speed. Check the engine speed value on screen CEK20 "Screen settings menu" (E).

In order to ensure the correct operation of the solenoid, part Item B2-2 must not bear against the screw Item B2-3. Provide a minimum gap of 1 mm between these two items. Failure to comply this instruction may damage the solenoid.

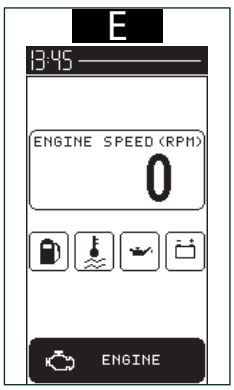
MINIMUM ENGINE SPEED SETTING (SUN POSITION).

– SUN position = 1,250 rpm ± 50.

On the base console, locate the engine start assist button (A-2) and switch it to the SUN* position: the solenoid will move to the right (D).

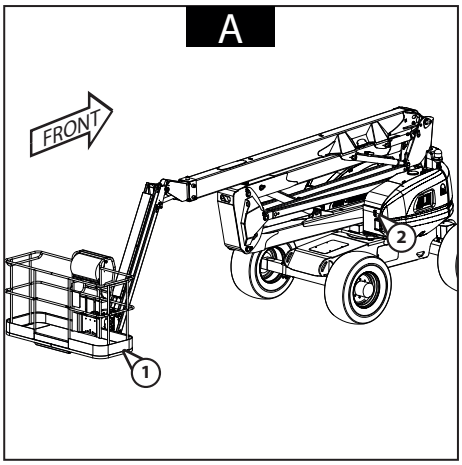
Turn the adjustment screw (D-1) to obtain the desired minimum engine speed. Check the engine speed value on screen CEK20 "Screen settings menu" (E).

E



Do not turn the engine's lead-sealed screws (D-2 and D-3).

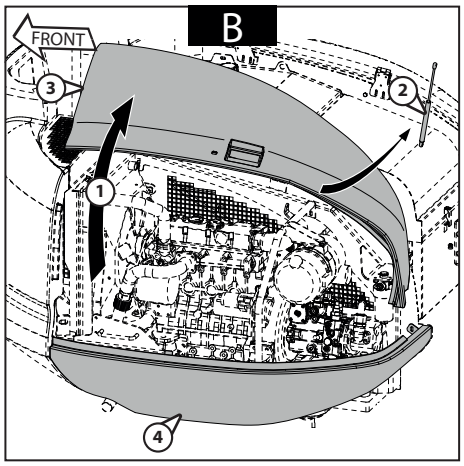
HYDROSTATIC PUMP REMOVAL



Place the basket in the down position (A-1).

Switch off the engine.

Switch off the power to the access platform.

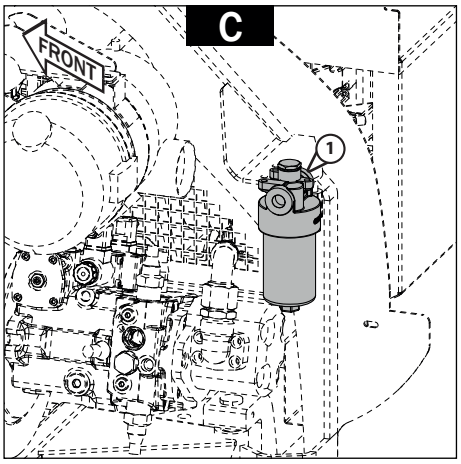


Open the left-hand turret cover panel (B-1), then remove it as follows:

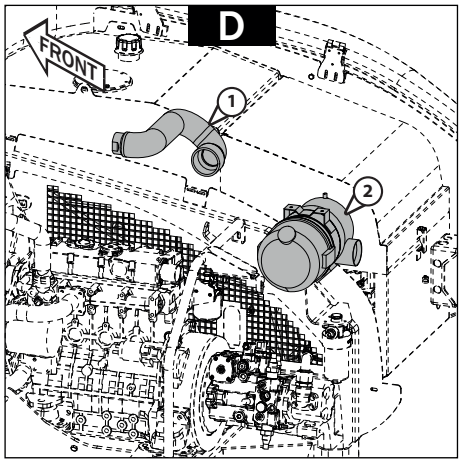
- Remove the cylinder head.

Hold the cover panel ..... 22 kg

- Remove the cover panel hinge fasteners.
- Remove the cover panel.
- Remove the cylinder.

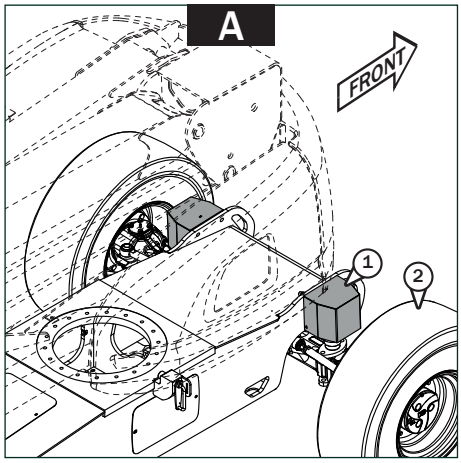


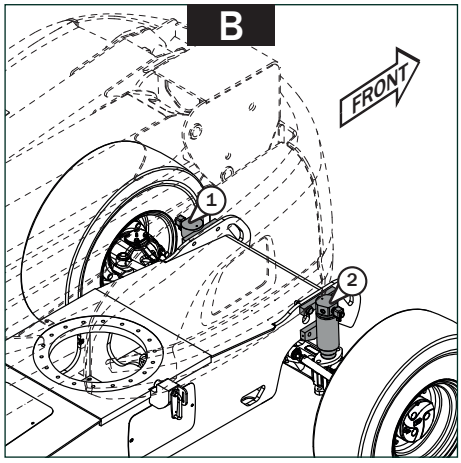
Remove the filter fastenings (C-1) while leaving the hydraulic hoses connected to it.

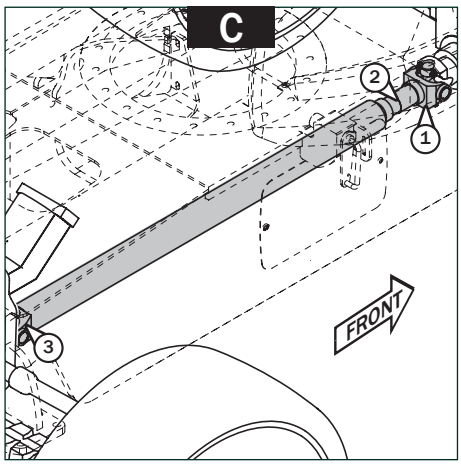


Remove the air intake hose (D-1).

Remove the complete air filter (D-2).







FRONT AXLE REMOVAL

Place the platform in the transport position on level ground.

The wheels must be straightened in order to limit the pressure in the steering control hoses.

Method for the OSCILLATION option:

- Remove the covers from the oscillation lock cylinders (A-1).
- Place a wooden chock in front of the right-front wheel (A-2).
- Disconnect the connector from the left-hand oscillation blocking cylinder electrovalve (B-1).
- Drive the platform forward onto the chock.
- Disconnect the connector of the right-hand oscillation lock cylinder electrovalve (B-2).
- Place a 1 cm thick wooden chock under the piston of the left-hand oscillation lock cylinder (B-1).
- Connect the connector of the left-hand oscillation lock cylinder electrovalve (B-1).
- Control the reversing of the platform so that it comes off the chock.
- Disconnect the connector of the left-hand oscillation lock cylinder electrovalve (B-1).

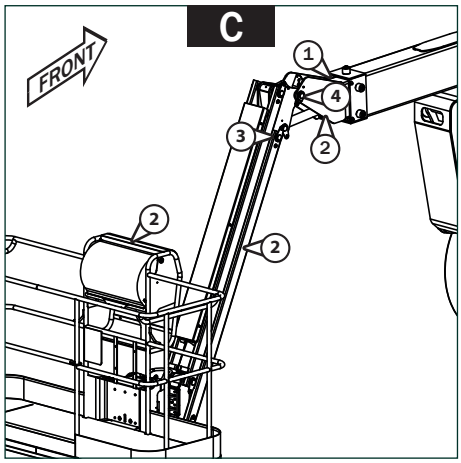
All machine versions:

Switch off the engine and power off the platform.

As the components to be dismantled are heavy, two people are needed to carry out the majority of the operations below.

Locate the universal joint connecting the two axles:

- Remove the two mounting flanges (C-1) on the front axle.
- Remove the universal joint head (C-2) from its housing on the axle by sliding it backwards and hold the universal joint.
- Remove the two rear axle fastening clamps (C-3) and remove the universal joint.



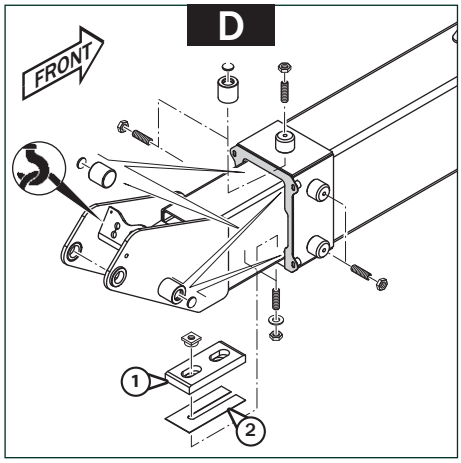
MOVING TUBE PAD REMOVAL

Extend the boom until the telescopic boom cylinder head pivot pin can be reached.

Remove the telescopic boom cylinder: 70 - HYDRAULIC COMPONENTS REMOVAL

Remove the flexible guide fasteners from the moving tube (C-1).

Sling the basket/jib/hinge assembly (C-2).



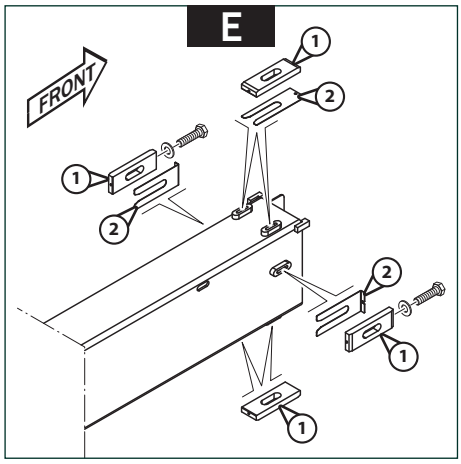
Remove the tilt cylinder foot pivot pin.

Tilt up the basket to retract the tilt cylinder rod. Remove the tilt cylinder head pivot pin (C-3), then remove the tilt cylinder without disconnecting its hoses.

Remove the pin (C-4) then remove the basket/jib/hinge assembly: set it down nearby to avoid damaging the hydraulic hoses and wiring harnesses.

Raise the moving tube with a hoist to unload the slide pads.

Remove the boom head slide pad fasteners (D-1).



Carefully note the number and position of the adjustment plates (D-2) of each slide.

Remove the pads.

Remove the moving tube.

Remove the boom foot slide pads (E-1).

Note the position of the adjustment plates (E-2).

REFITTING

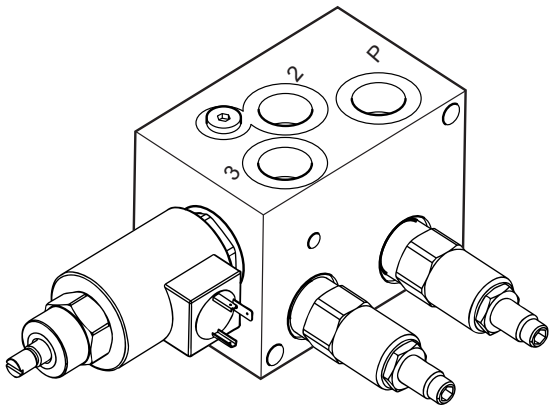
Carry out the operations described above in reverse order. The boom foot slide pads (E-1) are to be hammered into place.

If necessary put the adjustment plates in place (B-2) **547386.**

The maximum clearance to be left between the moving tube and the slide pads of arm 3 is 0.5 mm.

GENERATOR UNIT

Values present (as an indication)

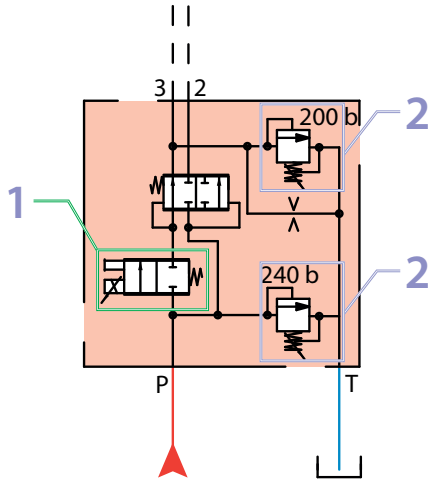


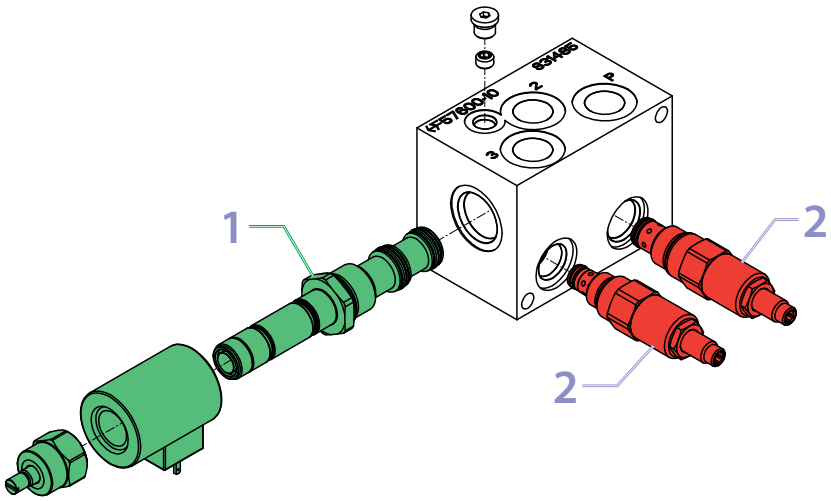
ROLE :

- Run the generator
- Cut the pressure according to the electrical instructions.

LEGEND :

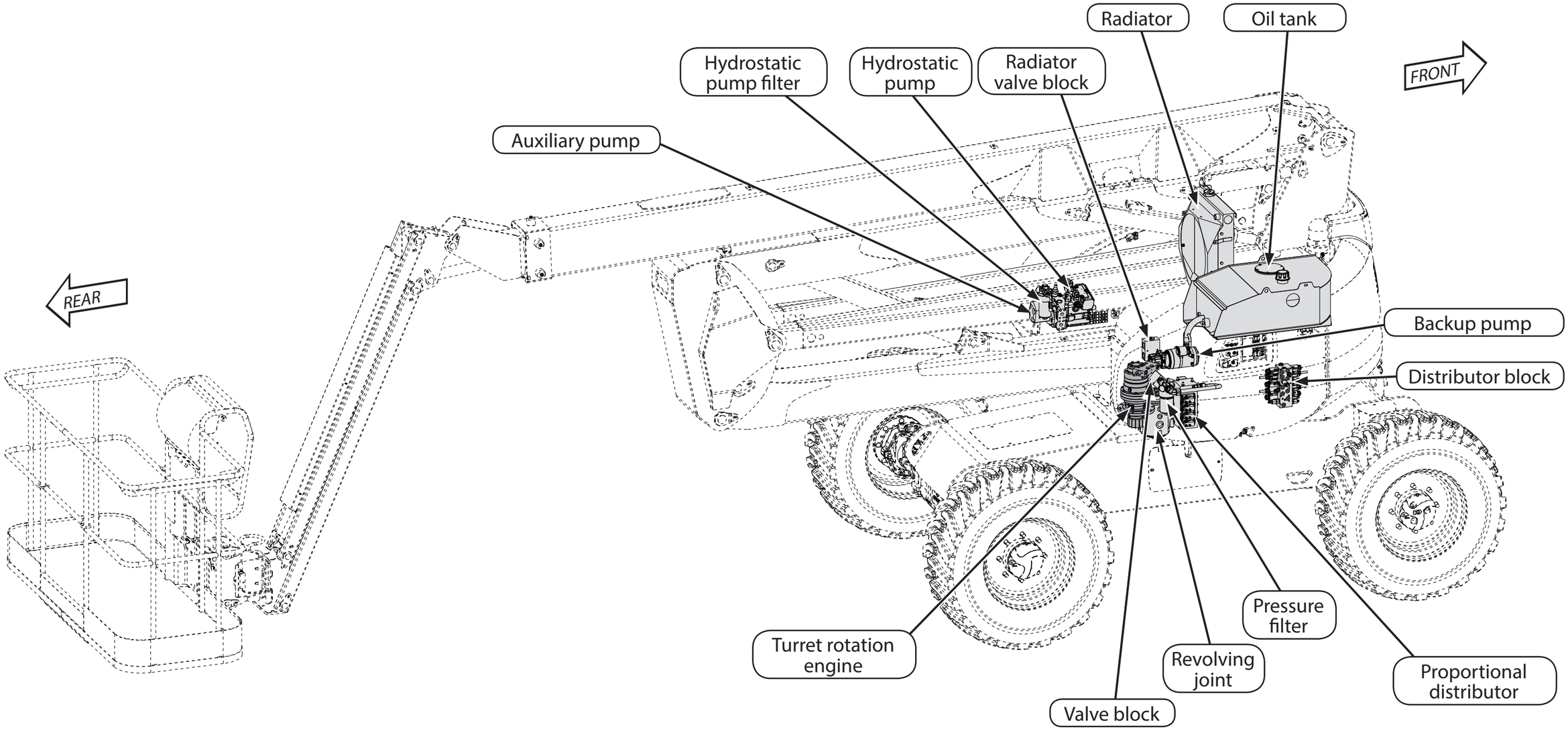
1 - NC proportional hydraulic slide valve
2 - HP restrictor

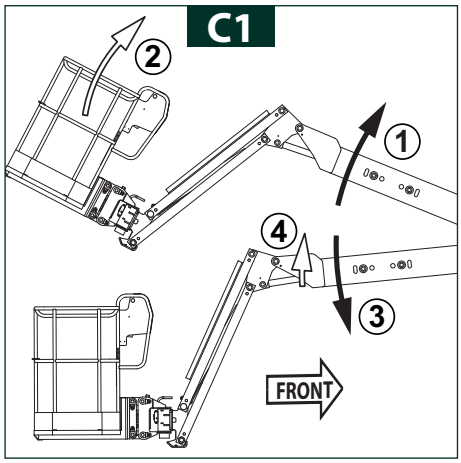


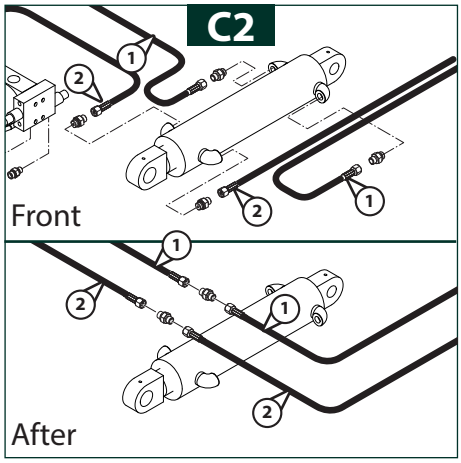


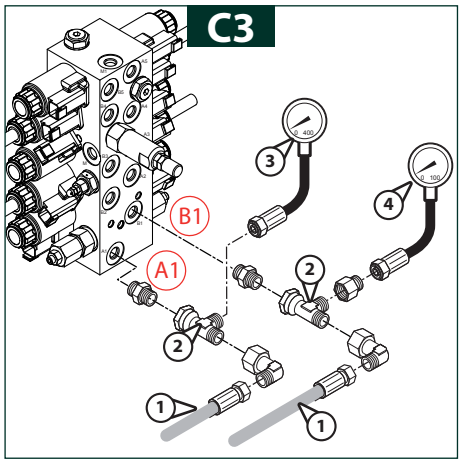
Note :

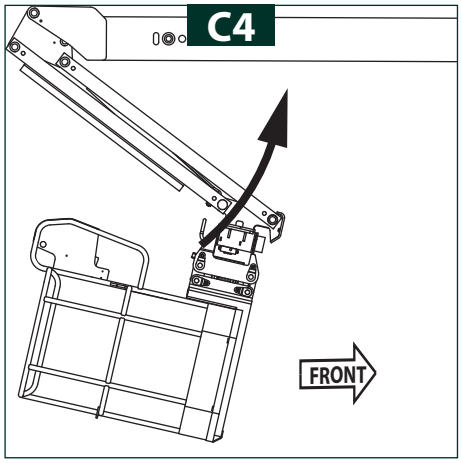
HYDRAULIC COMPONENTS IN THE TURRET











C - COMPENSATING/TILTING CIRCUIT

Resolving problems

If the basket does not remain in position and drops under gravity when the access platform is not in operation, perform the following test procedure.

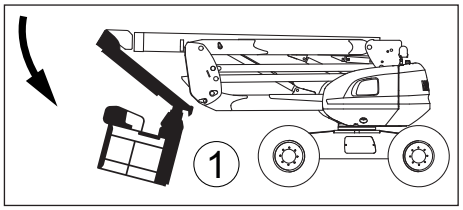
Test procedure

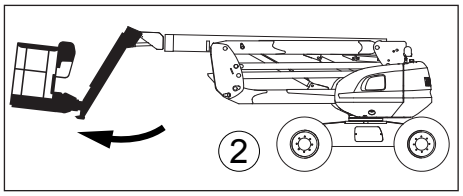
Decompress the compensating/tilting valve supply hoses by proceeding as follows (C1):

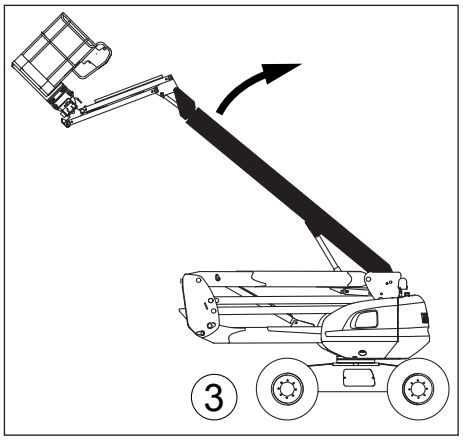
1 - From the base control panel (A1-3), raise arm 3 to mid stroke.
2 - Fully extend the tilting cylinder.
3 - Lower arm 3 to the down position.
4 - Raise arm 3 by 1 cm.

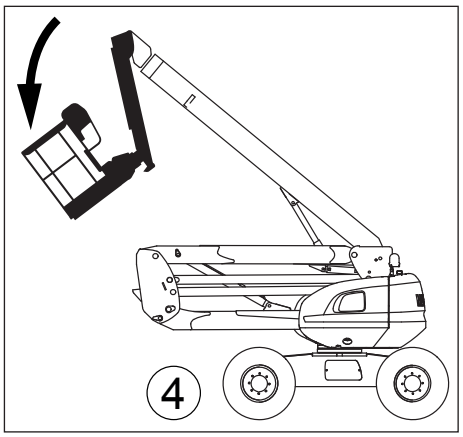
- Take a drain pan and place it under the compensating cylinder.
- Identify the hoses connected to the compensating cylinder lower chamber (C2-1), and undo them.
- Take a straight MA 8S/MA 8S coupler (Part no. 201746) and connect the hoses of the lower chamber (C2-1).
- Repeat the operation with the hoses connected to the upper chamber (C2-2) in such a way that the cylinder is completely by-passed.
- Remove the hoses from the distributor block (C3-1).
- Insert tee couplings between the distributor block and the hoses (C3-2).
- Take a 0 - 400 bar manometer (C3-3) and connect it to the left-hand tee coupling: outlet A1.
- Take a 0 - 100 bar manometer (C3-4) and connect it to the right-hand tee coupling: outlet B1.
- Tilt the basket and jib to their maximum extent (C4) several times from the base control panel (A1-3) to pressurize the hydraulic circuit.
- Place the basket in the horizontal position.
- Switch off the engine.
- Note the pressure readings displayed by the two manometers.
- Check that the basket does not descend.

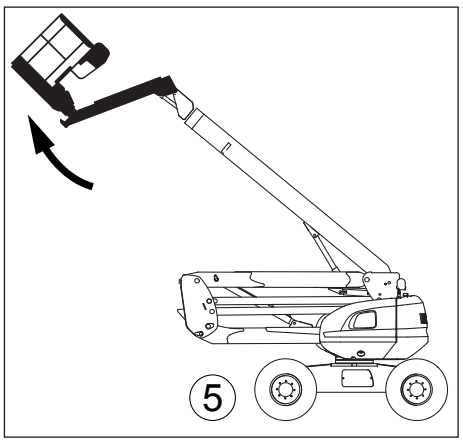
NOTE:
This procedure may take a long time (several hours).

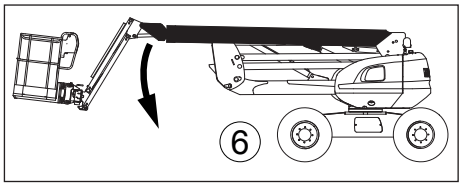












CYLINDER REFIT

Perform the removal operations in reverse order.

Switch on the machine, start the engine and perform a complete test of all machine movements.

Bleed the compensating/tilting circuit: whenever technical maintenance is performed on the compensating/tilting hydraulic circuit, bleeding must be carried out as described below:

A - Perform steps 1 and 2 several times to the maximum extent.

B - Raise arm 3 as high as it will go, step 3.

C - Perform steps 4 and 5 to the maximum extent.

D - Lower arm 3 as far as it will go, step 6.

E - Repeat the above steps several times.

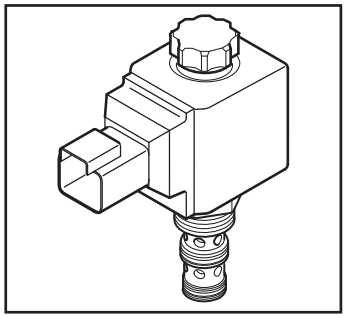
F - Place the basket horizontal.

G - Check that the basket remains in the horizontal position throughout the arm 3 raising step.

H - Check that the basket remains in the horizontal position throughout a complete arm 3 lowering operation.

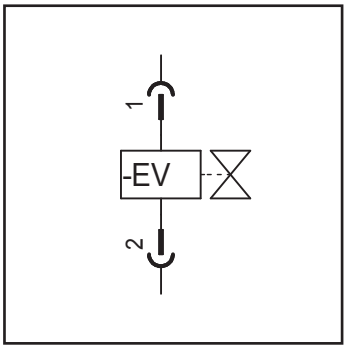
Switch off the engine, check the hydraulic oil level in the tank and top up the oil level if required.

EV4 + EV17 BRAKE UNIT ELECTROVALVE



	PIN	Function
	1	Power supply
	2	Weight

Corresponding connector

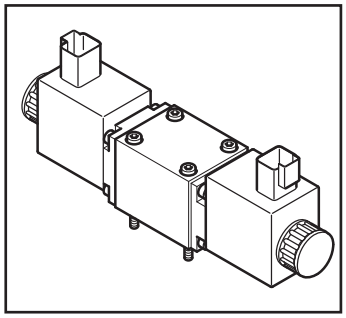


Diagram

	PIN	Min.	Typical	Max
Supply voltage	1		12 V	
Consumption	1		3 A	

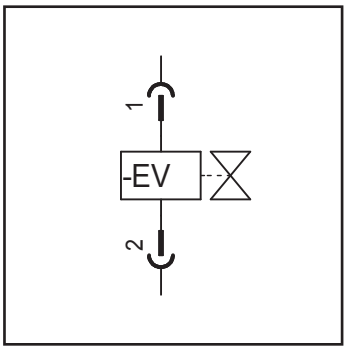
Notes:

EV5 + EV6 STEERING MODE ELECTROVALVE



	PIN	Function
	1	Power supply
	2	Weight

Corresponding connector



Diagram

	PIN	Min.	Typical	Max
Supply voltage	1		12 V	
Consumption	1		3 A	

Notes:

POSITION OF ELECTRICAL COMPONENTS BY DIAGRAM (from No. 949267)

POSITION OF MODULES AND MISCELLANEOUS COMPONENTS

ID ref.	Descriptions	Diagram 1	Diagram 2	Diagram 3	Diagram 4	Diagram 5	Diagram 6	Diagram 7	Diagram 8
-	Backup pump	✓							
	Dead man pedal				✓	✓			
-	DIAGNOSTIC plug	✓	✓						
-	Base control panel	✓	✓	✓	✓	✓			
-	Basket control panel	✓	✓	✓	✓	✓		✓	✓
BRC30	BRC30 module	✓	✓	✓	✓	✓	✓	✓	✓
CEK20	Base control panel display	✓	✓						
OU100	Rotating beacon light							✓	
OU102	Horn							✓	
OU105	Anti-start	✓							
OU110	Flashing light							✓	
OU300	Basket buzzer							✓	
OU308	Overload Safety (on UPC102)			✓					✓
OU310	+ basket sensor (on UPC102)			✓					✓
UPC30	UPC30 module	✓	✓	✓	✓	✓	✓	✓	✓
UPC102	UPC102 module	✓	✓	✓	✓	✓		✓	✓

POSITION OF FUSES

ID ref.	Descriptions	Diagram 1	Diagram 2	Diagram 3	Diagram 4	Diagram 5	Diagram 6	Diagram 7	Diagram 8
F1	5A fuse (BRC30)	✓	✓						
F2	30A fuse (on BRC30)	✓	✓						
F3	30A fuse (on BRC30)	✓	✓						
F4	10A fuse (on BRC30)	✓	✓	✓					
F5	10A fuse (on BRC30)	✓							
F6	10A fuse (on BRC30)	✓							
F7	5A fuse (on BRC30)	✓	✓						
F8	30A fuse (on BRC30)	✓							
F9	30A fuse (on BRC30)	✓							
F10	30A fuse (on BRC30)	✓							
F11	10A fuse (on BRC30)	✓	✓						
F12	30A fuse (on BRC30)	✓							
F13	30A fuse (on BRC30)	✓							
F14	5A fuse (on BRC30)	✓							
F17	250 A fuse	✓							
F18	250 A fuse	✓							

POSITION OF ELECTROVALVES

ID ref.	Descriptions	Diagram 1	Diagram 2	Diagram 3	Diagram 4	Diagram 5	Diagram 6	Diagram 7	Diagram 8
EV100	Brake electrovalve			✓					
EV101	Hydraulic safety electrovalve	✓			✓	✓			✓
EV102	Engine stop electrovalve	✓							
EV103	Differential lock electrovalve			✓					
EV104	Crab electrovalve			✓					
EV105	4-Wheel PVG electrovalve			✓					
EV106	RH steering PVG electrovalve			✓					
EV107	LH steering PVG electrovalve			✓					
EV108	Turret RH rotation electrovalve					✓			
EV109	Turret LH rotation electrovalve					✓			
EV110	Basket tilting extend electrovalve					✓			
EV111	Basket tilting retract electrovalve					✓			
EV112	Basket RH rotation electrovalve					✓			
EV113	Basket LH rotation electrovalve					✓			
EV114	Jib LIFTING electrovalve					✓			
EV115	Jib LOWERING electrovalve					✓			
EV116	Oscillation electrovalve 1					✓			
EV117	Oscillation electrovalve 2					✓			
EW100	Forward travel proportional electrovalve		✓	✓					
EW101	Reverse travel proportional electrovalve			✓					
EW102	Engine accelerator proportional electrovalve		✓	✓	✓				
EW103	Generator proportional electrovalve							✓	
EW105	Arm 1/2 lifting proportional electrovalve				✓				
EW106	Boom proportional electrovalve				✓				
EW107	Arm 3 lifting proportional electrovalve				✓				
EW108	Function block proportional electrovalve			✓	✓	✓			

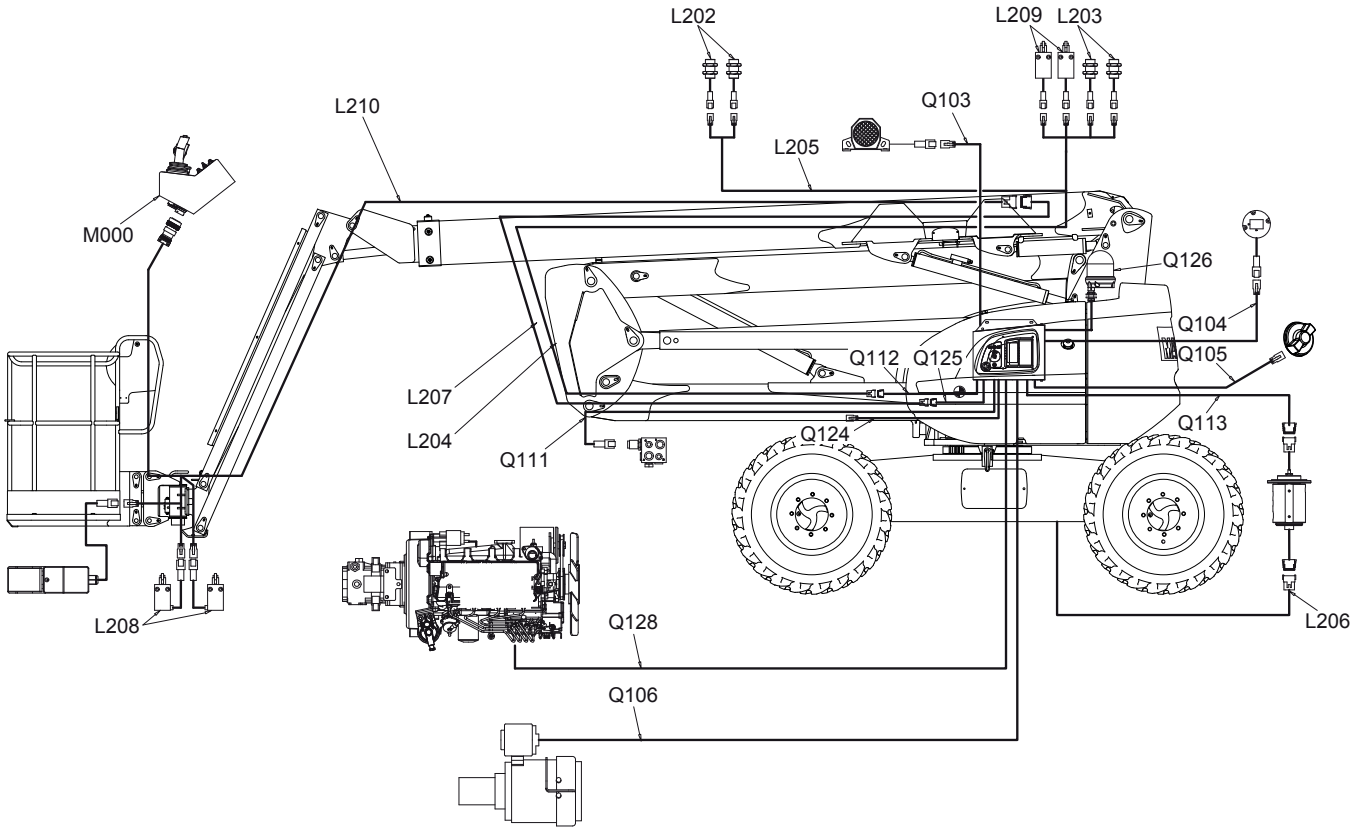
DIAGRAM 5 - ON-OFF HYDRAULIC MOVEMENTS (On/Off)

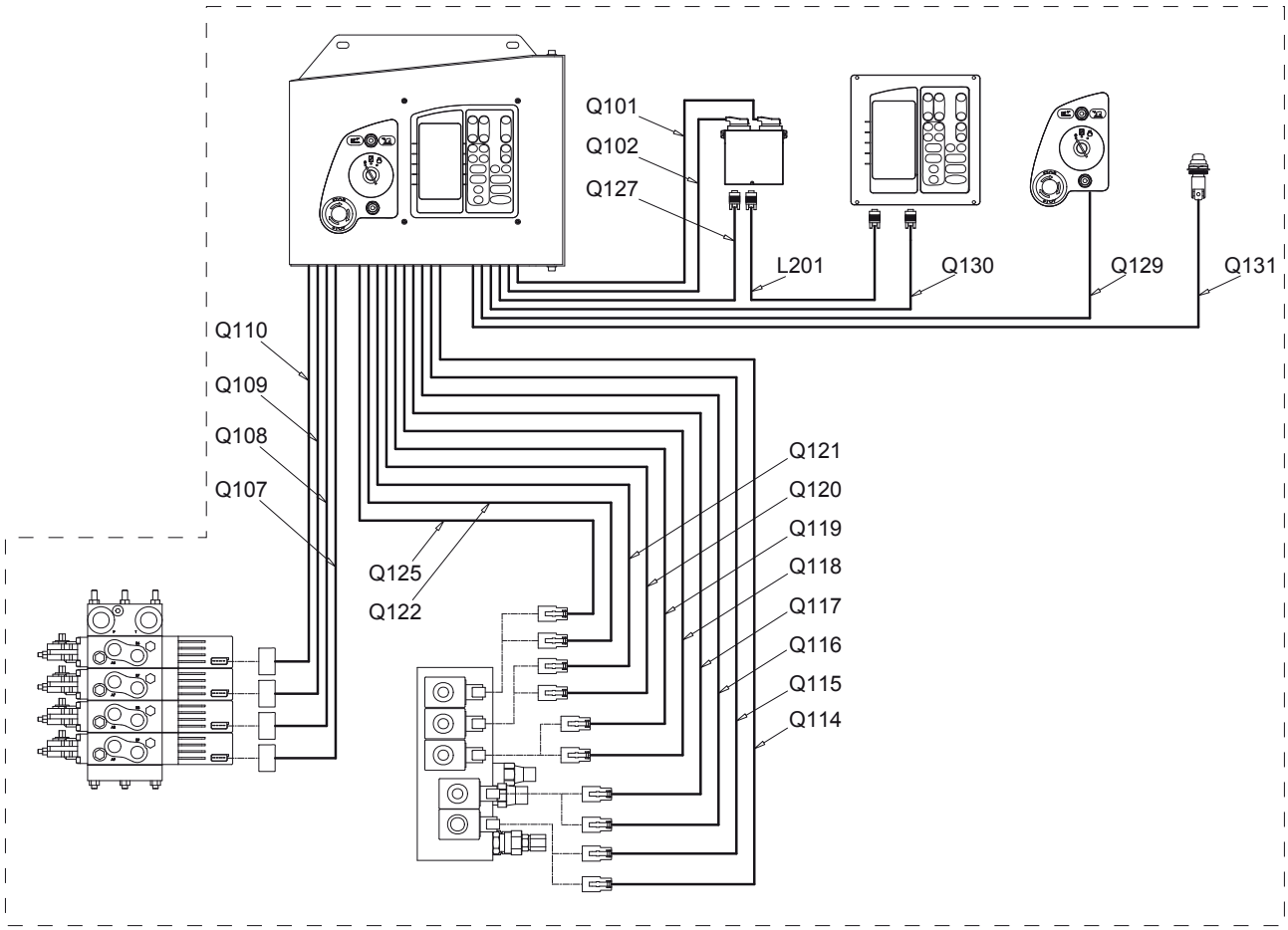
(BASKET TILTING, TURRET ROTATION, JIB LIFTING, PVPX VALVE)

Item	*Designation*	*Position on diagram 5*
-	Base control panel	I3
-	Basket control panel	E40
BRC30	BRC30 module	E24
EV101	Hydraulic safety electrovalve	I7
EV108	Turret RH rotation electrovalve	K15
EV109	Turret LH rotation electrovalve	K14
EV110	Basket tilting extend PB	K17
EV111	Basket tilting retract PB	K18
EV112	RH basket rotation electrovalve	K21
EV113	LH basket rotation electrovalve	K19
EV114	Jib lifting electrovalve	K22
EV115	Jib lowering electrovalve	K23
EV116	Oscillation electrovalve 1	M11
EV117	Oscillation electrovalve 2	M12
EW108	Auxiliary proportional electrovalve	K10
K1	Relay contact (on BRC30) - Overload safety	E8
K1	Relay coil (on BRC30) - Overload safety	G24
PB306	Dead man pedal pushbutton	M29
SW100	Base - basket selector	I5
SW303	Basket selector - Basket tilt up	G36
SW304	Basket selector - Basket RH rotation	G41
SW306	Basket selector - Jib up	G38
SW308	Basket selector - Basket tilt down	G36
SW309	Basket selector - Basket LH rotation	G40
SW311	Basket selector - Jib down	G39
UPC102	UPC102 module	I41
UPC30	UPC30 module	C24

LOCATION OF WIRING HARNESSES ON THE ACCESS PLATFORM

(up to no. 949266)



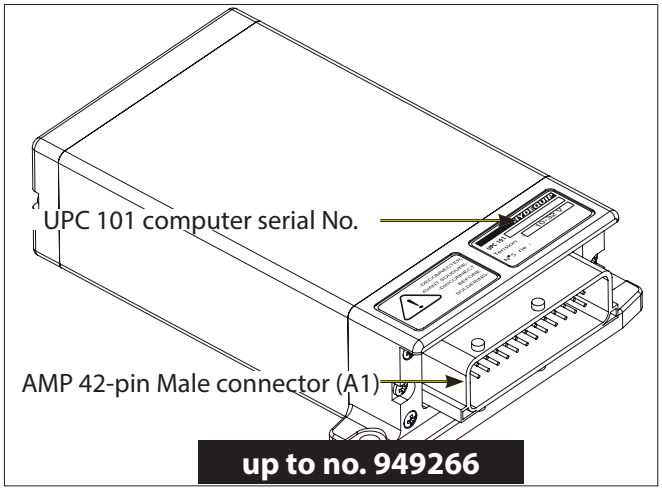


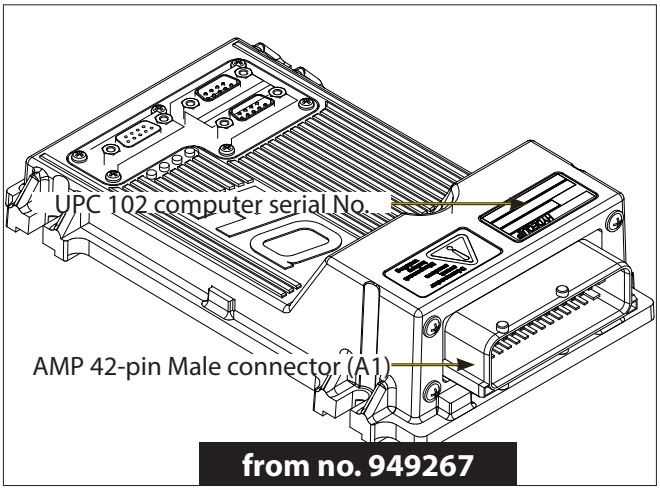
pages

UPC 101 COMPUTER (up to no. 949266)

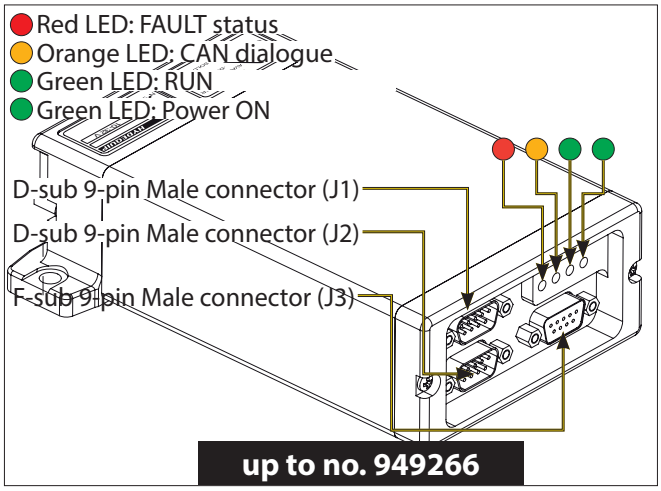
UPC 102 COMPUTER (from no. 949267)

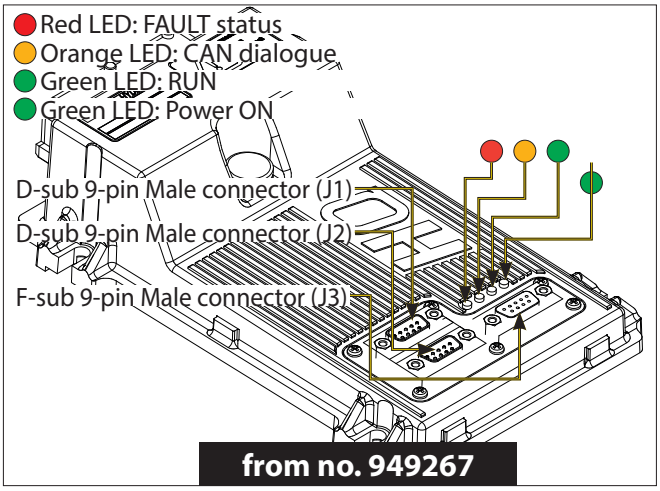
Front view





Rear view





80

Connectors C1 and C2	
Pin No.	**Designation**
1, 15, 29	Permanent power supply (Battery): BAT+
28, 42	GND ground
14	After ignition APC+
2 to 13, 16 to 27, 30 to 41	Input/Outputs

Connector J1		Connector J2		Connector J3	
Pin No.	**Designation**	**Pin No.**	**Designation**	**Pin No.**	**Designation**
1	NC*	1	NC	1	NC
2	CANL	2	CANL	2	NC
3	NC	3	NC	3	NC
4	NC	4	NC	4	NC
5	NC	5	NC	5	NC
6	NC	6	NC	6	NC
7	CANL	7	CANL	7	NC
8	NC	8	NC	8	NC
9	NC	9	NC	9	NC

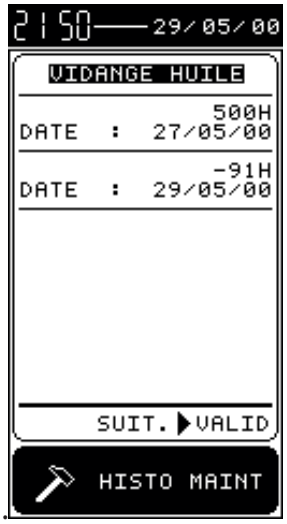
* NC = Not Connected

LED	NORMAL OPERATION	CAN BUS FAULT
Orange	Flashing	Not lit
Red	Not lit	Lit
Green (Run)	Flashing	Flashing
Green (ON)	Lit	Lit

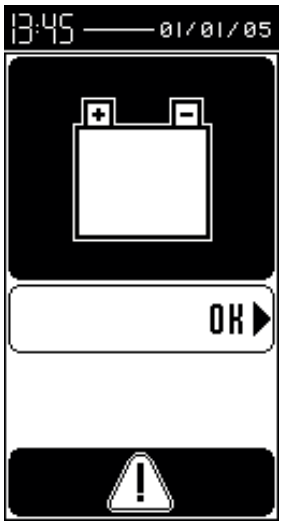
7. MAINTENANCE HISTORY PAGE

Access level required: Dealer/Hirer
The fault history page is accessible via the menu page.

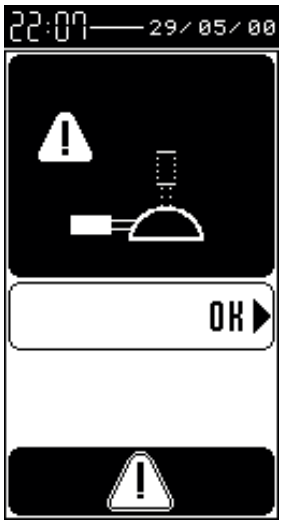
This page enables the last 9 maintenances (by maintenance type) performed on the machine to be viewed. The maintenance date and counter value at the time of confirmation are displayed.
Maximum number of pages: 16



The manufacturer level is needed to erase the history (press "CONFIRM" until the system offers you this).



This fault appears when the power supply to a computer is less than 11 V or more than 15 V.



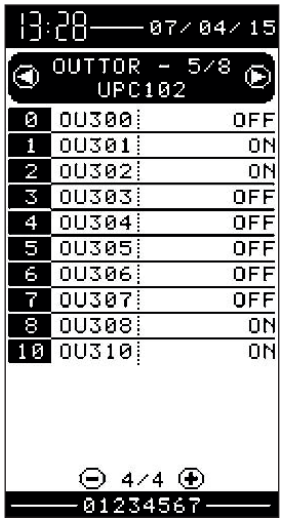
This fault appears when a movement selection remains engaged during the start-up phase.

A fault must be acknowledged only when it first appears (the user is warned by a continuous BEEP from the screen). Acknowledgement of a fault is performed by pressing the "CONFIRM" key when the fault page is displayed.

ENGINE CONTROL	4	Engine start-up safety time delay	20	1	300	245	17,4
	5	Movt forbidden engine reg by-pass	1	0	1	246	17,5
	6	Engine start-up threashold	600	0	1000	247	17,6
	7	Engine speed forcing valid time delay	1	0	600	248	17,7
	8	Engine speed forcing devalid time delay	0	0	600	249	17,8
PRE-HEATING	0	Pre-heating time delay	70	70	150	291	18,1
FORWARD MOVEMENT CONTROL	0	Forw. mvt after stopping time delay	5	0	100	84	19,1
	1	Translation stop detection time delay	1	1	100	85	19,2
	2	Transp limit switch detection time delay	0	0	60	86	19,3
	3	Work limit switch detection time delay	0	0	60	87	19,4
ANTI-STALLING CONTROL	0	Idling speed anti-stalling	1300	50	4000	140	20,1
	1	Max engine speed anti-stalling	2200	50	4000	141	20,2
	2	Engine filter anti-stalling	5	0	20	142	20,3
	3	Activation threshold anti-stalling	150	0	400	143	20,4
	4	High P gain anti-stalling	1000	2	10000	144	20,5
	5	High I gain anti-stalling	800	2	10000	145	20,5
	6	Low P gain anti-stalling	1000	2	10000	146	20,5
	7	Low I gain anti-stalling	600	2	10000	147	20,5
	8	Engine setting filter coefficient anti-stalling	20	0	200	148	20,6
GAUGE CONTROL	0	Inlet 0 diesel volume	330	200	3000	29	21,1
	1	Outlet 0 diesel volume	80	0	99	30	21,2
	2	Inlet 1 diesel volume	420	200	3000	31	21,1
	3	Outlet 1 diesel volume	76	0	99	32	21,2
	4	Inlet 2 diesel volume	520	200	3000	33	21,1
	5	Outlet 2 diesel volume	70	0	99	34	21,2
	6	Inlet 3 diesel volume	615	200	3000	35	21,1
	7	Outlet 3 diesel volume	66	0	99	36	21,2
	8	Inlet 4 diesel volume	710	200	3000	37	21,1
	9	Outlet 4 diesel volume	60	0	99	38	21,2
	10	Inlet 5 diesel volume	780	200	3000	39	21,1
	11	Outlet 5 diesel volume	56	0	99	40	21,2
	12	Inlet 6 diesel volume	850	200	3000	41	21,1
	13	Outlet 6 diesel volume	50	0	99	42	21,2
	14	Inlet 7 diesel volume	935	200	3000	43	21,1
	15	Outlet 7 diesel volume	44	0	99	44	21,2
	16	Inlet 8 diesel volume	1070	200	3000	45	21,1
	17	Outlet 8 diesel volume	38	0	99	46	21,2
	18	Inlet 9 diesel volume	1230	200	3000	47	21,1
	19	Outlet 9 diesel volume	32	0	99	48	21,2
	20	Inlet 10 diesel volume	1630	200	3000	49	21,1
	21	Outlet 10 diesel volume	26	0	99	50	21,2
	22	Inlet 11 diesel volume	1800	200	3000	51	21,1
	23	Outlet 11 diesel volume	20	0	99	52	21,2
	24	Inlet 12 diesel volume	1950	200	3000	53	21,1
	25	Outlet 12 diesel volume	16	0	99	54	21,2

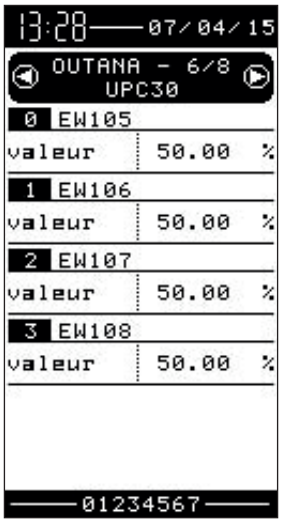
Presentation of sub-menus

MENU	SUB-MENU	ACCESS LEVEL	COMMENTS
SCREEN	SCREEN ADJUSTMENT	USER	Screen-specific settings: contrast, brightness, date and time. Deactivation of screen BEEP.
CODIFICATION	CODIFICATION	USER	Displays the different codes: Manitou code, product code, equipment code, software code, machine number.
	MACHINE NUMBER	MANUFACTURER	Forces the system's machine number.
DIAGNOSTICS	HOUR COUNTER	USER	Displays engine hours. DEALER: option of resetting rental hours. HIRER/MANUFACTURER: option to force engine and rental hours.
	DAILY HOURS	USER	Displays engine hours per day. L/C: option of resetting daily hours.
	INPUT/OUTPUT DISPLAY	USER	Displays system Inputs and Outputs.
	DIAGNOSTICS	USER	Detection of missing conditions for activating a movement.
	FAULT HISTORY	USER	Displays the fault log. L/C: option of deleting the log.
SECRET CODE	CODE	USER	Enter an access code.
	ANTI-START LOCK	USER (if option)	Locking of access platform (only available with anti-start option).
	MANAGE ANTI-START	DEALER (if option)	Activation of anti-start option and adjustment of option settings.
	ANTI-START CODE MODIFICATION	DEALER (if option)	Modification of the platform release code (only with the anti-start option)
	DEFAULT ANTI-START CODE	MANUFACTURER (if option)	Return to the default release code (factory set) (available only with the anti-start option).
SETTINGS	USER OPTIONS	USER	Access to specific User options.
	DEALER OPTIONS	DEALER	Access to specific Dealer options.
	MANUFACTURER OPTIONS	MANUFACTURER	Access to specific Hirer/Manufacturer options DEALER: display possible.
	LANGUAGE	DEALER	Access to screen language choices.
	SECRET CODES	MANUFACTURER	Access to READ and DEALER codes.
	SYSTEM PARAMETERS	READ	Access to system parameters (access to the different parameter sub-groups depends on the access level).
MAINTENANCE	MAINTENANCE	USER	Maintenance display (warnings and hours remaining). DEALER: possibility of validating maintenance carried out. L/C: option of forcing the time remaining to each maintenance.
	MAINTENANCE HISTORY	READ	Displays the validation dates of each maintenance operation. L/C: option of deleting the log.
CALIBRATION	ENGINE ACCELERATOR CALIBRATION	DEALER	Access to the engine accelerator calibration page. READ: display possible.
	JOYSTICK CALIBRATION	DEALER	Access the control panel joystick calibration page.
	SPEED CALIBRATION	DEALER	Access to the movement speed calibration page (adjusted at end of production line). READ: display possible.
	OVERLOAD CALIBRATION	DEALER	Access to the redundant strain gauge settings page.
	GENERATOR CALIBRATION	DEALER	Access to the generator calibration page. READ: display possible.
	PARAMETER MANAGEMENT	DEALER	Access the management of the machine's complete set of parameters (save/recover/reset)



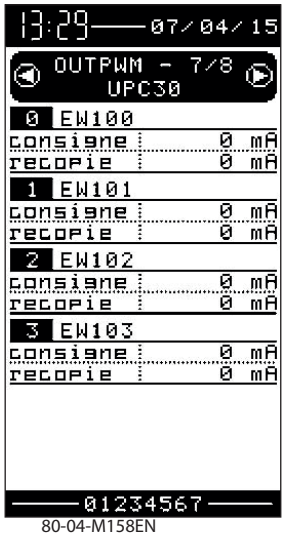
Description	*ON*	*OFF*
Basket buzzer	Active	Inactive
Front axle aligned indicator lamp	Lit	Unlit
Rear axle aligned indicator lamp	Lit	Unlit
Engine fault indicator lamp	Lit	Unlit
Levelling fault indicator lamp	Lit	Unlit
Overload indicator lamp	Lit	Unlit
Preheating indicator lamp	Lit	Unlit
Fuel indicator lamp	Lit	Unlit
Overload safety	No overload	Overload
Basket components power supply	Active	Inactive

OUTANA



Description		*Value*		
Lower arm PVG	Status	Lifting	Neutral	Lowering
	Value	25%	50%	75%
Boom PVG	Status	Removals	Neutral	Retracted
	Value	25%	50%	75%
Upper arm PVG	Status	Lifting	Neutral	Lowering
	Value	25%	50%	75%
Auxiliary PVG	Status	Activated	Neutral	Activated
	Value	25%	50%	25%

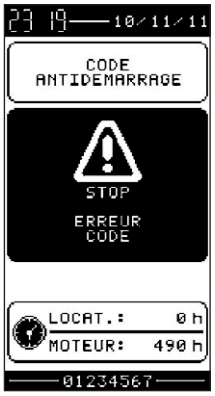
OUTPWM



Description		*Value*		
Forward gear electrovalve	Status	Forward Gear	Neutral	Reverse Gear
	Set point	Up to 1,200 mA	0 mA	0 mA
	Copy	Up to 1,200 mA	0 mA	0 mA
Reverse gear electrovalve	Status	Forward gear	neutral	Reverse Gear
	Set point	0 mA	0 mA	Up to 1,200 mA
	Copy	0 mA	0 mA	Up to 1,200 mA
Engine accelerator valve	Status	Min. rpm	Max. rpm	
	Set point	0 mA	700 mA	
	Copy	0 mA	700 mA	
Generator valve	Status	Generator active	Generator off	
	Set point	*	0 mA	
	Copy	*	0 mA	

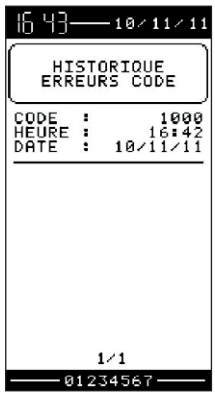
*: According to the "generator setting" parameter adjustment (300 mA to 1700 mA).

Temporary locking



Five incorrect codes entered successively cause the display of a warning message for 2 min.
No code can then be entered during this time (platform locking).
Each additional incorrect code doubles the locking time. A 6th incorrect code causes the message to be displayed for 4 min and a 7th incorrect code for 8 min.
The maximum platform locking time is 64 min.

Display of the history at start-up

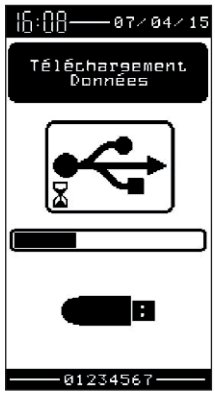


If at least one incorrect code has been entered without the system then being unlocked (attempt to start the platform without a code), the history of code errors is automatically displayed at start-up.

6 USB Transfer Option

These pages only appear if the "USB Transfer Events Diary" option is activated.

Data transfer takes place on a USB key via the specific USC module (USB interface) previously installed on the platform (with the "USB Transfer Events Diary" option activated).
The system automatically detects any USB key connected to the module and automatically downloads the entire events diary (up to 1000 events). The event diary corresponds to all the alerts and faults contained in the fault history.



Press on: Exit

Press on: Exit

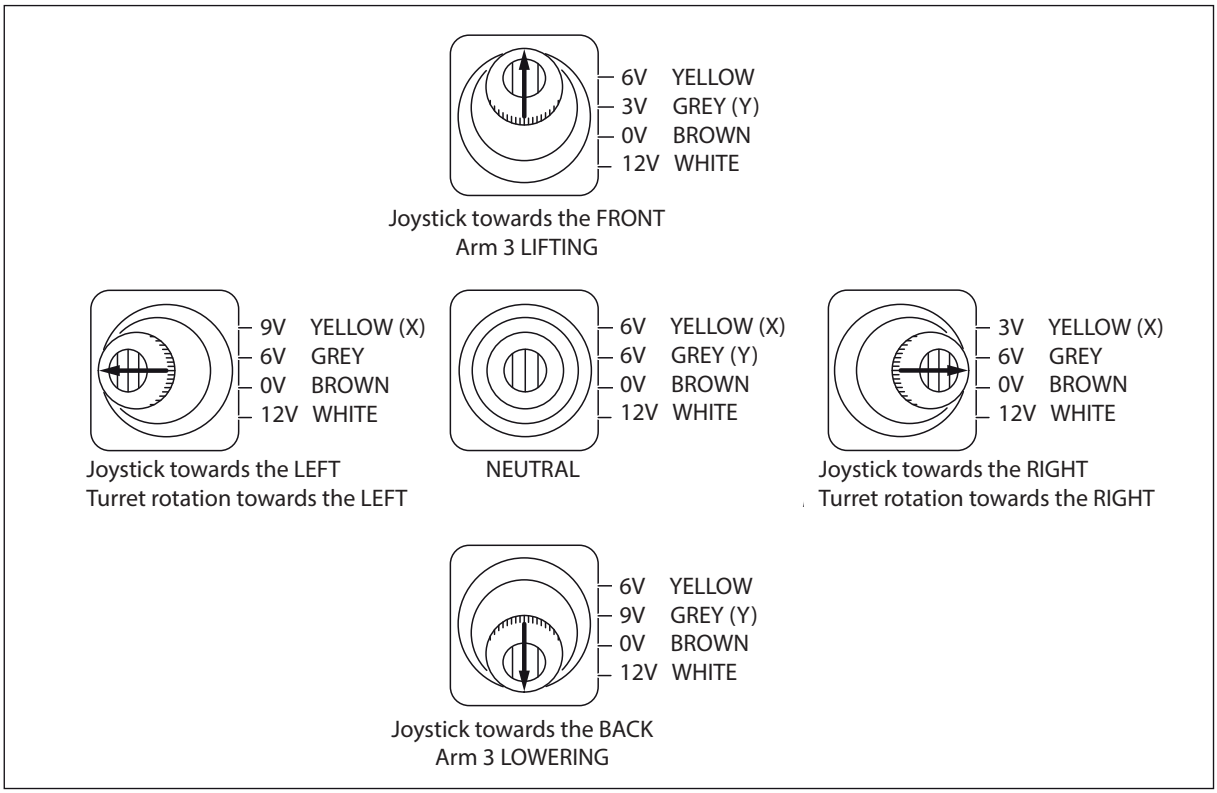
If there is a problem during data transfer the downloading stops to display a specific page detailing the type of problem encountered.

SCREEN GROUP			
Sub-group	**Number**	**Description**	**Value (Min/Max)**
FAULT MANAGEMENT	6	High water temperature warning time delay OFF (s)	4.0 (0.0/600.0)
	7	Engine low oil pressure warning time delay ON (s)	20.0 (0.0/600.0)
	8	Engine low oil pressure warning time delay OFF (s)	4.0 (0.0/600.0)
	9	Engine low oil pressure sensor test time delay (s)	0.4 (0.0/600.0)
	10	Engine low oil pressure fault cancellation time delay (s)	5.0 (0.0/600.0)
	11	Battery charge problem warning time delay ON (s)	4.0 (0.0/600.0)
	12	Battery charge problem warning time delay OFF (s)	2.0 (0.0/600.0)
	13	Low level 1 fuel warning threshold (l)	10 (0/60)
	14	Low fuel level 1 warning time delay ON (s)	8.0 (0.0/60.0)
	15	Low fuel level 1 warning time delay OFF (s)	8.0 (0.0/60.0)
	16	Low level 2 fuel warning threshold (l)	7 (0/60)
	17	Low fuel level 2 warning time delay ON (s)	8.0 (0.0/60.0)
	18	Low fuel level 2 warning time delay OFF (s)	8.0 (0.0/60.0)
	19	Very low fuel level warning threshold (l)	4 (0/60)
	20	Very low fuel level warning time delay ON (s)	4.0 (0.0/60.0)
	21	Very low fuel level warning time delay OFF (s)	4.0 (0.0/60.0)
	22	Engine OFF Time-out warning (s)	20 (0/1800)
	23	Battery/W charge problem warning Time Delay ON (s)	8.0 (0.0/60.0)
	24	Battery/W charge problem warning Time Delay OFF (s)	2.0 (0.0/60.0)
	25	Unlock safety time delay blocked ON (s)	30.0 (0.0/600.0)
	26	Backup Pump Time Delay Blocked ON (s)	300.0 (0.0/3000.0)
	27	Overload warning Time Delay ON (s)	0.0 (0.0/2.0)
	28	Overload warning Time Delay OFF (s)	1.0 (0.0/5.0)
	29	Working Levelling warning Time Delay ON (s)	1.5 (0.0/60.0)
	30	Working Levelling warning Time Delay OFF (s)	1.0 (0.0/60.0)
	31	Transport Levelling warning Time Delay ON (s)	3.0 (0.0/60.0)
	32	Transport Levelling warning Time Delay OFF (s)	1.0 (0.0/60.0)
	33	Base Panel Dead Man Time Delay blocked ON (s)	60.0 (0.0/600.0)
	34	Basket Panel Dead Man Time Delay Blocked ON (s)	60.0 (0.0/600.0)
	35	Travel Joystick Trigger Time Delay Blocked ON (s)	15.0 (0.0/600.0)
	36	Sensitive Edge Time-out Lock ON (s)	120.0 (0.0/600.0)
	37	Rearm pushbutton Time-out lock ON (s)	60.0 (0.0/600.0)
	38	Oscillation Unlock Relay Time-out warning ON (s)	5.0 (0.0/20.0)
	39	Oscillation Unlock Relay Off Time-out warning OFF (s)	0.2 (0.0/5.0)
	40	Oscillation Unlock Relay Time-out warning ON (s)	2.0 (0.0/5.0)
	41	Oscillation Lock Relay Off Time-out warning OFF (s)	0.2 (0.0/5.0)
	42	PVPX Reread Off warning Time Delay ON (s)	2.0 (0.0/60.0)
	43	Untimely PVPX Control warning Time Delay ON (s)	2.0 (0.0/60.0)
	44	Engine Stop Reread Off warning Time Delay ON (s)	6.0 (0.0/60.0)
	45	Brake Release Reread Off warning Time Delay ON (s)	2.0 (0.0/60.0)
	46	Untimely Brake Release Control warning Time Delay ON (s)	2.0 (0.0/60.0)
	47	Travel Pump PWM Retained-Copied Deviation (mA)	300 (10/2000)
	48	Travel pump PWM fault time delay ON (s)	1.0 (0.0/60.0)
	49	Travel pump PWM fault time delay OFF (s)	10.0 (0.0/60.0)
	50	Engine acceleration PWM retained-copied deviation (mA)	300 (10/2000)
	51	Engine acceleration PWM fault time delay ON (s)	2.0 (0.0/60.0)
	52	Engine acceleration PWM fault time delay OFF (s)	10.0 (0.0/60.0)
	53	Generator PWM retained-copied deviation (mA)	300 (10/2000)
	54	Generator PWM fault time delay ON (s)	2.0 (0.0/60.0)
	55	Generator PWM fault time delay OFF (s)	10.0 (0.0/60.0)
	56	Sensor power supply low threshold (V)	9.50 (5.00/30.00)
	57	Sensor power supply high threshold (V)	16.00 (12.00/40.00)
	58	Sensor power supply Time-out warning ON (s)	2.0 (0.0/60.0)
	59	Sensor power supply Time-out warning OFF (s)	1.0 (0.0/60.0)
	60	Overload Sensor 1-2 Inconsistency Time-out ON (s)	2.0 (0.0/60.0)
	61	Overload Sensor 1-2 Inconsistency Time-out OFF (s)	1.0 (0.0/60.0)
	62	Switch 2 Position Inconsistency Time Delay ON (s)	1.0 (0.0/5.0)
	63	Switch 2 Position Inconsistency Time Delay OFF (s)	0.0 (0.0/5.0)
INTERNAL DATA	0	750B1551-B Jul 05 2017	0 (0/0)
	1	Reset EEPROM	0 (0/1)

Analogue output test

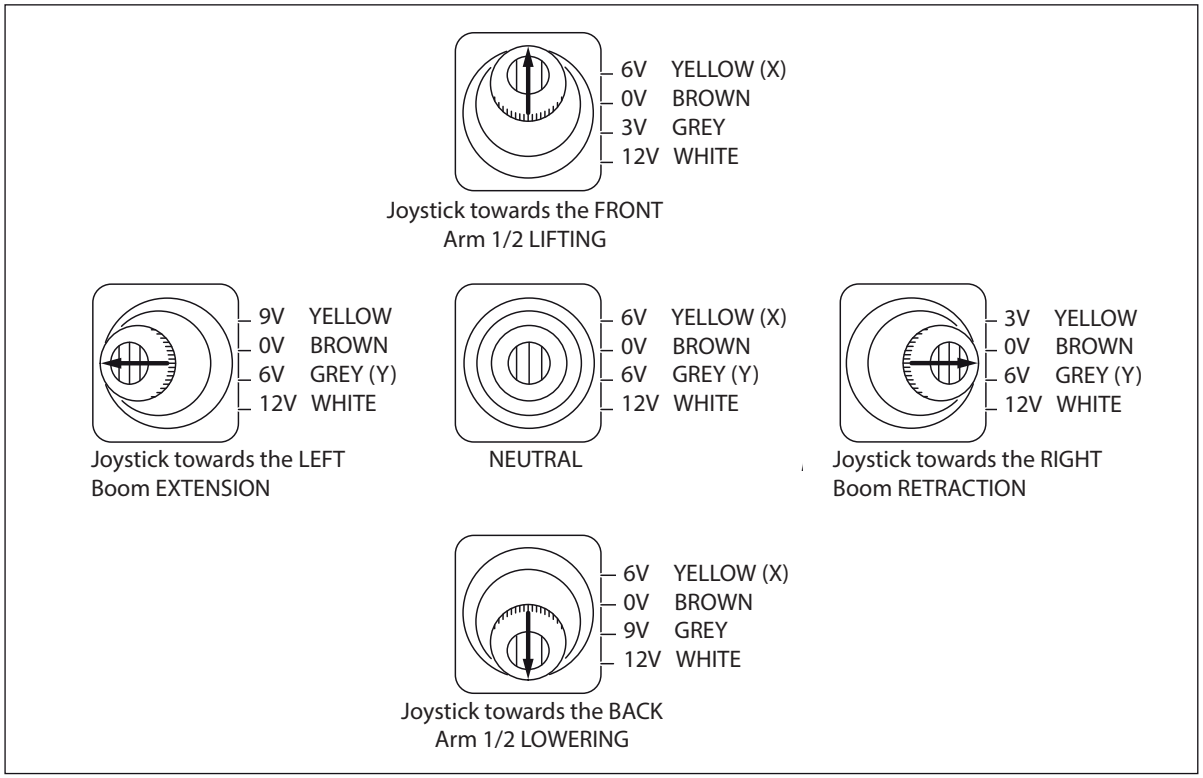
Turret rotation and arm 3 joystick (A-1).

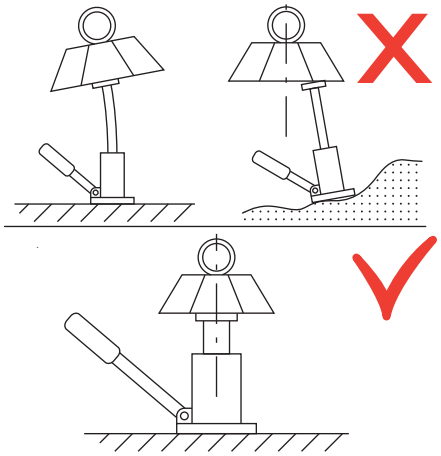
Move the ball towards the front, the back, the left then the right and check the values displayed by the voltmeter:



Boom and arm 1/2 joystick (A-2).

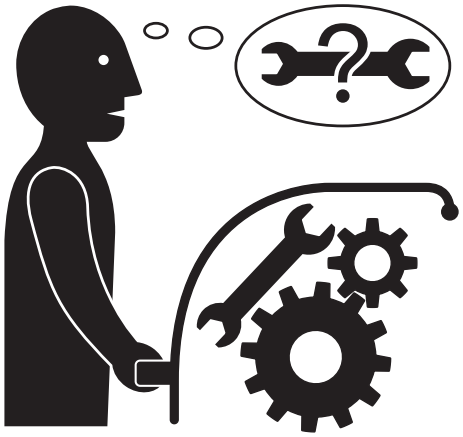
Move the ball towards the front, the back, the left then the right and check the values displayed by the voltmeter:





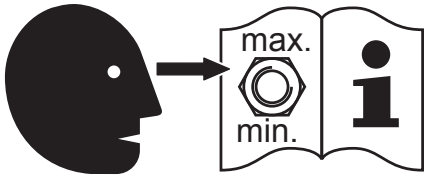
When any machine component is lifted or shored, ensure that the equipment used is intended for at least the load that it is subjected to by said component and that it corresponds to the national standards for lifting devices.

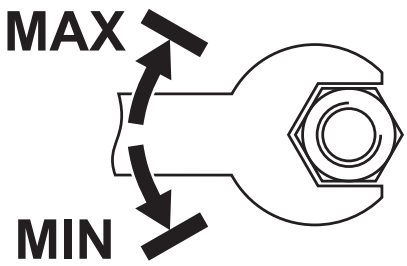
When using a jack, ensure it is used on a flat, unchanging, load-bearing surface which can handle the intended load, that it has a sufficient lifting capacity and that it is correctly placed and positioned on the machine.



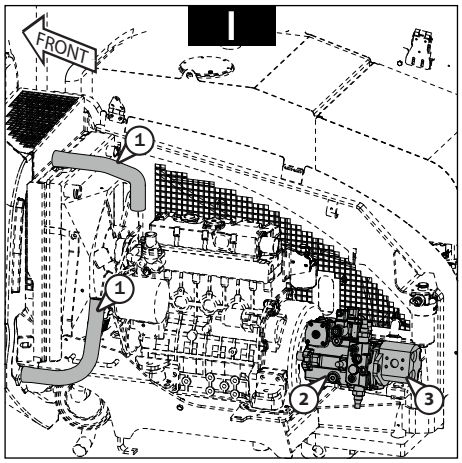
Make sure no object or tool which could cause an accident is left in the machine.

Never check for possible leaks using your hand.





Never use a component beyond its maximum capacities indicated by the manufacturer.



Remove the two cooling system hoses (I-1).

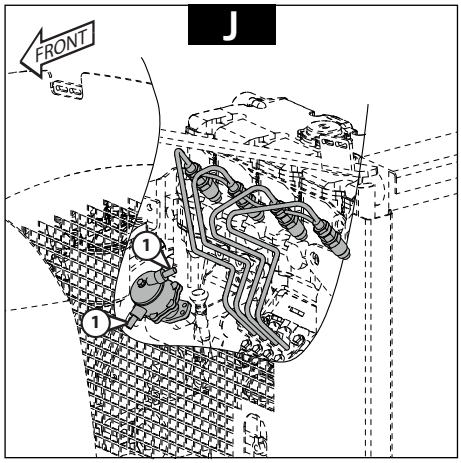
Locate, remove and plug the hydraulic hoses connected to the hydrostatic pump (I-2) and the auxiliary pump (I-3).

Note: When shut down, the pressure in these hoses is low to nil.

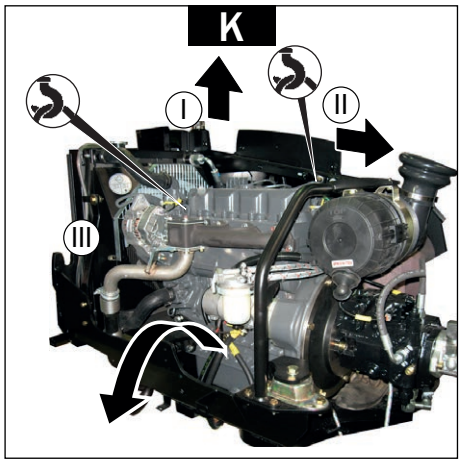
Place a drain pan under the pumps.

Slowly undo the nut of the hose or its fastening screws, a quarter-turn at a time, to release the residual pressure.

Once the pressure has fallen, fully remove the hose, plug it and proceed to the next one.



Locate, remove and plug the engine supply and diesel return hoses (J-1): *Pivoting frame open*.



Hook a sling connected to an engine hoist with two slinging points (blue rings) ..... 250 kg

Remove the screws connecting the Silent blocks to the engine support bracket (J-1).

Take out the engine (K):

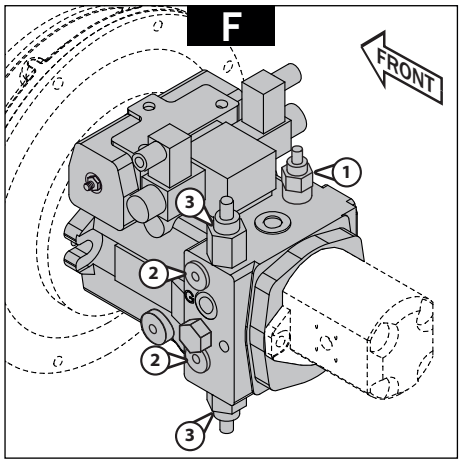
I - Lift the engine 20~30 mm.

II - Move it towards the rear to extract the fan from its housing in the radiator.

Beware of the hoses and components remaining in place.

III - Take the engine out of the frame and complete its removal.

F



Calibration - HP Valves

Caution, before adjusting the HP valve, you must first over-calibrate the valve DR 14 (F-1).

Install a manometer (0-400 bar) on each HP port (F-2).

Change the DR valve setting.

Warning, because of the technological design of the DR valve, do not adjust its pressure settings. Ensure that the engine is stopped before adjusting.

Undo the lock-nut of the valve, then tighten the calibration screw by half-a-turn.

Disconnect the brake electrovalve control wiring harness from the brake/steering hydraulic block.

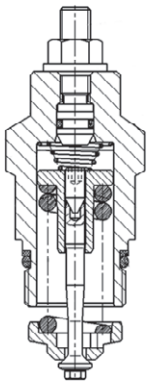
Select the high-speed setting (hare) on the basket control panel and run the machine at full speed in forward gear.

Read the pressure on the manometer connected to the lower pressure test port (line A): the theoretical pressure is 330 bars.

Perform the same checks when running the machine at full speed in reverse gear and checking the manometer connected to the upper pressure test port (line B).

If the pressure readings are incorrect, switch off the engine and perform the following procedure:

G

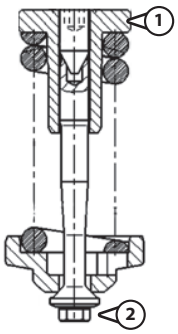


- Remove the valve(s) to be adjusted (F-3), remove the shock-absorber assembly (G).
  - Remove the locking screw (H-1).
  - Tighten (to increase the HP pressure) or loosen (to reduce the HP pressure) the spring setting screw (H-2). For information: one turn of the screw changes the pressure setting by approx. 45 bars.

Put back the valve(s) in place, then repeat the procedure until the correct reading are obtained.

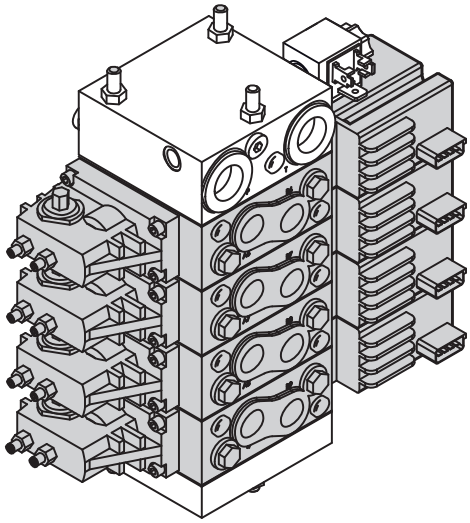
Calibrate the DR valve.

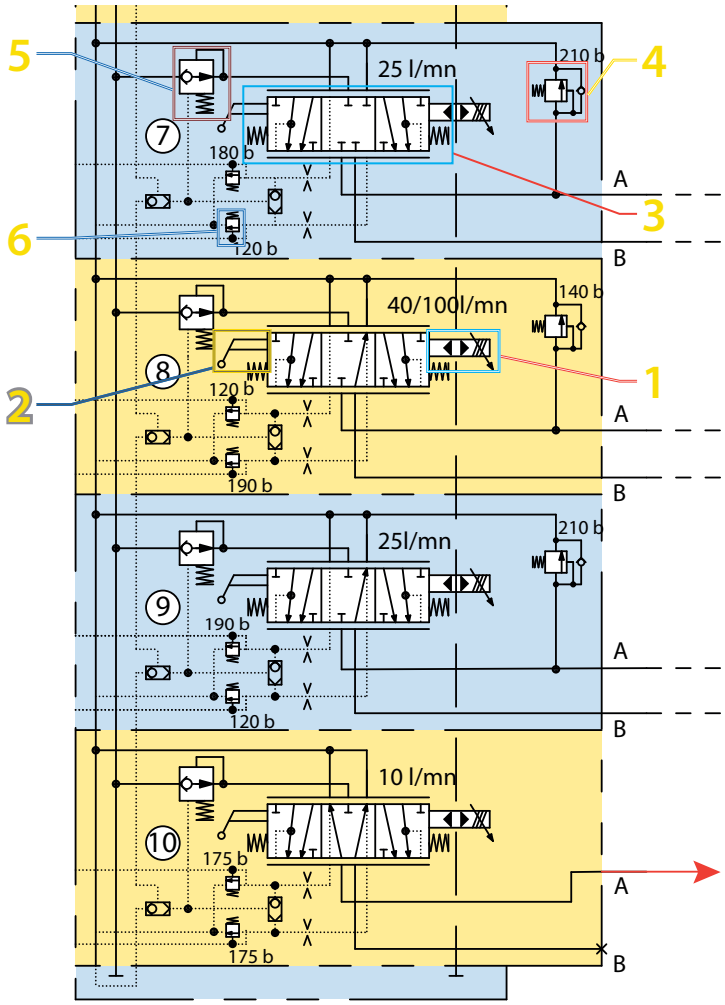
H



Values present (as an indication)

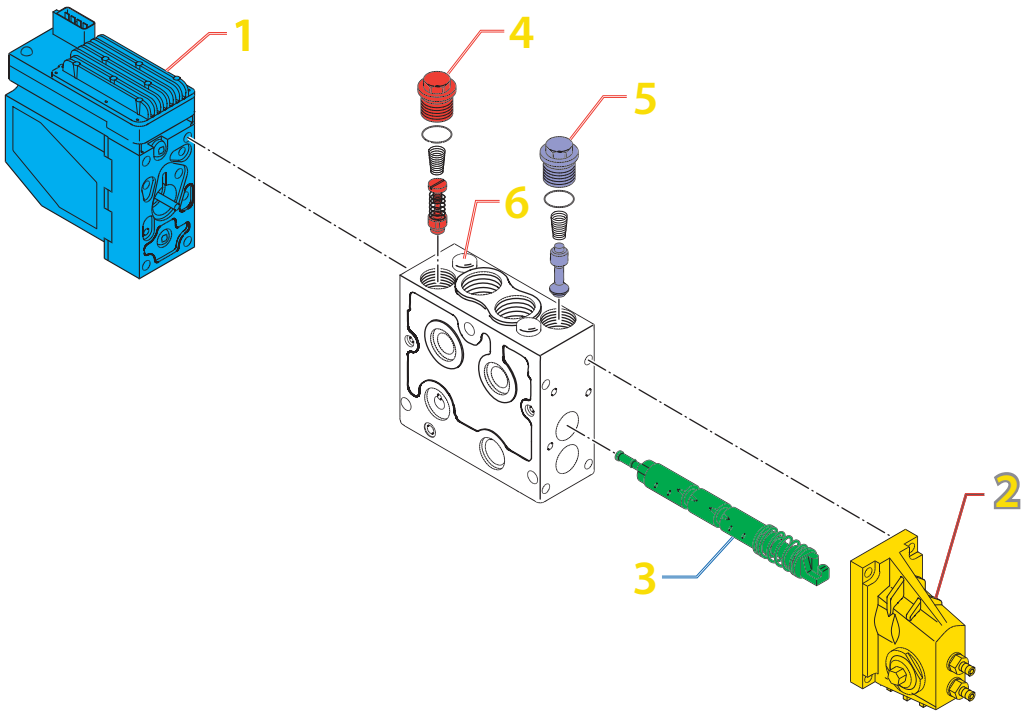
DISTRIBUTION COMPONENT





LEGEND :

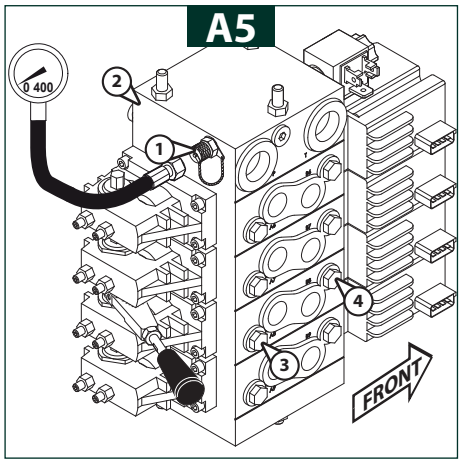
1 - Electrical control
2 - Manual control
3 - Distribution slide valves
4 - Anti-shock shutter valves
5 - Anti-cavitation shutter valves
6 - LS pressure reducers
7 - Pressure equalisers



ELECTROVALVE ACTIVATION TABLE

				Electrovalve: - = Resting / E = Excited																						
				4	5	6		7		8		9		10		11		12		13		14		15		Generator electro.*
						6a	6b	7a	7b	8a	8b	9a	9b	10a	10b	11a	11b	12a	12b	13a	13b	14a	14b	15a	15b	
Transport position	Stop			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	E
	Steering only	2-wheel	Left	-	-	-		-	-	-	-	-	-	E	-	-	-	E	-	-	-	-	-	-	-	-
			Right	-	-	-	-	-	-	-	-	-	-	E	-	-	-	-	E	-	-	-	-	-	-	-
		4-wheel	Left	-	-	E	-	-	-	-	-	-	-	E	-	-	-	E	-	-	-	-	-	-	-	-
			Right	-	-	E	-	-	-	-	-	-	-	E	-	-	-	-	E	-	-	-	-	-	-	-
		Crab	Left	-	-	-	E	-	-	-	-	-	-	E	-	-	-	E	-	-	-	-	-	-	-	-
			Right	-	-	-	E	-	-	-	-	-	-	E	-	-	-	-	E	-	-	-	-	-	-	-
	Travelling			E	E/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Travel + Steering	2-wheel	Left	E	E/-	-	-	-	-	-	-	-	-	E	-	-	-	E	-	-	-	-	-	-	-	-
			Right	E	E/-	-	-	-	-	-	-	-	-	E	-	-	-	-	E	-	-	-	-	-	-	-
		4-wheel	Left	E	E/-	E	-	-	-	-	-	-	-	E	-	-	-	E	-	-	-	-	-	-	-	-
			Right	E	E/-	E	-	-	-	-	-	-	-	E	-	-	-	-	E	-	-	-	-	-	-	-
		Crab	Left	E	E/-	-	E	-	-	-	-	-	-	E	-	-	-	E	-	-	-	-	-	-	-	-
			Right	E	E/-	-	E	-	-	-	-	-	-	E	-	-	-	-	E	-	-	-	-	-	-	-
Working position	Stop			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	E
	Steering only	2-wheel	Left	-	-	-	-	-	-	-	-	-	-	E	-	-	-	E	-	-	-	-	-	-	-	-
			Right	-	-	-	-	-	-	-	-	-	-	E	-	-	-	-	E	-	-	-	-	-	-	-
		4-wheel	Left	-	-	E	-	-	-	-	-	-	-	E	-	-	-	E	-	-	-	-	-	-	-	-
			Right	-	-	E	-	-	-	-	-	-	-	E	-	-	-	-	E	-	-	-	-	-	-	-
		Crab	Left	-	-	-	E	-	-	-	-	-	-	E	-	-	-	E	-	-	-	-	-	-	-	-
			Right	-	-	-	E	-	-	-	-	-	-	E	-	-	-	-	E	-	-	-	-	-	-	-
	Travelling			E	E/-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Travel + Steering	2-wheel	Left	E	E/-	-	-	-	-	-	-	-	-	E	-	-	-	E	-	-	-	-	-	-	-	-
			Right	E	E/-	-	-	-	-	-	-	-	-	E	-	-	-	-	E	-	-	-	-	-	-	-
		4-wheel	Left	E	E/-	E	-	-	-	-	-	-	-	E	-	-	-	E	-	-	-	-	-	-	-	-
			Right	E	E/-	E	-	-	-	-	-	-	-	E	-	-	-	-	E	-	-	-	-	-	-	-
		Crab	Left	E	E/-	-	E	-	-	-	-	-	-	E	-	-	-	E	-	-	-	-	-	-	-	-
			Right	E	E/-	-	E	-	-	-	-	-	-	E	-	-	-	-	E	-	-	-	-	-	-	-
	Lifting	Arm 1/2	Raising	-	-	-	-	E	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
			Lowering	-	-	-	-	-	E	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		Arm 3	Raising	-	-	-	-	-	-	-	-	E	-	-	-	-	-	-	-	-	-	-	-	-	-	-
			Lowering	-	-	-	-	-	-	-	-	-	E	-	-	-	-	-	-	-	-	-	-	-	-	-
	Boom		Removals	-	-	-	-	-	-	E	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
			Retracted	-	-	-	-	-	-	-	E	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Jib		Raising	-	-	-	-	-	-	-	-	-	-	E	-	E	-	-	-	-	-	-	-	-	-	-
			Lowering	-	-	-	-	-	-	-	-	-	-	E	-	-	E	-	-	-	-	-	-	-	-	-
	Basket rotation		Right	-	-	-	-	-	-	-	-	-	-	E	-	-	-	-	-	-	-	E	-	-	-	-
			Left	-	-	-	-	-	-	-	-	-	-	E	-	-	-	-	-	-	-	-	E	-	-	-
	Turret rotation		Right	-	-	-	-	-	-	-	-	-	-	E	-	-	-	-	-	E	-	-	-	-	-	-
			Left	-	-	-	-	-	-	-	-	-	-	E	-	-	-	-	-	-	E	-	-	-	-	-
	Tilting		Scoop	-	-	-	-	-	-	-	-	-	-	E	-	-	-	-	-	-	-	-	-	E	-	-
			Tilting	-	-	-	-	-	-	-	-	-	-	E	-	-	-	-	-	-	-	-	-	-	E	-

* Generator electrovalve activated after 5 seconds without basket movement and activation.



3 arm lifting cylinder block valves

Connect the manometer to the pressure test port (A5-1) marked M on the upper block (A5-2).
From the base control panel (A1-3), extend/retract the arm 3 lifting cylinder. Maintain the command when the cylinder is fully extended/retracted, and check that the manometer displays a pressure of:

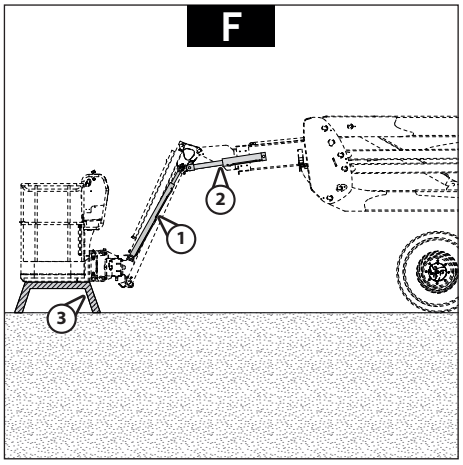
- ***180 bar*** cylinder extended.
- ***140 bar*** cylinder retracted.

From the base control panel (A1-3), extend/retract the boom cylinder (command maintained) and adjust the valve settings to obtain:

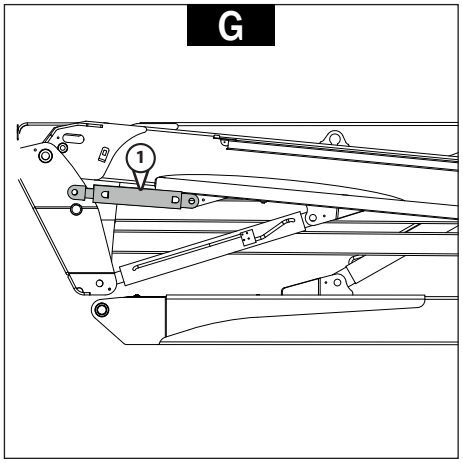
- ***180 bar*** cylinder extended.
- ***140 bar*** cylinder retracted.

Refit the caps.

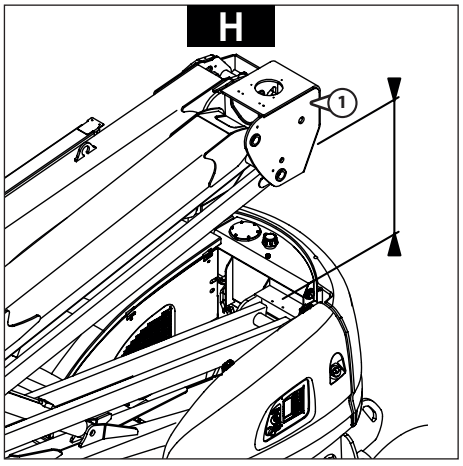
F



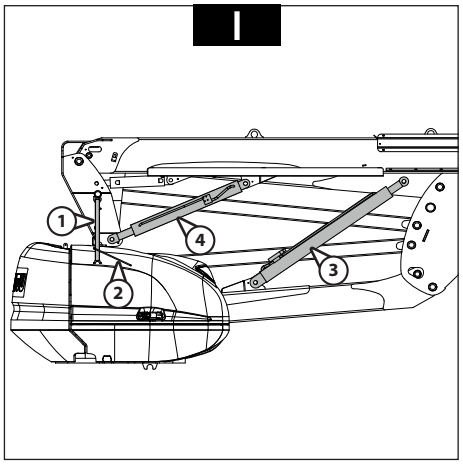
G



H



I



CYLINDER REMOVAL

PREPARING THE PLATFORM

Place the machine on level ground.

From the base control panel and depending on the cylinder to be removed, raise arms 1/2, raise arm 3, extend the telescope, or extend the jib.

Hold by wedging or by means of a sling hung from a hoist.

For the jib (F-1), tilting (F-2), compensating (G-1) and telescope cylinders:

- Set the basket down on a block (F-3).

Warning, for the tilting/compensating cylinders, the basket is immobilized AFTER decompressing the hoses.

For the arm 1/2 (I-3) and arm 3 cylinders (I-4):

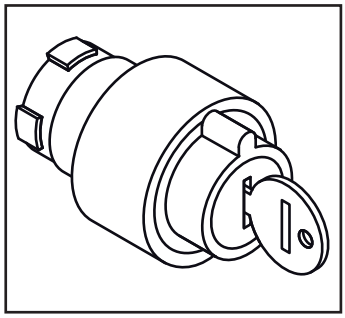
- From the base console, raise arms 1/2 until the upper hinge (H-1) is one meter above the counterweight.

- Climb onto the frame, remove the locking pin, manually raise the maintenance support arm into the vertical position (I-1) and place the strut (I-2).

- From the base console, lower arms 1/2 until the upper hinge (H-1) comes into contact with the maintenance support arm, then release the controls.

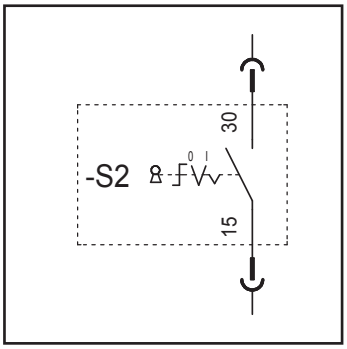
Switch off the engine and power off the platform.

S2 IGNITION KEY



	PIN	Function
	30	NO contact
	15	

Corresponding connector



Diagram

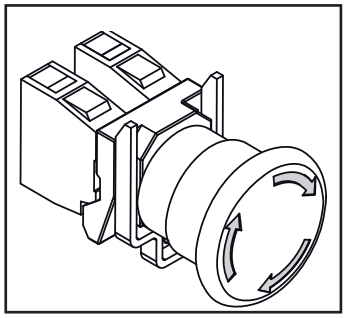
	PIN	Min.	Typical	Max
Supply voltage	30		12 V	
Consumption				

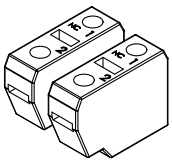
Notes: _____

_____

_____

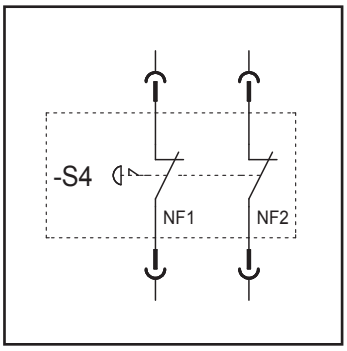
S4 + S11 EMERGENCY STOP BUTTON





	PIN	Function
	NC1+	NC Switch
	NC2+	NC Switch
	NC1-	
	NC2-	

Corresponding connector



Diagram

	PIN	Min.	Typical	Max
Supply voltage			12 V	
Consumption				

Notes: _____

_____

_____

DIAGRAM 3 - TRANSMISSION

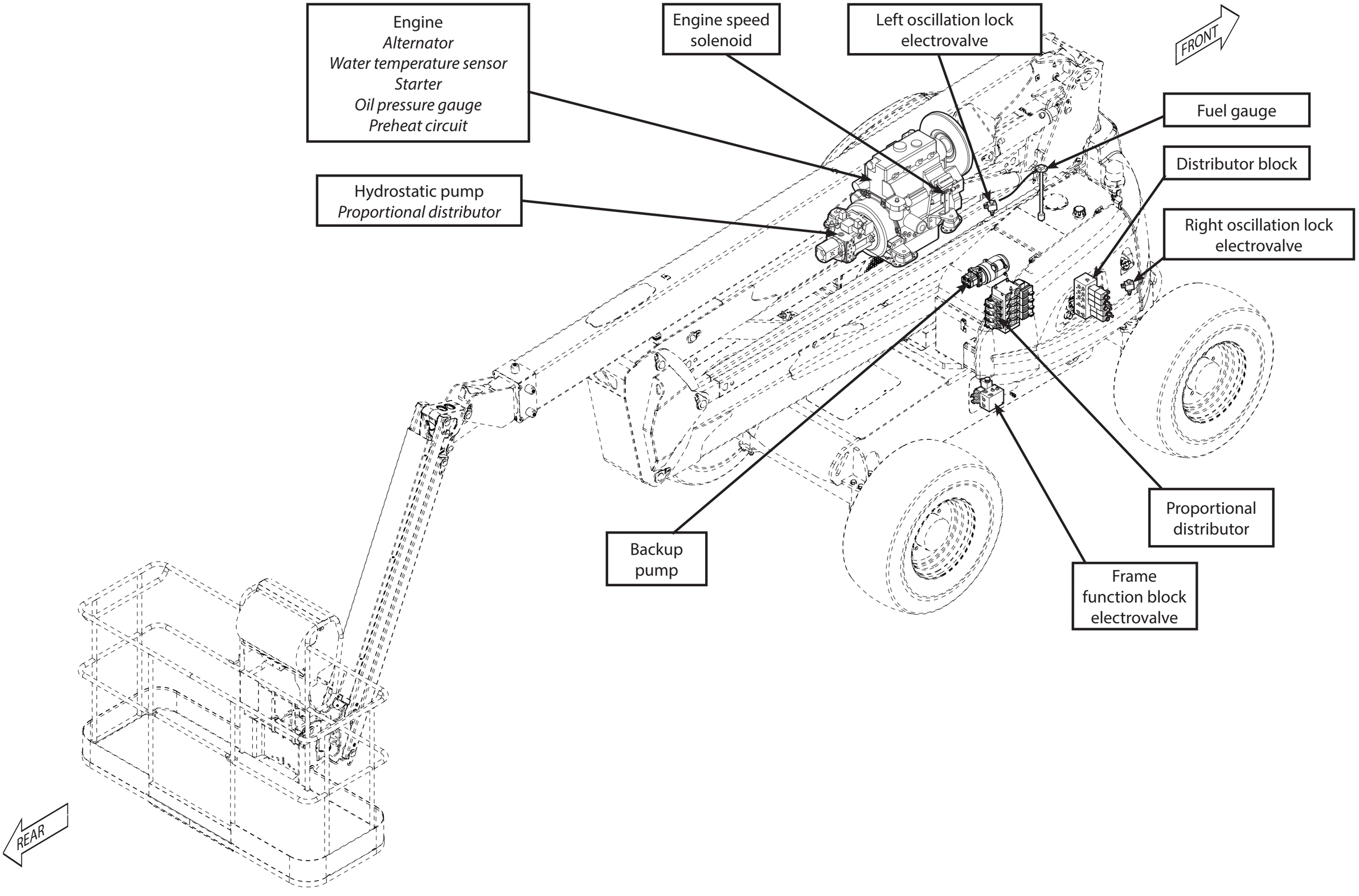
(TRANSMISSION, DIFFERENTIAL LOCK, BRAKING, STEERING CONTROL)

Item	*Designation*	*Position on diagram 3*
-	Base control panel	M4
-	Basket control panel	G35
-	Basket joystick	G32
-	Travel pump	M19
BRC30	BRC30 module	I15
EV100	Brake electrovalve	M8
EV101	Hydraulic safety electrovalve	M7
EV103	Differential lock electrovalve	M10
EV104	Crab electrovalve	M11
EV105	4-Wheel PVG electrovalve	M13
EV106	RH steering PVG electrovalve	M16
EV107	LH steering PVG electrovalve	M14
EW100	Forward travel proportional electrovalve	M17
EW101	Reverse travel proportional electrovalve	M20
EW108	Auxiliary proportional electrovalve	M24
F4	10A fuse (on BRC30)	G5
J300	Basket joystick	E30
K1	Overload safety relay (on BRC30)	G24
K1	Overload safety relay contact (on BRC30)	E10
KA5	Relay contact (on BRC30)	E6
KA6	Relay contact (on BRC30)	E7
OU308	Overload Safety (on UPC102)	K32
OU310	+ basket sensor (on UPC102)	K34
PB305	Basket travel joystick trigger	G34
PB306	Dead man pedal	M28
SW100	Base/basket selector	O5
SW102	Ignition key	O3
SW300	Tortoise travel mode selector	G37
SW301	4-wheel steering mode selector	G40
SW302	RH steering selector on joystick	G36
SW307	LH steering selector on joystick	G35
SW312	Hare travel mode selector	G39
SW313	Crab steering mode selector	G38
UPC102	UPC102 module	I40
UPC30	UPC30 module	C23

DIAGRAM 8 - OVERLOAD

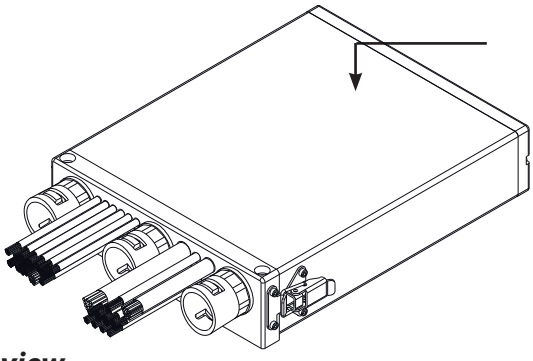
Item	*Designation*	*Position on diagram 8*
-	Basket control panel	E33
BRC30	BRC30 module	G13
DS301	Strain gauge 1 - 240 kg	K38
DS302	Strain gauge 2 - 240 kg	K34
EV101	Hydraulic safety electrovalve	K15
K1	Relay - overload safety (on BRC30)	G19
K1	Relay Contact - Overload safety (on BRC30)	E16
OU308	Overload Safety (on UPC102)	G32
OU310	+ basket sensor (on UPC102)	G29
UPC30	UPC30 module	E21
UPC102	UPC102 module	G32

(from no. 949267)

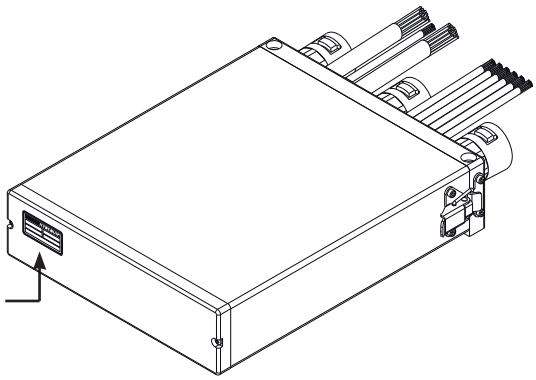


BRC 303 BOX (up to no. 949266)

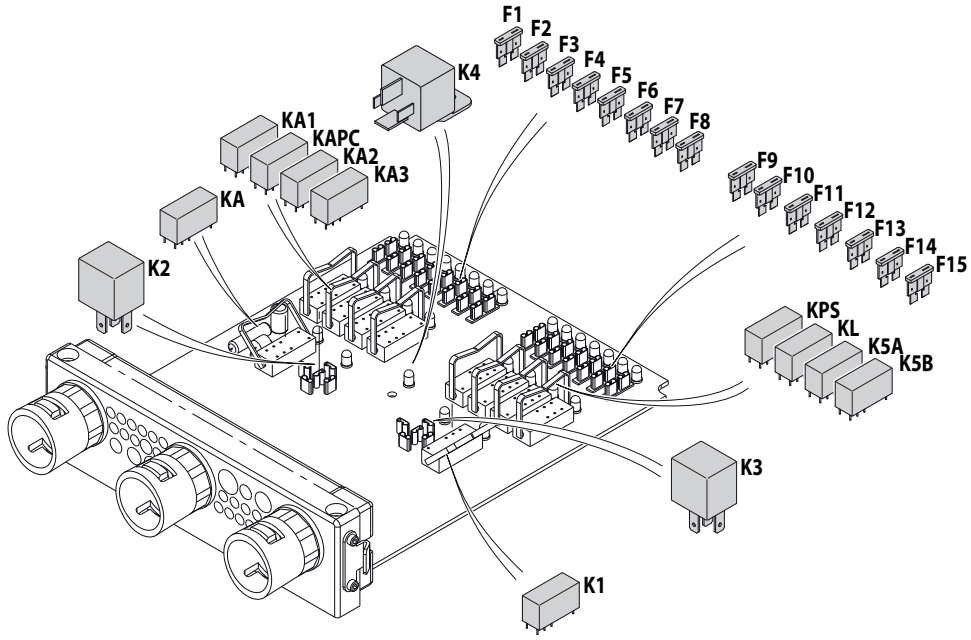
Front view



Rear view



Exploded view

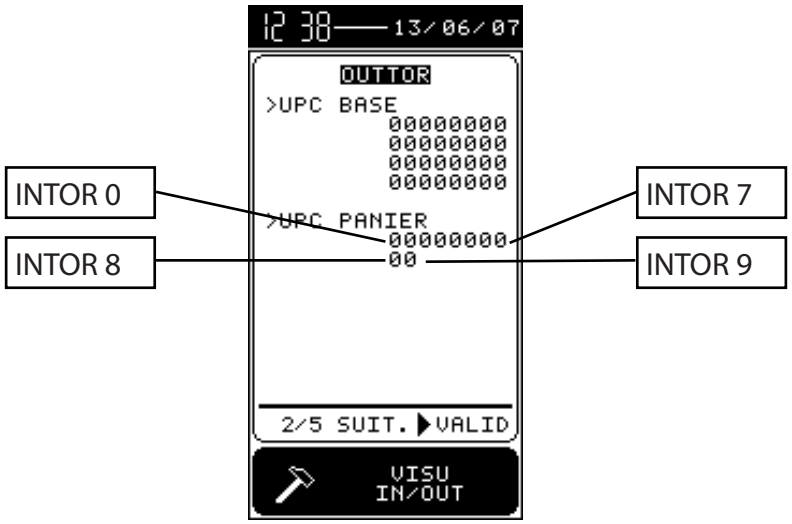


The power must be switched off to the access platform before removing the box in order to avoid destroying the printed circuit board.

APC+ = +12V after contact.
It powers:

- the input sensors (front and rear axle alignment, boom, arm down, overload, tilt).

Calc	Sub-group	Level 1		Level 2		Level 3		Level 4		Level 5		Level 6	
		User		Read only		Dealer		After-Sales service		Manufacture		HYDEQUIP	
		Read	Write	Read	Write	Read	Write	Read	Write	Read	Write	Read	Write
UPC301	STEERING CONTROL			●				●	●	●	●	●	●
	ARMS 1-2 CONTROL			●				●	●	●	●	●	●
	TELESCOPE CONTROL			●				●	●	●	●	●	●
	ARM 3 CONTROL			●				●	●	●	●	●	●
	TILT CONTROL			●				●	●	●	●	●	●
	PENDULAR ARM CONTROL			●				●	●	●	●	●	●
	TURRET ROTATION CONTROL			●				●	●	●	●	●	●
	BASKET ROTATION CONTROL			●				●	●	●	●	●	●
	POCKET LANGUAGE			●				●	●	●	●	●	●
	TIME ADJUSTMENT			●								●	●
	INTERNAL DATA			●								●	●
CEK20	LANGUAGE			●		●	●	●	●	●	●	●	●
	SECRET CODES									●	●	●	●
	PERIODS SERVICES			●		●	●	●	●	●	●	●	●
	SETTINGS SERVICE OPERATIONS			●				●	●	●	●	●	●
	ENGINE HOURS SCREEN			●				●	●			●	●
	SCREEN DATA			●				●	●			●	●

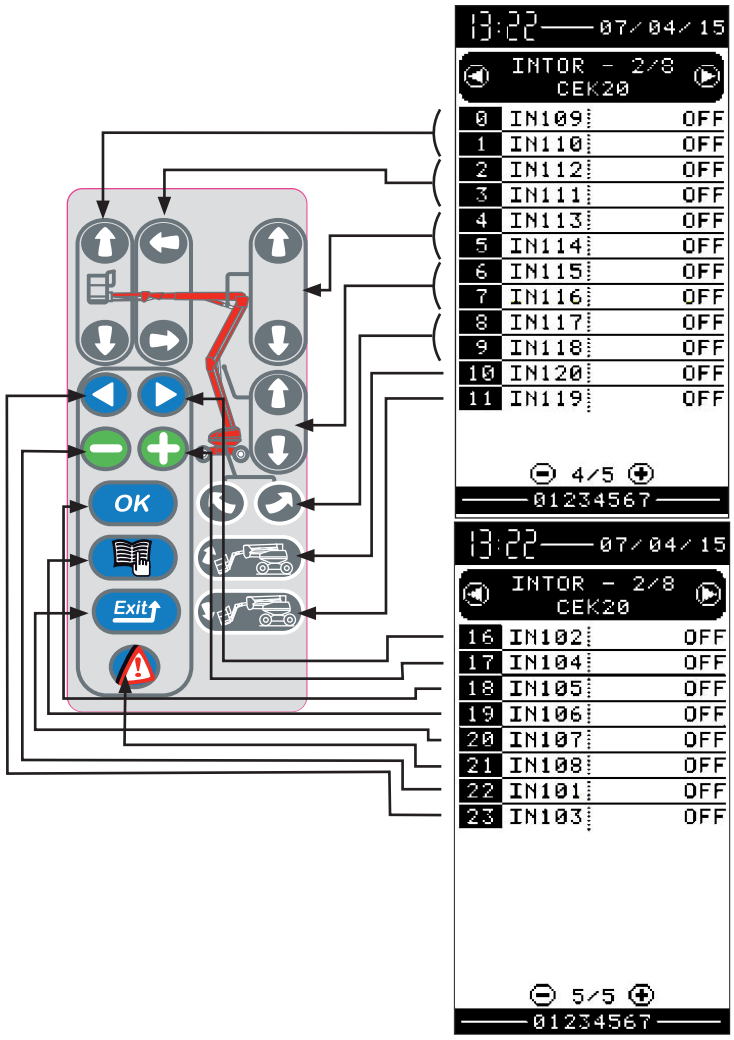


Block	Function	N°	Status 0	Status 1
OUTTOR UPC101	Buzzer	0	Not pressed	Pressed
	Front axle indicator	1	Not pressed	Pressed
	Rear axle indicator	2	Not pressed	Pressed
	Engine fault indicator	3	Not pressed	Pressed
	Tilt fault indicator	4	Not pressed	Pressed
	Overload indicators	5	Not pressed	Pressed
	Pre-heating indicator	6	Not pressed	Pressed
	Diesel fuel level low indicator	7	Not pressed	Pressed
	Supply to KA2 (overload relay)	8	Switched off	Switched on
	Supply to sensors	9	Switched off	Switched on

11. TABLE OF PARAMETERS

Sub-Group	Number	Description	Value	Minim. Value	Maxim. Value	Global Number	Chapter
MAXIMUM SPEED ADJUSTMENT	0	Raising Arms 1-2 Max speed V	72	57	87	153	6,1
	1	Lowering Arms 1-2 Max speed V3	60	45	75	158	6,1
	2	Telescope Extension Max speed V3	74	59	89	164	6,1
	3	Telescope Retraction Max speed V3	58	43	73	169	6,1
	4	Raising Arm 3 Max speed V3	62	47	77	174	6,1
	5	Lowering Arm 3 Max speed V3	45	30	60	179	6,1
	6	Extension tilt Max speed V3	37	22	52	202	6,1
	7	Retraction tilt Max speed V3	18	5	33	207	6,1
	8	Raising pendular arm Max speed V3	58	43	73	212	6,1
	9	Lowering pendular arm Max speed V3	22	7	37	217	6,1
	10	Turret rotation right Max speed V3	36	21	51	222	6,1
	11	Turret rotation left Max speed V3	36	21	51	227	6,1
	12	Basket rotation right Max speed V3	12	5	27	233	6,1
	13	Basket rotation left Max speed V3	12	5	27	238	6,1
OPTIONS	0	Flashing light stoppage time delay	10	1	300	250	7,1
	1	TOR generator activation time delay	40	1	300	251	7,2
	2	Telescope locking	0	0	1	287	7,3
	3	Transport Only tilt	1	0	1	288	7,4
	4	Base horn option number	0	0	2	289	7,5
	5	IForward motion prohibition, Work mode	0	0	1	290	7,6
PARAMETER CONTROL	0	Restore parameters	0	0	1	466	8,1
	1	Save parameters	0	0	1	467	8,2
	2	Restore default parameters	0	0	1	468	8,3
REXTH FORWARD MOTION CONTROL	0	Forw. motion max speed, Work mode	37	5	100	88	9,1
	1	Forw. motion accel ramp, Work mode	35	0	100	89	9,2
	2	Forw. motion decel ramp, Work mode	25	0	100	90	9,3
	3	Rev. motion max speed, Work mode	37	0	100	91	9,1
	4	Rev. motion accel ramp, Work mode	35	0	100	92	9,2
	5	Rev. motion decel ramp, Work mode	25	0	100	93	9,3
	6	Forw. motion max slow speed, Transport mode	100	0	100	94	9,1
	7	Forw. motion accel ramp slow speed, Transp. mode	15	0	100	95	9,2
	8	Forw. motion decel ramp slow speed, Transp.t mode	9	0	100	96	9,3
	9	Rev. motion max slow speed, Transp. mode	100	0	100	97	9,1
	10	Rev. motion accel ramp slow speed, Transp. mode	15	0	100	98	9,2
	11	Rev. motion decel ramp slow speed, Transp. mode	9	0	100	99	9,3
	12	Forw. motion max high speed, Transp. mode	100	0	100	100	9,1
	13	Forw. motion accel ramp high speed, Transp. mode	15	0	100	101	9,2
	14	Forw. motion decel ramp high speed, Transp. mode	10	0	100	102	9,3
	15	Rev. motion max high speed, Transp. mode	100	0	100	103	9,1
	16	Rev. motion accel ramp high speed, Transp. mode	15	0	100	104	9,2
	17	Rev. motion decel ramp high speed, Transp. mode	10	0	100	105	9,3
	18	Forw. motion max ramp speed, Transp. mode	60	0	100	106	9,1
	19	Forw. motion accel ramp ramp speed, Transp. mode	20	0	100	107	9,2

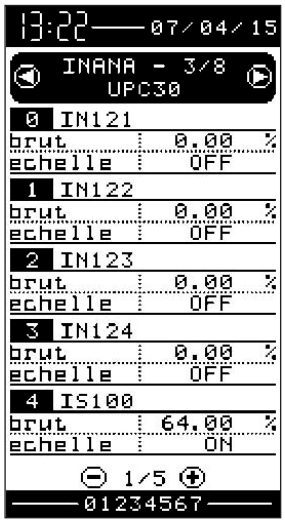
TIME SETTING	7	Oil filter service hour	0	0	10000	311	33,1
	8	Oil filter service sec	0	0	3600	312	33,1
	9	1st oil filter service OK	0	0	1	313	33,1
	10	Air filter service hour	0	0	10000	314	33,1
	11	Air filter service sec	0	0	3600	315	33,1
	12	1st air filter service OK	0	0	1	316	33,1
	13	Diesel filter service hour	0	0	10000	317	33,1
	14	Diesel filter service sec	0	0	3600	318	33,1
	15	1st diesel filter service OK	0	0	1	319	33,1
	16	Hydraulic filter service hour	0	0	10000	320	33,1
	17	Hydraulic filter service sec	0	0	3600	321	33,1
	18	1st hydraulic filter service OK	0	0	1	322	33,1
	19	Hydrostatic filter service hour	0	0	10000	323	33,1
	20	Hydrostatic filter service sec	0	0	3600	324	33,1
	21	1st hydrostatic filter service OK	0	0	1	325	33,1
	22	General lubrication service hour	0	0	10000	326	33,1
	23	General lubrication service sec	0	0	3600	327	33,1
	24	1st general lubrication service OK	0	0	1	328	33,1
	25	Mechanical check service hour	0	0	10000	329	33,1
	26	Mechanical check service sec	0	0	3600	330	33,1
	27	1st mechanical check service OK	0	0	1	331	34,1
INTERNAL DATA	0	750B0320 Jul 01 2008	0	0	0	469	34,2
	1	685406* Jul 01 2008	0	0	0	470	34,3
	2	Process Timer	30	30	50	471	34,4
	3	Total initialisation	0	0	1	472	34,5
	4	PVG prop min recovery	4500	4000	5000	473	34,6
	5	PVG prop max recovery	5500	5000	6000	474	34,13
	6	PVG supply stoppage counter	10	0	500	475	34,7
	7	P gain current loop 0/1	190	10	2000	476	34,8
	8	I gain current loop 0/1	120	10	2000	477	34,7
	9	P gain current loop 2/3	40	10	2000	478	34,8
	10	I gain current loop 2/3	30	10	2000	479	34,9
	11	PWM error threshold	400	10	10000	480	34,10
	12	PWM error cancellation time-out	100	1	300	481	34,11
	13	PWM error detection time-out	20	1	300	482	34,12
	14	PWM frequency 0/1	3	1	15	483	34,12
	15	PWM frequency 2/3	8	1	15	484	34,12



Description	ON	OFF
Jib up	Actuated	Not actuated
Jib lowering	Actuated	Not actuated
Boom - Retracted	Actuated	Not actuated
Boom - Extended	Actuated	Not actuated
Arm 3 - Raised	Actuated	Not actuated
Arm 3 Lowered	Actuated	Not actuated
Arm 1/2 - Raised	Actuated	Not actuated
Arm 1/2 - Lowered	Actuated	Not actuated
Turret rotation - Left	Actuated	Not actuated
Turret rotation - Right-hand	Actuated	Not actuated
Tilting - Discharge	Actuated	Not actuated
Tilting - Excavation	Actuated	Not actuated

Description	ON	OFF
Right	Actuated	Not actuated
PLUS	Actuated	Not actuated
OK	Actuated	Not actuated
Menu	Actuated	Not actuated
Exit	Actuated	Not actuated
Default	Actuated	Not actuated
MINUS	Actuated	Not actuated
Left	Actuated	Not actuated

INANA



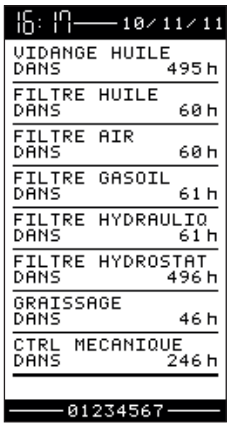
Description		Value	
Arm 1/2 PVG fault	Status	No fault	Default
	Gross	2,20%	64%
	Scale	OFF	ON
Boom PVG fault	Status	No fault	Default
	Gross	2,20%	64%
	Scale	OFF	ON
Arm 3 PVG fault	Status	No fault	Default
	Gross	2,20%	64%
	Scale	OFF	ON
Auxiliary PVG fault	Status	No fault	Default
	Gross	2,20%	64%
	Scale	OFF	ON
Front axle aligned	Status	Not aligned	Aligned
	Gross	2,20%	64%
	Scale	OFF	ON

Maintenance Menu

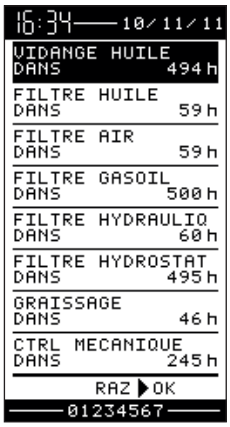
Maintenance sub-menu

This sub-menu can be used to view the time remaining before each system maintenance operation is to be performed.

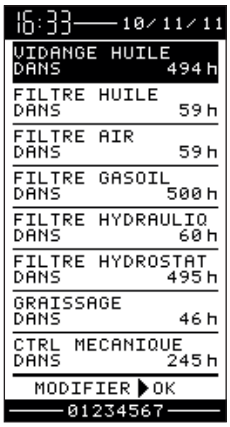
A maintenance operation that is indicated as "To be done" or "Urgent" must be performed and validated buy the dealer (maintenance hours reset).



User level



Dealer level



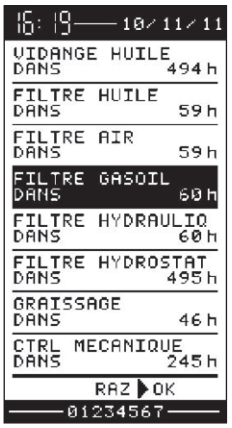
Manufacturer level

User level: All maintenance operations can be viewed (reset not possible).

Dealer level: All maintenance operations can be viewed and can be reset.

Manufacturer level: All maintenance operations can be viewed and can be modified (forcing of engine hours).

Reinitialise maintenance

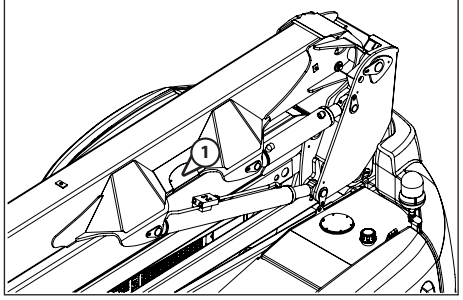


OK key: access parameters

Confirm with and

SCREEN GROUP			
Sub-group	**Number**	**Description**	**Value (Min/Max)**
TRAVEL ADJUSTMENTS	17	Work Maximum reverse speed 200 (%)	32 (17/47)
	18	Work reverse acceleration range 200 (%)	35 (0/100)
	19	Work reverse deceleration range 200 (%)	25 (0/100)
	20	Tortoise Maximum forward speed 160 (%)	63 (48/78)
	21	Tortoise Maximum forward speed 180 (%)	55 (40/70)
	22	Tortoise forward acceleration range 160/180 (%)	15 (0/100)
	23	Tortoise forward deceleration range 160/180 (%)	10 (0/100)
	24	Tortoise Maximum reverse speed 160 (%)	63 (48/78)
	25	Tortoise Maximum reverse speed 180 (%)	55 (40/70)
	26	Tortoise reverse acceleration range 160/180 (%)	15 (0/100)
	27	Tortoise reverse deceleration range 160/180 (%)	10 (0/100)
	28	Tortoise ATJ + Maximum forward speed (%)	65 (50/80)
	29	Tortoise ATJ + forward acceleration range (%)	25 (0/100)
	30	Tortoise ATJ + forward deceleration range (%)	12 (0/100)
	31	Tortoise ATJ + Maximum reverse speed (%)	65 (50/80)
	32	Tortoise ATJ + reverse acceleration range (%)	25 (0/100)
	33	Tortoise ATJ + reverse deceleration range (%)	12 (0/100)
	34	Tortoise Maximum forward speed 200 (%)	72 (57/87)
	35	Tortoise forward acceleration range 200 (%)	20 (0/100)
	36	Tortoise forward deceleration range 200 (%)	10 (0/100)
	37	Tortoise Maximum reverse speed 200 (%)	72 (57/87)
	38	Tortoise reverse acceleration range 200 (%)	20 (0/100)
	39	Tortoise reverse deceleration range 200 (%)	10 (0/100)
	40	Maximum forward speed range 160 (%)	50 (35/65)
	41	Maximum forward speed range 180 (%)	43 (28/58)
	42	Forward acceleration range 160/180 ramp (%)	15 (0/100)
	43	Forward deceleration range 160/180 ramp (%)	10 (0/100)
	44	Maximum reverse speed range 160 (%)	50 (35/65)
	45	Maximum reverse speed range 180 (%)	43 (28/58)
	46	Reverse acceleration range 160/180 ramp (%)	15 (0/100)
	47	Reverse deceleration range 160/180 ramp (%)	10 (0/100)
	48	Range ATJ + Maximum forward speed (%)	56 (41/71)
	49	Range ATJ + forward acceleration range (%)	25 (0/100)
	50	Range ATJ + forward deceleration range (%)	13 (0/100)
	51	Range ATJ + Maximum reverse speed (%)	56 (41/71)
	52	Range ATJ + reverse acceleration range (%)	25 (0/100)
	53	Range ATJ + reverse deceleration range (%)	13 (0/100)
	54	Maximum forward speed range 200 (%)	63 (48/78)
	55	Forward acceleration range 200 ramp (%)	25 (0/100)
	56	Forward deceleration range 200 ramp (%)	10 (0/100)
	57	Maximum reverse speed range 200 (%)	63 (48/78)
	58	Forward acceleration range 200 ramp (%)	25 (0/100)
	59	Forward deceleration range 200 ramp (%)	10 (0/100)
	60	Hare Maximum forward speed 160/180 (%)	100 (85/100)
	61	Hare Forward acceleration range 160/180 (%)	20 (0/100)
	62	Hare Forward deceleration range 160/180 (%)	8 (0/100)
	63	Hare Maximum reverse speed 160/180 (%)	100 (85/100)
	64	Hare Reverse acceleration range 160/180 (%)	20 (0/100)
	65	Hare Reverse deceleration range 160/180 (%)	8 (0/100)
	66	Hare ATJ + Maximum forward speed (%)	100 (85/100)
	67	Hare ATJ + forward acceleration range (%)	33 (0/100)
	68	Hare ATJ + forward deceleration range (%)	8 (0/100)
	69	Hare ATJ + Maximum reverse speed (%)	100 (85/100)
	70	Hare ATJ + reverse acceleration range (%)	33 (0/100)
	71	Hare ATJ + reverse deceleration range (%)	8 (0/100)
	72	Hare Maximum forward speed 200 (%)	100 (85/100)
	73	Hare Forward acceleration range 200 (%)	25 (0/100)
	74	Hare Forward deceleration range 200 (%)	8 (0/100)
	75	Hare Maximum reverse speed 200 (%)	100 (85/100)
	76	Hare Reverse acceleration range 200 (%)	25 (0/100)

H



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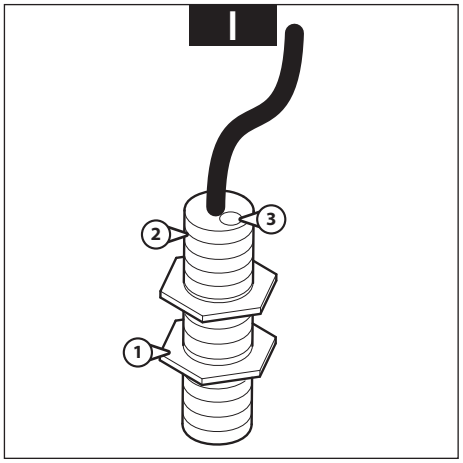


ARM DOWN SENSOR(S) ADJUSTMENT

Raise the arm a few centimetres to facilitate access to the sensor.

Switch off the engine and switch on the power to, the platform.

Locate the arm down sensor housing ◅ 80 - ELECTRICAL COMPONENT LOCATION.

Remove the protective casing from the sensor(s) (H-1) and retrieve the rubber strip.

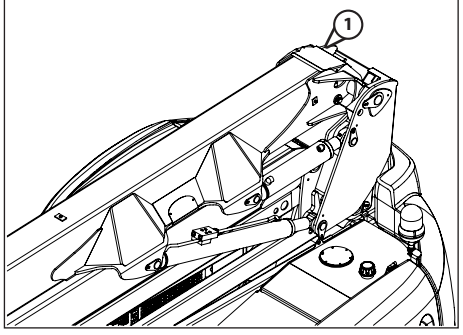
Unscrew the lock nuts (I-1).

Screw or unscrew the sensor(s) (I-2) until the LED (I-3), located next to the power supply wire, switches from red to green (the clearance remaining between the support and the sensor is approximately 3 mm).

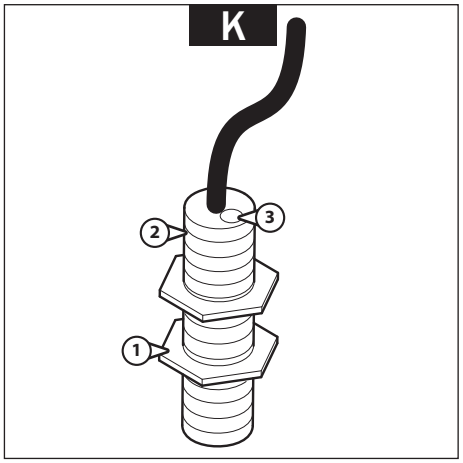
Re-tighten the lock nuts.

Refit the rubber skirt and the casing.

J



K



ADJUSTMENT OF THE BOOM RETRACTED SENSOR(S)

Place the arms in the down position, retract the boom and operate the control.

Switch off the engine but leave the power to the platform switched on.

Locate the boom retracted sensor(s) housing at the base of arm 3 (J-1) ◅ 80 - ELECTRICAL COMPONENTS LOCATION

Remove the protective casing from the sensor(s).

Unscrew the lock nuts (J-1).

Screw or unscrew the sensors (K-2) until the LED (K-3), located next to the power supply wire, switches from red to green (the clearance remaining between the support and the sensor is approximately 3 mm).

Re-tighten the lock nuts.

Refit the cap.

5 – SYSTEM FAULTS

System faults will be identified by the code "**UC**", e.g.:

"UC012S"

UC => control unit
012 => fault number
S => fault type

System fault types:

"**S**" => communication
"**T**" => memory
"**U**" => functional warning
"**V**" => closed-loop control

6 – MAINTENANCE INFORMATION

Maintenance information will be codified as follows:

"MA035L"

MA => maintenance
035 => code e.g.: engine oil filter
L => fault type

Maintenance fault types:
"**L**" => late
"**N**" => to be carried out soon

7 – INPUT/OUTPUT CONTROL DISPLAY CODIFICATION

The different component codes will also be used to designate them in the Input/Output control display.

Inputs and outputs that are not codified in this way will have their code defined as follows:
- INTOR inputs => "**IN**"
- OUTTOR outputs => "**OU**"
- INANA inputs => "**AN**"

Together with a numerical code specifying its location on the machine:
1.. => base
2.. => structure
3.. => basket

And a number specific to each component.