

ASCD 18-200 W4; ASCD 18-300 W2

Repair instructions





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1. Models described

These repair instructions describe how to repair the following models:

Model	Order number
ASCD 18-200 W4	7 115 07
ASCD 18-300 W2	7 115 06



2. 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



3. 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.



4. Tools required

Standard tools

Circlip pliers

Slotted screwdriver

Blade

Vice

Torx T10; T15

Side-cutting pliers

Soldering station

Arbor press

Punch Dia. 3 mm; dia. 4 mm

Hacksaw

Sleeve 6 mm inner diameter
20 mm outer diameter

Special tools

Assembly aid 6 41 22 125 01 0

Extractor tool 6 41 14 037 00 0



5. Lubricants and auxiliary substances required

Lubricants

Klübersynth GE 14-151	0,5 g	Gearbox
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6. Removal

Removing the sleeve [applies to: ASCD 18-200 W4]



1. Remove the circlip (1).
2. Remove the disc (2).
3. Remove the spiral spring (3).
4. Remove the sleeve (4).
5. Remove the ball (5).

Tools:

- Circlip pliers
- Slotted screwdriver
- Magnet



6. Removal

Removing the motor housing



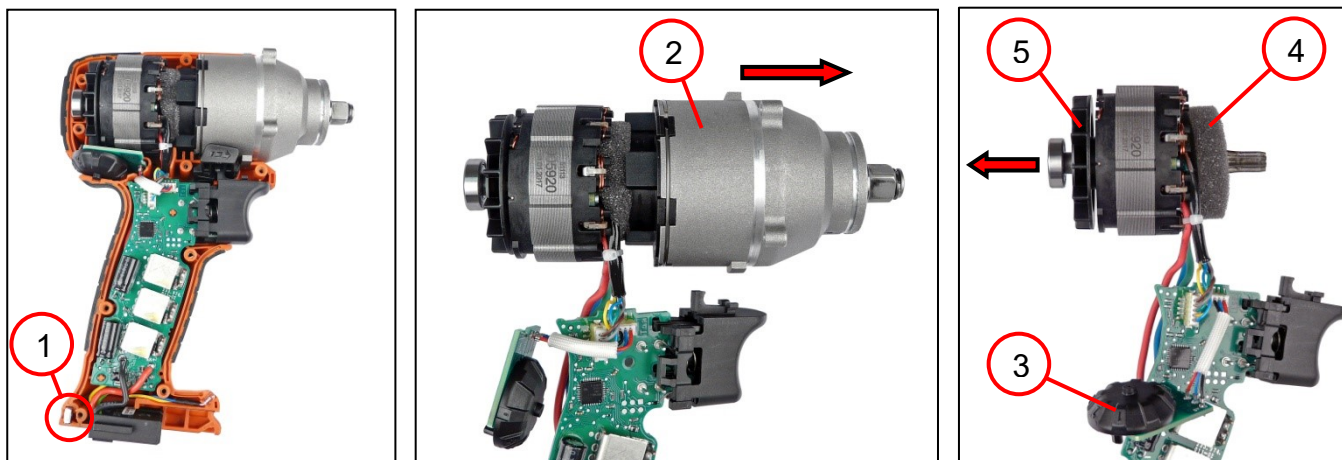
1. Cut through the type plate.
2. Remove the circlip (1).
3. Unscrew the four screws (2).
4. Remove the gearbox housing (3).
5. Unscrew the nine screws (4).
6. Remove the motor housing (5).
7. Remove the pressure piece (6).

Tools:

- Blade
- Torx T10

6. Removal

Removing the motor housing

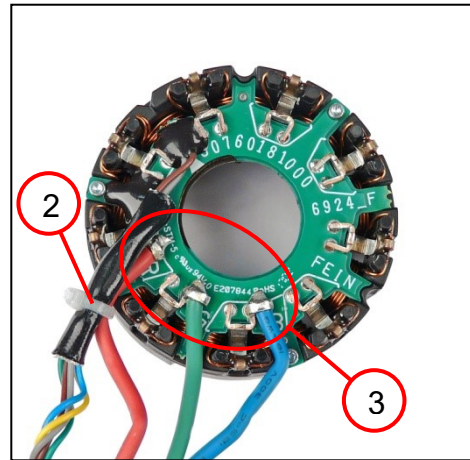
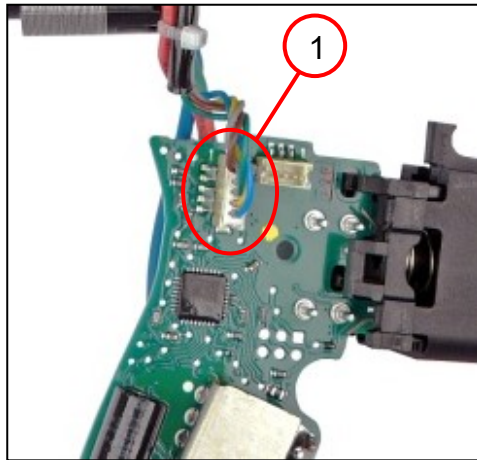


1. Remove the nut (1).
1. Remove all components from the motor housing.
2. Pull off the gearbox (2).
3. Pull off the speed setting switch (3).
4. Remove the insulating ring (4).
5. Pull out the rotor (5).



6. Removal

Removing the motor housing



1. Pull off the plug (1).
2. Remove the cable tie (2).
3. Unsolder the three cables (3).

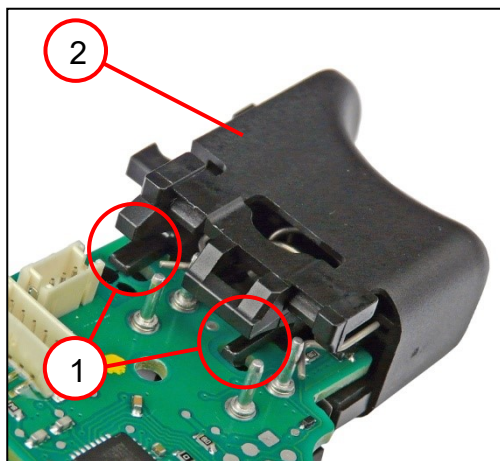
Tools:

- Side-cutting pliers
- Soldering station



6. Removal

Removing the switch



1. Lift up the two hooks (1).
2. Pull off the switch (2).

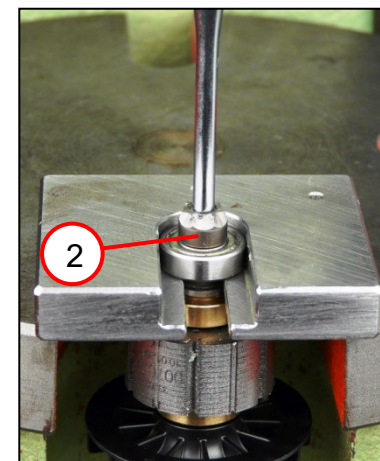
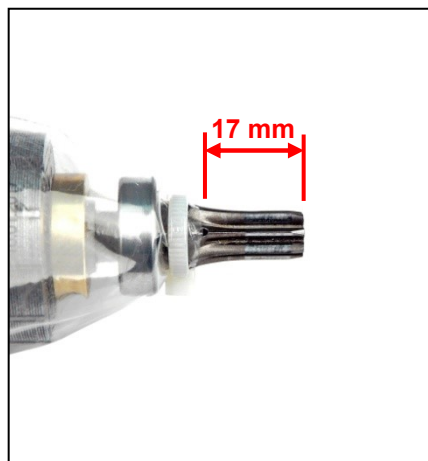
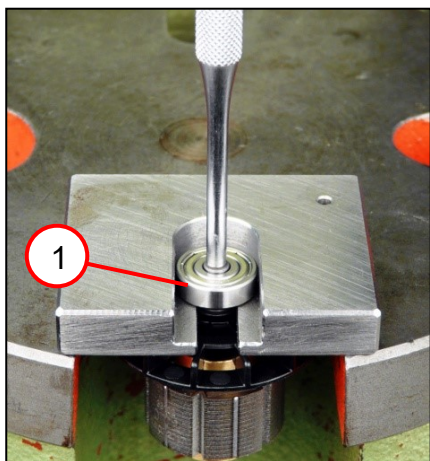
Tools:

- Slotted screwdriver



6. Removal

Removing the stator



1. Press down on the grooved ball bearing (1).
2. Protect the rotor from metal swarf.
3. Saw the pinion to the correct size.
4. Remove the remaining pinion (2) together with the grooved ball bearing.

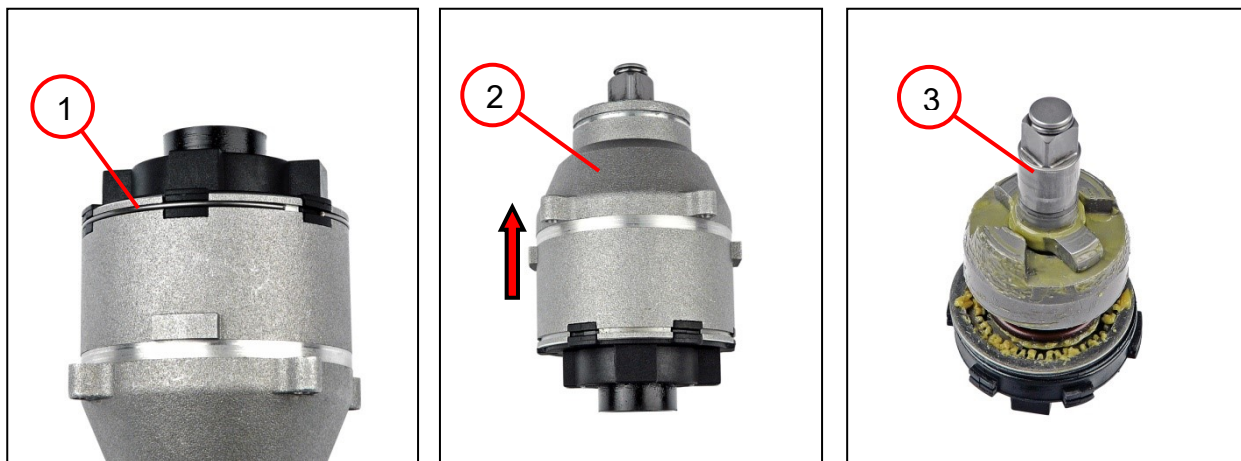
Tools:

- Arbor press
- Punch, dia. 3 mm
- Extractor tool
- Vice
- Hacksaw
- Punch, dia. 4 mm



6. Removal

Removing the gearbox



1. Remove the circlip (1).
 2. Remove the gearbox housing (2).
 3. Remove the tool holder (3).
- ☞ The tool holder varies depending on the model.

Document required for further repair work:

TI 2021-08 S1 Optimization of the tool holder

All relevant service communications can be found in the FEIN electronic information system.

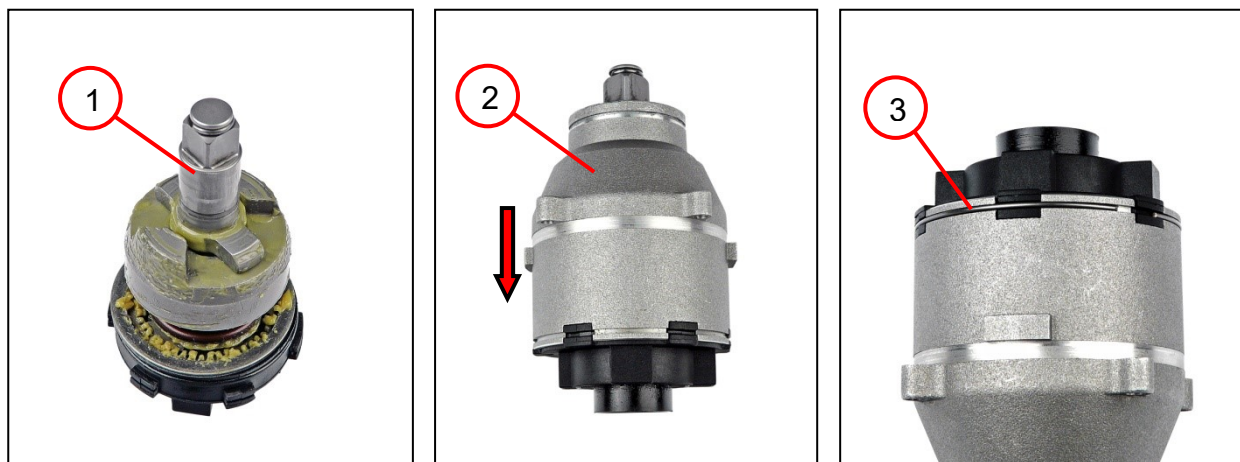
Tools:

- Slotted screwdriver



7. Fitting

Fitting the gearbox



1. Grease the tool holder.
2. Position the tool holder (1).
3. Fit the gearbox housing (2) in the correct position.
4. Fit the circlip (3).

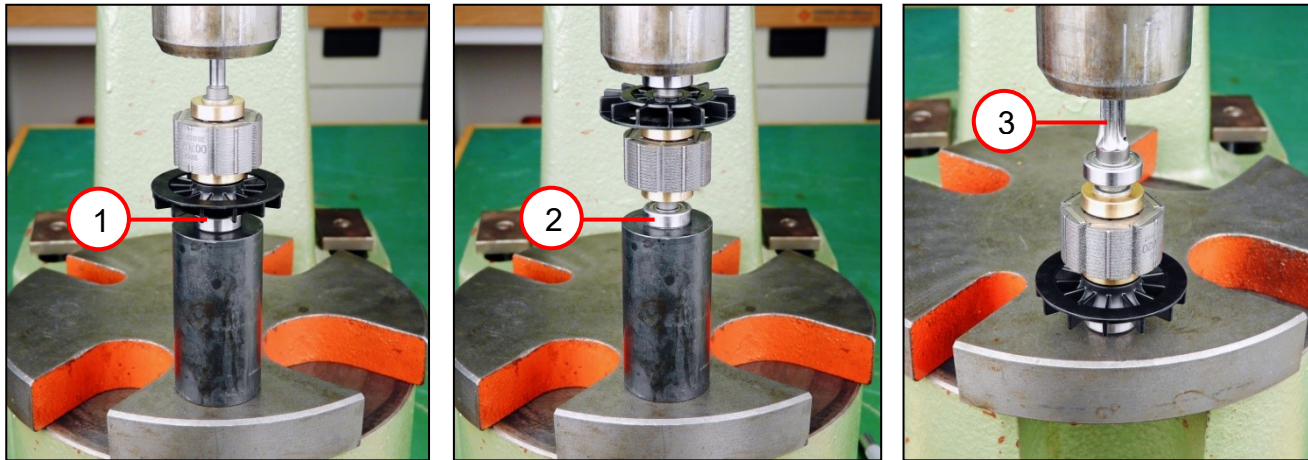
Tools:

- Slotted screwdriver



7. Fitting

Fitting the rotor



1. Press on the grooved ball bearing (1).
2. Press on the grooved ball bearing (2).
3. Press on the pinion (3).

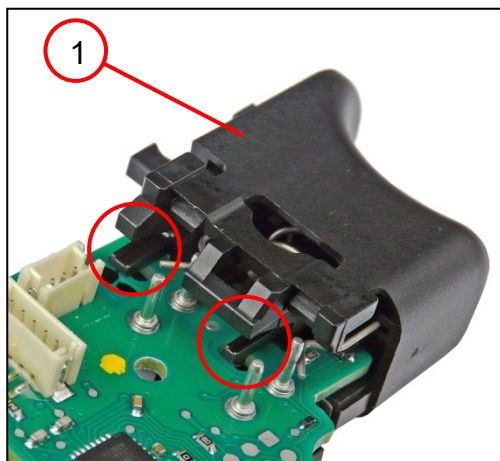
Tools:

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



7. Fitting

Fitting the switch

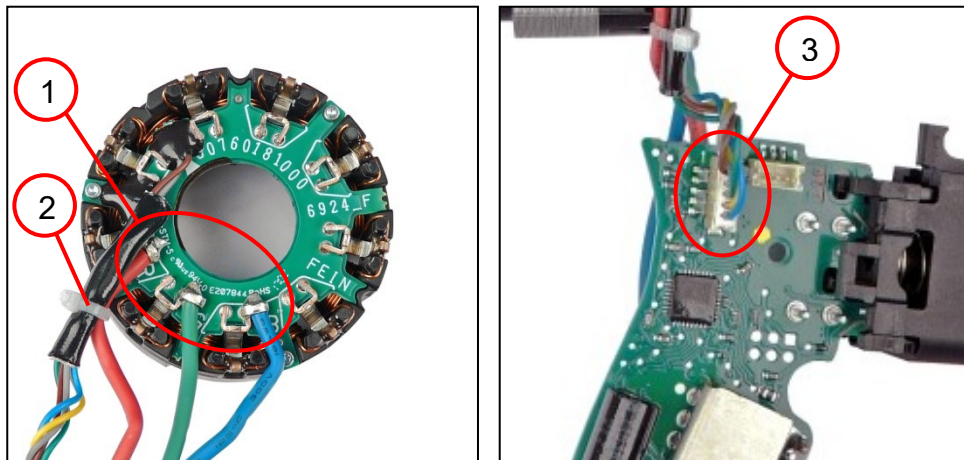


1. Position the switch (1).



7. Fitting

Fitting the stator



1. Solder the three cables (1) as shown in the connection diagram.
2. Push the protective hose up to the soldering point.
3. Secure the cable harness to the red cable (2) with a cable tie.
☞ Place the cable tie in the correct position as shown in the photograph.
4. Insert the cable (3).

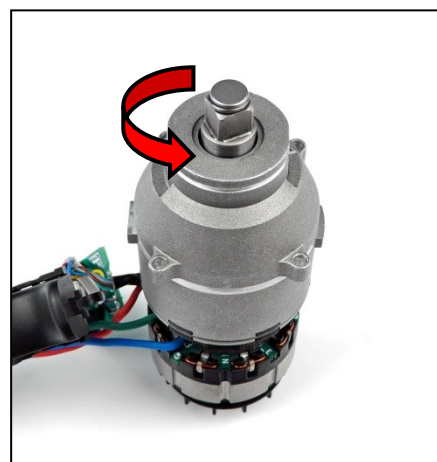
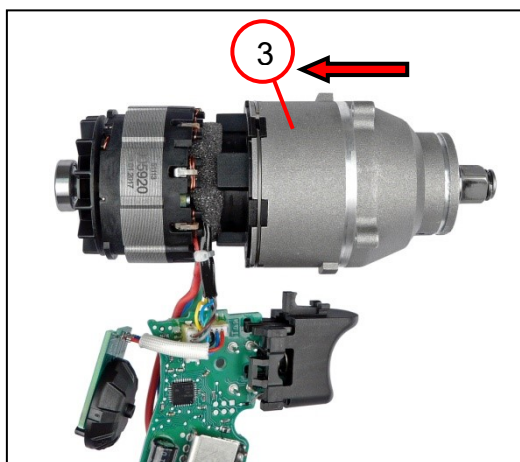
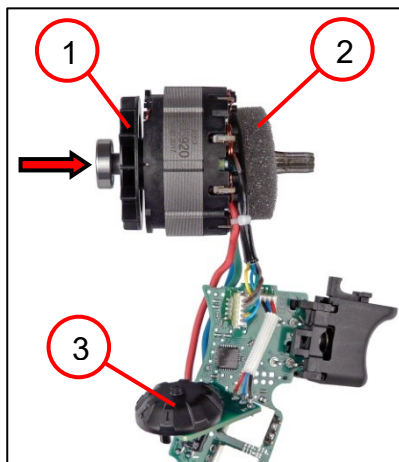
Tools:

- Soldering station
- Side-cutting pliers



7. Fitting

Fitting the gearbox



Caution: Magnetic field!

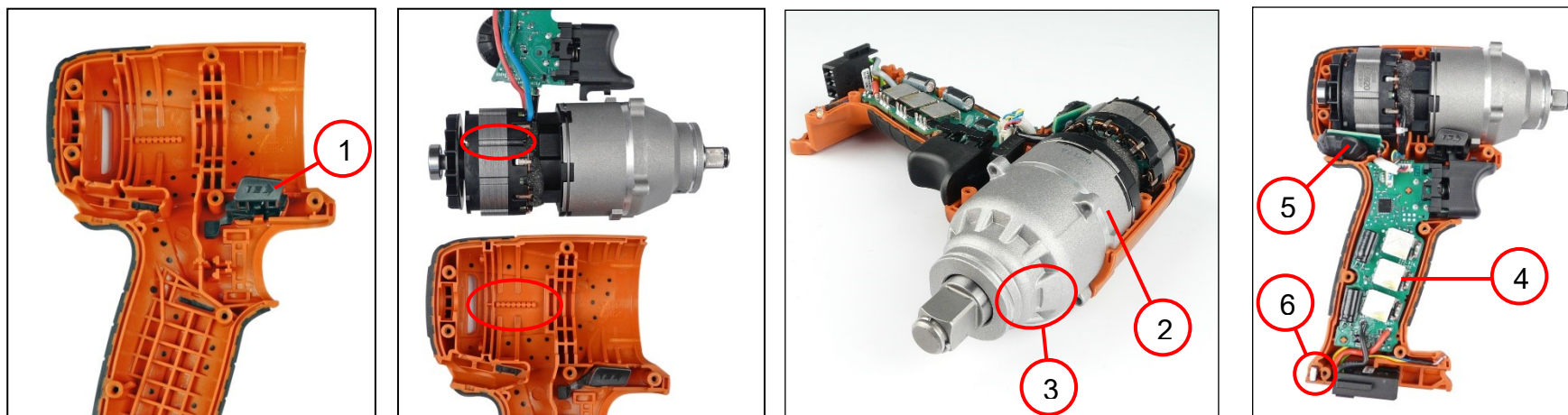
Damage caused by metal foreign bodies on the rotor.

☞ Clean the rotor before the housing is fitted.

1. Insert the rotor (1).
2. Position the insulating ring (2).
3. Insert the speed setting switch (3).
4. Fit the gearbox (3) in the correct position.
 - ☞ Insert the pinion into the centre of the gearbox.
5. Check that the gearbox runs true.
 - ☞ If the gearbox is not running true, reassemble the gearbox correctly.

7. Fitting

Fitting the gearbox



1. Insert the toggle switch (1).
2. Insert the gearbox (2) in the correct position.
 ☞ Align position (3) to point upwards.
3. Insert the electronics (4).
4. Insert the speed setting switch (5).
5. Insert the nut (6).



7. Fitting

Fitting the housing



1. Place the pressure piece (1) in the correct position.
2. Position the motor housing (2).
3. Screw in the ten screws (3) [$1.2 \text{ Nm} \pm 0.1 \text{ Nm}$].
4. Position the gearbox housing (4).
5. Fit the circlip (5).
6. Screw in the four screws (6).

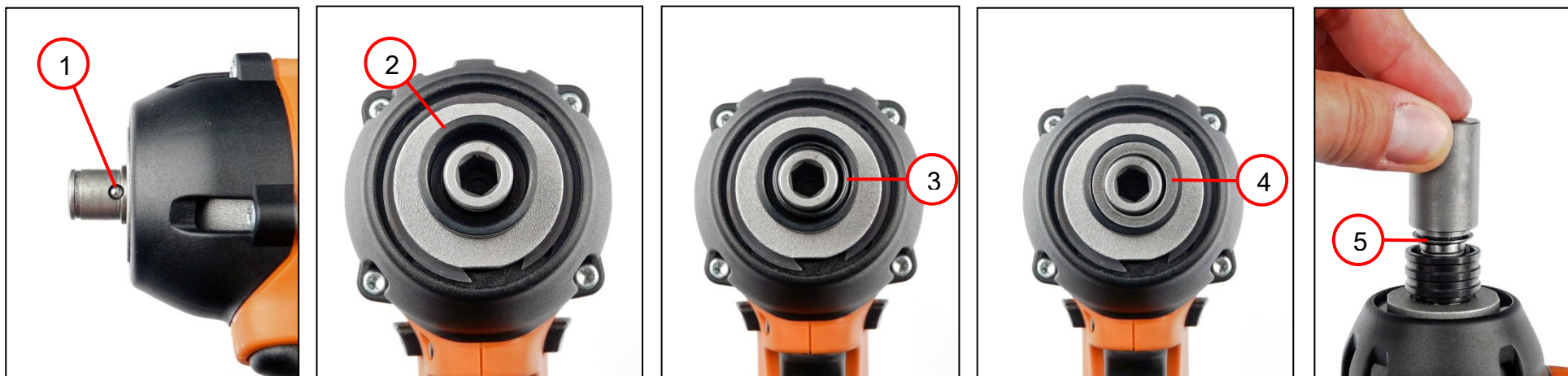
Tools:

- Torx T10; T15
- Circlip pliers



7. Fitting

Fitting the tool holder [applies to: ASCD 12-150 W4]



1. Grease the ball (1).
2. Insert the ball (1).
3. Position the sleeve (2).
4. Position the spiral spring (3).
5. Position the disc (4).
6. Fit the circlip (5).

Tools:

- Assembly aid



8. Troubleshooting

Currently unavailable.

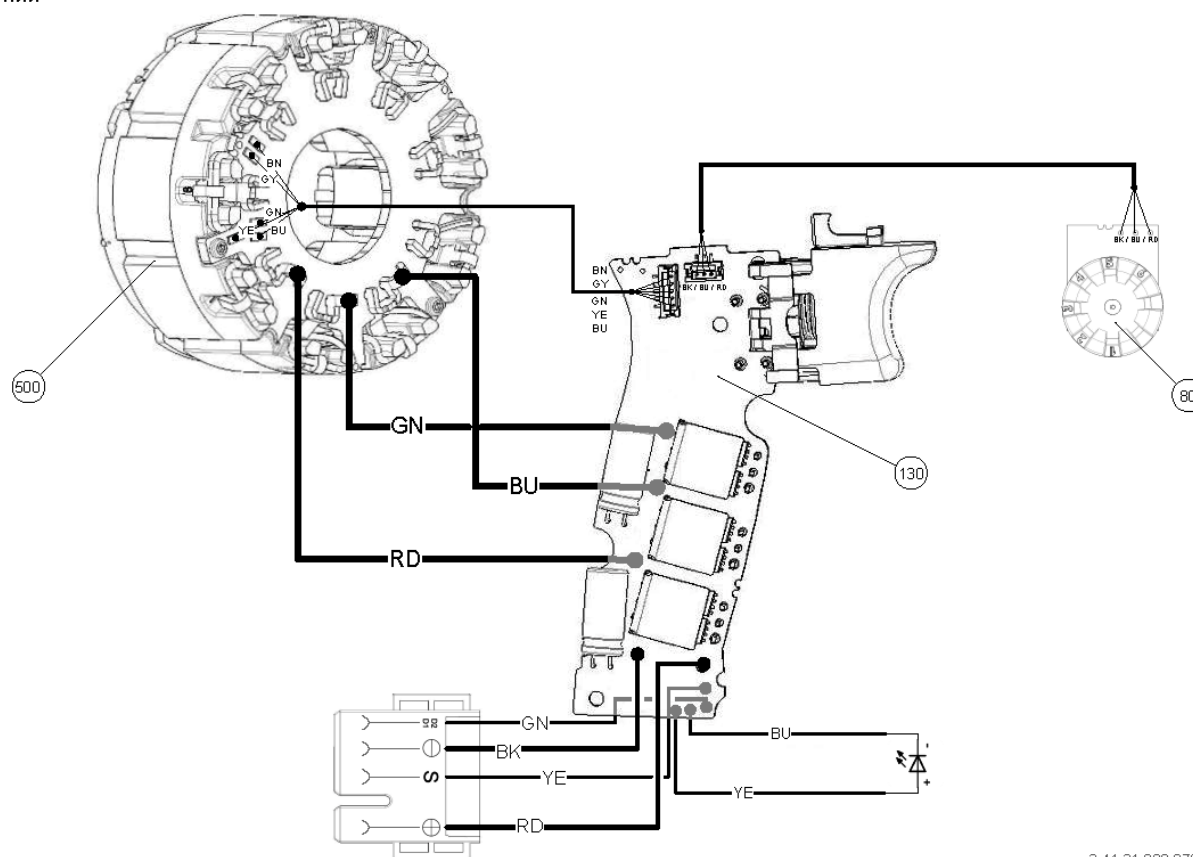


9. Connection diagram

Anschlussplan

Connection diagram
Esquemade conexiones
Schémade connexion
Схема соединений
接线图

7 115 03 – ASCD12 /12V
7 115 04 – ASCD12 /12V
7 115 05 – ASCD12 /12V
7 115 06 – ASCD18 /18V
7 115 07 – ASCD18 /18V



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