

ABS 14; ABS 18; ASB 14; ASB 18

Repair instructions



ABS 14; ABS 18



ASB 14; ASB 18





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1. Models described

These instructions describe how to repair the following models:

Model	Order number
ABS 14	7 113 18 00 95 0
ABS 18	7 113 19 00 94 0
ASB 14	7 104 06 00 95 0
ASB 18	7 104 06 00 94 0



2. Technical data

Technical data

The complete technical data can be found in the operating instructions for the model.

Test data

Up-to-date test data for all models can be found on the FEIN Extranet (Customer Service → Repair Guides).

Lubricants

The lubricants and container sizes available from FEIN can be found on the FEIN Extranet (Customer Service → Repair Guides).

Lists of spare parts

Lists of spare parts and exploded views are available online at www.fein.com



3. Notes and requirements

Note

These instructions are only intended for persons with suitable technical training. It is assumed that the reader has mechanical and electrical training.

Only use original FEIN spare parts!

Requirements

Please note that power tools may only be repaired, maintained and checked by a trained electrician, as improper repair can result in serious risks to the user.

The provisions set out in **DIN VDE 0701-0702** should be observed after repairs.

The relevant accident prevention regulations of the employers' liability insurance associations are to be observed when commissioning.

The German Equipment and Product Safety Act applies for correct use.

Outside Germany, the regulations applicable in the relevant country must be observed!



4. Tools required

Standard tools

Torx T10

Hook

Cross-tip screwdriver

Socket wrench 10mm

Soldering rod

Torque wrench: 0.5 Nm – 24 Nm



5. Lubricants and auxiliary substances required

Auxiliary substances

Loctite 242

Note

Also refer to Extranet - Customer Service / Repair Guides / Auxiliary Substances



6. Disassembly

Disassembling battery



1. Press catch and pull battery off tool.



6. Disassembly

Disassembling quick-clamping drill chuck



1. Unscrew screw (left-handed thread) in quick-clamping drill chuck.

Tools:

- Cross-tip screwdriver



6. Disassembly

Disassembling quick-clamping drill chuck



1. Secure socket head screw wrench in quick-clamping drill chuck.
2. Use socket head screw wrench to unscrew quick-clamping drill chuck from gearbox.

Tools:

- Socket head screw wrench size 10



6. Disassembly

Disassembling cover



1. Loosen four screws (1) and take off with cover (2).

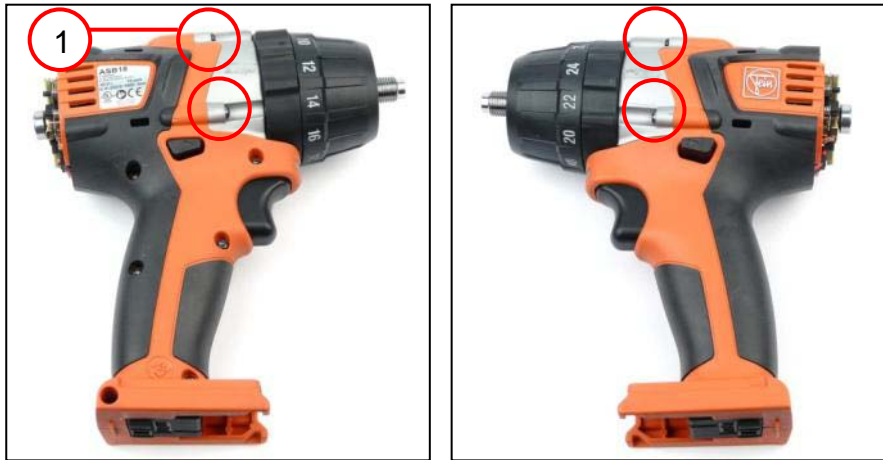
Tool:

- Torx T10



6. Disassembly

Disassembling cover



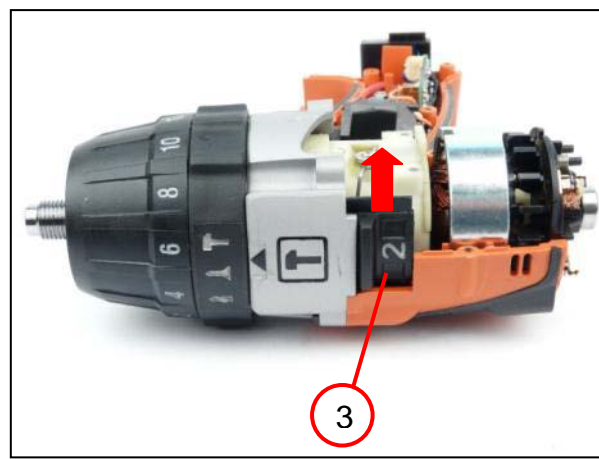
1. Loosen four screws (1).

Tool:
- Torx T10



6. Disassembly

Disassembling cover



1. Unscrew six screws 3x15 (1).
2. Unscrew screw 3x20 (2) and take off motor housing half.
3. Slide out slide switch (3).

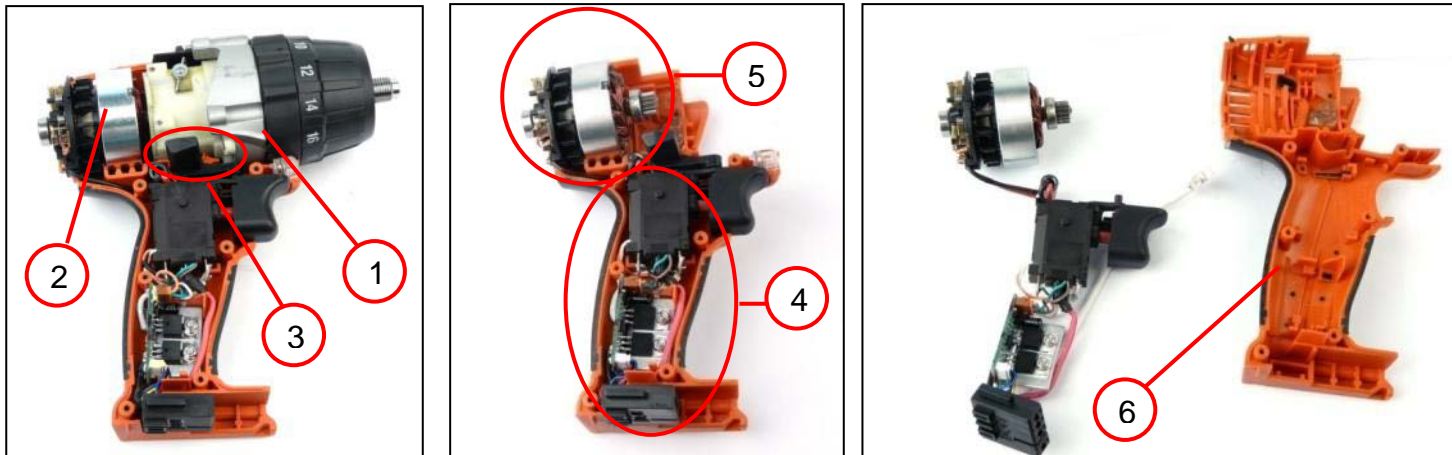
Tool:

- Torx T10



6. Disassembly

Disassembling motor

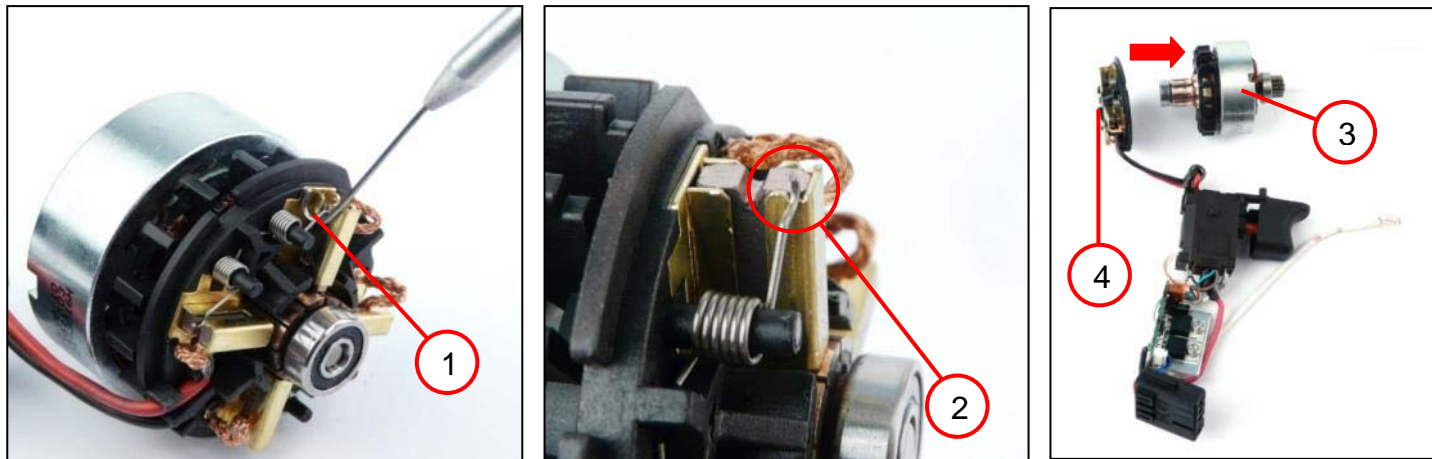


1. Lift gearbox (1) a little and remove from armature (2).
2. Remove toggle switch (3).
3. Take switch (4) and armature (5) out of motor housing half (6).



6. Disassembly

Disassembling motor



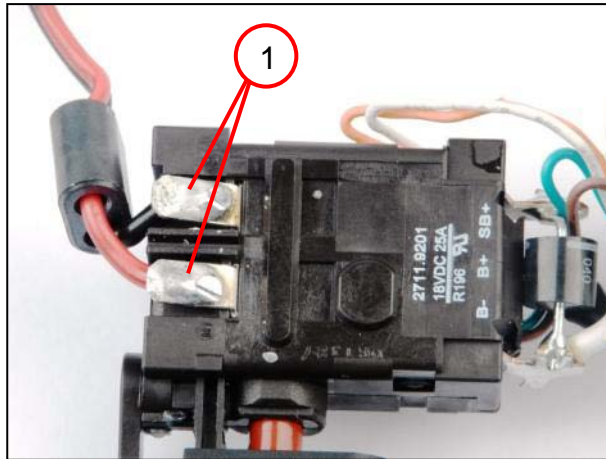
1. Lift four levers (1) of brush holder onto intended notches (2) with hook.
2. Pull armature (3) off brush holder set (4).

Tool:
- Hook



6. Disassembly

Disassembling switch



1. Unsolder two cables (1) of brush holder set from switch.

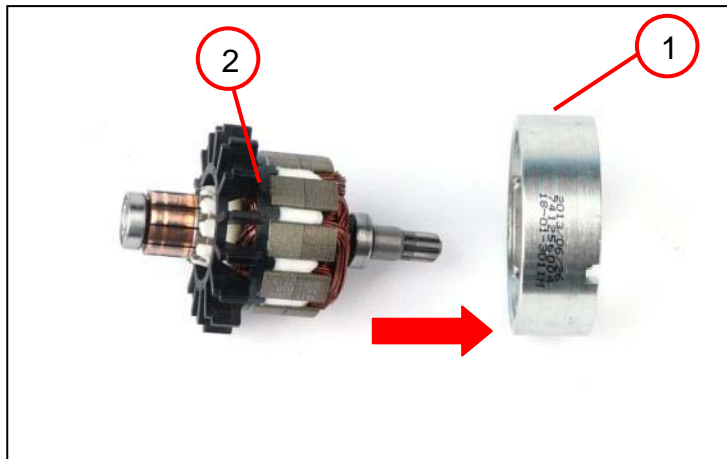
Tool:

- Soldering rod



6. Disassembly

Disassembling stator



1. Pull stator (1) off armature (2).

Caution

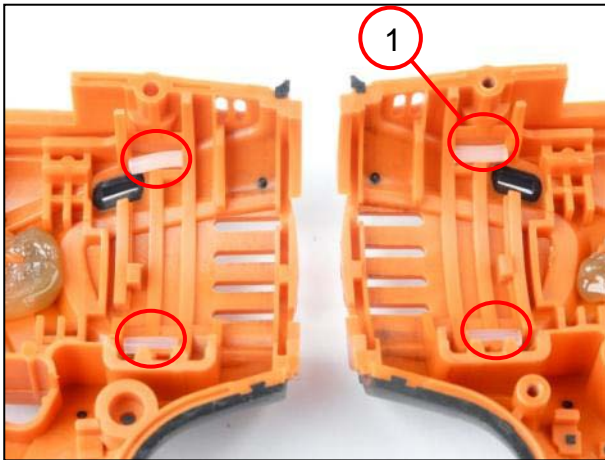
Risk of crushing due to pull of magnet.

☞ During disassembly, only touch magnet on outer race.



6. Disassembly

Disassembling cover

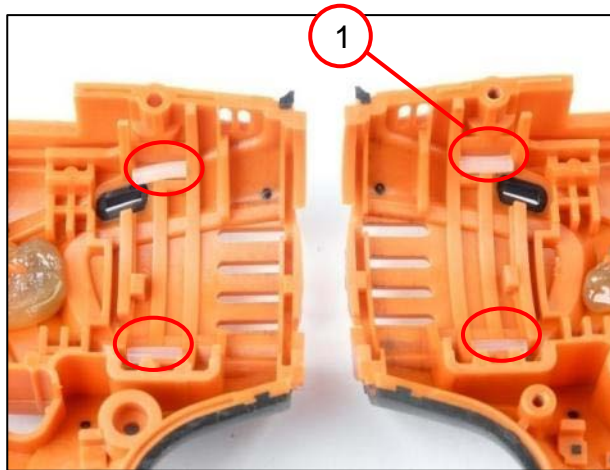


1. Loosen four pressure pieces (1).



7. Assembly

Assembling gearbox housing

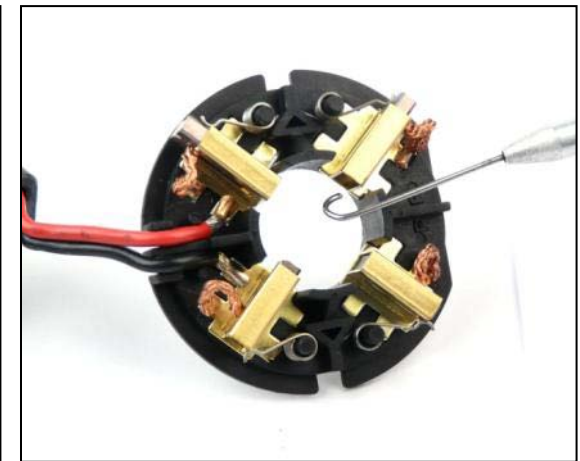
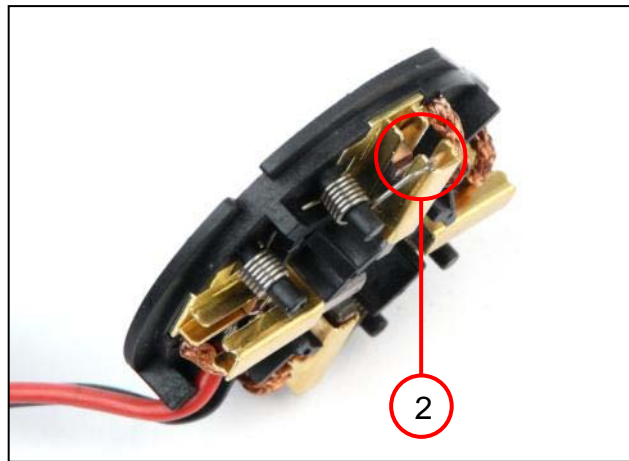
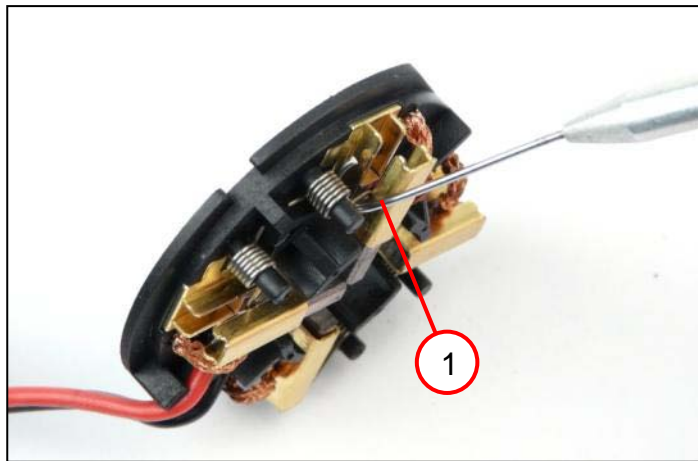


1. Insert four pressure pieces (1) into motor housing.



7. Assembly

Assembling brush holder set



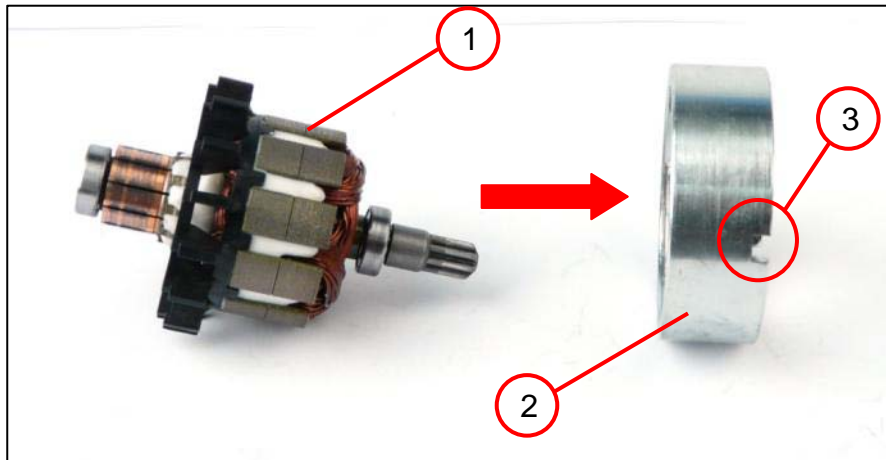
1. Lift four tension springs (1) of brush holder onto intended notches (2) with hook.
2. Push carbon brushes to the outside to free up the passage.

Tool:
- Hook



7. Assembly

Assembling stator



1. Slide armature (1) into stator (2).
 - ☞ The recess (3) must face outwards.

Caution

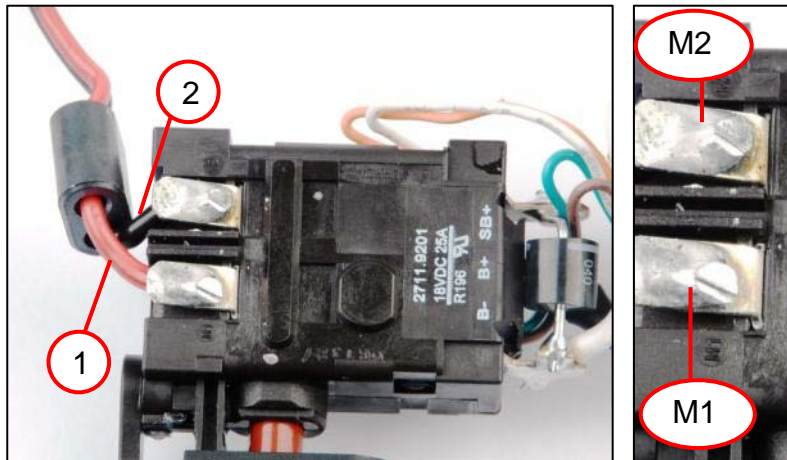
Risk of crushing due to pull of magnet.

- ☞ During assembly, only touch magnet on outer race.



7. Assembly

Assembling gearbox



1. Solder red cable (1) of brush holder set onto position M1 on switch.
2. Solder black cable (2) of brush holder set onto position M2 on switch.

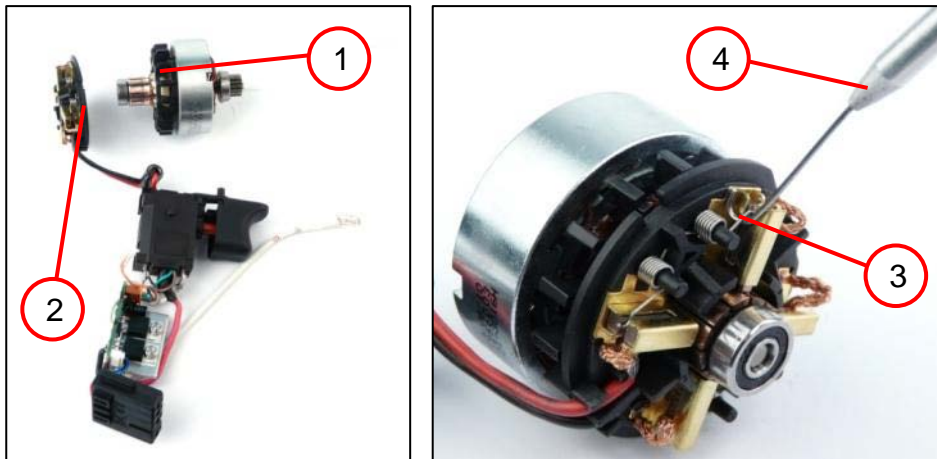
Tool:

- Soldering rod



7. Assembly

Assembling motor



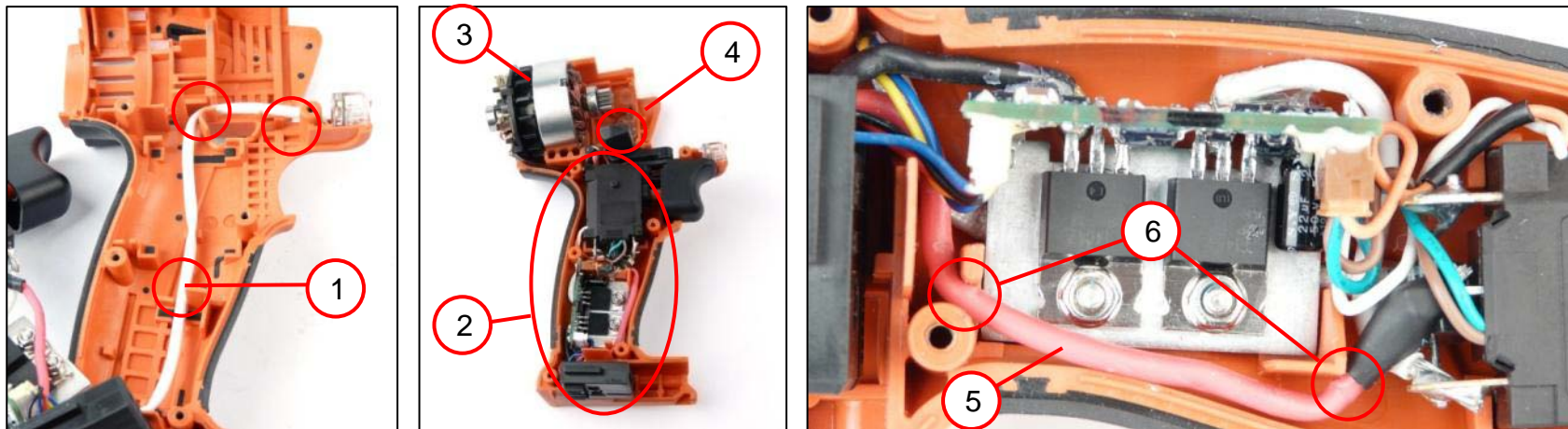
1. Insert armature (1) in brush holder set (2).
2. Lift four tension springs (3) back onto carbon brushes with hook (4).

Tool:
- Hook



7. Assembly

Assembling motor

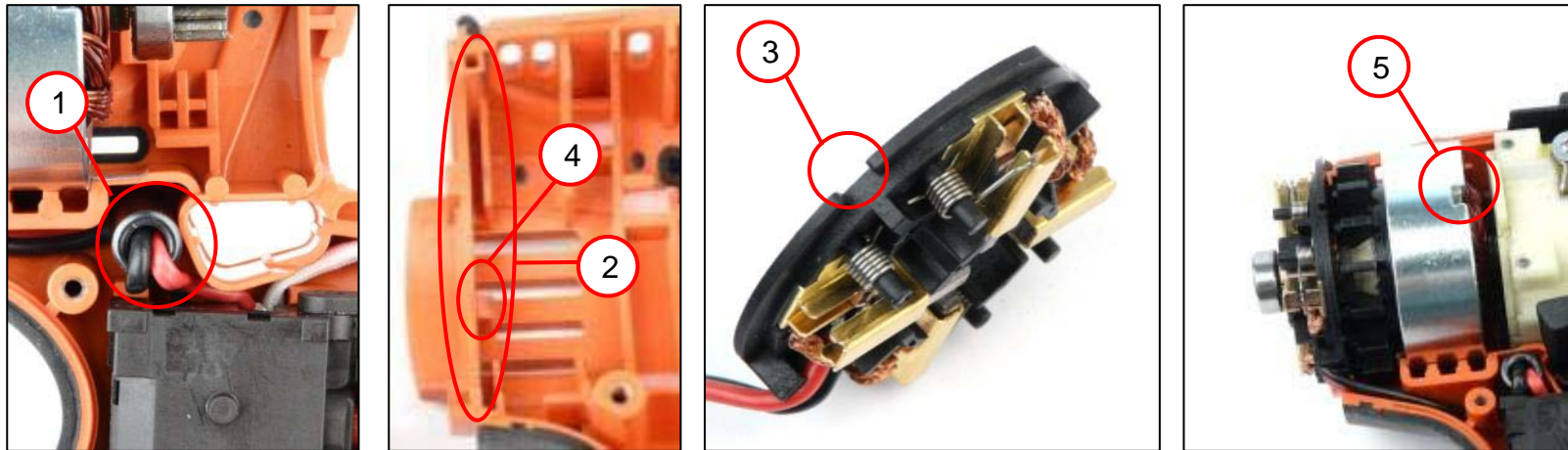


1. Place white cable in intended notches (1).
2. Install switch (2), armature (3) and toggle switch (4) in motor housing half.
 - ☞ Route cable (5) in intended recesses (6).



7. Assembly

Assembling motor

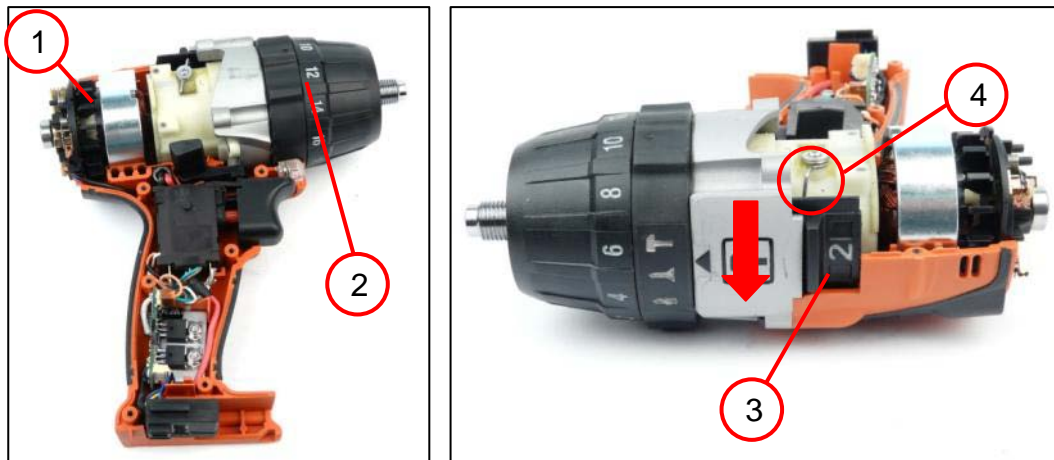


1. Place ferrite ring (1) in the correct position.
2. Check the following before closing the cover:
 - Brush holder set must be inserted into recess (2).
 - Groove (3) of brush holder set must be inserted above elevation (4) in housing.
 - Recess (5) of stator must lock on lower motor housing half.



7. Assembly

Assembling motor

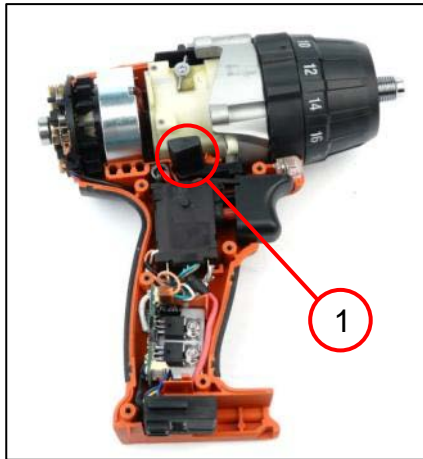


1. Lift armature (1) slightly and install gearbox (2).
2. Install slide switch (3).
 - ☞ Ensure that wire clamp (4) of gearbox is in slot of slide switch.



7. Assembly

Assembling housing



1. Install toggle switch (1).
2. Attach motor housing half and screw in six screws 3x15 (2).
 - 🔧 Tighten to torque of 1 Nm.
3. Screw in screw 3x20 (3).
 - 🔧 Tighten to torque of 0.5 Nm.

Tool:

- Torx T10
- Torque wrench



7. Assembly

Assembling housing



1. Screw in four screws (1).
 - 🔧 Tighten to torque of 1 Nm.
2. Attach cover and screw in 4 screws (2).
 - 🔧 Tighten to torque of 0.5 Nm.

Tool:

- Torx T10
- Torque wrench



7. Assembly

Assembling quick-clamping drill chuck



1. Screw on quick-clamping drill chuck (1)
2. Clamp socket head screw wrench (2)
3. Tighten quick-clamping drill chuck (1) with socket head screw wrench (2).

Tool:

- Socket head screw wrench size 10



7. Assembly

Assembling quick-clamping drill chuck



1. Apply Loctite 242 to screw.
2. Screw down quick-clamping drill chuck with screw (1) (left-handed thread).
 - ☞ Tighten to tightening torque of 30-45 Nm.

Tool:

- Cross-tip screwdriver
- Loctite 242



7. Assembly

Assembling battery



1. Slide on battery (1).

NOTE

If the tool does not start up during the function test, there is a risk that the battery will be overloaded and destroyed (short-circuit) because the motor is blocked by incorrect installation!



8. Troubleshooting



9. Connection diagram