3 Operation

This chapter describes the controls, and contains information on the function and handling of the telltales and controls in the cab.

The pages stated in the table refer to the description of the controls.

A combination of digits, or a combination of digits and letters (e.g. 40/18 or 40/A) used for identifying the control elements, means:
fig. no. 40/control element no. 18 or position A in fig. no. 40

Figures carry no numbers if they are placed to the left of the text.

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

5 Maintenance

5.1 Introduction

Operational readiness and the service life of machines are heavily dependent on maintenance.

It is therefore in the interest of the machine owner to carry out the prescribed maintenance work.

Bear in mind the following points before carrying out service and maintenance work:

- Chapter 2 “SAFETY INSTRUCTIONS” of this Operator's Manual
- The Operator's Manuals of the attachments.

Carry out the prescribed inspections and rectify any disorders immediately before putting the machine into operation, or have them rectified by a Wacker Neuson workshop.

Secure open (engine) covers appropriately. Do not open (engine) covers on slopes or in strong wind.

When using compressed air, dirt and debris can be blown into your face. Therefore, wear protective goggles, masks and clothing when using compressed air.

5.2 Safety-relevant parts

Service and maintenance work must be carried out by a specifically trained driver.

All other maintenance work that is not indicated in this Operator's Manual must be carried out only by the trained and qualified staff of a Wacker Neuson workshop.

The following maintenance plans indicate the maintenance work to be carried out. .

This is necessary to ensure their optimal functioning.

– *see Maintenance plan (overview)* on page 5-35.

Immediately repair or replace parts that are already damaged or not working properly before they are due for replacement.

Notice!

Safety-relevant parts may only be repaired or replaced by a Wacker Neuson dealer or customer service.

Parts	Interval
Hydraulic hoses	Replace hydraulic hoses every 6 years from the date of manufacture, even if they do not seem to be damaged
Bladder type accumulator	Must be checked by a Wacker Neuson dealer every 2 years.
Seat belt	No replacement necessary. Replace the seat belt after an accident.

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

6 Specifications

6.1 Model 1703

Engine

Blurred on purpose. The manual you buy has this page in full quality.

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

Table of contents

Introduction
- Important information on this Operator's Manual ... 1-1
- Overall machine view (from serial no. AG02503) ... 1-2
- Overall machine view (up to serial no. AF05530) ... 1-3
- Brief description ... 1-4
- Fields of application, attachments ... 1-5
  - Use: attachment ... 1-5
- Regulations ... 1-6
- EC declaration of conformity 1703 (from serial number AG02503) ... 1-7
- EC declaration of conformity 2003 (from serial number AG02503) ... 1-8
- EC declaration of conformity 1703 (up to serial number AF05530) ... 1-9
- EC declaration of conformity 2003 (up to serial number AF05530) ... 1-10
- Type labels and component numbers ... 1-11
- Other signs and symbols ... 1-13
  - Overview of adhesive labels ... 1-13
  - ...on the outside of the machine ... 1-14
  - Overview of safety labels ... 1-16
- Fire extinguisher ... 1-23

Safety instructions
- Identification of warnings and dangers ... 2-1
- Warranty ... 2-1
- Disposal ... 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
  - Cab and protective structures ... 2-7
  - Operation without cab/canopy ... 2-7
  - Checks when reversing the machine ... 2-7
  - Applications with lifting gear ... 2-8
  - Working with attachments ... 2-8
  - Transport ... 2-9
  - Working in the area of underground electric lines ... 2-9
  - Working near overhead electric lines ... 2-9
- Safety instructions for maintenance ... 2-11
- Warning of special hazards ... 2-13
  - Electrical energy ... 2-13
  - Gas, dust, steam, smoke ... 2-13
  - Hydraulics ... 2-13
  - Noise ... 2-13
  - Oil, grease and other chemical substances ... 2-13
  - Battery ... 2-14
  - Tracks ... 2-14
- Protective structures ... 2-14
- Hammer operation ... 2-14
  - Safety instructions ... 2-14
  - Working with a hammer ... 2-15

Operation
- Cab overview ... 3-3
- Instrument panel overview ... 3-5
- Putting into operation ... 3-6
  - Safety instructions ... 3-6

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

2 Safety instructions

2.1 Identification of warnings and dangers

Important indications regarding the safety of the staff and the machine are identified in this Operator's Manual with the following terms and symbols:



Danger!

Failure to observe the instructions identified by this symbol can result in personal injury or death for the operator or other persons.

☞ *Measures for avoiding danger*



Caution!

Failure to observe the instructions identified by this symbol can result in damage to the machine.

☞ *Measures for avoiding danger for the machine*



Notice!

This symbol identifies instructions for a more efficient and economical use of the machine.



Environment!

Failure to observe the instructions identified by this symbol can result in damage to the environment. The environment is in danger if environmentally hazardous material (e.g. waste oil) is not subject to proper use or disposal.

2.2 Warranty

Warranty claims can be brought forward to your Wacker Neuson dealer only. Furthermore, the instructions in this Operator's Manual must be observed.

2.3 Disposal

All fluids, lubricants, material, etc., used on the machine are subject to specific regulations regarding collection and disposal. Dispose of different materials and consumables separately and in an environmentally friendly manner!

Disposal may be carried out by a Wacker Neuson dealer only. Also observe the legal regulations of your country regarding disposal!



Environment!

Avoid damage to the environment! Do not allow the oil and oily wastes to get into the ground or stretches of water!

If the machine is no longer used according to its designated use, make sure it is decommissioned or put out of operation and disposed of according to applicable regulations.

- Observe all applicable safety regulations during machine disposal!
- Machine disposal must be carried in accordance with state-of-the-art standards that apply at the time of disposal!

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

Putting the machine into operation for the first time ... 3-6
Running-in period ... 3-6
Check lists ... 3-7
Start-up checklist ... 3-7
Operation checklist ... 3-8
Parking checklist ... 3-8
Driving the excavator ... 3-9
Preheating start switch ... 3-9
Throttle ... 3-9
Telltales and warning lights: overview ... 3-10
Before starting the engine ... 3-12
Starting the engine (general information) ... 3-12
Starting with the drive interlock – external transponder (option) ... 3-13
Starting with the drive interlock – internal transponder (option) ... 3-14
Starting at low temperatures ... 3-15
When the engine has started 3-15
Jump-starting the engine (supply battery) ... 3-15
Special instructions for driving on public roads ... 3-17
Moving off ... 3-17
Drive levers ... 3-17
High speed ... 3-18
Hydraulic brake ... 3-18
Driving on slopes ... 3-19
Specific safety instructions ... 3-19
Driving on slopes ... 3-20
Stabiliser blade operation ... 3-21
Parking the machine ... 3-22
Parking the machine ... 3-22
Light system ... 3-23
Working lights ... 3-23
Roof lights (option) ... 3-23
Interior light ... 3-23
Rotating beacon (option) ... 3-24
Cab heating and ventilation ... 3-24
Summer/winter operation ... 3-25
Washer system ... 3-25
Tank for washer system ... 3-26
Seat adjustment ... 3-26
Weight adjustment ... 3-27
Horizontal adjustment ... 3-27
Backrest adjustment ... 3-27
Seat belt ... 3-28
Emergency exit ... 3-29
Emergency exit on machines equipped with protective Front Guard structures (option) ... 3-29
Front window (from serial no. AG02503) ... 3-30
Opening/closing the front window ... 3-30
Opening/closing the lower front window ... 3-31
Opening/closing the whole front window ... 3-32

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

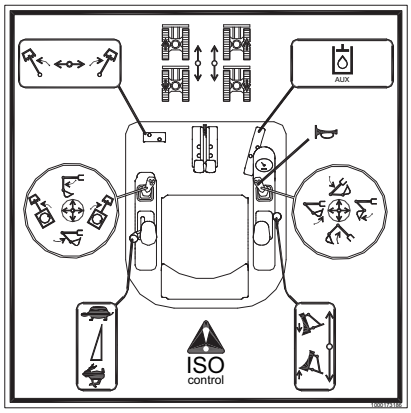


Fig. 31: Controls

Meaning

This label describes the pedal and control lever functions.

– see chapter 3.42 *Control levers/ISO controls: overview* on page 3-52

Location

On the headliner

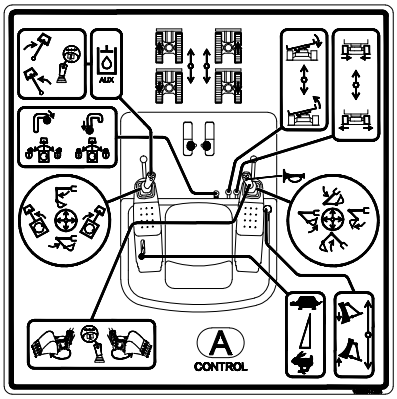


Fig. 32: Controls

Meaning (option)

This label describes the pedal and control lever functions for machines equipped with the proportional controls option and proportional controls with Powertilt.

– see chapter 3.42 *Control levers/ISO controls: overview* on page 3-52

Location

On the headliner

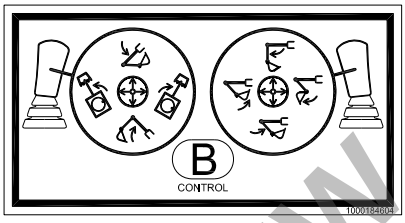


Fig. 33: Changeover valve for SAE/ISO controls

Meaning

Label shows the ISO or SAE valve controls selected.

– see chapter 3.43 *Changeover valve for SAE/ISO controls (option)* on page 3-55

Location

Inside the cab

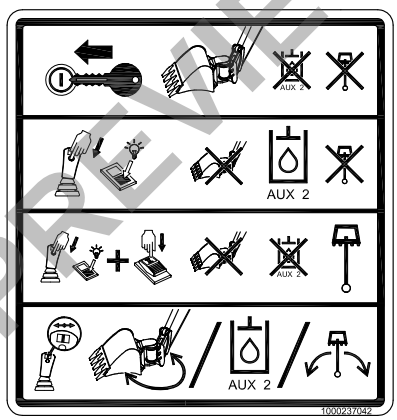


Fig. 34: Cab label

Meaning

The Powertilt function is enabled once the excavator is started.

- Not assigned.
- Not assigned.
- The unit is operated with the slide switch on the left-hand side control lever (right-hand side control lever with auxiliary hydraulics and proportional controls).

Location

On the headliner

– see chapter 3.52 *Powertilt (option)* on page 3-71

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

3.4 Driving the excavator

Preheating start switch

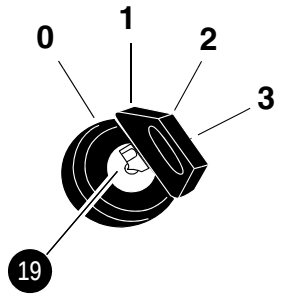


Fig. 46: Preheating start switch

Notice!

The engine can only be started if either control lever base is folded down.

Position	Function	Power consumer
0	Insert or remove the ignition key	None
1	ON/drive position	All functions are operational ➥ Telltales come on ➥ Shrill sound
2	Preheats the engine (4 seconds)	
3	Starts the engine	➥ Starter is actuated ➥ Telltales must go out

Throttle

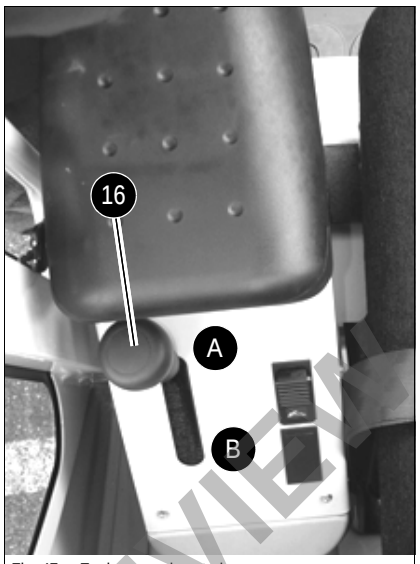


Fig. 47: Engine speed control

The throttle lever controls the engine speed as follows:

- Continuously (throttle lever 16)
  - ➥ Position A: idling speed
  - ➥ Position B: max. engine speed

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

3.30 Door (up to serial no. AF05530)

Danger!

Close/secure the door and the side window when driving and working with the machine

–

Danger of accidents!

☞ *Close the door before moving the machine*

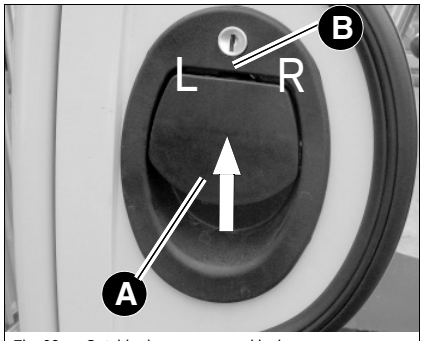


Fig. 98: Outside door opener and lock

Opening the door from the outside:

☞ *Push door handle A up.*

Locking the door:

☞ *Turn the key in door lock B to the **left** L.*

☞ The door is locked

Unlocking the door:

☞ *Turn the key in door lock B to the **right** R.*

☞ The door is unlocked

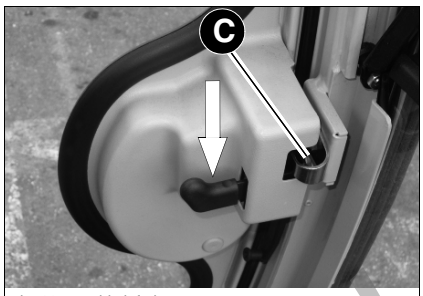


Fig. 99: Inside left door opener

Opening the door from the inside:

☞ *Press the lever on the inside left on door lock C down.*

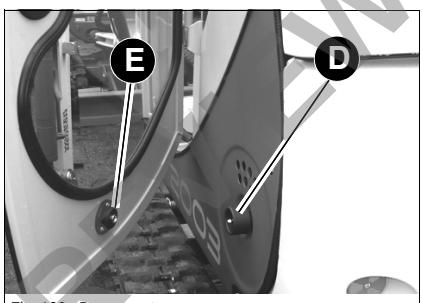


Fig. 100: Door arrester

Securing an open door:

☞ *Press the door against bracket D of arrester E with an audible click.*

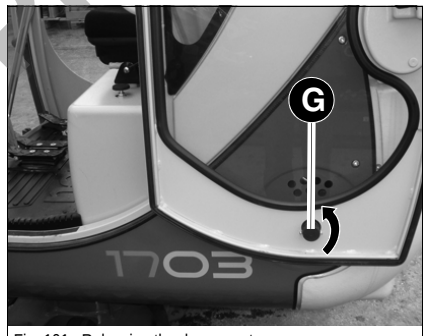


Fig. 101: Releasing the door arrester

Releasing the door opener:

Turn button G to release the door from the arrester.

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

3.49 Re-equipping attachments

Re-equipping the attachments is described below for a bucket. If you are fitting or removing attachments with their own hydraulic functions – e.g. grab or offset bucket – you must follow the special information given in the Operator's Manual of the attachment.
Also refer to the Operator's Manual of the attachment for the procedure to follow for fitting an attachment onto a quickhitch.

Specific safety instructions

- Driving in pins with a plastic hammer can cause them to splinter, which can cause severe personal injury.
  ☞ Always wear goggles, a hard hat, protective gloves, safety shoes and other suitable protective clothing.
- Do not stand behind the bucket when removing pins.
  ☞ Do not place your foot underneath the bucket.
- Pay special attention to your fingers when removing and reinserting pins.
- Never insert fingers in the bores of the pins as you align them.



Danger!

Re-equipping attachments –

Danger of personal injury!

☞ *Avoid accidents and injuries by following the information below:*

- Stop the engine
- Fold the control lever base up
- Re-equip attachments only with suitable tools
- Do not align components with your fingers or your hands but use suitable tools – danger of crushing!

☞ *Once you have re-equipped the attachments, or before starting work, make sure the attachment is safely locked with the stick and the tilt rod, or with the quickhitch (options).*

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

5.6 Engine lubrication system

Caution!

If the engine oil level is too low or if an oil change is overdue, this can cause

Engine damage or loss of output!

☞ *Have the oil changed by an authorised workshop*
– see chapter 5.20 Maintenance plan (overview) on page 5-35

Checking the oil level

Notice!

Check the oil level once a day.
We recommend checking it before starting the engine. After stopping a warm engine, wait at least 5 minutes before checking.

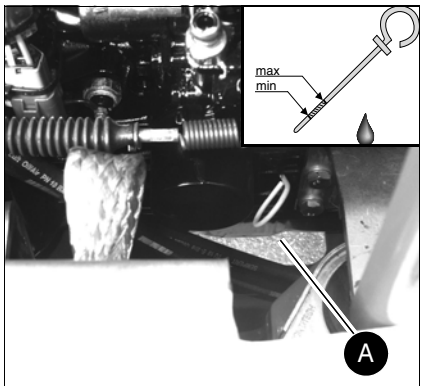


Fig. 213: Checking the oil level

☞ *Proceed as follows:*

- Park the machine on level ground
- Stop the engine!
- Fold the control lever base up
- Let the engine cool down
- Open the engine cover
- Clean the area around the oil dipstick with a lint-free cloth
- Oil dipstick A:

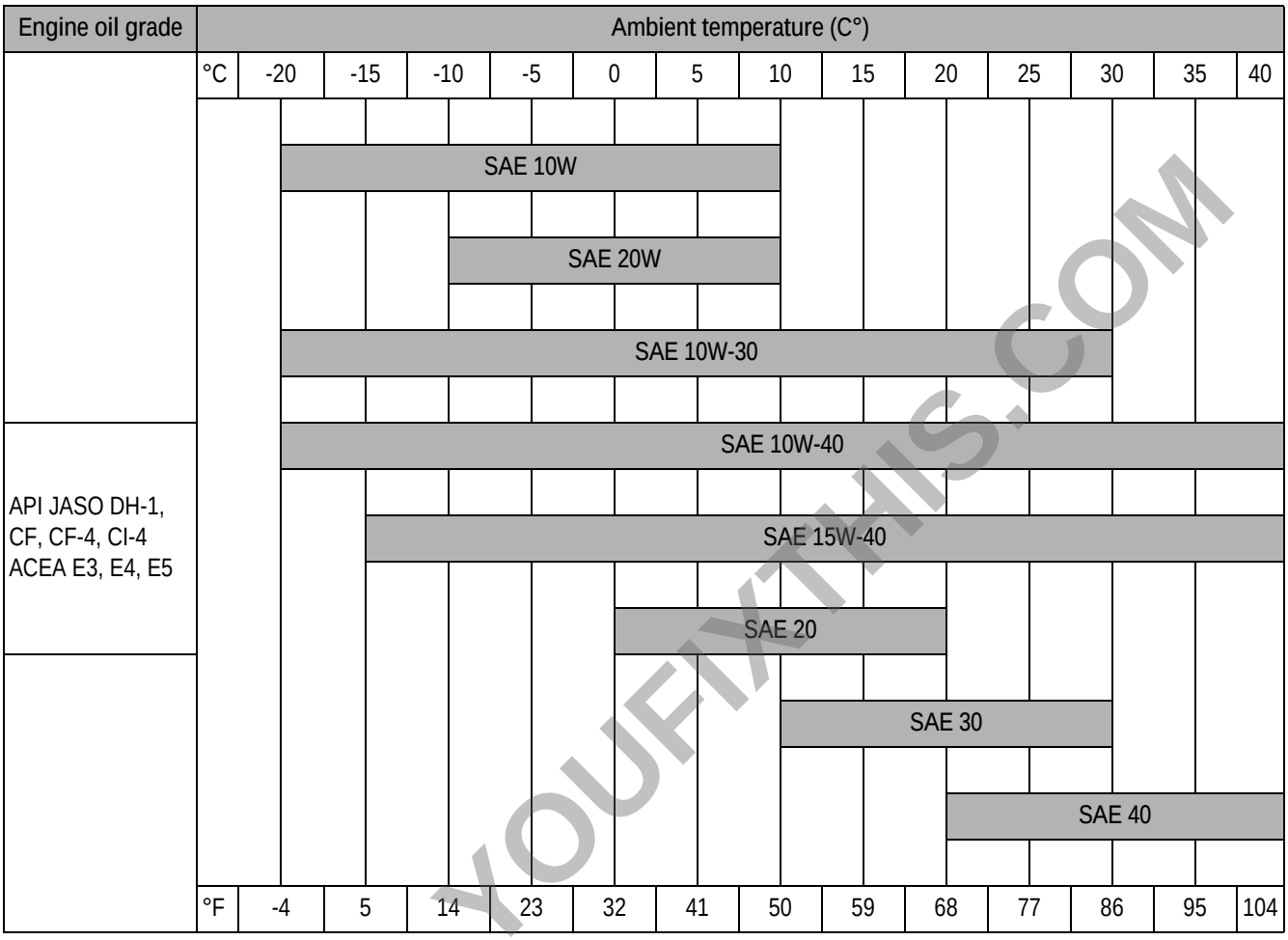
☞ Pull it out
☞ Wipe it with a lint-free cloth
☞ Push it back in as far as possible
☞ Withdraw it and read off the oil level

☞ *However if necessary, fill up oil at the latest when the oil reaches the MIN mark on the oil dipstick* A

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.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	

Oil grades for the hydraulic system, depending on temperature

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

PREVIEW ONLY

You're viewing 12 of 202 pages

The full manual includes:

- All 202 pages, complete
- Searchable PDF (find any keyword)
- No watermarks
- Instant download
- Print-ready quality

GET FULL MANUAL NOW

Wacker Neuson 1703, 2003 Operator Manual

Scan or click anywhere
youfixthis.com

Click anywhere on this page to get the full manual