

## Sabuly CS-BTA521SL

# User Manual: Sabuly 7.2V High-Performance Replacement Battery

Model: CS-BTA521SL

## 1. INTRODUCTION

Thank you for choosing the Sabuly 7.2V High-Performance Replacement Battery. This battery is designed to provide reliable power for specific ABB IRB robotic systems, including models IRB 6660-205/1.9, IRB 6700, IRB 6620, and IRB 8700. It serves as a direct replacement for part numbers 3HAC044075-001/01 and 3HAC044075-001.

This manual contains important instructions for the safe handling, installation, operation, and maintenance of your new battery. Please read it thoroughly before use and retain it for future reference.



Figure 1: Sabuly 7.2V High-Performance Replacement Battery. This image shows the overall view of the yellow battery pack with its black and blue wires connected to a black plastic connector.

## 2. IMPORTANT SAFETY INFORMATION

**WARNING: Failure to follow these safety instructions may result in fire, electric shock, injury, or damage to the battery or device.**

- **Non-Rechargeable Battery:** This battery is a Lithium-Thionyl Chloride (Li-SOCl<sub>2</sub>) type and is **NOT rechargeable**. Attempting to recharge it may lead to explosion, fire, or severe injury.
- **Do Not Disassemble:** Do not attempt to disassemble, open, or service the battery pack. The warranty will be void if the label is removed.
- **Physical Integrity:** Do not crush, puncture, or short external contacts. Avoid dropping the battery.
- **Environmental Conditions:** Do not dispose of in fire or water. Do not store or operate above 60°C (140°F).
- **Disposal:** Dispose of used batteries according to local regulations. Do not dispose of with household waste.



Figure 2: Close-up view of the battery's warning label. The label clearly states "CAUTION WARRANTY VOID IF LABEL IS REMOVED" and provides critical safety warnings regarding disassembly, crushing, puncturing, shorting, and temperature limits.

### 3. SETUP AND INSTALLATION

This battery is intended as a direct replacement for the original battery in compatible ABB IRB robotic systems. Installation should only be performed by qualified personnel following the robot manufacturer's guidelines.

1. **Power Off:** Ensure the robotic system is completely powered off and disconnected from all power sources before beginning installation.
2. **Locate Battery Compartment:** Refer to your robot's service manual to locate the existing battery.
3. **Remove Old Battery:** Carefully disconnect the old battery's connector and remove it from its compartment. Note the orientation for correct installation of the new battery.
4. **Install New Battery:** Insert the Sabuly replacement battery into the compartment, ensuring it fits securely.
5. **Connect Wires:** Connect the battery's plug to the corresponding port on the robotic system. Ensure the connection is firm and correctly oriented.



Figure 3: Close-up view of the battery's black plastic connector with black and blue wires. This image highlights the

specific connector type for proper installation.

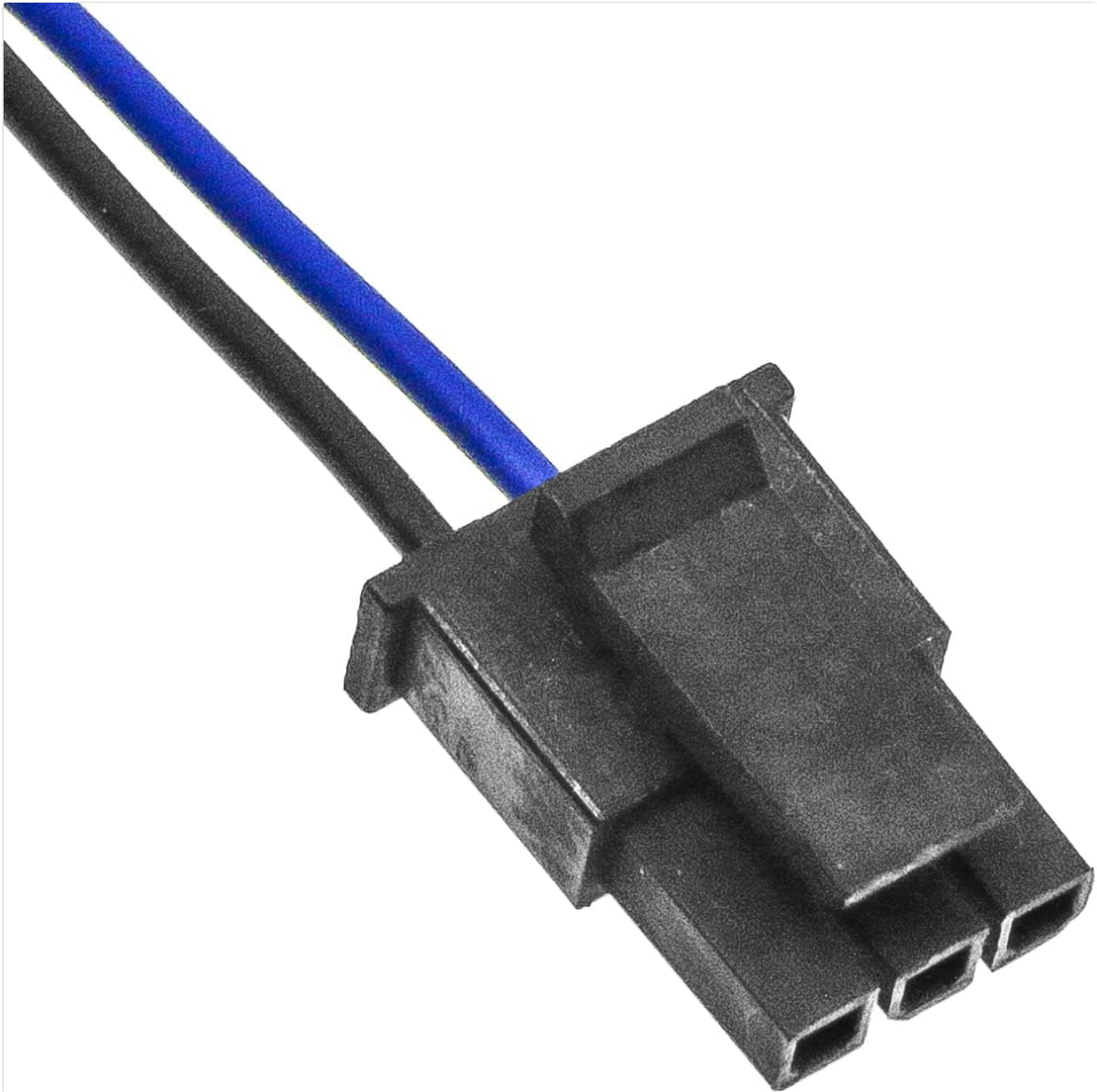


Figure 4: Angled view of the battery's connector, showing the pin configuration. This provides another perspective for ensuring correct alignment during connection.

## 4. OPERATING GUIDELINES

As a primary (non-rechargeable) battery, its operation is straightforward: it provides power until its capacity is depleted. It is crucial to understand that this battery cannot be recharged.

- **Initial Use:** Once installed, the battery will begin providing power to the system as required.
- **Replacement:** When the robotic system indicates a low battery or requires a battery replacement, follow the installation steps in Section 3 to replace the depleted battery with a new one.
- **Special Charger:** The product description mentions "Please charge with a special charger for battery." This statement is typically for rechargeable batteries. Given this battery's Li-SOCI2 chemistry and the explicit "Non Rechargeable Battery" warning on the product label, this battery **must not be charged**. If your system requires a rechargeable battery, this product is not suitable.

## 5. MAINTENANCE AND STORAGE

Proper maintenance and storage can help ensure the longevity and safety of the battery before its

installation.

- **Storage:** Store the battery in a cool, dry place, away from direct sunlight and extreme temperatures. The maximum storage temperature is 60°C (140°F).
- **Packaging:** Keep the battery in its original packaging until ready for installation to prevent accidental short circuits or damage.
- **Cleaning:** Do not attempt to clean the battery with liquids. If necessary, gently wipe with a dry, clean cloth.
- **Inspection:** Before installation, visually inspect the battery for any signs of damage, swelling, or leakage. Do not use if damaged.

## 6. TROUBLESHOOTING

If you encounter issues after installing the battery, consider the following:

- **System Not Powering On:**
  - Verify that the battery connector is fully and correctly seated.
  - Ensure the robotic system's main power supply is connected and active.
  - Check if the battery is new and not depleted.
- **Battery Life Shorter Than Expected:**
  - Ensure the battery is compatible with your specific robot model and its power requirements.
  - Verify that the battery was stored correctly before use.
- **Physical Damage:** If the battery shows any signs of physical damage (e.g., swelling, leakage, punctures), discontinue use immediately and dispose of it safely according to local regulations.

For persistent issues, please refer to the robotic system's own troubleshooting guide or contact Sabuly customer support.

## 7. SPECIFICATIONS

| Attribute               | Value  |
|-------------------------|--|
| Model Number            | CS-BTA521SL  |
| Compatible Part Numbers | 3HAC044075-001/01, 3HAC044075-001                  |
| Compatible Robot Models | ABB IRB 6660-205/1.9, IRB 6700, IRB 6620, IRB 8700 |
| Battery Type            | Lithium-Thionyl Chloride (Li-SOCl <sub>2</sub> )   |
| Voltage                 | 7.2V   |
| Capacity                | 3600mAh  |
| Dimensions (L x W x H)  | 52.3 x 33.7 x 17.1mm (2.06 x 1.33 x 0.67 inches)   |
| Gross Weight            | 75.0g (2.65 ounces)                                |
| Manufacturer            | Sabuly   |
| Certifications          | UN38.3, MSDS, ISO9709, RoHS, CE                    |

## 8. WARRANTY AND SUPPORT

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Sabuly stands behind the quality of its products. This battery is manufactured by a professional battery manufacturer with certifications including UN38.3, MSDS, ISO9709, RoHS, and CE.

If you have any questions or concerns regarding your Sabuly replacement battery, whether before or after purchase, please do not hesitate to contact us by email. We are committed to providing prompt assistance and will reply as soon as possible.

For specific warranty terms and conditions, please refer to the purchase documentation or contact Sabuly customer support directly.

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