Service Manual

Track excavator

28 Z_3



Machine model	**$28Z_3$**
Edition	**1.0**
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2.18 Attachments

Description of attachment	Weight	Capacity	Item no.	Excavator	Remarks
Complete quickhitch facility	27 kg		1000018479	28Z$_3$	Required for operation of Neuson quickhitch systems
Bucket B = 300 mm	56 kg	50 l	1000093755	28Z$_3$	
	64 kg	50 l	1000017130	28Z$_3$	For quickhitch facility
Bucket B = 400 mm	64 kg	69 l	1000093756	28Z$_3$	
	72 kg	69 l	1000017125	28Z$_3$	For quickhitch facility
Bucket B = 500 mm	74 kg	88 l	1000093757	28Z$_3$	
	82 kg	88 l	1000017127	28Z$_3$	For quickhitch facility
Bucket B = 600 mm	82 kg	107 l	1000093758	28Z$_3$	
	90 kg	107 l	1000017134	28Z$_3$	For quickhitch facility
Bucket B = 700 mm	90 kg	127 l	1000093759	28Z$_3$	
	99 kg	127 l	1000017128	28Z$_3$	For quickhitch facility
Offset bucket B = 1000 mm short stick	135 kg	111 l	1000096567	28Z$_3$	
	142 kg	111 l	1000017131	28Z$_3$	For quickhitch facility
Offset bucket B = 1400 mm short stick	kg	158 l	1000096568	28Z$_3$	
	kg	158 l	1000017132	28Z$_3$	For quickhitch facility
Offset bucket B = 1000 mm long stick	135 kg	111 l	1000096569	28Z$_3$	
	142 kg	111 l	1000096571	28Z$_3$	For quickhitch facility
Offset bucket B = 1400 mm long stick		158 l	1000096570	28Z$_3$	
		158 l	1000096572	28Z$_3$	For quickhitch facility
Ditch cleaning bucket B = 1000 mm	84 kg	117 l	1000096563	28Z$_3$	
	102 kg	116 l	1000096549	28Z$_3$	For quickhitch facility
Ditch cleaning bucket B = 1400 mm	109 kg	166 l	1000096564	28Z$_3$	
	130 kg	164 l	1000096550	28Z$_3$	For quickhitch facility
Hammer mount console	27 kg		1000070743	28Z$_3$	

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5.14 Troubleshooting in the hydraulic system

Problem	Possible causes
Hydraulic system without function	Defective safety switch on control lever base
	Wrong setting of safety switch on control lever base
	Defective solenoid valve on pilot oil supply unit
	Contaminated solenoid valve on pilot oil supply unit
	Hydraulic oil level too low
	Defective valve fuses
	Defective/interrupted plug and socket connection towards solenoid valve
Hydraulic hammer does not work correctly	Quickhitch couplings not connected correctly
	Hydraulic oil quantity too high/too low
	Hydraulic oil pressure too high/too low
	Check the nitrogen fill
Excavator runs in 1st speed only	Defective switch for 2nd speed range
	Defective solenoid valve on pilot oil supply unit
	Contaminated solenoid valve on pilot oil supply unit
	Defective valve fuses
	Defective/interrupted plug and socket connection towards solenoid valve
	Counterpressure in travelling drive does not drop below control pressure

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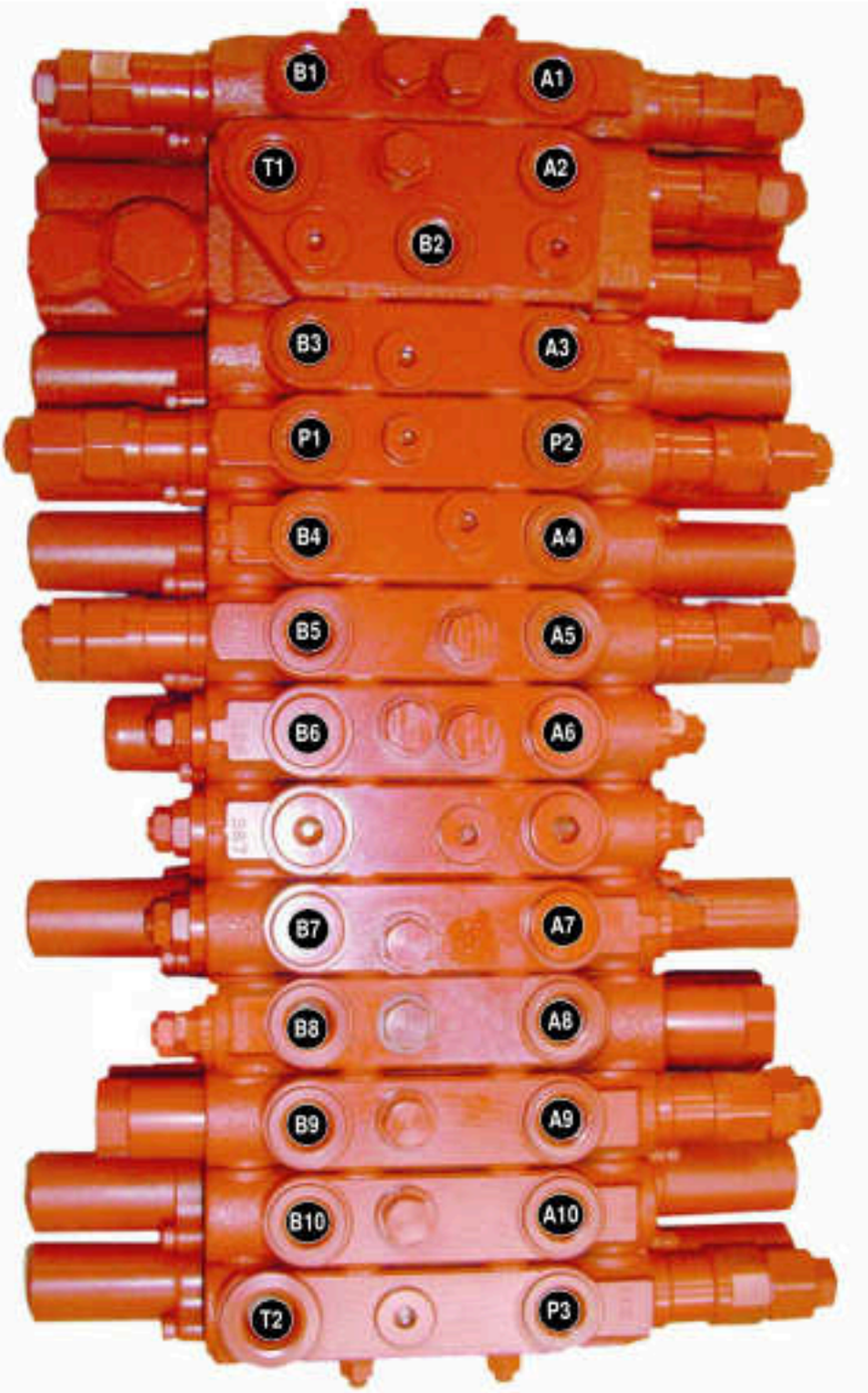
Wiring diagrams and wiring harnesses include all options.

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5.2 Main valve block

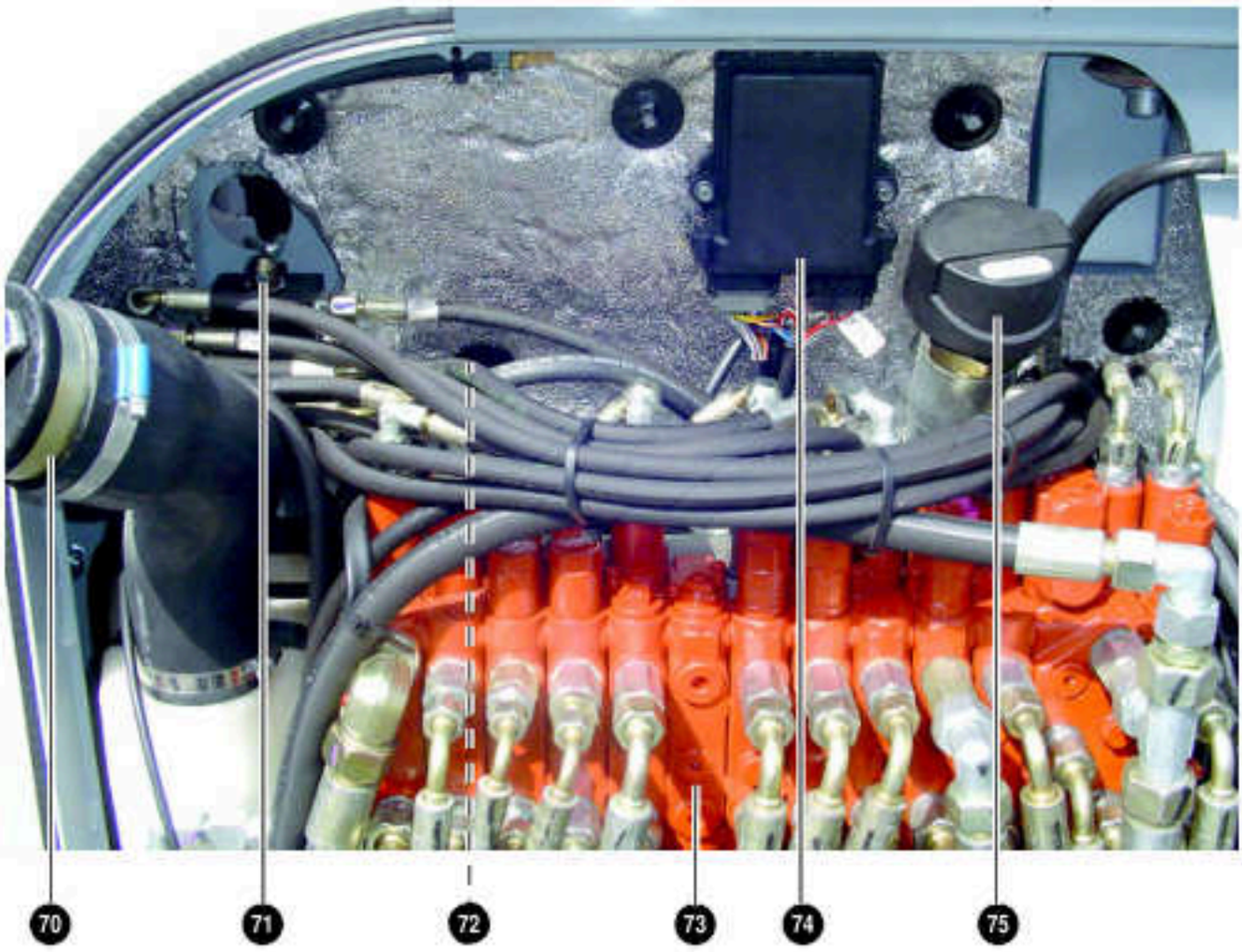
Ports

- Bucket
- Boom
- Right-hand side drive
- Input P1 P2
- Left-hand side drive
- Stick
- Auxiliary hydraulics
- Auxiliary hydraulics flow rate adjustment segment
- 3rd control circuit (option)
- Swivel boom
- Stabiliser blade
- Upper carriage rotation
- Straight-ahead / drive counterbalancing system



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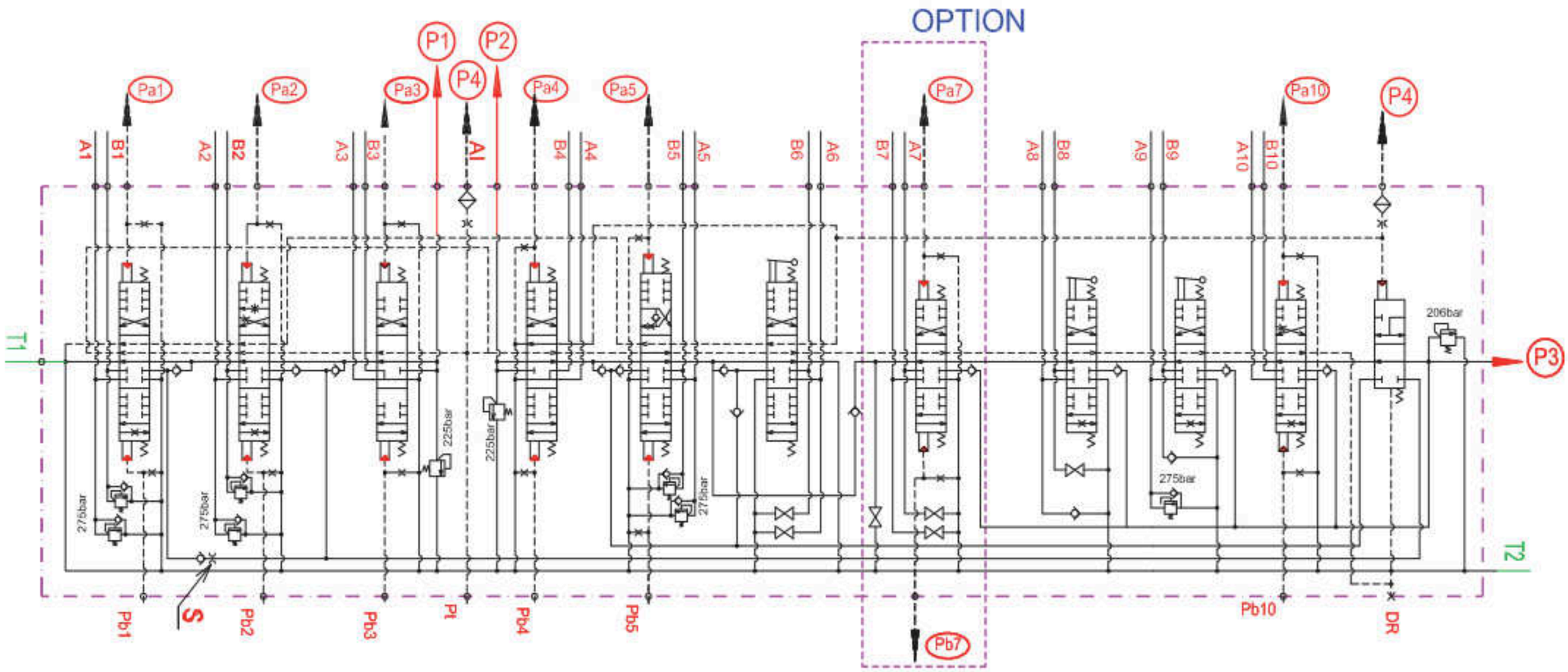
1.12 Valve compartment



Pos.	Description	For more information see page
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5.20 Main valve block diagram 28Z3 A3



Pilot control lines

Port	Legend	Controlled via
Pa1, Pb1	Bucket control	Joystick (right)
Pa2, Pb2	Boom control	Joystick (right)
Pa3, Pb3	Right-hand side drive control	Drive pedal (right)
Pa4, Pb4	Left-hand side drive control	Drive pedal (left)
Pa5, Pb5	Stick control	Joystick (left)
Pa6, Pb6	Auxiliary hydraulics control	Switch on joystick
Pa7, Pb7	3rd control circuit (option) control	Switch on joystick
Pa8, Pb8	Boom swivel control	Hammer pedal
Pa9, Pb9	Stabiliser blade control	Stabiliser blade lever
Pa10, Pb10	Upper carriage rotation control	Joystick (left)

Main control lines

Port	Legend
A1, B1	Bucket ram
A2, B2	Boom ram
A3, B3	Drive unit (right) via swivel joint
A4, B4	Drive unit (left) via swivel joint
A5, B5	Stick ram
A6, B6	Auxiliary hydraulics
A7, B7	3rd control circuit
A8, B8	Offset ram
A9, B9	Stabiliser blade ram
A10, B10	Swivel unit

Pump/tank lines

Port	Legend
P1	Pump 1 port
P2	Pump 2 port
P3	Pump 3 port
P4	Pump 4 port
T1	Tank line via non-return valve and filter in tank
T2	Tank line via oil cooler and filter in tank

S: bucket pre-tension – *see Bucket pre-tension* on page 5-11

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