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*Originalfassung*

**DE BETRIEBSANLEITUNG**

*Übersetzung / Translation*

**EN USER MANUAL**

**SK NÁVOD NA PREVÁDZKU**

**CZ NÁVOD NA OBSLUHU**

**SL NAVODILO ZA OBRATOVANJE**

**HR UPUTA ZA UPORABU**

**HU HASZNÁLATI ÚTMUTATÓ**

**FR MODE D'EMPLOI**

**ES INSTRUCCIONES DE SERVICIO**

**HOLZSPALTER**

**LOG SPLITTER**

**ŠTIEPAČ NA PALIVOVÉ DREVO**

**ŠTÍPAČ NA PALIVOVÉ DŘEVO**

**CEPILNIK LESA**

**STROJ ZA CIJEPANJE DRVA**

**FAHASÍTÓ GÉP**

**FENDEUSE DE BÛCHE**

**RAJADORA DE LEÑA**



ZI-HS5TN



ZI-HS7TU

## ZI-HS5TN / ZI-HS7TU

EAN: 9120039233741 / EAN: 9120039233758

**ACHTUNG: Öl kontrollieren!**

**POZOR: Kontrolujte olej!**

**POZOR: Preverite olje!**

**ATTENTION: Vérifiez l'huile!**



**ATTENTION: Check Oil!**

**POZOR: Kontrolujte olej!**

**PAŽNJA: Provjerite ulje!**

**NOTA: ¡Controle el aceite!**



## **16 PREFACE (EN)**

### **Dear customer!**

These operating instructions contain information and important notes on commissioning and handling the ZI-HS5TN and ZI-HS7TU wood splitters.

In the following, the usual trade designation of the machine (see cover sheet) in these operating instructions is replaced by the designation "Machine".

The operating instructions are an integral part of the machine and must not be removed. Keep them for later use and attach these instructions to the machine if they are passed on to third parties!

### **Observe the safety instructions!**



Please read these instructions carefully before putting the unit into operation. This will make it easier for you to handle the device properly and will prevent misunderstandings and possible damage. Observe the warning and safety instructions. Disregard can lead to serious injuries.

Due to the constant further development of our products, illustrations and contents may differ slightly. If you notice any errors, please inform us.

Subject to technical changes!

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### **Customer Support:**

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## 17 SAFETY

Only use the machine in a technically perfect condition and in accordance with its intended use, safety-conscious and aware of the dangers! Have faults which could impair safety rectified immediately!!

The machinery is intended exclusively for the following activities:

For splitting wood in grain direction, with dimensions within the limits specified in the "Technical data" section.

The splitting process of the machine is intended for operation by only one person.

**ZIPPER-MASCHINEN accepts no responsibility or warranty for any other use or use beyond this and for any resulting damage to property or injury.**

### Operating conditions:

The machine is intended for use under the following conditions:

Rel. humidity:	max. 50 %
Temperature (Operation)	+5° C bis +40° C
Temperature (storage, transport)	-25° C bis +55° C

Any improper use or disregard of the information and instructions given in this manual will void all warranty claims and claims for damages against Zipper GmbH.

### Improper use:

- Operation of the machine without adequate physical and mental aptitude
- Operating the machine without knowledge of the operating instructions
- Changes in the design of the machine
- Operating the machine under explosive conditions
- Operating the machine outside the specified power range
- Remove the safety markings attached to the machine.
- Modify, circumvent or disable the safety devices of the machine.

### 17.1 Safety instructions

**Warning signs and/or stickers on the machine which are illegible or have been removed must be replaced immediately!**

**Local laws and regulations may determine the minimum age of the operator and restrict the use of this machine.**

In order to avoid malfunctions, damage and adverse health effects, the following additional measures for safe working must be observed UNCONDITIONALLY:





- Do not split soaked wood.
- Only split the wood horizontally in the direction of the grain!
- Do not split wood that contains foreign objects such as nails, cables, etc.
- Never operate the machine outdoors in the rain.
- Choose a level, vibration-free, non-slip surface as the installation location.
- Ensure sufficient lighting conditions at the workplace.
- Keep the working area free of obstacles (e.g. pieces of wood, leftover wood, etc.).
- Before each use, check the machine for its perfect condition (tight fit of hoses and screws, operability of the switch-off devices, etc.).
- Never leave the running machine unattended.
- The machine may only be operated, serviced or repaired by persons who are familiar with it and who have been informed of the dangers arising during this work.
- Although it is possible that several operators could work on the machine (e.g. for loading and unloading), only one person should ever operate the splitting process.
- As the operator of the machine, make sure that unauthorised persons maintain an appropriate safety distance from the machine and, in particular, keep children away from the machine.



- Wear suitable work clothing (eye protection, work gloves, safety shoes and close-fitting work protective clothing, never loose clothing, ties, jewellery, etc. - danger of being drawn in!
- Keep your hands away from crevices and cracks that open in the wood.
- Do not reach into the splitting area.
- Do not work on the machine if you are tired, not concentrated or under the influence of medication, alcohol or drugs!
- Do not use the machine in areas where vapours from paints, solvents or flammable liquids represent a potential danger (danger of fire or explosion!).
- Do not smoke in the immediate vicinity of the machine (fire hazard)!
- Make sure that the on/off switch is in the "Off" position before switching on the machine.
- Ensure that the machine is earthed.
- Only use suitable extension cords.
- Always disconnect the unit from the mains before cleaning, maintenance or repair work and secure it against unintentional reconnection.
- Use only intact tools.

## 17.2 Residual risks

Despite intended use, certain residual risks remain. Due to the design and construction of the machine, hazardous situations may occur which are identified in these operating instructions as follows:

	<b>DANGER</b> A safety instruction designed in this way indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.
	<b>WARNING</b> Ein solcherart gestalteter Sicherheitshinweis weist auf eine möglicherweise gefährliche Situation hin, zu schweren Verletzungen oder sogar zum Tod führen kann, wenn sie nicht gemieden wird.
	<b>CAUTION</b> A safety instruction designed in this way indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury.
	<b>NOTICE</b> A safety notice designed in this way indicates a potentially hazardous situation which, if not avoided, may result in property damage.

Irrespective of all safety regulations, your common sense and appropriate technical suitability/training are and will remain the most important safety factor for error-free operation of the machine. **Safe working depends primarily on you!**

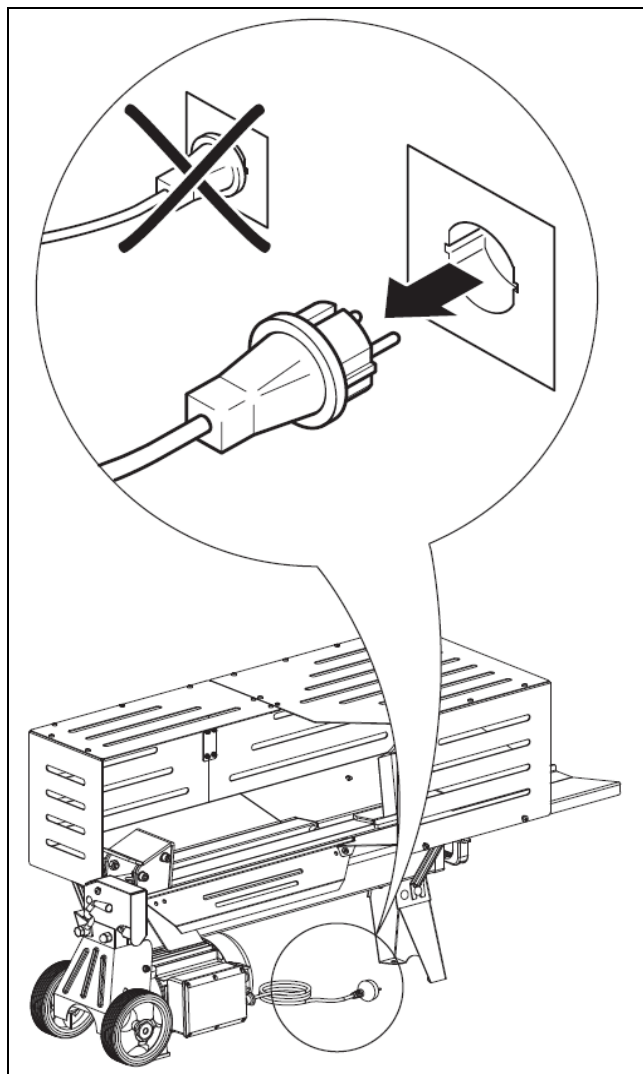


## 18 ASSEMBLY BASE FRAME (ONLY FOR ZI-HS7TU)

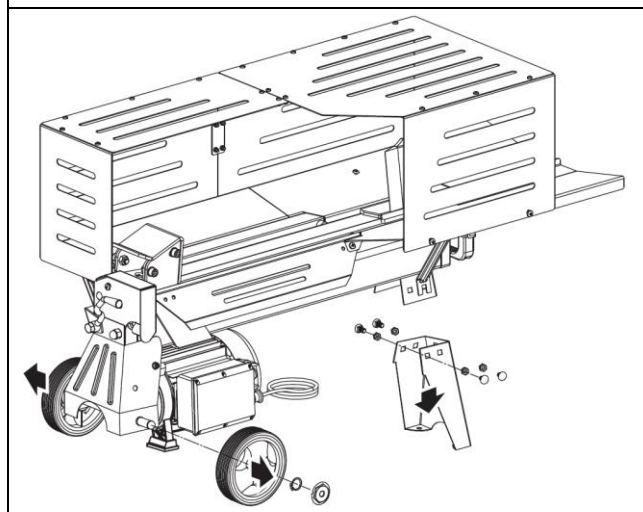


### CAUTION

Due to its high weight, at least two persons are required to mount the log splitter on the base frame

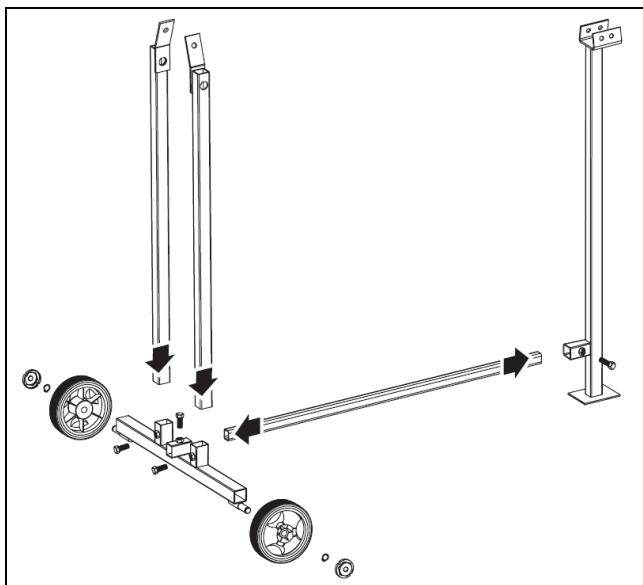


**A. Disconnect device from the mains:**  
Make sure that the device is not connected to the mains and is protected against unintentional switching on!

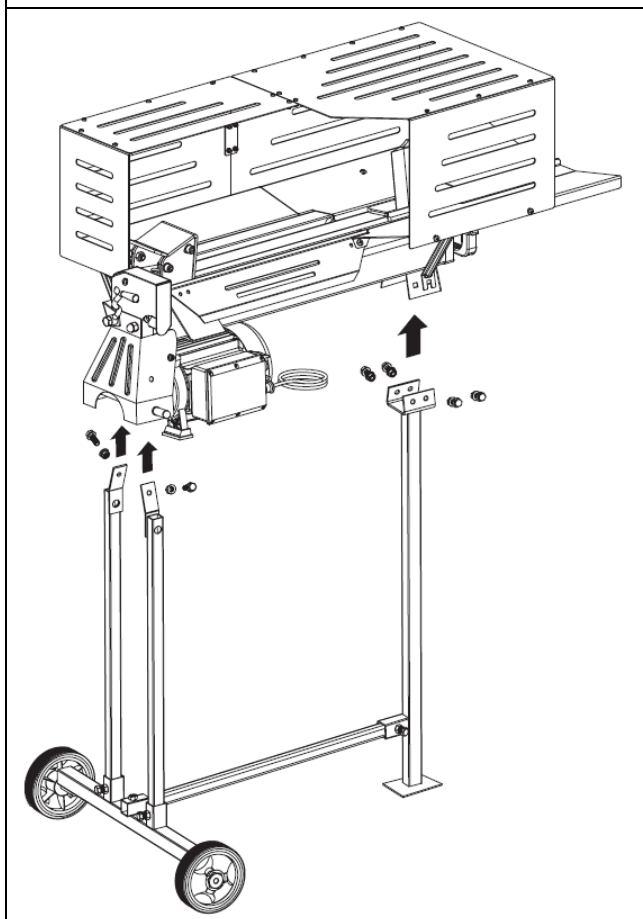


**B. Remove wheels and support leg:**  
Remove wheels (14) and support leg (16).





**C. Mount the base frame:** Assemble the base frame (as shown in the illustration on the left).



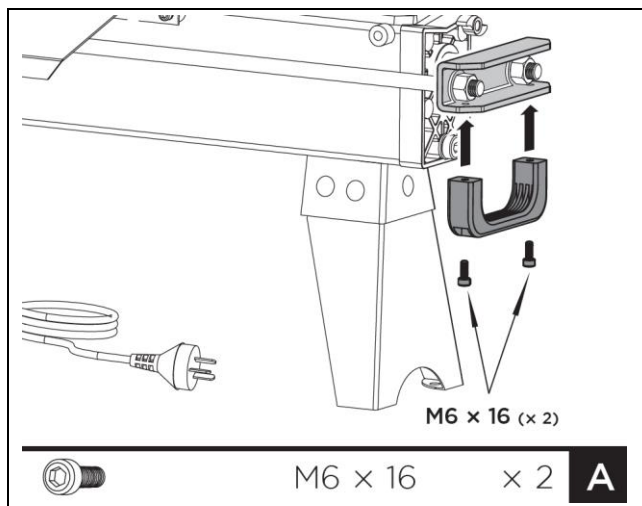
**D. Mounting the machine body:** Mount the machine body (as shown in the illustration on the left) on the base frame.

**E.** Follow the steps below to complete assembly!



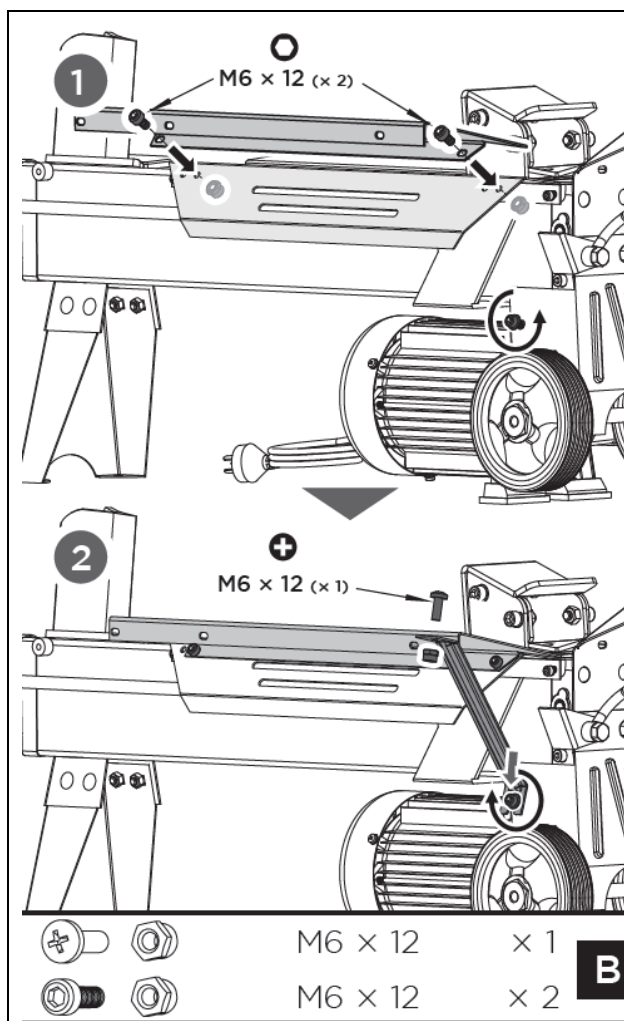
## 19 ASSEMBLY ZI-HS5TN & ZI-HS7TU

### 19.1 Lifting Handle

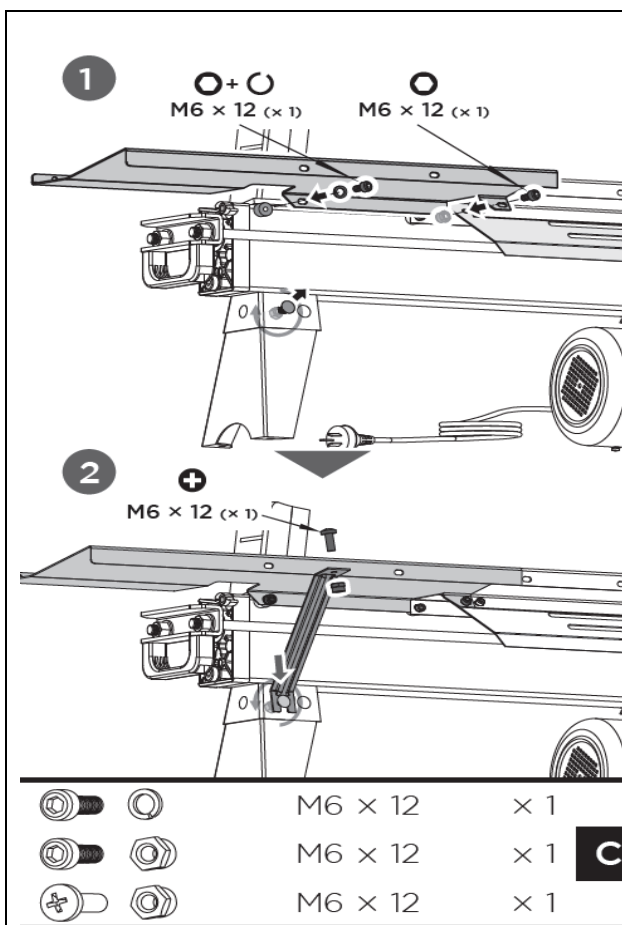


**A. Mounting the lifting handle:** Attach the lifting handle to the U-bracket with two M6x16 screws.

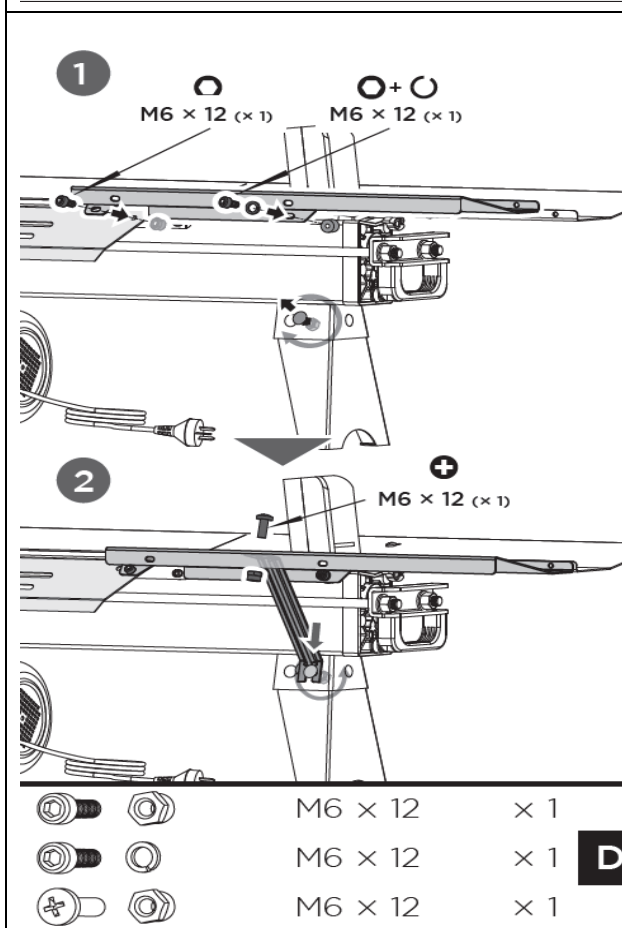
### 19.2 Log Tray



**B. Fastening the guard bottom plate:** Mount the guard bottom plate to the rear guide plate and secure it with the two socket head cap screws M6x12 and the lock nuts. Loosen the socket head cap screw and the large washer on the wheel bracket, insert the open end of the support strut 2 between the large washer and the wheel bracket and tighten the screw. Connect the upper end of support strut 2 to the guard bottom plate with a cross recessed pan head screw M6x12 and lock nut M6 and tighten.

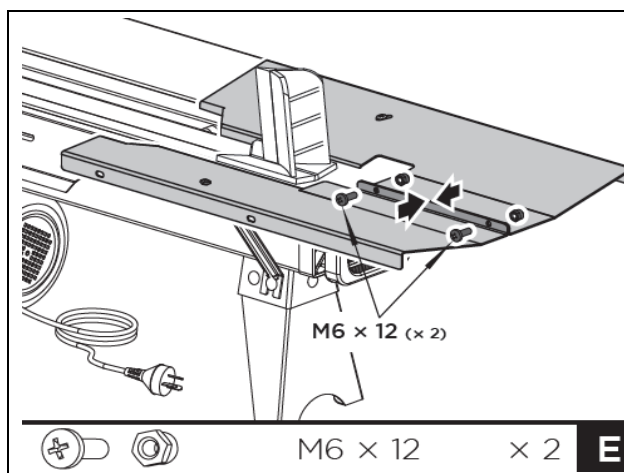


**C. Log tray right:** Align the two mounting holes of log tray right with the holes on the rear of the splitter. Insert one socket head cap screw M6x12 and a spring washer 6 into the mounting hole on the left side, another socket head cap screw M6x12 and lock nut M6 on the right side and tighten both screws firmly (1). Then loosen the cup head bolt and nut on the left side of the front leg, insert the open end of support strut 1 onto the bolt and tighten the nut. Connect the upper end of support strut 1 by means of a cross recessed pan head screw M6x12 and lock nut M6 with log tray 1 and tighten the screw (2).



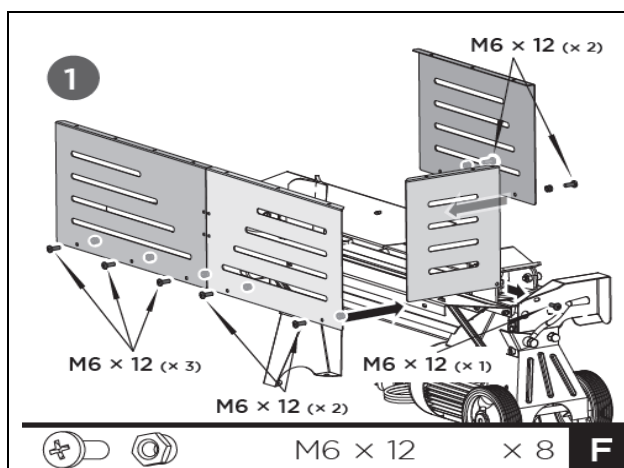
**D. Log tray left:** Align the two mounting holes of log tray left with the holes on the front of the splitter. Insert a socket head cap screw M6x12 and a spring washer 6 into the mounting hole on the right side, another socket head cap screw M6x12 and lock nut M6 on the left side and tighten both screws firmly. Then loosen the cup head bolt and nut on the right side of the front leg, insert the open end of support strut 1 onto the bolt and tighten the nut. Connect the upper end of the support strut 1 with the cross recessed pan head screw M6x12 and the counter nut M6 with log tray 2 and tighten the screw.



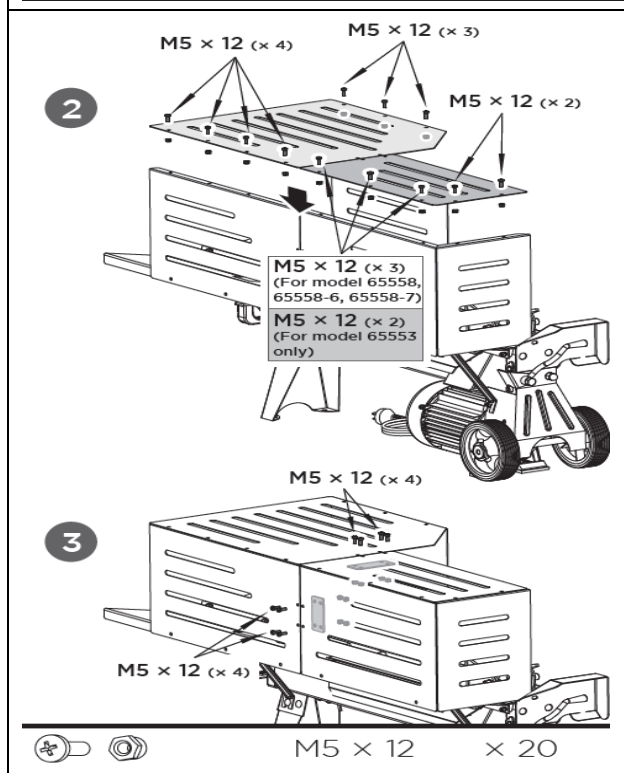


- E. Connecting log tray right and left:**  
Connect log tray 1 and 2 with two screws M6x12 and lock nuts.

### 19.3 Steel Guard



- A. Attaching front guard plates, left guard plate and rear guard plates:**  
Fix the front guard plate, the left guard plate and two rear guard plates with screws M6x12 and nuts to the log tray and the bottom plate (1).



- B. Connecting top guard plates / rear guard plates:** Mount the two top guard plates with M5x12 bolts and nuts to the vertical plates (2).  
Connect the top guard plates / rear guard plates with the plate connectors and M5x12 bolts and nuts (3).



## 20 TRANSPORT

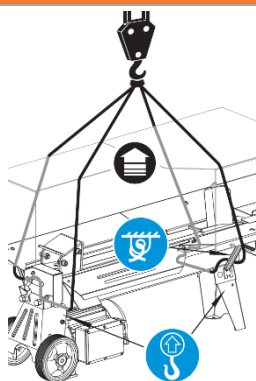
For easier transport over short distances, the log splitter is equipped with two wheels and a transport handle.

### NOTICE



Before moving the log splitter, make sure that the vent screw is tightened!

### WARNING

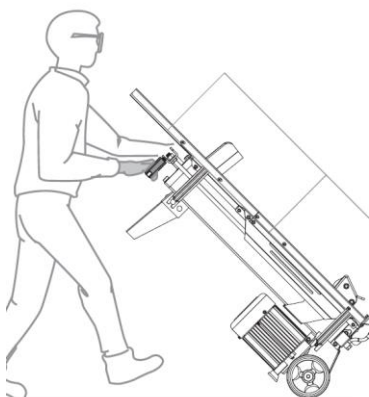


When using a crane for lifting (e.g. when loading the splitter onto a truck), attach the hoist only to the intended places - see illustration on the left.

Observe the applicable regulations regarding load securing!

Never hang the hoist on the transport handle!

Never transport the log splitter when loaded!



To move the log splitter over short distances, hold it by the transport handle and tilt it slightly - see illustration on the left.

## 21 OPERATION

### CAUTION



**Never adjust the pressure relief screw!** The maximum splitting force of the log splitter is factory set and the pressure limiting screw is sealed with adhesive to ensure that the pressure does not exceed the preset maximum. Adjustment was made by a qualified mechanic using professional instruments. Unauthorized adjustment of the pressure relief screw may result in serious injury or damage to the machine!

### 21.1 Preparatory activities

#### 21.1.1 Greasing the splitting wedge

Apply a thin layer of grease to the splitting wedge of your wood splitter before starting work. This will prolong the life of your tool.

### 21.1.2 18.1.2 Bleeding the hydraulic system

#### NOTICE



Never forget to loosen the breather screw before starting to operate the log splitter! Otherwise, the air in the system will be released and compressed again and again, which will destroy the seals of the hydraulic circuit and make the log splitter unusable.

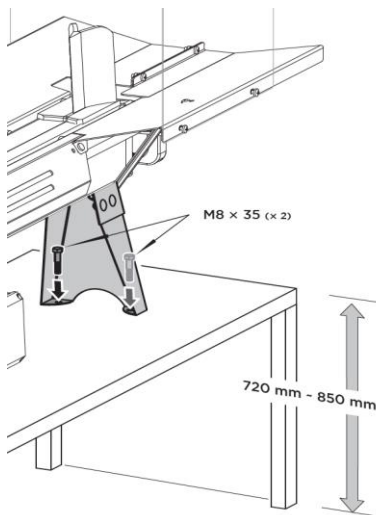


To bleed the hydraulic system, loosen the bleed screw a few turns so that the air can flow gently into and out of the oil tank.

The air flow through the oil tank should be visible during operation.

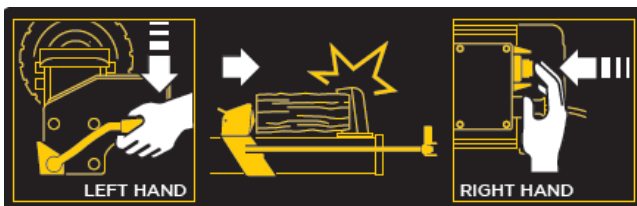
*Important: Tighten the air-vent screw before each transport to prevent oil leakage.*

### 21.1.3 Fixing the log splitter (ZI-HS5TN only)

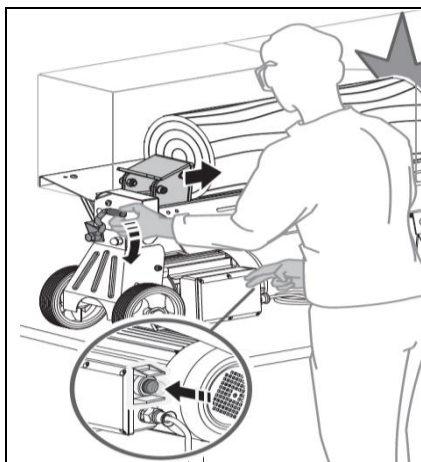


Before putting the wood splitter into operation place it on a 72–85 cm high, stable and level workbench and fasten the support leg with two screws (M8x35) as shown in the picture on the left.

## 21.2 Operating the log splitter

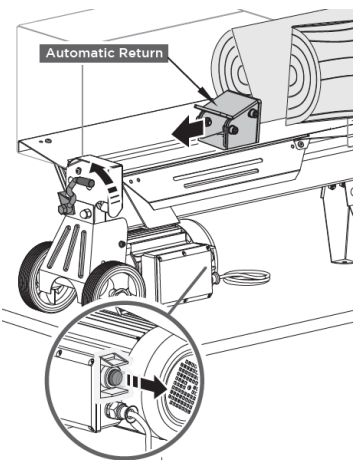


The log splitter is equipped with a two-hand control. The left hand controls the hydraulic control lever, the right hand the pressure switch (see illustration on the left). If one hand is missing, the log splitter "freezes".



The trigger-controlled locking device is designed to prevent accidental lowering of the hydraulic control lever.

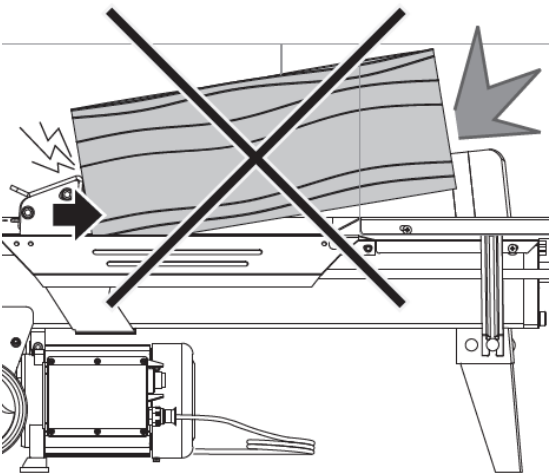
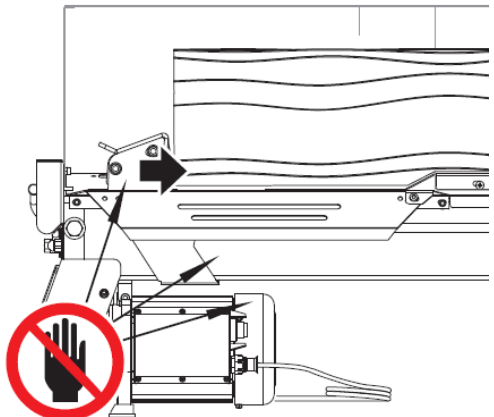
To operate the hydraulic control lever, first move it forwards and then pull the trigger downwards with your index finger (Fig. left).

	<p>Only when both hands release the control elements the log pusher automatically returns to its starting position.</p>
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## NOTICE



Never press the log splitter for more than 5 seconds, as the oil under pressure will overheat, which may cause the blade to break or damage the machine.

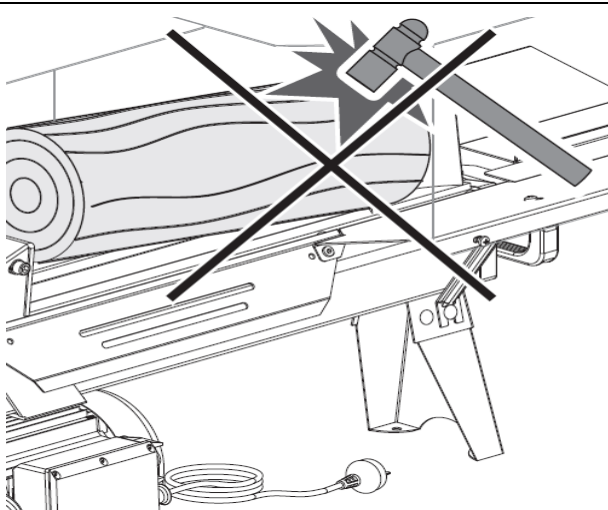
	<p>Make sure that the wood does not twist, wobble or slip when splitting. Also note the five-second time limit for pressurizing. If the log cannot be split within this period of time, its hardness exceeds the capacity of the machine. In this case, turn the log by 90° and try to split the log this way. If this does not work either, the log should be sorted out for safety reasons and to protect the machine.</p>
	<p>Always split blocks in the direction of the grain. To split, place the blocks firmly on the wood support boards and the worktable, and keep your hands away from cracks and tears that open in the wood. Never try to split two or more pieces of wood at the same time. One of them could be catapulted out and hit and injure you.</p>

### 21.2.1 Freeing jammed logs

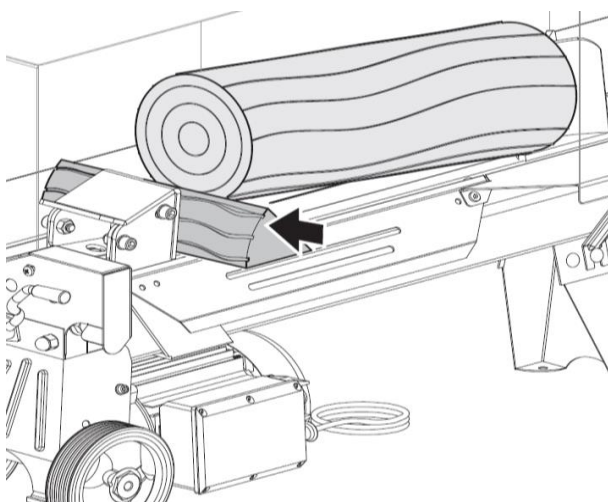
#### CAUTION



Do not try to remove trapped wood by hand, either yourself or with the help of other people! You could slip off and/or get trapped and seriously injure yourself.

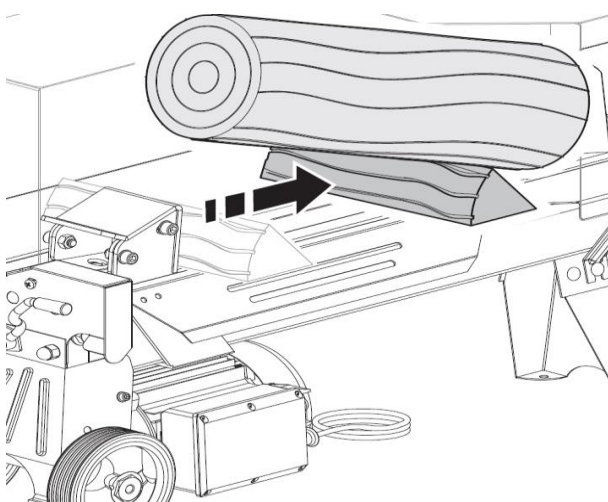


**Note:** Never try to free a jammed logs by hitting it (e.g. with an axe). The hitting could damage or launch the machine and cause accidents.



To free a jammed log:

- Release both control elements.
- After the wood slide moves back and comes to a standstill at its starting position, place a wedge under the clamped log.
- Start the log splitter to move the wedge so that it lies completely under the clamped log.



- Repeat above procedure with sharper slope wedge woods until the log is completely freed.





## 22 MAINTENANCE

### WARNING



Before carrying out any maintenance work, ensure that moving parts are stationary, that the machine is disconnected from the mains and secured against unintentional restarting! Only trained specialist personnel is authorised to carry out repair work on this machine!

### 22.1 Maintenance schedule

Activity	ZI-HS5N	ZI-HS7TU
Check oil level	Before usage	Before usage
Change hydraulic oil	Every 150h or after one year	Every 150 h or after one year

### 22.2 Changing the hydraulic oil

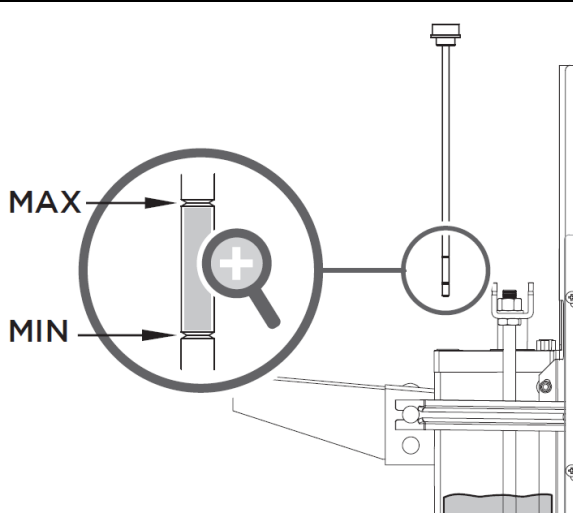
### NOTICE



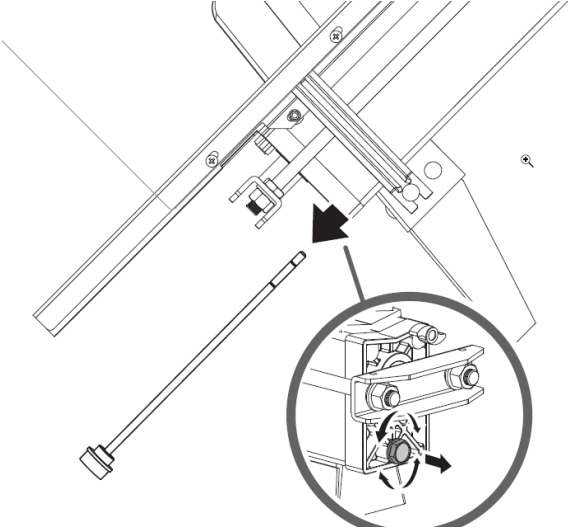

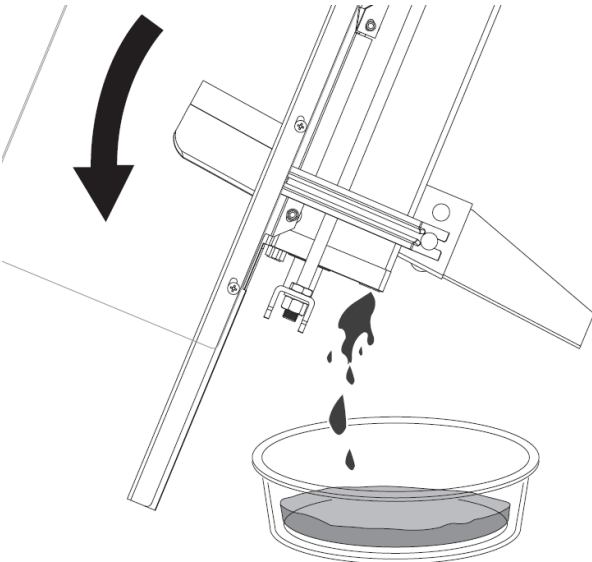
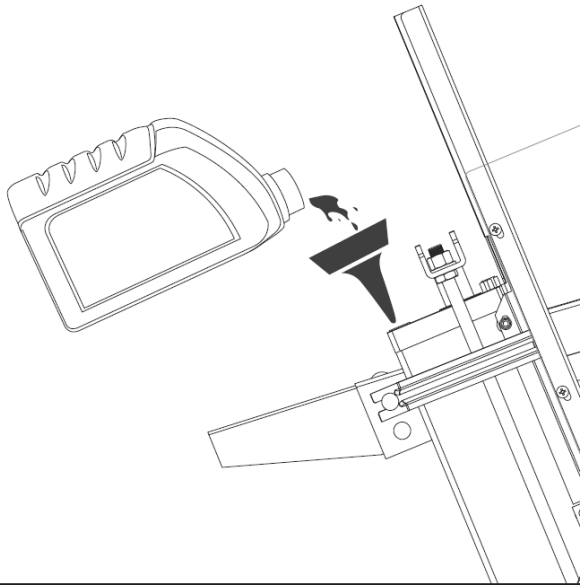
Check the oil level regularly. Change the hydraulic oil completely at least once a year. Always dispose of used oil correctly and never dispose of it in household waste or waste water!

The hydraulic system of the log splitter is a closed system with oil tank, oil pump and control valve.

The following oils (or equivalent products) are recommended for the splitter hydraulic transmission system: Shell Tellus 22, Mobil DTE 11, Aral Vitam GF 22 oder BP Energol HLP-HM 22.



**OIL-LEVEL CHECK:** If the oil level is too low, the oil pump may be damaged and overfilling may cause the hydraulic system to overheat. Check the oil level regularly with the dipstick - see graphic on the left!



	<div data-bbox="877 369 1045 537">  </div> <p>Waste oils are toxic and must not be discharged into the environment. Contact your local authorities for information on proper disposal.</p> <p>To change oil carry out the following steps:</p> <ol style="list-style-type: none"> <li>1. Make sure that all moving parts stand still and that the splitter is disconnected from the power source.</li> <li>2. Loosen the oil drain plug with dipstick and remove it.</li> </ol>
	<ol style="list-style-type: none"> <li>3. Turn the log splitter on the support leg over a four litres capacity container and drain the hydraulic oil off.</li> </ol>
	<ol style="list-style-type: none"> <li>4. Then turn the wood splitter to the motor side.</li> <li>5. Top up with fresh hydraulic oil of appropriate specification.</li> <li>6. Make sure that the level of the refilled oil is correct.</li> <li>7. Re-insert the oil drain bolt with the dipstick and tighten.</li> <li>8. Make sure that the bolt is tightened to prevent oil from leaking when the log splitter is returned to the horizontal position.</li> </ol>



## 22.3 Sharpening the wedge

The wood splitter is equipped with a re-inforced splitting wedge with a specially treated cutting edge. After a long period of operation and if necessary, sharpen the wedge with a fine file to remove burrs or notches.

## 23 DISPOSAL

	Observe the national waste disposal regulations. Do not dispose of the machine, machine components or equipment in residual waste. If necessary, contact your local authorities for information on the disposal options available. If you buy a new machine or an equivalent device from your specialist dealer, he is obliged in certain countries to dispose of your old machine properly.
	Waste oils are toxic and must not be discharged into the environment. If necessary, contact your local authorities for information on proper disposal.

## 24 TROUBLESHOOTING

PROBLEM	PROBABLE CAUSE	REMEDY SUGGESTED
Failure to split logs	Log is improperly positioned	Refer to "Log Splitter Operation" section for correct log loading.
	The sizes or hardness of the log exceeds the capacity of the machine	Reduce the log sizes before splitting it on the log splitter.
	Wedge cutting edge is blunt	Refer to "Sharpening Wedge" section to sharpen the cutting edge.
	Oil leaks	Locate leak(s) and contact the dealer
	Unauthorized adjustment was made on max. pressure limiting screw. Lower max. pressure rating was set.	Contact your distributor.
The log pusher moves jerkily, taking unfamiliar noise or vibrating a lot	Lack of hydraulic oil and excessive air in the hydraulic system.	Check oil level for possible oil refilling. Contact your distributor.
Oil leaks around cylinder ram or from other points	Air sealed in hydraulic system while operating	Loosen bleed screw by 3–4 rotations before operating the log splitter.
	Bleed screw is not tightened before moving the log splitter.	Tighten the bleed screw up before moving the log splitter.
	Oil drain bolt with dipstick is not tight.	Tighten the oil drain bolt with dipstick.
	Hydraulic control valve assembly and / or seal(s) worn	Contact your distributor.



**All repair work on this machine must be carried out by a specialist for this product!**

