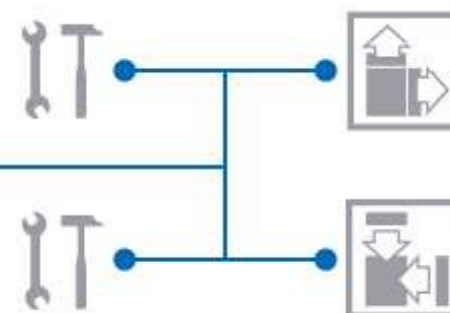




ASW 18-18 (7 112 69 ...)  
 ASW 18-18-PC (7 112 70 ...)





## Technical data

### Technical data

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

### Tests

Up-to-date test data and test instructions after repair can be found on the FEIN Extranet (Customer Service → Repair Guides).

### Lubricants / Auxiliary substances

The lubricants or auxiliary substances and their 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](http://www.fein.com)



## Notes and requirements

### Please 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.**

### Provisions

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 employer's liability insurance associations are to be observed when commissioning.

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

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



## Lubricants and auxiliary substances required

### Lubricants

Grease	0 40 123 0100 0	0.6 g	Tool holder; clutch ring
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### Auxiliary substances

Loctite 638

Loctite 243

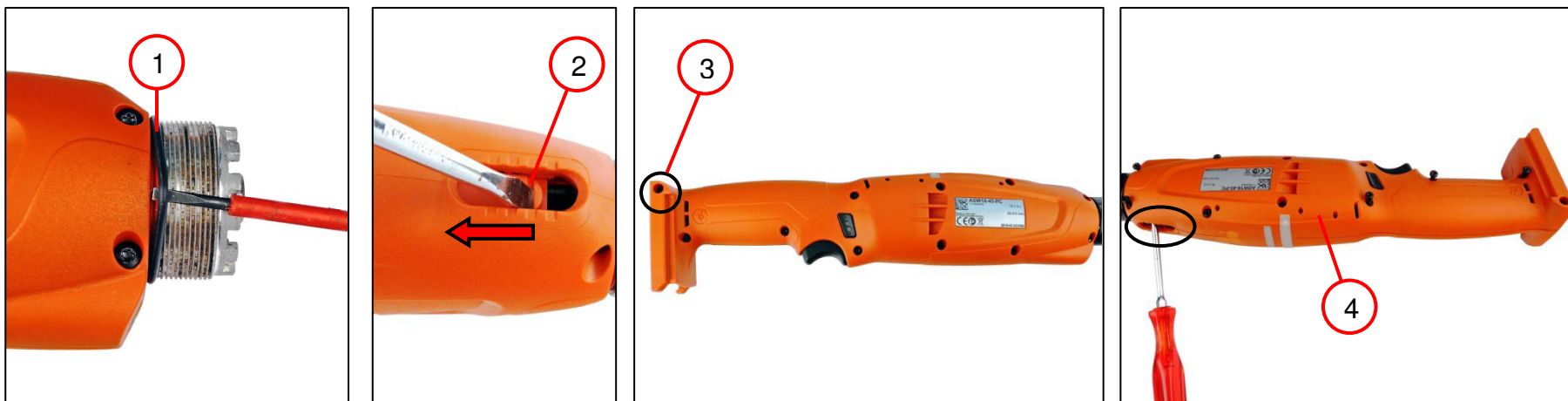
## Troubleshooting



Not yet available.

## Removal

### Removing the motor housing



1. Remove the Sealing ring (1).
2. Slide back the cover (2).
3. Unscrew the eleven screws (3).
4. Pry off the motor housing (4).
  - ☞ Place the screwdriver between the clutch and the upper part of the housing.

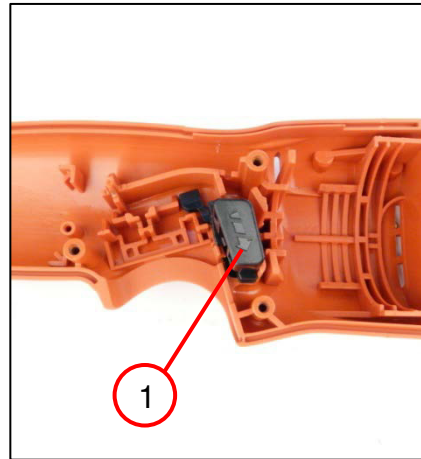
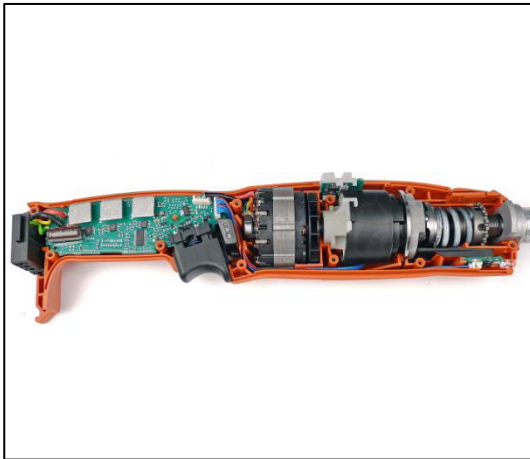
#### Tools:

- Flat-head screwdriver 40x2
- Flat-head screwdriver 90x4.5
- Torx T10



## Removal

### Removing the gearbox housing

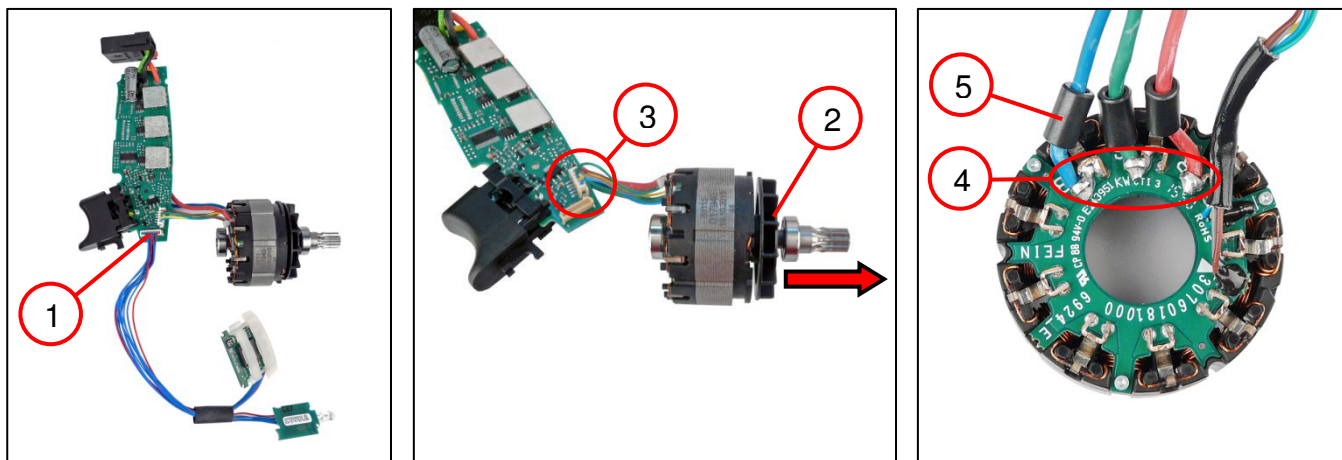


1. Remove all components.
2. Remove the toggle switch (1).



## Removal

### Removing the electronics



1. Pull off the plug (1).
2. Remove the rotor (2).
3. Pull off the plug (3).
4. Unsolder the three cables (4).
5. Remove the three ferrite cores (5).

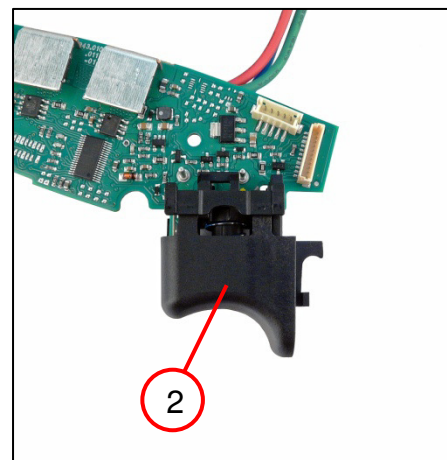
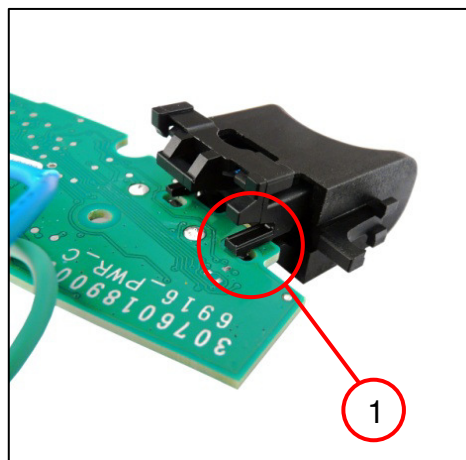
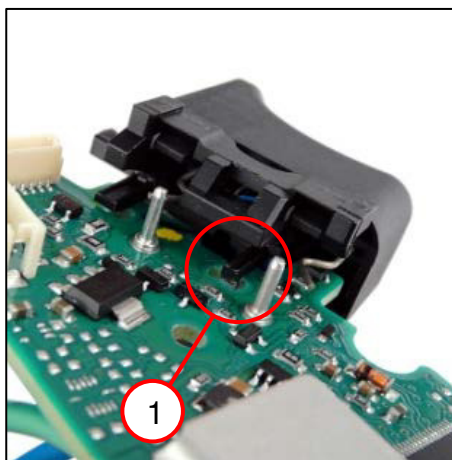
#### Tools:

- Soldering station



## Removal

### Removing the electronics

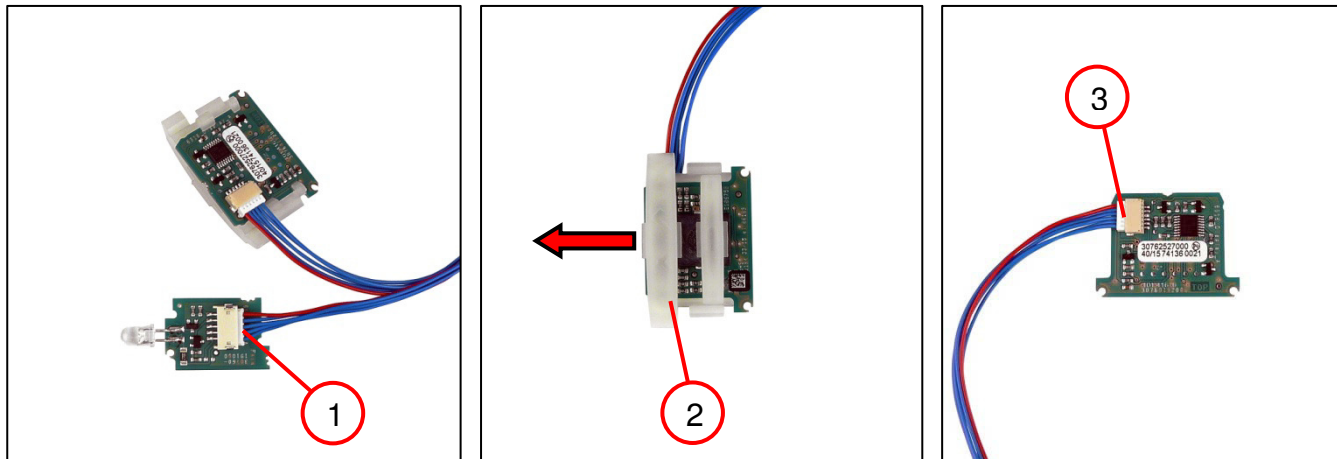


1. Lift the hook (1) on each side.
2. Pull off the switch (2).



### Removal

#### Removing the electronics

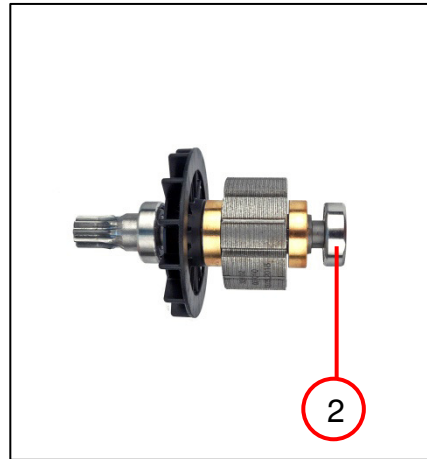
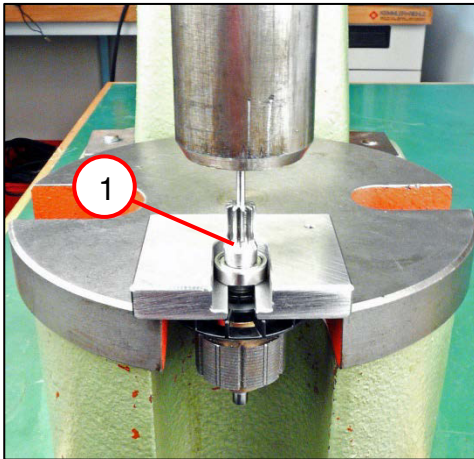


1. Remove the plug (1).
2. Remove the cover (2).
3. Remove the plug (3).



## Removal

### Removing the rotor



1. Press down the grooved ball bearing and the gear-wheel [N = 10] (1).
2. Remove the grooved ball bearing (2).

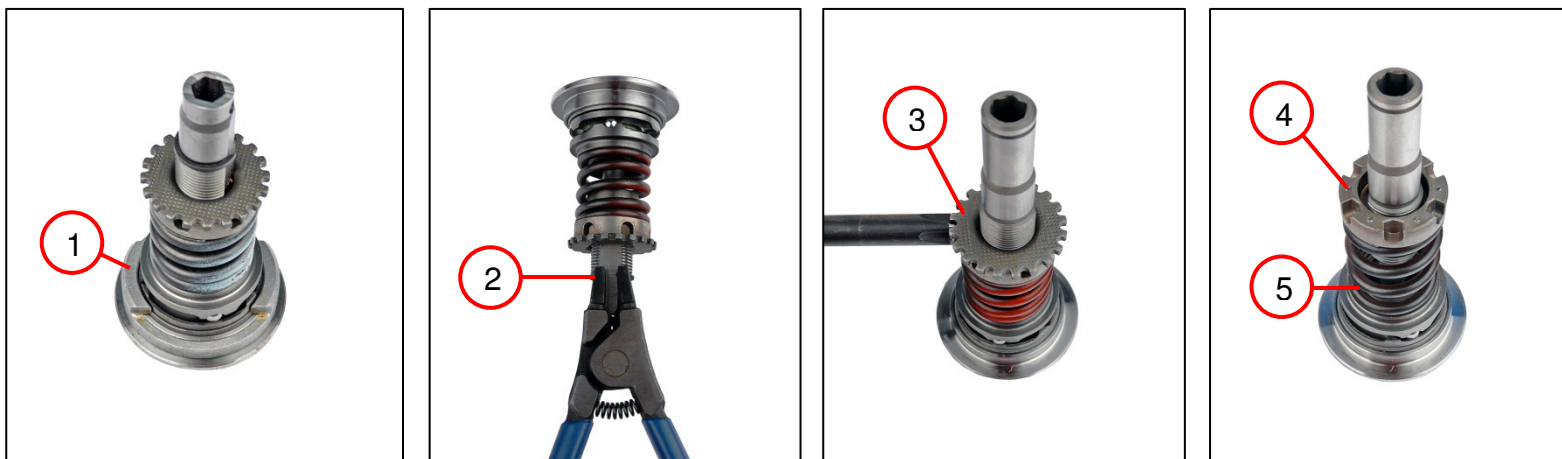
#### Tools:

- Arbor press
- Drawing-off plate



## Removal

### Disassembling the clutch



1. Remove the ring (1).
2. Remove the circlip (2).
3. Remove the adjusting ring (3) [left-handed thread].
4. Remove the ring (4).
5. Remove the spring (5).

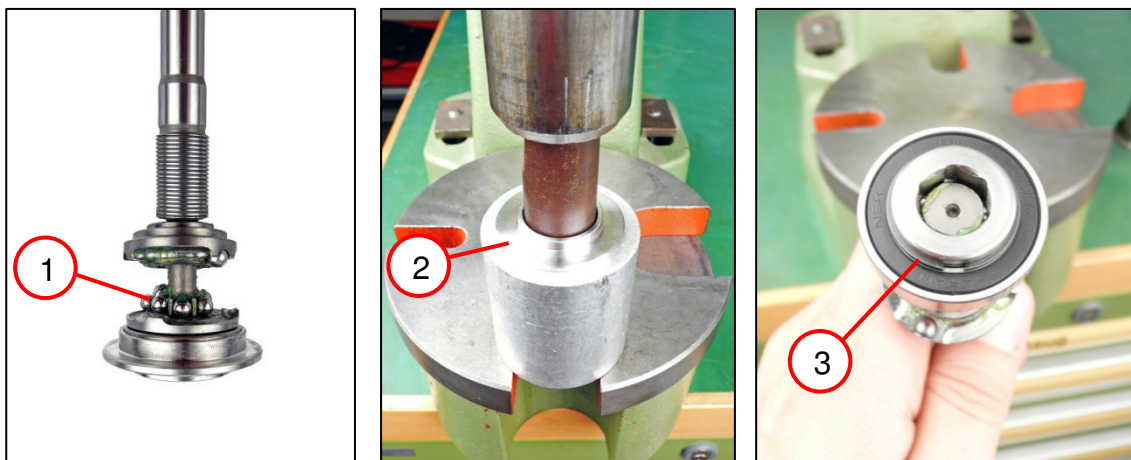
#### Tools:

- Circlip pliers
- Torque adjusting spanner



## Removal

### Disassembling the clutch



1. Remove the nine balls (1).
2. Remove the flange (2).
3. Remove the circlip (3).

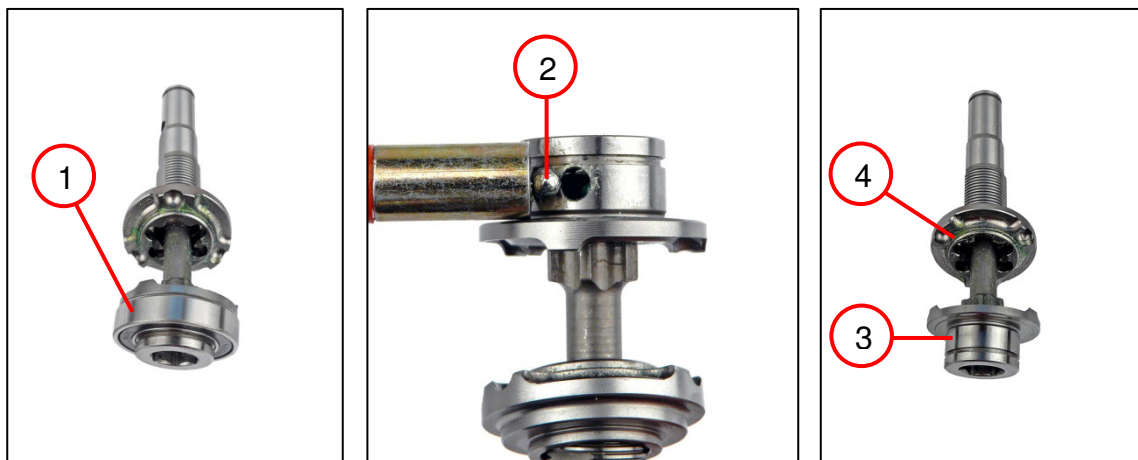
#### Tools:

- Forceps
- Arbor press
- Sleeve  
50 mm outer diameter  
36 mm inner diameter
- Bolt with 20 mm diameter
- Circlip pliers



## Removal

### Disassembling the clutch



1. Remove the grooved ball bearing (1).
2. Remove the nine balls (2).
3. Remove the clutch ring (3).
4. Remove the clutch ring (4).

#### Tools:

- Drawing-off socket cap
- Clamping sleeve, dia. 32 mm
- Bar magnet

## Fitting

### Assembling the clutch



1. Grease the tool holder (1).
2. Position the clutch ring (2).
3. Position the clutch ring (3).
4. Grease the nine balls [d = 4 mm].
5. Insert the nine balls [d = 4 mm] (4).
6. Grease the nine balls [d = 5 mm].
7. Insert the nine balls [d = 5 mm] (5).

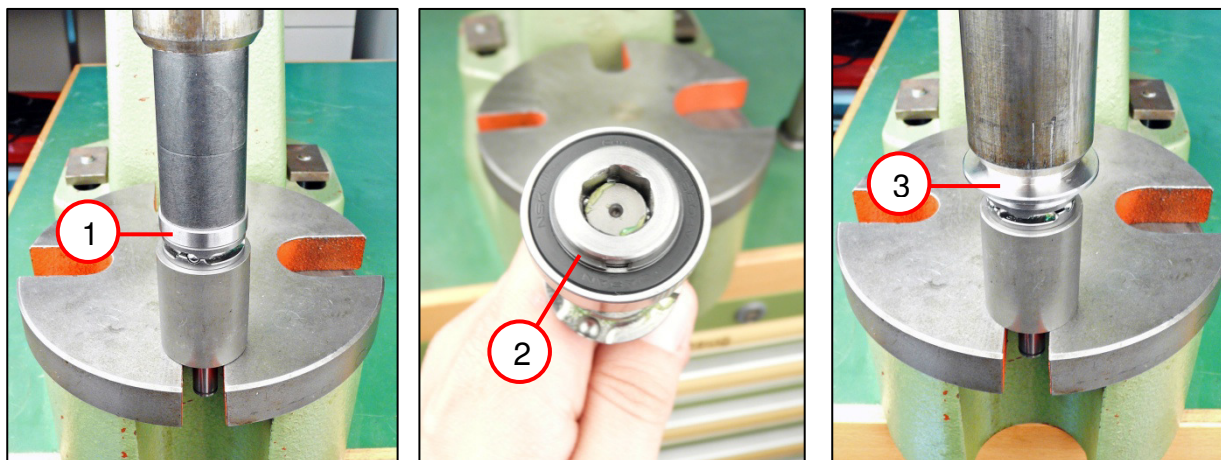
#### Tools:

- Forceps





### Assembling the clutch



1. Press on the grooved ball bearing (1).
2. Fit the circlip (2).
3. Press on flange (3).

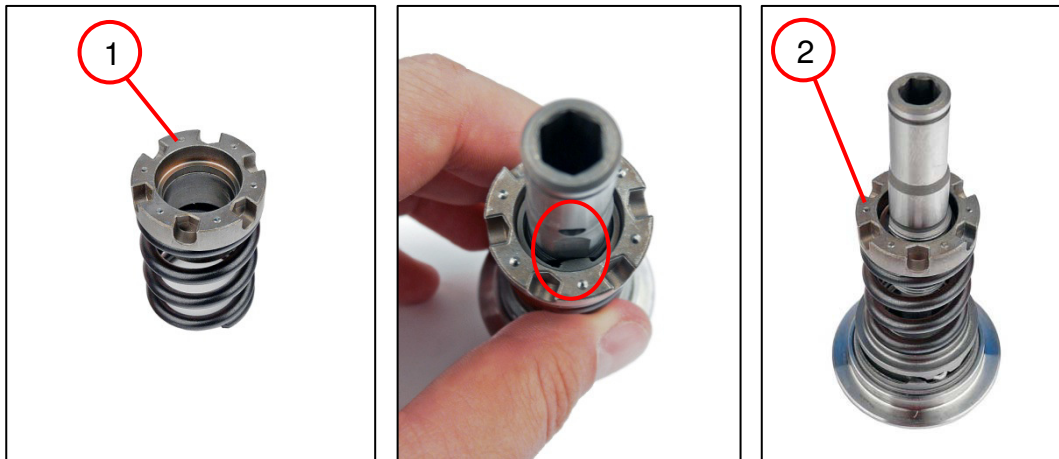
#### Tools:

- Arbor press
- Sleeve  
32 mm outer diameter  
21 mm inner diameter
- Sleeve  
32 mm outer diameter  
26 mm inner diameter



## Fitting

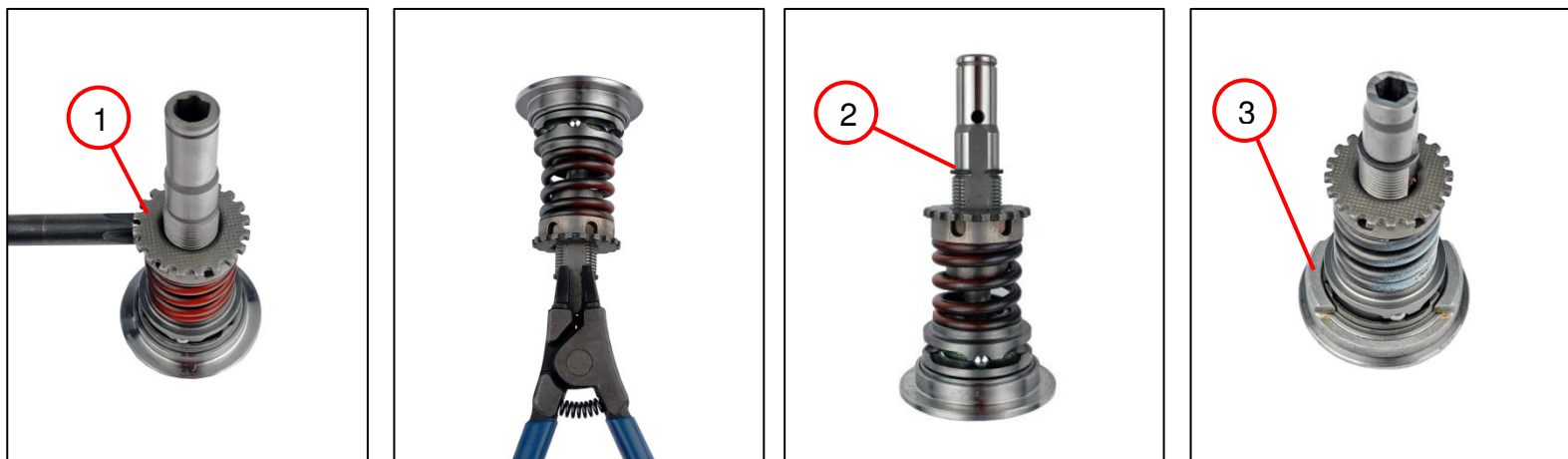
### Assembling the clutch



1. Position the ring (1).
2. Position the ring with the spiral spring (2).

## Fitting

### Assembling the clutch



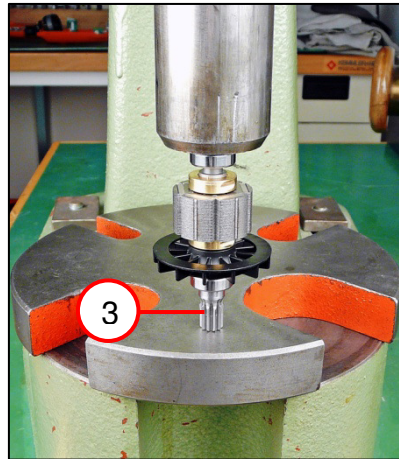
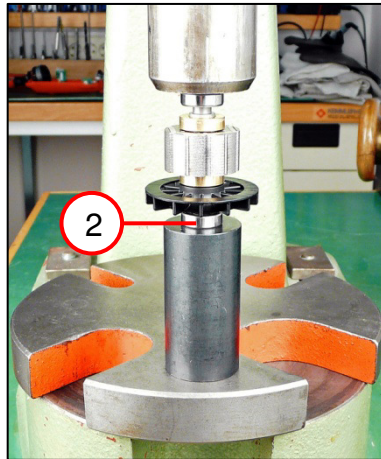
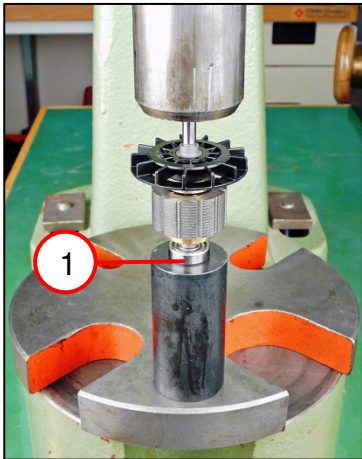
1. Fit the adjusting ring (1) [left-handed thread].
2. Fit the circlip (2).
3. Place the ring (3) in the correct position.

#### Tools:

- Torque adjusting spanner
- Circlip pliers

## Fitting

### Fitting the rotor



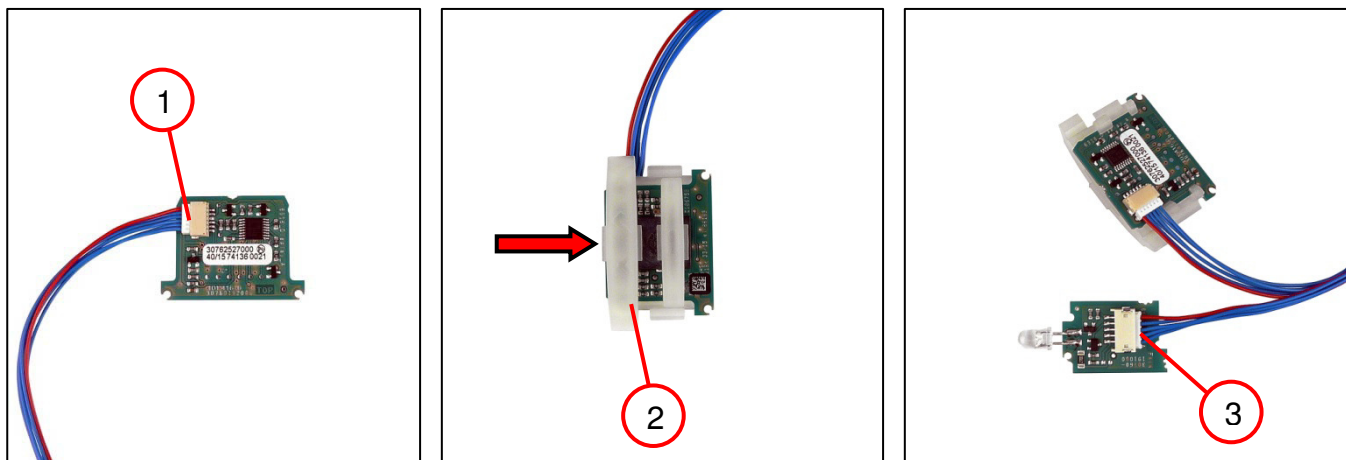
1. Press on the grooved ball bearing (1).
2. Press on the grooved ball bearing (2).
3. Press on the gear-wheel [N = 10] (3).

#### Tools:

- Arbor press
- Sleeve  
16 mm outer diameter  
6 mm inner diameter



### Fitting the electronics



#### **WARNING!**

#### **Damage from electrostatic charging.**

Failure to comply with the safety regulations for ESD protection may cause damage to the electronics.

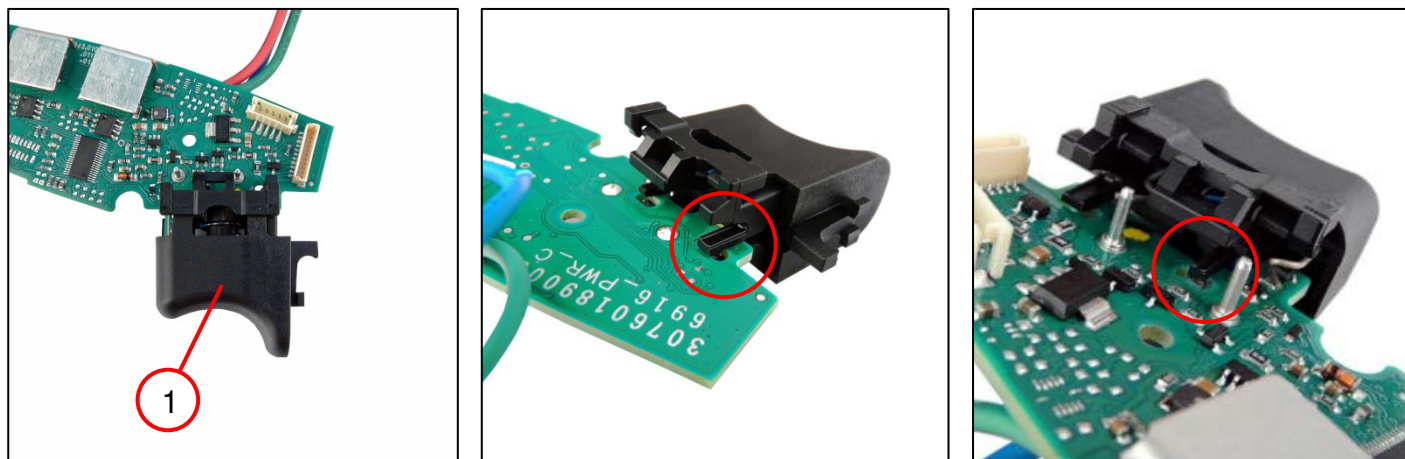
☞ Only perform assembly/disassembly work on electronics on a workstation with ESD protection.

1. Connect the plug (1).
2. Slide on the cover (2).
3. Connect the plug (3).



## Fitting

### Fitting the electronics



#### **WARNING!**

#### **Damage from electrostatic charging.**

Failure to comply with the safety regulations for ESD protection may cause damage to the electronics.

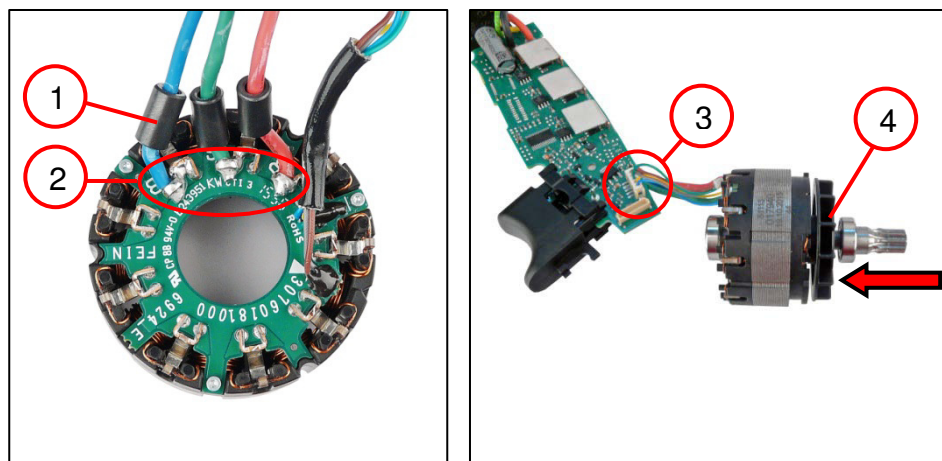
☞ Only perform assembly/disassembly work on electronics on a workstation with ESD protection.

1. Fit the switch (1).



## Fitting

### Fitting the electronics



#### **WARNING!**

#### **Damage from electrostatic charging.**

Failure to comply with the safety regulations for ESD protection may cause damage to the electronics.

- ☞ Only perform assembly/disassembly work on electronics on a workstation with ESD protection.

#### **Tools:**

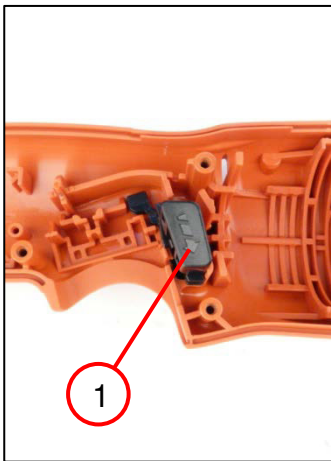
- Soldering station

1. Position the three ferrite cores (1).
2. Solder the three cables (2) as shown in the connection diagram.
3. Connect the plug (3).
4. Position the rotor (4).



## Fitting

### Fitting the motor housing

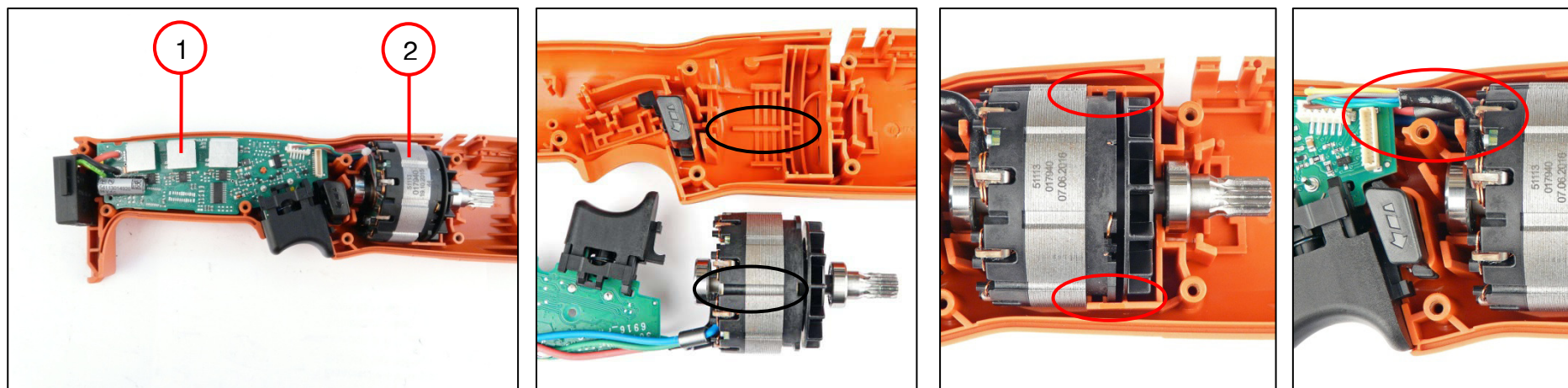


1. Position the toggle switch (1) in the lower motor housing.



## Fitting

### Fitting the motor housing

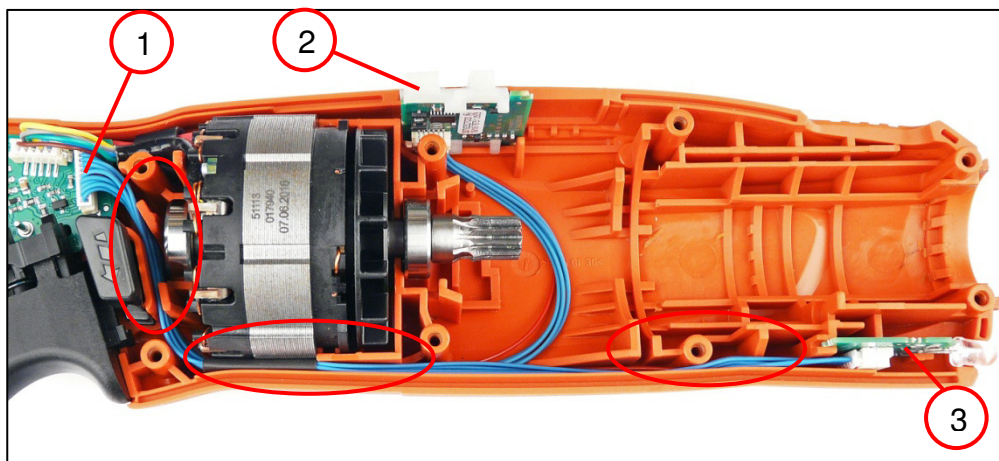


1. Position the electronics (1).
2. Correctly position the stator (2).



### Fitting

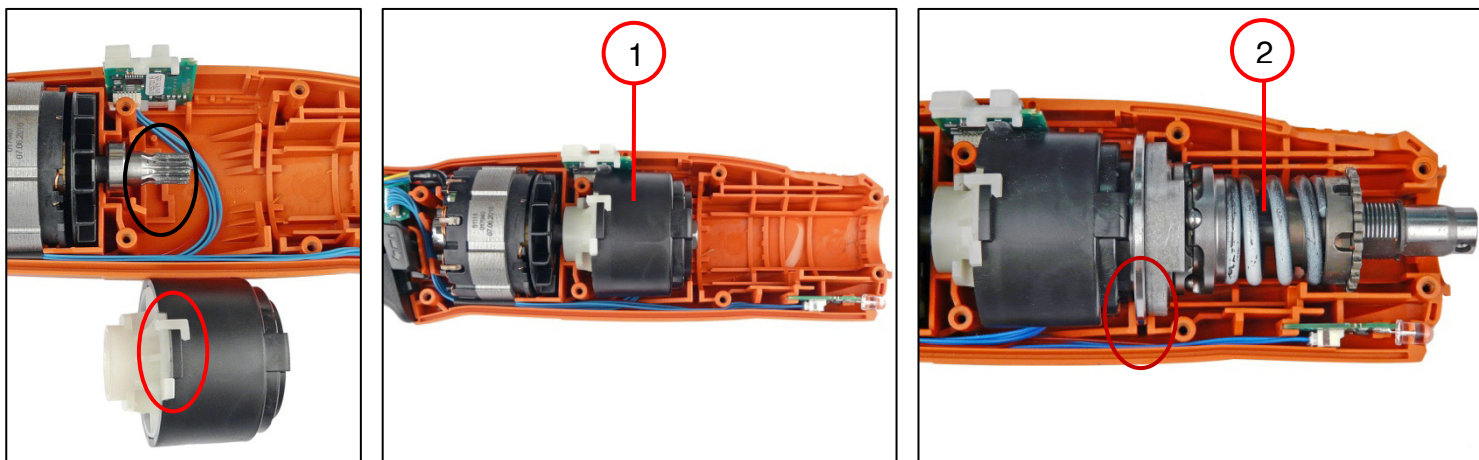
#### Fitting the motor housing



1. Connect the cable harness (1).
2. Route the cable harness.
3. Position the electronics (2).
4. Position the electronics (3).

## Fitting

### Fitting the motor housing

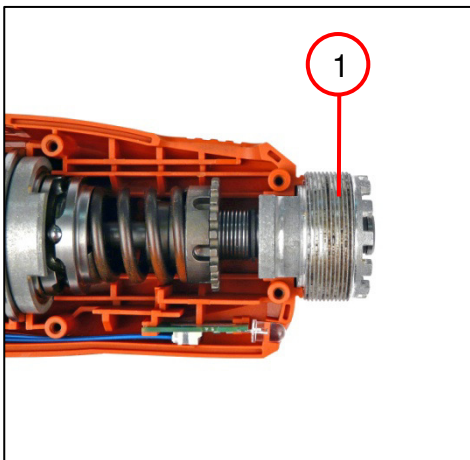


1. Correctly position the gearbox (1).
2. Place the clutch (2) in the correct position.



## Fitting

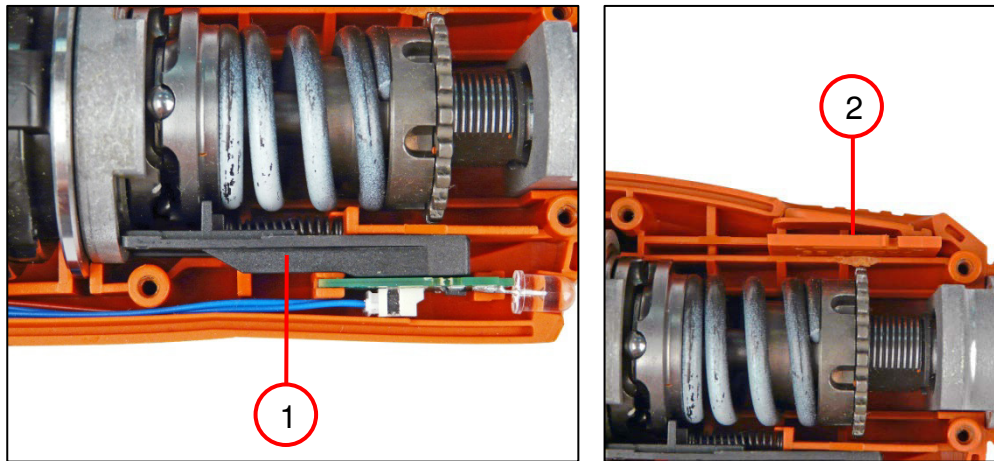
### Fitting the motor housing



1. Position the flange (1) in the correct position.

## Fitting

### Fitting the motor housing

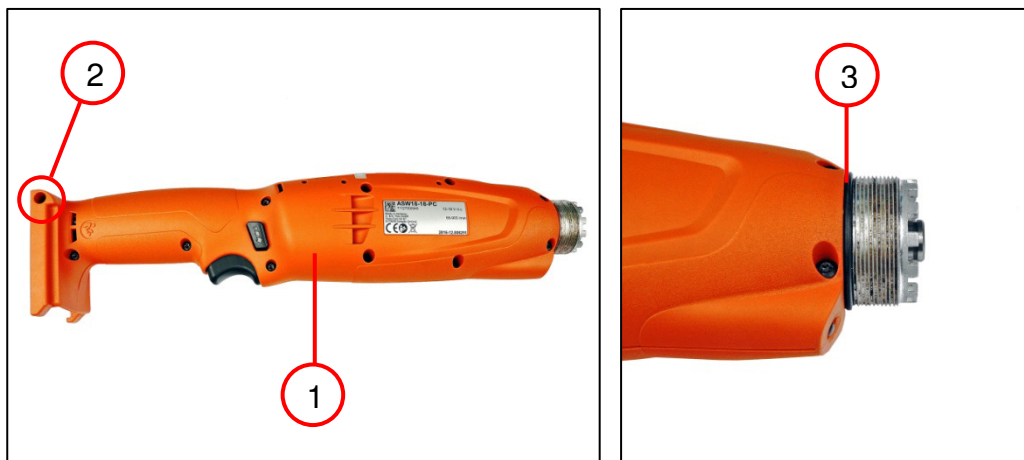


1. Position the slide switch (1).
2. Position the cover (2).



### Fitting

#### Fitting the motor housing



1. Position the motor housing (1).
2. Screw in the 11 screws (2).
3. Position the sealing ring (3).

#### Tools:

- Torx T10

# ASW 18-6; ASW 18-12; ASW 18-18; ASW 18-6-PC; ASW 18-12-PC; ASW 18-18-PC



## Connection diagram

### Anschlussplan

Connection diagram

Esquema de conexiones

Schéma connexion

Схема соединений

接线图

7 112 62 – ASW18-30 18V

7 112 63 – ASW18-45 18V

7 112 64 – ASW18-60 18V

7 112 65 – ASW18-6 18V

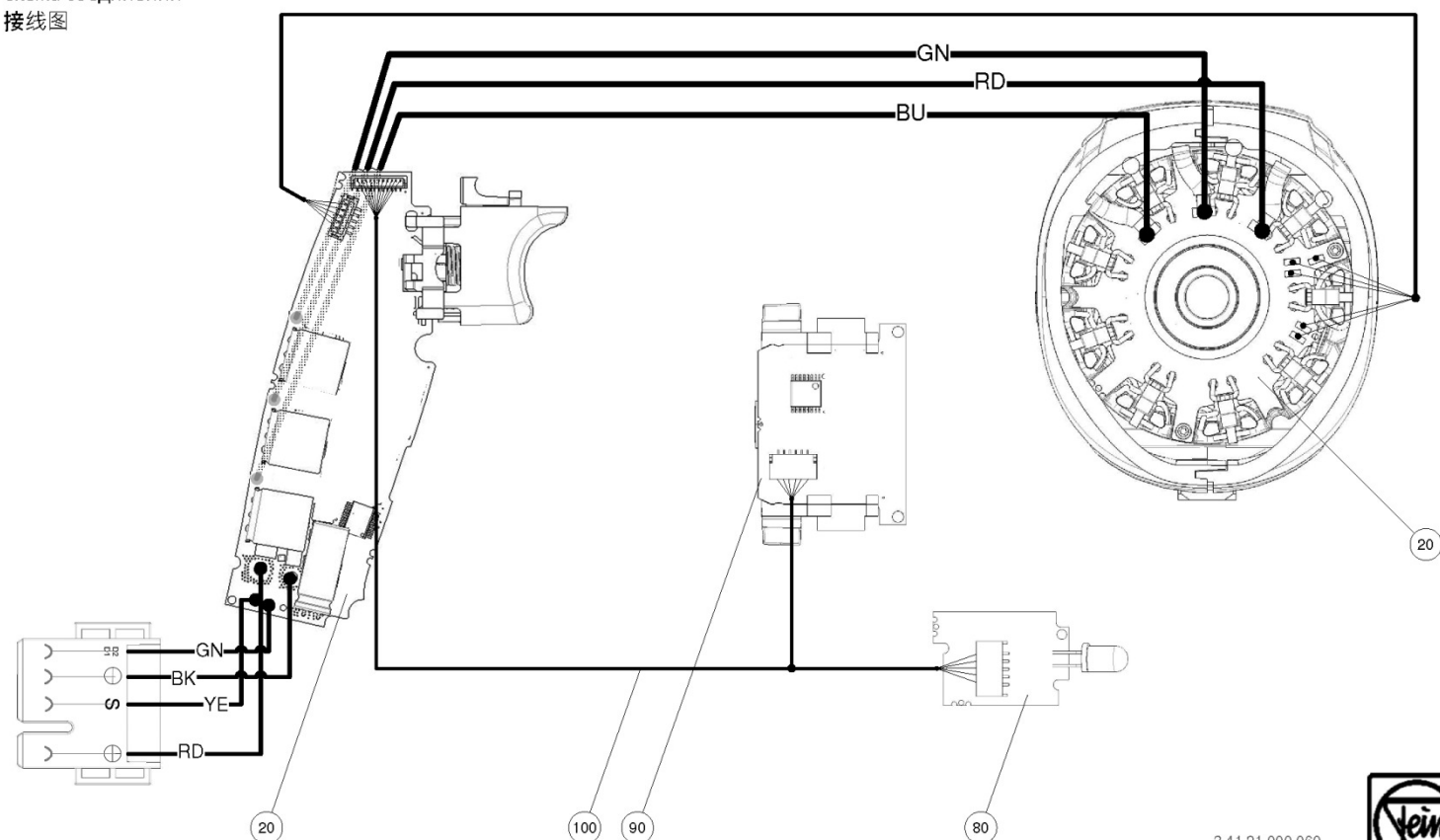
7 112 66 – ASW18-6PC 18V

7 112 67 – ASW18-12 18V

7 112 68 – ASW18-12PC 18V

7 112 69 – ASW18-18 18V

7 112 70 – ASW18-18PC 18V



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19.10.2017

