

# SG6600\_8800UD-MV Transformer Replacement Instructions

SG6600UD-MV / SG8800UD-MV



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# 1 About This Document

This document introduces the specific operation steps of replacing SG6600\_8800UD-MV transformer.

## 1.1 Validity

This document applies to the following product:

- SG6600UD-MV
- SG8800UD-MV

Unless otherwise specified, take SG8800UD-MV as an example to introduce the removal and installation steps of transformer.

## 1.2 How to Use This Document

Read this document and related documents carefully before any operation on the transformer. This document must be carefully stored and available at all times.

Contents of this document may be updated and amended continuously, so it is possible that there may be some errors or slight inconsistency with the actual product. Please refer to the actual product purchased.

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## 1.3 Symbol Explanations

The symbols that may be used in this document are listed below. Please read carefully to make better use of this document.

### DANGER

**"DANGER" indicates high-risk potential hazards that, if not avoided, may lead to death or serious injury.**

### NOTICE

**"NOTICE" indicates potential risks that, if not avoided, may lead to device malfunctions or financial losses.**



**"NOTE" indicates additional information, emphasized contents, or tips that may be helpful, e.g. to help you solve problems or save time.**

## 2 Removing Transformer

For a running substation, if the transformer is damaged, disassemble the transformer following the steps in this section.

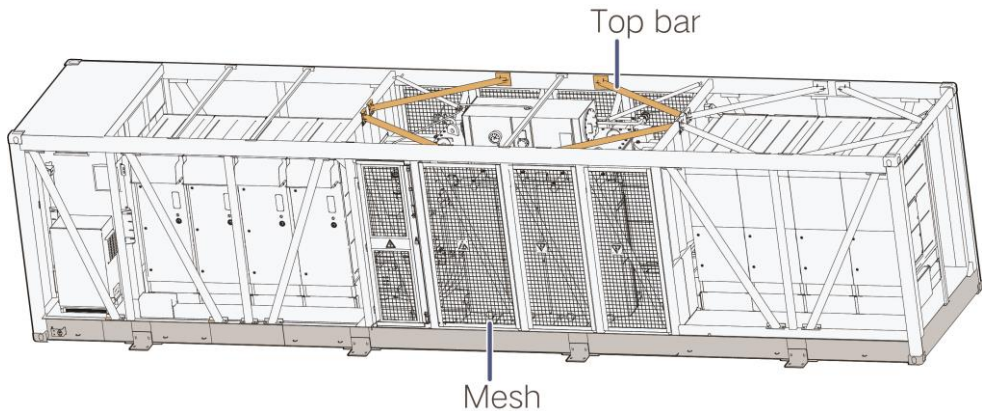
### **⚠ DANGER**

**Before operation, use measuring equipment to ensure that there is no voltage at the points of connection. Otherwise, an electric shock may occur!**

### 2.1 Removing Container Beams and Mesh

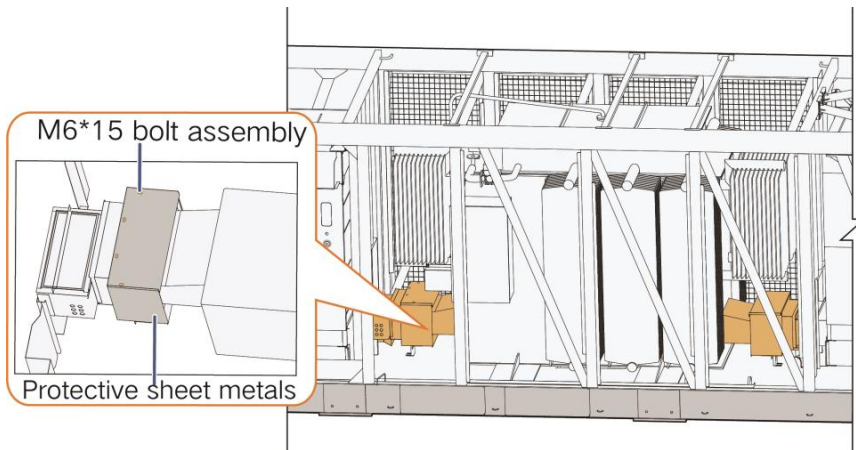
The transformer is in the container. To facilitate hoisting the transformer, first remove top bars and the mesh of the container.

- Unscrew the M8\*20 stainless steel outer hexagon bolt assembly and remove the mesh.
- Unscrew the M16\*50 stainless steel outer hexagon bolt assembly and remove the top bars.

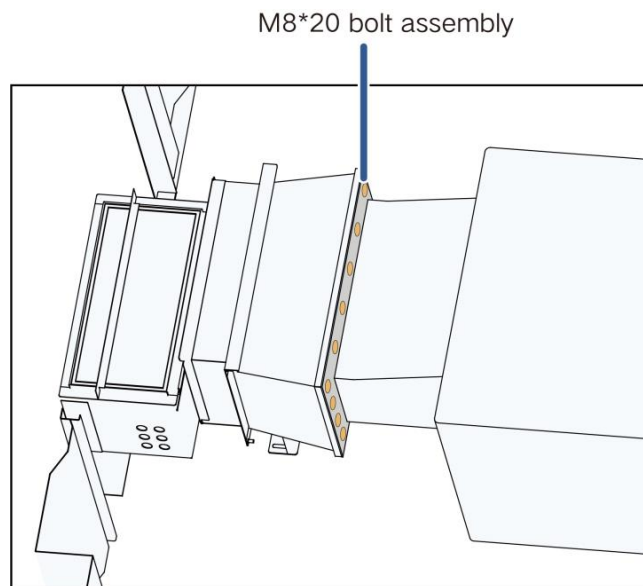


### 2.2 Removing LV Side Soft Connecting Cover

**Step 1** Unscrew the M6\*15 cross-recessed hexagon bolt assemblies on both sides of the transformer, and remove the protective sheet metals.



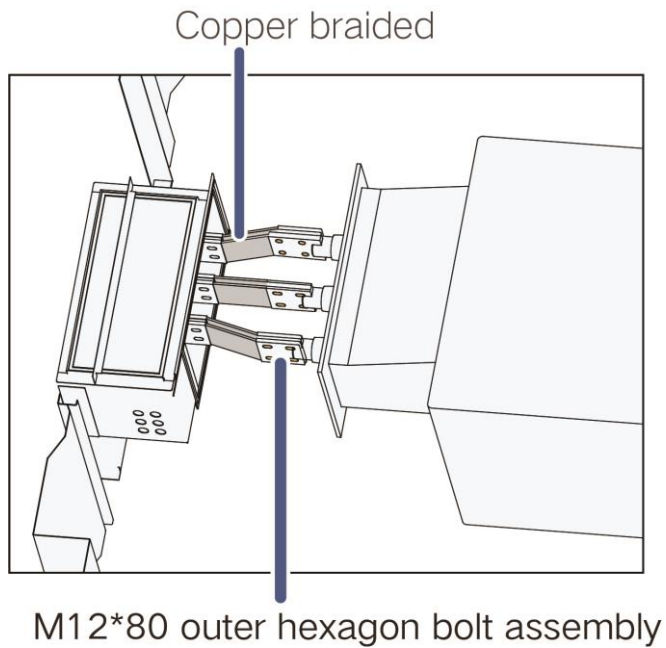
**Step 2** Unscrew the M8\*20 outer hexagon bolt assemblies, and separate the canvas shield from the transformer flange.



**Step 3** Push the LV side soft connecting cover to the side of the transformer to expose the low-voltage copper bar of the transformer for subsequent hoisting of the transformer.

### 2.3 Removing LV Side Copper Braided Wires

Unscrew the M12\*80 outer hexagon bolt assembly and remove the LV side copper braided wires.



## 2.4 Removing Transformer Internal Cables

**Step 1** Remove the three-phase cables and ground cable that connect the RMU and the transformer.

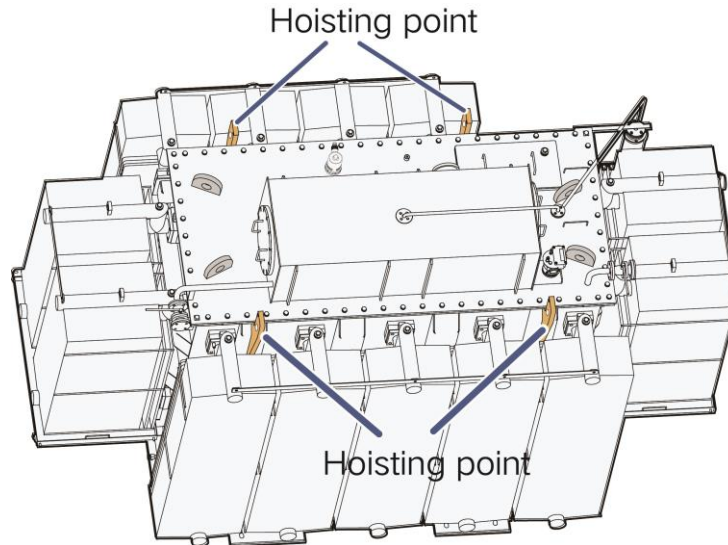


**Step 2** Disconnect all communication and power cables between the transformer and the power distribution cabinet and the communication box. Do not leave the removed cables inside the transformer room.

## 2.5 Lifting Transformer

**Step 1** Unscrew the bolts on the transformer to separate it from the container.

**Step 2** Use a crane to hoist the transformer out of the container through the four hoisting points at the top of the transformer.



\* The figure is for reference only. And the actual product received shall prevail.  
The transformer is successfully removed.

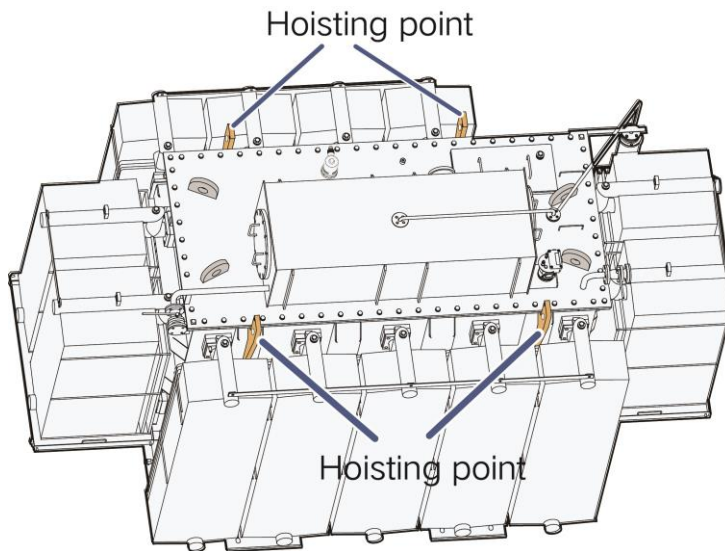
## 3 Installing Transformer

After removing the damaged transformer, install a new transformer following the steps in this section.

### 3.1 Installing Transformer

**Step 1** Use a crane to hoist the transformer into the container through the four hoisting points at the top of the transformer.

**Step 2** Use the bolts on the transformer to fix it to the container, recommended torque:  $170 \text{ N}\cdot\text{m} \pm 10 \text{ N}\cdot\text{m}$ .



### 3.2 Connecting Transformer Internal Cables

**Step 1** Connect the three-phase cable and ground cable to the RMU.

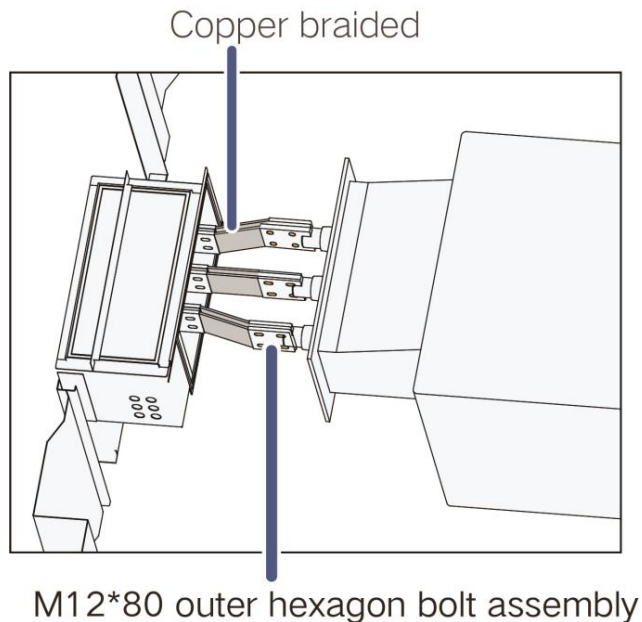




**Step 2** Connect all communication and power cables between the transformer and the power distribution cabinet and the communication box.

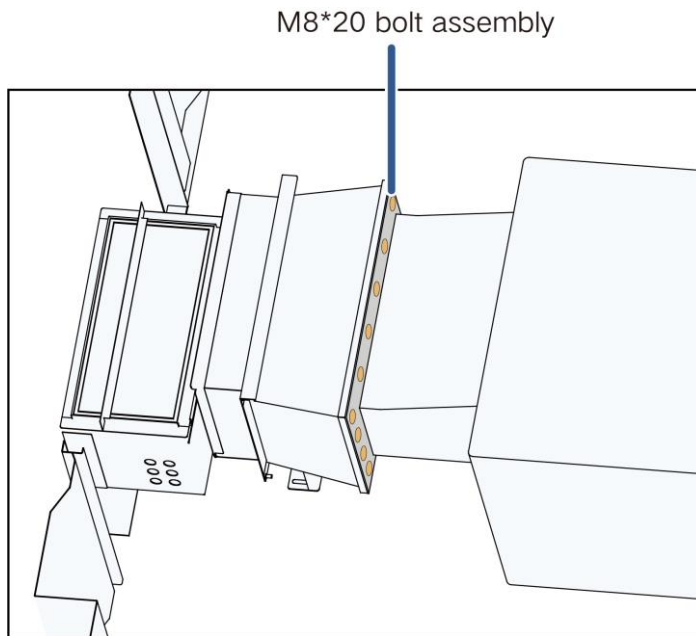
### 3.3 Installing LV Side Copper Braided Wires

Use the M12\*80 outer hexagon bolt assembly to install the LV side copper braided wires.

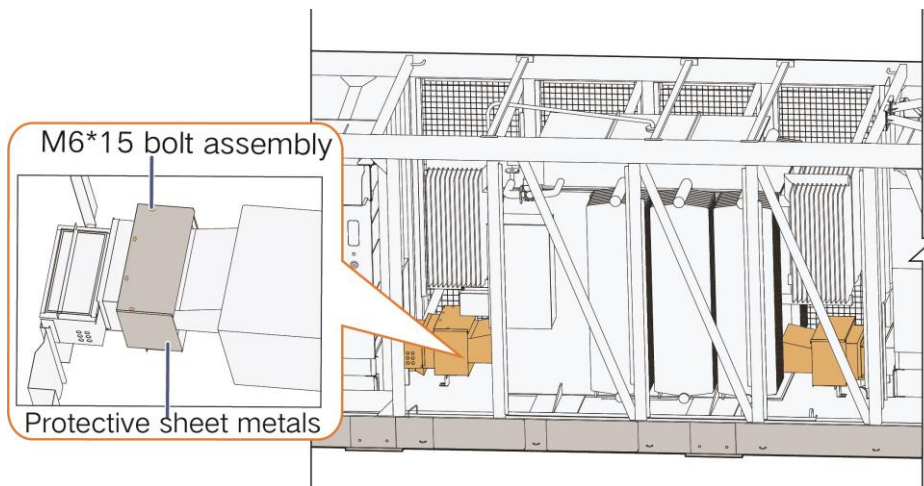


### 3.4 Installing LV Side Soft Connecting Cover

**Step 1** Fix the canvas shield onto the transformer flange using M8\*20 outer hexagon bolt assemblies.



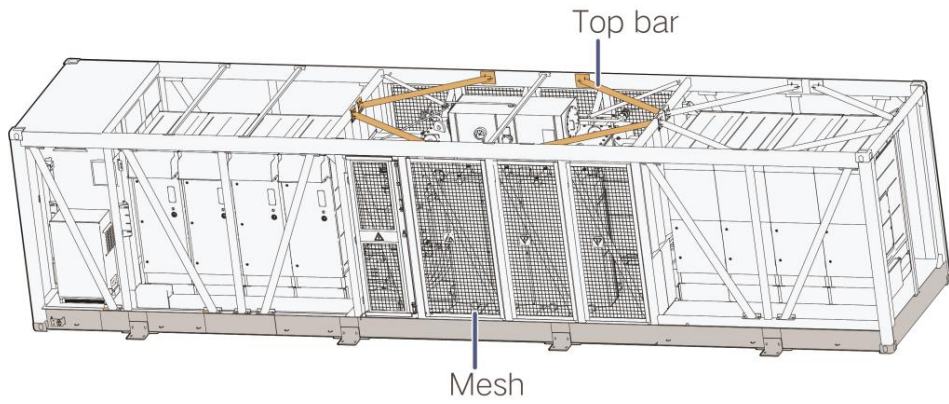
**Step 2** Mount the protective sheet metals using M6\*15 cross-recessed hexagon bolt assemblies on both sides of the transformer.



### 3.5 Installing Container Beams and Mesh

After placing the transformer, install top bars and the mesh of the container.

- Use the M16\*50 stainless steel outer hexagon bolt assembly and to fix the top bars.
- Use the M8\*20 stainless steel outer hexagon bolt assembly to fix the mesh.



The transformer is successfully replaced.

## 4 Recommended Torque

To prevent the copper crimp terminals from being loosened by the force, thus causing poor contact, and to avoid heat or even fire due to increased contact resistance, make sure to fasten the screws.

If there is no special requirements for the fastening torque, follow the recommended torque below:

<b>Screw/Bolt</b>	<b>Torque (N·m)</b>	<b>Screw</b>	<b>Torque (N·m)</b>
M3	0.7 - 1	M8	18 - 23
M4	1.8 - 2.4	M10	34 - 40
M5	4 - 4.8	M12	60 - 70
M6	7 - 8	M16	119 - 140