Operator's Manual

Track excavators

50Z3 / 6003



Machine models	**50Z3/6003**
Edition	**4.0**
Language	**EN**
Item no.	**1000127717**

MidWestTech | Wacker Neuson 50z3, 6003 Track Excavator Operator's Manual | Publication 1000127717

Order the manual at mid-west-tech.com >

Table of contents

Introduction

Important information on this Operator's Manual ... 1-1
Machine overview ... 1-2
Brief description ... 1-3
Travelling drive ... 1-3
Work hydraulics ... 1-3
Cooling system ... 1-3
Cab (ROPS, TOPS and FOPS) ... 1-3
Fields of application, attachments ... 1-4
Use: attachment ... 1-4
Regulations ... 1-5
EC declaration of conformity version 50Z$_3$ up to serial number AH00578 ... 1-6
EC declaration of conformity version 50Z$_3$ from serial number AH00579 ... 1-7
EC declaration of conformity version 6003 up to serial number AH00578 ... 1-8
EC declaration of conformity version 6003 from serial number AH00579 ... 1-9
Type labels and component numbers ... 1-10
Other signs and symbols ... 1-13
...on the outside of the machine ... 1-13
...inside the cab ... 1-15
Fire extinguisher ... 1-16

Safety instructions

Identification of warnings and dangers ... 2-1
Warranty ... 2-1
Designated use and exemption from liability ... 2-2
General conduct and safety instructions ... 2-3
Organisational measures ... 2-3
Selection and qualification of staff, basic responsibilities ... 2-4
Safety instructions regarding operation ... 2-5
Normal operation ... 2-5
Applications with lifting gear ... 2-7
Trailers and attachments ... 2-7
Transport ... 2-8
Safety instructions for maintenance ... 2-9
Warning of special hazards ... 2-11
Electric energy ... 2-11
Gas, dust, steam, smoke ... 2-11
Hydraulics ... 2-11
Noise ... 2-11
Oil, grease and other chemical substances ... 2-12
Battery ... 2-12
Tracks ... 2-12

Operation

50Z3 cab ... 3-2
6003 cab ... 3-4
Up to serial number AH00578 ... 3-4
From serial number AH00579 ... 3-5
50Z3 controls ... 3-7
6003 controls ... 3-9
Up to serial number AH00578 ... 3-9
Putting into operation ... 3-12
Safety instructions ... 3-12
Putting the machine into operation for the first time ... 3-12
Running-in period ... 3-12

MidWestTech | Wacker Neuson 50z3, 6003 Track Excavator Operator's Manual | Publi... Order the manual at mid-west-tech.com >

Check lists 3-13
Start-up checklist 3-13
Operation checklist 3-14
Parking checklist 3-14
Driving the excavator 3-15
Preheating start switch 3-15
Throttle 3-15
Automatic revs setting (option) 3-16
Telltales and warning lights: overview 3-17
Before starting the engine 3-20
Starting the engine: general 3-20
Procedure 3-21
Jump-starting the engine (supply battery) 3-22
Special instructions for driving on public roads 3-22
Starting at low temperatures 3-23
When the engine has started 3-23
Engine warm-up 3-23
Moving off 3-24
Drive levers 3-24
High speed 3-25
Hydraulic brake 3-25
Mechanical brake 3-25
Driving on slopes 3-26
Driving on slopes 3-27
Stabiliser blade operation 3-28
Parking the machine 3-29
Parking the machine on slopes 3-29
Light system 3-30
Working light 3-30
Roof lights (option) 3-30
Interior light 3-30
Rotating beacon (option) 3-31
Cab heating and ventilation 3-31
Summer/winter operation (up to serial number AD04650) 3-32
Heating controls (from serial number AD04651) 3-32
Washer system 3-33
Tank for washer system 3-33
Air conditioning (option) 3-34
Recirculated air mode 3-34
Seat adjustment 3-35
Weight adjustment 3-36
Height adjustment 3-36
Horizontal adjustment 3-36
Backrest adjustment 3-36
Seat belt 3-37
Emergency exit 3-38
Front window 3-39
Door 3-40
Engine cover 3-41
Battery master switch 3-42
Tilting the cab 3-43
Exit through the door 3-46
Adjusting the left-hand side armrest 3-47
Towing the track excavator 3-47
Towing 3-47

MidWestTech | Wacker Neuson 50z3, 6003 Track Excavator Operator's Manual | Publi... Order the manual at mid-west-tech.com >

Crane handling the machine 3-48
Loading and transporting the machine 3-49
Tying down the machine 3-50
Working with the machine 3-51
General safety instructions 3-51
Control levers/ISO controls: overview 3-52
Left-hand side control lever 3-52
Boom swivel controls/triple articulation boom (option) 3-52
Right-hand side control lever 3-53
Lowering the boom with the engine stopped 3-53
Releasing pressure 3-53
Rotating the upper carriage 3-54
Swivel unit brake 3-54
Changeover valve for SAE/ISO controls (option) 3-55
Left-hand side control lever 3-55
Right-hand side control lever 3-55
Directional valve position 3-55
Directional valve 3-56
Control lever with proportional controls (option): overview 3-57
Function 3-57
Measures to be taken in case of malfunctions 3-58
Left-hand side control lever 3-58
Changeover between auxiliary hydraulics and boom swivel 3-59
Switching status display on/off for auxiliary hydraulics/boom swivel 3-59
Operating the boom/auxiliary hydraulics 3-59
Hammer operation 3-59
Adjusting control response: 3-60
Characteristic curves – status display 3-60
Lowering the boom with the engine stopped 3-61
Releasing pressure 3-61
Rotating the upper carriage 3-62
Swivel unit brake 3-62
Control lever if equipped with 3rd control circuit (option): overview 3-63
Left-hand side control lever 3-63
Boom swivel controls 3-63
Lowering the boom with the engine switched off 3-64
Releasing pressure 3-64
Rotating the upper carriage 3-65
Swivel unit brake 3-65
Vario (option) 3-66
Vario operation 3-66
Driving across slopes with the Vario feature 3-66
Danger area of the Vario feature 3-67
Working with the Vario feature 3-68
Improved reach with the Vario feature 3-68
Releasing the pressure on the work hydraulics 3-69
Releasing pressure 3-69
Pressure release with proportional controls (option) 3-69
Re-equipping attachments 3-70
Specific safety instructions 3-70
Removing a bucket 3-70
Mounting a bucket 3-71
Quickhitch (option) 3-71
Hydraulic quickhitch (option) 3-73
Maintenance 3-73
Operation 3-74

MidWestTech | Wacker Neuson 50z3, 6003 Track Excavator Operator's Manual | Publi... Order the manual at mid-west-tech.com >

Enabling the 3rd control circuit

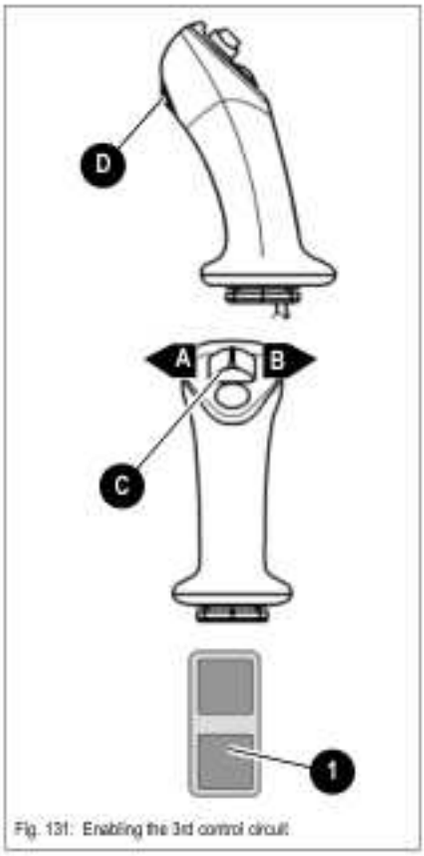


Fig. 131: Enabling the 3rd control circuit

- ☞ *Press button **D** on the control lever.*
- ☞ *The unit installed on the 3rd control circuit can be moved or turned to the left **A** or right **B** with slide switch **C**.*
- ☞ *Telltale **1** of the proportional control status indicator comes on.*

3.37 Connections for auxiliary hydraulics

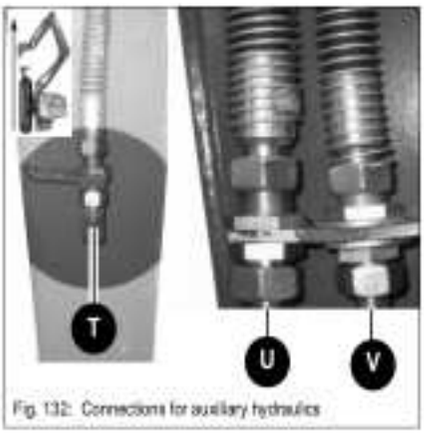


Fig. 132: Connections for auxiliary hydraulics

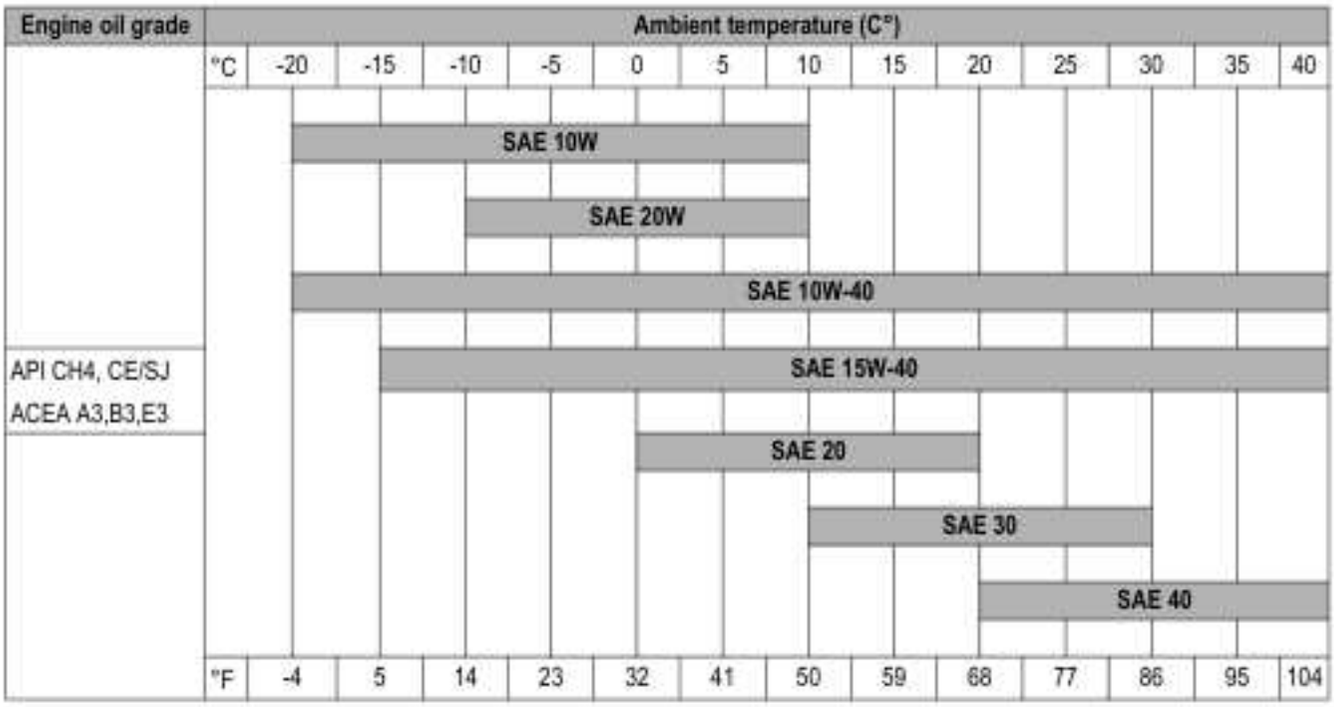
Port	Stick (left)	Stick (right)
T	☞ *Pressure line*	
U		☞ *Large reflux line*
V		☞ *Pressure line*

Notice!

Follow the instructions in the Operator's Manual of the attachment manufacturer for connecting the auxiliary hydraulics to attachments.

MidWestTech | Wacker Neuson 50z3, 6003 Track Excavator Operator's Manual | Publi... Order the manual at mid-west-tech.com >

Oil grades for the diesel engine, depending on temperature



Additional oil change and filter replacement (hydraulics)

Caution!

An additional oil change and filter replacement can be required depending on how the machine is used. Failure to observe these replacement intervals can cause damage to hydraulic components.

☞ *Observe the following intervals*

Application		Hydraulic oil	Hydraulic oil filter insert
Normal work (excavation work)		Every 1000 s/h	Replace the first time after 50 s/h, then every 500 s/h
Percentage of hammer work	20 %	Every 800 s/h	300 s/h
	40 %	Every 400 s/h	
	60 %	Every 300 s/h	100 s/h
	Over 80 %	Every 200 s/h	

Notice!

Please refer to the maintenance plan on page 5-35 for additional maintenance work.

MidWestTech | Wacker Neuson 50z3, 6003 Track Excavator Operator's Manual | Publi... Order the manual at mid-west-tech.com >

6.17 Lift capacity table 50Z, long stick, counterweight (option)

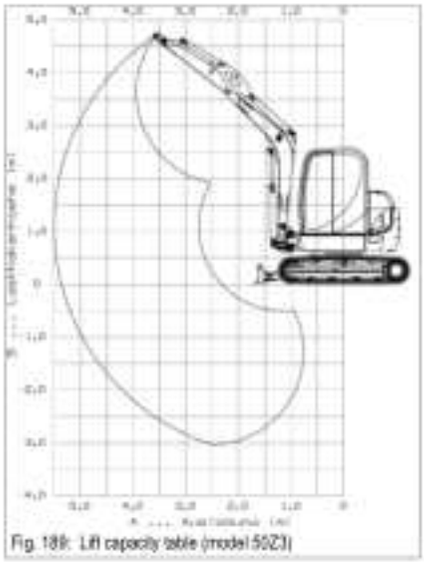
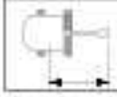


Fig. 189: Lift capacity table (model 50Z3)

A / B			4,0m		3,0m		2,0m	
4,0m	920*	780	855*	855*				
3,0m	915*	800	865*	865*				
2,0m	935*	520	1050*	865	1315*	1315*		
1,0m	970*	485	1310*	800	2025*	1205		
0,0m	1015*	490	1495*	745	2365*	1110		
-1,0m	1065*	540	1515*	720	2350*	1085	4570*	2115
-2,0m	1110*	690	1250*	735	1970*	1105	3590*	2115

max	Admissible load on extended stick
A	Reach from live ring centre
B	Load hook height
*	Lift capacity limited by hydraulics

All table indications in kg and horizontal position on firm ground without bucket.

	With the stabiliser blade in driving direction
	Without the stabiliser blade, 90° to driving direction

If equipped with a bucket or other attachments, lift capacity or tilt load is reduced by bucket or attachment dead weight.

Calculation basis: according to ISO 10567

The track excavator's lift capacity is restricted by the settings of the pressure limiting valves and the hydraulic system's stabilising features.

Neither 75 % of the static tilt load nor 87 % of the hydraulic lift capacity is exceeded.

MidWestTech | Wacker Neuson 50z3, 6003 Track Excavator Operator's Manual | Publi... Order the manual at mid-west-tech.com >

Pos.	Description	For more information see page
1	Cover for hammer pedal	
2	Hammer pedal	3-52
3	Left-hand side control lever	3-52, 3-55, 3-58, 3-58
4	Right-hand side control lever	3-53, 3-55, 3-53, 3-53
5	Control lever base (left)	3-46
6	Control lever base (right)	
7	Armrest (left)	
8	Armrest (right)	
9	Lever (horizontal seat adjustment)	3-36
10	Air vent (rear window, on the left)	
11	Air vent (rear window, on the right)	
12	Radio (option)	
13	Seat (backrest adjustment)	3-36
14	Seat belt (lock)	3-37
15	Cup holder	
16	Bracket (storage box for documents)	
17	Switch panel	3-9
18	Throttle	3-15
19	Fuse box	6-3
20	Preheating start switch	3-15
21	Cigarette lighter	
22	Round display element (new version from serial number AH00579)	3-9
23	Drive pedal (left)	3-24
24	Drive pedal (right)	3-24
25	Drive lever (left)	3-24
26	Drive lever (right)	3-24
27	Stabiliser blade lever/pedal	3-28
28	Heating controls (from serial number AD04651)	3-32
29	Coolant temperature indicator	3-19

MidWestTech | Wacker Neuson 50z3, 6003 Track Excavator Operator's Manual | Publi... Order the manual at mid-west-tech.com >