# Operator's Manual

Mobile excavator

9503




| | |
|---|---|
| **Machine model** | **9503** |
| **Edition** | **2.0** |
| **Order no.** | **1000171927** |
| **Language** | **EN** |

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## Right-hand side control lever (Powertilt)

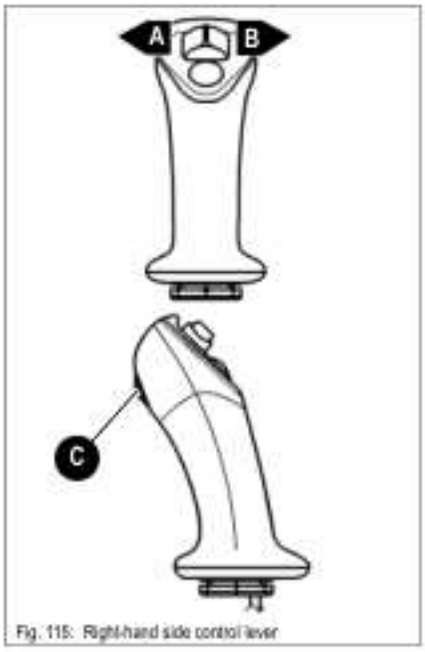


Fig. 115: Right-hand side control lever

The Powertilt functions are operated with the right-hand side control lever.

| Position | Lever | Function |
|---|---|---|
| • A | ☞ *To the left* | ➥ Powertilt turns to the left |
| • B | ☞ *To the right* | ➥ Powertilt turns to the right |
| • C | | Changeover between:<br>• Powertilt and<br>• 3rd control circuit |

## Enabling the 3rd control circuit

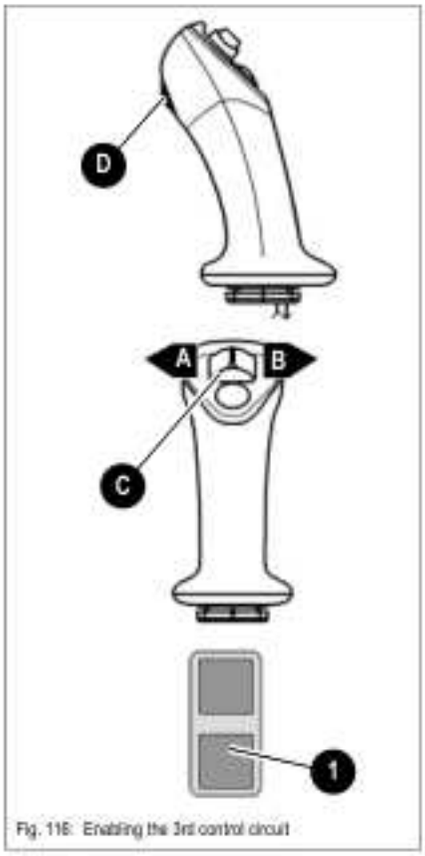


Fig. 116: Enabling the 3rd control circuit

☞ *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.*



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## 5.5 Air filter

### Caution!

The filter cartridge will be damaged if it is washed or brushed out!
Bear in mind the following to avoid premature engine wear!

- *Do not clean the filter cartridge*
- *Replace the filter cartridge when the telltale comes on*
- *Never reuse a damaged filter cartridge*
- *Ensure cleanliness when replacing the filter cartridge!*

Telltale **59** in the round display element monitors the filter cartridge.

*Replace outside filter **B** and inside filter **C**:*

- If telltale **59** in the round display element comes on
- According to the maintenance plan

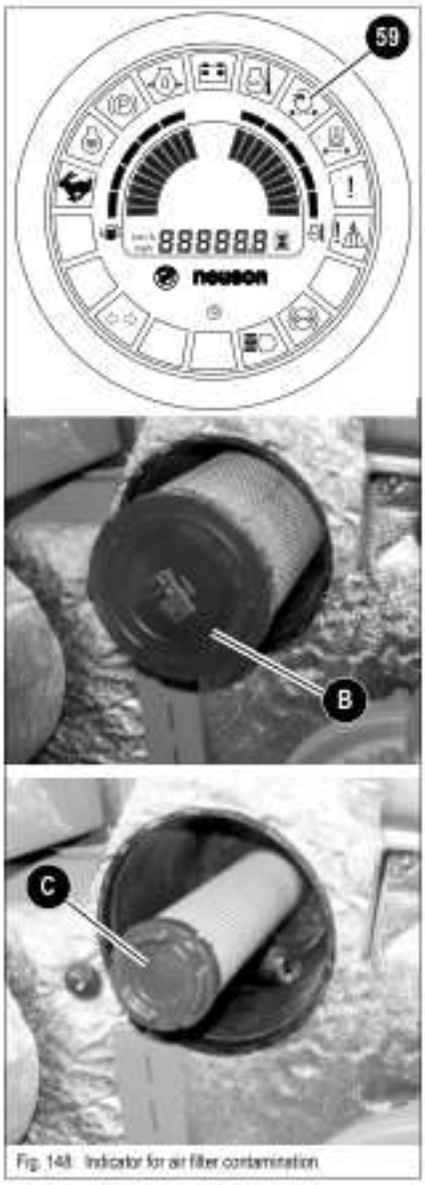


Fig. 148: Indicator for air filter contamination

### Notice!

For **applications in especially dusty environment**, the air filter is fitted with an extra inside filter **C**. Do not clean inside filter **C**.

### Caution!

Filter cartridges degrade prematurely when in service in acidic air for longer periods of time. This risk is present for example in acid production facilities, steel and aluminium mills, chemical plants and other nonferrous-metal plants.

*Replace outside filter **B** and inside filter **C** at the latest after 50 service hours!*

General instructions for air filter maintenance:

- Store filters in their original packaging and in a dry place
- Do not knock the filter against other objects as you install it
- Check air filter attachments, air intake hoses and air filters for damage, and immediately repair or replace if necessary
- Check the screws at the induction manifold and the clamps for tightness
- Check the function of the dust valve, replace if necessary



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## 5.19 Fluids and lubricants

| Component/ application | Engine/machine fluid | Specification | Season/ temperature | Capacities[1] |
|---|---|---|---|---|
| Diesel engine | Engine oil | API CG-4, CH-4,CI-4 | -20 °C +40 °C | 15 l |
| | | ACEA: E7-04, E3-96, E5-02 (SAE 10W40)[2] | | |
| Hydraulic oil tank | Hydraulic oil | HVLP46[3] | Year-round[4] | 169 l |
| | Biodegradable oil[5] | PANOLIN HLP Synth 46 | | |
| | | FINA BIOHYDRAN SE 46 | | |
| | | BP BIOHYD SE-46 | | |
| Grease | Roller and friction bearings[6] | FINA Energrease L21M | Year-round | As required |
| | Open gear[7] (live ring gears) | BP Energrease MP-MG2 | Year-round | As required |
| Cardan shaft | Multipurpose grease[8] | BP Energrease LC2 | Year-round | As required |
| Grease nipples | Multipurpose grease[9] | BP Energrease L21 M | Year-round | As required |
| Battery terminals | Acid-proof grease[10] | FINA Marson L2 | Year-round | As required |
| Fuel tank | Diesel fuel | 2-D ASTM D975 – 02 (USA) | | 170 l |
| | | 1-D ASTM D975 – 02 (USA) | | |
| | | EN 590 : 2004 (EU) | | |
| | | | | |
| | | DIN 51603 [11] | | |
| | | BS 2869 – A2 (GB) [9] | | |
| Radiator | Coolant | Soft water + antifreeze ASTM D4985 | Year-round | About 11.5 l |
| | | Distilled water + antifreeze ASTM D4985 | | |

1. The capacities indicated are approximative values; the oil level check alone is relevant for the correct oil level. Capacities indicated are no system fills.
2. According to DIN 51511
3. According to DIN 51524 section 3
4. Depending on local conditions – SEE **Hydraulics oil grade** on page 5-48
5. Hydraulic ester oils (HEES)
6. KF2K-25 according to DIN 51502 multipurpose lithium grease with $MoS^2$ additive
7. KP2N-20 according to DIN 51502 EP multipurpose calcium sulphonate complex grease
8. KP2N-30 according to DIN 51502 lithium complex
9. KF2K-25 according to DIN 51502 multipurpose lithium grease with $MoS^2$ additive
10. Standard acid-proof grease
11. Bear in mind the country-specific legislation!



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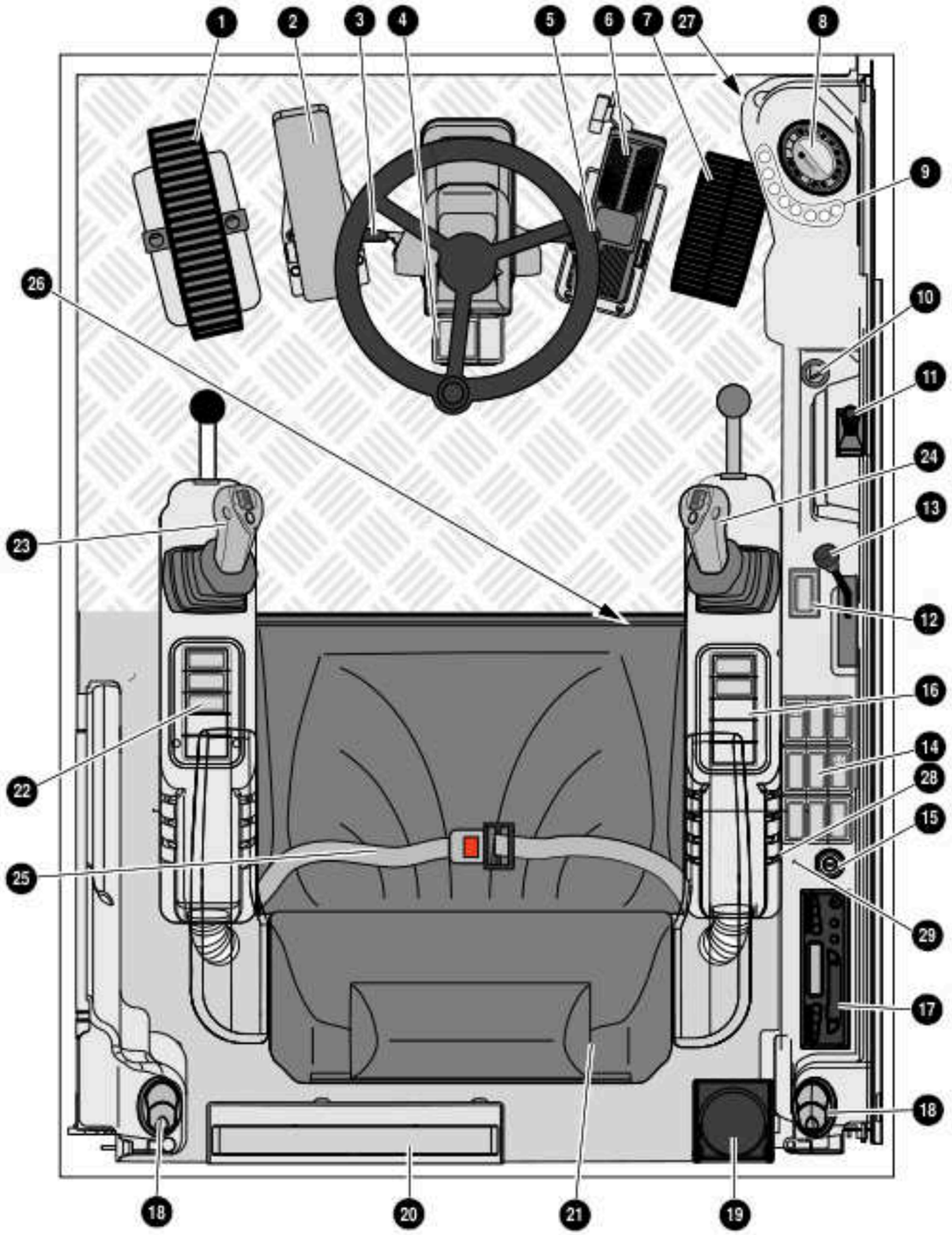



Fig. 1: Cab overview

## 3.1 Cab overview

| Cab | | |
|---|---|---|
| 1 | Hammer pedal boom swivel controls/auxiliary hydraulics/triple articulation boom (option) | 3-68 |
| 2 | Drive pedal hydraulically active in work position | 3-21 |
| 3 | Forwards/reverse driving direction lever; and down = fast/up = slow | 3-21, 3-23 |
| 4 | Steering column adjustment | 3-28 |
| 5 | Multifunctional lever lights/horn/turn indicators | 3-39 |
| 6 | Brake pedal | 3-16 |
| 7 | Accelerator pedal (automotive driving) | 3-23 |
| 8 | Display | 3-8 |
| 9 | Other displays | |
| 10 | Cigarette lighter | |
| 11 | Lever for outriggers/stabiliser blade (option) | 3-33, 3-34, 3-35 |
| 12 | Safe load indicator switch (option) | 3-98 |
| 13 | Throttle | 3-10 |
| 14 | Lateral switch panel | |
| 15 | Ignition lock | 3-11 |
| 16 | Switch panel on right-hand side control lever base | |
| 17 | Radio (option) | |
| 18 | Rear air vent | |
| 19 | Drinks holder | |
| 20 | Document storage bin | |
| 21 | Seat | 3-44 |
| 22 | Switch panel on left-hand side control lever base | |
| 23 | Left-hand side joystick | 3-68, 3-71, 3-73, 3-76 |
| 24 | Right-hand side joystick | 3-68, 3-71, 3-73, 3-76 |
| 25 | Seat belt | 3-46 |
| 26 | Heating controls/leg room air vent | 3-41 |
| 27 | Front window air vents | |
| 28 | Drive interlock (option) emitter/receiver unit | 3-13 |
| 29 | Drive interlock (option) telltale | 3-13 |



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