

# Battery module adapters

## T10619

<b>en-gb</b>	Original Instructions	<b>fi</b>	Alkuperäiset ohjeet	<b>pl</b>	Oryginalne instrukcje
<b>de</b>	Originalbetriebsanleitung	<b>fr-fr</b>	Instructions d'origine	<b>pt-br</b>	Instruções originais
<b>ar</b>	التعليمات الأساسية	<b>he</b>	הוראות מקוריות	<b>pt-pt</b>	Instruções originais
<b>bg</b>	Оригинално ръководство за експлоатация	<b>hr</b>	Izvorne upute	<b>ro</b>	Instrucțiuni originale
<b>cs</b>	Originální návod k použití	<b>hu</b>	Eredeti útmutató	<b>ru</b>	Инструкции на языке оригинала
<b>da</b>	Originale brugsanvisninger	<b>it</b>	Istruzioni originali	<b>sk</b>	Pôvodný návod
<b>el</b>	Πρωτότυπο οδηγίων χρήσης	<b>ja</b>	元の手順	<b>sl</b>	Originalna navodila za uporabo
<b>en-us</b>	Original Instructions	<b>ko</b>	원래 지침	<b>sr</b>	Originalna uputstva
<b>es-es</b>	Instrucciones originales	<b>lt</b>	Originali instrukcija	<b>sv</b>	Originalinstruktioner
<b>es-mx</b>	Instrucciones originales	<b>lv</b>	Instrukcijas oriģinālvalodā	<b>tr</b>	Orijinal Talimatlar
<b>et</b>	Originaalkasutusjuhend	<b>mk</b>	Оригинално упатство	<b>uk</b>	Оригінальна інструкція
<b>fa</b>	دستورات اصلی	<b>nl</b>	Originele instructies	<b>zh-cn</b>	原始说明
		<b>no</b>	Opprinnelige instruksjoner	<b>zh-tw</b>	原廠操作說明

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# 1 General Information

Product Name:	Battery module adapters
Product Type:	Load holding device
Product Number:	T10619
Weight:	0.19 kg per piece
Max. Load Capacity:	34 kg per piece
Static Test Coefficient:	3.0

Table 1: General Information

## Intended use:

- ▶ The battery module adapters lift battery modules from high-voltage batteries in vehicles as defined in the workshop manuals of the Volkswagen Group brands.
- ▶ The battery module adapters are used to remove battery modules from the thermal paste in defined HV batteries as defined in the workshop manuals of the Volkswagen Group brands.

## Terms of use:

- ▶ For qualified workshop personnel only.
- ▶ Use only for work approved by the Volkswagen Group.
- ▶ For use on high-voltage components only by qualified personnel.
- ▶ Use only for loads up to 34 kg per battery module adapter.
- ▶ Do not hold or lift any persons or animals.
- ▶ Do not hold or lift items other than those described in the workshop manuals of the Volkswagen Group brands.
- ▶ Do not stand under suspended loads.
- ▶ To remove the battery modules, use only with the components of the support bracket 10-222A or 10-222B that are listed in Table 2 and in accordance with the instructions in the workshop manuals of the Volkswagen Group brands.
- ▶ To lift the battery modules, use only with the workshop equipment that is listed in Table 3 or the components of the support bracket 10-222A or 10-222B that are listed in Table 3 and in accordance with the instructions in the workshop manuals of the Volkswagen Group brands.

- ▶ When using with a workshop crane, use only on level, even, and stable ground.
- ▶ Use and store only in enclosed workshops with a roof.
- ▶ Use only with the approved accessories (see the workshop manuals of the Volkswagen Group brands).
- ▶ Do not work on suspended loads.
- ▶ Use only at ambient air temperatures between -20 °C and +80°C.

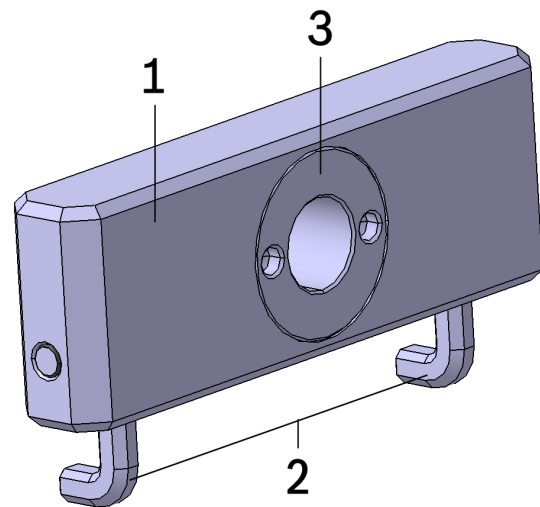


Figure 1: Battery module adapter T10619

- 1** Base
- 2** Hooks (2 pieces)
- 3** Bushing

**Required special tools to remove the battery modules**

Product Number:	Product Name:
10-222A/10	Fixture
10-222A/12	Shackle
10-222A/14	Adapter (2 pieces)
10-222A/100	Cross beam

Table 2: Required special tools to remove the battery modules

**Required special tools and workshop equipment to lift the battery modules**

Product Number:	Product Name:
3033	Lifting tackle
10-222A/10	Fixtures (2 pieces)
10-222A/12	Shackles (2 pieces)
VAS 6100	Workshop crane

Table 3: Required special tools and workshop equipment to lift the battery modules

## 2 General Safety Instructions

**Read and follow all safety notes and instructions!**

Failure to follow the safety instructions could result in serious injuries and severe damage to materials.

Observe and follow the safety notes below.

- ▶ The load holding device has been specifically constructed for its intended use. The safety of the load holding device can no longer be ensured if it is misused or modified in ways not expressly approved by the manufacturer. Serious personal injuries or severe damage to materials could occur.
- ▶ Ensure that each person using the load holding device is familiar with these instructions and can access them at all times.
- ▶ Ensure that all users are also familiar with the instructions of the additional tools and workshop equipment that are necessary for the work.
- ▶ Carefully read and adhere to the instructions in the technical safety information of the Volkswagen Group brands.
- ▶ Observe and follow the basic information and safety notes for high-voltage vehicles in the corresponding Volkswagen Group information media when using on vehicles with high-voltage components.
- ▶ Wear safety shoes with ESD protection.
- ▶ Wear cloth gloves.
- ▶ Wear safety glasses.
- ▶ Position hands and feet so as to avoid potential crushing hazards.
- ▶ Use the load holding device only for work approved by the Volkswagen Group.
- ▶ Do not exceed the maximum load capacity of 34 kg per battery module adapter.
- ▶ The battery module adapters may only be used with a suitable workshop crane, e.g. VAS 6100, lifting tackle 3033 and the support bracket 10-222A or 10-222B in accordance with the workshop manuals of the Volkswagen Group brands.
- ▶ Ensure that the workshop crane and the swivel lifting hook are in good working order before each use.
- ▶ When using with a workshop crane, ensure that the path is clear and easily visible.
- ▶ Move the load slowly and carefully.
- ▶ Observe the battery module adapters and the load during all movements.
- ▶ Observe the battery module adapters as they are released from the thermal paste.
- ▶ Persons may not be under the load or in the hazard area while the load is being moved.
- ▶ Do not work on suspended loads.

### 3 Operating Instructions

#### **WARNING**

##### **Risk of electric shock!**

The HV battery is a high-voltage storage capacitor (HVSM). High voltage could cause serious personal injuries or severe damage to materials.

- ▶ Observe and follow the hazard classification of the high voltage system in the workshop manuals.
- ▶ Observe and follow the notes and work instructions in the workshop manuals.
- ▶ For qualified workshop personnel only.

#### **3.1 Preparing the battery module adapters**

1. Ensure that the battery module adapters are complete and inspect them for visible damages such as signs of wear, deformation, breaks, cracks, and corrosion before each use. Do not use the battery module adapters if damaged or in poor condition, but discard them immediately.
2. Perform the necessary preparatory work to use the battery module adapters in accordance with the workshop manuals of the Volkswagen Group brands.

#### **3.2 Removing the battery module**

1. Pivot and insert a battery module adapter in the battery module (see the workshop manuals of the Volkswagen Group brands). Ensure that the hooks (2) engage correctly in the holes of the battery module as specified in the workshop manuals.

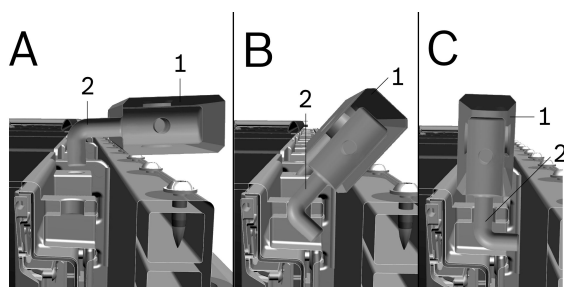


Figure 2: Pivoting and inserting the battery module adapter in the battery module

**1** Base body

**2** Hooks (2 pieces)

**A** 1<sup>st</sup> Step: Base parallel to battery module

**B** 2<sup>nd</sup> Step: Pivot and insert the base into the battery module

**C** 3<sup>rd</sup> Step: Base perpendicular to battery module

2. Connect the fixture (6) and a shackle (8) to the cross beam (5).

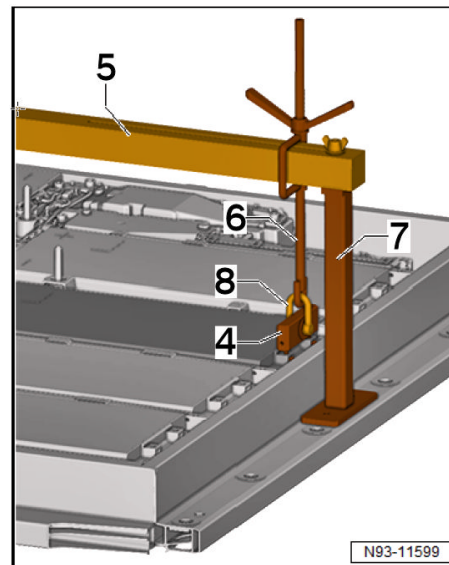


Figure 3: Attaching the support bracket to the battery module

**4** T10619: Battery module adapter

**5** 10-222A/100: Cross beam

**6** 10-222A/10: Fixture

**7** 10-222A/14: Adapter

**8** 10-222A/12: Shackle

3. Position the cross beam (5) above the center of the battery module.
4. Hook the shackle (8) into the hole in the bushing (3) of the battery module adapter on one side of the battery module (see Figure 3).

5. Turn the toggle nut on the fixture (6) slowly and carefully. This will release the battery module from the thermal compound paste.

### **CAUTION**

#### **Risk of injury!**

The hook can suddenly disengage from the battery module if the battery module is not removed from the thermal paste correctly.

- ▶ Do not use the workshop crane to release the battery module from the thermal compound paste.
- ▶ Do not use electric tools such as an electric or impact screwdriver to release the battery module from the thermal compound paste.
- ▶ If the battery module is not releasing, stop the process. Ensure that all the preparatory steps have been performed correctly. If necessary, repeat the preparatory steps. Proceed with the process carefully.

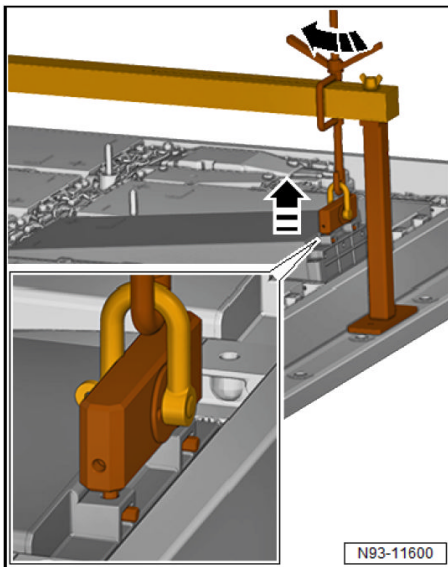


Figure 4: Removing the battery module adapter

### **3.3 Lifting the battery module**

1. Pivot and insert a battery module adapter in the battery module (see the workshop manuals of the Volkswagen Group brands). Ensure that the hooks (2) engage correctly in the holes of the battery module as specified in the workshop manuals.

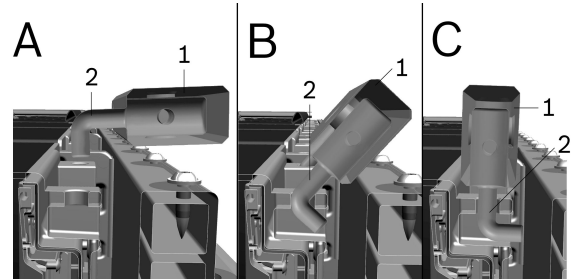


Figure 5: Pivoting and inserting in the battery module adapter in the battery module

**1** Base body

**2** Hooks, (2 pieces)

**A** 1<sup>st</sup> Step: Base parallel to battery module

**B** 2<sup>nd</sup> Step: Pivot and insert the base into the battery module

**C** 3<sup>rd</sup> Step: Base perpendicular to battery module

2. Repeat the previous step to attach another battery module adapter on the opposite side of the battery module.

3. Connect the lifting tackle (10) to the workshop crane (9). Connect the shackles (8) to the spindles of the lifting tackle (10).

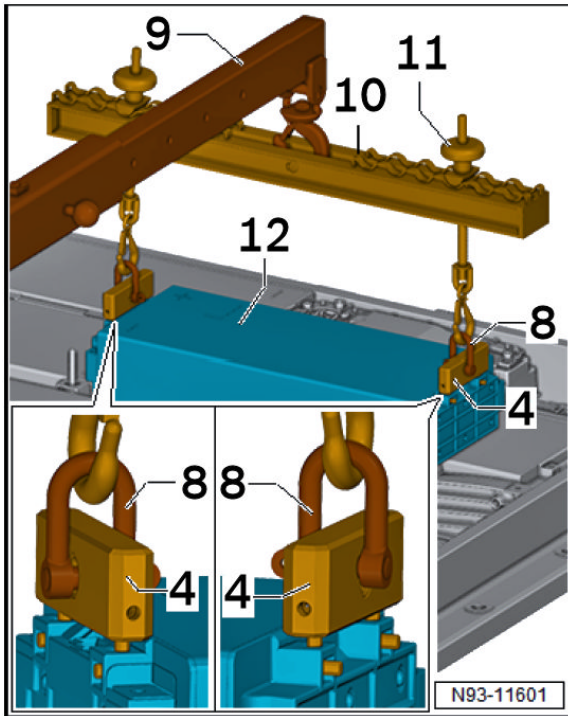


Figure 6: Lifting the battery module

- 4** T10619: Battery module adapter
- 8** 10-222A/12: Shackles (2 pieces)
- 9** Workshop crane, e.g. VAS 6100
- 10** 3033: Lifting tackle
- 11** Star handles on the spindles of the lifting tackle
- 12** Battery module

4. Position the lifting tackle (10) above the center of the battery module.
5. Attach the shackles (8) to the battery module adapter.
6. Carefully lift the battery module with the workshop crane (9) and the lifting tackle (10) out of the battery housing.

Observe the center of gravity position of the battery module. If necessary, readjust the spindles of the lifting tackle (10).

## **WARNING**

### **Danger of a falling load!**

Attaching the load incorrectly or moving the load carelessly could cause the load to fall. This could result in serious personal injuries or severe damage to materials.

- Lift the load upright.
- Ensure that the load is secure when setting it down.

7. Place the battery module on a clean and fuzz-free surface.

### **3.4 Repair work on the battery module**

1. Remove the battery module adapter from the battery module.
2. Remove the rest of the thermal compound paste from the battery module as described in the workshop manuals of the Volkswagen Group brands.
3. Perform further work as described in the workshop manuals.
4. Ensure that all parts of the special tool have been removed after completing the repair work.

## 4 Inspection and Maintenance

Ensure that the battery module adapters are complete and inspect them for visible damages such as signs of wear, deformation, breaks, cracks, and corrosion before each use. Do not use the battery module adapters if damaged or in poor condition, but discard them immediately.

Contact your first-level support representative with any queries.

### **NOTICE**

*Modifications to this product which have not been expressly approved by the manufacturer will void any warranty. The manufacturer assumes no liability for personal injury or damage to materials which occur as the result of improper use of this product.*

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## Declaration of Conformity with the Machinery Directive 2006/42/EC, Annex II 1A

Manufacturer:	Bosch Automotive Service Solutions GmbH Am Dörrenhof 1 85131 Pollenfeld-Preith Germany
Authorized to compile the technical documents:	Bosch Automotive Service Solutions GmbH Am Dörrenhof 1 85131 Pollenfeld-Preith Germany
Product Name:	Battery module adapters
Product Type:	Load holding device
Product Number:	T10619

We hereby declare that the product described above complies with the relevant clauses of the 2006/42/EC Machinery Directive.

Any modification to the product not expressly approved by the manufacturer will void the validity of this declaration.

The following harmonized standards have been applied:

EN ISO 12100:2010	Safety of machinery - General principles for design - Risk assessment and risk reduction
EN 13155:2003+A2:2009	Cranes - Safety - Non-fixed load lifting attachments

Pollenfeld, Thursday, March 12, 2020

Place, Date

Carsten Henkel, Managing Director