

**Special Tools
Require**

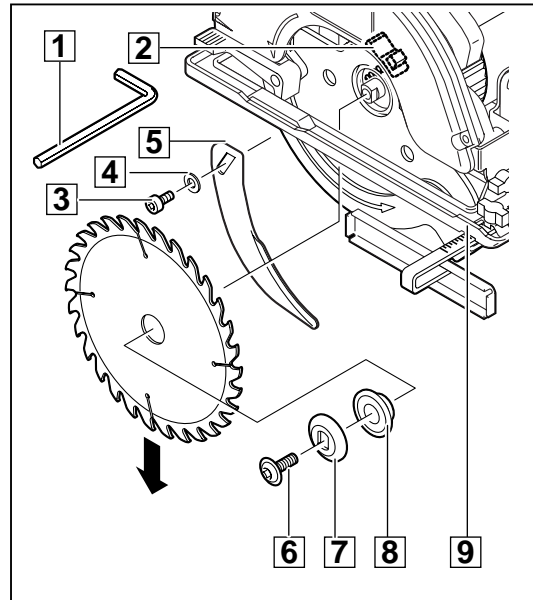
- | | |
|-----------------|--------------|
| ■ Forcing discs | 4931 5990 18 |
| ■ TX 20 | 4931 5990 04 |
| ■ TX 15 | 4931 5990 05 |

Important!

- Before beginning the maintenance work, perform an initial check with a high voltage test according to VDE (see chapter Electrical and Mechanical Test Instructions).
- Before all repair work, pull the power plug from the socket!

Disassembly**Removing the
saw blade**

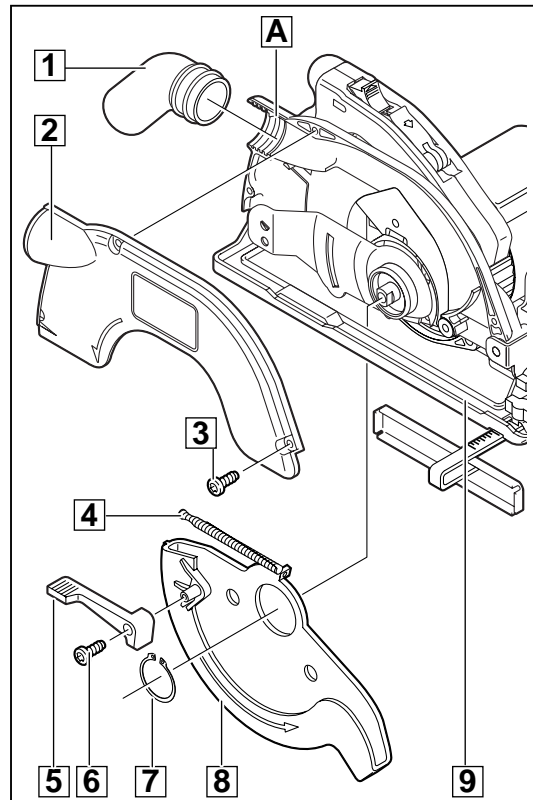
- 1 Loosen the locking screw (6) in the middle of the saw blade with the Allen key (1).
 ➔ At the same time depress the spindle lock (2) (behind the saw protection) to prevent the saw blade from rotating.
- 2 Remove the backing flange (7) and the pick-up washer (8).
- 3 Remove the saw blade downwards through the base plate (9).
- 4 Remove the screw (3) with washer (4) from the splitting wedge (5) and remove the splitting wedge (5).



1

**Removing the
housing**

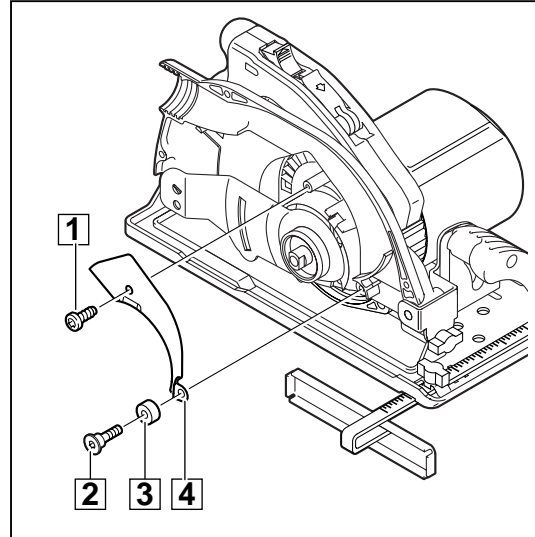
- 1 Remove the three screws (3) from the housing (2) (TX20) and remove the housing (2).
- 2 Remove the suction sleeve (1).
- 3 Loosen the screw (6) and remove the locking lever (5).
- 4 Remove the Seeger circlip ring (7) (standard tool) with Seeger circlip ring special pliers. If necessary, press them off with aid of a screwdriver.
- 5 Unhinge the tension spring (4) from the housing (A). The other side of the tension spring (4) is screwed thread-like into the saw protection (8).
- 6 Remove the saw protection (8) with the tension spring through the base plate (9).



2

Removing the latch plate

- 1 Loosen two screws (1) and (2).
Remove the buffer (3).
- 2 Remove the latch plate (4).

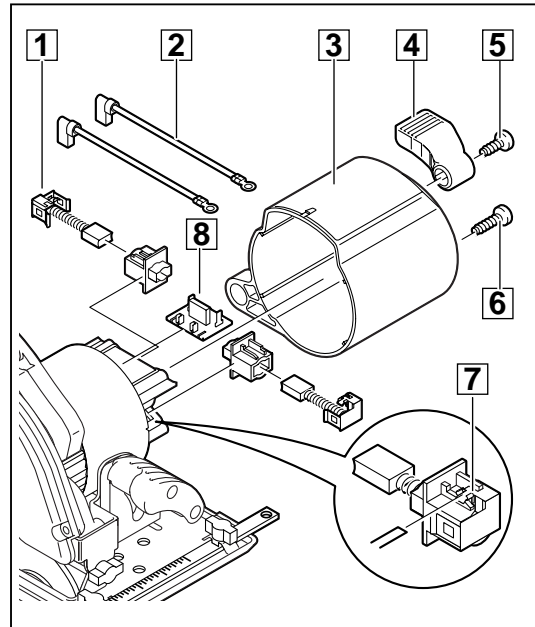


3

Detaching the motor cover and the carbon brushes

☞ Place the machine with the motor facing up.

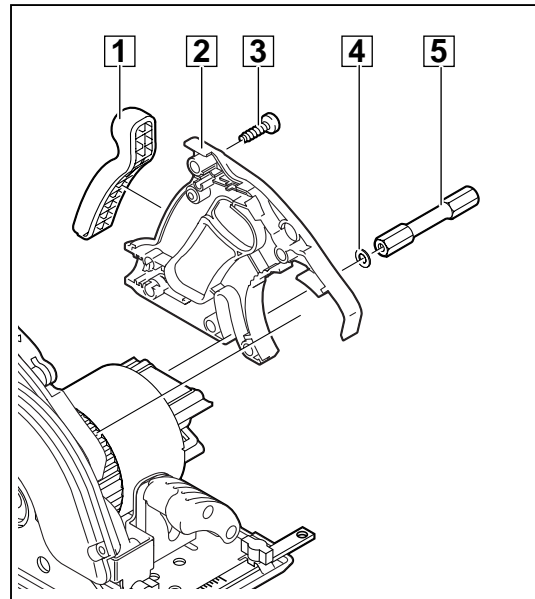
- 1 Remove the two screws (6) from the motor cover and one screw (5) from the lever (4) for setting the cutting depth.
- 2 Pull off the lever (4) and the motor cover (3).
- 3 On both sides, lightly push the plug contact (7) upwards and pull off the carbon brush holders (1) with the carbon brushes.
- 4 Pull the connection wires (2) from the printed circuit.
- 5 Remove the printed circuit (8). If necessary, lever it off with aid of a screwdriver.



4

Removing the handle


- 1 Unscrew the shaft (5) and remove the disc (4).
- 2 Remove the eight handle screws (3) and pull off the handle (2).
- 3 Lever off the soft grip (1).




5

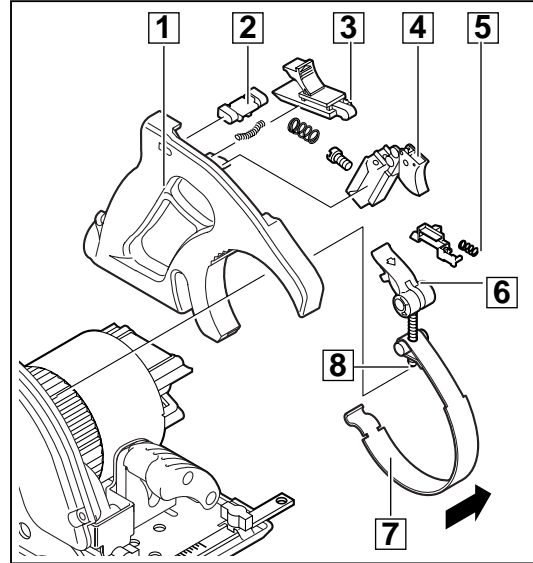
Removing the strip band assembly

- 1 Push back the locking bolt (3) and fold down the lever (6): the strip band (7) relaxes slightly.

 **Carefully remove the strip band (7) together with the lever (6), pulling them upwards: due to the loss of tension the strip band (7) can be catapulted from the machine!**

 **It is necessary to pay attention to the adjusting measure (8) of the lever (6), so the machine can be reassembled with the original setting!**

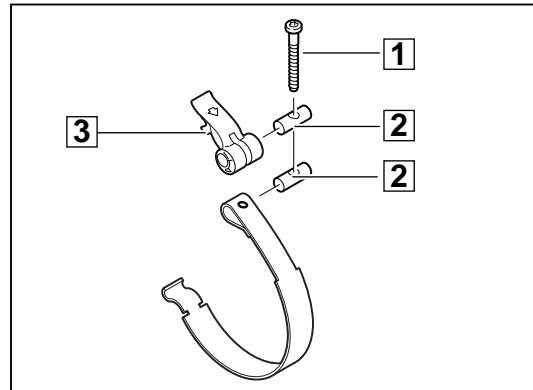
- 2 Remove the switch lock (2), the switch (4), the locking bolt (3) and the catch (5).



6

Disassembling the strip band

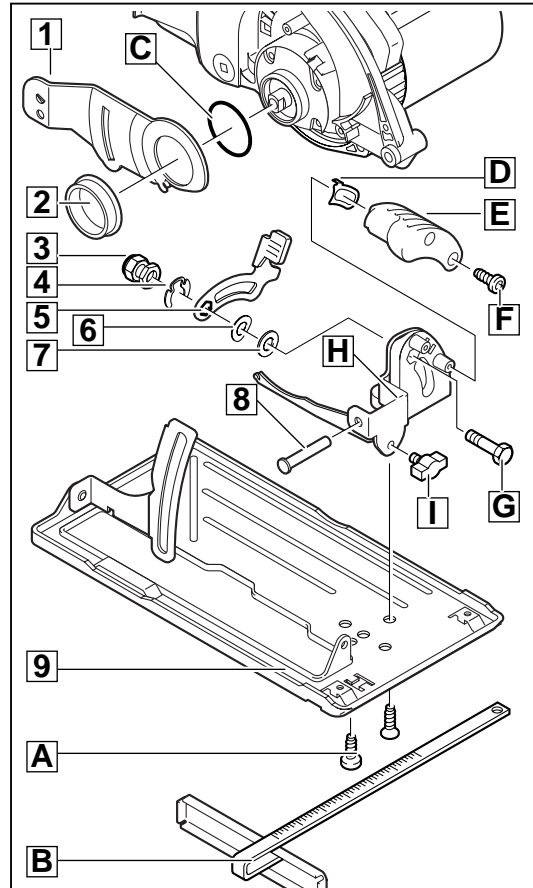
- 1 Remove the screw (1).
- 2 Remove two bolts (2) and the lever (3).



7

Disassembling the base plate

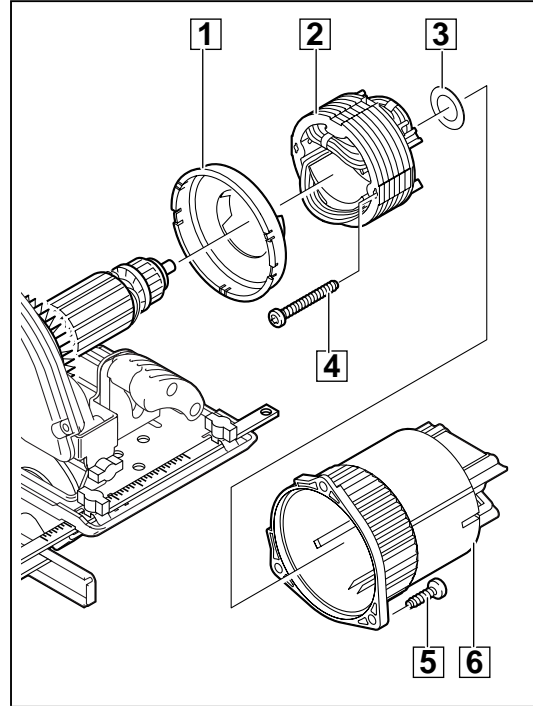
- 1 Remove the bolt (8) and the base plate (9). Loosen the clamping screw (I).
- 2 Remove the gap cone device (1).
- 3 Remove the slide ring (2) and the O-ring (C).
- 4 Remove the following parts from the base plate (9):
 - parallel guide (B),
 - screws (A) and (G),
 - adjusting nut (3),
 - locking washer (4),
 - bent lever (5),
 - disc (6),
 - spring washer (7),
 - screw (F),
 - auxiliary handle (E),
 - pointer (D),
 - adjusting segment (H).



8

Detaching the motor housing and the field

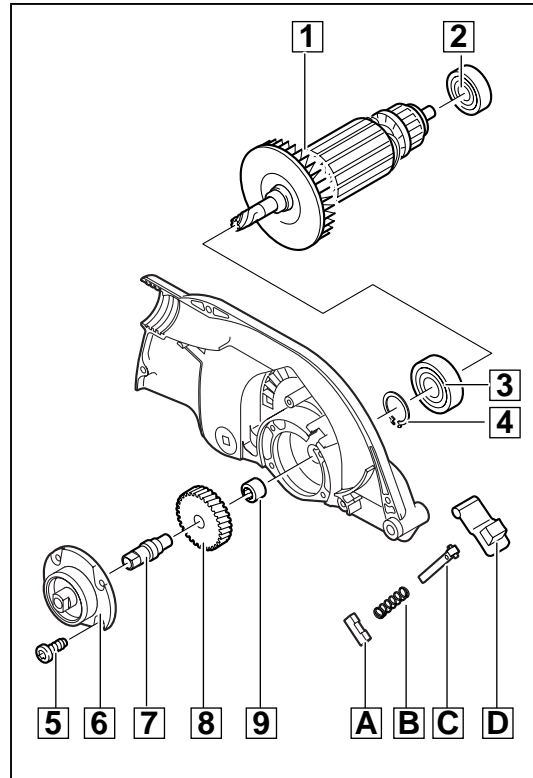
- 1** Loosen three screws (5) in the motor housing (6) and remove the motor housing (6).
- 2** Remove the air deflector ring (1).
- 3** Loosen two screws (4) and remove the field (2).
 ➔ In case of stiffness: hit the motor housing (6) lightly with a plastic hammer to loosen the field (2)!
- 4** Remove the spring washer (3) from the motor housing (6).



9

Detaching the gear and the armature

- 1** Loosen four screws (5).
- 2** Expel the armature (1) with a plastic hammer.
- 3** Remove the following parts:
 - bracket (6),
 - saw spindle (7),
 - gear (8).
- 4** Remove the spindle lock:
 - felt (A),
 - spring (B),
 - bolt (C),
 - retention piece (D).
- 5** Press out the needle bearing (9) and the grooved ball bearing (3).
- 6** Press off the grooved ball bearing (2) from the armature.



10

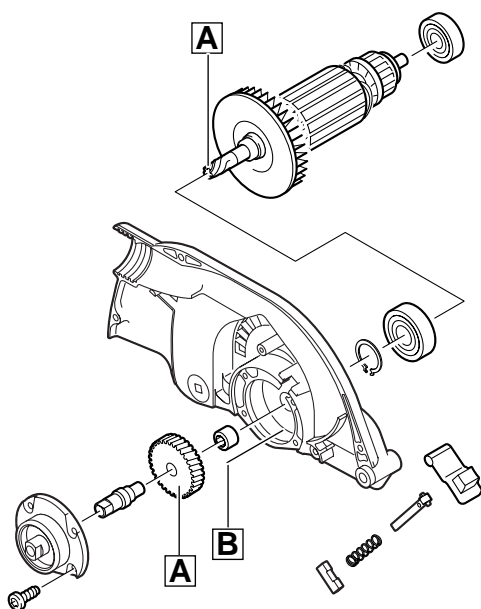
Maintenance

General	It is recommended to submit the machine to maintenance after the carbon brushes have switched off.
Cleaning	Clean all parts – with the exception of the electrical parts – with cold cleaning agent. Caution! No cleaning agent should penetrate into the bearing. Clean the electrical parts with a dry brush.
Check for wear	Check the disassembled parts for wear (visual inspection) and replace worn parts.
Electrical tests	Before reassembling, perform an electrical test on all relevant parts (see chapter Electrical and Mechanical Test Instructions).
Lubrication	Each time maintenance is performed, the machine is to be lubricated as stated in the lubrication plan. After the machine is fully disassembled, completely remove the old grease and replace with new grease. The grease must be applied to the machine as indicated in the lubrication plan.

Legend

A Cover generously with grease Alvania R2 (10 g) (4931 215 902).

B Fill with remaining grease Alvania R2.

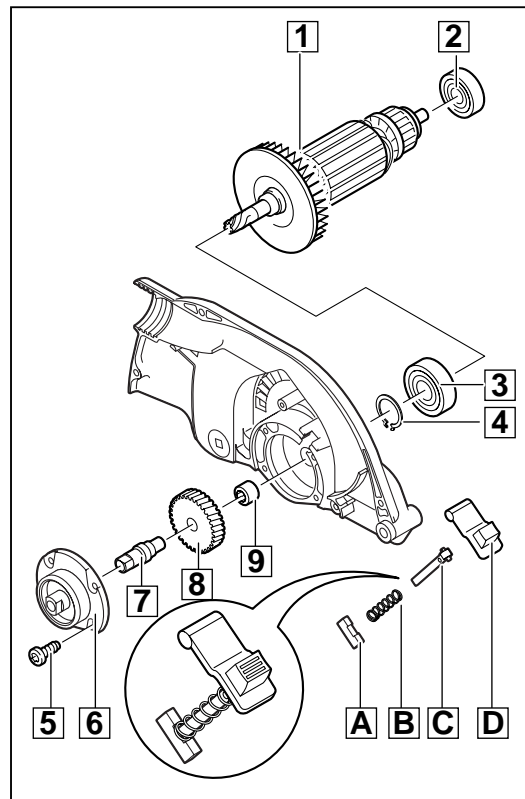


Torques	Screws in plastic	1.8 Nm
	Screws in metal	2.5 Nm

Assembly

Mounting the gear and the armature

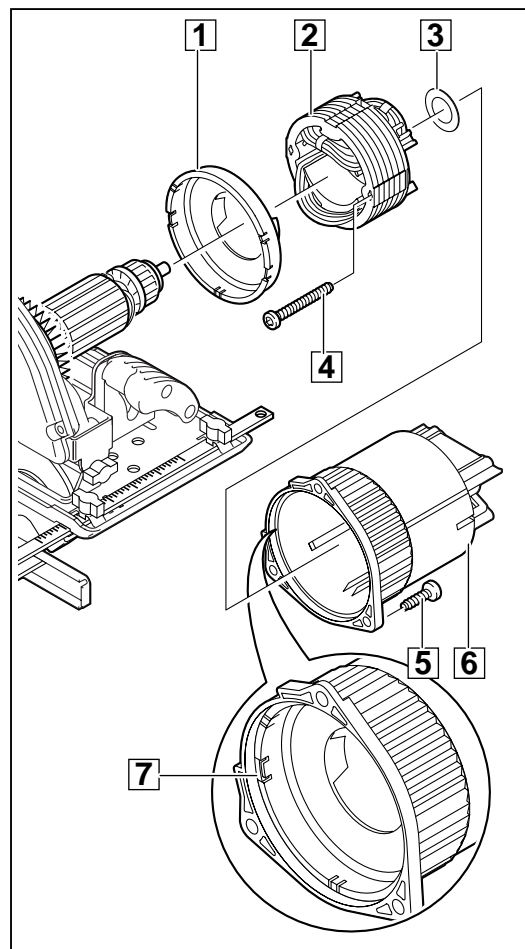
- 1 Press the grooved ball bearing (2) onto the armature.
- 2 Press in the needle bearing (9) and the grooved ball bearing (3).
- 3 Mount the following parts:
 - saw spindle (7),
 - bracket (6),
 - felt (A).
- 4 Insert the spindle lock:
 - Insert the retention piece (D) into the housing.
 - Push the spring (B) over the bolt (C).
 - Place the bolt (C) with the spring into the relief in the gear (8) and put this assembly on the saw spindle.
- 5 Tighten the four screws (5).
- 6 Insert the armature (1), rotating it.



1

Mounting the motor housing and the field

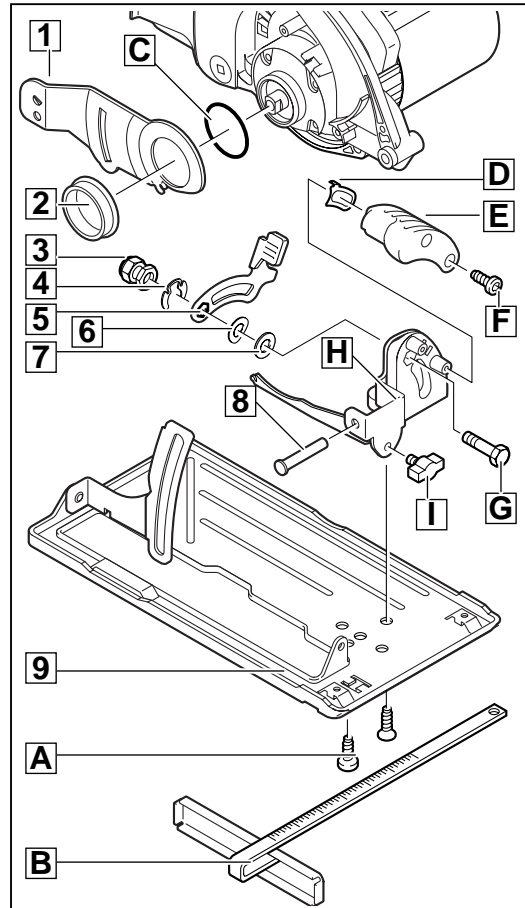
- 1 Insert the spring washer (3) into the motor housing (6).
- 2 Insert the field (2) into the motor housing (6) and fasten it with the two screws (4).
- 3 Place the air deflector ring (1) in the right position.
 - ☞ The markings on the air deflector ring (7) must match the markings on the motor housing (6) (see illustration).
- 4 Fasten the motor housing (6) with three screws (5).



2

Assembling the base plate

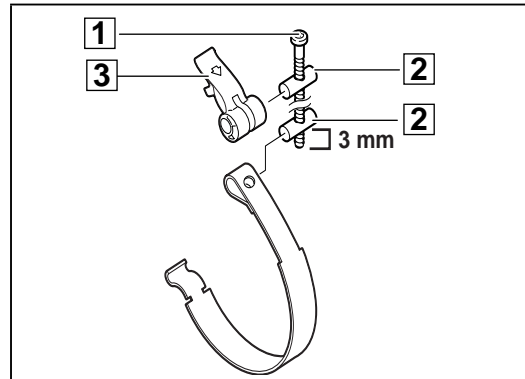
- 1** Mount the following parts on the base plate (9):
 - adjusting segment (H),
 - pointer (D),
 - auxiliary handle (E),
 - screw (F),
 - spring washer (7),
 - disc (6),
 - bent lever (5),
 - locking washer (4),
 - adjusting nut (3),
 - screws (A) and (G),
 - parallel guide (B),
 - clamping screw (I).
- 2** Put on the O-ring (C) and the slide ring (2).
- 3** Put on the gap cone device (1).
- 4** Insert the bolt (8).



3

Mounting the strip band

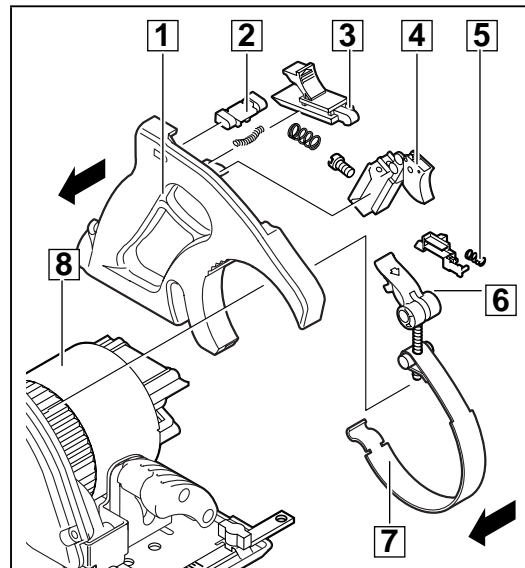
- 1** Insert the bolts (2) and the lever (3).
- 2** Screw in the screw (1).
 - ☞ The screw end should protrude the bolt by **3 turns of the thread** (= 3 mm). If necessary, use the screw (1) to adjust the mechanic tension of the strip band in the further course of assembly.



4

Placing the strip band

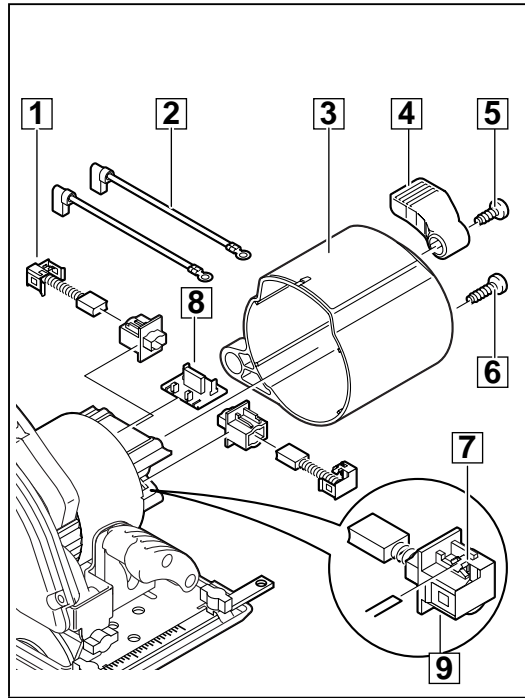
- 1** Insert the strip band (7) into the handle shell (1) **outside the motor housing**, pull them together over the motor housing (8) and align them.
- 2** Insert the switch lock (2), the switch (4), the locking bolt (3) and the catch (5) into the handle shell (1).



5

Mounting the motor cover and the carbon brushes

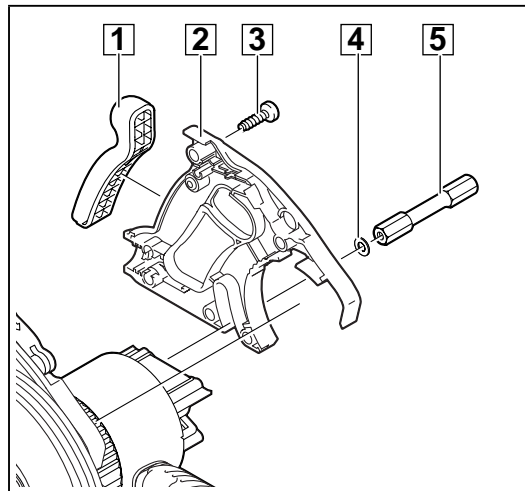
- 1 Connect the circuit board (8).
- 2 Mount the connection wires (2).
 ⚡ Black wire to plug contact J6 on the circuit board (8).
 White wire to plug contact J5 on the circuit board (8).
- 3 Insert the carbon brushes (1) into the carbon brush holders and insert them on both sides.
 ⚡ The contacts on the sides (7) must be connected. The locking contact (9) on the carbon brush holders must be seated correctly.
- 4 Mount the motor cover (3) and the lever (4).
- 5 Fasten the motor cover (3) with two screws (6) and the lever to set the cutting depth with one screw (5).



6

Mounting the soft grip

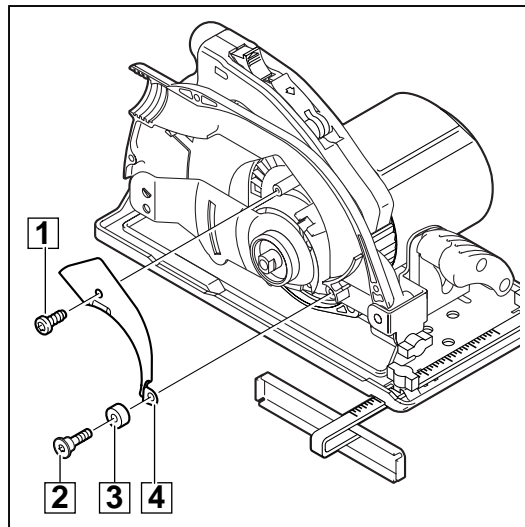
- 1 Insert the soft grip (1) into the handle shell (2).
- 2 Insert the disc (4) and mount the shaft (5).
 ⚡ The shaft (5) should not sit too tight, the base plate must still be adjustable.



7

Mounting the latch plate

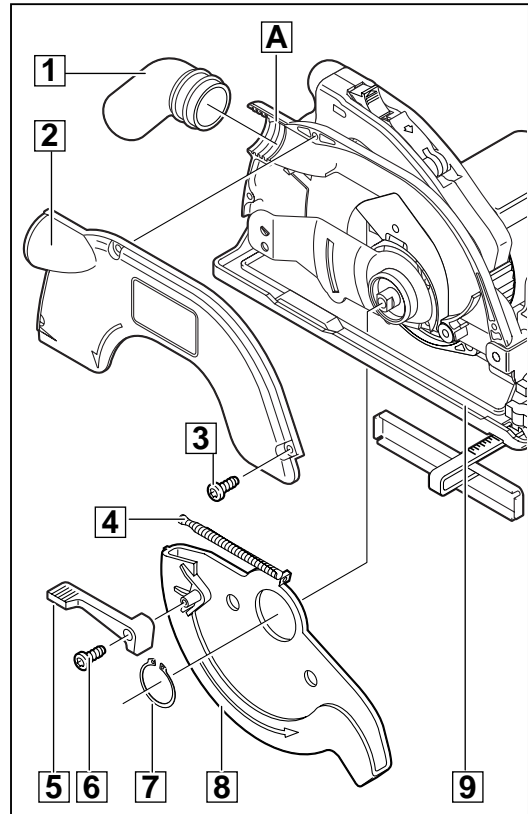
- 1 Put on the latch plate (4).
- 2 Put the buffer (3) on the screw and fasten the latch plate (4) with two screws (2) and (1).



8

Mounting the housing


- 1 Put the suction sleeve (1) through the base plate (9) from below.
- 2 Hinge the tension spring (4) in the left half of the housing (A).
- 3 Fasten the locking lever (5) with the screw (6).
- 4 Insert the suction sleeve (1).
- 5 Put together the two housing halves and fasten them with three screws (3).

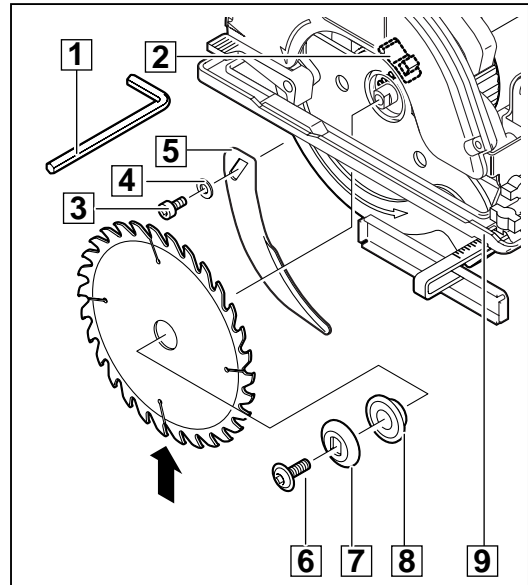
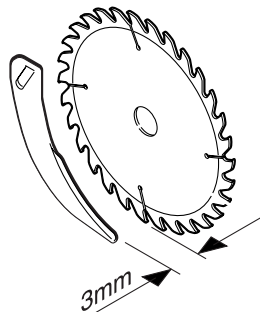


9

Mounting the saw blade

- 1 Fasten the splitting wedge (5) with the washer (4) and the screw (3) on the machine.
- 2 Insert the saw blade through the base plate (9).
- 3 Place the pick-up washer (8) and the backing flange (7) in the middle of the saw blade.
- 4 Fasten the Allen screw (6) with the Allen key (6).

 Align the splitting wedge: the distance to the saw blade must not exceed 3 mm!



10

Test Run

Test run the machine and pay attention to noises.
Let the machine run-in.

Electrical Test

Perform an electrical test on the machine (see chapter Electrical and Mechanical Test Instructions).