



Technical documentation for crane steering



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WARNING

The pressure in the return hose from the PVG valve must not exceed 20 bar.

A direct return connection must therefore **ALWAYS** be fitted to the tank on the tractor.

Always fit the return hose first, before fitting the pressure hose.

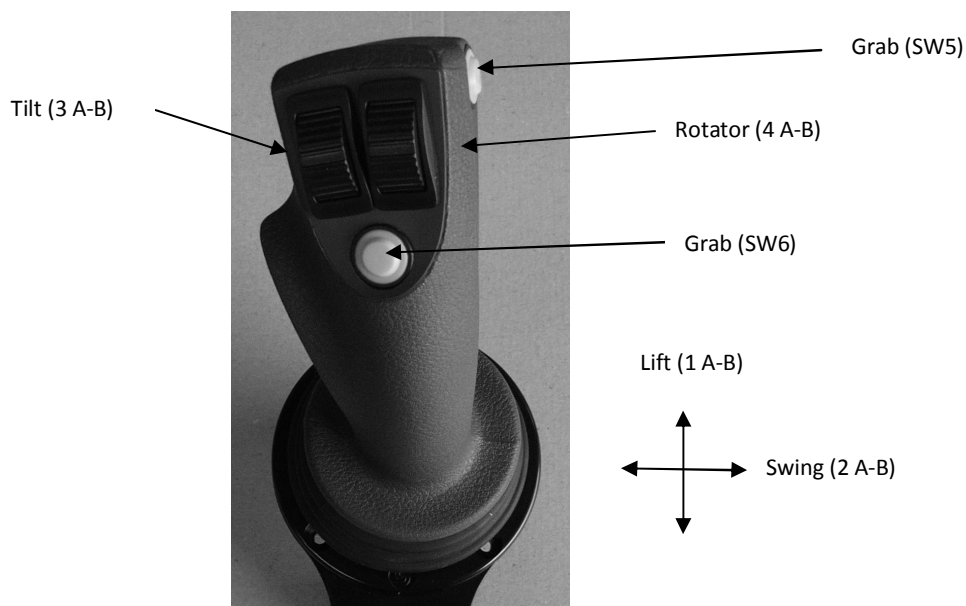
Also ensure that the crane is completely relieved of pressure before the pressure hose and return hose are removed from the tractor. Remove the pressure hose first, and then remove the return hose.

A nonreturn valve is fitted on the return hose and this ensures the PVG valve against wrong flow direction.

1. Use

The crane steering is supplied in 1 hand operated and 2 hands operated versions and are meant for mounting on TP 250 K, TP 270 K, TP 280 K, TP 310, TP 320 and TP 400 wood chipper. The crane steering is used for controlling the PVG valve on the crane. Furthermore the 2 hands operated crane steering can be delivered with functions for activation of: forced reverse, opening of swing roll, boost and activation of actuator at the tipping nozzle on the wood chipper's ejector tube.

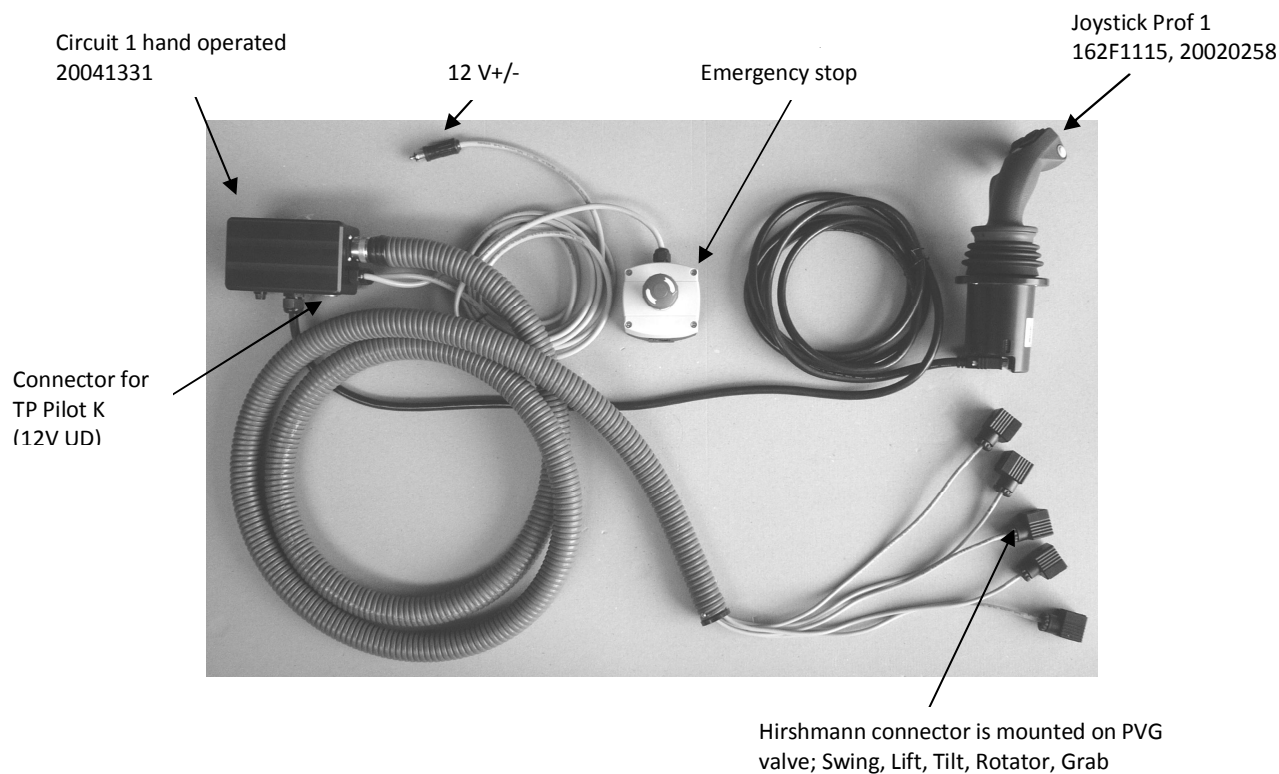
2. Operation of the crane, 1 hand operated circuit



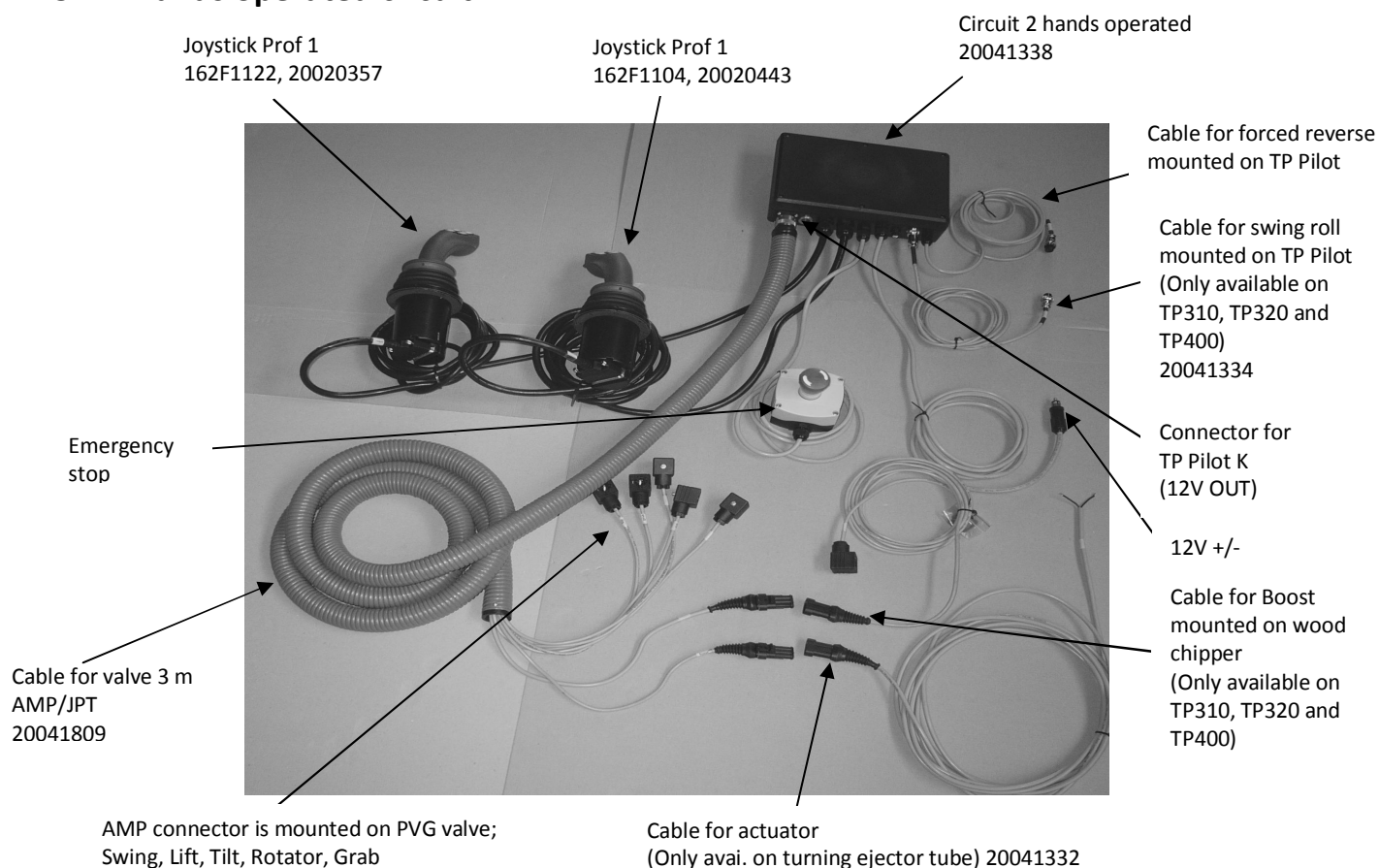
3. Operation of the crane, 2 hands operated circuit



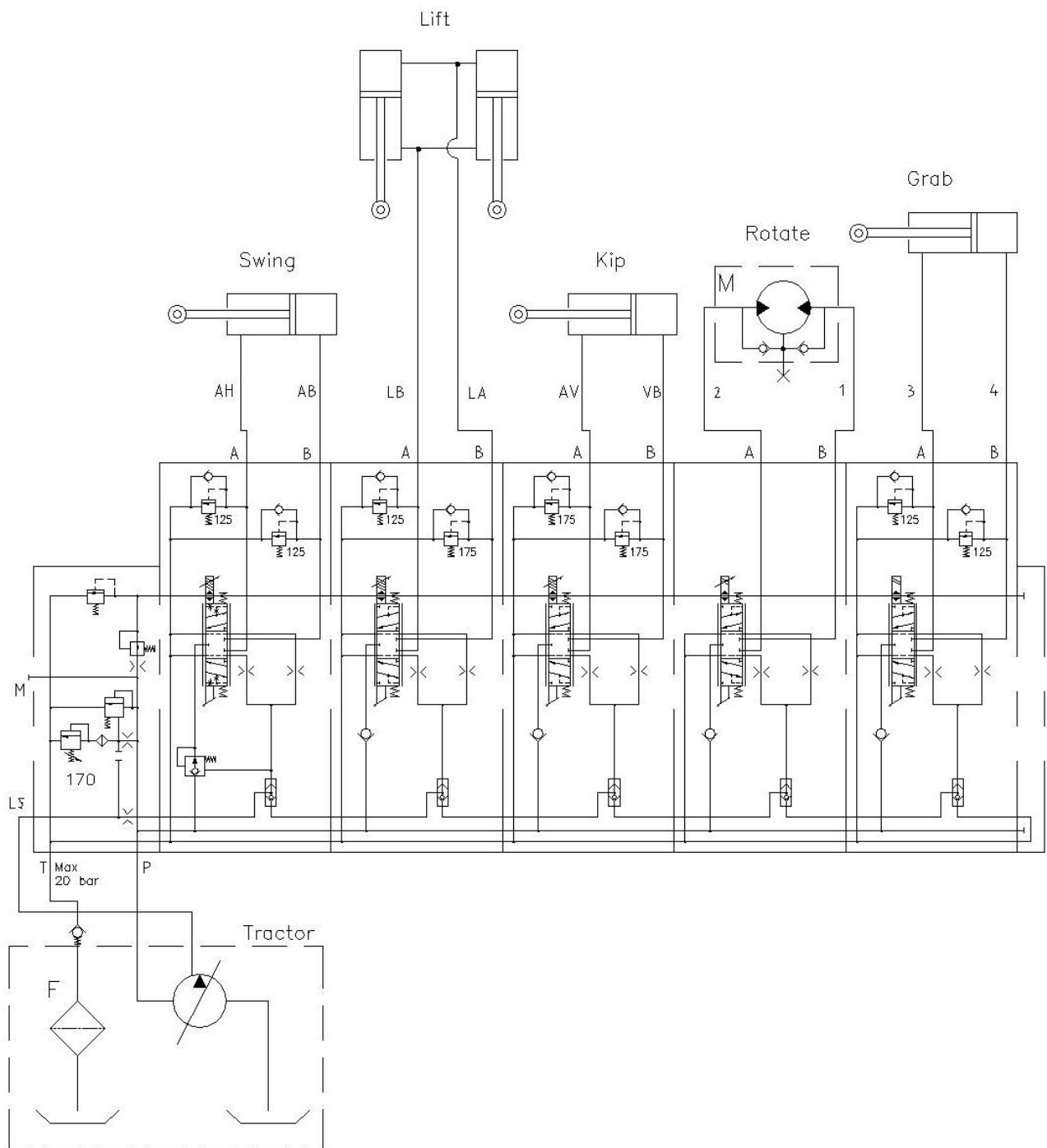
4. 1 hand operated circuit



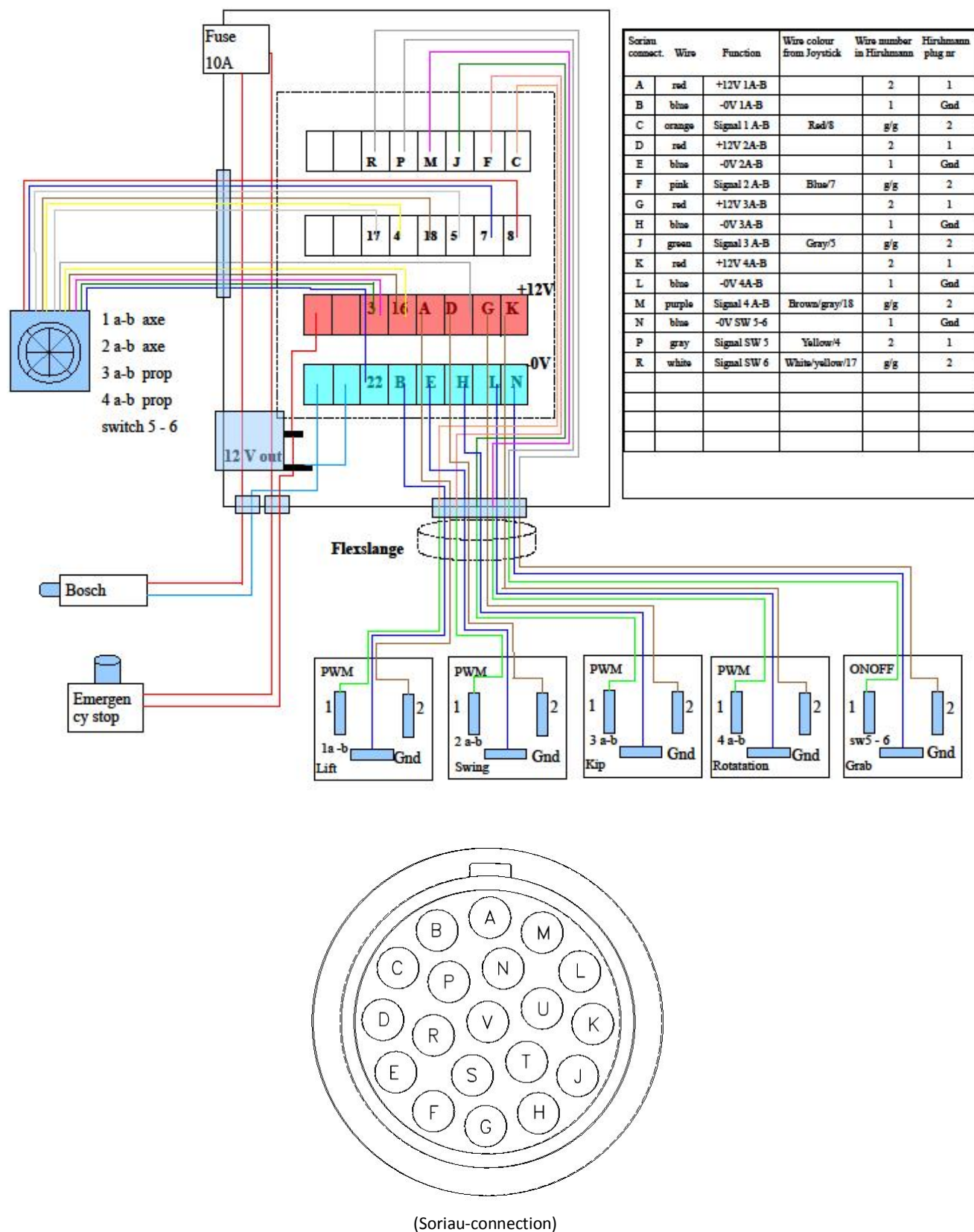
5. 2 hands operated circuit



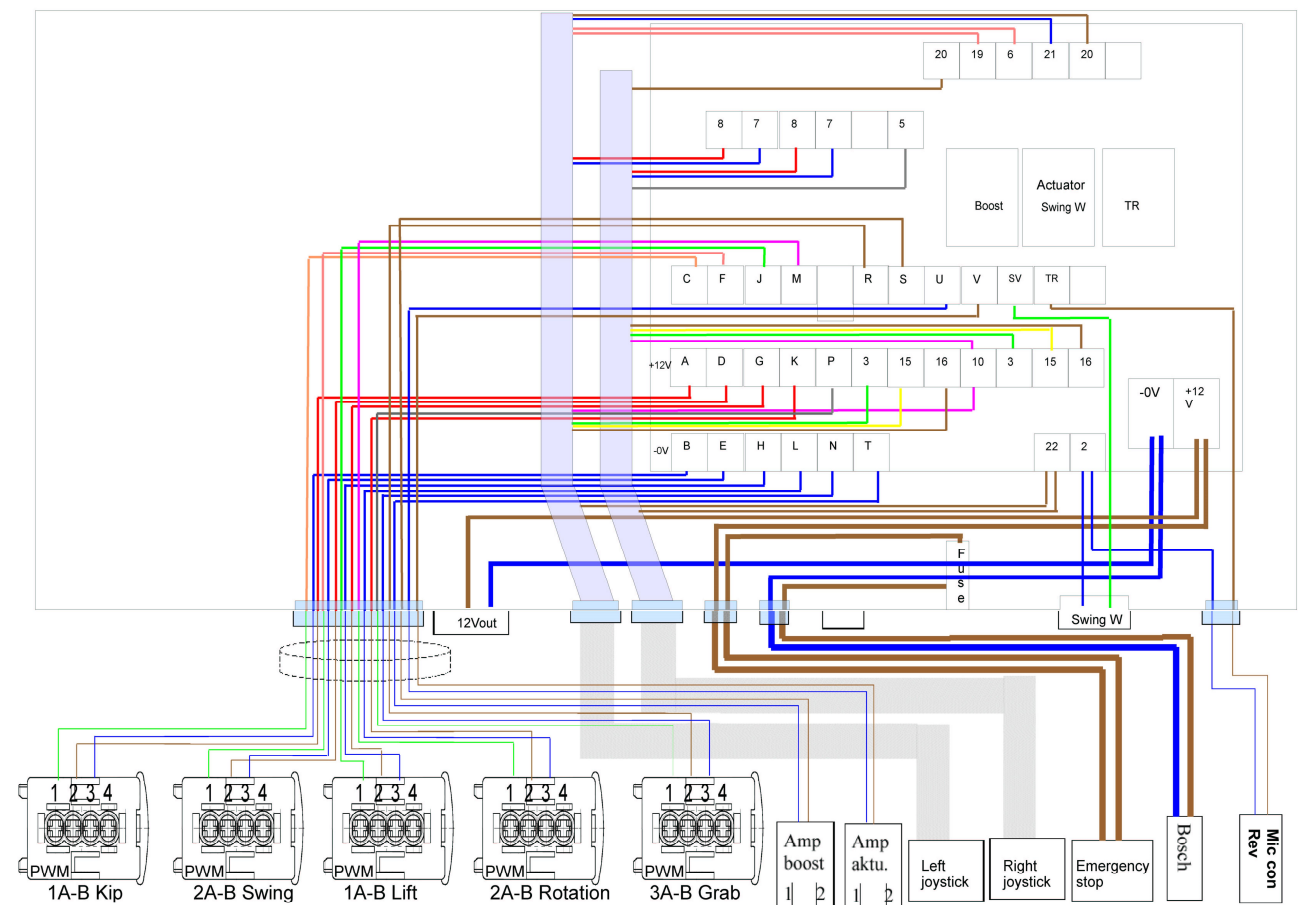
6. Hydraulics diagram for PVG 32/5 valve on crane



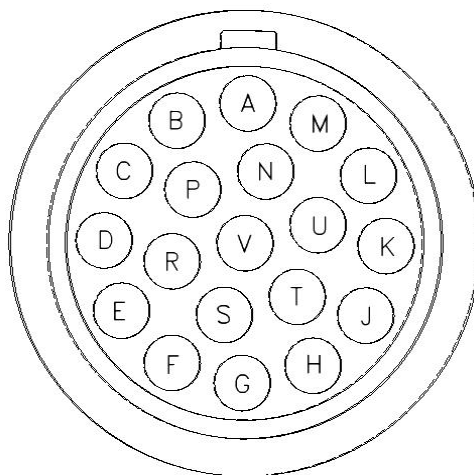
7. Electric diagram for 1 hand operated circuit



8. Electric diagram for 2 hands operated circuit

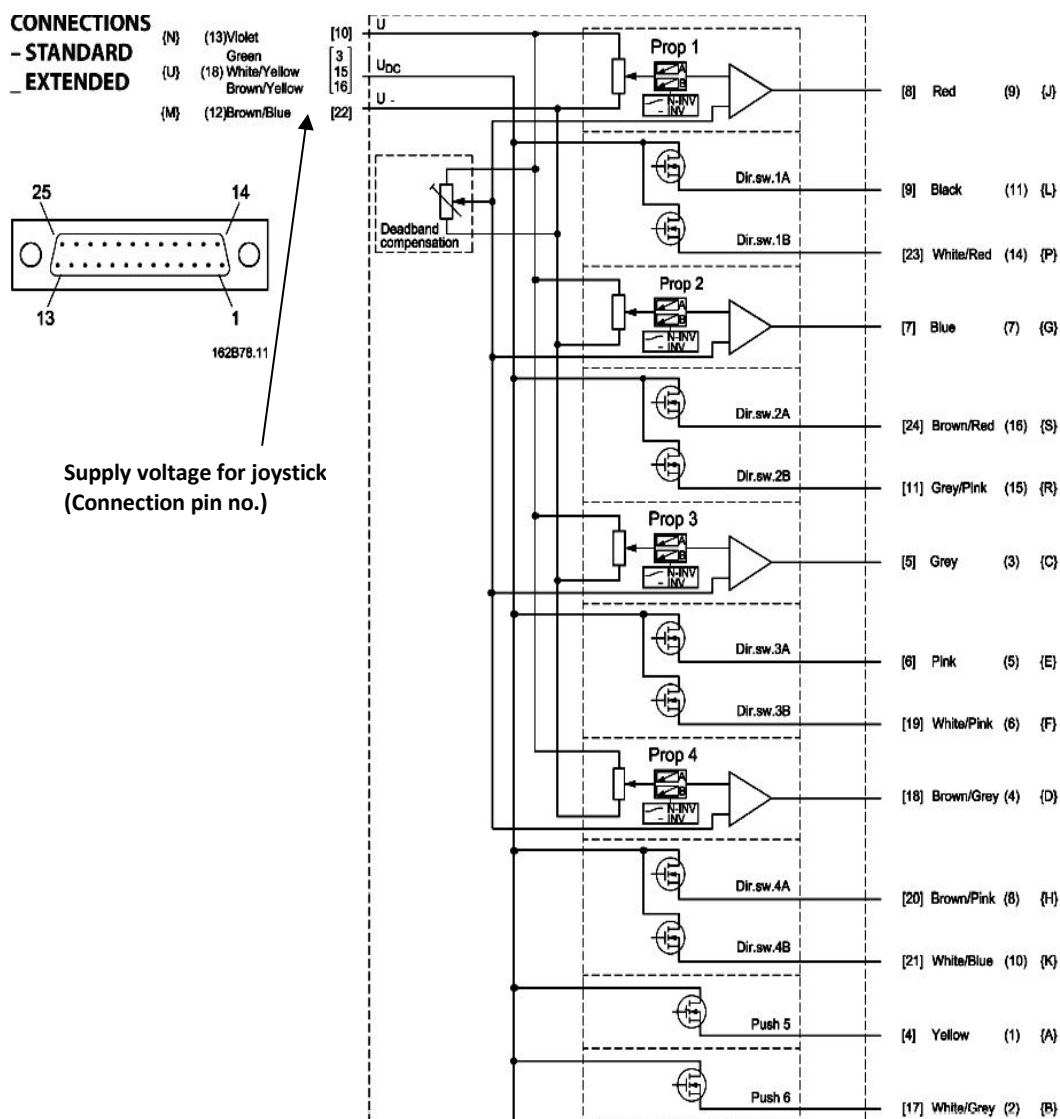


Souriau-connections	wire-colour	Function	Wire colour from Left joystick	Wire colour from Right joystick	Wire number in Hirshmann plug	AMP/MIK plug nr.
A	red	+12V 1A-B KIP			2	2
B	blue	-0V 1A-B KIP			1	3
C	orange	Signal 1A-B KIP	Red / 8		g/g	1
D	red	+12V 2A-B SWING			2	2
E	blue	-0V 2A-B SWING			1	3
F	pink	Signal 2A-B SWING	Blue / 7		g/g	1
G	red	+12V 1A-B LIFT			2	2
H	blue	-0V 1A-B LIFT			1	3
J	green	SIGNAL 1A-B LIFT		Red / 8	g/g	1
K	red	+12V 2A-B ROTATION			2	2
L	blue	-0V 2A-B ROTATION			1	3
M	violet	SIGNAL 2A-B ROTATION		Blue / 7	g/g	1
N	blue	-0V 3A-B GRAB			1	3
P	gray	+12V 3A-B GRAB			2	2
R	white	SIGNAL 3A-B GRAB		Gray / 5	g/g	1
S	brown	SIGNAL SW-4A BOOST		Brown/pink / 20	2	2
T	blue	-0V SW-4A BOOST			1	1
U	black	SIGNAL SW-3B ACTUATOR	White/pink / 19		2	2
V	white	SIGNAL SW-3A ACTUATOR	Pink / 6		1	1
		SIGNAL SW-4B option not used		White/blue / 21	Not mounted	
		Signal SW4A T Reverse (TR)	Brown/pink / 20			2
		Signal SW4B Swing V (SV)	White/blue / 21			2



(Soriau-connection)

9. Pin numbers for Prof 1 joystick



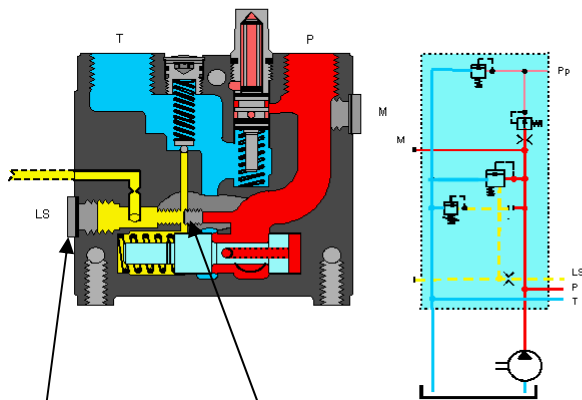
10. Reconstruction from LS to open centre

In the standard delivery the valve block is supplied with a Load Sensing (LS) hose connection to the tractor.

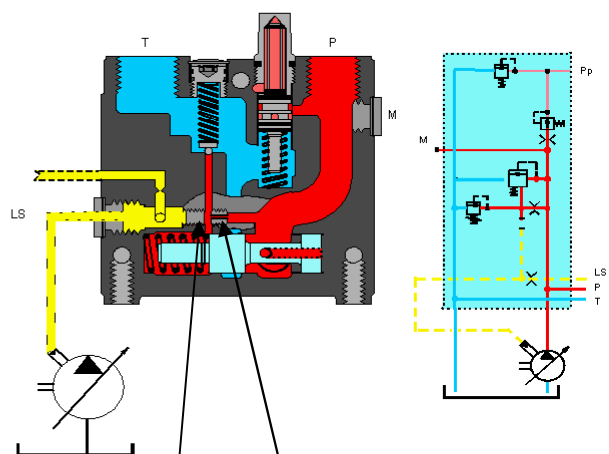
If this is not in use, remove the LS hose and fitting in the LS port. Remove the hexagon socket head and nozzle (tailstock screw with hole) and insert the open centre screw in the LS port. Insert the external 1/4" plug.

Open Center vs. Closed Center Inlet

PVP Open Center (Gear pumps)



PVP Closed Center (LS or Pressure Comp)



Feb. 2007
Jan Pedersen



Insert the open
centre screw.



Insert the external
1/4" plug.

Remove the hexagon socket head
and nozzle (tailstock screw with hole).