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|------------|-----|
| 0309       |     |

# **Track Excavator**

# 1404



**OPERATOR'S MANUAL** 



www.wackerneuson.com



### 1 Introduction

### 1.1 Important operator information

Store the Operator's Manual in the storage compartment under the seat.

This Operator's Manual contains important information on how to work safely, correctly and economically with the machine. It provides information and instructions for all operators, regardless of their experience level. It helps to avoid dangerous situations and reduce repair costs and downtimes. Furthermore, the reliability and the service life of the machine will be increased by following the instructions in the Operator's Manual. This is why the Operator's Manual must always be kept at hand in the machine.

Your own safety, as well as the safety of others, depends to a great extent on how the machine is moved and operated. Thoroughly read and understand the information in this Operator's Manual before operating the machine for the first time. This Operator's Manual will help to familiarize yourself more easily with the machine, thereby enabling you to use it more safely and efficiently.

Before operating the machine for the first time, carefully read the section "Safety Instructions" to learn how to operate the machine safely. As a rule, keep the following in mind: Careful and prudent working is the best way to avoid accidents!

### **Special instructions**

- Instructions are provided for bucket attachments. No instructions are provided for other attachments. Refer to the specific attachment operator's manual for safe operation.
- Wacker Neuson reserves the right to make product improvement changes during the course of series production of this machine.
- Modifying the manufacturer specification and configuration of this machine, or using unapproved attachments, can cause personal hazards and damage the machine.
   Contact your Wacker Neuson dealer for additional information and clarification regarding modifications.

Operational safety and readiness of the machine do not only depend on your skill, but also on maintenance and service of the machine. This is why regular maintenance and service work is absolutely necessary. Extensive maintenance and repair work must always be performed by an expert with appropriate training. Insist on using Wacker Neuson original spare parts when performing maintenance and repair work. This ensures operational safety and readiness of your machine, and maintains its value.

- Special equipment and superstructures are not described in this Operator's Manual.
- · We reserve the right to improve the technical standard of our machines
- Modifying Wacker Neuson products and fitting them with additional equipment and tools not included in our delivery program requires written authorization from Wacker Neuson, otherwise warranty and product liability for possible damage caused by these modifications shall not be applicable.

Your Wacker Neuson dealer will be pleased to answer any further questions regarding the machine or the Operator's Manual.

### Abbreviations / symbols

- · This symbol stands for a list.
  - Subdivision within lists or an activity. Follow the steps in the recommended sequence.
- This symbol requires you to perform the activity described.
- Description of the effects or results of an activity.

n. s. = not shown.

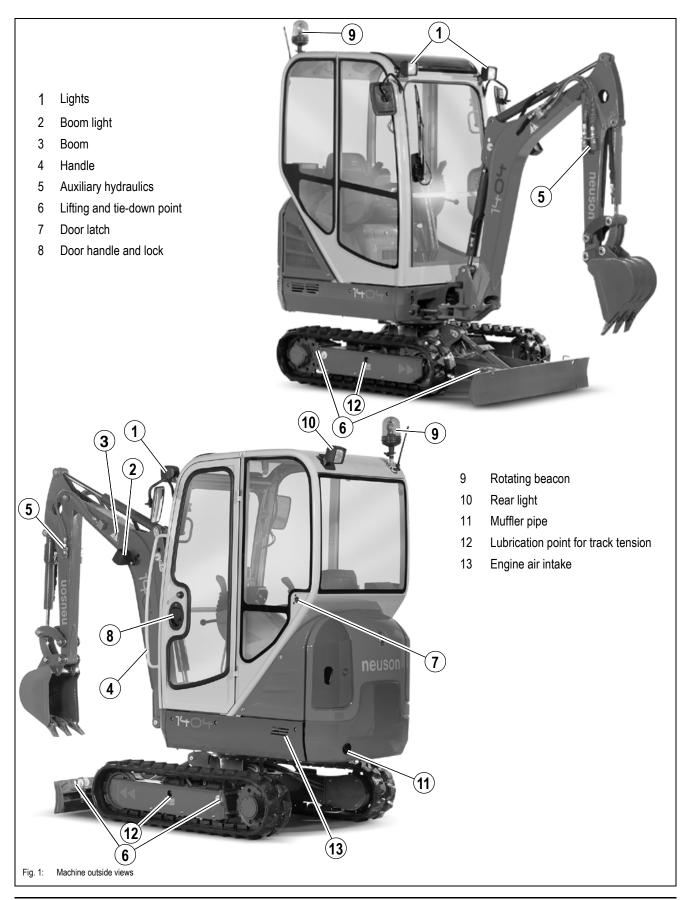
"Opt." = option; Stated whenever controls or other components of the machine are installed as an option.

This symbol shows the traveling direction – for better orientation in figures and graphics.





### 1.2 Machine overview





### 1.3 Brief description

The model 1404 excavator is a self-propelled work machine.

Get informed on and follow the legal regulations of your country regarding the use of excavators.

This machine is a versatile and powerful tool for moving earth, gravel and debris on construction sites and elsewhere. A wide range of attachments accounts for the numerous applications of the machine, among others hammer and grab applications. See *Chapter "Fields of application, attachments"* on page 1-4.

The main components of the machine are:

- FOPS (Falling Object Protective Structure), TOPS (Tip Over Protective Structure) and ROPS (Roll Over Protective Structure) tested open cab (standard)
- FOPS (Falling Object Protective Structure), TOPS (Tip Over Protective Structure) and ROPS (Roll Over Protective Structure) tested closed cab (option)
- Model 1404: water-cooled Yanmar three cylinder diesel engine
- · Sturdy steel sheet chassis; rubber-mounted engine

The diesel engine permanently drives the gear pump whose oil flow is sent to a hydraulic motor for each track drive.

The diesel engine drives the joint gear pump for the work hydraulics. The oil flow of this pump depends on the diesel engine speed only.

The indicator lights in the instrument panel of the machine ensure constant monitoring of the engine and hydraulic oil temperature, as well as of the coolant temperature and level.

Do not modify or attempt to repair the ROPS cab or ROPS structure. A bent or damaged ROPS will no longer protect the operator in the event of a tipping incident and must be replaced. Contact your Wacker Neuson dealer for instructions or clarification.

The ROPS is a special safety device designed and produced to exacting material and assembly standards for certification. Bending, heating, welding, cutting, or drilling holes in the ROPS will reduce the protection performance in a tipping incident.

Fasten your seatbelt, otherwise you may be thrown around or even outside the cab and crushed. Therefore always fasten your seatbelt as you drive and work with the machine. Tighten the seatbelt before starting work with the machine.

Traveling drive

Work hydraulics

Cooling system

Cab



### 1.4 Fields of application, attachments

The attachments installed determine the intended use of this machine.

### NOTICE

In order to avoid damage to the machine, only the attachments listed below have been certified for installation on the machine.

Contact your Wacker Neuson dealer if you wish to use other attachments.

Using tools of other manufacturers, or tools which have been released for other excavator types, may reduce the machine's output and stability considerably, and can also cause damage to the machine and injuries to the operator or the staff.

Always compare the weight of the tool and its maximum payload with the indications in the lift capacity table. Never exceed the maximum payload stated in the lift capacity table.

The measurements are Metric (Imperial).

Possible attachments

Use: attachment

| Description of attachment                   | Capacity                    | Item no.:  | Excavator | Remarks   |
|---|-----------------------------|------------|-----------|---|
| Complete quickhitch facility                | -                           | 1000004049 | 1404      | Required for operation of Wacker Neuson quickhitch system |
| Bucket B = 250 mm (9.8 in.)                 | 23 I (0.8 ft <sup>3</sup> ) | 1000093251 | 1404      | -   |
|   | 23 I (0.8 ft <sup>3</sup> ) | 1000017084 | 1404      | For quickhitch facility                                   |
| Bucket B = 300 mm (11.8 in.)                | 27 I (1.0 ft <sup>3</sup> ) | 1000093249 | 1404      | -   |
|   | 27 I (1.0 ft <sup>3</sup> ) | 1000017085 | 1404      | For quickhitch facility                                   |
| Bucket B = 400 mm (4.4 in.)                 | 35 I (1.2 ft <sup>3</sup> ) | 1000093252 | 1404      | -   |
|   | 35 I (1.2 ft <sup>3</sup> ) | 1000017087 | 1404      | For quickhitch facility                                   |
| Bucket B = 500 mm (1.8 in.)                 | 44 I (1.6 ft <sup>3</sup> ) | 1000093253 | 1404      | -   |
|   | 44 I (1.6 ft <sup>3</sup> ) | 1000017088 | 1404      | For quickhitch facility                                   |
| Bucket B = 600 mm (1.12 in.)                | 53 I (1.9 ft <sup>3</sup> ) | 1000093254 | 1404      | -   |
|   | 53 I (1.9 ft <sup>3</sup> ) | 1000017089 | 1404      | For quickhitch facility                                   |
| Offset bucket B = 850 mm (33.5 in.)         | 50 I (1.8 ft <sup>3</sup> ) | 1000093255 | 1404      | -   |
|   | 50 I (1.8 ft <sup>3</sup> ) | 1000017090 | 1404      | For quickhitch facility                                   |
| Offset bucket B = 1000 mm (39.4 in.)        | 56 I (2.0 ft <sup>3</sup> ) | 1000096515 | 1404      | -   |
|   | 56 I (2.0 ft <sup>3</sup> ) | 1000017091 | 1404      | For quickhitch facility                                   |
| Ditch cleaning bucket B = 850 mm (33.5 in.) | 69 I (2.4 ft <sup>3</sup> ) | 1000093460 | 1404      | -   |
|   | 68 I (2.4 ft <sup>3</sup> ) | 1000093335 | 1404      | For quickhitch facility                                   |



| Description of attachment                    | Capacity                    | Item no.:  | Excavator | Remarks                         |
|--|-----------------------------|------------|-----------|---------------------------------|
| Ditch cleaning bucket B = 1000 mm (39.4 in.) | 82 I (2.9 ft <sup>3</sup> ) | 1000096528 | 1404      | -                               |
|  | 80 I (2.8 ft <sup>3</sup> ) | 1000096518 | 1404      | For quickhitch facility         |
| Hammer mount console                         | -                           | 1000020344 | 1404      | Universal mount                 |
| Hammer mounting kit                          | -                           | 1000157326 | 1404      | Mount for Wacker Neuson hammers |

# 1.5 Operator qualifications

### Requirements to be met by the operator

Earth moving machinery may be moved and serviced only by persons who meet the following requirements:

- · 18 years or older.
- · Physically and mentally suited for this work.
- Persons have been instructed in driving and servicing the earth moving machinery and have proven their qualifications to the contractor.
- · Persons are expected to perform work reliably.
- They have been appointed by the contractor for driving and servicing the earth moving machinery.
- They are informed on and follow the legal regulations of your country.





### 1.6 EC Declaration of Conformity version 1404



WACKER NEUSON

### **EC Declaration of Conformity**

according to EC Directive 98/37/EC, 2000/14/EC Appendix 6

### Wacker Neuson Linz GmbH Haidfeldstrasse 37 A-4060 Linz-Leonding

declare, under their own responsibility, that the product

Product name Wacker Neuson track excavator 1404

Model 1404 Version 1404

Serial no.

to which this declaration refers, corresponds to the pertinent fundamental requirements regarding safety and health of

EC Directive 98/37/EC

and the requirements of further pertinent EC Directives and standards.

| ISO 3471 and<br>EN 13510 | Tested                     |      | Administrative unit reported according to Appendix 6                              |  |
|--------------------------|----------------------------|------|---|--|
| 2000/14/EC               | information<br>Noise level | dBA  | TÜV München<br>(Munich/Germany<br>Industrial Supervisory<br>Board) Westendstrasse |  |
|                          | Measured value             | 93   |   |  |
|                          | Guaranteed value           | 92.7 | 199<br>D-80686 Munich   |  |

The following standards and/or technical specifications have been used for the proper application of the requirements regarding safety and health stated in the EC Directives:

EN 474-1, EN 474-3, EN292-1, EN 292-2, ISO 3471, EN 13510;

Place of storage of technical documentation:

Wacker Neuson Linz GmbH

Department: R & D Haidfeldstr. 37

A-4060 Linz-Leonding

Linz-Leonding, (date) \_ \_ . \_ . \_ \_ .

Josef Erlinger

Wacker Neuson Linz GmbH

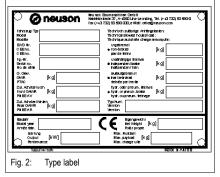




# 1.7 Type labels and component numbers



Fig. 1: Type label: location



### Serial number

The serial number is stamped on the machine chassis.

It is also located on the Product Identification Number plate riveted to the front left chassis of the machine.

Type label information

Example: 1404

Machine model: 1404

Serial no.: e.g. AF01272

Model year: 2006

Power, SAE: 13.2 kW (17.7 hp)
Dead weight: 1550 kg (3417 lbs)

Other information – see chapter 6 Specifications on page 6-1



### Cab certification number

The certification label (arrow) is located at the top right on the cab frame.



### Engine serial number

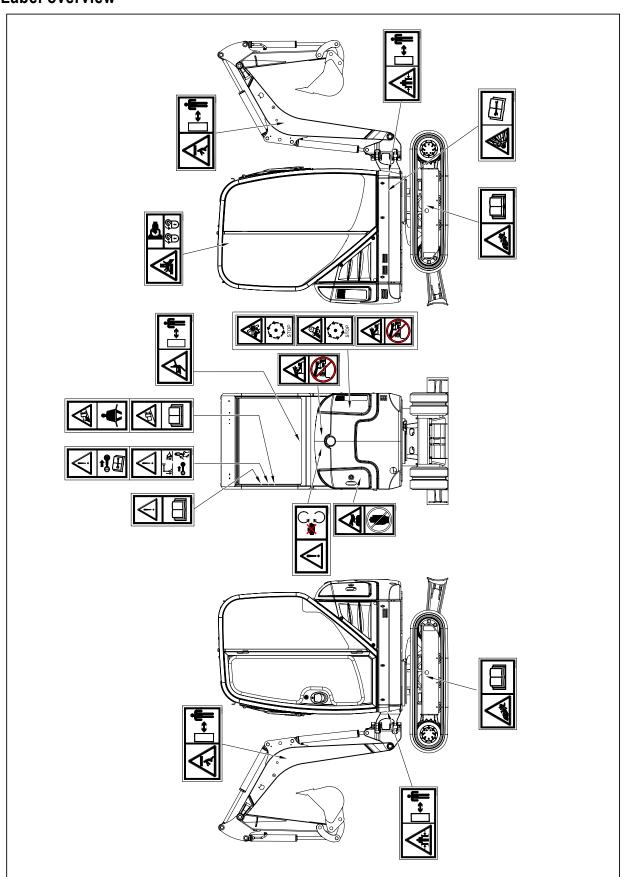
The type label (arrow) is located on the cylinder-head cover (engine).

**Example:** Yanmar 46557





# Label overview







### 1.8 Symbols

The following symbols are displayed on the machine to provide pictorial information to the user. The information and explanations are provided to avoid misinterpretation by the user. The symbols have been chosen to provide important information to those involved with operating, adjusting, maintaining, and repairing this machine.



Fig. 5: Eye hook label

### Description

Locates the lifting points for hoisting the excavator with lifting devices (slings, chains, or cables).

#### Location

On either side of the stabilizer blade, and on either side of the boom near the cylinder end of the stick hydraulic cylinder mounting and either side of cabin roof.



Fig. 6: Label for points used for strapping down the machine

### Description

Tie down points. Location points designated for tie down of the machine during transport to prevent movement during transport.

#### Location

On either side of the stabilizer blade, and on either side of the undercarriage.



Fig. 7: Noise level label

### Description

Noise levels produced by the machine.

L<sub>WA</sub> = sound power level

### Location

Cabin: On the left window. Canopy: On the seat console.

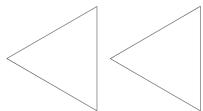


Fig. 8: Direction arrows

### Description

This label shows the **forward** driving direction.

#### Location

On each undercarriage at the idler end of the structure.



Fig. 9: Diesel

### Description

Fill location for diesel fuel only.

### Location

In engine compartment near fuel tank filter neck.





Fig. 10: Hydraulic oil

Hydraulic oil reservoir. Use hydraulic fluid only.

### Location

In engine compartment.

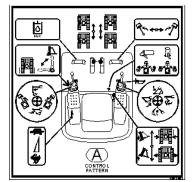


Fig. 11: Functios of the joysticks (control pattern "A")

### **Description**

Explains the functions of the joysticks (control pattern "A") and of other controls. If the machine is fitted with the "selection valve" check before starting the machine which control pattern you have chosen!

### Location

On the cabin roof.

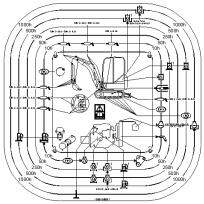


Fig. 12: Main service intervals

### Description

Shows the main service intervals. For complete list of service interval see the maintenance section of this Operator's Manual.

### Location

Cabin: On the rear window. Canopy: On roof window.

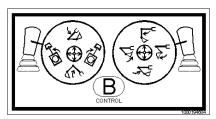


Fig. 13: Opt. Functions of the joysticks(control pattern "B")

### **Description (Opt.)**

Explains the functions of the joysticks (control pattern "B"). Check before starting the machine which control pattern you have chosen!

### Location

On the cabin roof.



# **Safety Labels**



Fig. 14: Tighten tracks

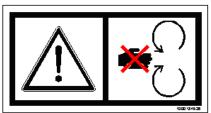


Fig. 15: Prohibitory label



Fig. 16: Front window

Always follow the instructions on the safety labels!

### **Description**

The label means the following:

- · Potential high pressure grease discharge from the track tension adjustment fitting.
- Always the maintenance section of this Operator's Manual before releasing or tightening the tracks to avoid potential injury from ejected grease.

#### Location

On the undercarriage near the opening to insert the grease fitting.

### Description

Stop the engine before opening or dismantling the safety devices ( like engine hood, fan guard,...)

### Location

On the engine cover.

### Description

 $\label{eq:point_point} \mbox{Pinch point hazard. Always use the handles to open and close the front window.}$ 

Always fasten the front window with both locks.

### Location

On front window.







Fig. 17: Rotating V-belt



Fig. 18: Hot surfaces



Fig. 19: Hydraulic oil tank under pressure

This safety label warns of the following hazards:

Cutting hazard. Cooling fan can cut when rotating. Stop engine before working on the engine or cooling system.

Entanglement hazard. You can be pinched or entlanged in the engine V-belt when the engine is running. Stop engine before working on the engine.

Hot surface and burn hazards. Do not touch.

Contents are under pressure. Do not remove cap.

### Location

In the engine compartment

### Description

Hot surface! Do not touch.

### Location

Engine compartment near muffler system.

### Description

The tank is hot and under pressure!

· Allow the fluids to cool down!

Carefully and slowly open the cover only after the fluids has cooled down, to allow the pressure to escape.

Wear safety goggles and gloves when opening the cover.

### Location

In the engine compartment.





Fig. 20: Front window

Always use the handles to open and close the front window.

Always fasten the front window with both locks.

### Location

On the front window.



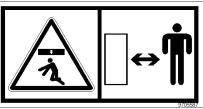
Fig. 21: Read the Operator's Manual

### Description

Attention! Read and understand the Operator's Manual before starting, operating, adjusting, maintaining, or repairing the machine.

### Location

On the b-pillar in the cabin.



### Description

Crushing hazard. Bystanders must stay clear of the machine when it is being operated.

### Location

On either side of the boom structure.

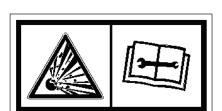


Fig. 23: Under pressure

Fig. 22: Keep distance 1

### Description

Accumulator is under high pressure. Always read Service Manual before maintaining or repairing the machine.

### Location

On the bracket near to the accumulator.

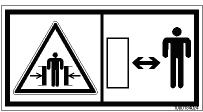


Fig. 24: Keep distance 2

### Description

Crushing hazard. Bystanders must stay clear of the machine when it is being operated.

On the left and right side of the boom swing console on the chassis.

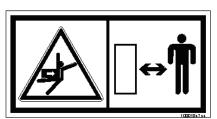


Fig. 25: Keep distance 3

### Description

Collision hazard. Bystanders must stay clear of the machine when it is being operated.

### Location

On the rear window.





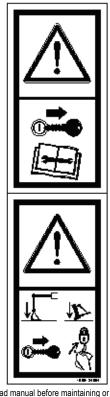


Fig. 26: Read manual before maintaining or repairing

Attention: Remove starter key and read the Service Manual before servicing the machine.

Attention: Before leaving the machine, lower all equipment to ground, remove the key and lock the controls Remove starter key and lock out machine.

### Location

On the b-pillar in the cabin.

### Description

Risk of being thrown from the machine. Operate the machine only from the operator's seat.

Fasten seat belt when operating the machine.

Operate within stability limits of machine to avoid tipping over.

Read the Operator's Manual.

### Location

On the b-pillar in the cabin.

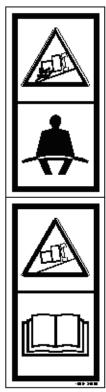
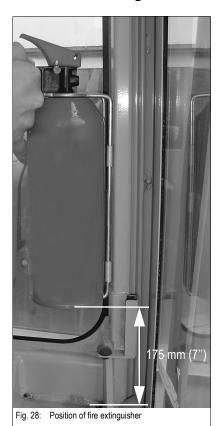


Fig. 27: Operator's seat and fasten seat





# 1.9 Fire extinguisher



The fire extinguisher is not supplied with the machine.

Retrofitting a fire extinguisher according to NFPA must be performed by an authorized Wacker Neuson service center.

#### ■ Location

⇒ In the cab, on the left in driving direction behind the seat (see Fig. 28).

### Installation:

- Mount the fire extinguisher on the cab profile according to the manufacturer's instructions.
- The maximum hole diamenter is 6mm (0.24")
- The maximum number of holes is two.



### Important!

Check the fire extinguisher at regular intervals, also make sure it is safely mounted.



