

Huskvarna, 2018-03-12

## **Safety and Operating Instructions**

Dear customer,

thank you for choosing a Husqvarna quality product. We hope that you will genuinely enjoy it.  
Please note that the enclosed manual contains Atlas Copco references.

The Husqvarna Group is vouching for the quality of this product.

If you have any questions, please do not hesitate to contact our local sales or service point.

Husqvarna AB  
561 82 Huskvarna, Sweden

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## Safety and operating instructions

### Beams and screeds





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## Introduction

Thank you for choosing a product from Atlas Copco. Since 1873, we have been committed to finding new and better ways of fulfilling our customers' needs. Through the years, we have developed innovative and ergonomic product designs that have helped customers improve and rationalize their daily work.

Atlas Copco has a strong global sales and service network, consisting of customer centers and distributors worldwide. Our experts are highly trained professionals with extensive product knowledge and application experience. In all corners of the world, we can offer product support and expertise to ensure that our customers can work at maximum efficiency at all times.

Construction Tools EOOD

7000 Rousse

Bulgaria

## About the Safety and operating instructions

The aim of the instructions is to provide you with knowledge of how to use the machine in an efficient, safe way. The instructions also give you advice and tell you how to perform regular maintenance on the machine.

Before using the machine for the first time you must read these instructions carefully and understand all of them.

## Safety instructions

To reduce the risk of serious injury or death to yourself or others, read and understand the Safety and operating instruction before installing, operating, repairing, maintaining, or changing accessories on the machine.

Post this Safety and operating instruction at work locations, provide copies to employees, and make sure that everyone reads the Safety and operating instruction before operating or servicing the machine. For professional use only.

In addition, the operator or the operator's employer must assess the specific risks that may be present as a result of each use of the machine.

Save all warnings and instructions for future reference.

## Safety signal words

The safety signal words Danger, Warning and Caution have the following meanings:

<b>DANGER</b>	Indicates a hazardous situation which, if not avoided, will result in death or serious injury.
<b>WARNING</b>	Indicates a hazardous situation which, if not avoided, could result in death or serious injury.
<b>CAUTION</b>	Indicates a hazardous situation which, if not avoided, could result in minor or moderate injury.

## Work area

### ▲ WARNING Secure the working area

Cluttered benches and insufficient lighting can cause personal accidents and result in serious injuries.

- ▶ Keep the working area clean.
- ▶ Maintain adequate lighting in the working area.

Only qualified and trained persons may operate or maintain the machine. They must be physically able to handle the bulk and weight of the machine. Always use your common sense and good judgement.

Keep bystanders, children, and visitors away while operating the machine. Distractions may cause loss of control.

## Personal safety

### Personal protective equipment

Always use approved protective equipment. Operators and all other persons in the working area must wear protective equipment, including at a minimum:

- Protective helmet
- Hearing protection
- Impact resistant eye protection with side protection
- Respiratory protection when appropriate
- Protective gloves
- Proper protective boots
- Appropriate work overall or similar clothing (not loose-fitting) that covers your arms and legs.

### Drugs, alcohol or medication

#### ▲ WARNING Drugs, alcohol or medication

Drugs, alcohol or medication may impair your judgment and powers of concentration. Poor reactions and incorrect assessments can lead to severe accidents or death.

- ▶ Never use the machine when you are tired or under the influence of drugs, alcohol or medication.
- ▶ No person who is under the influence of drugs, alcohol or medication may operate the machine.

#### ▲ WARNING Slipping, tripping and falling hazards

There is a risk of slipping or tripping or falling, for example tripping on the hoses or on other objects. Slipping or tripping or falling can cause injury. To reduce this risk:

- ▶ Always make sure that no hose or other object is in your way or in any other person's way.
- ▶ Always make sure you are in a stable position with your feet as far apart as your shoulders width and keeping a balanced body weight.

**▲ WARNING Dust and fume hazard**

Dusts and/or fumes generated or dispersed when using the machine may cause serious and permanent respiratory disease, illness, or other bodily injury (for example, silicosis or other irreversible lung disease that can be fatal, cancer, birth defects, and/or skin inflammation).

Some dusts and fumes created by compaction work contain substances known to the State of California and other authorities to cause respiratory disease, cancer, birth defects, or other reproductive harm. Some examples of such substances are:

- Crystalline silica, cement, and other masonry products.
- Arsenic and chromium from chemically-treated rubber.
- Lead from lead-based paints.

Dust and fumes in the air can be invisible to the naked eye, so do not rely on eye sight to determine if there is dust or fumes in the air.

To reduce the risk of exposure to dust and fumes, do all of the following:

- ▶ Perform site-specific risk assessment. The risk assessment must include dust and fumes created by the use of the machine and the potential for disturbing existing dust.
- ▶ Use proper engineering controls to minimize the amount of dust and fumes in the air and to minimize build-up on equipment, surfaces, clothing, and body parts. Examples of controls include: exhaust ventilation and dust collection systems, water sprays, and wet drilling. Control dusts and fumes at the source where possible. Make sure that controls are properly installed, maintained and correctly used.
- ▶ Wear, maintain and correctly use respiratory protection as instructed by your employer and as required by occupational health and safety regulations. The respiratory protection must be effective for the type of substance at issue (and if applicable, approved by relevant governmental authority).
- ▶ Work in a well ventilated area.
- ▶ If the machine has an exhaust, direct the exhaust so as to reduce disturbance of dust in a dust filled environment.
- ▶ Operate and maintain the machine as recommended in the operating and safety instructions
- ▶ Wear washable or disposable protective clothes at the worksite, and shower and change into clean clothes before leaving the worksite to reduce exposure of dust and fumes to yourself, other persons, cars, homes, and other areas.

- ▶ Avoid eating, drinking, and using tobacco products in areas where there is dust or fumes.
- ▶ Wash your hands and face thoroughly as soon as possible upon leaving the exposure area, and always before eating, drinking, using tobacco products, or making contact with other persons.
- ▶ Comply with all applicable laws and regulations, including occupational health and safety regulations.
- ▶ Participate in air monitoring, medical examination programs, and health and safety training programs provided by your employer or trade organizations and in accordance with occupational health and safety regulations and recommendations. Consult with physicians experienced in relevant occupational medicine.
- ▶ Work with your employer and trade organization to reduce dust and fume exposure at the worksite and to reduce the risks. Effective health and safety programs, policies and procedures for protecting workers and others against harmful exposure to dust and fumes must be established and implemented based on advice from health and safety experts. Consult with experts.

## Operating, precautions

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**▲ WARNING Incorrect usage**

An incorrect use of the machine, accessories, and insertion tools/ cutting blades can result in serious injuries or a hazardous situation.

- ▶ Use the machine, accessories and tools in accordance with the safety instructions.
- ▶ Use the machine for what it is designed for, and in the way it is intended.
- ▶ Use the correct machine for the work that is going to be performed.
- ▶ Do not force the machine while operating.
- ▶ Take the working conditions into account.

## Maintenance, precautions

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**▲ WARNING Machine modification**

Any machine modification may result in bodily injuries to yourself or others.

- ▶ Never modify the machine. Modified machines are not covered by warranty or product liability.
- ▶ Always use original parts and accessories approved by Atlas Copco.
- ▶ Change damaged parts immediately.



- ▶ Replace worn components in good time.

### **▲ WARNING Damaged machine parts**

Lack of maintenance will result in damaged or worn parts that can cause accidents.

- ▶ Check the moving parts for misalignment or binding.
- ▶ Check the machine for broken or, in other ways, damaged parts.

Damaged or worn parts can effect the operation of the machine.

## **Storage**

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- ◆ Keep the machine in a safe place, out of the reach of children and locked up.

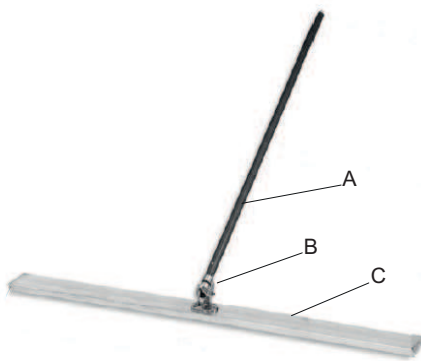
## Overview

To reduce the risk of serious injury or death to yourself or others, read the Safety instructions section found on the previous pages of this manual before operating the machine.

## Design and function

BV 20H is a non-vibrating beam and is not equipped with a motor vibrator.

## Main parts



- A. Handle
- B. Turn head
- C. Beam

## Operation

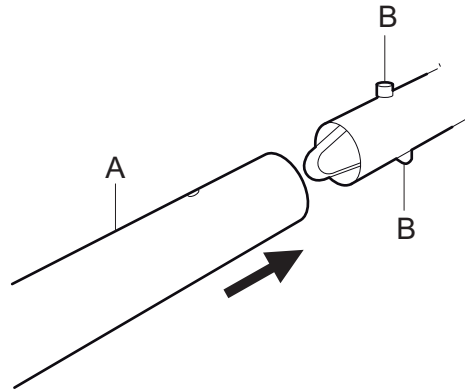
### Preparations before operating

#### Operating

**NOTICE** The handle is disassembled to save space when transporting.

#### Assembly of handle link

Install the handle link (A). Check that the blocking pins (B) engages the holes in the tube to lock the handle and link firmly together.



#### Preparations

##### BV 20H

1. Check the general condition of the equipment.  
*NOTICE* Replace any damaged part immediately.

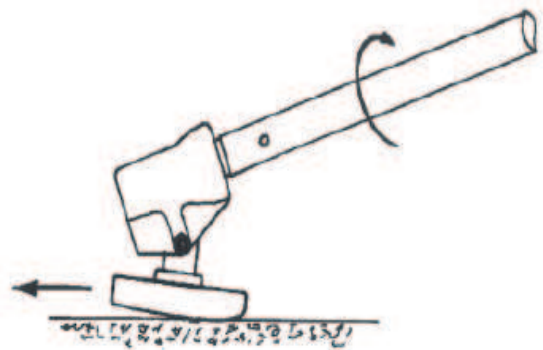
#### General inspection

Before using the BV 20H:

1. Clean and inspect the machine and the functions before use.
2. Check for damages.

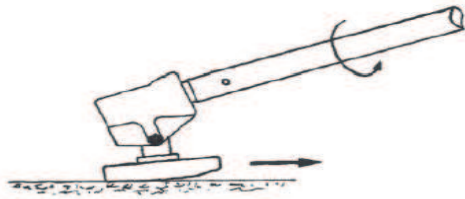
#### Adjusting the work angle

1. Slide the beam on the surface of the concrete.
2. Simultaneously turn the handle link in the counter clockwise direction.



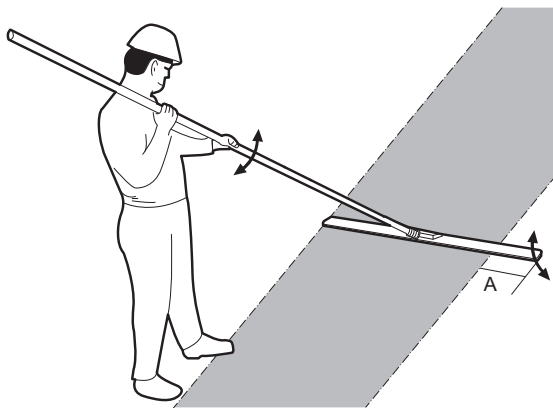
3. Position the handle link on your shoulder.
4. Pull the beam backwards.

5. Simultaneously turn the handle link to adjust the work angle so the edge of the beam closest to you is slightly raised.



**Use**

1. Spray form oil under the beam to stop it from sticking to the concrete.
2. Place the beam at the beginning of the first section.
3. Turn the handle link to obtain the optimum beam angle on the concrete surface. See section “Adjusting the work angle”.
4. Position the handle link on your shoulder.
5. Slowly walk backwards pulling on the beam. The footprints are removed by the beam.
6. When you smooth the next section, position the beam so that it overlaps about 15 cm (5.9 in.) (A) on the already smoothed surface.



**When taking a break**

- ◆ Make sure to place the machine on the ground, so that it can not fall.

*NOTICE* Never use the beam to move the concrete sideways.

**Maintenance**

Regular maintenance is a basic requirement for the continued safe and efficient use of the machine. Follow the maintenance instructions carefully.

- ◆ Before starting maintenance on the machine, clean it in order to avoid exposure to hazardous substances. See “Dust and fume hazard”.
- ◆ Use only authorised parts. Any damage or malfunction caused by the use of unauthorised parts is not covered by warranty or product liability.
- ◆ When cleaning mechanical parts with solvent, comply with appropriate health and safety regulations and ensure there is satisfactory ventilation.
- ◆ For major service of the machine, contact the nearest authorised workshop.

**Every 10 hours of operation (daily)**

**Lubrication**

*NOTICE* Do not mix grease with different characteristics.

It may be necessary to grease the rotation device between the handle link and the beam after prolonged use. Use a grease of the type Shell Regina 2 or an equivalent type of grease.

**Every 75 hours of operation (or every second week)**

**Every day**

Clean the beam with water and a brush after use. Hardened concrete is difficult to remove and a clean surface is important for a good work result.

Apply a thin coat of lubricant (oil) to the beam to facilitate the next cleaning operation.

**BV 20H**

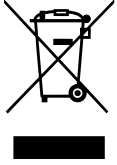
- ◆ Check the nuts and bolts. Tighten them if necessary.

**Storage**

- ◆ Clean the machine properly before storage, in order to avoid hazardous substances. See section “Dust and fume hazard”.
- ◆ Always store the machine in a dry place.

## Disposal

A used machine must be treated and disposed in such way that the greatest possible portion of the material can be recycled and any negative influence on the environment is kept as low as possible, and in accordance with local restrictions.



# Technical data

## Weights and dimensions

	BV 20H
Total weight, kg (lbs)	7,5 (16,5)
Handle link weight kg (lbs)	1,3 (2,9)
Beam dimensions: L x W x H mm (in.)	2000 x 152 x 35 (78.7 x 5.98 x 1.37)
Handle tube dimensions (2 pcs.): L x W x H mm (in.)	1,800 x 2, Ø44 (70.86 x 0.08, Ø1.73)
Working width of the beam, m (ft.)	2 (6.56)

## Dimensions

mm (in.)

### BV 20H

