# TABLE OF CONTENTS

1. Scope of supply ................................................. 3  
2. Prepare the Frame ............................................. 4  
3. Mounting of the motor ....................................... 5  
4. Option 1: Mounting with clamp (not included in the scope of supply) 6  
5. Option 2: Mounting with the mounting bracket on the stand plate (not included in the scope of supply) 7  
5. Mounting of the motor in the end position ............... 8  
6. Mounting of the crank ........................................ 8  
7. Mounting of the display ...................................... 8  
8. Mounting of the speedsensor ................................ 9  
9. Cabling of the components ................................... 9  
10. Mounting and connection of the luggage carrier battery system Typ13 10  
11. Mounting and connection of the frame battery system Typ13 11  
12. Connection of the bike light at the motor ............... 11
1. **Scope of Supply**

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Central motor MM15</td>
<td>Terminal strip for battery</td>
<td>LCD-Display with cable or display on the handle bar</td>
<td>Operating element for LCD-Display</td>
</tr>
<tr>
<td>Mounting bracket for stand plate</td>
<td>Speedsensor with magnet</td>
<td>Pedal cranks (1x left, 1x right)</td>
<td>4x Tapping screw 16mm for battery holder cover</td>
</tr>
<tr>
<td>4x ScrewM5x12 for battery holder</td>
<td>4x ScrewM5x12 for battery holder</td>
<td>Light connection cable (optional)</td>
<td>Assembly tool (optional)</td>
</tr>
<tr>
<td>Light connection cable (optional)</td>
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</tbody>
</table>

**Scope of supply on a purchase of a luggage carrier battery system**

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Battery 9Ah / 11Ah / 15Ah Typ 13</td>
<td>Battery holder for luggage carrier</td>
<td>Battery charger Typ 13</td>
<td>Luggage carrier with supplies</td>
</tr>
<tr>
<td>Cover for battery holder</td>
<td></td>
<td></td>
<td></td>
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</tbody>
</table>

**Scope of supply on a purchase of a frame battery system**

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frame battery 12Ah or 14Ah Typ 13</td>
<td>Battery holder for frame montage</td>
<td>Cover for battery holder</td>
<td>Battery charger Typ 13</td>
</tr>
<tr>
<td></td>
<td></td>
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</tbody>
</table>

Unpack the parts and remove any packaging.
Check the parts if they are complete and undamaged.
In the case of transport damage, please immediately contact the supplier.
2. Prepare the Frame

First, the existing bottom bracket should be removed completely.

**Attention: The engine installation is only possible with frames that have installed a BSA bottom bracket (68mm length)!**

Remove the pedal crank completely. All gear and brake cables and light cords should be routed so that they do not extend between the frame and motor.
3. MOUNTING OF THE MOTOR

Put the engine carefully through the frame. Push the security plate on the axis. Srew the securing nut carefully with the hand.

Check if the motor is on the right side (chain side) completely tight on the pedal crank. If not, the distance have to be balanced with the distance plate! Take care that the gearbox doesn’t touch the frame.
After the balance of the chain side the distance between engine and security plate has to be balanced with the distance plate. Screw the M5-screws just slightly.

Depending on the frame, you have to use the matching assembly option for torque support. Option 1 is included in the scope of supply.

4. **Option 1: Mounting with the mounting bracket on the stand plate (included in the scope of supply)**

Put the motor in the right position to mount it with the mounting bracket.
5. **Option 2: Mounting with clamp (not included in the scope of supply)**

Put the motor in the right position to mount it with the clamp.

For the safety of the frame the clamp can be covered with a shrink tube. (not included in the scope of supply)

6. **Option 3: Mounting with the mounting bracket (not included in the scope of supply)**

For special frames or special vehicles you can choose the alternative mounting bracket. This model will be fixed on the frame.
7. MOUNTING OF THE MOTOR IN THE END POSITION

Screw the 2 M5-screws tight on the stand plate. Screw the motor with the securing nut together and tighten them. Use the special tool for this operation. The securing nut should be tighten with about 50Nm. The use of a screw glue is also possible.

8. MOUNTING OF THE CRANK

Fix the 2 cranks and take care of the marks on the right and left side.

9. MOUNTING OF THE CRANK

Put the chain on the chainring and check, if the length and tension are alright. We suggest to use a special, strong chain that is designed for E-Bikes only!

10. MOUNTING OF THE DISPLAY

Fix the display and the operating element on the handlebar. An operation without using the operating element is also possible.
11. MOUNTING OF THE SPEEDSENSOR

Fix the sensor to the frame and fix the magnet in the spokes. The distance should be about 3-5mm.

12. CABLEING OF THE COMPONENTS

Put all the cables together as shown on the plan.
13. MOUNTING AND CONNECTION OF THE LUGGAGE CARRIER BATTERY SYSTEM TYP13

Attach the special luggage carrier horizontal to the bike.
Connect the terminal strip for the battery with the +/- cable of the motor. Push the terminal strip in the battery rail cover and screw it with the battery rail with 4 tapping screws 16mm.

Screw the battery holder with 4 ScrewsM5x12 on the luggage carrier.
14. Mounting and Connection of the Frame Battery System Typ 13

Mount the battery holder on the frame. Solder the “+” cable of the motor with the “+” contact of the battery holder. Solder the “-” cable of the motor with the “-” contact of the battery holder.

Screw the cover with the 4 tappings screws.

15. Connection of the Bike Light at the Motor

You need the light connection cable and the connector plug, which are optional available.
The connector have to be mounted on the cable of the front light. This cable can be stuck on connection 3.

Now the battery can be inserted and the kit is fully assembled. Please refer to the user manual for the function and operation of the system.

If you still have any questions about assembly, which are not explained in the manual, please feel free to contact our service department. Our technicians are happy to help!

We hope you enjoy your bike
and have a good trip with your Schachner electric bike!