



## **SLi TOOL USER MANUAL**

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### **THIS MANUAL COVERS**

11C, 11CRIT, 14C, 15C, 17C, 19C, SC198, SC198NXT GEN, SC240, SC240NXT GEN, SC385, F7, S44, S49, S54, 21-36 RAM, 22-54 RAM

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# STOP!

**Warning. Do not use SLi equipment unless you first read and understand the instructions and warnings in this User Manual. Using SLi equipment involves the risk of severe injury. To avoid injury, use SLi equipment only as instructed in this User Manual.**



## 1. General

### 1.1 Information about this User Manual

**This User Manual contains warnings and instructions for the proper use and maintenance of SLi equipment. For your safety and the safety of others, always follow all warnings and instructions contained in this User Manual.**

**In addition to following the warnings and instructions in this User Manual, when using SLi equipment, you must also follow all applicable workplace and Occupational Health & Safety rules and guidelines.**

**Do not use any SLi equipment (“tool” or “tools”) unless you first read and thoroughly understand the warnings and instructions in this User Manual! This User Manual is a component of the tool and must be stored in a known location that is accessible at all times to all personnel who use SLi equipment.**

**This Manual contains information about different types of SLi equipment. You must read and thoroughly understand the information relating to the type of tool you are using. Some information relating to other types of SLi equipment may not relate directly to your tool.**

**All information, technical specifications, graphics, and illustrations contained in this User Manual are based on the most up-to-date data available at the time this Manual was created.**

## NOTE!

**The current version of the User Manual can be found on our website [www.genesisrescue.com](http://www.genesisrescue.com) or by scanning the QR code.**



## 1.2 Explanation of Symbols

### Warnings

In this Manual, warnings are identified by symbols. The individual warnings are introduced by signal words expressing the type of risk and consequences.

These warnings must be followed to reduce the risk of accidents, injury, and property damage.

**DANGER!**

...points out an immediately dangerous situation which can cause death or severe injury if it is not avoided.

**WARNING!**

...points out a potentially dangerous situation which can cause death or severe injury if it is not avoided.

**CAUTION!**

...points out a potentially dangerous situation which can cause minor or slight injury if it is not avoided.

**ATTENTION!**

...points out a potentially dangerous situation which can cause property damage if it is not avoided.



### **NOTE!**

...emphasizes useful tips and information for efficient, trouble-free operation.

## **1.3 Limitation of Liability**

The information in this Manual was compiled in accordance with the applicable standards and regulations, the current state of technology, and our long-standing knowledge and experience in existence at the time the Manual was drafted. Due to possible technical developments and changes in the tools, and for any specially designed tools, some information and product depictions herein may differ from the tool you are using.

The acts and omissions listed below may cause death or severe injury and must be avoided. Genesis Rescue is not liable for injuries or damages resulting from the following impermissible acts and omissions:

- Non-observance of the warnings and instructions in this Manual
- Improper use of SLi equipment
- Use of SLi equipment by untrained personnel
- Unauthorized modifications to the tool
- Unauthorized technical changes to the tool
- Use of unauthorized replacement parts
- Use of non-original accessories

For special designs or due to technical changes, the actual scope of supply may differ from the explanations and representations described.

## **1.4 Copyright**

All texts, illustrations, drawings and images in these operating instructions may be used freely without prior authorization.

**NOTE!**

Additional information, images and diagrams are available on our website: [www.genesisrescue.com](http://www.genesisrescue.com)

## 1.5 Warranty Provisions

The warranty provisions are included with the sales documentation as a separate document.

## 1.6 Customer Service

Our Customer Service would be happy to provide you with technical information about SLi equipment.

Phone: 937.293.6240

Fax: 937.293.7049

For information on SLi Technology & Electronics email: [slisupport@genesisrescue.com](mailto:slisupport@genesisrescue.com)

For information on all other hardware components, please contact your respective dealer using our Dealer Locator through the QR Code below.

**NOTE!**

When contacting Customer Service, please provide the identification, type, and year of the manufacture of the equipment. This information can be found on the type plate. For further assistance, please locate your dealer through the QR Code:



## 2. Safety

This section of the Manual operating instructions provides and presents a comprehensive overview of information the tool user must understand and follow for all important safety aspects for optimal protection of the operating personnel as well as safe, trouble-free operation.

Failure to observe and follow all the warnings and instructions presented in this Manual can result in severe injury.

### 2.1 Intended Use

The hydraulic battery tools are designed and intended and tested exclusively for the intended uses and applications described here. Do not use the tools for any other use or application not expressly described here are fundamentally prohibited.

All battery tools are designed for as one-person operation tool and should always be therefore to be operated by only one person.

#### **Cutters** (SC198, SC198NXT GEN, SC240, SC240NXT GEN, SC385, F7)

- The battery-powered cutting tools are to be used only exclusively for cutting vehicle doors, roof beams, pillars, door sills, and the ring and the spokes of the steering wheel.
- If possible, for cutting solid material, always use the rear part of the cutter blades as it is equipped with special edges for cutting solid material .
- In an industrial workplace application, the cutting tools equipment can also be used to cut pipes, structural steels, profiles, sheets, and cables.

#### **Spreaders** (S44, S49, S54)

- The battery-powered spreading tools are to be used only for opening vehicle doors, lifting vehicles or other movable loads, pushing away and moving vehicle parts and loads, and squeezing pipes and tie bars.
- If possible, Always use the tips of the spreader for squeezing.
- The spreader tips can also be used as a peeling tool.
- The chain set is only solely to be used for pulling.

**Combi Tools (11C/11CRIT, 14C, 15C, 17C, 19C)**

- The battery-powered combi tools are to be used only for the specified purposes of both the cutters and the spreaders. The spreader tips can also be used as a peeling tool.

**Rescue Rams (21-36, 22-54)**

- The rescue rams are to be used only to lift and push up steering columns, vehicle roofs and other vehicle parts.

**Accessories - Chain Sets**

- Spreaders and combi tools may only be used with the appropriate chain set and pulling device. Pulling chains are exclusively for pulling away obstacles and loads and for enlarging openings to free trapped persons.

**WARNING!**

- Only use the tool for the intended uses described above.

**NOTE!**

All SLi equipment (cutters, spreaders, combi tools and rescue rams) are intended for use by rescue professionals or in industrial workplaces and are not for private use!

**NOTE!**

SLi equipment contain a communication module, which is required for the WLAN, LTE and GPS for communication and location determination. More detailed information on the communication module and the radio connections and channels used can be found in section 4.7.

## 2.2 Operator And Workplace Supervisor Responsibilities

In addition to following all warnings and instructions in this Manual, the tool operator must also familiarize themselves with and follow all occupational safety and health regulations and guidelines applicable to their profession and workplace.

- The operator must educate themselves on the occupational health and safety regulations and guidelines for their profession and/or workplace that are applicable to the tool and its use.
- The operator must assess the risks and identify the dangers at the operation site of the tool.
- The workplace supervisor must determine responsibility for tool cleaning and maintenance, clearly communicate such responsibility, and keep records of the cleaning and maintenance. The operator must educate themselves on who is responsible for tool cleaning and maintenance.
- The workplace supervisor must ensure that all persons who may use the tool have completely read and understood the warnings and instructions in this Manual.
- The workplace supervisor must train all persons who may use the tool at regular intervals and inform them of the dangers associated with handling the tool. The operator must ensure that they have been properly trained on tool use prior to attempting to use the tool.
- Continuous training and instruction by the tool manufacturer are mandatory for a valid training certificate via the manufacturers classes.

The workplace supervisor and operator are also responsible for ensuring that the SLi equipment is undamaged and in proper working condition at all times.

- After every use, and at least once per year, the tool must be visually inspected by an Instructed Person.
- Every three years, and whenever there is any concern with the safety or reliability of the tool, a function and load test must be conducted. Call 937-293-6240 for more information.
- After each use, and at least once a year, check the seal between the battery cover and the housing for cracks and damage. Lubricate the seal with a colorless lubricant such as WD-40.
- The tool must be tested for leaks at least once a year and whenever there is any concern with its reliability.

## 2.3 Operating Personnel

The following terms are used in this Manual and denote the type of qualifications necessary for a person to engage in certain activities involving the tool:

- **Instructed Persons**

Instructed Persons have been instructed by their workplace supervisor regarding the work tasks they have been assigned and the possible risks and dangers associated with improper tool use and other improper actions.

- **Expert personnel**

Expert Personnel have the necessary professional training, knowledge, and experience, as well as knowledge of all applicable tool instructions and occupational health and safety regulations and guidelines to allow them to carry out the tasks they have been assigned and independently recognize all potential dangers associated with such tasks.

**NOTE!**

Never operate the tool after consuming alcohol, drugs, or medications that effect your ability to properly use the tool!

**NOTE!**

Maintenance work may only be performed by Instructed Persons. Repairs may only be performed by the tool manufacturer or by Expert Personnel trained by the tool manufacturer and its authorized service partner.

## 2.4 Personal Protective Equipment

Always wear personal protective equipment (PPE) when using SLi equipment..

The following PPE and clothing must be worn when using the tool:



### Safe Work Clothing

To avoid entanglement with moving tool parts, wear only closely fitting work clothing with narrow sleeves and no flaps, belts, or other protruding pieces that could snag or get caught in the moving parts.



### Safe Shoes

Always wear steel-capped footwear to protect against falling objects. Wear footwear with good traction to avoid slipping on slippery surfaces.



### Work Gloves

Wear safety work gloves to protect against sharp edges and glass splinters when operating the equipment.



### Helmet With Face Shield

Wear a helmet with face shield to protect against flying or falling parts and glass splinters.



### Protective Goggles

In addition to a face mask, wear protective goggles to protect the eyes from projectiles and particles.



### Ear Protection

To protect your hearing, ear protection should be worn in addition to personal protective equipment.

## 2.5 Particular Hazards

### Electrical Current

**DANGER!****Danger of death due to electrical current!**

There is an immediate danger of death if live parts are touched. Damage to insulation or individual components can be life-threatening.

Therefore:

- If the insulation is damaged, immediately disconnect the power supply and arrange for repairs.
- Only allow electricians to carry out work on the electrical system.
- When any work is being carried out on the electrical system, it must be disconnected from the main supply and checked to ensure that it is not live.
- Before carrying out maintenance, cleaning or repair work, the power supply must be switched off and secured to prevent it from being switched on again.
- Do not bypass or shut down any fuses. Use fuses with the correct amperage when replacing.
- Keep live parts away from moisture. This can cause a short circuit.

**WARNING!**

Caution. Risk of damage from hoses burning or melting on hot vehicle parts. If using a tool with a hydraulic hose, pay attention to the location of the hose and keep it away from hot vehicle parts or other high temperature surfaces.

## Noise



### **WARNING!** **Danger to hearing caused by noise**

The noise arising in the working area can cause serious damage to the hearing.

Therefore:

- Wear ear protection during any special kind of work that causes noise.
- Only wear ear protection while you are in the danger area.

## Hydraulic Energy



### **WARNING!** **Danger due to hydraulic energy!**

The hydraulic forces that are released and escaping hydraulic fluid can cause severe injuries.

Therefore:

- Always keep the tool in sight while working and put it down if necessary.
- Inspect hose lines and tools for damage after each use.
- Avoid skin contact with the hydraulic oil (wear safety gloves).
- Remove hydraulic oil from wounds without delay and consult a doctor immediately.

## 2.6 Conduct in Dangerous Situations and Accidents

### Preventive measures

- Always be prepared for accidents
- Always have first-aid equipment (first-aid kit, blankets, etc.) within reach
- Familiarize personnel with accident reporting and first aid procedures, and use of rescue equipment
- Always keep access routes for rescue vehicles open

### In case of incidents

- Immediately shut down tools
- Initiate first-aid measure
- Remove all persons from the danger zone
- Inform supervisor or other responsible person on site
- If necessary, call for emergency assistance.
- Maintain open access routes for rescue vehicles

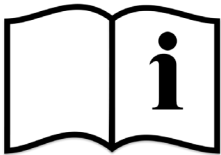
## 2.7 Signage

The following symbols and instruction panels are located on the SLi equipment. These instructions are intended to always remain on the tools.



### **Please note contents of operating instructions**

Do not use the designated tool until you have read the operating instructions from cover to cover.



### **WARNING!**

#### **Danger of injury due to illegible symbols!**

As times goes by, adhesive labels and symbols on the tool may get dirty, or be rendered illegible in some other manner.

Therefore, it is absolutely necessary to:

- Maintain all safety, warning and operating instructions on the tool in a readily legible condition.
- Damaged signs and adhesive labels must be replaced immediately.

### 3. Technical Specifications

#### 3.1 Combi Tools



**11C**



**14C**



**15C**



**17C**



**19C**



**11C-RIT**

|                                             | <b>11C</b>          | <b>14C</b>          | <b>15C</b>          | <b>17C</b>          | <b>19C</b>           | <b>11C-RIT</b>      |
|---------------------------------------------|---------------------|---------------------|---------------------|---------------------|----------------------|---------------------|
| <b>Length</b>                               | 32.6 in.            | 37.1 in.            | 37.4 in.            | 38.9 in.            | 42.4 in.             | 31.1 in.            |
| <b>Width</b>                                | 7.6 in.             | 9.3 in.             | 9.3 in.             | 9.3 in.             | 10.0 in.             | 7.6 in.             |
| <b>Height</b>                               | 9.0 in.             | 9.0 in.             | 9.0 in.             | 9.0 in.             | 9.0 in.              | 9.0 in.             |
| <b>Weight (ready for use)</b>               | 32.2 lbs.           | 41.7 lbs.           | 43.7 lbs.           | 47.9 lbs.           | 56.4 lbs.            | 31.5 lbs.           |
| <b>Opening Width</b>                        | 8.7 in.             | 11.2 in.            | 11.6 in.            | 15.5 in.            | 15.8 in.             | 8.5 in.             |
| <b>Pulling Width (with adapter)</b>         | 15.5 in.            | 17.3 in.            | 16.1 in.            | 17.7 in.            | 20.7 in.             | 12.7 in.            |
| <b>Expansion Force in the Working Area*</b> | 6,969 - 132,862 lbf | 8,093 - 176,025 lbf | 7,868 - 176,025 lbf | 7,868 - 240,770 lbf | 10,116 - 359,694 lbf | 6,744 - 293,375 lbf |
| <b>Max. Pulling Force</b>                   | 8,093 lbf           | 11,915 lbf          | 12,589 lbf          | 13,039 lbf          | 17,535 lbf           | 10,556 lbf          |
| <b>Nominal Pressure</b>                     | 10K psi             | 10K psi             | 10K psi             | 10K psi             | 10K psi              | 10K psi             |
| <b>EN Class **</b>                          | BK31/270G-14.6      | CK36/360I-18.9      | CK35/370H-19.7      | CK35/405I-21.7      | CK45/480K-25.6       | AC140H-14.3         |
| <b>NFPA Class</b>                           | A6-B7-C6-D7-E7-F3   | A7-B8-C7-D9-E8-F5   | A7-B8-C7-D8-E8-F5   | A7-B9-C7-D9-E9-F6   | A8-B9-C9-D9-E9-F7    | A6-B7-C6-D7-E7-F3   |
| <b>Part No.</b>                             | 1101470GRS          | 1101471GRS          | 1101472GRS          | 1100144GRS          | 1101554GRS           | 1101159GRS          |

### 3.2 Cutters



**SC198**



**SC198NXT GEN**



**SC240**



**SC240NXT GEN**



**SC385**



**F7**

|                               | <b>SC198</b>      | <b>SC198NXT GEN</b> | <b>SC240</b>      | <b>SC240NXT GEN</b> | <b>SC385</b>      | <b>F7</b>         |
|-------------------------------|-------------------|---------------------|-------------------|---------------------|-------------------|-------------------|
| <b>Length</b>                 | 35.7 in.          | 35.7 in.            | 36.9 in.          | 36.9 in.            | 39.5 in.          | 42.0 in.          |
| <b>Width</b>                  | 9.3 in.           | 9.3 in.             | 9.3 in.           | 9.3 in.             | 11.7 in.          | 11.7 in.          |
| <b>Height</b>                 | 9.0 in.           | 9.0 in.             | 9.0 in.           | 9.0 in.             | 9.0 in.           | 9.0 in.           |
| <b>Weight (ready for use)</b> | 41.9 lbs.         | 42.1 lbs.           | 47.4 lbs.         | 50.0 lbs.           | 56.6 lbs.         | 61.5 lbs.         |
| <b>Opening Width</b>          | 7.2 in.           | 7.2 in.             | 7.4 in.           | 7.4 in.             | 8.0 in.           | 11.8 in.          |
| <b>Nominal Pressure</b>       | 10K psi           | 10K psi             | 10K psi           | 10K psi             | 10K psi           | 10K psi           |
| <b>EN Class **</b>            | BC166I-19.0       | BC1661I-20.1        | BC187K-21.5       | BC187K-22.7         | CC202K-25.6       | CC268K-27.9       |
| <b>NFPA Class</b>             | A7-B8-C6-D8-E9-F4 | A7-B8-C6-D8-E9-F4   | A8-B9-C7-D9-E9-F4 | A8-B9-C7-D9-E9-F4   | A9-B9-C9-D9-E9-F5 | A9-B9-C9-D9-E9-F7 |
| <b>Part No.</b>               | 1101547GRS        | 1101548GRS          | 1101549GRS        | 1101550GRS          | 1101551GRS        | 1101553GRS        |

### 3.3 Spreaders

**S44****S49****S54**

|                                             | <b>S44</b>            | <b>S49</b>           | <b>S54</b>           |
|---------------------------------------------|-----------------------|----------------------|----------------------|
| <b>Length</b>                               | 35.2 in.              | 39.3 in.             | 40.6 in.             |
| <b>Width</b>                                | 9.3 in.               | 11.1 in.             | 11.1 in.             |
| <b>Height</b>                               | 9.0 in.               | 9.0 in.              | 9.0 in.              |
| <b>Weight (ready for use)</b>               | 40.3 lbs.             | 47.6 lbs.            | 48.0 lbs.            |
| <b>Spreading Width</b>                      | 24.0 in.              | 29.0 in.             | 32.0 in.             |
| <b>Pulling Width</b>                        | 18.3 in.              | 22.0 in.             | 26.8 in.             |
| <b>Spreading Force in the Working Area*</b> | 9,891.6 - 192,661 lbf | 12,364 - 112,629 lbf | 11,240 - 112,629 lbf |
| <b>Max. Pulling Force</b>                   | 15,287 lbf            | 15,736 lbf           | 15,062 lbf           |
| <b>Max. Squeezing Force *</b>               | 33,496 lbf            | 32,372 lbf           | 32,372 lbf           |
| <b>Nominal Pressure</b>                     | 10K psi               | 10K psi              | 10K psi              |
| <b>EN Class **</b>                          | AS44/610-18.2         | AS55/735-21.6        | BS50/805-21.8        |
| <b>Part No.</b>                             | 1101468GRS            | 1101469GRS           | 1100143GRS           |

### 3.4 Rescue Rams



21-36



22-54

|                         | 21-36         | 22-54                      |
|-------------------------|---------------|----------------------------|
| <b>Length</b>           | 21.3 in.      | 22.0 in.                   |
| <b>Width</b>            | 6.1 in.       | 6.14in.                    |
| <b>Height</b>           | 12.6 in.      | 13.6 in.                   |
| <b>Weight</b>           | 40.3 lbs.     | 47.6 lbs.                  |
| <b>Pushing Force*</b>   | 24,953 lbf    | 24,279 lbf/13,938 lbf      |
| <b>Closed Length</b>    | 21.3 in.      | 22.0 in.                   |
| <b>Extended Length</b>  | 36.0 in.      | 54.6 in.                   |
| <b>Nominal Pressure</b> | 10K psi       | 8K psi                     |
| <b>EN Class **</b>      | R111/368-18.4 | TR108/428-62/372-21.4-E-II |
| <b>Part No.</b>         | 1103096GRS    | 1100145GRS                 |

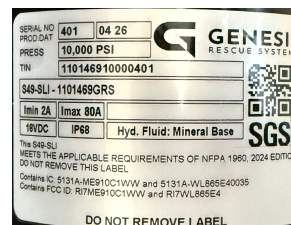
### 3.5 Operating Conditions

The permissible temperature range of the SLi tools is between -4°F and 131°F. Do not use tools outside this range as the tools may not function reliably.

### 3.6 Type Plate

The type plate for all SLi tools is located on the bottom of the cylinder. It provides the serial number, production date, nominal pressure, tool designation and TIN number.

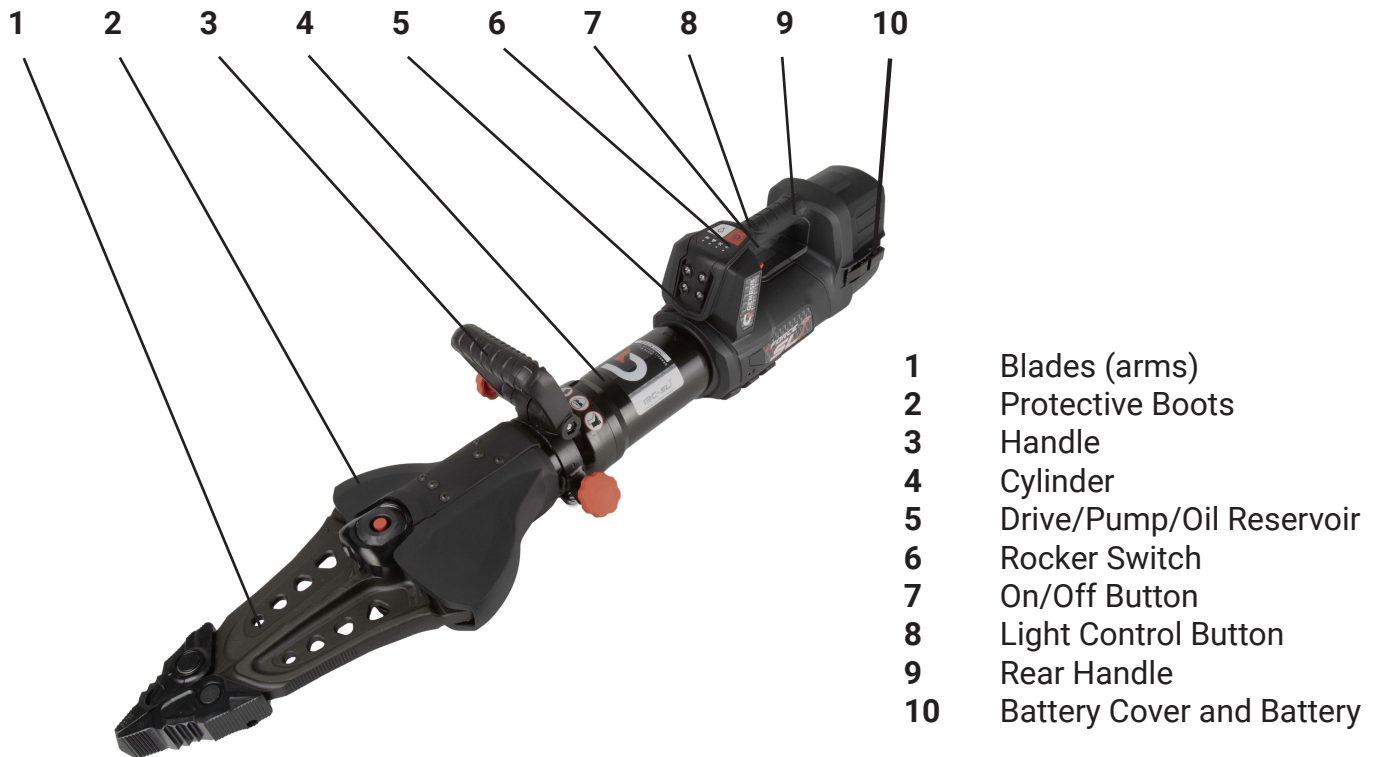
The TIN - "Tool Identification Number" is a 15-digit number and is assigned once. The TIN is made up of the product ID and the serial number, and as such enables unique identification



## 4. Structure and Function

### 4.1 Overview of SLi Equipment

#### Combi Tools



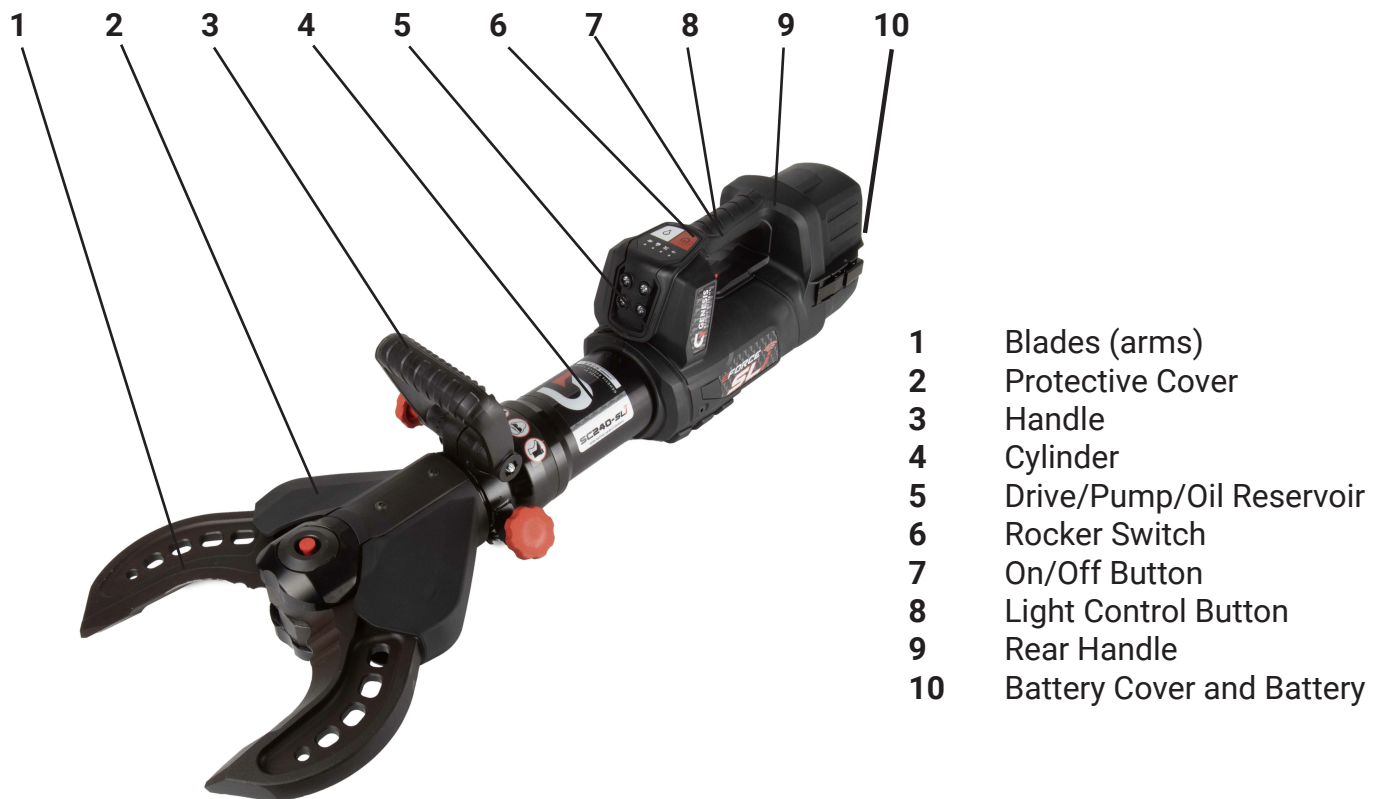
#### Brief Description of Combi Tools

Battery-powered combi tools are specially designed rescue equipment for cutting and spreading vehicle body parts. They are used to rescue trapped or enclosed accident victims. The combi tool may be used for cutting vehicle doors, roof beams, columns, and sills, as well as for opening vehicle doors, lifting vehicle parts and loads, and squeezing pipes and tie bars.

Because the tools are equipped with an internal electrohydraulic drive, they are not linked to a power unit and can therefore be used in hard-to-reach locations. By using the IP 68 battery cover, underwater use is also possible, subject to the limitations and instructions set forth in this Manual.

The movement speed of the shear blades (arms) may be adjusted by moving the rocker switch on the control handle with greater or lesser force. The maximum force is achieved only when the rocker switch is fully activated.

## 4.2 Cutter



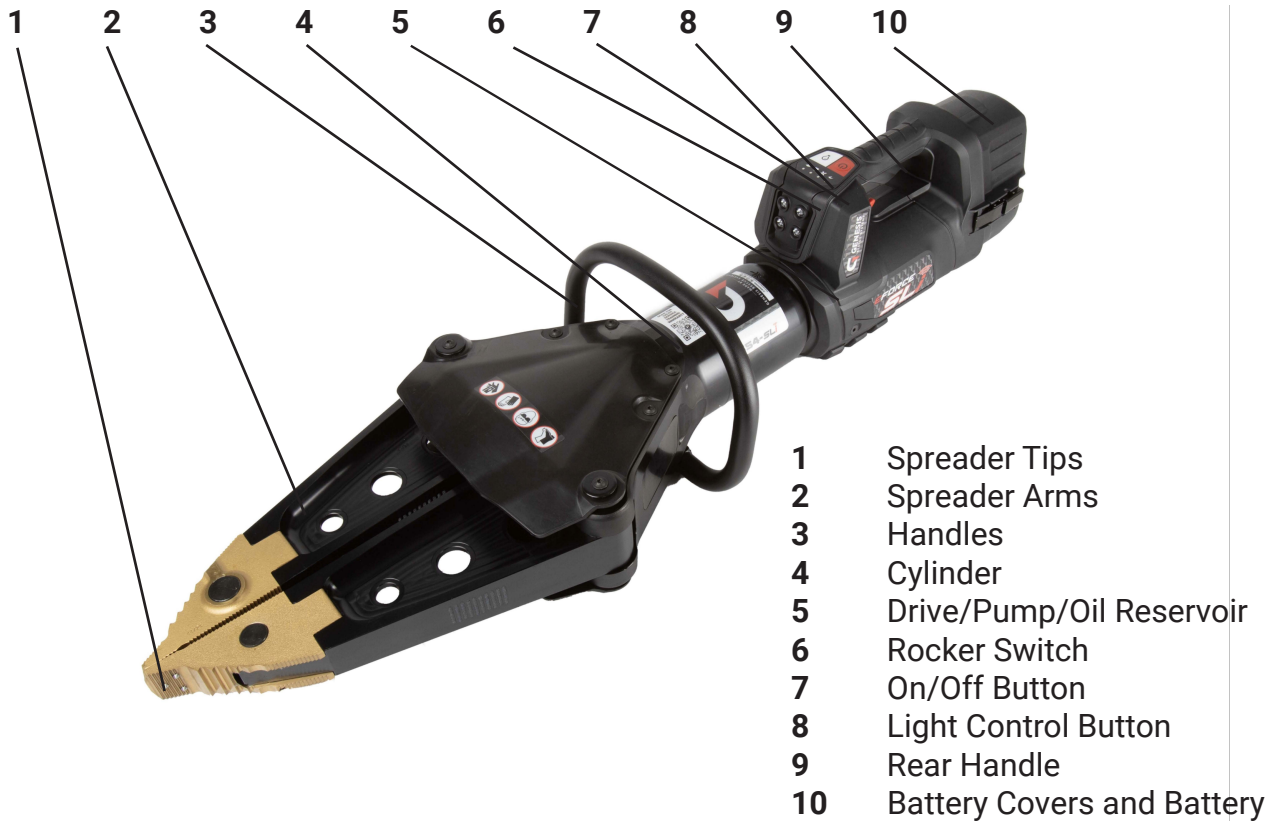
### Brief Description of Cutter

Battery-powered cutters are specially designed rescue equipment for cutting vehicle body parts. They are used to rescue trapped or enclosed accident victims. The cutter may be used for cutting vehicle doors, roof beams, columns, and sills.

Because the tools are equipped with an internal electrohydraulic drive, they are not linked to a power unit and can therefore be used in hard-to-reach locations. By using the IP 68 battery cover, underwater use is also possible subject to the limitations and instructions set forth in this Manual.

The movement speed of the shear blades may be adjusted by moving the rocker switch on the control handle with greater or lesser force. The maximum cutting force is achieved only when the rocker switch is fully activated.

## 4.3 Spreaders



### Brief Description of Spreader

Battery-powered spreaders are specially designed rescue equipment for spreading, pressing and pulling. They may be used to rescue trapped or enclosed accident victims. The spreaders are suitable for opening vehicle doors, and for lifting vehicles and other movable loads.

Because the tools are equipped with an internal electrohydraulic drive, they are not linked to a power unit and can therefore be used in hard-to-reach locations. By using the IP 68 battery cover, underwater use is also possible, subject to the limitations and instructions in this Manual.

The movement speed of the spreading arms may be adjusted by moving the rocker switch on the control handle with greater or lesser force. The maximum spreading force is achieved only when the rocker switch is on fully activated.

## 4.4 Rescue Rams



### Brief Description of Rescue Rams

Battery-powered rescue rams are specially designed rescue equipment for pushing away parts of a vehicle body. They are used to rescue trapped or enclosed accident victims. The rescue ram is suitable for pushing up steering columns, vehicle roofs and other obstacles.

Because the tools are equipped with an internal electrohydraulic drive, they are not linked to a power unit and can therefore be used in hard-to-reach locations. By using the IP 68 battery cover, underwater use is also possible, subject to the limitations and instructions in this Manual.

The rescue rams can be used in addition to the spreader if the spreading arm's spreading distance is not adequate.

The movement speed of the rams may be adjusted by moving the rocker switch on the control handle with greater or lesser force. The maximum pushing force is achieved only when the rocker switch is on fully activated.

## 4.5 Hydraulic Supply

### Drive

The battery-operated tools are powered by an 18 V DC motor. When the tool is switched on, the motor idles. Only when the rocker switch is manually moved does the motor start to run at a higher speed.

### Pump

The hydraulic pressure is generated by a high pressure hydraulic pump (in the pump unit). The pump is a radial piston pump with 4 pump elements.

### Oil Reservoir

The oil volume for operation is taken from a tank. The entire hydraulic system is therefore completely closed and free of air. The tank compensates for volume expansion caused by heat.

### Hydraulic Oil

All battery-powered tools should use a special hydraulic oil for rescue equipment in accordance with WN61000137. The oil does not usually need to be changed, but we recommend changing it after 10 years. An oil change can only be performed by Genesis Rescue Systems or an authorized service partner.



#### CAUTION!

**Do not attempt to carry out repairs on the hydraulic system!**

The complete hydraulic system is designed as a closed circuit and must therefore be completely free of air. For this reason, do not attempt to carry out repairs on the drive, to ensure that no air can enter the system!

## 4.6 Electrical Supply, Using a Combi Tool as an Example



Figure 1: Inserting and removing the battery



Figure 2: Using the half shell IP 54 cover

### **Inserting/removing the battery:**

Connect the battery to the rescue tool by sliding the battery into the battery holder of the tool. Make sure that the Click On/Click Off of the battery is correctly seated and locked.

To remove, press the push-buttons on both sides of the battery simultaneously and then pull the battery upwards out of the battery holder.

### **Using the IP 54 battery cover:**

The IP 54 battery cover is used to protect the battery from mechanical damage. Before fitting the cover, make sure that the O-ring seal is correctly seated and that there is no dirt or damage to the housing in this area.

First place the IP 54 battery cover on the upper edge of the housing and then press it on fully. Close the two latches on the left and right completely. When using the IP 54 battery cover, the tool achieves protection against moisture and splash water. Furthermore, a quick battery change is possible in regular use scenarios. To open or remove the IP 54 battery cover, fully open the two latches on the left and right and then pull the cover backwards.

To protect the battery and the electronics, the tool is divided into a wet and dry area. The battery, drive and electronics are protected in the rear area of the housing by the IP 68 battery cover.



Figure 3: Check the seal and the housing. First press the IP 68 battery cover on at the top edge of the housing

#### Using the IP 68 battery cover:

For underwater use, replace the IP 54 battery cover with the IP 68 battery cover supplied. Before fitting the cover, make sure that the O-ring seal is correctly seated and that there is no dirt or damage to the housing in this area. First place the IP 68 battery cover on the upper edge of the housing and then press it on fully. Close the two latches on the left and right completely. When using the IP 68 battery cover, the tool is approved for use underwater (including fresh and salt and dirt, mud, algae, silt and other contamination) to a depth of 10 ft. for a duration of 60 minutes.

#### After Using Underwater:

Allow any water that enters the wet area of the tool to drain out completely and dry the tool before opening the IP 68 battery cover. To remove, loosen the fasteners on both sides and pull the cover off to the rear. When the tool is extended and retracted, negative or positive pressure can occur in the housing. If there is a corresponding build-up of negative pressure, the cover may be firmly attached to the housing; release the built-up negative pressure in the cover by moving it sideways. After opening the cover, carefully check whether water has penetrated - if this is the case, contact customer service. For further maintenance and care instructions after underwater use - see Chapter 9.2.



Figure 4: Completely close the latches on both sides of the battery cover



#### NOTE!

Underwater radio communication is not possible!

**Caution.** Risk of fire from re-charging battery exposed to salt water. If the battery is exposed to salt water, do not re-charge and properly dispose of the battery.

## 4.7 Communication Module and Radio Connection

The communication module is installed in the rear housing component. This transmits data from the tool to an external output device via WLAN or an LTE connection - depending on the user's choice and the active operating mode. The basic hydraulic functions are always guaranteed by component separation.

To use the SLi features and for registration, follow the instructions in Chapter 4.9.



### NOTE!

The range of the radio connection can be influenced by environmental factors and is therefore dependent on many aspects such as weather, buildings, vegetation, terrain, etc. Underwater radio communication is not possible!

### 4.7.1 Standards and Data Sheets

Confirmed standards concerning electromagnetic compatibility:

EN IEC61000-6-1:2019  
EN IEC61000-6-2:2019  
EN IEC61000-6-3:2006 + A1:2010  
EN IEC61000-6-4:2019  
ETSI EN 301 489-1 V2.2.3  
ETSI EN 301 489-17 V3.2.4  
ETSI EN 301 489-19 V2.1.1  
ETSI EN 301 489-52 V1.1.0

Confirmed standards concerning radio communication:

ETSI EN 301 511 V12.5.1 (2017-03)  
ETSI EN 301 908-1 V13.1.1 (2019-1)  
ETSI EN 300 328 V2.2.2 (2019-07)  
ETSI EN 301 893 V2.1.1 (2017-05)  
ETSI EN 303 413 V1.1.1 (2017-06)

### 4.7.2 Information Regarding Radio Channels Used

GNSS: Ae1, Ae2, L1

WIFI Range/Frequencies: 3b

Frequency Range: 2400Mhz-2483.5Mhz, 5150Mhz-5350Mhz, 5470Mhz-5725Mhz

Channel Width: Broadband

Number of RF Channels: WIFI 2.4GHz: 13, WIFI 5GHz: 9

4G Range: B1 (2100), B2 (1900), B3 (1800), B4 (AWS 1700), B5 (850), B8 (900), B12 (700), B13 (700), B18 (800), B19 (800), B20 (800), B26 (850)

2G Range: B2 (1900), B3 (1800), B5 (850), B8 (900)

| GNSS Constellation | GNSS Signal Designations | RNSS Frequency Band (MHz) |
|--------------------|--------------------------|---------------------------|
| BDS                | B1I                      | 1 559 to 1 610            |
| BDS                | B2C                      | 1 559 to 1 610            |
| Galileo            | E1                       | 1 559 to 1 610            |
| Galileo            | E5a                      | 1 164 to 1 215            |
| Galileo            | E5b                      | 1 164 to 1 215            |
| Galileo            | E6                       | 1 215 to 1 300            |
| GLONASS            | G1                       | 1 559 to 1 610            |
| GLONASS            | G2                       | 1 215 to 1 300            |
| GPS                | L1 C/A                   | 1 559 to 1 610            |
| GPS                | L1C                      | 1 559 to 1 610            |
| GPS                | L2C                      | 1 215 to 1 300            |
| GPS                | L5                       | 1 164 to 1 215            |
| SBAS               | L1                       | 1 559 to 1 610            |
| SBAS               | L5                       | 1 164 to 1 215            |

All exceptions: E5 - E6 - G2 - L2C - L5

#### 4.7.3 Transmission Power

- 2G LB max. 32dBm 2G HB
- 4G FDD max. 23dBm @1RB

#### 4.7.4 Receiving Sensitivity

- 2G -> sensitivity of -107dBm
- 4G FDD (BW=5MHz) -> sensitivity of -102dBm

#### 4.7.4 Labels Country-Specific Radio Approvals



Complies with  
IMDA Standards  
[Dealer's Licence No.]

Contains IC: 5131A-ME910C1WW and 5131A-WI865E40035  
Contains FCC ID: RI7ME910C1WW and RI7WL865E4



TAXXXX-YYYY  
APPROVED



## 4.8 Operating SLi Equipment

To start the battery-operated tool, press the on/off switch. The workspace lighting LEDs switch on and the four control LEDs on the control panel briefly light up green; this is a control function. The motor begins to idle. In this state, if the tool is not operated using the rocker switch on the control handle, the drive switches off automatically after 30 seconds and must then be restarted. However, the data connection remains active for another 2 minutes and only switches off completely once this time has elapsed.

The pressure used on the rocker switch will determine the movement speed of the tool. The maximum cutting, expansion or pushing force is only obtained by fully depressing and holding the rocker switch.

### **Closing the cutter / Opening the spreaders / Extending the rescue ram**

The main direction of tool movement is triggered by pressing the rocker switch to the left with your index finger (grooved/convex side of the rocker switch).

### **Opening the cutter / Closing the spreaders / Retracting the rescue ram**

The opposite direction is triggered by pressing the control rocker to the right with your thumb (curved/concave side of the rocker switch).

### **Dead man's circuit**

When the rocker switch is released, it returns to the zero position automatically. This always brings the tool to a stop in any situation, including under load. The motor switches off automatically after 30 seconds.

#### **LED - Service & Maintenance:**

Lights up if a service interval has been reached or the tool is being accessed externally.

#### **LED - Maximum Pressure Display:**

Lights up as soon as the tool has built up maximum pressure.

#### **ON/OFF Button:**

When this button is pressed, the motor starts to rotate at idle speed. If the rocker switch is not pressed for 30 seconds, the tool switches off automatically.



#### **LED - Theft Mode:**

Lights up when anti-theft protection is activated.

#### **LED - Training Mode:**

Lights up as soon as training mode has been activated and set via the app.

#### **LIGHT CONTROL Button:**

Individual adjustment of the light mode in 5 steps at the touch of a button.

The operating instructions for SLi equipment are available on our website under each specific product: [www.genesisrescue.com](http://www.genesisrescue.com)

## 4.9 Device Registration for SLi Rescue Devices

You must create an account in the Genesis Rescue Hub to register the tool. An existing account can also be used for this purpose.

### Who should register the SLi device?

To ensure a person-independent and transparent registration of your SLi device, an internal concept for the main account as well as the individual sub profiles and the respective assigned authorizations in the digital world of Genesis Rescue is necessary. Do not create a separate account for each device.

We recommend that you create a main account for your fire department or other organization and register all tools to this account.. The tools can then be additionally assigned to different stations and vehicles from this account. Special personal profiles with sub-authorizations can also be assigned again for each device.

1. Scan the QR code below or open our device registration website in your browser: [hub.genesisrescue.com](http://hub.genesisrescue.com)
2. If you already have an account for another Genesis Rescue digital solution or app, you can log in with your existing credentials and add the new SLi device by providing its unique TIN number.
3. If you do not yet have an account in the Genesis Rescue digital world, then you can quickly and easily create your SLi device by clicking on the "Register" button in the top right corner. A user account will then be created automatically.
4. The TIN number required for registration can be found on the type plate of your SLi device. The activation code is located in the separate flyer labeled "Device Registration".



## 4.10 Accessories

### Combi Tools



Brute Tips



RIT Tips



Mechanical Rams



M18 Milwaukee Battery



Spot Weld Tips



DIVEX Bag - Large



DIVEX Bag - Small

| Part No.       | SPS 270 MK2 | SPS 360 MK2 | SPS 370 MK2 | RIT-TOOL | SPS 400 MK2 | SPS 480 MK2 |
|----------------|-------------|-------------|-------------|----------|-------------|-------------|
| Shear Blades   | 1101470     | 1101471     | 1101472     | 1101159  | 1100144     | 1085938     |
| Tips           | -           | -           | 1050616     | 1050616  | 1050616     | 1050616     |
| Pulling Device | 2835746     | 2835746     | 2836033     | 2836033  | 2836033     | 2836033     |
| Chain Set      | 5171407     | 2819139     | 2819139     | 2819139  | 2819139     | 1095147     |

| Part No.                     | SC198 NXT GEN | SC240 NXT GEN |
|------------------------------|---------------|---------------|
| Shear Blades Without Inserts | 1099757       | 1099397       |
| Shear Blade Insert           | 1099753       | 1099753       |
| Shear Blade With Insert      | 1099758       | 1099396       |
| Shear Blade Inserts in Bag   | 1103455       | 1103455       |

|                         |         |
|-------------------------|---------|
| Shear Blades for SC 198 | 1099451 |
| Shear Blades for SC 240 | 1099309 |
| Shear Blades for SC385  | 1099765 |
| Shear Blades for F7     | 1101226 |

### Spreader

| Part No.          | S44     | S49/S54 |
|-------------------|---------|---------|
| Replacement Tips  | 1091176 | 1091849 |
| Chain Set         | 2819139 | 571415  |
| Door Opening Tips | -       | 1100623 |

### SLi Tool Accessories

|                                                   | Part No.      |
|---------------------------------------------------|---------------|
| Replacement Battery M18 8.0HB Milwaukee           | 1099928       |
| Mains Charger M12-18 FC - 110V RAPIDCHARGER       | ART.205.409.7 |
| Continuous Power Supply - Power Adapter 230V      | 1099997       |
| IP 68 Battery Cover (for 5.5Ah and 8.0Ah Battery) | 1099894       |
| IP 54 Battery Cover (for 5.5Ah and 8.0Ah Battery) | 1099352       |

## 4.11 Replacing Blade Inserts (NXT GEN)

During a change of blades, ensure the cutter is secured in a vice or other fixture and that the tool is not able to move. Replacing the blades requires a soft-face hammer, the tensioning pins supplied, a punch, and the blade inserts themselves. Replace both blade inserts at the same time to continue optimum cutting performance.

**NOTE!**

The blade inserts should not be reground.

**Procedure:**

Before changing the blade insert, first remove the battery from the tool. The cutter blades must be in an open position, but less than completely open to avoid putting a load on the blades. Now the blade insert can be changed on the cutter blade with the smooth surface, using the punch to knock out the tensioning pin downwards.

After the tensioning pin has been knocked out of its position, the blade insert can be pulled out. If the blade insert is stuck, it is advisable to level it slightly with the punch in the holes and thereby loosen it.

Carefully remove dirt and grime before inserting the new blade insert. When inserting, make sure that the blade insert does not tilt. To do this, approach with the rounded side of the insert first

If the blade insert cannot be inserted by hand, it is advisable to use lubricant and a soft-face hammer.

After the new blade insert has been fully inserted, the blades are turned and the tensioning pin is driven in again from the rear. Make sure that the tensioning pin is fully driven in again with the punch.

## 4.12 Replacing the Spreader Tips

The spreader tips of the S49 and the S54 are secured with captive collar pins in the spreader arms. To replace them, the pins must be pushed out. After the tips have been replaced, the collar pins can be pushed back through. Check that the pins are seated correctly (pressed completely in).

The holder for the chain set must be mounted in identical fashion. The chain lock must be installed with the latch facing upward.

The collar pins on the spreader tips can be pressed out of the spreader arms but have a safeguard device to prevent them from being lost and therefore they cannot be separated from the tips.

The S44 spreader tips are not secured with removable collar pins but rather with a tensioning pin that must be knocked out when the tips are being changed. The chain set can be fastened in a separate hole without having to remove the tips beforehand.



### CAUTION!

During operation, special care must be taken to ensure that the collar pin remains fully closed.



### CAUTION!

**Ensure that the door opening tips always have full-surface contact!**

If the optionally available door opening tips are attached to the combi tool or spreader, they must always be inserted into the gap while ensuring full-surface contact. Furthermore, reposition as often as possible to insert the teeth at least 3/4" into the gap. Otherwise, the tip may break when the tool is fully loaded.

## 5. Applications

### 5.1 Safety Instructions



#### **Warning.**

Warning. Risk of severe injury and property damage from blade breakage due to cutting at improper angles. Always cut with the blades perpendicular (at a 45-degree angle) to the material being cut. Cutting at a non-perpendicular angle may lead to blade breakage, resulting in projectiles and other injury-causing hazards. Never twist the blades while cutting.



**Warning.** Risk of severe injury from pinch point behind the spreader arms during use. To avoid injury, always keep hands, arms, and other body parts away from the backside of the spreader arms during use.

### 5.2 Cutting (Cutters, Combi Tools)

To optimize cutting performance, place the material being cut as near as possible to the blades pivot point. The tool may have to be repositioned to optimize cutting. Remember, the tool will only achieve full cutting performance when the rocker switch is fully depressed. Also, it may take a few seconds for the hydraulic pump to reach maximum working pressure.

Always cut at a right angle to the cutting material to prevent damage to the blades. The tips of the shear blades must not be more than 3/16" apart during the cutting process. If this value is exceeded, the cutting process must be cancelled and then started again.



#### **Warning.**

Warning. Risk of severe injury from tool pinch points. The blades and spreader arms create pinch points during use both (1) on the tool, and (2) between the tool and the vehicle or other objects near the tool. For your safety, never place hands, arms, or any part of your body at or near the blades or spreader arms during use. Never grab or hold the tool by the blades or spreader arms. Always hold the tool by the top of handles.

### CAUTION!

Do not sever any parts with loose ends as this can result in personal injury due to parts flying off.



**WARNING!** Risk of severe injury from pinch point behind the spreader arms during use. To avoid injury, always keep hands, arms, and other body parts away from the backside of the spreader arms during use.



### ATTENTION!

When cutting high-strength vehicle body parts, such as shock absorbers, hinges or steering columns, the shear blades (arms) may cause severe damage.

## 5.3 Pressing (Rescue Rams)

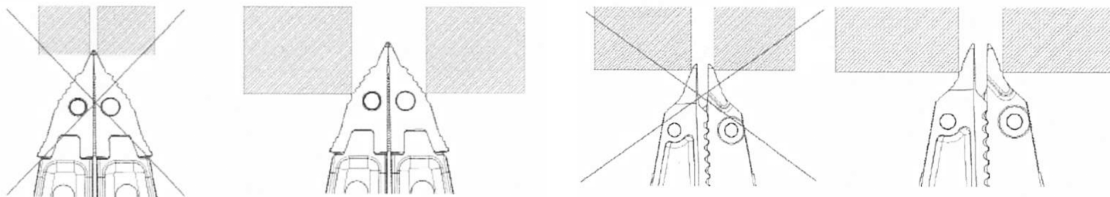
Position the rescue ram while it is in its fully closed state. To the extent possible, make sure that the ram is placed in the center of the vehicle body part to be pushed away and at a right angle to the load.

The pushing head can be rotated on the piston rod to improve the attachment to the surface being pushed.

## 5.4 Spreading (Spreaders, Combi Tools)

The spreading functions can be used to open doors, lift vehicles and other movable loads, push vehicle parts away, and squeeze pipes and tie bars. To use this function, the vehicle must be stable and supported.

To prevent the tool from sliding, the arms and tips are serrated inside and out. Spreader tips also have spikes for a better grip. The spreader tips must be positioned as depicted below.



## 5.5 Pulling (Spreaders, Combi Tools, Rescue Rams)

After the chain set has been attached to the equipment, spreaders, combi tools, and rescue rams can also be used for pulling.

For pulling, the chains must be tightly tensioned and must be tensed only in the pulling direction. To tension the chain, only one lock can be pressed in, so that the chain can be pulled through the chain lock.

If the range of movement is insufficient, tension chains or other means must be used so that the tool can be reopened and the chain tensioned again.



### ATTENTION!

For quick use, it is advisable to keep the pulling chain with the chain locks mounted approx. 4-8 inches from the end. Carefully check the chains prior to every use. Check that the weight does not stress the tip of the hook, but lies in the middle of the hook instead.

- You must not undertake any repairs yourself.
- Never load chains greater than the load capacity indicated.
- Do not shock-load.
- Do not galvanize or paint the chains.
- Do not shorten the chains by knotting.
- Do not apply heat to the chains.
- Only use the chains and accessories between temperatures of -40°F and 140°F.
- Chains must only be used for pulling. Lifting loads is not permitted.

### Chains may not be used again if:

- They are deformed, cracked or exhibit corrosion pitting.
- The diameter of the metal forming the chain link has reduced by 10% of the nominal thickness.
- An individual chain link has been permanently stretched.
- An individual chain link has been enlarged by more than 2%.
- The internal chain pitch over a measuring distance of 11 chain links has increased by more than 2%.

## 5.6 Squeezing (Spreaders, Combi Tools)

With the spreader tool, the spreader arms may be used to close down on and squeeze pipes and other hollow profiles. With the combi tools, squeezing can only be done with the tips!



### ATTENTION!

Material to be squeezed can suddenly spring away.

## 5.7 Lifting (Spreaders, Combi Tools, Rescue Rams)

Spreaders, combi tools, and rescue rams can be used for lifting vehicles or other movable loads. Always secure the load so that it does not slip and position the spreader tips far enough apart under the load to prevent slipping.

The load being lifted must be constantly monitored for tipping, rolling away or changing position. Once lifted, the load must be immediately propped up and supported in a suitable way. Do not remain under lifted loads!

Under special conditions, rescue rams can also be used to lift loads. When doing so, to the extent possible, place the ram in the center of the load being lifted and at a right angle to the load.



### NOTE!

Before using a rescue ram, you must position the attachment point so that the force is exerted in the desired direction.



### NOTE!

Do not use SLi Equipment to lift the entire load.

## 5.8 Peeling (Spreaders, Combi Tools, Rescue Rams)

The spreader tips and peeling tool can be used to create entry openings (e.g., after bus and train accidents, in silos).

## 6 Battery and Charger

### 6.1 Charger Technical Data

|                                      |                 |               |
|--------------------------------------|-----------------|---------------|
|                                      | <b>Part No.</b> | <b>8.0 Ah</b> |
| <b>M12-18 FC - 110V RAPIDCHARGER</b> | ART.205.407.9   | 87 min        |



### 6.2 Special Safety Instruction



**WARNING!**  
Do not throw used batteries into domestic waste or into the fire.  
Your dealer can dispose of your old battery in an environmentally friendly manner.

The following batteries can be charged with the chargers and are intended for use in combination with our rescue equipment:



| Battery Type | Part No.      | Voltage | Nominal Capacity | Weight    |
|--------------|---------------|---------|------------------|-----------|
| M18 Forge    | ART.205.180.6 | 18V     | 6.0 Ah           | 2.07 lbs. |
| M18 Forge    | ART.205.180.7 | 18V     | 8.0 Ah           | 2.38 lbs. |
| M18 Forge    | ART.205.180.8 | 18V     | 12.0 Ah          | 3.30 lbs. |



**ATTENTION!**  
Only the batteries listed in the table should be used to operate SLi rescue equipment. Care must be taken to use Milwaukee's FORGE Series.



## WARNING!

### Important safety instructions concerning the battery and the charger.

- The charger cannot be used to charge non-rechargeable batteries.
- Do not store batteries together with metal items (risk of short circuit).
- Metal parts must not get into the battery insertion slot on the chargers (risk of short circuit).
- Do not open batteries or chargers, and only store in dry rooms. Protect against moisture.
- Mains voltage is present at the charger. Do not reach into the tool with objects that can conduct electricity.
- Do not charge a damaged battery. Replace it immediately.
- Check the tool, connection cable, battery pack, extension lead and plug for damage and aging. Have damaged parts repaired only by a specialist.
- This tool is not intended to be used by people (including children) with limited physical, sensory or mental capabilities, or who have a lack of experience and/or a lack of knowledge.
- Before underwater use, the IP 68 battery cover required for this purpose must be attached.
- • Do not expose batteries to fire or excessive temperatures above 265°F (130°C) as batteries may explode. Toxic fumes and materials are created when batteries are burned.
- • Only charge in a well-ventilated area and within the Recommended Ambient Charging Temperature range of 40°F to 104°F (5°C to 40°C).
- • Do not store the battery or charger where temperatures may exceed 120°F (50°C), including in direct sunlight, a vehicle, or a metal building in the summer.
- • While charging, keep the battery pack clear of other objects for proper ventilation and do not block the vents.
- • Avoid smoking or open flames near a charging battery as vented gases may explode.
- • Store the battery pack and charger in a cool, dry place, in an upright position. Do not store or expose the battery to damp or wet environments where corrosion of terminals may occur.
- • Do not store or charge the battery pack in the presence of gaseous fumes, dust, or flammable materials.
- • Do not place a battery pack near anything that may cause a short circuit (e.g., coins, keys, nails, or any small metal objects in a toolbox, pocket, or drawer). A battery pack will short circuit when a metal object makes a connection between the positive and negative contacts on the battery pack.
- • Do not use or charge a battery that appears damaged or swollen.
- For additional safety information and product specifications, visit the Milwaukee website at <https://www.milwaukeetool.com/products/batteries-and-chargers>.
-

### 6.3 Intended Use

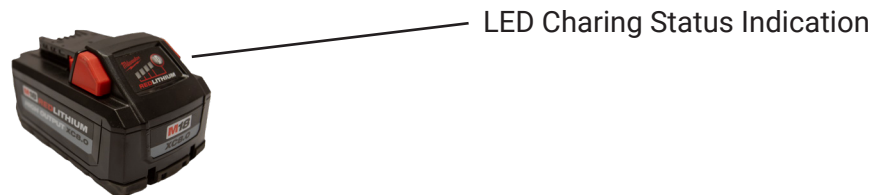
The charger listed in the table is approved for charging the 18V Li-Ion batteries of the M18/V18 system supplied with the battery tool.

### 6.4 Mains Connection

Only connect the charger to single-phase alternating current and only to the mains voltage specified on the rating plate. The charger It can also be connected to ungrounded outlets as it is built in accordance with protection category II.

### 6.5 Li-Ion Battery

For safety reasons, the batteries are discharged when they are delivered (air transport regulation). The battery must be charged completely before first use



If the battery is not used for a long period of time, it switches to idle mode. The battery must be re-charged in order to be used again.

The battery's charge level can be checked by pressing the button on the battery. Do not press the button while the battery is in the charger unless you first switch off the charger for at least 1 minute otherwise the indication will be inaccurate. The number of glowing LEDs indicates the charge level.

If the tool does not work after inserting the battery, insert the battery into the charger to check its condition. Indications on the battery and the charger provide information on the battery condition.

You can continue to work with reduced power at lower temperatures. For best operational readiness, the batteries must be fully charged after use. The batteries have special protection against deep discharge.

## 6.6 Charging Process

### LIGHT INDICATORS



Continuous Red

Charging



Slow Flashing Green

Approaching Full Charge



Continuous Green

Charging is Complete



Fast Flashing Red

Battery is Too Hot/Cold -  
Charging Will Begin When  
Battery Reaches Correct  
Charging Temperature



Slow Flashing Red

Battery Charge is Pending -  
Charging Will Begin When  
the First Pack is Fully Charged



Flashing Red/Green

Damaged or Faulty Battery  
Pack

## 6.7 Maintenance

If the power cable is damaged, it must be replaced by Expert Personnel.

Only use approved accessories and approved spare parts. If a component does not have a replacement part description, have the component replaced by an authorized dealer.

- Never disassemble a battery or charger.
- Unplug the charger and remove the battery before performing any maintenance.
- To clean dust and debris from the charger, battery vents, and electrical contacts, utilize vacuuming or brushing only.
- Do not expose battery pack or charger to fluids, water, or rain.
- While keeping away from all electrical contacts, the housing only may be cleaned with a damp, soapy cloth. Be sure to keep all moisture away from the electrical contacts and immediately dry off housing after cleaning so that moisture does not transfer from the housing to the contacts.
- Do not use flammable or combustible solvents around battery packs or chargers. Conductive fluids such as bleach or bleach containing products can cause a short circuit.

## 7 Transport, Packaging and Storage

### 7.1 Safety Instructions



#### **CAUTION!**

Damage due to improper transport!  
Improper transport can cause considerable property damage.

Therefore:

- When unloading the packaged pieces, proceed with caution and pay attention to the symbols on the packaging.
- Only completely open and remove packaging at the actual storage site.

### 7.2 Transport Inspection

Check the delivery immediately after receiving it for completeness and possible transport damage so that, if needed, a remedy can be found quickly.

If there is any externally visible damage, proceed as follows:

- Refuse the delivery or accept it with reservation.
- State the extent of damage on the transport documents or the transporter's delivery receipt.
- Initiate a complaint.



#### **NOTE!**

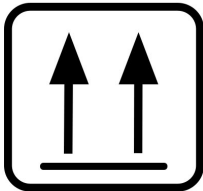
Report every deficiency as soon as it is recognized  
Damage claims can be directed to our Customer Service (see Chapter 1.6).

### 7.3 Symbols on the Packaging



#### Caution - Fragile!

Handle the package carefully, do not drop it, throw it, hit it or tie it down.



#### Facing Upwards!

The package must always be transported and stored with the arrows pointing upwards. Do not roll or tilt.

### 7.4 Disposal of Packaging



Properly dispose of all packaging materials and parts that have been removed (transport protection) in accordance with local regulations.

### 7.5 Storage

To the greatest extent possible, store the equipment in a dry, dust-free area. Avoid exposing the tool to direct UV radiation.



#### CAUTION!

The tool must be stowed securely in the brackets provided in order to avoid damage during transit, etc.



#### NOTE!

To maintain battery performance, store batteries fully charged at ambient temperature. Regular charge/discharge cycles contribute to the longevity of batteries.

## 8 Installation and Commissioning

### 8.1 Safety Instructions



#### **WARNING!**

Danger of injury due to improper operation!

Improper operation can cause severe injury or property damage.

- Carry out all work steps according to the information in these operating instructions.
- Before starting work, ensure that all covers and guards are installed and that they work properly.

#### **Personal Protective Equipment**

Wear protective equipment as specified in Chapter 2.4 when performing all work!



#### **NOTE!**

Additional types of personal protective equipment may be required depending on the work site conditions (e.g., hazardous chemicals present).

### 8.2 Checks

Inspect the SLi tool for damage. Never use the tool unless it is in proper working condition! If the tool is damaged or otherwise not in proper working condition, do not use the tool and immediately notify your supplier.

### **SLi Combi Tools, Cutters and Spreaders:**

- Check the blades (for damage)
- Inspect the spreader tips (for damage)
- Check the membrane keypad and the rocker switch (for function)
- Check the handle (fastened securely)
- Check the cover plate (for damage)
- Check the latching of the battery cover and the battery retaining plate
- Perform the self-test function

### **SLi Rescue Ram:**

- Check the piston rod (for damage)
- Check the membrane keypad and the rocker switch (for function)
- Check the pressure elements (for damage)
- Perform the self-test function
- Check the latching of the battery cover and the battery retaining plate

## **8.3 Shut-Down (End of Work)**

### **Cutters:**

When finished using, position the blade tips so that one is above the other. This is to prevent injury from contacting the exposed blade. However, do not close the blades of the cutter completely. This is to relieve the hydraulic load on the cutter for storage.

### **Rescue Rams:**

When finished using, the ram's piston rod must be retracted to relieve the hydraulic load on the tool. Retract the rod so that approximately 1/4" of the rod is extended.

### **Combi Tools and Spreaders:**

When finished using, position the spreader arms so that they remain slightly open in order to relieve the tool's hydraulic pressure.

## 8.4 Advantages of Device Registration

### What are the advantages of device registration for SLi rescue equipment?

With the new SLi battery-powered tool series, Genesis Rescue Systems is heralding a digital revolution in the rescue tool market. This series offers more speed, a Milwaukee compatible 18V battery, with an intuitive design, as well as numerous smart features packed into a robust and submersible housing. To be able to use the smart features of your SLi device without restrictions via web interface and app, it is necessary that you register your device online.

The registration process activates the SIM card in the device, which enables data transfer. At the same time, you can store settings for the device and the respective authorization profiles via the app or the web interface. Explicit consent to the privacy policy of the device owner is required for device registration.



WLAN and LTE



GPS



Device Management



Authorization Profile



SLi App



Device Status and Telemetry



Service Information



Telemetry



Safety Stop



Quicktest



Theft Protection



Training Mode

More information on the smart functions and features of the SLi rescue equipment can be found at [www.genesisrescue.com](http://www.genesisrescue.com)

## 9 Maintenance

### 9.1 Safety Instruction



#### **WARNING!**

Danger of injury due to defective maintenance work!

- Have all maintenance work carried out by trained specialists.
- Ensure good housekeeping and cleanliness at the workplace! Loose components and tools left lying around constitute a potential hazard.
- Wear protective gloves during all work!

### 9.2 Upkeep and Maintenance

To be ready for operation at any time, you must do the following:

- After every use and at least once a year, visually check the tool and its accessories. Pay particular attention to spreader tips, blades, the housing and the seal on the battery cover.
- Every three years and whenever there is any concern with the safety or reliability of the tool, perform a function and load test.
- After every use, check the lubrication of the movable parts and pins, and spray with suitable lubrication if necessary. Apply lubrication via the lubrication groove provided for this purpose on the spreaders and the grease nipple on the cutters.
- Every 10 years we recommend that you have the hydraulic oil changed by our factory.

**ATTENTION!**

Prior to all maintenance work, the equipment must be cleaned of any dirt so that it does not get into the hydraulic system. Cleaning can be carried out using a conventional cleaner.

### 9.3 Maintenance After Operation in Humidity

- The tool must be dried after being operated in damp conditions
- Rusted parts (bolts, blades and clips) must be greased

### 9.4 Maintenance After Underwater Use

- If the tool becomes dirty, rinse it thoroughly with clean water to remove mud, silt, algae, salt water or other contaminants.
- After operation under water or in damp conditions, drain the water from the front area of the tool. The tool must then be dried.
- Check the seal on the battery cover and the housing. If water enters the battery cover - contact your service partner.
- Browened parts (bolts, blades, and clips) must be greased.
- After underwater application, inform your service partner that the tool has been in underwater use the next time it is serviced.
- After use in dirty and/or salt water, we recommend contacting a Genesis service partner for thorough cleaning of the tool.

### 9.5 Maintenance Schedule

**ATTENTION!**

In case of problems with the device maintenance, our customer service is at your disposal (see Chapter 1.6).

## 10 Malfunctions & Faults

### Combi Tools & Cutters

| Malfunction                                                       | Possible Cause                                      | Remedy                                                                                                                     |
|-------------------------------------------------------------------|-----------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------|
| Tool does not reach full performance                              | Rocker switch not completely pressed to the side    | Press the rocker switch completely to the side                                                                             |
| Combi tool moves in opposite direction under load                 | Check valve defective                               | Have the tool checked by an authorized service center                                                                      |
| Blades are loose and gape apart during cutting                    | Blade not attached to the shear head as specified   | Repair work by an approved workshop                                                                                        |
| Blade opening below target value                                  | Shearing head settings altered                      | Repair work by an approved workshop                                                                                        |
| Combi tool opening width below target value                       | Shearing head settings altered                      | Repair work by an approved workshop                                                                                        |
| Pressure build-up despite movement (open - closed) without a load | Hex nut/central bolt too tight                      | Repair work by an approved workshop                                                                                        |
| Blade chipping                                                    | Blades damaged from cutting high-strength materials | Re-sharpenable to about 1/16" (see repair manual)<br>Otherwise replace                                                     |
| Cracks in the blades                                              | Blades damaged from cutting high-strength materials | Have the blades replaced by an authorized service center                                                                   |
| Rescue equipment does not function                                | Battery is dead                                     | Place the battery on the charger. The displays on the battery and charger give information about the battery charge status |
| Water ingress in the underwater battery cover                     | O-ring seal defective or dirty                      | Replace and lubricate the O-ring seal                                                                                      |

**Rescue Rams:**

| Malfunction                                | Possible Cause                                   | Remedy                                                                                                                     |
|--------------------------------------------|--------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------|
| Tool does not reach full performance       | Rocker switch not completely pressed to the side | Press the rocker switch completely to the side                                                                             |
| Ram moves in opposite direction under load | Check valve defective                            | Have the tool checked by an authorized service center                                                                      |
| Rescue equipment does not function         | Battery is dead                                  | Place the battery on the charger. The displays on the battery and charger give information about the battery charge status |

**Spreaders:**

| Malfunction                                     | Possible Cause                                     | Remedy                                                                                                                     |
|-------------------------------------------------|----------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------|
| Tool does not reach full performance            | Rocker switches not completely pressed to the side | Press the rocker switches completely to the side                                                                           |
| Spreader moves in opposite direction under load | Check valve defective                              | Have the tool checked by an authorized service center                                                                      |
| Rescue equipment does not function              | Battery is dead                                    | Place the battery on the charger. The displays on the battery and charger give information about the battery charge status |

## 11 Decommissioning/Recycling

After its operating life has expired, dispose of the tool properly. However, individual parts can be reused.

The hydraulic oil must be drained completely and collected. Note that the hydraulic oil must be disposed of separately!

Local disposal requirements apply to the disposal of all equipment parts and packaging materials.



**NOTE!**

Please ask your supplier about disposal of the equipment.

## 2026 SLi Tool User Manual

Effective 10/10/2023 Form: RM-013 Rev. 4 Updated: 05/01/2026

TO ENSURE ACCURATE PRICING RETRIEVE THE LATEST VERSION FROM THE TOOLBOX.  
UNAUTHORIZED DISTRIBUTION IS PROHIBITED.

| REV | REVISION LOG                                     | DATE       | UPDATED BY |
|-----|--------------------------------------------------|------------|------------|
| 0   | Release                                          | 10/10/2023 | April S    |
| 1   | Changed Images 3.1 (p.18)                        | 11/3/2023  | April S    |
| 2   | Measurement Change (p.18 & 19)                   | 11/8/2023  | April S    |
| 3   | Attorney Revision, Tool Photo Updates            | 05/25/2025 | Jared R    |
| 4   | Changed Typeplate image to reflect 1960 standard | 05/01/2026 | Jared R    |
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