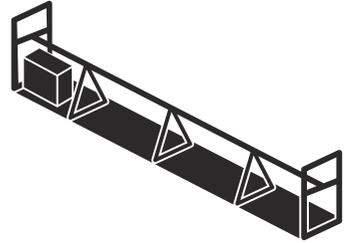


# Husqvarna®



BE 20, BE 30, BD 32, BD 42, BD 52, BD 62

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## Contents

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## Introduction

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### California Proposition 65

 **WARNING!**

The engine exhaust from this product contains chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.

### Product description

The product is a system for concrete vibration. The product has an electric (BE 20) or a gasoline (BE 30)

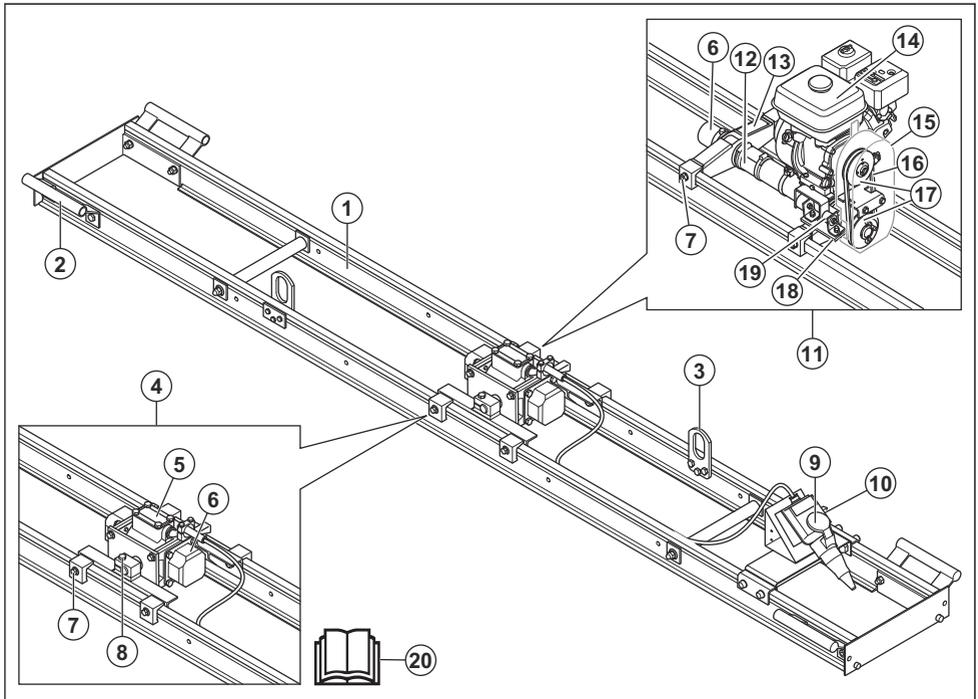
drive unit. The drive unit is used together with a BD beam. These BD double beams are vibrating beams intended for compaction and levelling of concrete during its placement. The BD beams have 2 parallel aluminum beams and are available in different dimensions.

### Intended use

The product is for professional operation only. The product is used for compaction of concrete, to make areas of concrete level and to make the surface smooth. The product is used on medium to large concrete floors. The product can be used for vibrations at a maximum depth of 150 mm. The drive unit BE 20 can also be used for surface vibration.

Do not use the product for other tasks.

## Product overview



1. Beam (BD)
2. Handle
3. Lifting eye
4. Electric drive unit (BE 20)
5. Rating plate
6. Eccentric weights
7. Adjustment screw for position on the beam
8. Adjustment screw for horizontal or vertical vibrations
9. Electrical connection (BE 20)
10. ON/OFF switch (BE 20)
11. Fuel drive unit (BE 30)
12. Shaft
13. Type plate
14. Engine
15. Drive belt cover
16. Drive belt
17. Pulleys
18. Vibration element
19. Vibration damping units
20. Operator's manual

## Symbols on the product



**WARNING:** This product can be dangerous and cause serious injury or death to the operator or others. Be careful and use the product correctly.



Read the manual carefully and make sure that you understand the instructions before you use the product.



Use hearing protection.



Use protective gloves.



Do not touch the pulleys. Risk of injury.



Lifting point on the safety frame.



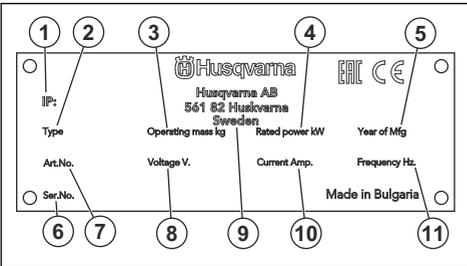
Noise emission to the environment as referred to in the EC directive. The emission of the product is specified in *Technical data* on page 16 and on the label.



This product is in compliance with applicable EC directives.

**Note:** Other symbols/decals on the product refer to special certification requirements for some markets.

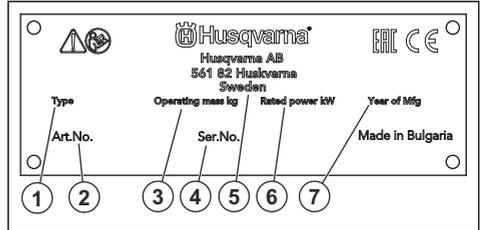
## Rating plate (BE 20)



1. IP classification
2. Product type
3. Product weight
4. Rated power
5. Production year
6. Serial number

7. Product number
8. Voltage, V
9. Manufacturer
10. Current, A
11. Frequency, Hz

## Type plate (BE 30)



1. Product type
2. Product number
3. Product weight
4. Serial number
5. Manufacturer
6. Rated power
7. Production year

## Product liability

As referred to in the product liability laws, we are not liable for damages that our product causes if:

- the product is incorrectly repaired.
- the product is repaired with parts that are not from the manufacturer or not approved by the manufacturer.
- the product has an accessory that is not from the manufacturer or not approved by the manufacturer.
- the product is not repaired at an approved service center or by an approved authority.

## Safety

### Safety definitions

Warnings, cautions and notes are used to point out specially important parts of the manual.



**WARNING:** Used if there is a risk of injury or death for the operator or bystanders if the instructions in the manual are not obeyed.



**CAUTION:** Used if there is a risk of damage to the product, other materials or the adjacent area if the instructions in the manual are not obeyed.

**Note:** Used to give more information that is necessary in a given situation.

### General safety instructions



**WARNING:** Read the warning instructions that follow before you use the product.

- This product is a dangerous tool if you are not careful or if you use the product incorrectly. This product can cause serious injury or death to the operator or others. Before you use the product, you must read and understand the contents of this operator's manual.
- Save all warnings and instructions.
- Comply with all applicable laws and regulations.

- The operator and the employer of the operator must know and prevent the risks during operation of the product.
- Do not let a person operate the product unless they read and understand the contents of the operator's manual.
- Do not operate the product unless you receive training before use. Make sure that all operators receive training.
- Do not let a child operate the product.
- Only let approved persons operate the product.
- The operator is responsible for accidents that occur to other persons or their property.
- Do not use the product if you are tired, ill, or under the influence of alcohol, drugs or medicine.
- Always be careful and use your common sense.
- This product produces an electromagnetic field during operation. This field can under some circumstances interfere with active or passive medical implants. To decrease the risk of serious injury or death, we recommend persons with medical implants to speak to their physician and the medical implant manufacturer before operating this product.
- Keep the product clean. Make sure that you can clearly read signs and decals.
- Do not use the product if it is defective.
- Do not do modifications to this product.
- Do not operate the product if it is possible that other persons have done modifications to the product.
- Before you go away from the product, stop the product and disconnect the power source.
- Make sure that the power outlet voltage agrees with the voltage that is given on the rating plate of the product.
- Make sure that clothes, long hair and jewelry do not get caught in moving parts.
- Do not sit on the product.
- Do not hit the product.
- Make sure that you or other persons cannot get caught in and fall on cables, hoses and shafts in the work area.
- Before you operate the product, find out if there are hidden wires, electrical cables or other sources of electricity. Do not operate the product unless you know that it is in a safe work area.

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### Vibration safety



**WARNING:** Read the warning instructions that follow before you use the product.

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- During operation of the product, vibrations go from the product to the operator. Regular and frequent operation of the product can cause or increase the degree of injuries to the operator. Injuries can occur in fingers, hands, wrists, arms, shoulders, and/or nerves and blood supply or other body parts. The injuries can be debilitating and/or permanent, and can increase gradually during weeks, months or years. Possible injuries include damage to the blood circulation system, the nervous system, joints, and other body structures.
- Symptoms can occur during operation of the product or at other times. If you have symptoms and continue to operate the product, the symptoms can increase or become permanent. If these or other symptoms occur, get medical aid:
  - Numbness, loss of feeling, tingling, pricking, pain, burning, throbbing, stiffness, clumsiness, loss of strength, changes in skin color or condition.
- Symptoms can increase in cold temperatures. Use warm clothing and keep your hands warm and dry when you operate the product in cold environments.
- Do maintenance on and operate the product as given in the operator's manual, to keep a correct vibration level.
- The product has a vibration damping system that decreases the vibrations from the handles to the operator. Let the product do the work. Do not push the product with force. Hold the product at the handles lightly, but make sure that you control the product and operate it safely. Do not push the handles into the end stops more than necessary.
- Keep your hands on the handle or handles only. Keep all other body parts away from the product.

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### Safety instructions for operation



**WARNING:** Read the warning instructions that follow before you use the product.

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- Make sure that you know how to stop the product quickly in an emergency.
- The operator must have the physical strength that is necessary to operate the product safely.
- Use personal protective equipment. Refer to *Personal protective equipment on page 6*.
- Make sure that only approved persons are in the work area.
- Keep the work area clean and bright.
- Make sure that you are in a safe and stable position during operation.
- Make sure that there is no risk that you or the product can fall from a height.
- Make sure that there is no grease or oil on the handle.
- Do not use the product in areas where fire or explosions can occur.
- The product can cause objects to eject at high speed. Make sure that all persons in the work area use approved personal protective equipment. Remove loose objects from the work area.

- Stop the product immediately if strong vibrations suddenly occurs. Do not continue the operation before the cause of the increased vibrations is removed.

- Do not breathe the exhaust fumes.
- Make sure that the airflow in the work area is sufficient. This is very important when you operate the product in trenches or other small work areas where exhaust fumes can easily collect.

## Dust safety

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**WARNING:** Read the warning instructions that follow before you use the product.

- Operation of the product can cause dust in the air. Dust can cause serious injury and permanent health problems. Silica dust is regulated as harmful by several authorities. These are examples of such health problems:
  - The fatal lung diseases chronic bronchitis, silicosis and pulmonary fibrosis
  - Cancer
  - Birth defects
  - Skin inflammation
- Use correct equipment to decrease the quantity of dust and fumes in the air and to decrease dust on work equipment, surfaces, clothing and body parts. Examples of controls are dust collection systems and water sprays to bind dust. Decrease dust at the source where possible. Make sure that the equipment is correctly installed and used and that regular maintenance is done.
- Use approved respiratory protection. Make sure that the respiratory protection is applicable for the dangerous materials in the work area.
- Make sure that the airflow is sufficient in the work area.
- If it is possible, point the exhaust of the product where it cannot cause dust to go into the air.

## Noise safety

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**WARNING:** Read the warning instructions that follow before you use the product.

- High noise levels and long-term exposure to noise can cause noise-induced hearing loss.
- To keep the noise level to a minimum, do maintenance on and operate the product as given in the operator's manual.
- Examine the muffler for damages and defects. Make sure that the muffler is correctly attached to the product.
- Use approved hearing protection while you operate the product.
- Listen for warning signals and voices when you use hearing protection. Remove the hearing protection when the product is stopped, unless hearing protection is necessary for the noise level in the work area.

## Personal protective equipment

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**WARNING:** Read the warning instructions that follow before you use the product.

- Always use approved personal protective equipment when you operate the product. Personal protective equipment cannot fully prevent injury but it decreases the degree of injury if an accident does occur. Let your dealer help you select the correct personal protective equipment.
- Regularly do a check of the condition of the personal protective equipment.
- Use an approved protective helmet.
- Use approved hearing protection.
- Use approved respiratory protection.
- Use approved eye protection with side protection.
- Use protective gloves.
- Use boots with steel toe-cap and non-slip sole.
- Use approved work clothing or equivalent close-fitting clothing that has long sleeves and long legs.

## Exhaust fumes safety

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**WARNING:** Read the warning instructions that follow before you use the product.

- The exhaust fumes from the engine contain carbon monoxide which is an odourless, poisonous and very dangerous gas. To breathe carbon monoxide can cause death. Because carbon monoxide is odourless and cannot be seen, it is not possible to sense it. A symptom of carbon monoxide poisoning is dizziness, but it is possible that a person becomes unconscious without warning if the quantity or concentration of carbon monoxide is sufficient.
- Exhaust fumes also contain unburned hydrocarbons including benzene. Long-term inhalation can cause health problems.
- Exhaust fumes that you can see or smell also contain carbon monoxide.
- Do not use a combustion engine product indoors or in areas that do not have sufficient airflow.

## Fire extinguisher

- Keep a fire extinguisher near during operation.
- Use a powder fire extinguisher of "ABE" class or a carbon dioxide fire extinguisher of "BE" type.

## Safety devices on the product

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**WARNING:** Read the warning instructions that follow before you use the product.

- Do not use a product with defective safety devices.
- Do a check of the safety devices regularly. If the safety devices are defective, speak to your Husqvarna service agent.

## Fuel safety

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**WARNING:** Read the warning instructions that follow before you use the product.

- Fuel is flammable and the fumes are explosive. Be careful with fuel to prevent injury, fire and explosion.
- Do not breathe in the fuel fumes. The fuel fumes are poisonous and can cause injury. Make sure that the airflow is sufficient.
- Do not remove the fuel tank cap or fill the fuel tank when the engine is on.
- Let the engine become cool before you refuel.
- Do not fill fuel in an indoor area. Not sufficient airflow can cause injury or death because of asphyxiation or carbon monoxide.
- Do not smoke near the fuel or the engine.
- Do not put hot objects near the fuel or the engine.
- Do not fill fuel near sparks or flames.
- Before you refuel, open the fuel tank cap slowly and release the pressure carefully.
- Fuel on your skin can cause injury. If you get fuel on your skin, use soap and water to remove the fuel.
- If you spill fuel on your clothing, change clothing immediately.
- Do not fill the fuel tank fully. Heat causes the fuel to expand. Keep a space at the top of the fuel tank.
- Tighten the fuel tank cap fully. If the fuel tank cap is not tightened, there is a risk of fire.
- Before you start the product, move the product to a minimum of 3 m/10 ft from where you refueled.
- Do not start the product if there is fuel or engine oil on the product. Remove the unwanted fuel and engine oil and let the product dry before you start the engine.
- Examine the engine for leaks regularly. If there are leaks in the fuel system, do not start the engine until the leaks are repaired.
- Do not use your fingers to examine the engine for leaks.
- Keep fuel in approved containers only.
- When the product and fuel is in storage, make sure that fuel and fuel fumes cannot cause damage.
- Drain the fuel in an approved container outdoors and away from sparks and flames.

## Electrical safety

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**WARNING:** Read the warning instructions that follow before you use the product.

- The power plug must agree with the power outlet. Do not do modifications to the plug. Do not use adapter plugs with grounded products. Power plugs without modifications, and correct power outlets decrease the risk of electrical shock.
- Do not pull the power cord to move the product.
- Pull the power plug to disconnect the power cord. Do not pull the power cord.
- Make sure that the power cord does not catch in doors, fences or equivalent obstacles that can cause damage to the power cord.
- Do a check that the power cord and the power plug are in good condition and not damaged.
- Do not connect a damaged power cord to the product.
- Do not touch the power cord if it becomes damaged during operation of the product. Disconnect the power cord from the power outlet.
- Keep the power cord away from water, oil, sharp edges and moving parts.
- Keep the product away from rain and wet conditions. The risk of electrical shock increases if water goes into the product.
- Use a power supply with RCD (residual-current device) protection if you operate the product in a moist environment. An RCD decreases the risk of electrical shock.

## Safety instructions for maintenance

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**WARNING:** Read the warning instructions that follow before you use the product.

- If the maintenance is not done correctly and regularly, the risk of injury and damage to the product increases.
- Use personal protective equipment. Refer to *Personal protective equipment on page 6*.
- Stop the engine and make sure that all parts of the product are cool before you do the maintenance.
- Clean the product to remove dangerous material before you do the maintenance.
- Disconnect the spark plug cap before you do the maintenance.
- The exhaust fumes from the engine are hot and can contain sparks. Do not operate the product in indoor areas or near flammable material.
- Do not change the product. Modifications that are not approved by the manufacturer, can cause serious injury or death.

- Always use original accessories and spare parts. Accessories and spare parts that are not approved by the manufacturer, can cause serious injury or death.
- Replace damaged, worn or broken parts.
- Only do the maintenance as given in this operator's manual. Let an approved service center do all other servicing.

- Remove all tools from the product before you start the engine after maintenance. Loose tools or tools attached to rotating parts can eject and cause injury.
- After maintenance, do a check of the vibration level in the product. If it is not correct, speak to an approved service center.
- Let an approved service center do servicing on the product regularly.

## Assembly

### Introduction



**WARNING:** Read and understand the safety chapter before you assemble the product.

### To adjust the centrifugal force (BE 20)



**WARNING:** Disconnect the power source before you adjust the centrifugal force.

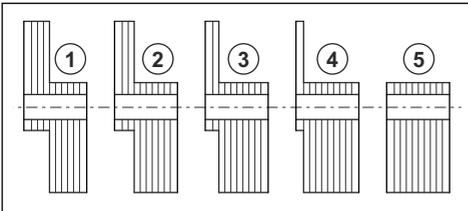
1. Remove the screws from the covers for the eccentric weights. There is 1 cover on each side of the drive unit.
2. Remove the covers for the eccentric weights.
3. Remove the nuts that hold the eccentric weights. The available positions are identified in the table and on the covers.
4. Turn the eccentric weights 180° to adjust the centrifugal force.



**CAUTION:** Do the same adjustment at each end of the drive unit.

5. Attach the eccentric weights.
6. Install the covers. Make sure that the cover seals are in good condition.

**Note:** The centrifugal force is set at position 4 at the factory.



Number of weights	1	2	3	4	5

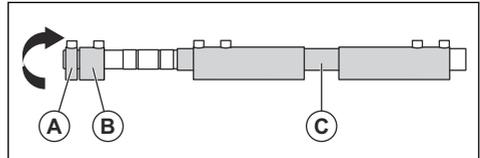
Centrifugal force, N	920	1850	2770	3690	4620

### To adjust the centrifugal force (BE 30)



**WARNING:** To prevent accidental start, stop the engine and remove the spark plug cap before you adjust the centrifugal force.

1. Remove the cap.



2. Loosen the screws that hold the eccentric weights (A) and (B).
3. Turn the eccentric weights (A) and (B) 180° to adjust the centrifugal force.
4. Tighten the screws that hold the eccentric weights (A) and (B).
5. Install the cap. Make sure that the O-rings are installed correctly.

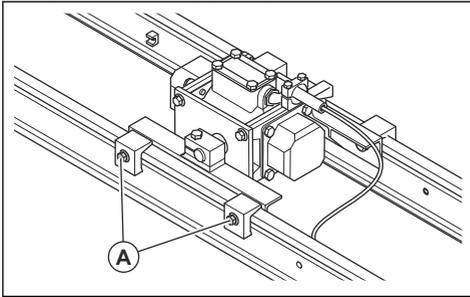
Weights	C	A+C	B+C	A+B+C
Centrifugal force, N @3600 min <sup>-1</sup>	1920	2140	2400	2620

### To install the drive unit on the beam (BE 20)

It is recommended to adjust the centrifugal force before you install the drive unit on the beam. Refer to *To adjust the centrifugal force (BE 20)* on page 8.

1. Put the beam on level ground.
2. Put the drive unit at the center of the beam.

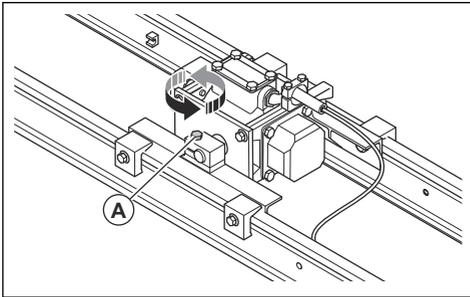
3. Tighten the screws (A). Torque to 68 Nm.



4. Examine the movement of the beam.
  - a) Start the product. Refer to *To start the electric drive unit (BE 20) on page 11.*
  - b) Make sure that the beam moves smoothly.
  - c) If the beam does not move smoothly, stop the product. Refer to *To stop the electric drive unit (BE 20) on page 12.*
  - d) Move the drive unit to the right or to the left, and examine the movement again.
5. Do the procedure again until the movement is smooth.

### To install the drive unit for surface vibration (BE 20)

1. Remove the screws (A).



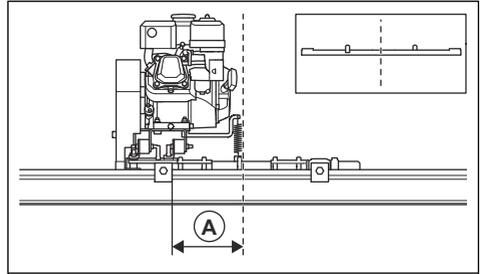
2. Turn the drive unit 90°.
3. Attach the screws (A).

### To install the drive unit on the beam (BE 30)

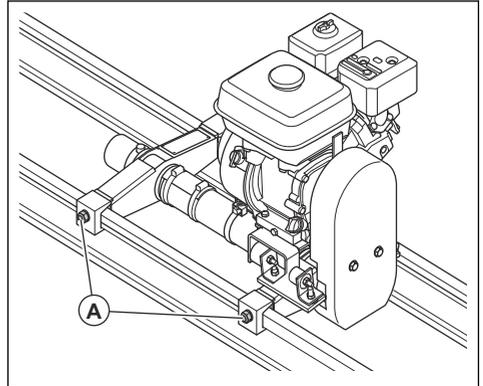
It is recommended to adjust the centrifugal force before you install the drive unit on the beam. Refer to *To adjust the centrifugal force (BE 30) on page 8.*

1. Put the beam on level ground.

2. Put the vibration element of the drive unit 200 mm/7.9 in. (A) from the center of the beam.



3. Tighten the screws (A). Torque to 68 Nm.

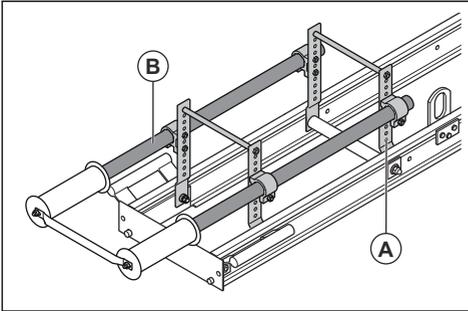


4. Examine the movement of the beam.
  - a) Start the product. Refer to *To start the fuel drive unit (BE 30) on page 11.*
  - b) Make sure that the beam moves smoothly.
  - c) If the beam does not move smoothly, stop the product. Refer to *To stop the fuel drive unit (BE 30) on page 12.*
  - d) Move the drive unit to the right or to the left, and examine the movement again.
5. Do the procedure again until the movement is smooth.

### To install the U2 outrigger

The U2 outrigger is available as an optional accessory. Use the outrigger when the product is on support rails. The rollers on the outrigger have a rubber cover.

1. Install the brackets (A) to the beam with the supplied screws and nuts.

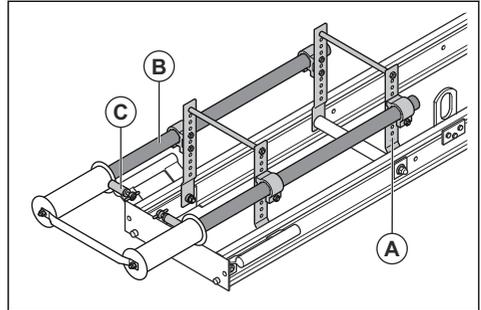


2. Adjust the height and length of the extension arm (B).

**Note:** The height between the lower edge of the extension arm and the beam can be adjusted from 125 mm/6 in. to 250 mm/10 in. in 25 mm/1 in. intervals. The length can be extended between 130 mm/5 in. and 500 mm/16 in.

shaft and the wheels lift the beam from the concrete surface. This makes it easier to move the beam back across the concrete surface.

1. Install the brackets (A) to the beam with the supplied screws and nuts.



2. Adjust the height and length of the extension arm (B).

**Note:** The height between the lower edge of the extension arm and the beam can be adjusted from 125 mm/6 in. to 250 mm/10 in. in 25 mm/1 in. intervals. The length can be extended between 130 mm/5 in. and 500 mm/16 in.

3. Adjust the height of the beam with the handles (C).

## To install the U3 outrigger

The U3 outrigger is available as an optional accessory. Use the outrigger when the product is on support rails. The rollers on the outrigger have a rubber cover. The outrigger has wheels that are attached to a shaft. The

## Operation

### Introduction



**WARNING:** Read and understand the safety chapter before you use the product.

### To do before you operate the product (BE 20)

- Read the operator's manual carefully and make sure that you understand the instructions.
- Do the daily maintenance. Refer to *Maintenance schedule on page 12*.
- Make sure that the electrical connection and the power cord on the product are not damaged.
- Make sure that the power cord can move freely along the concrete surface during operation.
- Make sure that the bottom edge of the product is straight. Refer to *To make the bottom edge of the product straight on page 11*.
- Make sure that the rails are stable. Rails that are not stable can cause the product to tilt or prevent correct movement of the product.

### To do before you operate the product (BE 30)

- Read the operator's manual carefully and make sure that you understand the instructions.
- Read the engine manual that is supplied by the engine manufacturer.
- Do the daily maintenance. Refer to *Maintenance schedule on page 12*.
- Make sure that there is sufficient fuel in the fuel tank.
- Make sure that the bottom edge of the product is straight. Refer to *To make the bottom edge of the product straight on page 11*.
- Make sure that the direction of rotation of the shaft is correct for the operation.
- Make sure that the rails are stable. Rails that are not stable can cause the product to tilt or prevent correct movement of the product.

### To fill fuel



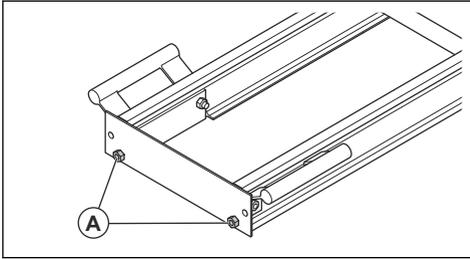
**WARNING:** Read and obey the instructions in *Fuel safety on page 7*.

- Close the fuel valve before you fill fuel.

- Always use a filter when you fill fuel.

## To make the bottom edge of the product straight

1. When the product is assembled, put the ends on trestles to free the bottom edge of the product.
2. Attach a string along the bottom edge of the product.
3. Apply tension to the string to make it straight.
4. If it is necessary, turn the hex screws at the end of the beam (A). Maximum torque is 100 Nm.



**CAUTION:** Do not adjust the female hex screws at the other end of the beam.

5. Look at the contact surface between the product and the trestles to make sure that the product is not twisted.
6. Look at the bottom edge of the product and the string to make sure that the product is straight.

## To change the direction of rotation

You get the best results if the shaft rotates in the opposite direction of the operation direction. The tension in the traction cords is kept and it is easier to control the movement of the product.

- For BE 20: Change the position of the phase switch in the electrical connector to change the direction of rotation.
- For BE 30: Lift and turn the product around to change the direction of rotation.

## To start the electric drive unit (BE 20)

1. Make sure that the frequency and voltage shown on the rating plate is the same as the power supply voltage.
2. Connect a power cord between the electrical connection of the drive unit and the power supply.
3. Turn the start/stop switch to start the drive unit.
4. Examine the direction of rotation of the vibration shaft. If the direction is incorrect, move the phase switch on the electrical connector to change to the opposite direction.

## To start the fuel drive unit (BE 30)

1. Open the fuel valve.
2. Set the choke control in the correct position.
  - a) If the engine is cold, close the choke.
  - b) If the engine is warm or the ambient temperature is high, open the choke.
3. Make sure that the throttle control is set to idle speed.
4. Set the engine ON/OFF switch to ON.
5. Pull the starter rope handle until the engine starts.
6. If the choke is closed, open the choke immediately.
7. Let the engine operate at idle speed for 2–3 minutes and then increase to full speed.

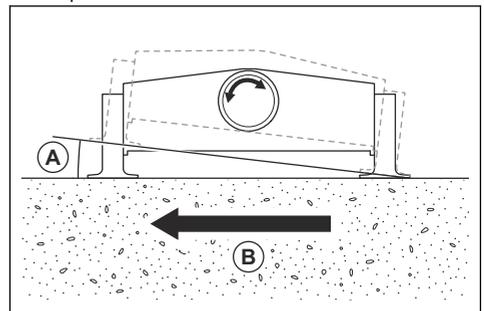
## Depth of the vibrations

The depth of the vibrations is related to the consistency of the concrete. To get the maximum depth of the vibrations, it is also necessary that the rails are stable. Usually, the vibrations go to a depth of 10–15 cm/4–6 in. If the depth of the concrete is more than this, it is necessary to use other concrete vibration methods before you use this product.

## To operate the product

2 operators, 1 at each end of the product, are necessary to operate the product safely and correctly. The work area must be sufficiently large to pull the product from a distance without stops.

- Before operation, install traction cords to the ends of the product.
- Pull and control the product with the traction cords.
  - a) Use the full length of the traction cords.
  - b) Keep the traction cords approximately at waist level, to make sure that the front of the product does not lift. Do not let the angle (A) of the product increase to more than 8°.

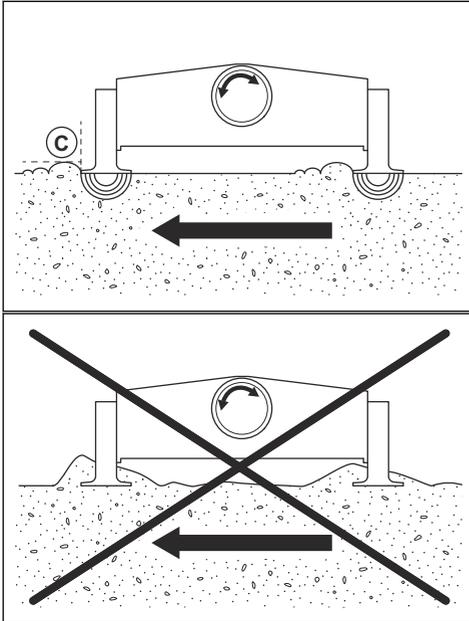


- c) Move the product forward (B) at a speed of 0.5–1.0 m/min. or 1.6–3.2 ft/min.



**CAUTION:** Do not stop during operation as this causes marks in the concrete surface.

- If the front part of the product makes a hole in the concrete surface, add concrete in front of the rear part of the product. The concrete fills the hole.
- During operation, examine the height of the concrete (C) in front of the 2 parts of the product. Correct height is 10–20 mm/0.4–0.8 in.



**Note:** If the height of the concrete is more than 20 mm/0.8 in., the product becomes too heavy to pull and the concrete surface behind the product is not smooth. If the height of the concrete is less than 10 mm/0.4 in., the vibrations do not give a good result.

- At the end of the work area, stop the vibrations before you stop the movement of the product.



**CAUTION:** Do not pull the product back across the concrete surface. If it is necessary to operate the product a second time across the work area, lift the product and move it back to the start.

### To stop the electric drive unit (BE 20)

1. Set the power switch to OFF.
2. Disconnect the power cord from the power source.



**WARNING:** Always disconnect the power cord from the power source when the product is not in operation.

### To stop the fuel drive unit (BE 30)

1. Move the throttle control to the idle speed position.
2. Set the engine ON/OFF switch to OFF. The engine stops.
3. Move the fuel valve to the OFF position.

## Maintenance

### Introduction



**WARNING:** Read and understand the safety chapter before you do maintenance on the product.

### Maintenance schedule

\* = General maintenance done by the operator. The instructions are not given in this operator's manual.

X = The instructions are given in this operator's manual.

O = Refer to the engine manual for instructions.

General maintenance, all models	Each use
Clean the product.	X
Examine the product for damages.	*
Make sure that nuts and screws are tightened.	*

BE 30	Each use	After the first 20h	Each 50h	Monthly or each 200h	Each 3 months or each 300h
Make sure that there are no fuel or oil leaks.	*				

BE 30	Each use	After the first 20h	Each 50h	Monthly or each 200h	Each 3 months or each 300h
Do a check of the fuel level and the engine oil level.	○				
Do a check of the throttle control and the throttle wire.	*				
Examine the air filter. Clean the air filter if it is necessary.	○				
Clean the air filter. Replace the air filter if it is necessary.			○	○	
Replace the air filter.					○
Replace the engine oil.		○	○	○	○
Examine and clean the spark plug. Replace the spark plug if it is necessary.			○	○	
Do a check of the engine speed.				○	
Drain the fuel and clean the fuel tank and the fuel filter.				○	
Clean and adjust the carburetor.					○
Clean the cylinder head.					○
Adjust the fuel valve.					○

## To clean the product

- Remove concrete from the surfaces of the product after each operation before the concrete becomes hard. Spray with concrete form oil or concrete release agent.
- Use a high-pressure washer to clean the product.



**CAUTION:** Do not point the water directly at the motor of an electric drive unit.



**CAUTION:** Before you clean a fuel drive unit with a high-pressure washer, put a cover on the engine. No water must come on the carburetor, the fuel tank or the generator.

- Clean the external surfaces of the engine of a fuel drive unit with water, but not a high-pressure washer.
- Clean the shafts but do not point the water at the bearings.
- Tilt the product to clean the bottom side.
- Remove grease and oil from the handle.

## Lubrication

It is necessary to replace the grease on model BE 20 each 5000 hours. Refer to the table.

BE 20	
Type of bearing	6305.ZZ
SKF suffix	C3
FAG suffix	C3
Grease	TRIBOL 3030/100 WITH T.G.O.A.-

The interval for lubrication of the bearings on model BE 30 is each 1200 hours.

## To replace the bearings

- Remove the covers.
- Make a note of the position of the eccentric weights.
- Remove the nuts and the eccentric weights.
- Remove the flanges and the rotor.
- Remove the bearings from the flanges with a punch.
- Clean the bearings with an applicable cleaning agent.
- Lubricate the bearings. Refer to *Lubrication on page 13*.
- Make sure that the O-rings and seals are not damaged. Replace damaged parts.

9. Install the bearings in the flanges with a press tool or a mallet.

11. Install the eccentric weights and the covers.

10. Install the flanges and the rotor.



**CAUTION:** Be careful when you install the rotor. The stator winding can become damaged.

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## Troubleshooting

Problem	Drive unit	Cause	Solution
The product does not start.	Electric.	There is no current.	Connect the power cord correctly to the electrical connection on the product.
			Do a check of the mains outlet.
	Fuel.	The fuel level or oil level is too low.	Fill fuel and oil to the correct level.
		The fuel valve is closed.	Open the fuel valve.
		The engine ON/OFF switch is in the OFF position.	Set the engine ON/OFF switch to the ON position.
	The spark plug is worn or not installed correctly.	Examine the spark plug. Replace it if it is necessary.	
The motor stops after some minutes.	Electric.	The voltage is too high.	Do a check of the voltage of the power supply.
		The motor protection is released.	The motor load is too high. Decrease the centrifugal force.
		The circuit breaker is released.	Bad ground connection. Do a check of the connectors and cables. Replace damaged parts.
The tension screws cannot be turned.	Electric and fuel.	There is water from the concrete in the product sections.	Use penetrating oil on the tension screws.
The tension screws are loose or missing.	Electric and fuel.	The tension screws are worn.	Replace the tension screws.
The beam is not straight.	Electric and fuel.	The rubber bearings on the stretching screw are worn.	Replace the bearings.
The result of the concrete surface is unsatisfactory.	Electric and fuel.	The drive unit is incorrectly set.	Make sure that the position of the eccentric weights is correct.
			Do a check of the drive belt tension and the tension of the product sections. Adjust or replace if it is necessary.
		The product is too long for the work area.	Adjust the work area or install a shorter beam to the drive unit.
		The rails are different at each end of the product or not applicable.	Adjust the rails.
		There is too much concrete in front of the product.	Monitor the height of the concrete during operation.

# Transportation, storage and disposal

## Transportation



**WARNING:** Be careful during transportation. The product is heavy and can cause injury if it falls.

- BE 20: Before transportation, disconnect the power cord from the power supply.
- BE 30: During transportation, keep the fuel valve closed and keep the engine in a vertical position to prevent fuel leakage.

## To lift the product



**WARNING:** Make sure that the lifting equipment has the correct specification to lift the product safely. The rating plate on the product shows the product weight.

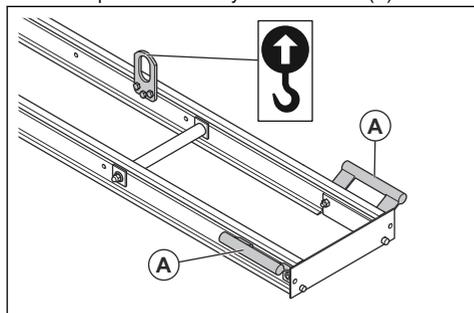


**WARNING:** Do not lift a damaged product. Make sure that the lifting eyes are correctly installed and not damaged.



**WARNING:** Do not walk or stay below or near a lifted product.

- Lift the product manually at the handles (A).



- If you use lifting equipment, attach the lifting equipment to the lifting eyes.



**WARNING:** Do not use metal hooks, chains or other lifting equipment with rough edges that can cause damage to the lifting eye.

## Storage

- Clean the product before storage.
- Keep the product in a dry and frost-free area.
- Keep the product in a locked area to prevent access for children or persons that are not approved.
- Remove all fuel from the fuel tank before you put the product in storage for a long period of time. Discard the fuel at an applicable disposal location. (BE 30)
- When the fuel tank is drained, start the engine. Let the engine operate until there is no fuel remaining in the carburetor and the engine stops. (BE 30)

## Disposal

- Obey the local recycling requirements and applicable regulations.
- Discard all chemicals, such as engine oil or fuel, at a service center or at an applicable disposal location.
- When the product is no longer in use, send it to a Husqvarna dealer or discard it at a recycling location.

## Technical data

	BE 20	BE 30
Voltage, V	380, 400, 440	N/A
Phases	3	N/A
Frequency, Hz	50	N/A

	BE 20	BE 30
Power, kW/hp @rpm	0.45/0.6 @3600	2.6/3.5 @3600 <sup>1</sup>
Full load current, A	0.8	N/A
Engine brand, type *	N/A	Honda, GX120
Fuel *	N/A	Unleaded gasoline, max. 10% ethanol
Fuel tank capacity, l/qts	N/A	2/1.8
Oil tank capacity, l/qts	N/A	0.6/0.52
Drive unit dimensions, L×W×H mm/ft	N/A	305×341×329/1.00×1.10×1.07
Total weight, kg/lb	37/81.6	32/70.5

\* = For further information and questions about this specific engine, refer to the engine manual or the web site of the engine manufacturer.

Beams	Height, mm/in.	Total width, mm/in.	Total length, m/ft	Weight, kg/lb	Deflection, mm/in.
BD 32	100/3.93	400/15.74	3.2/10.5	32/70.5	8–9/0.31–0.35
BD 42	100/3.93	400/15.74	4.2/13.8	41/90.4	11–12/0.43–0.47
BD 52	100/3.93	400/15.74	5.2/17.1	47/103.6	13–14/0.51–0.55
BD 62	100/3.93	400/15.74	6.2/20.3	57/125.7	18–20/0.71–0.78

Noise and vibration emissions	BE 20	BE 30
Sound power level, guaranteed $L_{WA}$ dB (A) <sup>2</sup>	94	103.8
Sound pressure level at the operator's ear, $L_p$ , dB (A) <sup>3</sup>	N/A	75.7
Vibration level, $a_{hv}$ , m/s <sup>2</sup> <sup>4</sup>	2.5	3.0

## Noise and vibration declaration statement

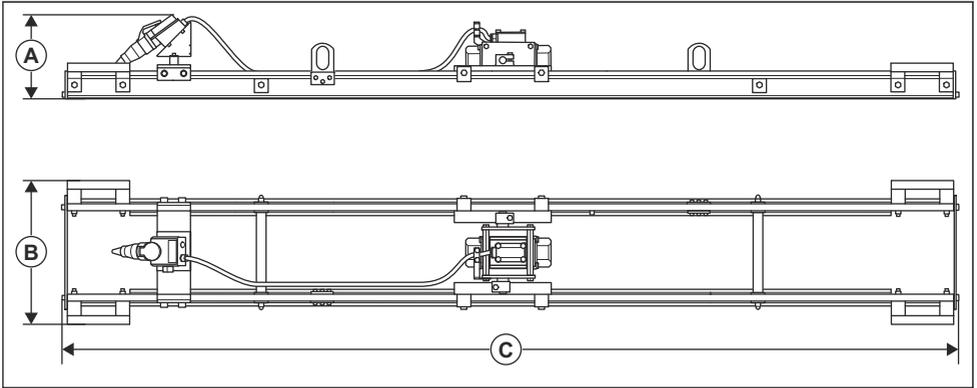
These declared values were obtained by laboratory type testing in accordance with the stated directive or standards and are suitable for comparison with the

declared values of other products tested in accordance with the same directive or standards. These declared values are not suitable for use in risk assessments and values measured in individual work places may be higher. The actual exposure values and risk of harm experienced by an individual user are unique and depend upon the way the user works, in what material

- <sup>1</sup> As specified by the engine manufacturer. The power rating of the engine indicated is the average net output (at specified rpm) of a typical production engine for the engine model measured to SAE standard J1349/ISO1585. Mass production engines may differ from this value. Actual power output for the engine installed on the final product will depend on the operating speed, environmental conditions and other values.
- <sup>2</sup> Noise emissions in the environment measured as sound power ( $L_{WA}$ ) as per EN ISO 3744 in conformity with EC directive 2000/14/EC. The difference between guaranteed and measured sound power is that the guaranteed sound power also includes dispersion in the measurement result and the variations between different machines of the same model according to Directive 2000/14/EC.
- <sup>3</sup> Sound pressure level  $L_p$  according to EN ISO 11201, EN 500-4. Uncertainty  $K_{PA}$  3.5 dB (A).
- <sup>4</sup> Vibration value according to EN 500-4. Reported data for vibration level has a typical statistical dispersion (standard deviation) of 1.5 m/s<sup>2</sup>.

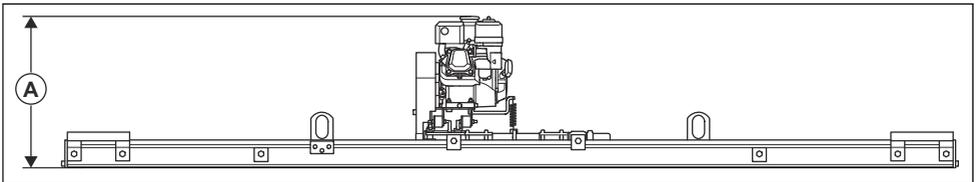
the product is used, as well as upon the exposure time and the physical condition of the user, and the condition of the product.

## Product dimensions (BE 20)



	BD 32	BD 42	BD 52	BD 62
Height, mm/in. (A)	305/12	305/12	305/12	305/12
Width, mm/in. (B)	520/20.5	520/20.5	520/20.5	520/20.5
Length, mm/in. (C)	3200+34/10.5+ 1.3	4200+34/13.8+ 1.3	5200+34/17.0+ 1.3	6200+34/20.3+ 1.3

## Product dimensions (BE 30)



The height (A) is 541 mm/21.2 in. for all beams. The width and length are the same as for BE 20. Refer to *Product dimensions (BE 20)* on page 19.

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# EC Declaration of Conformity

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## EC Declaration of Conformity

We, **Husqvarna AB**, SE-561 82 Huskvarna, Sweden, tel:  
+46-36-146500, declare on our sole responsibility that  
the product:

<b>Description</b>	<b>Concrete Compactor, Vibrating Beam</b>
<b>Brand</b>	Husqvarna
<b>Type/Model</b>	BE20 + screed BD
<b>Identification</b>	Serial numbers dating from 2020 and onwards

complies fully with the following EU directives and  
regulations:

<b>Directive/Regulation</b>	<b>Description</b>
2006/42/EC	"relating to machinery"
2014/30/EU	"relating to electromagnetic compatibility"
2011/65/EU	"relating to restriction of hazardous substances"

and that the following harmonized standards and/or  
technical specifications are applied;

EN 12649:2008+A1:2011

Partille, 2020-03-05



Martin Huber

R&D Director, Concrete Surfaces & Floors

Husqvarna AB, Construction Division

Responsible for technical documentation

## EC Declaration of Conformity

We, **Husqvarna AB**, SE-561 82 Huskvarna, Sweden, tel: +46-36-146500, declare on our sole responsibility that the product:

<b>Description</b>	<b>Concrete Compactor, Vibrating Beam</b>
<b>Brand</b>	Husqvarna
<b>Type/Model</b>	BE30 + screed BD
<b>Identification</b>	Serial numbers dating from 2020 and onwards

complies fully with the following EU directives and regulations:

<b>Directive/Regulation</b>	<b>Description</b>
2006/42/EC	"relating to machinery"
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Martin Huber

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[www.husqvarnacp.com](http://www.husqvarnacp.com)

Original instructions

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