

AR 2000.0 L, 3000.0 L

**STIHL**



2 - 21      Instruction Manual  
21 - 43      Manual de instrucciones



**WARNING**

Read Instruction Manual thoroughly before use and follow all safety precautions – improper use can cause serious or fatal injury.



**ADVERTENCIA**

Antes de usar la máquina lea y siga todas las precauciones de seguridad dadas en el manual de instrucciones – el uso incorrecto puede causar lesiones graves o mortales.



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## 1 Introduction

Thank you for your purchase. The information contained in this manual will help you receive maximum performance and satisfaction from your STIHL backpack battery and, if followed, reduce the risk of injury from its use.

### SAVE THIS MANUAL!



It is important that you read and observe the following information and warnings. Improper use can cause serious injury.



Read this instruction manual thoroughly before use and periodically thereafter. Follow all safety precautions. Careless or improper use of the backpack battery can cause serious or fatal injury.

Do not lend or rent your backpack battery without this instruction manual. Allow only persons who fully understand the information in this manual to use the backpack battery.

For further information, or if you do not understand any of the instructions in this manual,

please go to [www.stihlusa.com](http://www.stihlusa.com) or contact your authorized STIHL servicing dealer.

## 2 Guide to Using this Manual

### 2.1 Signal Words

This manual contains safety information that requires your special attention. Such information is introduced with the following symbols and signal words:



#### DANGER

- Indicates a hazardous situation which, if not avoided, will result in death or serious injury.



#### WARNING

- Indicates a hazardous situation which, if not avoided, could result in death or serious injury.

#### NOTICE

- Indicates a risk of property damage, including damage to the machine or its individual components.

### 2.2 Symbols in Text

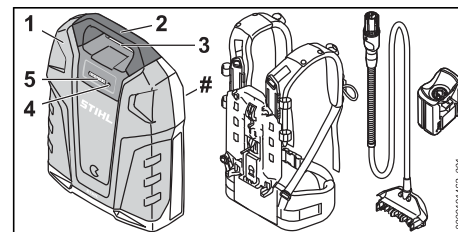
The following symbol is included to assist you with the use of the manual:



Refers to a designated chapter or subchapter in this instruction manual.

## 3 Main Parts

### 3.1 Battery



#### 1 Battery

Supplies electrical power to the tool's motor.

#### 2 Carrying Handle

For transporting the backpack battery.

#### 3 Socket

Socket on the battery for the connecting cord.

**4 Push Button**

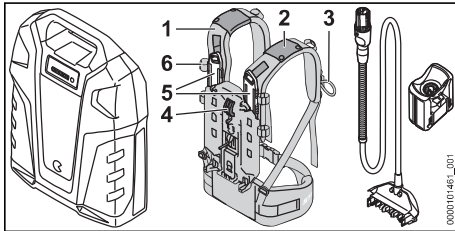
Activates the battery's LEDs. Activates and deactivates the Bluetooth® interface.

**5 Battery LEDs**

Indicate the battery's state of charge and display messages regarding potential malfunctions in the battery or power tool. Indicate the status of the Bluetooth® interface.

**# Rating Label with Serial Number****3.2 Battery Harness**

The battery harness is not included with the battery.

**1 Shoulder Straps**

For carrying the battery while working with a handheld product.

**2 Guide**

Secures the connecting cord to the backpack.

**3 Loop**

For securing the tool-side plug at the harness when it is disconnected from the power tool.

**4 Lever**

For securing and releasing the battery.

**5 Slide**

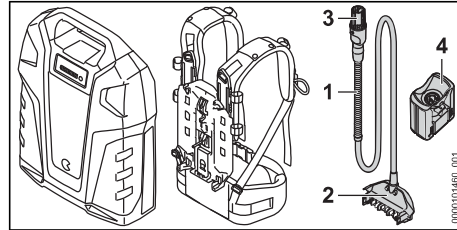
For adjusting the harness to suit the user's height.

**6 Hook and Eye Fasteners**

Secure the connecting cord to the backpack.

**3.3 Connecting Cord and AP Adapter**

The connecting cord and AP Adapter are not included with the battery.

**1 Connecting Cord**

Transmits electric current from the battery to the power tool.

**2 Battery-Side Plug**

Connects the connecting cord to the battery.

**3 Tool-Side Plug**

Fits into the power tool socket.

**4 AP Adapter**

Adapter for connecting the battery to a charger or STIHL power tool with an AP battery compartment.

**4 Safety Symbols on the Product****4.1 Backpack Battery**

The following safety symbols are found on the backpack battery:



To reduce the risk of injury, follow the specified safety precautions.



Read and follow all safety precautions in this instruction manual and the manual for the STIHL tool powered by this battery. Improper use can lead to serious or fatal personal injury or property damage.



To reduce the risk of personal injury or property damage from fire, explosion or burns, including chemical burns, do not disassemble, crush, drop, damage or heat the battery above 212 °F (100 °C). Never expose it to fire or incinerate, 5.2.



To reduce the risk of personal injury or property damage from a short circuit, fire or explosion, keep dry. Never immerse in water or other liquids, 5.2.

## 5 IMPORTANT SAFETY INSTRUCTIONS

### 5.1 Intended Use

#### ⚠ WARNING

- Use of STIHL AR L batteries for any purpose other than powering the STIHL tools listed below could lead to personal injury and property damage. Use only with the following STIHL power tools:
  - STIHL MSA chain saws (see important exceptions below)
  - STIHL HTA pole pruners
  - STIHL FSA trimmers and brush cutters
  - STIHL HSA hedge trimmers
  - STIHL HLA extended reach hedge trimmers
  - STIHL BGA blowers
  - STIHL RMA lawn mowers designed for use with STIHL AR L batteries

Do not use STIHL AR L batteries with STIHL TSA cut-off machines or STIHL RMA lawn mowers designed with an AP battery compartment. Use with these products could lead to severe personal injury and property damage from entanglement of the connecting cord, loss of control, or loss of balance.

Do not use STIHL AR L batteries with STIHL MSA top-handle chain saws while climbing in a tree for in-tree use. Use could lead to severe personal injury and property damage from entanglement of the connecting cord, loss of control, or loss of balance.

Always use a lift bucket for in-tree surgery and maintenance if using an AR L battery with a MSA top-handle chain saw. Do not climb in the tree with an AR L battery.

- Use of unauthorized chargers can damage the battery and result in fire, explosion and personal injury and property damage.
  - Charge STIHL AR L batteries only with genuine STIHL AL 301, AL 301-4 or STIHL AL 500 series chargers.
- The STIHL battery harness is designed for carrying a STIHL AR L series battery while working with a handheld product. When using the harness, the battery is carried as a backpack with the straps of the harness over both shoulders.

The STIHL AR L battery uses Bluetooth® technology to exchange information with mobile devices running the STIHL connected App.

## 5 IMPORTANT SAFETY INSTRUCTIONS

### 5.2 Battery Warnings and Instructions

#### ⚠ WARNING

- The battery contains safety features and devices which, if damaged, may allow the battery to generate heat, rupture, leak, ignite or explode.



- Never heat the battery above 212 °F (100 °C).
- Never incinerate or place the battery on or near fires, stoves or other high-temperature locations.
- Never use or charge a malfunctioning, damaged, cracked, leaking or deformed battery.
- Never open, disassemble, crush, drop, subject to heavy impact or otherwise damage the battery.
- Never expose the battery to microwaves or high pressures.
- Never insert objects into the battery's openings.
- Never sit or stand on the battery. Never place objects on the battery or stack batteries on top of one another.
- Extreme temperatures may cause the battery to generate heat, rupture, leak, ignite or explode, resulting in severe or fatal personal injury and property damage.
  - Never charge, use or store the battery outside the specified ambient temperature limits, [see](#) 21.4.
- To reduce the risk of personal injury and property damage in the event the battery emits smoke, has an unusual smell or feels unusually hot while using, charging or storing:
  - Immediately discontinue using or charging the battery. If you are using it, remove it from your back. Maintain a safe distance and prepare to contact the authorities in the event of fire or explosion.
- To reduce the risk of a short circuit, which could lead to electric shock, fire and explosion:
  - If the battery has been exposed to rain during work, allow it to dry indoors. Make sure it is completely dry before charging or using.
  - Never immerse the battery in water or other liquids.
  - Never bridge the battery terminals with wires or other metallic objects.



- Keep a battery that is not in use away from small metal objects capable of conducting electricity (e.g., paper clips, nails, coins, keys).
- Store the battery indoors in a dry room.
- Never store the battery in damp or corrosive environments or in conditions that could lead to corrosion of its metal components.
- Never store the battery connected to the power tool.
- When storing the battery, maintain a charge of 30 % to 45 % (2 green LEDs).
- If storing the battery in the charger, disconnect the charger from the outlet.
- Protect the battery from exposure to corrosive agents such as garden chemicals and de-icing salts.
- Protect the battery from exposure to conductive liquids such as salt water.
- Do not attempt to repair, open or disassemble the battery. There are no user-serviceable parts inside.
- Leaking battery fluid is potentially harmful and can cause skin and eye irritation, chemical burns and other serious personal injury.
  - Avoid contact with skin and eyes.
  - Use an inert absorbent such as sand on spilled battery fluid.
  - In the event of accidental contact, immediately rinse the contact area thoroughly with mild soap and water.
  - If fluid gets into your eye(s): Do not rub. Rinse water over the open eye(s) for at least 15 minutes and seek medical attention.
- A battery fire can be dangerous. To reduce the risk of severe personal injury and property damage in the event of fire:
  - Evacuate the area. Fire can spread rapidly. Stay clear of any vapors generated and maintain a safe distance.
  - Contact the fire department.
  - Although water can be used to put out a battery fire, use of a multi-purpose dry chemical fire extinguisher is preferable.
  - Consult the fire department regarding proper disposal of the burned battery.

### 5.3 Operator

#### **▲ WARNING**

- Operating a power tool with the backpack battery can be strenuous. The operator must be in good physical condition and mental health. To reduce the risk of personal injury:

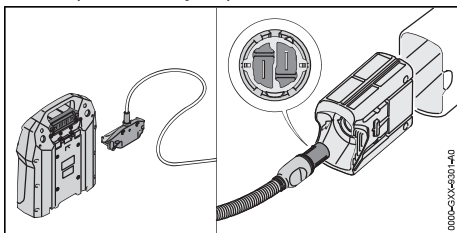
- Check with your doctor before using the backpack battery if you have any health condition that may be aggravated by strenuous work.
- Do not use the backpack battery while under the influence of any substance (drug, alcohol or medication, etc.) that might impair vision, balance, dexterity or judgment.
- Be alert. Do not use the backpack battery when you are tired. Take a break if you become tired.
- Do not permit minors to use the backpack battery.
- The backpack battery is designed to be operated by one person only. Do not allow other persons in the work area.

### 5.4 Connecting Cord

#### **▲ WARNING**

- Using a damaged connecting cord may result in fire, electric shock and other personal injury or property damage. To reduce these risks:
  - Check the battery's connecting cord regularly for damage. If it becomes damaged, immediately disconnect it from the power tool and battery. Never use a damaged connecting cord.
  - Do not abrade, crush, jerk, or otherwise abuse or misuse the connecting cord. Protect it from heat, oil and sharp edges.
  - If the connecting cord becomes damaged, have it replaced by an authorized STIHL servicing dealer before use. A damaged connecting cord must be replaced with an identical STIHL replacement part.
  - Unplug the backpack battery from the power tool when not in use.
  - Never yank or jerk the connecting cord to disconnect. To unplug the connecting cord from the backpack battery, grasp the battery-side plug, not the connecting cord.
  - Make sure the connecting cord is positioned and secured so that it will not be stepped on, tripped over, come in contact with sharp objects or moving parts, or otherwise be subjected to damage or stress.
  - Check the AP Adapter, the connecting cord and both plugs for signs of damage. Never use a damaged AP Adapter, connecting cord or plug.
  - Make sure the insulation of the connecting cord and plugs are in good condition.
  - Straighten a twisted connecting cord before use.

- Position the connecting cord so that it cannot be reached or damaged by the cutting or working attachment of the power tool being used.
- Position and secure the connecting cord as described in this manual.
- Do not use the connecting cord for any purpose other than providing an electrical connection between the battery and your authorized STIHL power tool. For example, do not use it for carrying or hanging up the battery or power tool.



- The two ends of the connecting cord are different shapes and use different electrical contacts. The battery-side plug is designed to be inserted into the backpack battery socket. The plug on the other end is to be inserted into an AP Adapter or STIHL power tool with an integrated socket (see illustration). To reduce the risk of electric shock and damage to the battery and connecting cord:
  - Never attempt to insert the wrong end of the connecting cord in the battery socket, AP Adapter or power tool (see illustration).

## 5.5 Using the Backpack Battery

### ⚠ WARNING

- Misuse may result in personal injury and property damage.
  - Use the battery, battery harness, connecting cord and AP Adapter only as described in this instruction manual.
  - Never modify the backpack battery, battery harness, connecting cord or AP Adapter in any way.
  - Use only accessories specifically authorized by STIHL for use with this backpack battery and battery harness.
  - Use the battery only with the harness described in this manual. It must not be combined with any other carrying straps.
  - Make sure the STIHL AR L series battery is securely connected to the battery harness before starting work.

## 5 IMPORTANT SAFETY INSTRUCTIONS

- To help reduce the risk of serious personal injury or death from unintentional activation of a power tool connected to the battery:



- Unplug the battery from the power tool before assembling, transporting, adjusting, inspecting, cleaning, servicing, maintaining or storing the tool. Unplug the battery in the event of a malfunction or emergency and any time the tool is not in use.
- Never leave the battery unattended when it is plugged in to a power tool.
- Disconnect the battery from the power tool before storing.
- To reduce the risk of serious personal injury from loss of control during operation:
  - Read and follow all safety precautions and instructions related to the power tool connected to the battery.
  - Make sure you have good balance and secure footing at all times. Take special care in slippery conditions (wet ground, snow) and in overgrown terrain.
  - Watch for hidden obstacles such as tree stumps, roots, rocks, holes and ditches to avoid stumbling or falling.
  - Be extremely cautious when working on slopes or uneven ground, as the backpack battery may alter your center of balance.
  - Never work with the backpack battery in trees, on roofs or on ladders or any other insecure support.
  - Do not overreach.
- To reduce the risk of injury from tripping on the connecting cord or losing control of the power tool:
  - Always position and secure the connecting cord so that it will not interfere with your power tool or proper working technique. Secure the connecting cord with the hook and eye fasteners at the battery harness. Keep the connecting cord away from the cutting attachment of the power tool.
  - Remain aware of the location of the connecting cord while working. Prevent it from contacting the power tool's cutting attachment or catching on other objects, which could cause you to lose balance or control of the power tool, resulting in serious personal injury and property damage.
- Using a backpack battery, battery harness, connecting cord or AP Adapter that is dam-



aged or improperly adjusted can lead to a malfunction and increase the risk of serious personal injury and property damage. Before starting work or charging the battery:

- Always check the battery, battery harness, connecting cord and AP Adapter for proper condition and operation.
- Check the battery, connecting cord, sockets, plugs and AP Adapter for corrosion, foreign matter and damage.
- If four LEDs flash red and a rapid succession of short beeps sound for several seconds, the battery is not functioning properly. Disconnect the battery from the power tool, take it off your back and contact your authorized STIHL servicing dealer immediately. Do not attempt to use, charge or store the battery until the problem has been corrected.
- Never attempt to use, charge or store a malfunctioning, damaged, cracked, leaking or deformed battery. Take it to your authorized STIHL servicing dealer immediately. Do not use, charge or store the battery until the problem has been corrected.
- Make sure the shoulder straps and other features of the battery harness are in good condition, properly adjusted and secure. If they are worn, weakened, cracked or damaged, contact your authorized STIHL servicing dealer and have them replaced.

## 6 Maintenance, Repair and Storage

### 6.1 Warnings and Instructions

#### ▲ WARNING

- There are no user-authorized repairs for the backpack battery, battery harness, connecting cord or AP Adapter. To reduce the risk of fire, electric shock or other personal injury and property damage:
  - Do not attempt to repair, open or disassemble the battery, battery harness, connecting cord or AP Adapter. There are no user-serviceable parts.
  - Users may carry out only the cleaning and maintenance operations described in this manual.
  - Strictly follow the cleaning and maintenance instructions in the appropriate sections of this instruction manual.
- STIHL recommends that all repair work be performed by authorized STIHL servicing dealers.
- Unintentional starting may result in personal injury or property damage. Always disconnect the battery from the power tool:
  - before inspecting, adjusting or cleaning the battery or power tool
  - before handling the power tool's cutting or working attachment
  - before leaving the battery or power tool unattended
  - before transporting or storing the battery
  - in the event of a malfunction or in an emergency
  - any time the battery is not in use.
- Use of parts that are not authorized or approved by STIHL may cause serious or fatal injury or property damage.
  - STIHL recommends that only identical STIHL replacement parts be used for repair or maintenance.
- To reduce the risk of electric shock when charging:
  - Unplug the charger from the electrical outlet before inspecting or cleaning the charger.
  - Regularly check the electrical contacts of the charger and ensure that the insulation of the power cord and plug are in good condition and show no signs of aging (brittleness), wear or damage.
  - Have a damaged power supply cord or AP Adapter replaced by an authorized STIHL servicing dealer.
- To reduce the risk of short circuit and fire:
  - Keep the charger and the AP Adapter free of foreign matter. Clean as necessary with a dry cloth or soft, dry brush.
- Improper storage can result in unauthorized use and damage, which can increase the risk of fire, electric shock and other personal injury or property damage. Before storing:
  - Remove the connecting cord from the power tool or AP Adapter. Never store the battery inserted, connected or plugged into the power tool.
  - When storing the battery, maintain a charge of 30 % to 45 % (2 green LEDs).
  - If storing the battery in the charger, disconnect the charger from the outlet.
  - Store the battery, battery harness, connecting cord and AP Adapter indoors in a dry, secure place that cannot be accessed by children or other unauthorized users.

- Never store the battery, connecting cord or AP Adapter in damp or corrosive environments or in conditions that could lead to the corrosion of metal components.
- Keep a battery that is not in use away from small metal objects capable of conducting electricity (e.g., paper clips, nails, coins, keys).

## 7 Before Starting Work

### 7.1 Preparing the Backpack Battery for Operation

Before starting work:

- ▶ Check the battery status, [18.1](#).
- ▶ Fully charge the battery, [18.2](#).
- ▶ Clean the battery, [18.3](#).
- ▶ If the connecting cord is used:
  - ▶ Clean the contact surfaces on the connecting cord, [18.2](#).
  - ▶ Position the connecting cord, [12.2](#).

### 7.2 Connecting to the STIHL connected App

- ▶ Turn on your mobile device's Bluetooth® interface.
- ▶ Turn on the battery's Bluetooth® interface, [10.1](#).
- ▶ Download the STIHL connected App from Google Play or the App Store.
- ▶ Follow in-app instructions for creating a new user account. Returning users should log in their existing account information.
- ▶ Follow the step-by-step instructions for adding the battery to your equipment list.

## 8 Charging the Backpack Battery

### 8.1 Setting up the Charger



#### WARNING

- Read and follow the safety precautions on the battery and charger and the warnings and instructions in this manual, [5.2](#), and in the charger's manual. To reduce the risk of short circuit, which could lead to electric shock, fire and explosion, make sure the charger and its components are dry and not damaged. Read and follow the warnings and instructions in your charger's manual. For optimum performance, observe the recommended ambient temperature ranges, [21.5](#).



#### WARNING

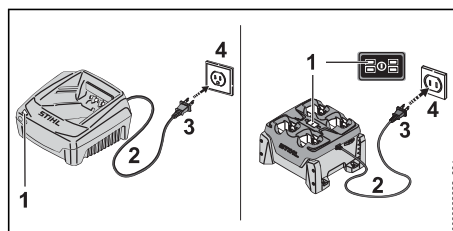
- A typical household electric circuit is between 15 and 20 amps. A single STIHL AL 500 charger draws approximately 4.8 amps. A single AL 301 or AL 301-4 charger draws approximately 4.4 amps. To reduce the risk of fire from overloading an electrical circuit:
  - Ensure the electrical system is rated to withstand the expected electrical draw before charging your battery.
  - Charge multiple batteries one at a time or on separate circuits, unless you know your circuit can handle the total expected draw from multiple chargers.



#### WARNING

- Since the charger heats up during the charging process, do not operate the charger on a combustible surface or in a location where combustible gases, liquids, vapors, dusts or other materials and substances are present.

To set up the charger:



- ▶ Insert the plug (3) into a properly installed electrical outlet (4) matching the voltage and electrical frequency stated on the charger's rating plate.



The charger runs a self-test immediately after it is plugged in. The charger LED (1) will glow green for about 1 second, then it will glow red briefly before going out. Once the LED goes out, the self-test is complete and the charger is ready to charge the battery.

- ▶ Position the power supply cord (2) so that it will not be stepped on, tripped over, come in contact with sharp objects or moving parts or otherwise be subjected to damage or stress.



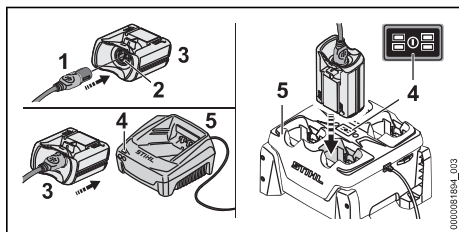
## 8.2 Charging

### WARNING

- STIHL batteries contain safety features and devices which, if damaged, may allow the battery to generate heat, rupture, leak, ignite or explode. Never charge a malfunctioning, damaged, cracked, leaking or deformed battery or use a charger that has been damaged,  5.2. Never insert a wet AP Adapter. Never use a wet charger,  5.2. Follow all product-specific warnings and instructions accompanying your charger.


To charge the battery:

- Attach the connecting cord to the battery.



- Push the plug of the connecting cord (1) into the socket (2) of the AP Adapter (3) until it stops.
- Push the AP Adapter into the charger (5) until it stops.  
The LED (4) on the **charger** glows green when the battery is charging.  
The LEDs on the **AR battery** glow green and show the state of charge.  
When the LEDs on the battery turn off, the charging process is complete and the charger will shut itself off. The AP Adapter can be removed from the charger.
- Disconnect the power supply cord from the electrical outlet when the charger is not in use for extended periods of time.

A battery is not fully charged when it ships from the factory. STIHL recommends that you fully charge the backpack battery before using it the first time.

Read and follow the warnings and instructions in your charger's manual. For optimum performance, observe the recommended ambient temperature ranges,  21.5.

The battery heats up during operation of the power tool. If a hot battery is connected to the charger, it may be necessary for it to cool down before charging starts. The charging process

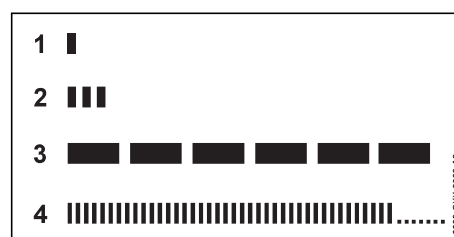
begins only after the battery has cooled down sufficiently.

Charging time depends on a number of factors, including battery condition and the ambient temperature. For a complete list of approximate charging times, see [www.stihl.com/charging-times](http://www.stihl.com/charging-times).

## 9 LED Diagnostics and Acoustic Signals

### 9.1 Battery Status

Six LEDs and an acoustic signal indicate the status of the battery.

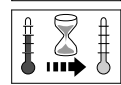


- A short beep**  
The acoustic signal works as it should.
- Three short beeps**  
The Bluetooth® signal is switched on or off.
- Six long beeps**  
The battery's charge is low. Recharge the battery.
- Rapid succession of short beeps**  
There is a malfunction in the battery. The signal stops automatically after a few seconds. Do not attempt to charge, use or store the battery. Replace the battery.

These LEDs can glow or flash green, red or blue.



**If one LED glows red continuously:** the battery is either too hot or too cold. Allow the battery to warm up or cool down gradually at an ambient temperature of about 50 °F to 68 °F (10 °C to 20 °C).



**If the four right side LEDs flash red and a rapid succession of several short beeps is emitted:** the battery has a malfunction and must be replaced. Do not attempt to charge, use or store the battery.



**If the first LED on the right side glows blue for about three seconds and three short beeps are emitted:** the Bluetooth® interface is turned on.

**If the first LED on the right side flashes blue six times and three short beeps are emitted:** the Bluetooth® interface is turned off.

- Be aware that your ability to hear the acoustic signal may be reduced when wearing hearing protection.

## 9.2 Power Tool Status

When the battery is connected to the power tool, the same LEDs on the battery will indicate the status of the power tool.

**If three LEDs glow red continuously:** the power tool motor is too hot. Allow the motor to cool down.

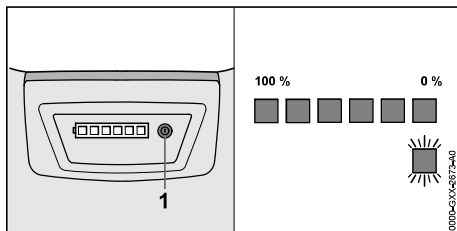
**If three LEDs flash red when you activate the trigger switch:** the power tool has an electrical malfunction. Do not operate the power tool. Have it checked by an authorized STIHL servicing dealer before use or storage.

For troubleshooting information, see 20. For more information about transporting a malfunctioning battery, see 16.

## 9.3 Charge Status

The LEDs and acoustic signals on the battery also indicate the battery's state of charge.

To determine the battery's state of charge:



- Press the button (1) on the backpack battery.

A single short beep will be emitted. The LEDs on the battery will glow or flash green for about 5 seconds and indicate the state of charge (see illustration).

**For example:**

**If six green LEDs glow continuously:** full charge.

**If one green LED is flashing and six long beeps are emitted:** less than 20 % charge.

## 10 Turning the Bluetooth® Interface On and Off

### 10.1 Turning the Bluetooth® Interface On

- Press and hold the button for about 3 seconds.

If the first LED on the right side glows blue for about 3 seconds and three short beeps are emitted, the battery's Bluetooth® interface is on.

### 10.2 Turning the Bluetooth® Interface Off

- Press and hold the button for about 3 seconds.

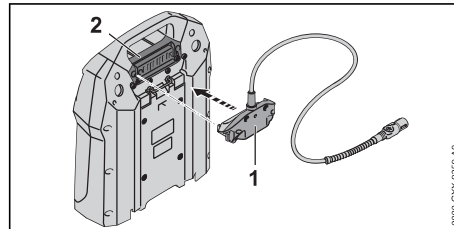
If the first LED on the right side flashes blue six times and three short beeps are emitted, the Bluetooth® interface is off.

## 11 Assembling the Backpack Battery

### 11.1 Attaching the Connecting Cord to the Battery

To attach the connecting cord:

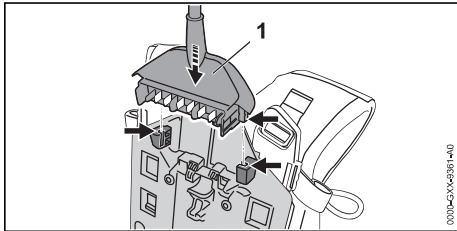
- Unplug the battery from the power tool.



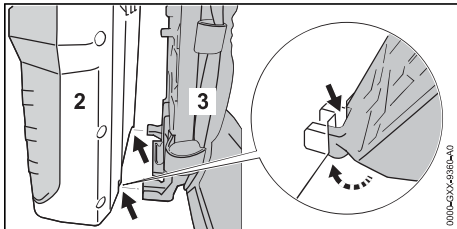
- Insert the plug (1) in the battery's socket (2) with the connecting cord facing up.

## 11.2 Attaching and Removing the Battery and Connecting Cord to the Battery Harness

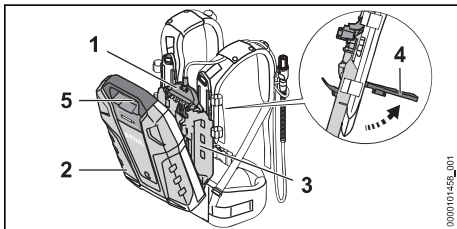
### 11.2.1 Attaching the Battery and Connecting Cord to the Battery Harness



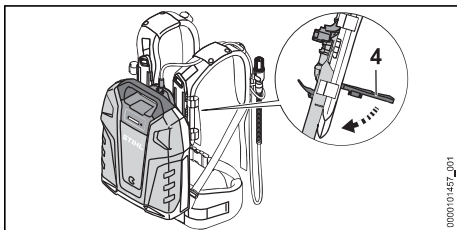
- ▶ Insert the plug (1).



- ▶ Position the battery (2) on the battery harness (3) so that the guides on the battery harness engage the recesses in the battery.



- ▶ Open the lever (4) and hold it there.
- ▶ Press the battery harness (3) against the battery (2) until the plug (1) connects to the socket (5).



- ▶ Swing the lever (4) down until it snaps into place.

### NOTICE

- Make sure the battery is securely attached to the harness before starting work.

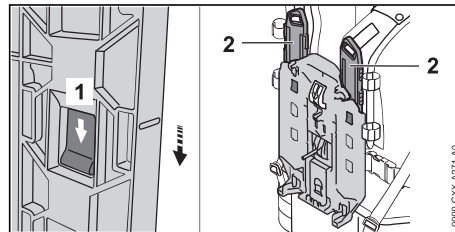
### 11.2.2 Removing the Battery and Connecting Cord from the Battery Harness

- ▶ Open the lever.
- ▶ Remove the battery.
- ▶ Remove the plug from the battery harness.

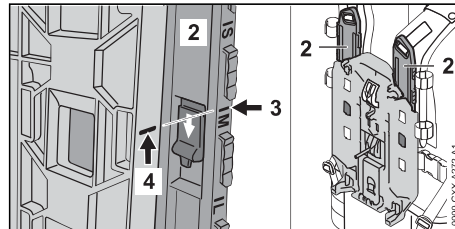
## 12 Adjusting the Backpack Battery

### 12.1 Adjusting the Battery Harness to Suit the Operator's Height

The battery harness can be set to positions S, M or L to suit the operator's height.



- ▶ Depress the locking tab (1) and push it in the direction of the arrow.
- ▶ Remove the slide (2).



- ▶ Line up mark (3) with mark (4).
- ▶ Insert the slide (2).
- ▶ Pull the slide up (opposite the direction of the arrow). It will engage with a click.
- ▶ Adjust the slide at the left and right shoulder straps to the same position.

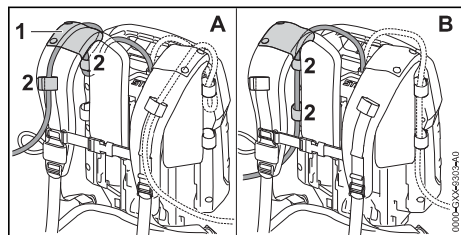
## 12.2 Positioning the Connecting Cord

### WARNING

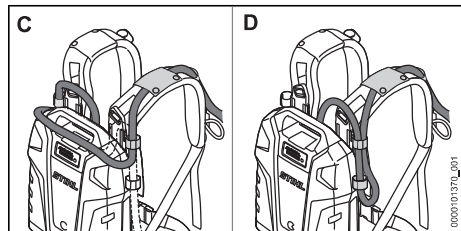
- To reduce the risk of injury from tripping on the connecting cord or losing control of the power tool, always secure the connecting cord with the hook and eye fasteners as described below. Always position and secure the connecting cord so that it will not interfere with the proper working technique as described in the instruction manual for the power tool you are using, or your ability to maintain control of the power tool.

### WARNING

- Manage the cord to prevent it from contacting the cutting/working attachment or catching on objects, which could cause you to lose balance or control of the power tool, resulting in serious personal injury and property damage.
- ▶ Secure the connecting cord as shown below and adjust it to suit the height and reach of the operator.



- ▶ Run the connection cord through the guide (1) on the shoulder strap (Illustration A), or along the back plate (Illustration B). Secure the connecting cord to the harness with the hook and eye fasteners (2). Always secure the connecting cord using the guide or hook and eye fasteners on the side of the body on which the power tool is held and controlled. Do not allow the connecting cord to swing across your body or hang at your side.



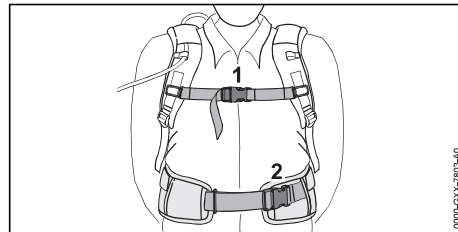
- ▶ If the length of the connecting cord is too long, adjust the connecting cord by making a loop around the top (Illustration C) or on the side (Illustration D) of the backpack battery with the hook and eye fasteners.

## 12.3 Putting on the Harness

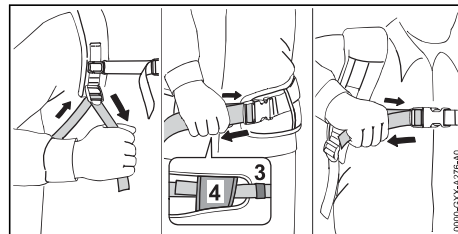
### WARNING

- The operator must be able to remove the backpack battery quickly in the event of an emergency. In an emergency, open and remove the waist belt and chest strap quickly before dropping the battery to the ground.

To ensure a proper fit:



- ▶ Put the backpack battery on your back.
- ▶ Fasten and adjust the waist belt (2) so that it rests comfortably but securely on your hips.
- ▶ Fasten the chest strap (1) and adjust it so that it fits comfortably but securely across your chest.



- ▶ Adjust the harness straps so that the back padding fits snugly and securely against your back.
- ▶ Always wear the battery harness over both shoulders.
- ▶ Thread the end of the waist belt through the loops (3) and (4).
- ▶ To remove the harness, open the quick-release fasteners on the waist belt and chest strap and loosen the harness straps by lifting the sliding adjusters.

To help reduce the risk of injury in the event of an emergency, practice quickly opening the fas-

teners on the waist belt and chest strap, loosening the shoulder straps and removing the battery.

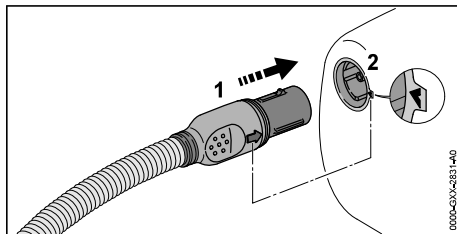
#### NOTICE

- To avoid damage, ease the battery to the ground when practicing. Do not allow the battery to drop to the ground and do not throw it.

## 13 Connecting the Backpack Battery to the Power Tool

### 13.1 Connecting to a Power Tool with an Integrated Socket

To connect the battery to a power tool with an integrated socket:



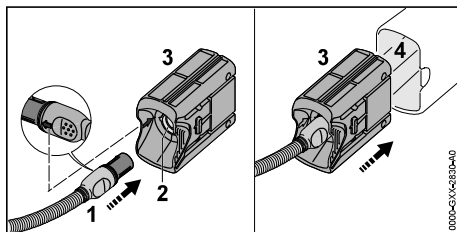
- ▶ Line up the arrow on the connecting cord plug (1) with the arrow on the power tool socket (2).
- ▶ Push the plug into the socket with steady, even pressure until it is fully inserted. The battery and power tool are now connected.

For further information on activating and operating the power tool, see the instruction manual of the power tool being operated with this battery.

Since a new battery is not fully charged, STIHL recommends that you fully charge the battery before using it the first time, 8.

### 13.2 Connecting to a Power Tool with a Battery Compartment

To connect the battery to a power tool with a battery compartment:



- ▶ Line up the arrow on the connecting cord plug (1) with the arrow on the AP Adapter (3).
- ▶ Push the plug into the AP Adapter socket (2) with steady, even pressure until it is fully inserted.
- ▶ Push the AP Adapter into the power tool's battery compartment (4) until it engages with an audible click. The battery and the power tool are now connected.

For further information on activating and operating the power tool, see the instruction manual of the power tool being operated with this battery.

Since a new battery is not fully charged, STIHL recommends that you fully charge the battery before using it the first time, 8.

### 13.3 Connecting to a STIHL Battery-Powered Product Designed for Use with STIHL AR L Batteries

To connect the battery to a power tool that accepts a direct connection of the AR L battery:

- ▶ Connect the battery as described in the power tool instruction manual.

### 13.4 Disconnecting the Battery

- ▶ Switch off the power tool as described in its instruction manual.
- ▶ If a power tool with an integrated socket is used, pull the plug out of the power tool socket with steady, even pressure.
- ▶ If a power tool with battery compartment is used, pull the plug out of the AP Adapter socket with steady, even pressure.
- ▶ If you are using power tool that accepts a direct connection of the AR L battery: Disconnect the battery as described in the power tool instruction manual.

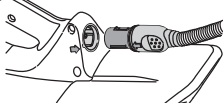
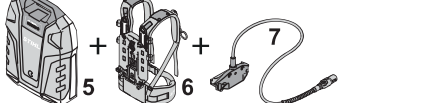

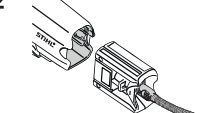
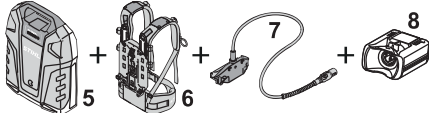






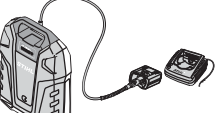
#### NOTICE

- Avoid exposing the battery to excessive heat or cold or prolonged periods of direct sunlight. Use or storage outside the recommended ambient temperature range can reduce the performance and/or service life of the battery.

For further information on activating and operating the power tool, see the instruction manual of the power tool being operated with this battery.

## 14 During Operation

### 14.1 Using the Battery, Battery Harness, Connecting Cord and AP Adapter

A			
B			
C			
D			

#### A. When using a STIHL battery-powered product designed with a socket (1):

Use the battery (5), battery harness (6) and connecting cord (7).

#### B. When using a STIHL battery-powered product designed with an AP battery compartment (2):

Use the battery (5), battery harness (6), connecting cord (7) and AP Adapter (8).

#### C. When using a STIHL battery-powered product designed for use with STIHL AR L batteries (3):

Connect the battery (5) directly into the product.

#### D. When charging with a STIHL AL series charger (4):


Use battery (5), connecting cord (7) and AP Adapter (8). Insert the AP Adapter directly into the charger.

For optimum performance, observe the recommended ambient temperature ranges,  21.5.

## 15 After Finishing Work

### 15.1 Preparing for Transportation or Storage


To prepare the battery for transportation or storage:

- ▶ Switch off the power tool as described in its instruction manual.
- ▶ Disconnect the battery,  13.4.
- ▶ If the battery, battery harness, connecting cord or AP Adapter became damp or wet during operation, allow them to dry separately and completely before charging or storing.

## 16 Transporting

### 16.1 Backpack Battery

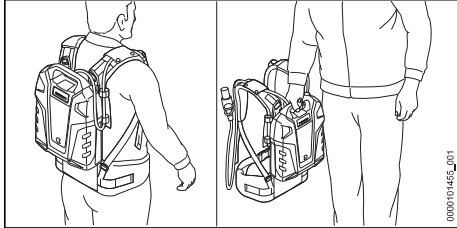
#### WARNING

- To reduce the risk of a short circuit, which could lead to electric shock, fire and explosion, never transport the battery with small metal objects capable of conducting electricity (e.g., paper clips, nails, coins, keys),  5.2.

When transporting an undamaged and properly functioning battery:

- ▶ Disconnect the battery from the power tool.





- ▶ Carry the battery on your back or by the handle.
- ▶ Never transport the backpack battery with small metal objects capable of conducting electricity (e.g., paper clips, nails, coins, keys).
- ▶ If you are placing the battery in a container or transporting it in a vehicle, secure it and its container against turnover, impact and damage.
- ▶ Never sit or stand on the battery. Never place objects on the battery or stack batteries on top of one another.

### WARNING

- Special precautions must be taken when transporting a damaged or malfunctioning battery. To reduce the risk of accidents, always contact your STIHL servicing dealer before transporting such a battery.

STIHL backpack batteries comply with the requirements set forth in UN-Manual of Tests and Criteria, Part III, Subsection 38.3.

Commercial air, vessel and ground transportation of lithium ion cells and batteries is regulated. The backpack battery is classified as a UN 3480, Class 9, packaging group II product. Shipping it, either as a complete tool or the battery, requires compliance with all applicable shipping regulations. Check with the ground, vessel, air cargo or passenger airline to determine if transport is prohibited or subject to restrictions or exemptions prior to shipping or travel.



Normally, no further conditions have to be met by the user in order to transport STIHL backpack batteries by road to the power tool's operating site. Check and comply with any special regulations that may apply to your situation.

For further information please go to [www.stihl-usa.com/battery-transportation-safety](http://www.stihl-usa.com/battery-transportation-safety) (for Canada: [www.stihl.ca](http://www.stihl.ca)).


## 17 Storing

### 17.1 Backpack Battery

#### WARNING

- To reduce the risk of a short circuit, which could lead to electric shock, fire and explosion, never store the battery with small metal objects capable of conducting electricity (e.g., paper clips, nails, coins, keys) or in wet or damp conditions,  5.2. If the battery is damp or wet, allow it to dry thoroughly before storing,  5.2.

#### WARNING

- Extreme temperatures can damage the battery and may also cause the battery to generate heat, rupture, leak, ignite or explode, resulting in severe or fatal personal injury or property damage. Never charge, use or store the battery outside the specified ambient temperature limits,  21.4.

To properly store the battery:

- ▶ Disconnect the battery from the power tool.
- ▶ When storing the battery, maintain a charge of 30 % to 45 % (2 green LEDs).
- ▶ If storing the battery in the charger, disconnect the charger from the outlet.
- ▶ Make sure the battery is dry and store it indoors in a dry and secure location.
- ▶ Keep it out of the reach of children and other unauthorized persons.
- ▶ Protect the battery against dampness and corrosive agents such as garden chemicals and de-icing salts.
- ▶ Protect the battery from exposure to conductive liquids such as salt water.
- ▶ For maximum battery life, store the battery at an ambient temperature between 50 °F and 68 °F (10 °C and 20 °C) with a charge between 30 % and 45 % (2 green LEDs).
- ▶ Do not leave spare batteries unused. Use them in rotation.