8.2 Adjusting Length of Shaft.......57

17.1 Deburring the Guide Bar63

17.2 Sharpening the Saw Chain......64

Repairing64

Contents

7.1 Mounting and Removing the Bar and Chain......54

8.1 Fitting and Adjusting the Carrying System57

Tensioning the Saw Chain......55

Filling Up with Chain Oil......56

Adjusting Pole Pruner for the User57

-		^	Demonstrate and Ethiop the Dettern
2 2.1 2.2 2.3	Guide to Using this Manual40Applicable Documentation40Symbols used with warnings in the text41Symbols in Text41	9 9.1 9.2 10	Removing and Fitting the Battery
3 3.1	Overview 41 STIHL HTA 65 Pole Pruner and Battery 41	10.2	Switching On
3.2	STIHL HTA 85 Pole Pruner and Battery42 Symbols43		Checking Pole Pruner and Battery
4 4.1 4.2 4.3 4.4	Safety Precautions44Warning Symbols.44Intended Use.44The Operator.45Clothing and Equipment.45	11.3 11.4 11.5	Checking the Guide Bar.59Checking the Saw Chain.59Checking the Controls.60Checking Chain Lubrication.60Testing the Battery.61
4.5 4.6 4.7	Work Area and Surroundings	12.1	Using the Pole Pruner61Holding and Controlling the Pole Pruner61Limbing61
4.8 4.9	Reactive Forces		After Finishing Work
	O Storing		Transporting
5 5.1	Preparing Pole Pruner for Operation	14.2 15	Transporting the Battery
6 6.1	Charging the Battery, LEDs	15.1	Storing the Pole Pruner
6.2 6.3	Displaying State of Charge		Cleaning63Cleaning the Pole Pruner63
7	Assembling the Pole Pruner54	16.2	Cleaning the Bar and Chain63

This instruction manual is protected by copyright. All rights reserved, especially the rights to reproduce, translate and process with electronic systems.

English 1 Introduction

18.1	Repairing the Pole Pruner and Battery	64
	Troubleshooting Troubleshooting Pole Pruner and Battery	
	Specifications	
	STIHL HTA 65, HTA 85 Pole Pruners	
	Chain Sprockets and Chain Speeds	
20.3	Minimum groove depth of guide bars	67
	STIHL AP battery	
	Noise and Vibration Data	
20.6	REACH	68
21	Bar and Chain Combinations	
21.1	STIHL HTA 65, HTA 85 Pole Pruners	69
	Spare Parts and Accessories	
23	Disposal	
	Disposing of Pole Pruner and Battery	
24	EC Declaration of Conformity	70
24.1	STIHL HTA 65, HTA 85 Pole Pruners	70
25	General Power Tool Safety Warnings	70
25.1	Introduction	70
	Work area safety	
	Electrical safety	
	Personal safety	
	Power tool use and care	
	Battery tool use and care	

1 Introduction

Dear Customer,

Thank you for choosing STIHL. We develop and manufacture our quality products to meet our customers' requirements. The products are designed for reliability even under extreme conditions.

STIHL also stands for premium service quality. Our specialist dealers guarantee competent advice and instruction as well as comprehensive service support.

We thank you for your confidence in us and hope you will enjoy working with your STIHL product.

U, 2 Sill

Dr. Nikolas Stihl

IMPORTANT: READ BEFORE USE AND KEEP IN A SAFE PLACE.

2 Guide to Using this Manual

2.1 Applicable Documentation

Local safety regulations apply.

- Read, understand and save the following documents in addition to this instruction manual:
 - User instructions for STIHL AR battery
 - Instruction manual for AP belt bag with connecting cable
 - Safety notes and precautions for STIHL AP battery
 - Instruction manual for STIHL AL 101, 300, 500 chargers
 - Safety information for STIHL batteries and products with built-in batteries: www.stihl.com/safety-datasheets

3 Overview English

2.2 Symbols used with warnings in the text



WARNING

This symbol indicates dangers that can cause serious injuries or death.

The measures indicated can avoid serious injuries or death.

NOTICE

This symbol indicates dangers that can cause damage to property.

► The measures indicated can avoid damage to property.

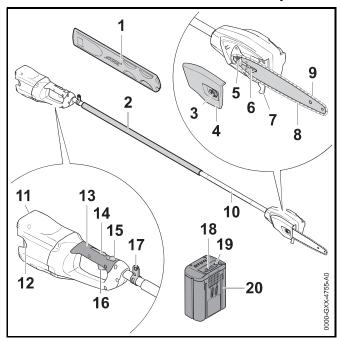
2.3 Symbols in Text



This symbol refers to a chapter in this instruction manual.

3 Overview

3.1 STIHL HTA 65 Pole Pruner and Battery



1 Chain Scabbard

Helps protect user from contact with saw chain.

2 Handle Hose

For holding and controlling the pole pruner.

3 Nu

Secures chain sprocket cover to the pole pruner.

4 Chain Sprocket Cover

Covers the chain sprocket and secures the guide bar to the pole pruner.

5 Chain Sprocket

Toothed wheel that drives the chain.

English 3 Overview

6 Tensioning Screw

Adjusts chain tension.

7 Stop

Toothed stop for holding pole pruner against wood while cutting.

8 Guide Bar

Supports and guides the saw chain.

9 Saw Chain

Cuts the wood.

10 Drive Tube

Connects all components.

11 Battery Compartment

Accommodates the battery.

12 Locking Lever

Secures the battery in the battery compartment.

13 Control Handle

For holding and controlling the pole pruner.

14 Trigger Lockout

Locks trigger in position.

15 Retaining Latch

Operated together with the trigger lockout to unlock the trigger.

16 Trigger

Switches the pole pruner on and off.

17 Carrying Ring

For attaching carrying system.

18 LEDs

Indicate battery's state of charge and malfunctions.

19 Button

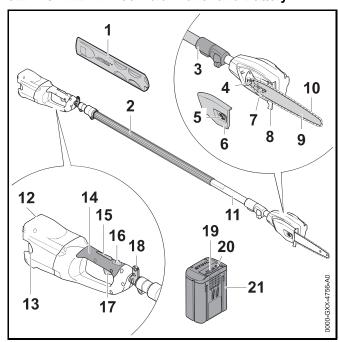
Activates the LEDs on the battery.

20 Battery

Supplies power to the pole pruner.

Rating Label with Serial Number

3.2 STIHL HTA 85 Pole Pruner and Battery



1 Chain Scabbard

Helps protect user from contact with saw chain.

2 Handle Hose

For holding and controlling the pole pruner.

3 Quick Release Clamp

Serves to adjust length of shaft.

4 Nut

Secures chain sprocket cover to the pole pruner.

5 Chain Sprocket Cover

Covers the chain sprocket and secures the guide bar to the pole pruner.

6 Chain Sprocket

Toothed wheel that drives the chain.

3 Overview English

7 Tensioning Screw

Adjusts chain tension.

8 Stop

Toothed stop for holding pole pruner against wood while cuttina.

9 Guide Bar

Supports and guides the saw chain.

10 Saw Chain

Cuts the wood.

11 Drive Tube

Connects all components.

12 Battery Compartment

Accommodates the battery.

13 Locking Lever

Secures the battery in the battery compartment.

14 Control Handle

For holding and controlling the pole pruner.

15 Trigger Lockout

Locks trigger in position.

16 Retaining Latch

Operated together with the trigger lockout to unlock the trigger

17 Trigger

Switches the pole pruner on and off.

18 Carrying Ring

For attaching carrying system.

19 LEDs

Indicate battery's state of charge and malfunctions.

20 Button

Activates the LEDs on the battery.

21 Battery

Supplies power to the pole pruner.

Rating Label with Serial Number

3.3 **Symbols**

Meanings of symbols that may be on the pole pruner and battery:



Retaining latch unlocks the trigger in this position.



Retaining latch locks the trigger in this position.



This symbol marks the chain oil tank.



 \supset_{\bigcirc} This symbol shows the direction of rotation of the chain.



Rotate in this direction to increase chain tension.



1 LED glows red. Battery too hot or too cold.



4 LEDs flash red. There is a malfunction in the



Guaranteed sound power level according to directive 2000/14/EC in dB(A) in order to make sound emissions of products comparable.



The data next to this symbol indicates the energy content of the battery according to the cell manufacturer's specification. The energy content available during operation is lower.



Do not dispose of the product with your household

English 4 Safety Precautions

4 Safety Precautions

4.1 Warning Symbols

Meanings of warning symbols on the pole pruner and battery:



Observe safety notices and take the necessary precautions.



Read, understand and save the instruction manual.



Wear safety glasses and a hard hat.



Wear safety boots.



Wear work gloves.



Maintain safe distance.



Always remove the battery during work breaks, transport, storage, maintenance or repairs.



Protect battery from heat and fire.



Do not immerse battery in fluids.



Observe battery's permissible temperature range.

4.2 Intended Use

The STIHL HTA 65 and HTA 85 pole pruners are designed for limbing and pruning the branches of tall trees.

The pole pruner must not be used for felling operations.

The pole pruner may be used in the rain.

The pole pruner is powered by a STIHL AP battery or a STIHL AR battery.

4 Safety Precautions English

WARNING

- Batteries not explicitly approved for the pole pruner by STIHL may cause a fire or explosion. This can result in serious or fatal injuries and damage to property.
 - Use the pole pruner with a STIHL AP battery or a STIHL AR battery.
- Using the pole pruner or the battery for purposes for which they were not designed may result in serious or fatal injuries and damage to property.
 - Use the pole pruner as described in this instruction manual.
 - Use the battery as described in this instruction manual or the instruction manual for the STIHL AR battery.

4.3 The Operator

WARNING

Users without adequate training or instruction cannot recognize or assess the risks involved in using the pole pruner and battery. The user or other persons may sustain serious or fatal injuries.



- Read, understand and save the instruction manual.
- ► If you pass the pole pruner or battery on to another person: Always give them the instruction manual.
- ► Make sure the user meets the following requirements:
 - The user must be rested.
 - The user must be in good physical condition and mental health to operate and work with the pole pruner and battery. If the user's physical, sensory or

- mental ability is restricted, he or she may work only under the supervision of or as instructed by a responsible person.
- The user must be legally recognized as an adult.
- The user has received instruction from a STIHL servicing dealer or other experienced user before working with the pole pruner for the first time.
- The user must not be under the influence of alcohol, medication or drugs.
- If you have any queries: Contact your STIHL servicing dealer for assistance.

4.4 Clothing and Equipment

▲ WARNING

- Long hair can be pulled into the pole pruner during operation. This can result in serious injuries.
 - ► Tie up and confine long hair so that it cannot be entangled in the pole pruner.
- Objects can be thrown through the air at high speed during operation. This can result in personal injury.



- Wear close-fitting safety glasses. Suitable safety glasses that have been tested and labeled in accordance with EN 166 or national standards are available from retailers.
- ► Wear a long-sleeved, snug-fitting upper garment.
- Falling objects can cause head injuries.



Wear a safety hard hat.

English 4 Safety Precautions

- Dust can be whipped up during operation: Whipped up dust can damage the respiratory passages and cause allergic reactions.
 - Wear a respirator.
- Unsuitable clothing can snag on wood, brush or the pole pruner. Not wearing personal protective equipment may result in serious injury.
 - ► Wear snug-fitting clothing.
 - ► Do not wear a scarf or jewelry.
- The user can be cut by the wood during operation. The user can come into contact with the saw chain during cleaning and maintenance work. This can result in personal injury.



Wear work gloves made of durable material.

 Wearing unsuitable footwear may cause you to slip or stumble. This can result in personal injury.



Wear sturdy enclosed footwear with nonslip soles.

4.5 Work Area and Surroundings

4.5.1 Pole Pruner

WARNING

 Bystanders, children and animals cannot recognize or assess the dangers of the pole pruner or flying debris.
 Bystanders, children and animals may be seriously injured and damage to property may occur.



 Do not allow bystanders, children or animals within 15 meters of the work area.

- Maintain a clearance of 15 meters from objects.
- ► Never leave the pole pruner unattended.
- Make sure that children cannot play with the pole pruner.
- Electrical components of the pole pruner can produce sparks. Sparks may cause a fire or an explosion in an easily combustible or explosive environment. This can result in serious or fatal injuries and damage to property.
 - Do not work in an easily combustible or explosive environment.

4.5.2 Battery

▲ WARNING

- Bystanders, children and animals cannot recognize or assess the dangers of the battery. Innocent children, bystanders and animals may be seriously injured.
 - Keep children, bystanders and animals away from the work area.
 - ► Do not leave the battery unattended.
 - Make sure that children cannot play with the battery.
- The battery is not protected against all ambient conditions. If the battery is exposed to certain ambient conditions, it may catch fire or explode. This can result in serious injuries and damage to property.



- Protect battery from heat and fire.
- Do not throw the battery into a fire.



► Use and store the battery at temperatures between -10°C and +50°C.

4 Safety Precautions English



► Do not immerse battery in fluids.

- ► Keep battery away from metallic objects.
- ► Do not expose battery to high pressure.
- ► Do not expose battery to microwaves.
- ► Protect battery from chemicals and salts.

4.6 Safe Condition

4.6.1 Pole Pruner

The pole pruner is in a safe condition if the following points are observed:

- The pole pruner is not damaged.
- The oil tank is closed.
- The pole pruner is in a clean condition.
- The controls function properly and have not been modified.
- Chain lubrication is operating properly.
- Wear marks on chain sprocket are not deeper than 0.5 mm.
- A combination of guide bar and saw chain recommended in this instruction manual is mounted.
- The guide bar and chain are properly mounted.
- The chain is properly tensioned.
- Only original STIHL accessories designed for this pole pruner model are fitted.
- Accessories are properly mounted.

▲ WARNING

- If components do not comply with safety requirements, they will no longer function properly, safety devices may be rendered inoperative. This can result in serious or fatal injuries.
 - ► Work with an undamaged pole pruner.
 - Close the oil tank cap.
 - If the pole pruner is dirty: Clean the pole pruner.
 - Do not modify the pole pruner. Exception: Mounting a combination of guide bar and saw chain recommended in this instruction manual.
 - If the controls do not function properly: Do not use the pole pruner.
 - Only fit original STIHL accessories designed for this pole pruner model.
 - Mount the guide bar and chain as described in this instruction manual.
 - Mount accessories as described in this instruction manual or the instructions supplied with the accessory.
 - ► Never insert objects in the pole pruner's openings.
 - If you have any queries: Contact your STIHL servicing dealer for assistance.

4.6.2 Guide Bar

The guide bar is in a safe condition if the following points are observed:

- Guide bar is not damaged.
- Guide bar is not deformed.
- The minimum groove depth is maintained, D 20.3.
- Bar rails are free from burrs.
- Bar groove is not pinched or splayed.

English 4 Safety Precautions

▲ WARNING

- If the guide bar is not in a safe condition, it can no longer support and guide the saw chain properly. The rotating saw chain can jump off the guide bar. This can result in serious or fatal injuries.
 - Work only with an undamaged guide bar.
 - If the groove depth is less than the minimum depth: Mount a new guide bar.
 - ► Deburr the guide bar every week.
 - If you have any queries: Contact your STIHL servicing dealer.

4.6.3 Saw Chain

The saw chain is in a safe condition if the following conditions are fulfilled:

- The saw chain is undamaged.
- The saw chain has been sharpened as specified.
- The height of the cutter depth gauges is between the service marks.
- The length of the cutters is between the wear marks.

A WARNING

- Parts that are not in a safe condition cannot function properly and safety devices can be disabled. People can be seriously injured or killed.
 - Never use a damaged saw chain.
 - Sharpen chain as specified.
 - ► If in any doubt: Contact a STIHL servicing dealer.

4.6.4 Battery

The battery is in a safe condition if the following points are observed:

- Battery is undamaged.
- Battery is clean and dry.
- Battery functions properly and has not been modified.

WARNING

- A battery that is not in a safe condition cannot operate safely. This can result in serious injuries.
 - Never work with a damaged battery.
 - Never attempt to charge a damaged or defective battery.
 - If the battery is dirty or wet: Clean the battery and allow it to dry.
 - ► Never attempt to modify the battery.
 - Never insert objects in the battery's openings.
 - Never bridge the battery's contacts with metallic objects (short circuit).
 - Do not open the battery.
- Fluid may escape from a damaged battery. The fluid can cause irritation if it contacts the skin or eyes.
 - Avoid contact with the fluid.
 - In case of contact with the skin: Wash affected areas with plenty of water and soap.
 - In case of contact with the eyes: Rinse eyes with plenty of water for at least 15 minutes and seek medical advice.
- A damaged or defective battery may smell unusual, emit smoke or burn. This can result in serious or fatal injuries and damage to property.
 - If the battery smells unusual or emits smoke: Do not use the battery and keep it away from combustible substances.
 - If the battery catches fire: Attempt to extinguish the battery with a fire extinguisher or water.

4 Safety Precautions English

4.7 Working

4.7.1 Cutting

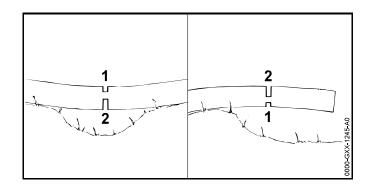
WARNING

- Always work within calling distance of others in case help is needed.
 - Make sure than persons outside the work area are within calling distance.
- The user cannot concentrate on the work in certain situations. The user can lose control of the pole pruner, stumble or fall and be seriously injured.
 - ► Work calmly and carefully.
 - ► If light and visibility are poor: Do not use the pole pruner.
 - ► Operate your pole pruner alone.
 - Watch out for obstacles.
 - Stand on the ground while working and keep a good balance. If it is necessary to work at heights: Use a lift bucket or a safe platform.
 - ► If you begin to feel tired: Take a break.
- The rotating saw chain can cut the operator. This can result in serious injuries.
 - Do not touch the rotating saw chain.
 - ► If the saw chain is blocked by an object: Switch off the pole pruner and remove the battery. Then remove the object causing the blockage.
- The rotating chain becomes hot and expands. If the chain is not lubricated sufficiently and re-tensioned at regular intervals, it man come off the guide bar or break. This can result in serious injuries and damage to property.
 - ► Use special chain oil.
 - Check chain tension regularly during cutting work. If chain tension is insufficient: Tension the chain.

- If the behavior of the pole pruner changes during operation or feels unusual, it may no longer be in a safe condition. This can result in serious injuries and damage to property.
 - Stop work, remove the battery and contact your STIHL servicing dealer for assistance.
- Vibrations may occur while using the pole pruner.
 - Wear gloves.



- Take regular breaks.
- If signs of circulation problems occur: Seek medical advice.
- Sparks may occur if the rotating chain makes contact with a hard object. Sparks may cause a fire in an easily combustible location. This can result in serious or fatal injuries and damage to property.
 - ► Do not work in an easily combustible location.
- Note that the saw chain continues to rotate for a short period after you release the trigger. The rotating saw chain can cut the user. This can result in serious injuries.
 - ► Hold the pole pruner firmly with both hands and wait until the saw chain comes to a standstill.

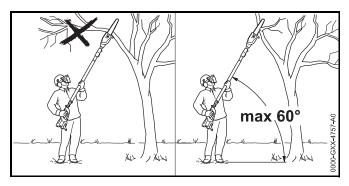


English 4 Safety Precautions

▲ WARNING

- The guide bar can be pinched when cutting wood that is under tension. The user can lose control of the pole pruner, stumble or fall and be seriously injured.
 - ► Make a relieving cut in the compression side (1) first, then perform bucking cut at the tension side (2).

4.7.2 Limbing

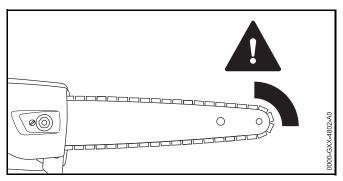


▲ WARNING

- A branch may fall to the ground during limbing. This can result in serious injuries.
 - ► Never stand directly underneath the branch you are cutting.
 - Maintain a shaft angle of no more than 60° to the horizontal.

4.8 Reactive Forces

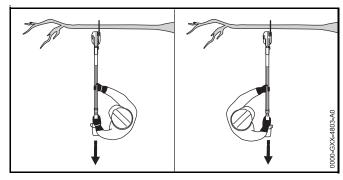
4.8.1 Kickback



Kickback can be caused for the following reasons:

- The rotating saw chain in the upper quadrant of the bar nose makes contact with a hard object and is suddenly braked.
- The rotating saw chain is pinched at the bar nose.

▲ WARNING

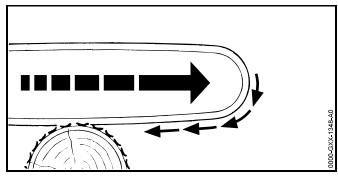


- If kickback occurs, the pole pruner can be thrown upwards and backwards. The user can lose control of the pole pruner and be seriously injured.
 - Always hold your pole pruner firmly with both hands.
 - Always keep your body out of the plane of the cutting attachment.

4 Safety Precautions English

- Use the working techniques described in this instruction manual
- ► Do not cut with the upper quadrant of the bar nose.
- Always cut with a properly sharpened and tensioned saw chain
- ► Use a reduced kickback saw chain.
- ► Use a guide bar with a narrow radius nose.
- Always cut with the chain running at full speed.

4.8.2 Pull-In

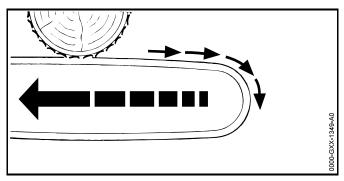


The pole pruner is pulled away from the operator when the bottom of the bar is used for cutting.

▲ WARNING

- If the rotating chain makes contact with a hard object and is suddenly pinched, the pole pruner is abruptly jerked away from the operator. The user can lose control of the pole pruner and be seriously injured.
 - ► Always hold your pole pruner firmly with both hands.
 - Use the working techniques described in this instruction manual.
 - ► Keep the guide bar straight in the cut.
 - Apply the stop properly.
 - ► Always cut with the chain running at full speed.

4.8.3 Pushback



The pole pruner is pushed back toward the operator when the top of the bar is used for cutting.

▲ WARNING

- If the rotating chain makes contact with a hard object and is suddenly pinched, the pole pruner is abruptly pushed back toward the operator. The user can lose control of the pole pruner and be seriously injured.
 - Always hold your pole pruner firmly with both hands.
 - Use the working techniques described in this instruction manual.
 - ► Keep the guide bar straight in the cut.
 - ► Always cut with the chain running at full speed.

English 4 Safety Precautions

4.9 Transporting

4.9.1 Pole Pruner

WARNING

- The pole pruner may turn over or shift during transport. This may result in personal injuries and damage to property.
 - ► Push the retaining latch into position ⊕.



► Remove the battery.

- Fit the scabbard so that it completely covers the guide bar.
- Secure the pole pruner with lashing straps or a net to prevent it turning over and moving.

4.9.2 Battery

WARNING

- The battery is not protected against all ambient conditions. The battery may be damaged if it is exposed to certain ambient conditions and damage to property may occur.
 - ► Never transport a damaged battery.
 - ► Store the battery in non-conductive packaging.
- The battery may turn over or shift during transport. This may result in personal injuries and damage to property.
 - Pack the battery in packaging in such a way that it cannot move.
 - Secure the packaging so that it cannot move.

4.10 Storing

4.10.1 Pole Pruner

▲ WARNING

- Children are not aware of and cannot assess the dangers of the pole pruner and can be seriously injured.
 - ► Push the retaining latch into position ⊕.



Remove the battery.

- Fit the scabbard so that it completely covers the guide bar.
- ► Store the pole pruner out of the reach of children.
- Dampness can corrode the electrical contacts on the pole pruner and metal components. This can damage the pole pruner.
 - ► Push the retaining latch into position ⊕.



► Remove the battery.

Store the pole pruner in a clean and dry condition.

4.10.2 Battery

▲ WARNING

- Children are not aware of and cannot assess the dangers of the battery and can be seriously injured.
 - Store the battery out of the reach of children.
- The battery is not protected against all ambient conditions. The battery may be damaged if it is exposed to certain ambient conditions.
 - Store the battery in a clean and dry condition.
 - ► Store the battery in an enclosed location.

- Store the battery separately from the pole pruner and charger.
- Store the battery in non-conductive packaging.
- Store the battery at temperatures between -10°C and +50°C

4.11 Cleaning, Maintenance and Repairs

WARNING

- The pole pruner may start unintentionally if the battery is left in place during cleaning, maintenance or repair operations. This can result in serious injuries and damage to property.
 - ► Push the retaining latch into position θ .



► Remove the battery.

- Aggressive cleaning agents, cleaning with a jet of water or pointed objects can damage the pole pruner, guide bar, saw chain and battery. If the pole pruner, guide bar, saw chain or battery are not cleaned correctly, components may no longer function properly or safety devices may be rendered inoperative. This can result in serious injuries.
 - Clean the pole pruner, guide bar, saw chain and battery as described in this instruction manual.
- If the pole pruner, guide bar, saw chain or battery are not serviced or repaired correctly, components may no longer function properly or safety devices may be rendered inoperative. This can result in serious or fatal injuries.
 - Do not attempt to service or repair the pole pruner or battery.
 - If the pole pruner or the battery require servicing or repairs: Contact your STIHL servicing dealer for assistance.
 - Service or repair the guide bar and chain as described in this instruction manual.

- The user can be cut by the sharp cutters while cleaning or servicing the saw chain. This can result in personal injury.
 - ► Wear work gloves made of durable material.

5 Preparing Pole Pruner for Operation

5.1 Preparing Pole Pruner for Operation

Perform the following steps before starting work:

- Make sure the following components are in a safe condition:
 - Pole pruner, □ 4.6.1.
 - Guide bar, 4.6.2.
 - Saw chain,
 4.6.3.
 - Battery, 🕮 4.6.4.
- ► Check the battery, 🛄 11.6.
- Recharge the battery fully as described in the instruction manual for the STIHL AL 101, 300, 500 chargers.
- ► Clean the pole pruner, 🛄 16.1.
- ► Mount the bar and chain, ☐ 7.1.1.
- ► Tension the saw chain, ☐ 7.2.
- ► Fill up with chain oil, 🕮 7.3.
- ► Fit and adjust the carrying system, □ 8.
- ► Check the controls, 🛄 11.4.
 - ► If 3 LEDs on the battery flash red while you are checking the controls: Remove the battery and contact your STIHL dealer for assistance.

There is a malfunction in the pole pruner.

- ► Check chain lubrication, 🛄 11.5.
- If you cannot carry out this work: Do not use your pole pruner and contact your STIHL servicing dealer for assistance.

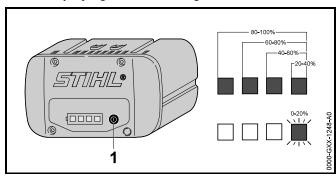
6 Charging the Battery, LEDs

6.1 Charging the Battery

The charging time depends on several factors, e.g. temperature of the battery or the ambient temperature. The actual charging time may differ from the specified charging time. For specified charging times see www.stihl.com/charging-times.

► Recharge the battery fully as described in the instruction manual for the STIHL AL 101, 300, 500 chargers.

6.2 Displaying State of Charge



- Press the button (1).
 The LEDs (5) glow green for about 5 seconds and indicate the state of charge.
- ► If the LED on the right flashes green: Charge the battery.

6.3 LEDs on Battery

The LEDs can show the state of charge or malfunctions. The LEDs can glow or flash green or red.

The state of charge is indicated when the LEDs glow or flash green.

► If the LEDs glow or flash red: Troubleshooting, □ 19. There is a malfunction in the pole pruner or battery.

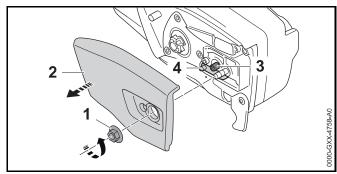
7 Assembling the Pole Pruner

7.1 Mounting and Removing the Bar and Chain

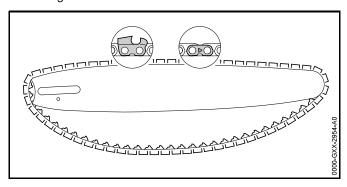
7.1.1 Mounting the Bar and Chain

The bar and chain combinations that can be used with the chain sprocket are listed in the specifications, \square 21.

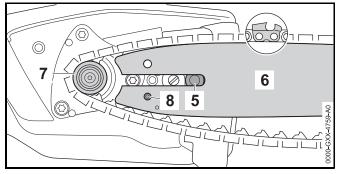
► Switch off the pole pruner, push retaining latch to position ⊕ and remove the battery.



- ► Rotate the nut (1) counterclockwise until the chain sprocket cover (2) can be removed.
- ► Remove the chain sprocket cover (2).
- ► Turn the tensioning screw (3) counterclockwise until the tensioner slide (4) butts against the left end of the housing.

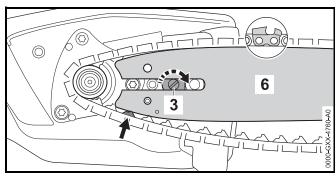


Fit the chain in the bar groove so that the arrows on the tie straps on the top of the bar point in the direction of rotation.



- Fit the guide bar and chain on the pole pruner and check the following points:
 - Chain drive links are seated in teeth of chain sprocket
 (7).
 - Collar stud (5) is located in slot in tail of guide bar (6).
 - Peg of tensioner slide (4) engages hole (8) in guide bar (6).

The guide bar (6) may be either way round. The logo on the guide bar (6) may also be upside down.



Turn the tensioning screw (3) clockwise until the chain fits snugly against the bar. Make sure the drive link tangs engage the bar groove.

The guide bar (6) and chain are seated against the pole pruner.

- ► Fit the sprocket cover (2) so that it is flush with the pole pruner.
- ► Fit and tighten down the nut (1) firmly.

7.1.2 Removing the Bar and Chain

- ► Switch off the pole pruner, push retaining latch to position ⊕ and remove the battery.
- Rotate the nut counterclockwise until the chain sprocket cover can be removed.
- ► Remove the sprocket cover.
- ► Turn the tensioning screw counterclockwise as far as stop.

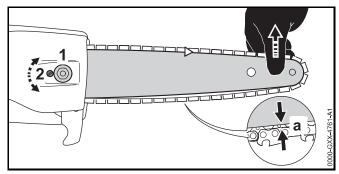
The chain is now slack.

► Remove the bar and chain.

7.2 Tensioning the Saw Chain

The saw chain expands or contracts during cutting work. Chain tension changes as a result. Check chain tension regularly during operation and readjust if necessary.

► Switch off the pole pruner, push retaining latch to position ⊕ and remove the battery.



- ► Loosen the nut (1).
- ► Hold the bar nose up and turn the tensioning screw (2) clockwise until the following points apply:
 - Chain sag 'a' in the center of the bar is 1 2 mm.
 - The chain can still be pulled easily along the bar with two fingers.

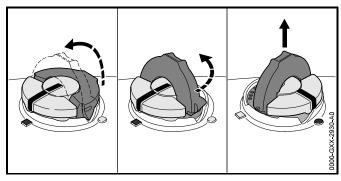
English

- If a Carving guide bar is used: Turn the tensioning screw (2) clockwise until the drive links on the underside of the bar are just half visible.
- ► Hold the bar nose up and tighten down the nut (1) firmly.
- ► If chain sag 'a' in the center of the bar is not 1 2 mm: Readjust chain tension.
- If you use a Carving bar and the drive links on the underside of the bar are less than half visible: Readjust chain tension.

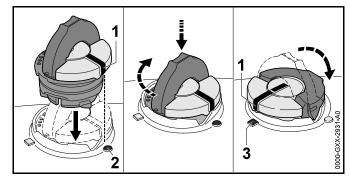
7.3 Filling Up with Chain Oil

Chain oil lubricates and cools the rotating chain.

- ► Switch off the pole pruner, push retaining latch to position ⊕ and remove the battery.
- Place pole pruner on a level surface so that the oil tank cap faces up.
- Use a damp cloth to clean the tank cap and the area around it.



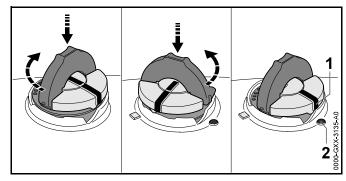
- Swing the grip on the oil tank cap to the vertical position.
- ► Turn the oil tank cap counterclockwise as far as stop.
- ► Remove the oil tank cap.
- Fill up with chain oil, taking care not to spill any oil and do not overfill the tank.
- If the grip on the oil tank cap has dropped into the closed position: Raise the grip until it is vertical.



- Place the cap in the filler opening so that mark (1) lines up with mark (2).
- ► Press the cap down and rotate it clockwise as far as stop. The cap snaps into place. The mark (1) points to mark (3),
- Check to see if the oil tank cap can be pulled upwards and off.
- If the oil tank cap cannot be pulled upwards and off: Fold down the grip on the oil tank cap. The oil tank is closed.

If the oil tank cap can be pulled upwards and off, perform the following steps:

► Place the oil tank cap in the filler opening – in any position.



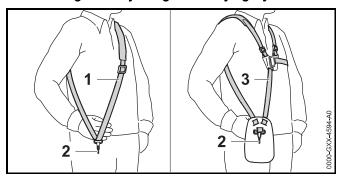
- ► Press the cap down and rotate it clockwise as far as stop.
- Press the cap down and rotate it counterclockwise until mark (1) points to mark (2).
- ► Now try again to close the oil tank.

If the oil tank still cannot be closed properly: Do not use your pole pruner and contact a STIHL dealer for assistance.

The pole pruner is not in a safe condition.

8 Adjusting Pole Pruner for the User

8.1 Fitting and Adjusting the Carrying System



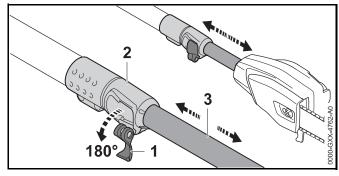
- ► Put on the shoulder strap (1) or full harness (3).
- Adjust the shoulder strap (1) or full harness (3) so that the carabiner (2) is about a hand's width below your right hip.

8.2 Adjusting Length of Shaft

HTA 85

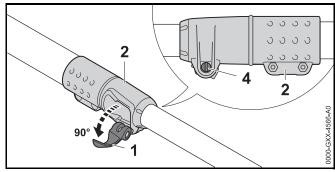
The length of the shaft can be adjusted to suit the height and reach of the user.

► Switch off the pole pruner, push retaining latch to position ⊕ and remove the battery.



- ► Open the lever (1) of the quick release clamp (2).
- ► Adjust shaft (3) to the required length.
- ► Close the lever (1) of the quick release clamp (2).
- Make sure the shaft (3) cannot be pushed in or pulled out and the lever (1) is seated against the quick-action clamp (2).

The shaft (3) is properly adjusted if it cannot be pushed in or pulled out and the lever (1) is seated against the quickaction clamp (2).



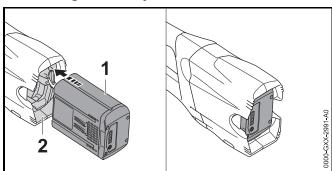
- ► If the shaft can be pushed in or pulled out:
 - ► Open the lever (1) of the quick release clamp (2) half way.
 - ► Hold the lever (1) of the quick release clamp (2) firmly and tighten the screw (4) moderately.

English

- ► Close the lever (1) of the quick release clamp (2). The shaft (3) can no longer be pushed in or pulled out and the lever (1) is seated against the quick-action clamp (2).
- If the lever (1) of the quick release clamp (2) cannot be closed properly:
 - Open the lever (1) of the quick release clamp (2) half way.
 - ► Loosen the screw (4).
 - ► Close the lever (1) of the quick release clamp (2). The shaft (3) can no longer be pushed in or pulled out and the lever (1) is seated against the quick-action clamp (2).

9 Removing and Fitting the Battery

9.1 Fitting the Battery

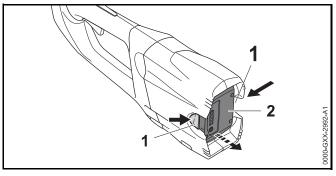


► Push the battery (1) into the battery compartment (2) as far as stop.

The battery (1) engages in position with a click.

9.2 Removing the Battery

- ► Place the pole pruner on a level surface.
- ► Hold one hand in front of the battery compartment to ensure the battery (2) does not fall out.

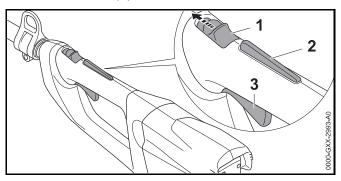


Depress both locking levers (1).
The battery (2) is unlocked and can be removed.

10 Switching Pole Pruning On and Off

10.1 Switching On

- Hold the pole pruner with one hand on the control handle
 wrap your thumb around the control handle.
- ► Hold the pole pruner firmly with your other hand on the handle hose wrap your thumb around the handle hose.



- ► Push the retaining latch (1) with your thumb to position ♂.
- Depress the trigger lockout (2) with your hand and hold it there.
- ► Pull the trigger (3) with your index finger and hold it there. The motor is accelerated and the chain rotates.

The more you depress the trigger, the faster the saw chain runs.

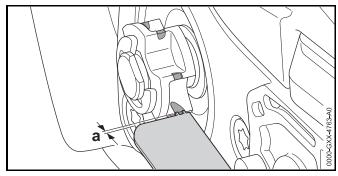
10.2 Switching Off

- ► Release the trigger and trigger lockout lever.
- Wait until the saw chain comes to a complete standstill after about 1 second.
- If the saw chain continues to run after about 1 second: Remove the battery and contact your STIHL dealer for assistance.
 - The pole pruner has a malfunction.
- ► Push the retaining latch into position ⊕.

11 Checking Pole Pruner and Battery

11.1 Checking the Chain Sprocket

- ► Switch off the pole pruner, push retaining latch to position ⊕ and remove the battery.
- ► Remove the chain sprocket cover.
- ► Remove the bar and chain.

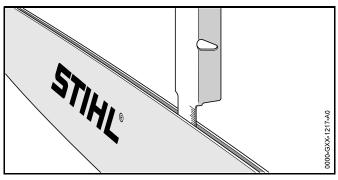


- Use a STIHL gauge to check the wear marks on the sprocket.
- If wear marks are deeper than a = 0.5 mm: Do not use your pole pruner and contact your STIHL servicing dealer for assistance.

The chain sprocket must be replaced.

11.2 Checking the Guide Bar

- ► Switch off the pole pruner, push retaining latch to position ⊕ and remove the battery.
- ► Remove the chain and guide bar.



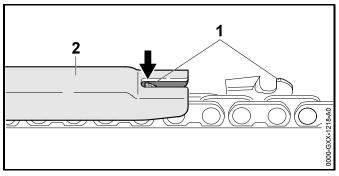
- Measure depth of bar groove with scale on STIHL filing gauge.
- Install a new guide bar if one of the following points applies:
 - Guide bar is damaged.

 - Bar groove is pinched or splayed.
- If you have any queries: Contact your STIHL servicing dealer for assistance.

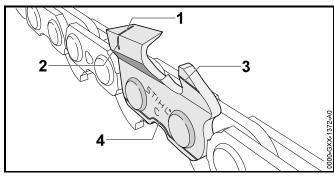
11.3 Checking the Saw Chain

► Switch off the pole pruner, push retaining latch to position ⊕ and remove the battery.

English



- ► Use a STIHL filing gauge (2) to check the height of the depth gauges (1). The STIHL filing gauge must match the chain pitch.
- ► If a depth gauge (1) projects from the filing gauge (2): Lower the depth gauge (1), ☐ 17.2.



- Make sure the service marks (1 to 4) on the cutters are visible.
- If one of the service marks is not visible on a cutter: Do not use your saw chain and contact your STIHL servicing dealer for assistance.
- Use a STIHL filing gauge to check that a filing angle of 30° has been maintained on all cutters. The STIHL filing gauge must match the chain pitch.
- ► If a filing angle of 30° has not been maintained: Resharpen the saw chain.
- If you have any queries: Contact your STIHL servicing dealer for assistance.

11.4 Checking the Controls

Retaining latch, trigger lockout and trigger

- ► Remove the battery.
- ► Push the retaining latch into position θ .
- Attempt to pull the trigger without depressing the lockout lever.
- ► If the trigger can be pulled: Do not use your pole pruner and contact your STIHL servicing dealer for assistance. Retaining latch or trigger lockout is faulty.
- ▶ Push the retaining latch into position ♂.
- Depress the trigger lockout lever and hold it in that position.
- ► Pull the trigger.
- ► Release the trigger and trigger lockout lever.
- ► If the trigger or trigger lockout is stiff or does not spring back to the idle position: Do not use your pole pruner and contact your STIHL servicing dealer for assistance. Trigger or trigger lockout is faulty.

Switching on the pole pruner

- ► Fit the battery.
- Depress the trigger lockout lever and hold it in that position.
- Pull the trigger and hold it there. The saw chain runs.
- If 3 LEDs flash red: Remove the battery and contact your STIHL dealer for assistance.
 There is a malfunction in the pole pruner.
- Release the trigger.

The saw chain stops running after about 1 second.

If the saw chain continues to run after about 1 second: Remove the battery and contact your STIHL dealer for assistance.

The pole pruner has a malfunction.

11.5 Checking Chain Lubrication

- ► Fit the battery.
- ► Hold the guide bar over a light surface.

12 Using the Pole Pruner English

Switch on the pole pruner. Chain oil is thrown off the chain and is visible on the light surface. Chain lubrication is operating properly.

If no chain oil can be seen:

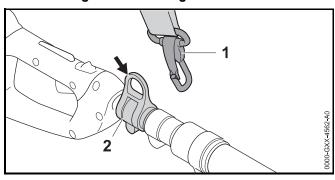
- Fill up with chain oil.
- ► Check chain lubrication again.
- ► If chain oil is still not visible on the light surface: Do not use your pole pruner and contact your STIHL servicing dealer for assistance. Chain lubrication is defective.

11.6 Testing the Battery

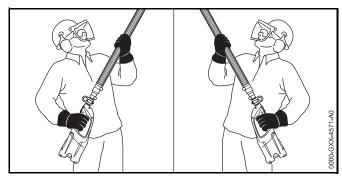
- Press button on battery.The LEDs glow or flash.
- If the LEDs do not glow or flash: Do not use the battery and contact your STIHL servicing dealer. There is a malfunction in the battery.

12 Using the Pole Pruner

12.1 Holding and Controlling the Pole Pruner



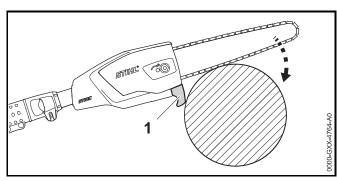
► Connect the carrying ring (2) to the carabiner (1).



- Hold the pole pruner with one hand on the control handle
 wrap your thumb around the control handle.
- Hold the pole pruner firmly with your other hand on the handle hose - wrap your thumb around the handle hose.

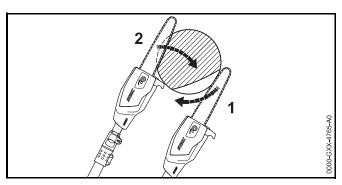
12.2 Limbing

Cross-cut



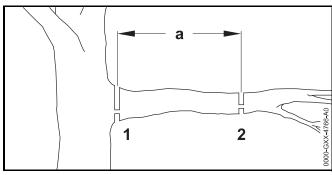
- ► Position the stop (1) against the branch.
- With the chain running a full speed, pivot the guide bar downward against the limb.
- ► Cut through the limb with the bottom of the bar.

English 13 After Finishing Work



► If the limb is under tension: Make the relieving cut (1) at the compression side and then perform bucking cut (2) from the tension side.

Cutting thick branches



- ► First perform a relieving cut (2) and then a cross cut at a distance of 20 cm (A) from the final cut (1).
- ► Perform a relieving cut and then finish with a cross-cut (1).

13 After Finishing Work

13.1 After Finishing Work

- ► Switch off the pole pruner, push retaining latch to position ⊕ and remove the battery.
- ► If the pole pruner is wet: Allow the pole pruner to dry.
- ► Clean the pole pruner.

- ► Clean the bar and chain.
- ► Loosen nut on the chain sprocket cover.
- Turn the tensioning screw two full turns counterclockwise.
 The chain is now slack.
- ► Tighten down the nut on the chain sprocket cover.
- Fit the scabbard so that it completely covers the guide bar.
- ► Clean the battery.

14 Transporting

14.1 Transporting the Pole Pruner

- ► Switch off the pole pruner, push retaining latch to position ⊕ and remove the battery.
- ► Fit the scabbard so that it completely covers the guide bar.
- Carry the pole pruner by the shaft with the guide bar behind you.
- Transporting the pole pruner in a vehicle: Secure the pole pruner to prevent turnover and movement.

14.2 Transporting the Battery

- ► Switch off the pole pruner, push retaining latch to position ⊕ and remove the battery.
- Make sure the battery is in a safe condition.
- ► Observe the following points when packing the battery:
 - The packaging must be non-conductive.
 - Make sure the battery cannot shift inside the packaging.
- Secure the packaging so that it cannot move.

The battery is subject to the requirements for the transport of dangerous goods. The battery is classified as UN 3480 (lithium-ion batteries) and has been tested in accordance with UN Manual of Tests and Criteria, Part III, sub-section 38.3.

For transport regulations see www.stihl.com/safety-data-sheets

15 Storing English

15 Storing

15.1 Storing the Pole Pruner

- ► Switch off the pole pruner, push retaining latch to position ⊕ and remove the battery.
- Fit the scabbard so that it completely covers the guide bar.
- ► Check the following points when storing the pole pruner:
 - Pole pruner is out of the reach of children.
 - Pole pruner is clean and dry.
- ► If you store the pole pruner for more than 3 months: Remove the bar and chain.

15.2 Storing the Battery

STIHL recommends that you store the battery with a charge between 40% and 60% (2 LEDs glow green).

- ► Check the following points when storing the battery:
 - Battery is out of the reach of children.
 - Battery is clean and dry.
 - Battery is in an enclosed location.
 - Battery is stored separately from the pole pruner and charger.
 - Battery is in non-conductive packaging.
 - Battery is in a temperature range between -10°C and +50°C.

16 Cleaning

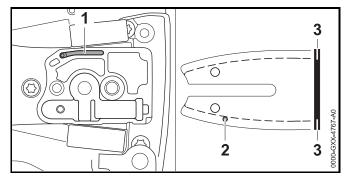
16.1 Cleaning the Pole Pruner

- ► Switch off the pole pruner, push retaining latch to position ⊕ and remove the battery.
- Clean the pole pruner with a damp cloth or STIHL resin solvent.
- ► Remove the chain sprocket cover.

- Clean the area around the sprocket with a damp cloth or STIHL resin solvent.
- ► Fit the chain sprocket cover.

16.2 Cleaning the Bar and Chain

- ► Switch off the pole pruner, push retaining latch to position ⊕ and remove the battery.
- ► Remove the bar and chain.



- Clean the oil port (1), oil inlet hole (2) and bar groove (3) with a soft brush or STIHL resin solvent.
- Clean the saw chain with a soft brush or STIHL resin solvent.
- ► Mount the bar and chain.

16.3 Cleaning the Battery

► Clean the battery with a damp cloth.

17 Maintenance

17.1 Deburring the Guide Bar

A burr can build up on the outer edge of the guide bar.

- Remove burr with a flat file or a STIHL guide bar dressing tool.
- If you have any queries: Contact your STIHL servicing dealer.

English 18 Repairing

17.2 Sharpening the Saw Chain

Correctly sharpening saw chains requires a lot of practice.

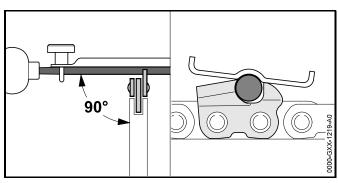
STIHL files, STIHL filing aids, STIHL sharpeners and the brochure "Sharpening STIHL Saw Chains" help you achieve the right results. To obtain the brochure visit http://www.stihl.com/sharpening-brochure.

STIHL recommends you have saw chains resharpened by a STIHL servicing dealer.

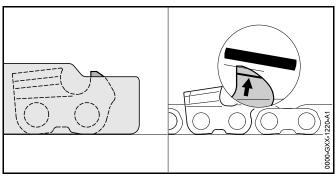


The chain's cutters are very sharp. There is a risk of cut injuries.

► Wear work gloves made of durable material.



- ► File each cutter with a round file so that the following points are observed:
 - Round file matches the chain pitch.
 - File from the inside to the outside of the cutter.
 - Hold the file at right angle to the guide bar.
 - Maintain a filing angle of 30°.



- ► File down the depth gauges with a flat file so that they are level with the STIHL filing gauge and parallel to the service mark. The STIHL filing gauge must match the chain pitch.
- ► If you have any queries: Contact your STIHL servicing dealer for assistance.

18 Repairing

18.1 Repairing the Pole Pruner and Battery

The pole pruner, guide bar, saw chain and battery cannot be repaired by the user.

- ► If the pole pruner, guide bar or saw chain are damaged: Do not use your pole pruner and contact your STIHL servicing dealer for assistance.
- ► If the battery has a malfunction or is damaged: Replace the battery.

19 Troubleshooting English

19 Troubleshooting

19.1 Troubleshooting Pole Pruner and Battery

Condition	LEDs on Battery	Cause	Remedy
Pole pruner does not run when switched on.	1 LED flashes green	Battery has low charge.	► Recharge the battery fully as described in the instruction manual for the STIHL AL 101, 300, 500 chargers.
	1 LED glows red.	Battery too hot or too cold.	► Remove the battery.
			► Allow battery to cool down / warm up.
	3 LEDs flash red.	There is a malfunction in	► Remove the battery.
		the pole pruner.	► Clean contacts in battery compartment.
			► Fit the battery.
			Switch on the pole pruner.
			► If 3 LEDs continue to flash red: Do not use your pole pruner and contact your STIHL servicing dealer for assistance.
	3 LEDs glow red	The pole pruner is too hot.	► Remove the battery.
			► Allow the pole pruner to cool down.
	4 LEDs flash red.	There is a malfunction in	► Remove battery and insert it again.
		the battery.	► Switch on the pole pruner.
			► If 4 LEDs continue to flash red: Do not use the battery and contact your STIHL dealer for assistance.
		No electrical contact	► Remove the battery.
		between pole pruner and	► Clean contacts in battery compartment.
	battery.		► Fit the battery.
		Pole pruner or battery damp.	► Allow pole pruner or battery to dry.
Pole pruner cuts out	3 LEDs glow red	The pole pruner is too hot.	► Remove the battery.
during operation.			► Allow the pole pruner to cool down.

English 19 Troubleshooting

Condition	LEDs on Battery	Cause	Remedy
		There is a electrical	► Remove battery and insert it again.
		malfunction.	► Switch on the pole pruner.
Runtime of pole pruner is too short.		Battery not fully charged.	► Recharge the battery fully as described in the instruction manual for the STIHL AL 101, 300, 500 chargers.
		Normal battery life has been exceeded.	► Replace the battery.

20 Specifications English

20 Specifications

20.1 STIHL HTA 65, HTA 85 Pole Pruners

HTA 65

- Approved batteries:
 - STIHL AP
 - STIHL AR
- Weight without battery: 3.4 kg
- Max. oil tank capacity: 105 cc (0.105 l)

HTA 85

- Approved batteries:
 - STIHL AP
 - STIHL AR
- Weight without battery: 4.5 kg
- Max. oil tank capacity: 105 cc (0.105 l)

For battery life see www.stihl.com/battery-life.

20.2 Chain Sprockets and Chain Speeds

The following chain sprockets may be used:

- 6-tooth for 1/4" P
 - Maximum chain speed according to ISO 11681: 13.3 m/s

20.3 Minimum groove depth of guide bars

The mininum groove depth depends on the pitch of the guide bar.

- 1/4" P 4 mm

20.4 STIHL AP battery

- Battery Technology: Lithium-ion
- Voltage: 36 V
- Capacity in Ah: see rating label
- Energy content in Wh: see rating label
- Weight in kg: see rating label
- Permissible temperature range for operation and storage:
 -10°C to +50°C

20.5 Noise and Vibration Data

K-value for sound pressure level is 2 dB(A). K-value for sound power level is 2 dB(A). K-value for vibration level is 2 m/s^2 .

HTA 65

STIHL recommends that you wear hearing protection.

- Sound pressure level L_{pA} measured according to ISO 22868: 76 dB(A)
- Sound power level L_{wA} measured according to ISO 22868: 93 dB(A)
- Vibration level a_{hv} measured according to ISO 22867
 - Control handle: 2.5 m/s²
 Handle hose: 2.5 m/s²

HTA 85

STIHL recommends that you wear hearing protection.

- Sound pressure level L_{pA} measured according to ISO 22868: 76 dB(A)
- Sound power level L_{wA} measured according to ISO 22868: 93 dB(A)
- Vibration level a_{hv} measured according to ISO 22867
 - Control handle: 1.0 m/s²
 Handle hose: 1.0 m/s²

English 20 Specifications

The vibration values quoted above have been measured according to a standardized test procedure and may be used to compare electric power tools. Depending on the type of usage, the vibrations that actually occur may differ from the values quoted. The vibration values quoted may be used for an initial assessment of the user's exposure to vibrations. The actual exposure to vibrations has to be estimated. This process may also take into account times during which the electric power tool is switched off and times during which it is switched on but running off load.

Information on compliance with Vibration Directive 2002/44/EC is available at www.stihl.com/vib.

20.6 REACH

REACH is an EC regulation and stands for the Registration, Evaluation, Authorisation and Restriction of Chemical substances.

For information on compliance with the REACH regulation see www.stihl.com/reach.

21 Bar and Chain Combinations English

21 Bar and Chain Combinations

21.1 STIHL HTA 65, HTA 85 Pole Pruners

		Drive link gauge/groove width	Length	Guide bar		Number of drive links	Saw chain
Ī	1/4" P	1.1 mm	25 cm	Rollomatic E Mini	8	56	71 PM3 (Type
	1/4 F	1.1 111111	30 cm	Rollomatic E Mini		64	3670)

The cutting length of a guide bar depends on the pole pruner being used and the saw chain that is mounted. Actual cutting length may be less than the specified length

22 Spare Parts and Accessories

22.1 Spare Parts and Accessories

STIHL

These symbols identify original STIHL replacement parts and original STIHL accessories.

STIHL recommends the use of original STIHL replacement parts and accessories.

Original STIHL replacement parts and original STIHL accessories are available from STIHL servicing dealers.

23 Disposal

23.1 Disposing of Pole Pruner and Battery

Information on disposal is available from STIHL servicing dealers.

 Dispose of the pole pruner, guide bar, saw chain, battery, accessories and packaging in accordance with local regulations and environmental requirements.

24 EC Declaration of Conformity

24.1 STIHL HTA 65, HTA 85 Pole Pruners

ANDREAS STIHL AG & Co. KG Badstrasse 115 D-71336 Waiblingen Germany

declare in exclusive responsibility that

- Category: Cordless pole pruner

- Make: STIHL

Model: HTA 65, HTA 85Serial identification: 4857

conforms to the relevant provisions of Directives 2011/65/EC, 2006/42/EU and 2014/30/EC and has been developed and manufactured in compliance with the following standards in the versions valid on the date of production: EN 55014-1, EN 55014-2, EN 60745-1 and EN ISO 11680-1.

The EC type examination in accordance with Directive 2006/42/EC Article 12.3(b) was carried out at VDE Prüf- u. Zertifizierungsinstitut (NB 0366), Merianstraße 28, 63069 Offenbach, Germany

HTA 65 certification number: 40040471HTA 85 certification number: 40037848

Technical documents are deposited at ANDREAS STIHL AG & Co. KG Produktzulassung (Product Licensing).

The year of manufacture, country of manufacture and serial number are applied to the pole pruner.

Done at Waiblingen, 01.03.2017 ANDREAS STIHL AG & Co. KG

Thomas Vms

Thomas Elsner, Director Product Management and Services

25 General Power Tool Safety Warnings

25.1 Introduction

This chapter reproduces the pre-formulated, general safety precautions specified in the IEC 60745 standard for handheld motor-operated electric tools.

STIHL is obliged to publish these texts.

The safety precautions and warnings on avoiding an electric shock given under "Electrical Safety" do not apply to STIHL cordless products.

WARNING

Read all the safety precautions, instructions, illustrations and specifications accompanying this electric power tool. Failure to follow the safety warnings and instructions may result in electric shock, fire and/or serious injury. Save all safety warnings and instructions for future reference.

The term "electric power tool" in the safety warnings refers to mains-operated (corded) power tools or battery-operated (cordless) power tools.

25.2 Work area safety

- a) Keep work area clean and well lit. Cluttered or dark areas invite accidents.
- b) Do not operate power tools in explosive atmospheres, such as in the presence of flammable liquids, gases or dust. Power tools create sparks which may ignite the dust or fumes.
- Keep children and bystanders away while operating a power tool. Distractions can cause you to lose control.

25.3 Electrical safety

- a) Power tool plugs must match the outlet. Never modify the plug in any way. Do not use any adapter plugs with earthed (grounded) power tools. Unmodified plugs and matching outlets will reduce risk of electric shock.
- b) Avoid body contact with earthed or grounded surfaces, such as pipes, radiators, ranges and refrigerators. There is an increased risk of electric shock if your body is earthed or grounded.
- c) Do not expose power tools to rain or wet conditions. Water entering a power tool will increase the risk of electric shock
- d) Do not abuse the cord. Never use the cord for carrying, hanging up, pulling or unplugging the power tool. Keep cord away from heat, oil, sharp edges or moving parts. Damaged or entangled cords increase the risk of electric shock.

- e) When operating a power tool outdoors, use an extension cord suitable for outdoor use. Use of a cord extension suitable for outdoor use reduces the risk of electric shock.
- f) If operating a power tool in a damp location is unavoidable, use a residual current device (RCD) protected supply. Use of an RCD reduces the risk of electric shock.

25.4 Personal safety

- a) Stay alert, watch what you are doing and use common sense when operating a power tool. Do not use a power tool while you are tired or under the influence of drugs, alcohol or medication. A moment of inattention while operating power tools may result in serious personal injury.
- b) Use personal protective equipment. Always wear eye protection. Protective equipment such as dust mask, non-skid safety shoes, hard hat, or hearing protection used for appropriate conditions will reduce personal injuries.
- c) Prevent unintentional starting. Ensure the switch is in the off position before connecting to power source and/or battery pack, picking up or carrying the power tool. Carrying power tools with your finger on the switch or energising power tools that have the switch on invites accidents.
- d) Remove any adjusting key or wrench before turning the power tool on. A wrench or a key left attached to a rotating part of the power tool may result in personal injury.
- e) Do not overreach. Keep proper footing and balance at all times. This enables better control of the power tool in unexpected situations.
- f) Dress properly. Do not wear loose clothing or jewellery. Keep your hair, clothing and gloves away from moving parts. Loose clothes, jewellery or long hair can be caught in moving parts.
- g) If devices are provided for the connection of dust extraction and collection facilities, ensure these are connected and properly used. Use of dust collection can reduce dust-related hazards.

h) Do not let familiarity gained from frequent use of tools allow you to become complacent and ignore tool safety principles. A careless action can cause severe injury within a fraction of a second.

25.5 Power tool use and care

- a) Do not force the power tool. Use the correct power tool for your application. The correct power tool will do the job better and safer at the rate for which it was designed.
- b) Do not use the power tool if the switch does not turn it on and off. Any power tool that cannot be controlled with the switch is dangerous and must be repaired.
- c) Disconnect the plug from the power source and/or remove the battery pack, if detachable, from the power tool before making any adjustments, changing accessories, or storing power tools. Such preventive safety measures reduce the risk of starting the power tool accidentally.
- d) Store idle power tools out of the reach of children and do not allow persons unfamiliar with the power tool or these instructions to operate the power tool. Power tools are dangerous in the hands of untrained users.
- e) Maintain power tools and accessories. Check for misalignment or binding of moving parts, breakage of parts and any other condition that may affect the power tool's operation. If damaged, have the power tool repaired before use. Many accidents are caused by poorly maintained power tools.
- f) Keep cutting tools sharp and clean. Properly maintained cutting tools with sharp cutting edges are less likely to bind and are easier to control.
- g) Use the power tool, accessories, tool bits etc. in accordance with these instructions, taking into account the working conditions and the work to be performed. Use of the power tool for operations different from those intended could result in a hazardous situation.
- h) Keep handles and grip surfaces dry, clean and free from oil and grease. Slippery handles and grip surfaces doe not allow proper operation and control of the power tool in unforeseen situations.

25.6 Battery tool use and care

- a) Recharge only with the charger specified by the manufacturer. A charger that is suitable for one type of battery pack may create a risk of fire when used with another battery pack.
- b) Use power tools only with specifically designated battery packs. Use of any other battery packs may create a risk of injury and fire.
- c) When battery pack is not in use, keep it away from other metal objects, like paper clips, coins, keys, nails, screws or other small objects that can make a connection from one terminal to another. Shorting the battery terminals together may cause burns or a fire.
- d) Under abusive conditions, liquid may be ejected from the battery; avoid contact. If contact accidentally occurs, flush with water. If liquid contacts eyes, additionally seek medical help. Liquid ejected from the battery may cause irritation or burns.
- e) Do not use a battery pack or tool that is damaged or modified. Damaged or modified batteries may exhibit unpredictable behaviour resulting in fire, explosion or risk of injury.
- f) Do not expose a battery pack or tool to fire or excessive temperature. Exposure to fire or temperature above 130 °C (265 °F) may cause explosion.
- g) Follow all charging instructions and do not charge the battery pack or tool outside the temperature range specified in the instructions. Charging improperly or at temperatures outside the specified range may damage the battery and increase the risk of fire.

25.7 Service

- a) Have your power tool serviced by a qualified repair person using only identical replacement parts. This will ensure that the safety of the power tool is maintained.
- b) **Never service damaged batteries.** Service of battery packs should only be performed by the manufacturer or authorized service providers.