



**Applies to:**

ASCD 18-1000 W34



## Contents

1	Models described .....	3
2	Technical data .....	4
3	Symbols used.....	5
4	Notes and requirements .....	6
5	Safety instructions .....	7
6	Tools, lubricants and auxiliary substances required.....	9
6.1	Standard tools .....	9
6.2	Special tools.....	9
6.3	Lubricants and auxiliary substances required .....	9
7	Test and diagnostics options .....	10
8	Disassembly .....	11
8.1	Removing the motor housing.....	11
8.2	Disassembling the electronics .....	13
8.3	Removing the gearbox .....	15
9	Assembly.....	16
9.1	Fitting the gearbox.....	16
9.2	Assembling the electronics.....	19
9.3	Assembling the motor housing .....	21
10	Inspection following repairs .....	24



**Models described****1 Models described**

These repair instructions describe how to repair the following models:

Model	Material number
ASCD 18-1000 W34	7 115 08 .. ..
ASCD 18-1000 W34	7 115 09 .. ..



**Technical data**

## 2 Technical data

**Technical data**

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

**Special tools**

The special tools catalogue can be found in the FEIN electronic information system.

**Lubricants and auxiliary substances**

The lubricants catalogue can be found in the FEIN electronic information system.

**Lists of spare parts**

Lists of spare parts and exploded views are available online in our spare parts catalogue, which can be accessed via the FEIN website.

**Connection diagram**

The connection diagram can be found in the FEIN electronic information system.

**Inspection following repairs**

Further information about the inspection steps required after repairs can be found in the FEIN electronic information system

**Documents required for further repair work**

- FEIN lubricants catalogue
- FEIN special tools catalogue
- All relevant service communications



**Symbols used****3 Symbols used**

	Refers to measures for avoiding the risk of injuries.
	ESD warning symbol to identify electrically sensitive components and parts.
	Refers to information or instructions that should be followed. Non-observance can result in damage or malfunctions.
	Read the operating instructions.
	Indicates notes that provide information or instructions that may provide a better understanding and contribute to the more effective use of the product.
	Part of the navigation interface.





## Notes and requirements

### 4 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!**



#### INFORMATION

Read the operating instructions for the product before carrying out any repair work.

#### 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.

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

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

The relevant accident prevention regulations are to be observed during commissioning.

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

#### Disclaimer

The content of this documentation has been carefully reviewed and produced to the best of our knowledge. C. & E. Fein GmbH assumes no responsibility for the completeness, relevance, quality or correctness of the information provided.

Liability claims against C. & E. Fein GmbH that relate to material or immaterial damage caused by the use or failure to use the information provided or by the use of incorrect or incomplete information are excluded. Claims relating to acts committed intentionally or through gross negligence are categorically excluded.






## Safety instructions

### 5 Safety instructions


#### 5.1 Structure

	<b>SIGNAL WORD FOR THE DANGER CLASSIFICATION.</b>
Type and source of the danger.	
Possible consequences.	
Measure that must be taken in order to avoid this danger.	

#### 5.2 Danger classification


##### Warning

This warning refers to a dangerous situation. If the situation is not avoided, this may result in severe injuries or death.

	<b>WARNING!</b>
Type and source of the danger.	
Possible consequences.	
Measure that must be taken in order to avoid this danger.	


##### Caution

This warning refers to a potentially dangerous situation. If the situation is not avoided, this may result in slight or minor injuries. This may also be used as a warning against material damage.

	<b>CAUTION!</b>
Type and source of the danger.	
Possible consequences.	
Measure that must be taken in order to avoid this danger.	

##### Please note

Indicates a potentially harmful situation. If this situation is not avoided, the product or an object in its environment could be damaged.

	<b>PLEASE NOTE:</b>
Type and source of the danger.	
Damage to the product or its environment.	
Measure that must be taken in order to avoid this danger.	



**Safety instructions****5.3 Information**

Indicates notes that provide information or instructions that may provide a better understanding and contribute to the more effective use of the product.

**INFORMATION**

Tip

**5.4 ESD protection**

Damage from electrostatic charge.

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

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

**ESD**

Avoiding the failure of electronics





**Tools, lubricants and auxiliary substances required****6 Tools, lubricants and auxiliary substances required****6.1 Standard tools**

Socket head wrench set

Blade

Torx T15

Side-cutting pliers

Soldering station

**6.2 Special tools**

Not required.

**6.3 Lubricants and auxiliary substances required**

Grease	SM 0018	12 g	Gearbox
Adhesive	LOCTITE® 5145	n. a.	Electronics
Thread locking compound	LOCTITE® 243	n. a.	Screws





## Test and diagnostics options

### 7 Test and diagnostics options

The FEIN USB programming adapter is used to read machine parameters, the software version and operating hours.

The firmware update software required for this can be found in the FEIN electronic information system.



#### NOTE!

The machine software has to be checked for possible updates with each repair.



## 8 Disassembly

### 8.1 Removing the motor housing

**Tools:**

- Socket head wrench, 4 mm
- Blade
- Torx T15



1. Unscrew the two screws (1).
2. Repeat step 1 on the opposite side of the machine.



3. Bring the gearbox housing (2) forward approx. 3–4 mm.

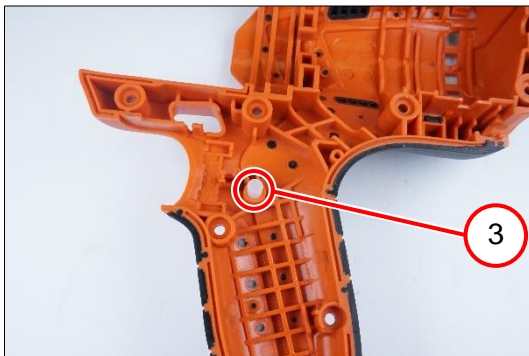


4. Separate the two stickers (3).

## 8.1 Removing the motor housing



5. Unscrew the ten screws (1).
6. Remove the housing half (2).



7. Remove the pressure piece (3).



8. Remove all components from the motor housing.

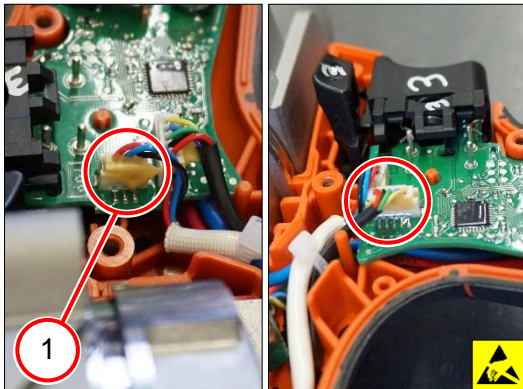
## 8.2 Disassembling the electronics

**Steps that must be completed:**

- Removing the motor housing

**Tools:**

- Side-cutting pliers
- Soldering station

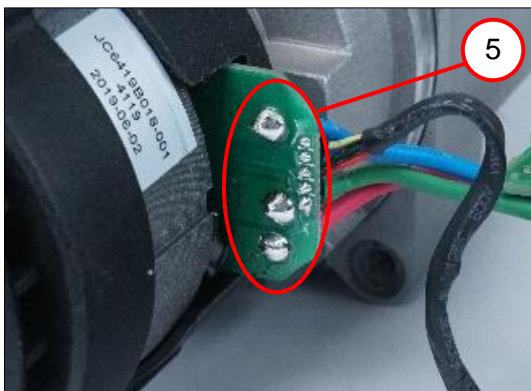
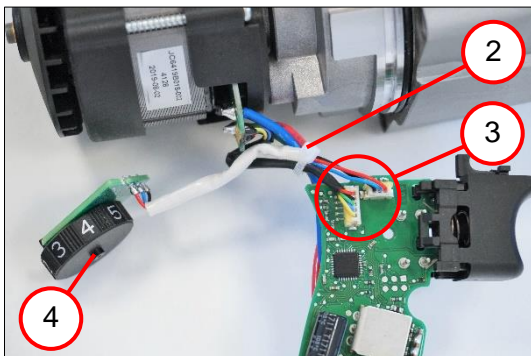
**! PLEASE NOTE:**

Damage to plugs!

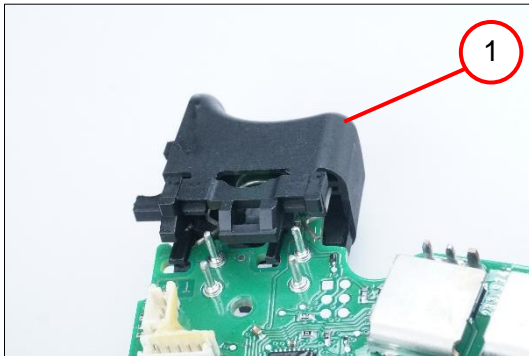
The two plugs can be damaged during separation.

Be careful when separating the sticker (1).

1. Separate the sticker (1).
2. Remove the cable tie (2).
3. Pull off the two plugs (3).
4. Remove the speed setting switch (4).
5. Unsolder the three cables (5).



## 8.2 Disassembling the electronics

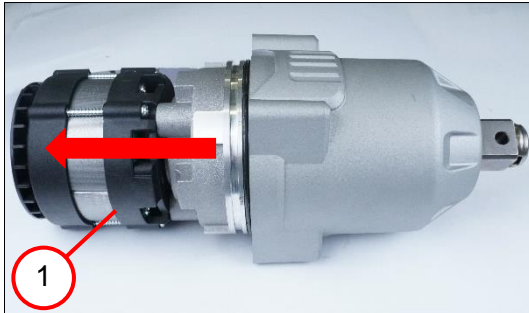


6. Remove the toggle switch (1).

## 8.3 Removing the gearbox

### Steps that must be completed:

- Removing the motor housing



1. Remove the motor with the flange (1).



2. Remove the gearbox housing (2).



3. Remove the disc (3).
4. Remove the tool holder (4).



## 9 Assembly

### 9.1 Fitting the gearbox



1. Fill the opening, the gap and the jaws (1) with 6 g of grease.

#### NOTE!

Decreasing lubricant effect of the lubricating grease.

This can lead to increased wear in the gearbox.

Regular maintenance of the gearbox after 15,000 cycles/screw connections. Lubricate the gearbox and striking mechanism.



2. Coat the shaft end (2) with 2 g of grease.



## 9.1 Fitting the gearbox



3. Position the tool holder (1).
4. Position the disc (2).



5. Coat the shaft in this section (3) with 2 g of grease.

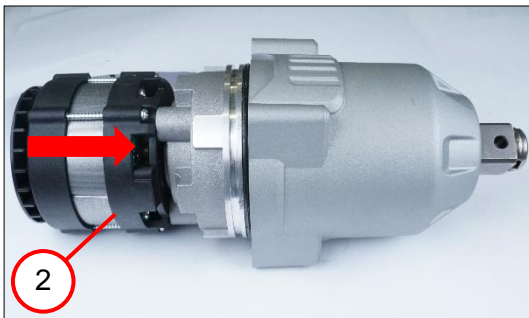


6. Position the gearbox housing (4).

## 9.1 Fitting the gearbox



7. Coat the ring gear toothing (1) with 2 g of grease.



8. Position the motor with the flange (2).

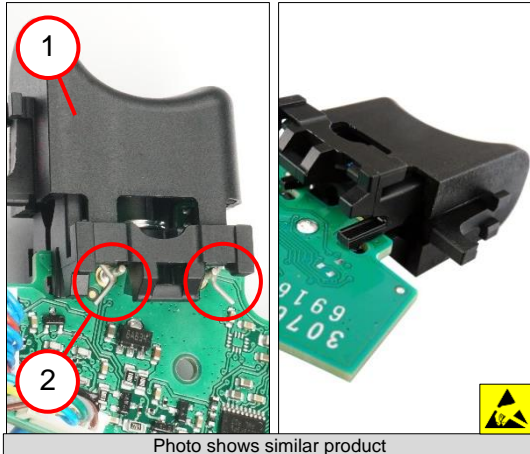
## 9.2 Assembling the electronics

### Steps that must be completed:

- Removing the motor housing

### Tools:

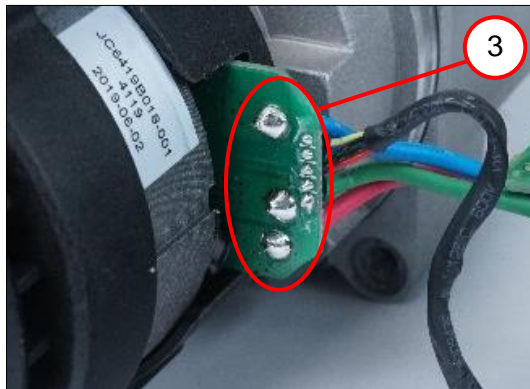
- Soldering station



1. Position the toggle switch (1).

### INFORMATION

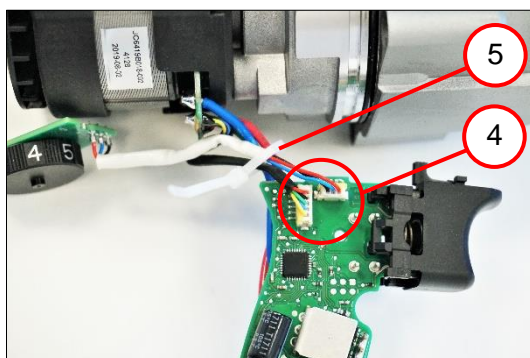
Ensure that the contact spring (2) is in the correct position.  
The contact spring must lie external to the pins.



2. Solder the three cables (3).

### INFORMATION

Ensure that the connection diagram is observed.



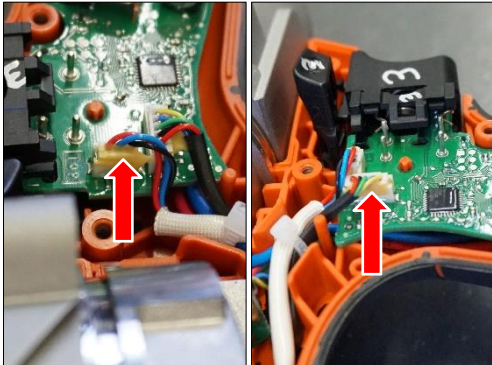
3. Position the two plugs (4).

4. Position the cable tie (5).

### INFORMATION

Only lay out the cable tie (5).

## 9.2 Assembling the electronics



5. Attach the two plugs with adhesive.

### INFORMATION

Ensure that the adhesive is applied in the correct positions.  
The adhesive must be applied on the sides of the plugs facing outwards.

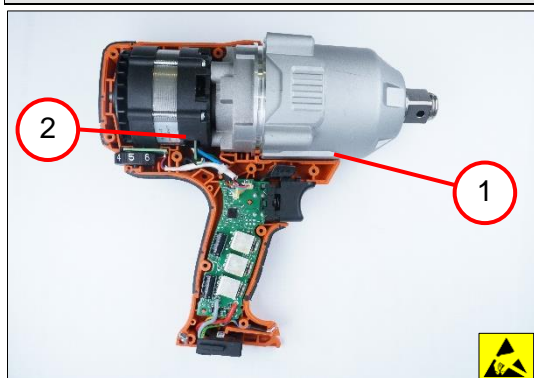
## 9.3 Assembling the motor housing

### Steps that must be completed:

- Fitting the gearbox
- Assembling the electronics

### Tools:

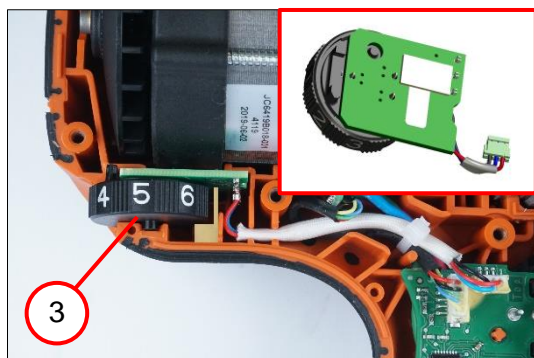
- Torx T15
- Socket head wrench, 4 mm



1. Position all components in the motor housing.

### **i** INFORMATION

Ensure that the motor housing (1) is in the correct position.  
Ensure that the motor (2) is in the correct position.



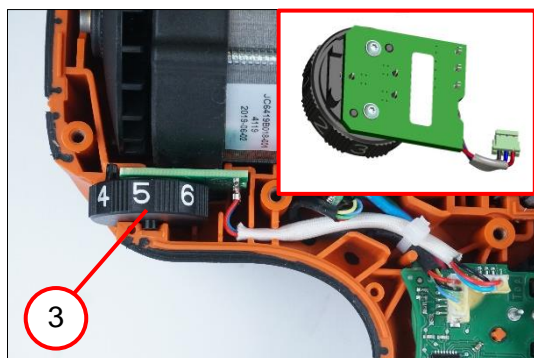
**Applies to model: 7 115 08 ... ASCD 18-1000 W34**

2. Correctly position the speed setting switch (3).

### **i** INFORMATION

The motor housings for the respective models are not compatible with each other.

- The speed setting switch is glued to the circuit board.
- There is a damper in the motor housing.



**Applies to model: 7 115 09 ... ASCD 18-1000 W34**

3. Correctly position the speed setting switch (3).

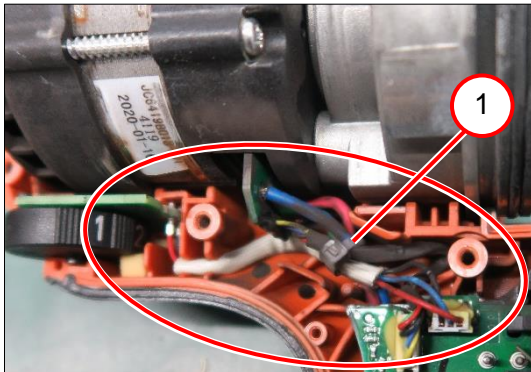
### **i** INFORMATION

The motor housings for the respective models are not compatible with each other.

- The speed setting switch is screwed to the circuit board.
- The motor housing has an expandable recess for the speed setting switch



### 9.3 Assembling the motor housing



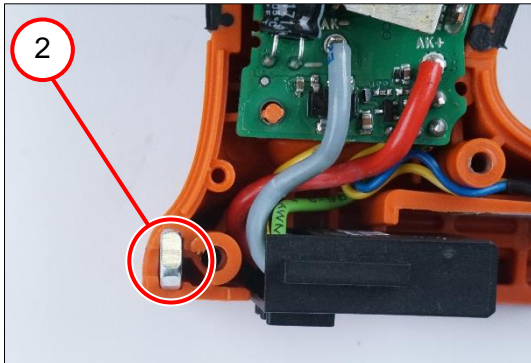
#### INFORMATION

Ensure that the cables are in the correct position.

4. Tighten the cable tie (1).



5. Position the nut (2).



6. Position the pressure piece (3).



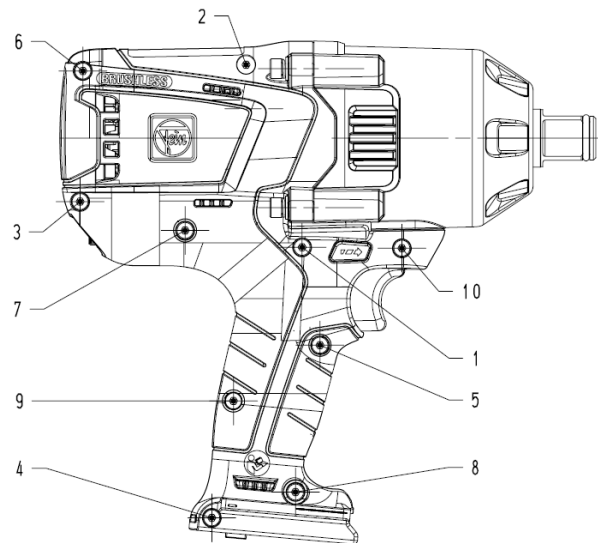
### 9.3 Assembling the motor housing



7. Position the motor housing (1).
8. Screw in the ten screws (2) [1.2 Nm].

#### **i** INFORMATION

Ensure that the ten screws (4) are in the correct sequence.



#### **i** INFORMATION

Coat the four screws (3) with thread-locking fluid.

9. Lightly screw in the four screws (3).
10. Screw in the four screws crosswise (3) [4.5 Nm].





## Inspection following repairs

### 10 Inspection following repairs

Always:	Visual inspection Speed check Insert tool Check the torque Test impact function Perform screwdriving test
Accessories required for operation, if present	Check battery charger Check battery receptacle; check battery
If restart lock present:	Check restart lock
Software:	Check current software version. Further information in the FEIN information system. (Fein Firmware Updater)

