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*Originalfassung*

**DE BETRIEBSANLEITUNG**

**BETONTRENNSCHNEIDER**

*Übersetzung / Translation*

**EN USER MANUAL**

**CONCRETE CUTTER**

**ES MANUAL DE INSTRUCCIONES**

**CORTADORA DE HORMIGÓN**

**FR MODE D'EMPLOI**

**SCIE COUPE DE BETON**

**CZ SCIE COUPE DE BÉTON**

**ŘEZACKA BETONU**

**SK NÁVOD NA POUŽITIE**

**REZACKA BETONU**

**SL NAVODILO ZA UPORABO**

**REZALNIK BETONA**

**HR UPUTA ZA UPORABU**

**REZAČ BETONA**

**SRB UPUTSTVO ZA UPOTRBU**

**REZAČ BETONA**



**ZI-BTS350**

**EAN: 9120039230733**





## 10 PREFACE (EN)

### Dear Customer!

This manual contains important information and advice for the correct and safe use and maintenance of the concrete cutter ZI-BTS350.

Following the usual commercial name of the device (see cover) is substituted in this manual with the name "machine".

The manual is part of the machine and may not be stored separately. Read it profoundly before first use of the machine and keep it for later reference. When the machine is handed to other persons always put the manual to the machine.

### **Please follow the security instructions!**

Please read the entire manual, to prevent misunderstandings, machine damage or even injuries!



Due to continuous development of our products illustrations, pictures might differ slightly.

If you however find errors in this manual, please inform us.

Technical changes excepted!

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### Customer Support

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## 11 SAFETY

### 11.1 Intended Use

The ZIPPER ZI-BTS350 is approved for the following stated activities in compliance with the safety instructions described in this operating and maintenance instructions:

Asphalt and concrete cutting in compliance with all technical limits and all safety regulations.

The improper use or failure to comply with the provisions and instructions detailed in this manual will void all claims for damages against the ZIPPER GmbH result.

Unauthorized modifications and manipulations of the machine also immediately invalidate all warranty and damage claims.

### 11.2 Safety

Warning signs and / or labels on the machine that are illegible or have been removed are to be replaced immediately!

The most important factor for adequate security at work is common sense. Care and good judgment are the best protection against injury. This list of general safety information does not purport to include all possible sources of danger, but we have tried to highlight some of the important details. Individuals should look for caution, warning and danger signs that are marked on the device and displayed at work and read the safety, understand and heed.

**During refueling the fire, naked flame and smoking prohibited.**  
**Refuel with the engine running or when engine parts are still hot, is strictly prohibited.**  
**Refuel only outdoors or in well-ventilated areas.**  
**Wipe off spilled fuel immediately.**  
**Fuel is highly flammable!**  
**With fatigue, lack of concentration or under the influence of medicines, alcohol or drugs that work on the machine is prohibited!**

**Before each use, check machine in perfect condition! Oil level, blade condition, tightness screws etc ...**  
**The regular maintenance and inspection is safety critical.**  
**The machine may only be operated by qualified personnel enrolled.**  
**Unauthorized persons, especially children, and people are not trained to keep away from the machine! Operation of the machine just over 18 years.**  
**If you work on the machine, you do not wear loose jewelry, loose clothing, ties, long, loose hair, etc ...**  
**Loose objects can become entangled in moving parts of the machine and cause injury!**  
**When working on the machine zertifizerte appropriate protective equipment (gloves, work shoes with steel inserts, safety glasses, hearing protection, ...) wear!**  
**Engine emissions contain toxic gases, which have a negative impact on personal health. Therefore, they work with the machine in a well ventilated area or outdoors!**  
**NEVER touch the carburetor, spark plug, air filter. Motor unit during and immediately after the operation! Risk of burns!**  
**Allow the engine to cool before adding fuel perform maintenance etc. ...**  
**The running machine should never be left unattended! Turn off the machine before leaving the work area and wait until the engine is at a standstill!**



### 11.3 Specific risks and hazards when working with concrete cutter

Concrete cutters are heavy units and should be positioned by two people with appropriate force, the machine-mounted lifting handles are to be used, furthermore, make sure that a proper lifting techniques.

#### **Bruises**

Minimize the risk of crushing her foot by wearing work boots with steel toes.

Make sure that the machine and the operator on level ground are both stable when setting up and the machine will not tip over during operation, slipping or falling.

#### **Injury by diamond saw blade**

Contact with the rotating diamond saw blade will result in serious injury.

The machine is to maneuver with the mounting brackets, with secure stand BEHIND the machine. Within 15m No 2 Person.

#### **Flying asphalt concrete fagments**

NEVER remove splash guard lip. Damaged immediately renew. Use break-resistant certified goggles.

#### **Hazards of the work environment**

Make sure that the walls of a trench are stable and not collapse because of the vibration.

Make sure that the area to stomping does not "live" electrical wires, gas pipes, or water pipes, which can be damaged by vibration.

Be careful when working near unprotected wells or pits. The operation of the machine is its own discretion and at your own risk.

#### **Risk of burns**

Touching the carburetor, the engine, the spark plug and other heatable machine components can cause serious burns, after prolonged continuous operation.

#### **Fire and Explosion Hazards**

Fuel is highly flammable and explosive under certain conditions.

NEVER use fuel or engine oil while the machine is in operation or still hot.

Refueled places where fuel is stored, not smoke or allow open flames or sparks.

Do not overfill the fuel tank and avoid the spillage of gasoline during refueling. If any fuel is spilled, make sure that this area is dry / cleaned before starting the engine.

Refuel only with the filter.

Make sure that the fuel tank cap is tightly closed after refueling again safely.

#### **Chemical hazards**

Never operate or refuel a gasoline or diesel engine in a closed area without adequate ventilation

Carbon monoxide emissions from the internal combustion engine of the drive units can cause damage to health by inhalation in confined spaces and death. Therefore, the engine take in a well ventilated area or outdoors in operation.

#### **Noise hazards**

Working with the concrete release cutter without hearing protection certified to cause hearing damage and temporary or permanent hearing loss. Wear a certified health and safety regulations after hearing protection to limit noise pollution.

#### **Special protective clothing**

Apart from the general safety instructions listed in the guidelines for the wearing of protective clothing special protective clothing and safety shoes must be worn with steel inserts.

#### **Maintenance**

Make sure that repairs to the motor and the machine are carried out by qualified personnel.

Make sure that the red engine switch is in the OFF position and the ignition wire is disconnected from the spark plug before you remove the protection, perform service, adjust belt or make adjustments.



## 12 GETTING STARTED

On the device are only few of them serviceable components. It is not allowed to disassemble the machine. Repairs must only be performed by an expert!

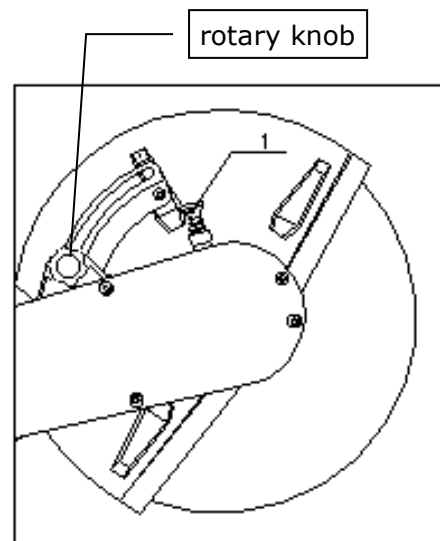
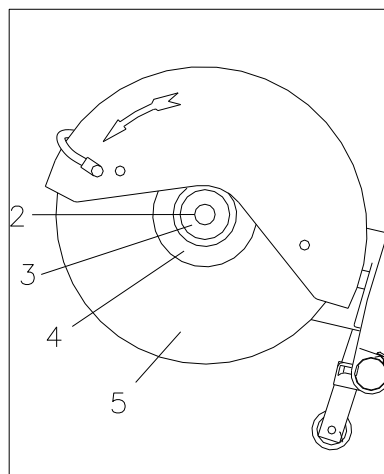
Accessories: Use only recommended by your dealer or by ZIPPER Accessories!

If you have any questions or problems, contact our customer service.

### 12.1 During the initial commissioning

The machine is delivered pre-assembled, you only need to mount the blade and possibly the retaining bracket.

#### 12.1.1 Fitting the cutting blade



ON OFF Switch to the OFF switch

- Press the lock (1) of the blade at a slight rotation of the blade to the spindle.
- With the supplied wrench, unscrew the nut (2) from the spindle.
- Remove the washer (3) and the outer flange (4).
- Place the blade on the spindle renewed. Replace the flange and the right case-washer and tighten the nut. Tightening torque 22 Nm.

The mother herself is tightening the screw in the direction of rotation.

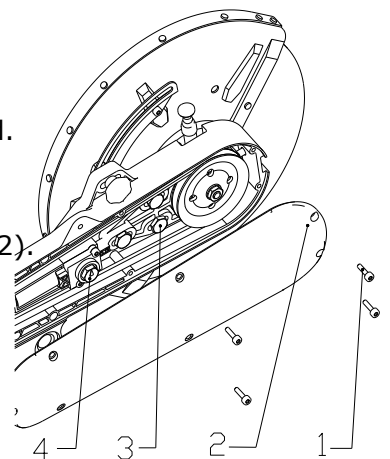
#### 12.1.2 Protection cover set

Use the rotary knob (1) You can change the position of guard.

Make sure that there is as little dust from the operator of the machine directed.

#### 12.1.3 Adjust V-belt tension:

- Remove the screws (1) on the drive housing and remove the belt guard(2).
- Loosen the three screws (3) on the belt guide.
- Turn the block plug (4) set in the clockwise direction about the optimum tension of the V-belt.
- Tighten the mounting screws (3) firmly.
- Attach the belt cover with the screws (1)





Adjust belt tension after 5 minutes of idling. During the first day in operation, you should frequently check the belt tension. Belts are correctly tensioned when it does not just slip under full load. Excessive tension reduces the life of the belt.





### 12.1.4 Refuelling

The concrete cutting cutter is powered by a gasoline-oil mixture. For the 2-stroke engine, you need a gasoline-oil mixture with a mixing ratio of 40:1. When refueling sure that no foreign particles get into the tank.

	<b>During refueling the fire, naked flame and smoking prohibited.</b>
	<b>Refuel with the engine running or when engine parts are still hot, is strictly prohibited.</b>
	<b>Refuel only outdoors or in well-ventilated areas.</b>
	<b>Wipe off spilled fuel immediately.</b>
	<b>Fuel is highly flammable!</b>

Use high-quality synthetic oil for heavy-duty two-stroke engines, if you want to make your mixture itself. Synthetic oil reduces soot and deposits on spark plug in the cylinder, the piston and the exhaust what the engine lubrication increases, and thus the life of the engine. Ge self-made mixtures are to consume within 4 weeks.

**ZIPPER Maschinen** recommends the use of high-quality finished mixtures specifically for heavy-duty two-stroke engines.

## HINWEIS

Before each use, shake the tank properly! Otherwise, the risk of damage to the motor consists of seizures, because it is lubricated at the beginning too little.

### Before each operation:

- Check the tightness of the blade, the fixing nut and all other threaded fasteners.
- Check the fuel level and refill if necessary (fuel mixture ratio 40:1)

## 13 OPERATION



### 13.1 Engine Start

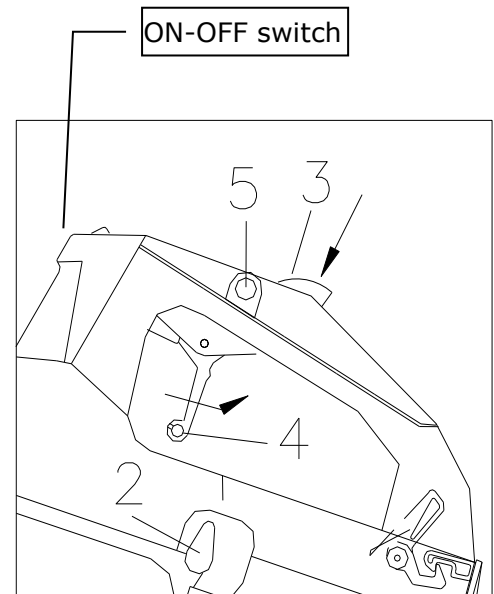
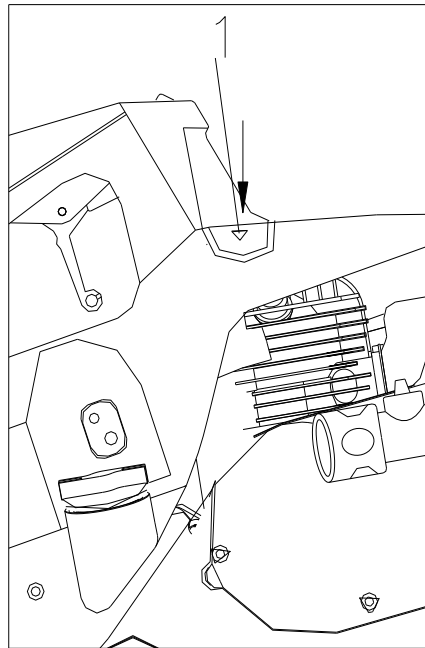
Place the concrete release cutter safely on the ground. The blade must not be to the ground or other objects together.


Before the blade, no persons are allowed to stay there.

**NOTE:** Remove at least 3m from the refueling.

#### 13.1.1 Cold start:

- Press the ON-OFF switch to the "ON" position
- Adjust the combi-switch (2) the corresponding position.
- At restart the combination switch (2) in to be adjusted to the "Choke"  Position.
- On a warm start of the "Choke" is not used. The combi-switch remains in the  Position.
- Press with your hand on the handle above the switch (3) of the throttle lever (4). Then push the throttle lever (4) up.
- Press with your thumb throttle-lock button (5) and leave at the same time the throttle lever to the lock button can lock.



- Press the the decompression (1) button.
- Hold the front hand lever with one hand and press with your foot to the lateral pedal to the floor.
- Start Cable: Cable tighten until resistance can roll back and then forcefully put in a train. If the engine according to the third Tightening does not start, open the choke slightly.
- Falls der Motor nach dem 3. Anziehen nicht anspringt, Choke etwas öffnen.
- The combi-switch after the first engine noises flammable placed in the  position.
- If the engine is running throttle lever (4) Press briefly to dislodge the lock button and the full throttle position is changed to idle.
- Leave for a few minutes without engine load.
- When a load is always at max throttle. Hold speed!

### 13.1.2 Warm start

- Press the ON-OFF switch to the ON position.
- Combination switch (2) in the OPEN position on the right. Do not choke on a warm start.
- Engine with pull starter start

### 13.1.3 Switch off

For a longer life of your engine you let the engine to idle for 3-5 minutes before turning off idle.

- ON OFF switch to OFF position switch.

### NOTE:

The length of the starter pull rope is 1.15 meters. Do not pull with great force. When all the rope has been pulled, the rope is pulled with further train. In addition, it can also mean that the parts are damaged.

Once you have pulled the rope, should you let it go immediately. One should continue to hold the hand lever of the starter pull rope and lead it back down.

The rope should be straight up or down to reduce wear.

After the train of the starter pull cord you can roll it slowly.

At this time, when the gasoline engine is not started successfully, it is necessary to press the button of the decompression valve again to restart.



### 13.1.4 Water supply

The water connection, you can connect a water supply.

This allows you to achieve a uniform cooling of the blade and reduce the formation of dust strongly.

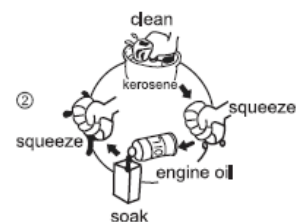
#### Operation

- Review safe working environment, safe work clothing, machine before putting on faultless and operational condition.
- Saw at Max. , align top position, fold down section markers (linkage with red roller) to cut line. Align the saw blade to cut line.
- gate valve at the bottom of the water tank open.
- Start the engine
- blade wind down slowly deepen the cut until the desired depth of cut is reached.
- Cut only as fast as it allows the material. If the blade lifts the feed, you slow down the feed!
- If desired cutting depth of more than 90mm, this should be achieved through two steps.
- The proper sense of the proper feed speed is important. Please slide the machine fast enough that the blade can work into the material, but once they realize that the speed decreases, reduce the feed.
- No lateral pressure on the blade.
- Can not operate without blade guard mounted!
- Do not force the blade into the material. Let the wheel going into the material alone.
- Do not perform long continuous cuts.
- No Dry cutting saw blades are suitable for wet cutting.
- No curves intersect. Not inclined to fix blade material.

## 14 MAINTENANCE

### 14.1 Maintenance activities

- Check the belt tension and adjust as required
- Lubricate the bearings of the diamond saw blade axis daily
- Before each use, the blade is in good condition and tight fit
- Before each use the air filter is clean.
- Before each use screw connections for tightness
- Air filter (every 100 hours)
  1. Remove the air filter.
  2. Clean it in a solution.
  3. Drops of engine oil on the air filter.
  4. Waste engine oil to remove from the air filter by wring it out.



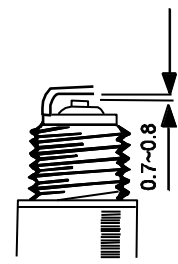
**CAUTION: NEVER WITHOUT ENGINE AIR FILTER OR MAINTAINED AIR FILTER WITH NOT OPERATE**

### 14.2 Spark plug (every 50h)

- Remove the spark plug contact.
- Remove any debris with a brush.
- Inspect the spark plug for discoloration.
- Check the contact gap. Standard: 0.7 ~ 0.8mm



(Picture 18)



(Picture 19)





### 14.3 Cleaning

#### NOTE

**Cleaning: The use of paint thinners, gasoline, corrosive chemicals or abrasive cleaners will result in damage to the surface!**

Therefore:

When cleaning, use only mild detergent

### 14.4 Storage

If the machine more than a month is not used, please follow these instructions:

- Entire remove fuel from the tank, fuel cock and carburetor.
- Water from the tap and remove line (this is to do in cold weather after each use)
- Remove spark plug, pour about 1 tablespoon of engine oil into spark plug hole
- Engine switch to the OFF
- Operate starter rope several times
- Spark plug insert
- Generator in a dry, well ventilated place, cover.

### 14.5 Disposal

Do not dispose of your waste in the ZI-BTS350. Contact your local authorities for information regarding the available disposal options. Improper disposal can lead to contamination of soil, ground water soil seepage of hazardous and noxious substances, and thus reach finally through contaminated water into your food supply and your health. Replace your old unit with a new one at your local dealer, is obligated to take back your old equipment free of charge for the purpose of proper disposal.



## 15 TROUBLESHOOTING

Trouble	Possible Cause	Solution
<b>Engine will not start</b>	<ul style="list-style-type: none"> <li>• ON OFF switch to OFF</li> <li>• Fuel filter clogged</li> <li>• Fuel tank empty</li> <li>• Spark plug is defective or loose</li> <li>• Spark plug gap set wrong</li> </ul>	<ul style="list-style-type: none"> <li>• Switch in the On position</li> <li>• Fuel filter change</li> <li>• Fill the fuel tank</li> <li>• Clean or replace spark plug</li> <li>• Check the correct setting</li> </ul>
<b>Engine stops after starting</b>	<ul style="list-style-type: none"> <li>• Idle speed too low</li> <li>• Clogged fuel filter</li> <li>• The fuel tank is empty</li> </ul>	<ul style="list-style-type: none"> <li>• Adjust idle speed</li> <li>• Change the fuel filter</li> <li>• add fuel</li> </ul>
<b>Less engine power</b>	<ul style="list-style-type: none"> <li>• Dirty air filter</li> </ul>	<ul style="list-style-type: none"> <li>• Clean or replace air filter</li> </ul>
<b>Blade does not run</b>	<ul style="list-style-type: none"> <li>• V-belt is defective</li> <li>• defective clutch</li> </ul>	<ul style="list-style-type: none"> <li>• Change belts</li> <li>• machine repair</li> </ul>
<b>Blade runs bad</b>	<ul style="list-style-type: none"> <li>• cutting wheel shaft</li> </ul>	<ul style="list-style-type: none"> <li>• Check ball bearings, shaft, flange and nut.</li> <li>• Replace if defective</li> </ul>