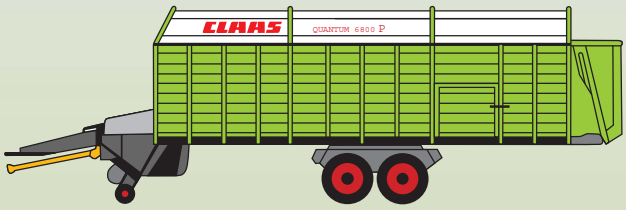
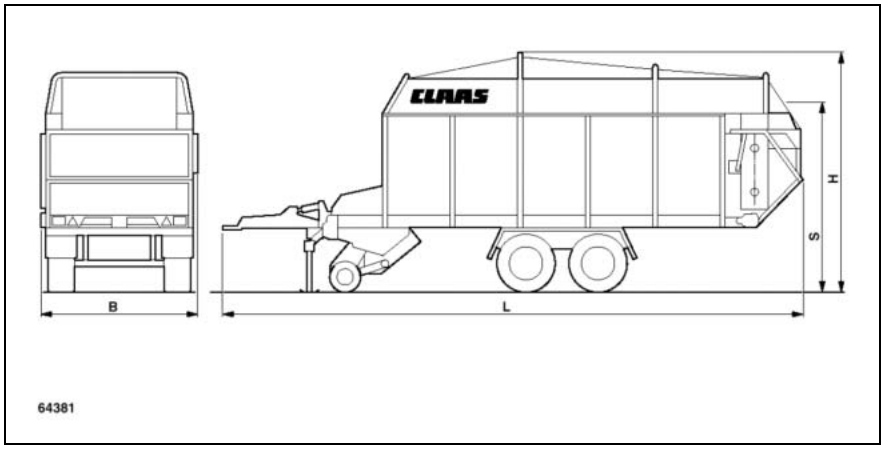
CLAAS



QUANTUM 3500 - 6800

Technical Systems

SERVICE & PARTS

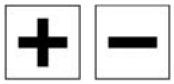


		QUANTUM 5500 S	QUANTUM 4500 S
Length (L)	mm	9,250	8,160
Width (B)	mm	2,550	2,550
Height (H) – dry forage assembly folded up – dry forage assembly folded down	 mm mm	 3,840 3,040	 3,840 3,040
Track width	mm	1,850	1,850
Pick-up width	mm	1,800	1,800
Platform height	mm	1,240	1,240
Platform area	mm	2,160 x 5,700	2,160 x 4,700
Loading capacity (acc. to DIN 11741)	m^3	31	26,3
Kerb weight	kg	6,920	6,500
Permissible total weight		13,000	11,000
Number of cutting knives		33	33
Shortest theoretical length of cut	mm	45	45
Number of pick-up tines per tine bar		26	26
Tine spacing	mm	61	61
PTO speed	min^{-1}	1,000	1,000
Tyres - up to 40 km/h without AGS - up to 60 km/h without AGS - up to 80 km/h with AGS - up to 60 km/h air suspension - Pick-up wheels		555/45-17 146F 555/45-17 146F 555/45-17 146F 555/45-17 146F 16x6.5-8 4PR	500/50-17 10PR 555/45-17 146F 555/45-17 146F - 16x6.5-8 4PR
Tyre pressure - with tyres 500/50-17 555/45-17 500/55-20 16x6.5-8	bar bar bar	- 3.0 - 2.5	3.5 3.0 - 2.5
Tightening torque of wheel nuts – wagon wheels	Nm	300	300
Sound pressure level	dB(A)	70	70

Unloading by means of cross conveyor belt

Pull out the cross conveyor belt before unloading and lock it to the lower back cover. Connect the hydraulic hoses to the hydraulic motor.

Switch on the pto for unloading with the cross conveyor belt and press this key. The shredder drums start running and the floor conveyor is switched on after a short delay.
To stop the unloading process, press this button again.
Any blockage of the shredder drums (the cut-out clutch of the universal drive shaft is activated) by the material requires reversing the floor conveyor.



Press these buttons simultaneously to reversing the floor conveyor.

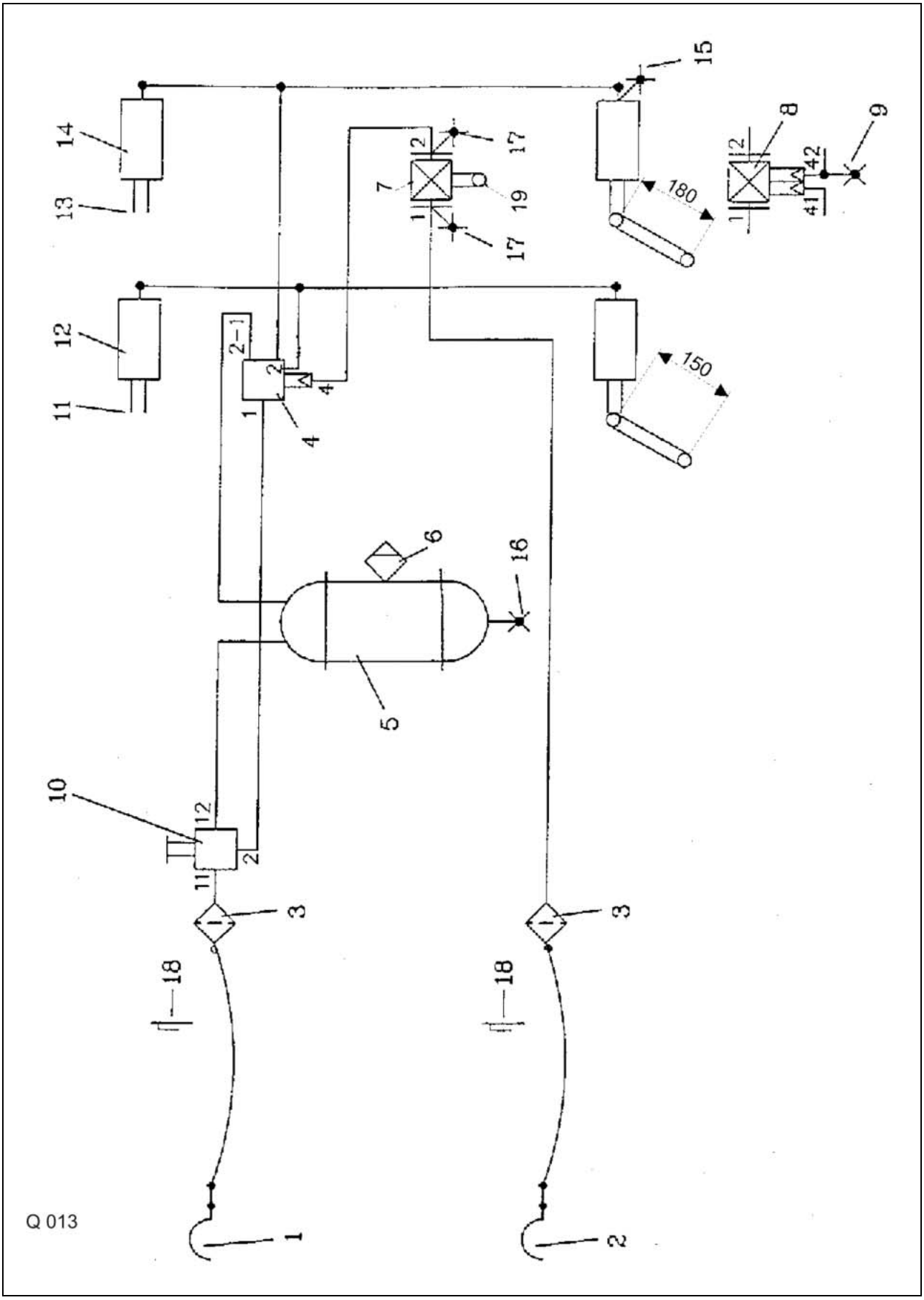
Pressing this button increases the floor conveyor speed.

Pressing this button decreases the floor conveyor speed.

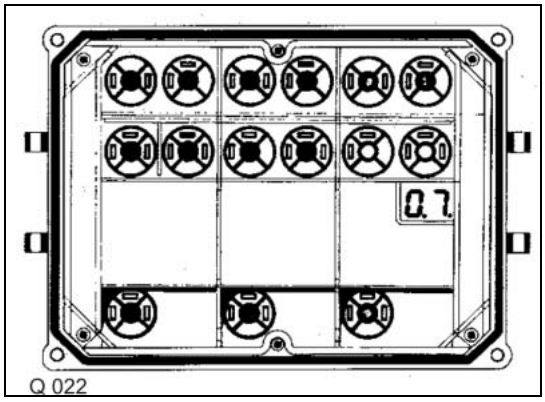
When pressing this key during the whole unloading process, the adjusted floor conveyor speed is saved for further unloading processes.

This key enables changing the direction of rotation of the cross conveyor belt.
From serial no.: …. with solenoid valve 62, the trailing axle can be blocked with this key.

5500P/S-16 40 km/h, 16 to, (Steering axle)



- Fault indication via an integrated LED display in the control device. If an error LED lights up, contact the service dept. of HALDEX in Denkendorf.

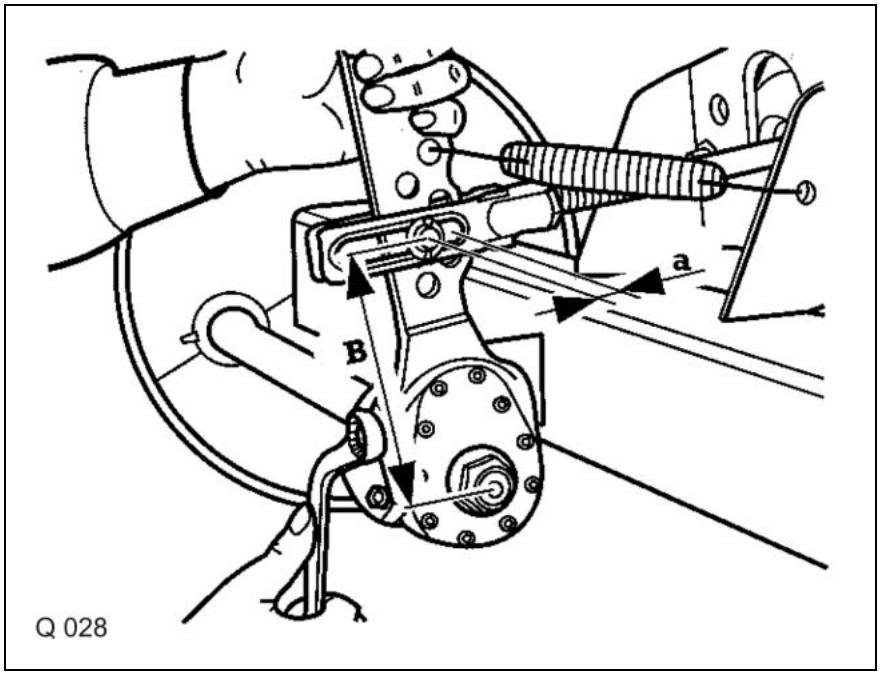


2.2 Adjusting the rod adjuster

2.2.1 Standard rod adjuster

Every 1000 operating hours

Checking and adjusting the operating clearance of the wheel brakes



- continuous checks needed
- every 1 to 3 weeks, depending on operating hours

Operate the rod adjuster by hand in direction of pressure. If the free play of the diaphragm cylinder pressure rod is 35 mm max., the wheel brake needs to be re-adjusted.
The adjustment is made on the re-adjusting hexagon of the rod adjuster. Set the free play “a” to 10 ... 12% of the connected brake lever length „B“.
Example: Lever length B = 150 mm corresponds to a free play of 15 ... 18 mm.

With automatic rod adjusters, the re-adjustment of the wheel brake is made automatically when the brake cams have twisted by approx. 15%.

As the motor is shut down, there is no pressure in the hydraulic system.

The compression spring (21) has pushed the volume flow controller (8) to the end stop on the right. Due to this position, the upper side of the control ram (14) is connected with the tank via the volume flow controller (8).

The control spring (15) has moved the swash plate (17) to its maximum position.

The pressure in the tractor's hydraulic system is limited e.g. to 200 bar in order to prevent component damage. This function is ensured by pressure controller (9).

During normal operation (working pressure < max. pressure), the pressure controller (9) is pushed to the right up to the stop by compression spring (24).

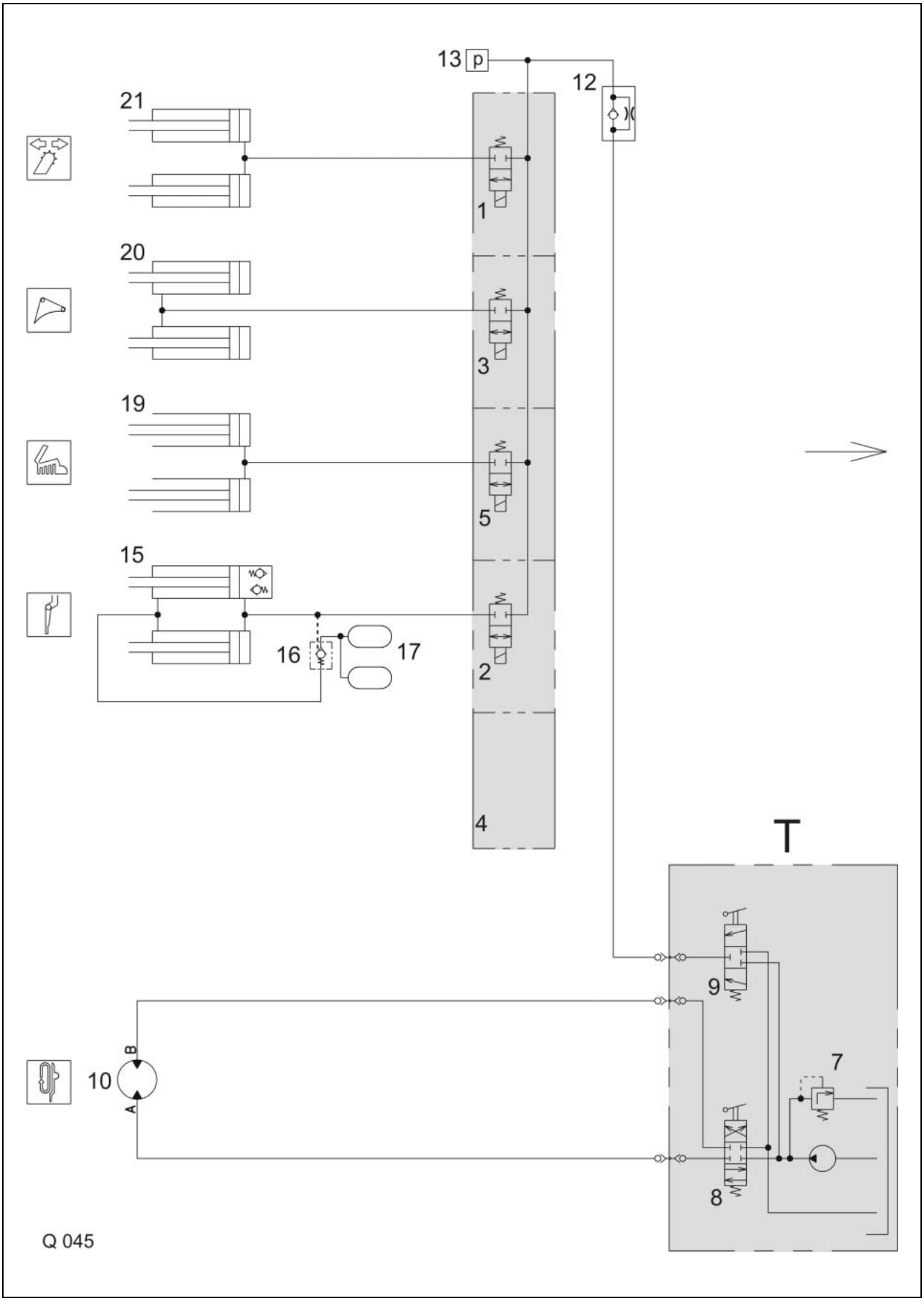
When e.g. a control unit is actuated and the cylinder reaches its limit position, the load pressure at input (7) rises until it is equal to the pressure at the pump output (20).

Under such pressure conditions:

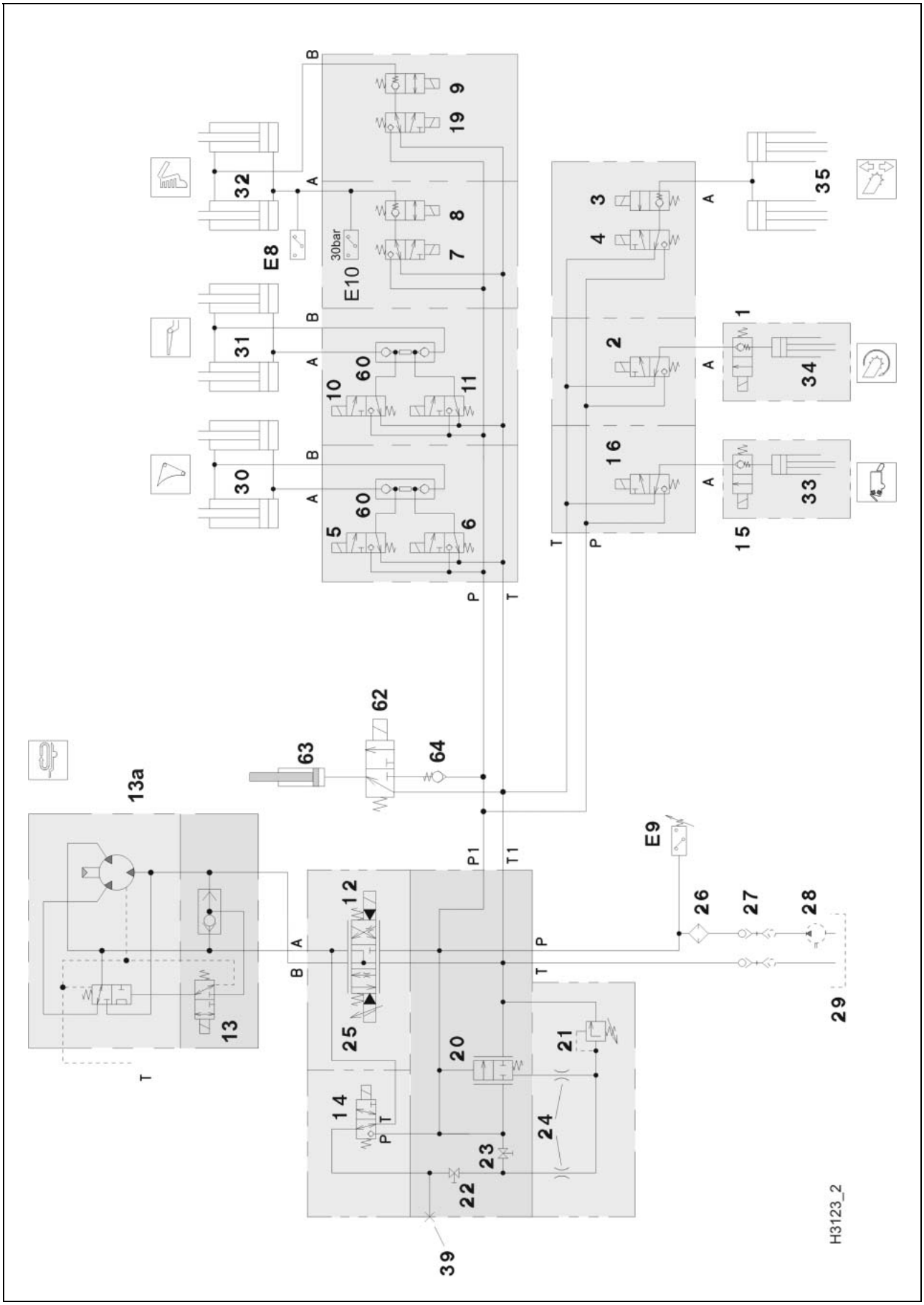
- the volume flow controller (8) is pushed to the right up to the stop by compression spring (21).
- the pressure controller (9) is pushed to the left up to the stop against compression spring (24).
  This movement occurs at a pressure of e.g. 200 bar. The control edge (26) is now opened, enabling the pump pressure to act upon the top face of the control ram (14). The swash plate (17) is now actuated against the control spring (15) to its end position "Min. delivery".

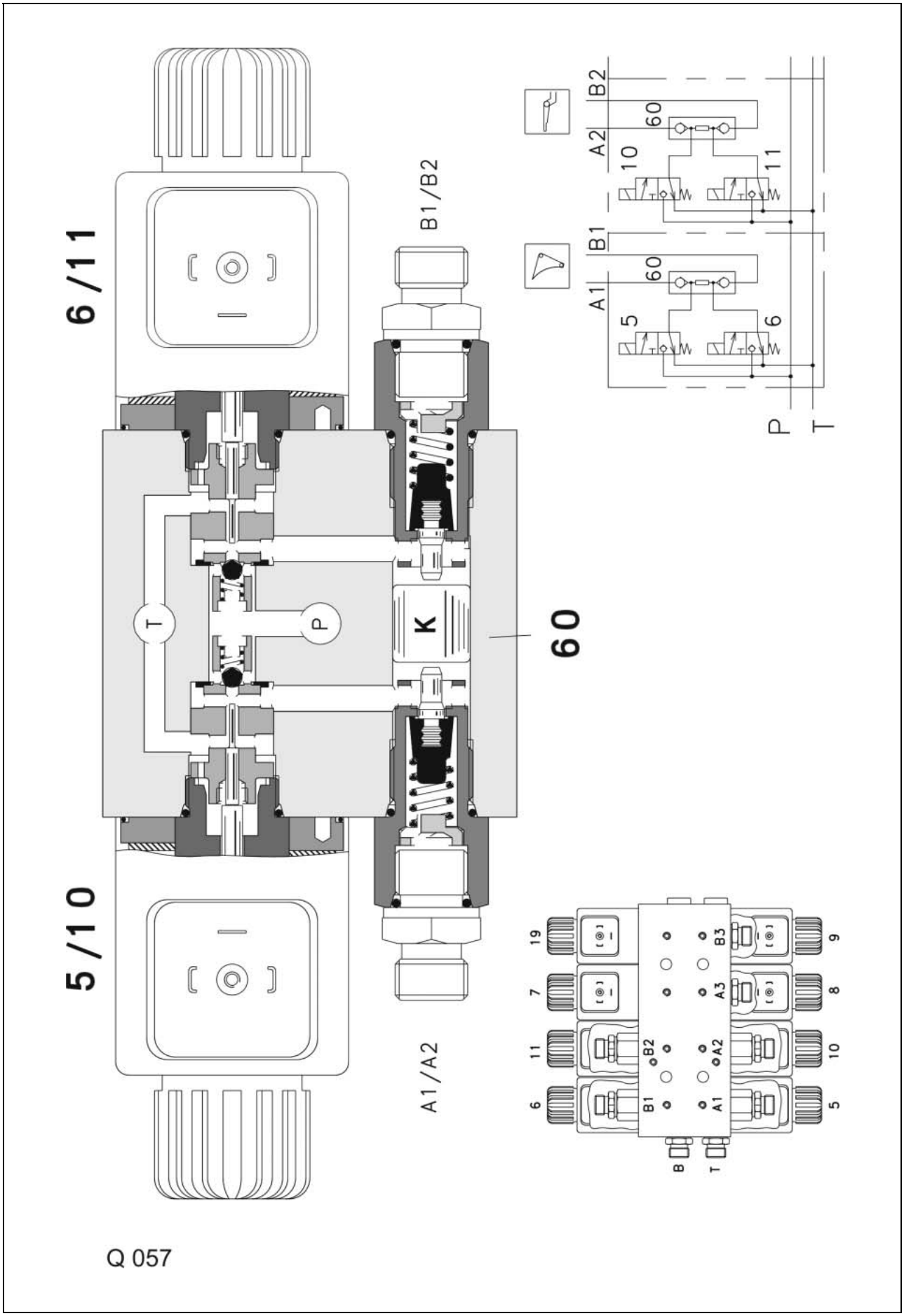
The LS pump now delivers the lowest volume flow against the maximum pressure.
The hydraulic system remains at the max. pressure level as long as the additional control unit is set to the neutral position.

3500 K, 2500 K, 3800 P

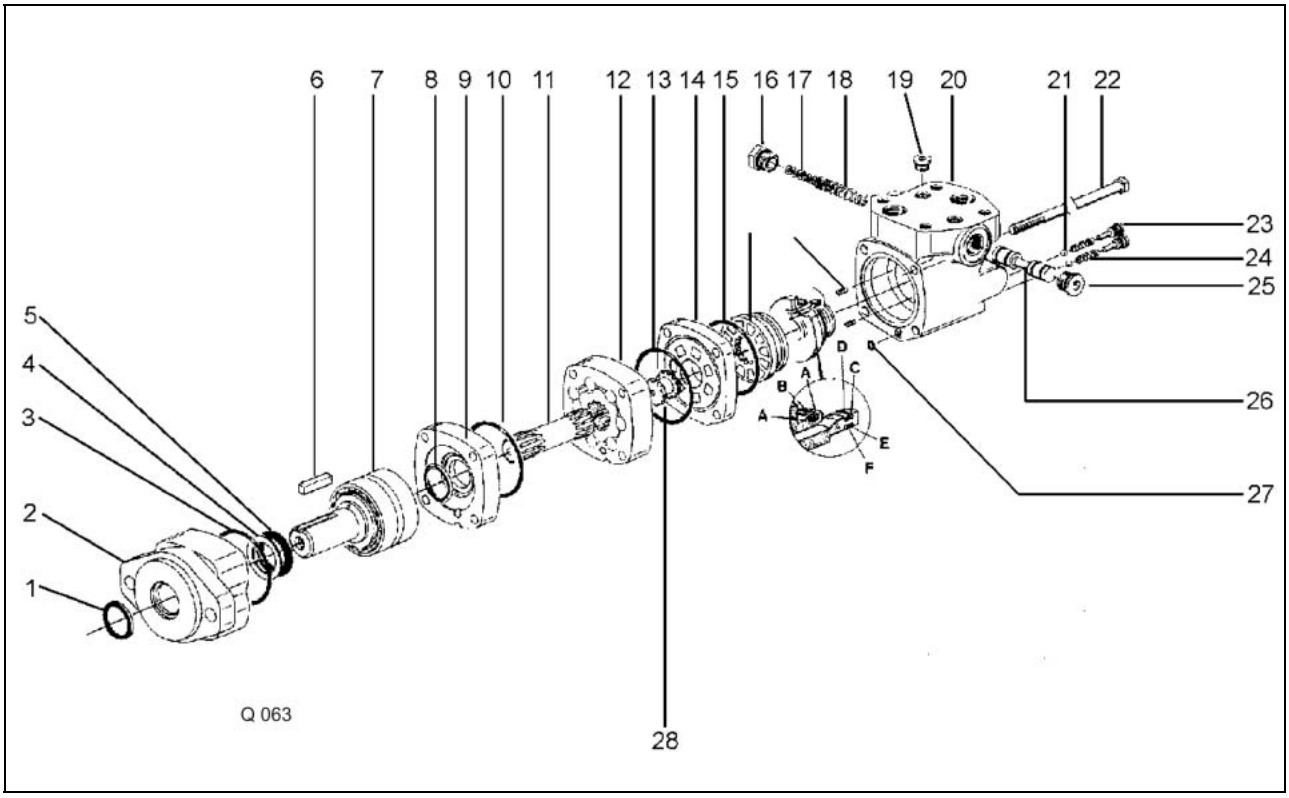


4500S / 5500S / S-16 / S-18 / 6800S



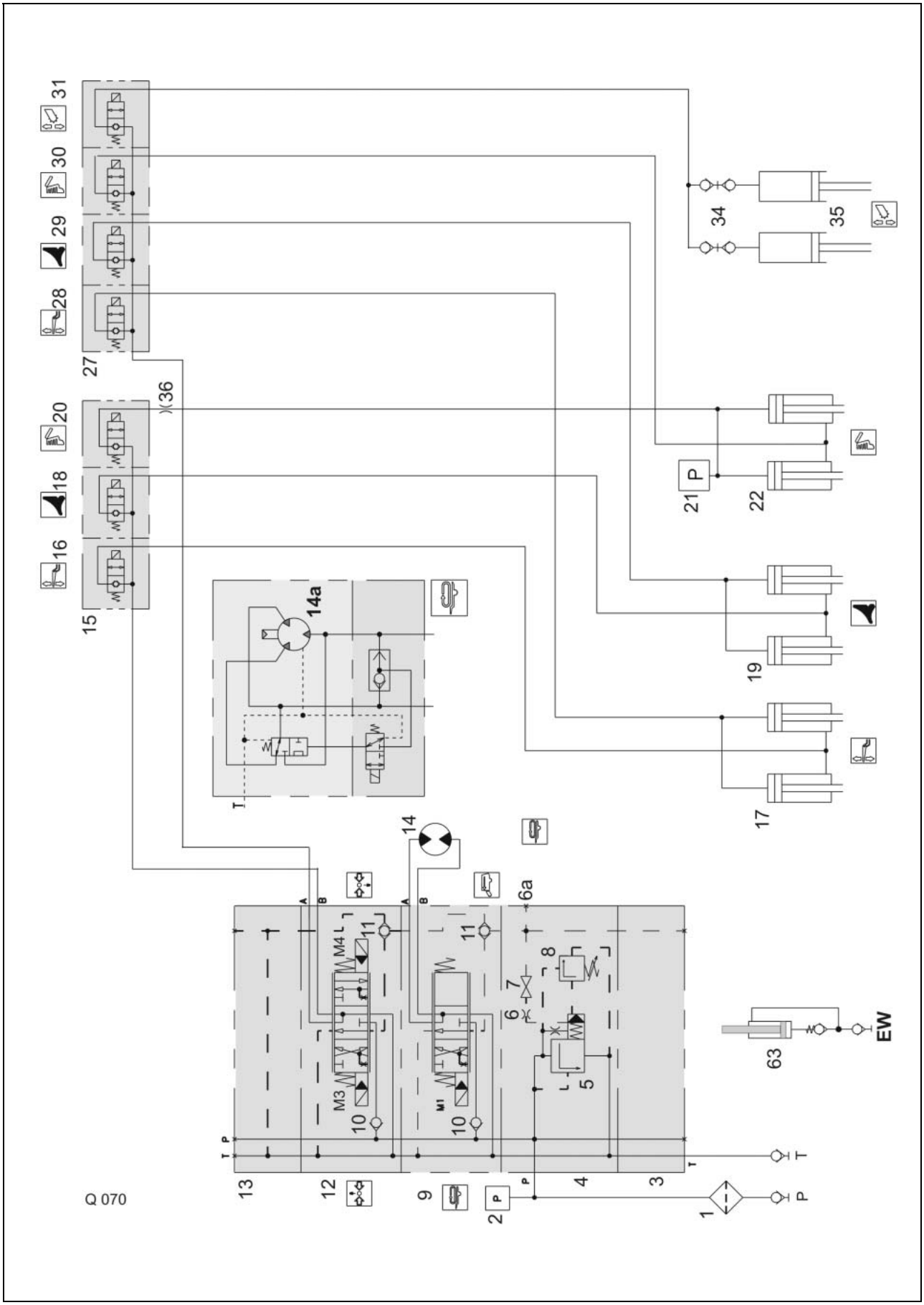


Q 057



1	Dust seal
2	Bearing housing
3	Seal
4	Back-up ring
5	Shaft seal ring
6	Woodruff key
7	Output shaft and bearing
8	Output shaft head seal
9	Lock-up plate
10	Seal
11	Drive
12	Geroler
13	Seal
14	Distributor plate
15	Seal
16	Plug
17	Compression spring
18	Compression spring
19	Plug
20	Valve body
21	Control ball
22	Screw
23	Plug
24	Compression spring
25	Plug
26	Control spool
27	Seal
28	Valve drive

4500P / 5500P / 5500 P-16 / 5500 P-18 / 5500GT / 6500P / 6800P



4.6 2/2 way solenoid valve (seated valve)

4.6.1 Up to serial no.

A	Cylinder port
P-R	Pressure or return line port
VS	Seated valve
I	Solenoid deactivated
II	Solenoid activated

Function

When the solenoid is deactivated, the load pressure of the cylinder (acting at port A) presses the ball into its seat.
The connection from port (A) to port (P-R) is blocked.
This ensures that no oil can escape from the cylinder, which would result in a lowering motion.

When the solenoid is activated, the iron core pushes the ball downward against the spring-loaded ram.
The oil can

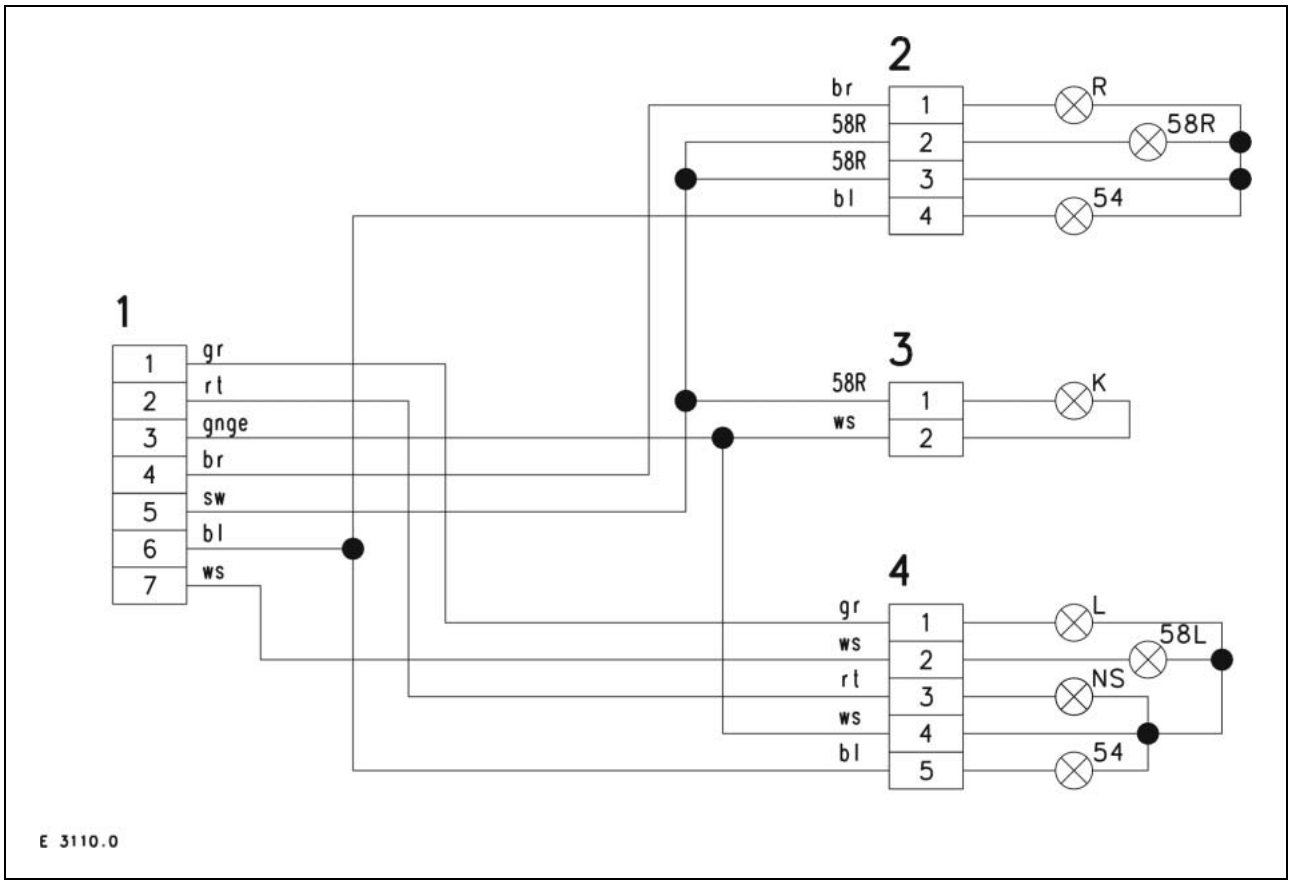
- flow from P to A = raising
- or from A to R = lowering

The valve can be switched manually at the adjusting screw of the solenoid.

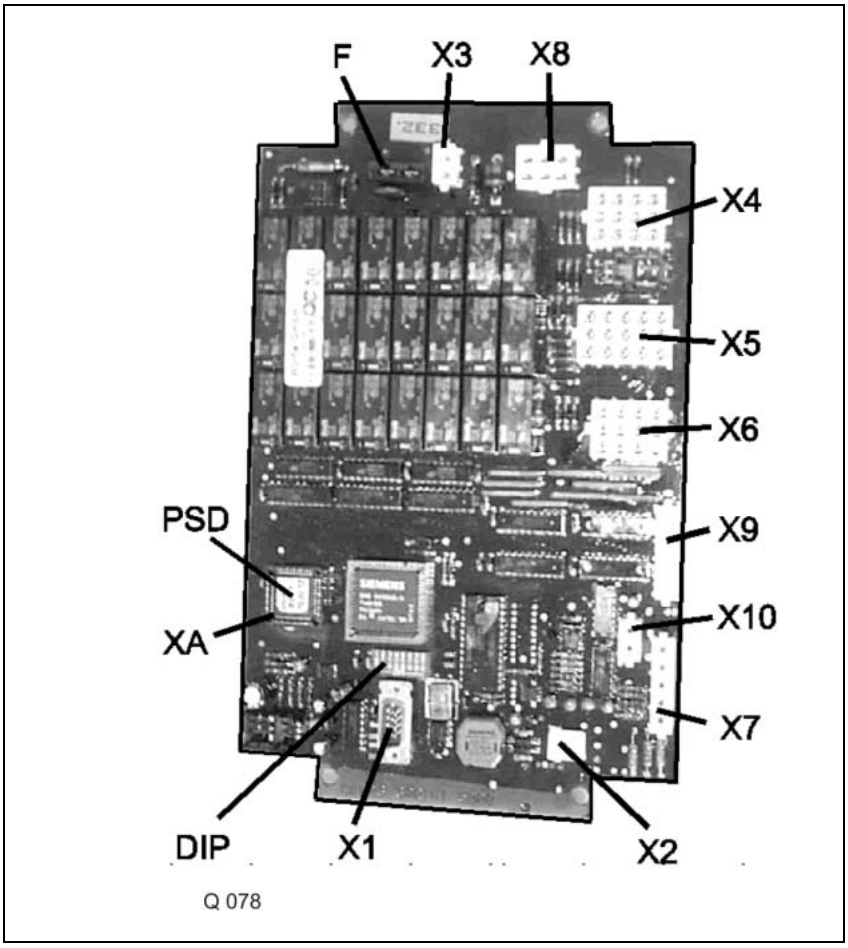
1.5 Lighting

1 7-pin plug
2 4-pin plug, right-hand rear lights
3 2-pin plug, rear number plate light
4 5-pin plug, right-hand rear lights

R Turn signals, right-hand
L Turn signals, left-hand
58R Taillights, right-hand
58L Taillights, left-hand
54 Brake light
K Rear number plate light
NS Rear fog light



2.3 QUANTUM S power board (A)



Plug X1	Canon	9-pin	Not used
Plug X2	Lumberg	5-pin	Switch console
Plug X3	AMP	2-pin	+30, -31
Plug X4	AMP	12-pin	Solenoid valve 1-12
Plug X5	AMP	15pin	Solenoid valve 13-25
Plug X6	AMP	12-pin	Reed contact 1-11 oil pressure switch
Plug X7	AMP	5-pin	Speed sensor
Plug X8	AMP	6-pin	Reed contact 13-15 oil pressure switch
Plug X9	AMP	5-pin	-
Plug X10	AMP	2-pin	-
SD			Program component (Eprom)
F			15 A fuse
XA			Caution: Pay attention to mounting surface