

FEIN Repair Tools



ASM / ASM 2-stage screwdriver



FEIN Repair Tools



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1. Technical data

Model	ASM 9- 2	ASM 9- 4	ASM 9- 6/150	ASM 9 - 6	ASM 9 - 9	ASM 12 - 9	ASM 12 - 12
Order number	7 112 07	7 112 06	7 112 05	7 112 04	7 112 03	7 112 02	7 112 01
Voltage: V	9.6					12.0	
Idling speed: rpm	380	800	150	600	380	590	460
Tightening torque range: Nm	0.9 – 2.0	1.5 – 4.0	1.5 – 6.0	1.5 – 6.0	2.0 – 9.0	2.0 – 9.0	3.0 – 12.0
Tool holder:	1/4" Allen screw						
Weight with battery: kg	1.37					1.46	

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2. Maintenance

- 2.1. [Provisions](#)
- 2.2. [Cleaning and care](#)
- 2.3. [Troubleshooting](#)
- 2.4. [Repair intervals \(maintenance intervals\)](#)

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2.1. Provisions

Provisions:

Please note that power tools may only be repaired, maintained and checked by a trained electrician, as improper repairs can result in serious risks to the user (**BGV A3**).

Only use original FEIN spare parts!

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!



2.2. Cleaning and care

Once a week, or more often in the case of frequent use:

- **Clean cooling apertures**
- **Clean contacts on tool and batteries, sand down visible burn marks with fine sandpaper**

Suggested cleaning agent:

- **WD 40**
- **Plastic cleaner**



2.3. Troubleshooting

Fault:

Screwdriver not running

- Red LED flashes (1Hz) 1x/sec
- Red LED flashes (1Hz) 1x/sec after battery has been changed
- Red LED lights up, battery is charged

- Red LED flashes (2Hz) 2x/sec
- Red LED flashes (4Hz) 4x/sec
- Mechanical operating noises

Remedy:

- Insert new battery or recharge inserted battery.
- Remove battery, wait 20 sec and reinsert battery
- Insert 1/4" or 6 mm socket wrench into head and turn socket wrench once or remove battery and reinsert without activating the switch knob or switch pushbutton

- ASM overheating > leave ASM to cool down
- Electronics defective > replace electronics
- Relubricate transmission, replace if necessary, fit cover plate correctly



2.4. Repair intervals (maintenance intervals)

Approx. every 250 000 screw connections:

- Clean and regrease motor pinion and bearing axles on planetary gears. **Warning: Slide planetary gears back onto the same wheel axles and with the same side facing the planetary carrier.**
- Blow electronics with dry compressed air
- Clean motor housing
- Check head
- Check LEDs

Approx. every 500.00 screw connections:

- Replace grooved ball bearing [\(200\)](#)

Approx. every 2 million screw connections:

- Replace EC motor [\(10\)](#), repair if broken down. EC motor [\(10\)](#) is maintenance-free.



3. Electrical function check

3.1. [Function check](#)

3.2. [Motor](#)

3.3. [Electronics](#)



3.1. Function check with inserted battery

1. Pushbutton [\(290\)](#) on until first click
> Light on
2. Pushbutton [\(290\)](#) on until second click
> Light on + motor runs clockwise
3. Pushbutton [\(290\)](#) on until second click,
- then release pushbutton
> Red LED and whistling sound, 1 sec.
4. Briefly press switch knob [\(32\)](#)
> Red and green LEDs flash 10 times
5. Briefly press switch knob [\(32\)](#),
- pushbutton [\(290\)](#) on until second click
> Red and green LEDs flash, light on + motor runs anti-clockwise
6. Pushbutton [\(290\)](#) on until first click
- press switch knob [\(32\)](#) for 4 sec. and keep
pushbutton [\(290\)](#) pressed.
> Light on, red and green LEDs flash 10 times, ASM in continuous anti-
clockwise mode

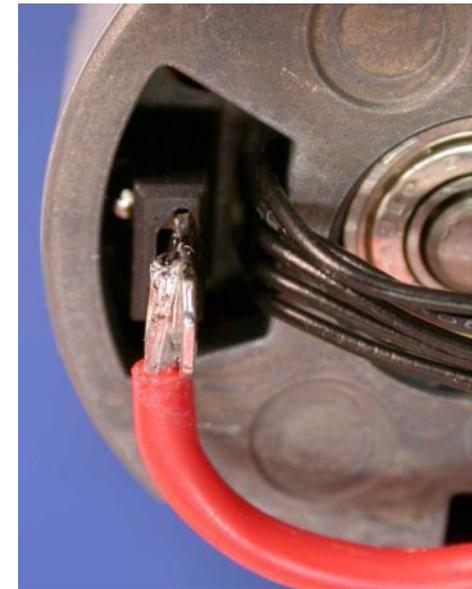
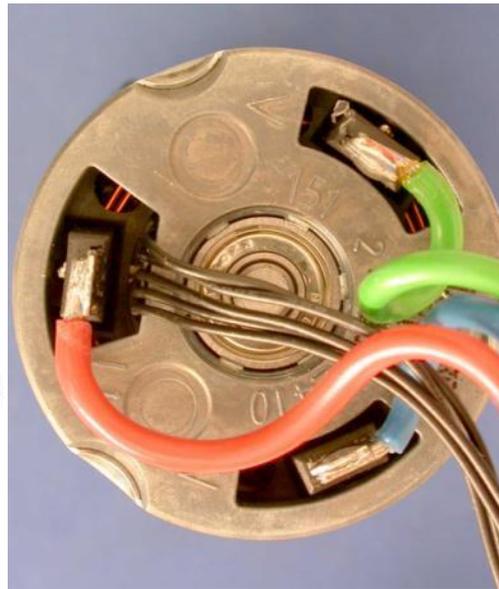
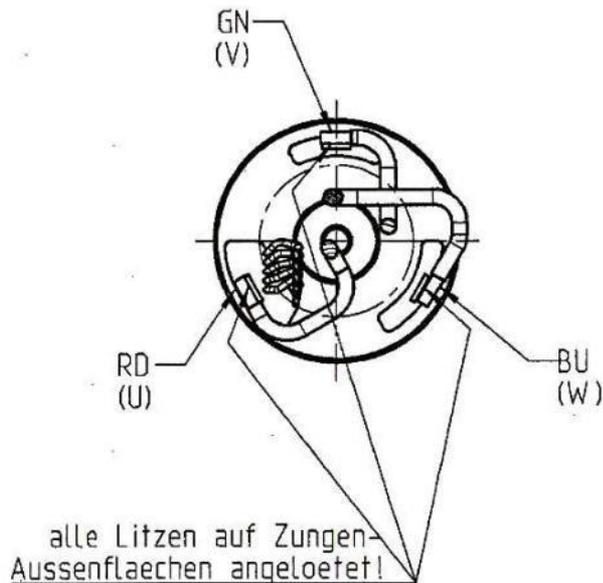
- then pushbutton [\(290\)](#) on until second click
> Red and green LEDs flash, light on + motor runs anti-clockwise

- then pushbutton [\(290\)](#) on until first click,
press switch knob [\(32\)](#) for 4 sec. and keep
pushbutton pressed
> ASM back in continuous clockwise mode

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3.2. Motor



Solder stranded wires according to connection diagram and pictures otherwise they won't function or be able to be installed later on!



3.3. Electronics

- 3.3.1. [Electronics, handling](#)
- 3.3.2. [Electronics connection diagram](#)
- 3.3.3. [Soldering electronics \(changed Jan. 2008\)](#)
- 3.3.4. [Electronics film I](#)
- 3.3.5. [Electronics film II](#)

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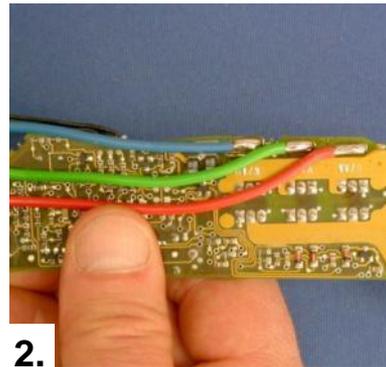


3.3.1. Electronics



1.

Correct!



2.

Incorrect!



3.

1. Touch electronics [\(15\)](#) on cooling element

2. Do not touch electronics [\(15\)](#) on circuit board

3. Electronics type plate [\(15\)](#)

2205
07 62 373 010

V=
label

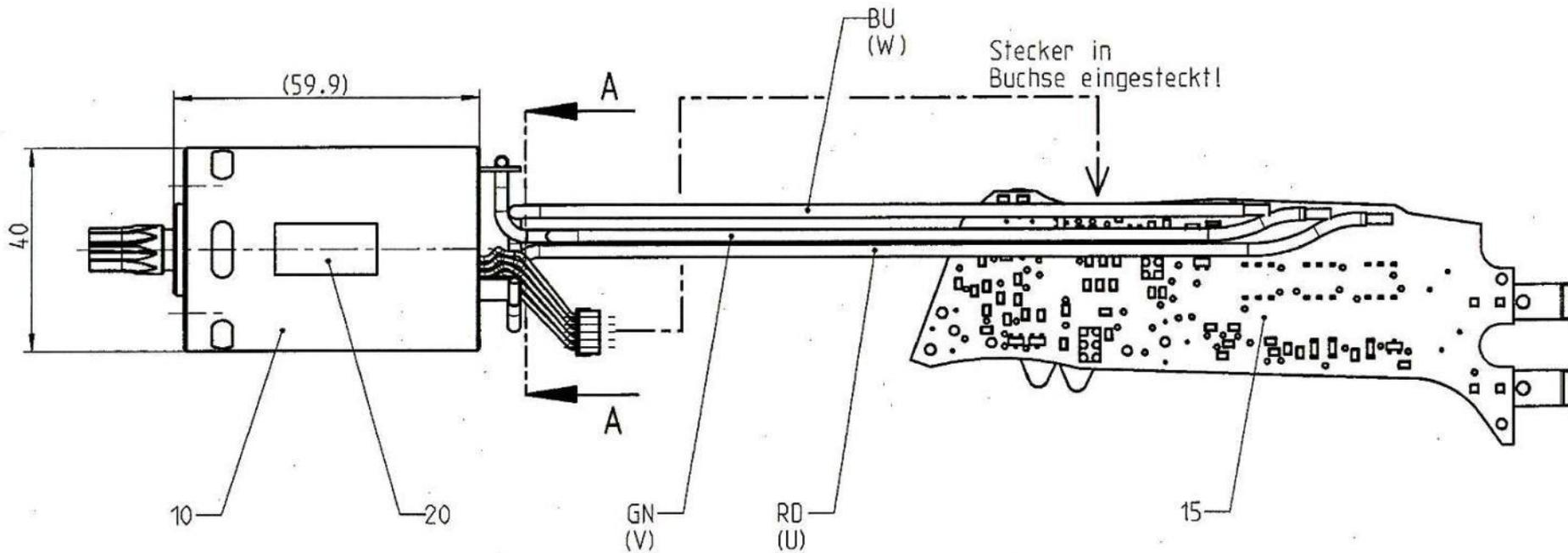
> Date of manufacture: CW 22 / 2005
> Article code without packaging
> for 9.6 V direct current
> = colour code for ASM 9-6/150

Colour code	Label versions
red	ASM 9-6/150
yellow	ASM 9-4
green	ASM 9-6
blue	ASM 12-9
white	ASM 9-2
	ASM 9-9
	ASM 12-12

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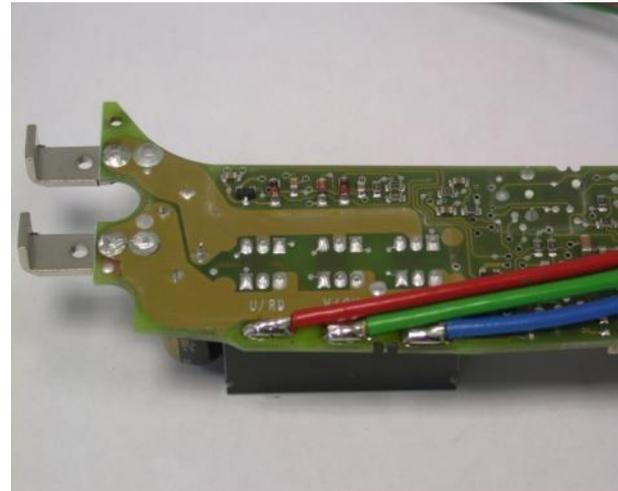
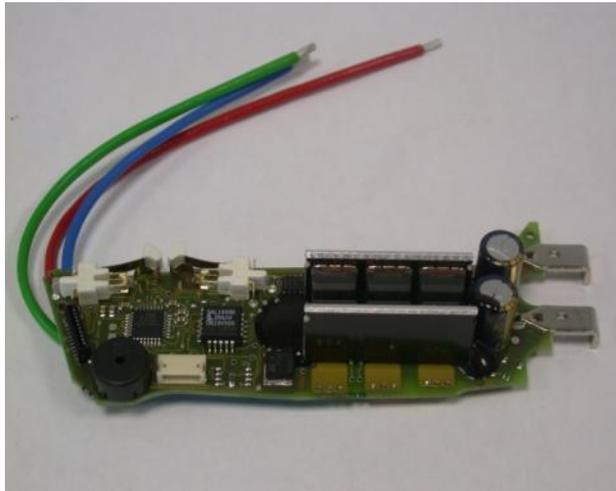
3.3.2. Electronics connection diagram



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3.3.3. Soldering electronics



The electronics are not intended to be soldered to the circuit board, as they are supplied with connecting cables. (see pictures)

Due to new guidelines, the soldering process has been changed to an unleaded solder. (different flow properties)

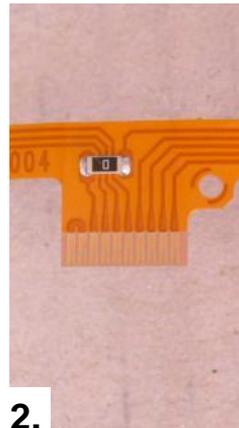
Compared with a normal solder, this solder requires higher temperatures (approx. 400 C), so you need special soldering stations and the necessary know-how.



3.3.4. Electronics film I



1.



2.

1. Type plate

- 1005 > Date of manufacture = CW 10 / 2005
- 3 07 62 267 01 4 > Article code for electronics film without packaging

2. Flat ribbon cable connection to electronics

Avoid damage otherwise the functionality will be impaired!

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3.3.5. Electronics film II



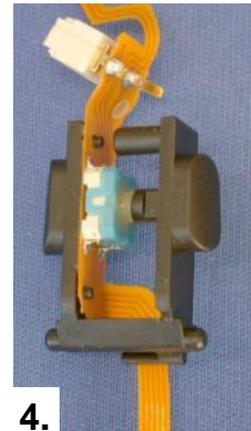
1.



2.



3.



4.

1. LED holder [\(33\)](#) and electronics film [\(30\)](#)
2. LED holder [\(33\)](#) and electronics film [\(30\)](#) fitted
3. Electronics film [\(30\)](#) and switch knob [\(32\)](#)
4. Electronics film [\(30\)](#) and switch knob [\(32\)](#) fitted



4. Dismantling

- 4.1. [Preparation](#)
- 4.2. [Motor housing I](#)
- 4.3. [Motor housing II](#)
- 4.4. [Motor housing III](#)
- 4.5. [Motor housing IV](#)
- 4.6. [Motor, transmission](#)
- 4.7. [Transmission](#)
- 4.8. [Clutch, head](#)
- 4.9. [Clutch](#)

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4.1. Preparation



1.



2.

1. **Tool with accessories.**
2. **Remove accessories from tool.**
e.g:
 - retaining clip
 - tool: hexagonal socket wrench
 - battery

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4.2. Motor housing I



1.



2.



3.



4.

1. Picture: tool with coded sleeve [\(280\)](#).
2. Remove coded sleeve [\(280\)](#).
3. Remove 9 screws [\(340\)](#) from motor housing [\(265\)](#).
4. Expand motor housing [\(265\)](#).

Tool:

- Slotted screwdriver: 0.8x4x100
- Circlip pliers: opener / straight 18-60 mm
- Cross-tip screwdriver PZ 1

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4.3. Motor housing II



1.



2.



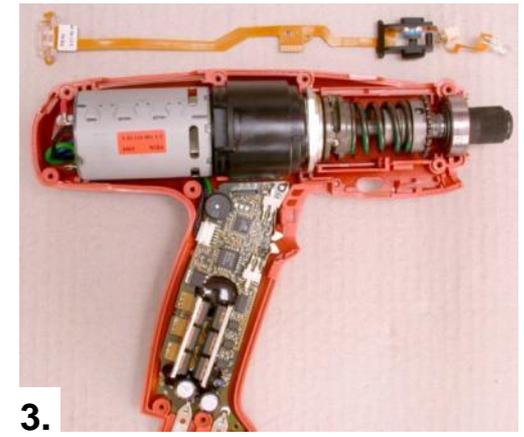
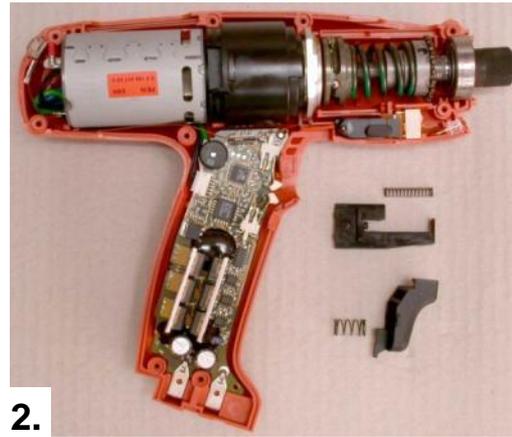
3.

1. **Picture: pre-fitted motor housing [\(265\)](#).**
2. **Remove all built-in parts from the motor housing [\(265\)](#).**
 - 1x **insert [\(300\)](#)**
 - 1x **sliding cover [\(310\)](#)**
 - 1x **O-ring [\(360\)](#)**
 - 1x **round seal ring [\(350\)](#)**
 - 2x **holding down device [\(370\)](#)**
3. **Picture: type plate without serial no.: attached inside the motor housing [\(265\)](#) for new tools.**

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4.4. Motor housing III

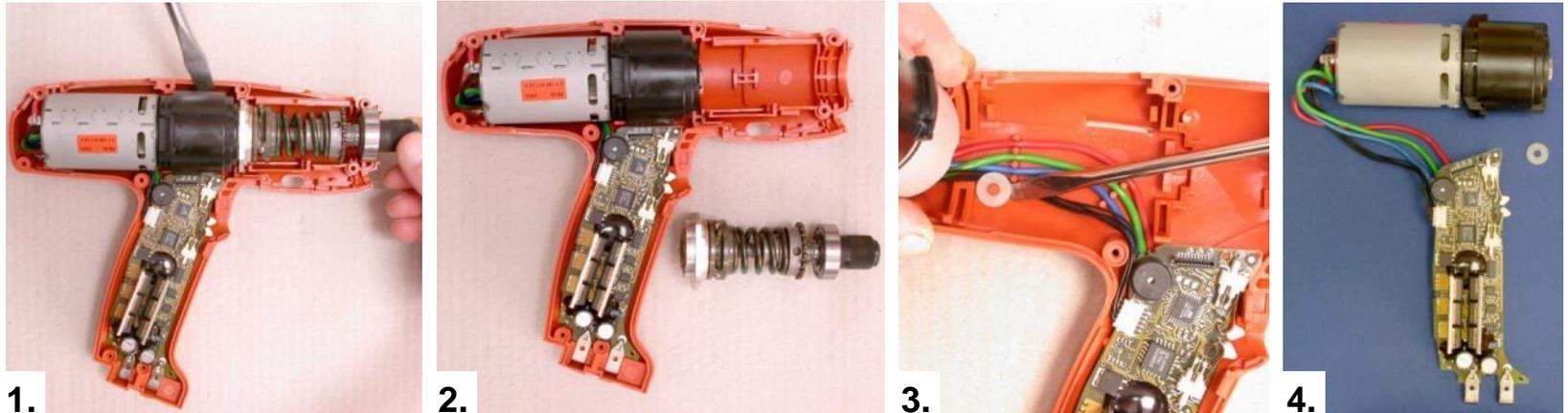


1. Picture: opened tool.
2. Remove slide switch [\(320\)](#) with pressure spring [\(410\)](#) and pushbutton [\(290\)](#) with pressure spring [\(330\)](#).
3. Remove electronics film [\(30\)](#) from motor housing [\(265\)](#) and disconnect from electronics [\(15\)](#).

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4.5. Motor housing IV



1. Lift transmission at same time (20) as head (110) and remove from motor housing (265). Fitted head (110) can be removed from the transmission (20) along with the needle bearing bush (70).
2. Picture: opened tool with fitted head (110) and needle bearing bush (70).
3. Detach plate (420) and then remove EC motor (10) and electronics (15) from motor housing.
4. Picture: EC motor cpl. (17) with transmission (20) and plate (420).

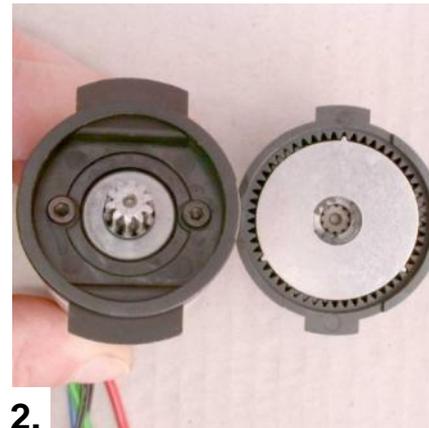
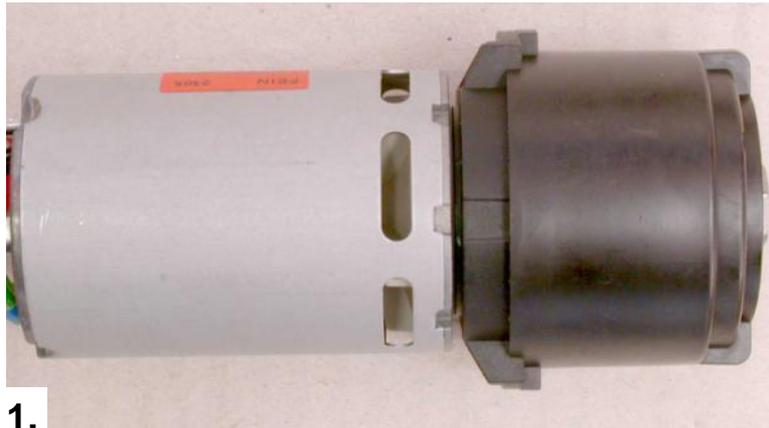
Tool:

- Slotted screwdriver: 0.8x4x100

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4.6. Motor, transmission



1. Picture: EC motor [\(10\)](#) with transmission [\(20\)](#).
2. Remove transmission [\(20\)](#) from EC motor [\(10\)](#).
3. Unscrew screws [\(380\)](#) and remove motor flange [\(40\)](#).

Tool:
• Socket head wrench:
WAF 2.5 mm



4.7. Transmission



1. Picture: transmission [\(20\)](#)

> transmission housing, 2 planetary carriers each with 3 spur gears and plate.

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4.8. Clutch, head



1.



2.



3.



4.

1. Picture: fitted head [\(110\)](#) with needle bearing bush [\(70\)](#).
2. Remove needle bearing bush [\(70\)](#) from head [\(110\)](#).
3. Remove circlip from head [\(110\)](#).
4. Remove parts of tool locking device:
 - circlip [\(250\)](#)
 - ring [\(240\)](#)
 - pressure spring [\(230\)](#)
 - sleeve [\(220\)](#)
 - ball [\(80\)](#) > D=4 mm

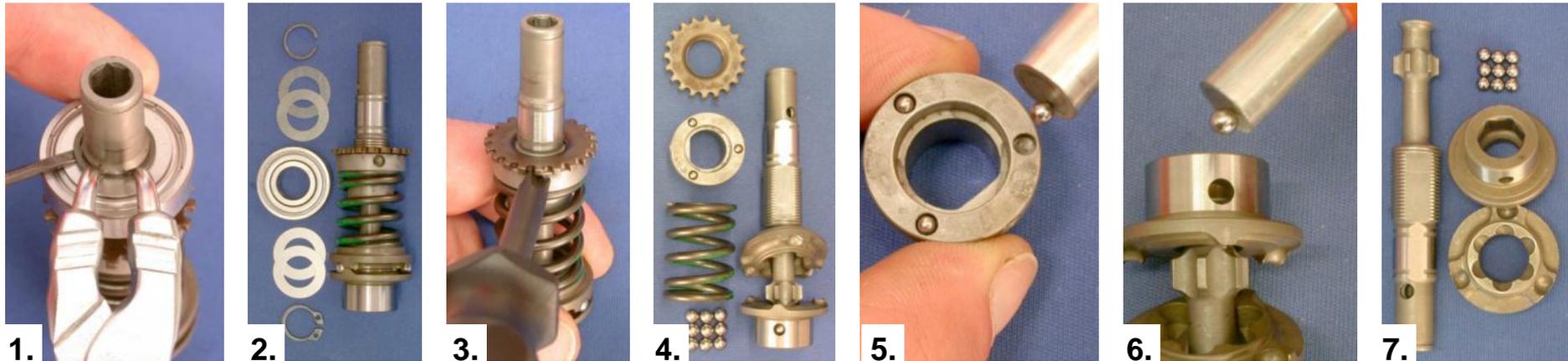
Tool:

- Tool vice with sharp clamping jaws or circlip pliers: opener / stepped 3-10 mm

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4.9. Clutch



1. Remove circlip [\(250\)](#).
2. Remove plates [\(165\)](#), grooved ball bearing [\(200\)](#) and circlip [\(215\)](#).
3. Unscrew adjusting ring [\(150\)](#) with adjusting wrench [\(5000\)](#).
4. Picture: adjusting ring [\(150\)](#), pressure ring [\(130\)](#), pressure spring [\(120\)](#) and balls [\(90\)](#) 9xD=5.0 mm
5. Remove balls [\(140\)](#), 3xD=3 mm, from pressure ring.
6. Remove balls [\(80\)](#) 9xD=4 mm, from cam ring [\(50\)](#).
7. Picture: head [\(110\)](#), balls [\(80\)](#) 9xD=4 mm, cam ring [\(50\)](#), adjusting ring [\(100\)](#).

Tool:

- Circlip pliers opener / stepped, 3-10 mm
- Adjusting wrench torque: 3 21 23 002 00 6
- Bar magnet



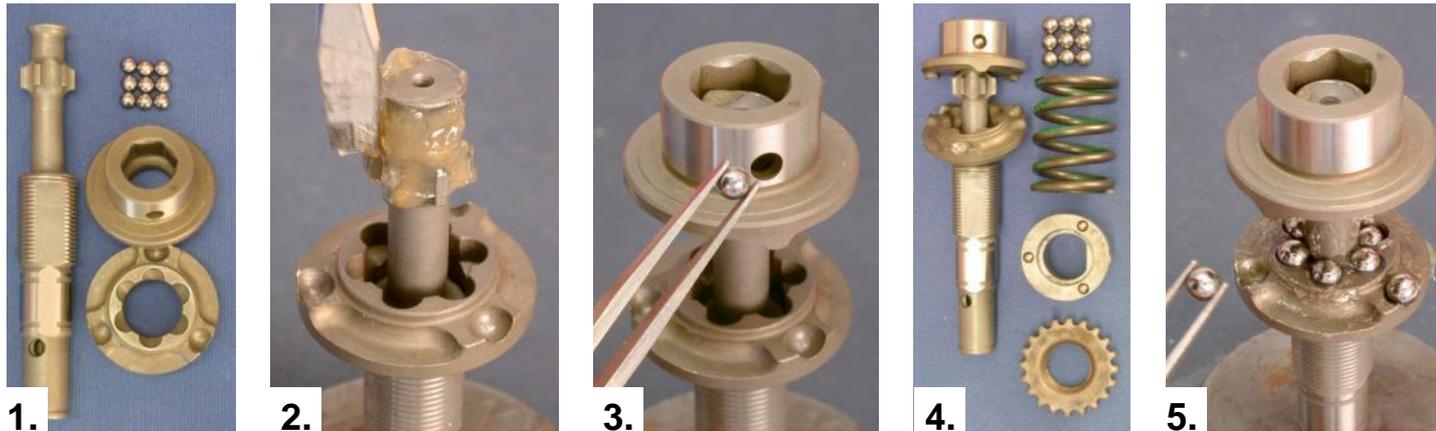
5. Assembly

- 5.1. [Clutch I](#)
- 5.2. [Clutch II](#)
- 5.3. [Head](#)
- 5.4. [Transmission I](#)
- 5.5. [Transmission II](#)
- 5.6. [Electronics](#)
- 5.7. [Electronics film](#)
- 5.8. [Slide switch](#)
- 5.9. [Pushbutton, motor housing](#)
- 5.10. [Function test](#)

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5.1. Clutch I



1. Picture: head (110), balls (80) 9xD=4 mm, cam ring (50), adjusting ring (100).
2. Insert adjusting ring (100) in head (110) in correct position, apply a generous amount of grease to head end (110).
3. Attach cam ring (50) to head (110) and insert ball (80) 9xD=4 mm through hole.
4. Picture: pre-fitted head (110), balls (90) 9xD=5 mm, pressure spring (120), pressure ring (130) and adjusting ring (150).
5. Grease adjusting ring (100) and equip with balls (90) 9xD=5 mm.

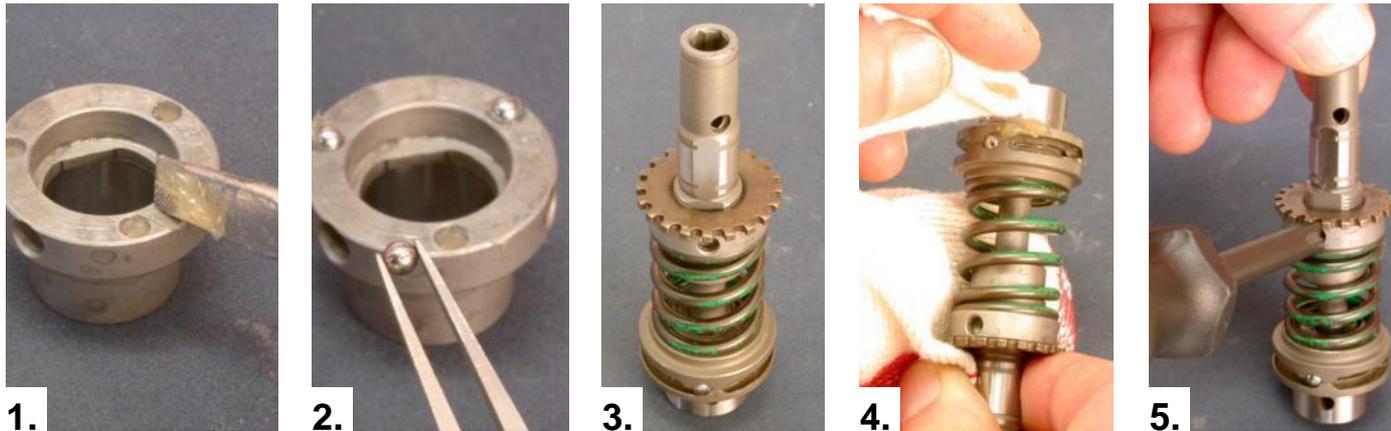
Tool:

- Slotted screwdriver: 0.8x4x100
- Grease 040 101 0100 4
- Forceps

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5.2. Clutch II



1. Fill holes in pressure ring (130) with grease.
2. Place balls (140) $3 \times D = 3 \text{ mm}$ in holes.
3. Fit pressure spring (120), pressure ring (130) and adjusting ring (150) to pre-fitted head (110).
Warning: check that no balls (80) $D = 4 \text{ mm}$ are in the hole of the cam ring (50) or have fallen out.
4. Remove excess grease.
5. Screw in adjusting ring (150) approx. 10 mm.

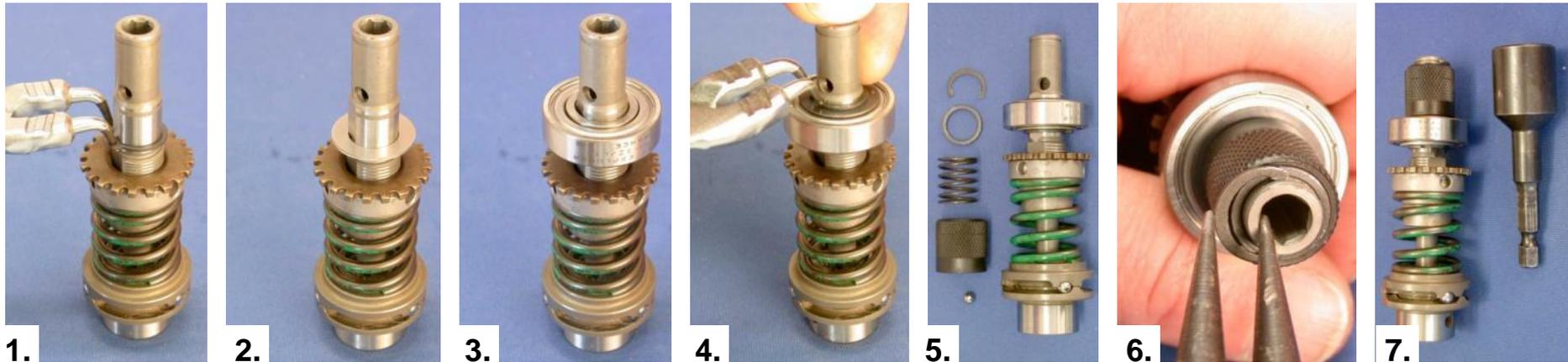
Tool:

- Forceps
- Grease:
040 101 0100 4
- Adjusting
wrench torque:
3 21 23 002 00 6

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5.3. Head



1. Fit circlip [\(215\)](#) to head [\(110\)](#).
2. Fit plates [\(165\)](#) (basic setting = 0.8 mm) to head [\(110\)](#).
3. Fit grooved ball bearing [\(200\)](#) to head [\(110\)](#).
4. Fit plates [\(165\)](#) (basic setting=0.4 mm) and circlip [\(215\)](#) to head [\(110\)](#).
5. Picture: Circlip [\(250\)](#), ring [\(240\)](#), pressure spring [\(230\)](#), sleeve [\(220\)](#), ball [\(80\)](#) D=4mm and pre-fitted head [\(110\)](#).
6. Fit circlip [\(250\)](#).
7. Check tool locking device with tool (1/4"external hex).

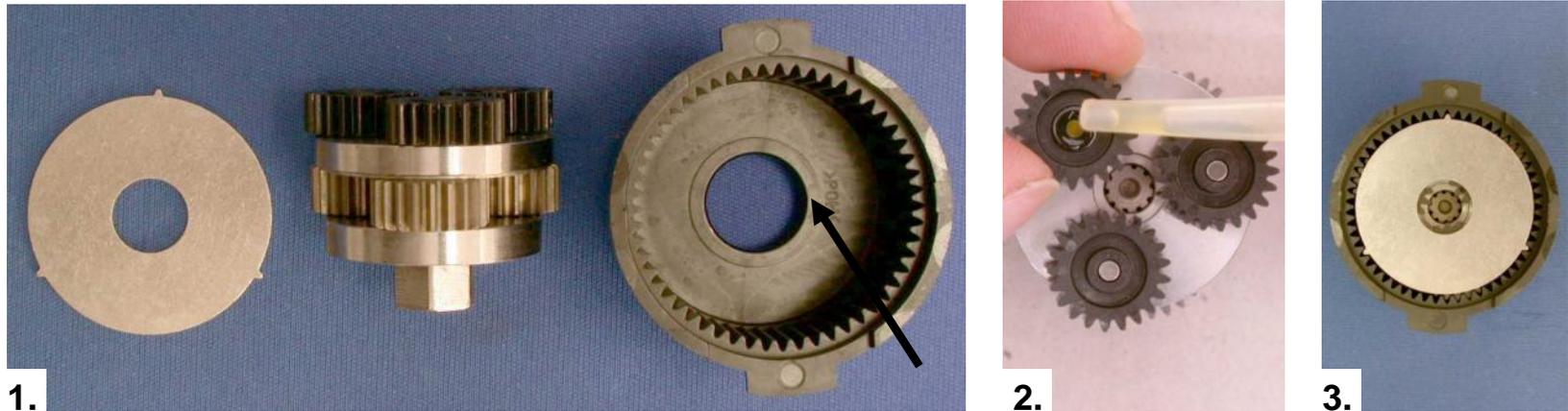
Tool:

- Circlip pliers: opener / stepped 3-10 mm
- Round-nosed pliers

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5.4. Transmission I



1. Picture: dismantled planetary transmission [\(20\)](#)
2. Grease bearing axles of gears.
One drop of liquid grease per axle is enough!
Apply 3-4 drops of liquid grease to the planetary transmission housing and 1 drop on the inner collar of the transmission housing (see arrow in picture 1.)!
3. Picture: Fitted transmission

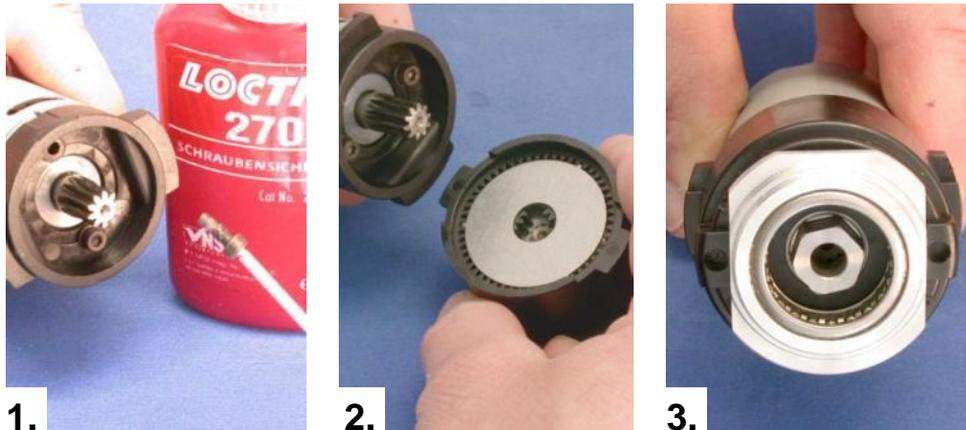
Tool:

- Liquid grease:
040 122 0100 3

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5.5. Transmission II



1. Screw on motor flange (40). Secure cylinder screws (380) with 1.1 Nm 0.1 Nm and Loctite 270.
2. Moisten motor pinion with 1-2 drops of oil and fit motor on transmission. Thrust washer must be fixed in the tothing of the transmission housing. If the thrust washer changes position, you'll hear a scratching noise during operation!
3. Apply a small amount of grease to needle bearing bush assembly (70) (1 g). **Observe installation position! Align curve of needle bearing bush assembly (70) with direction of tool handle**

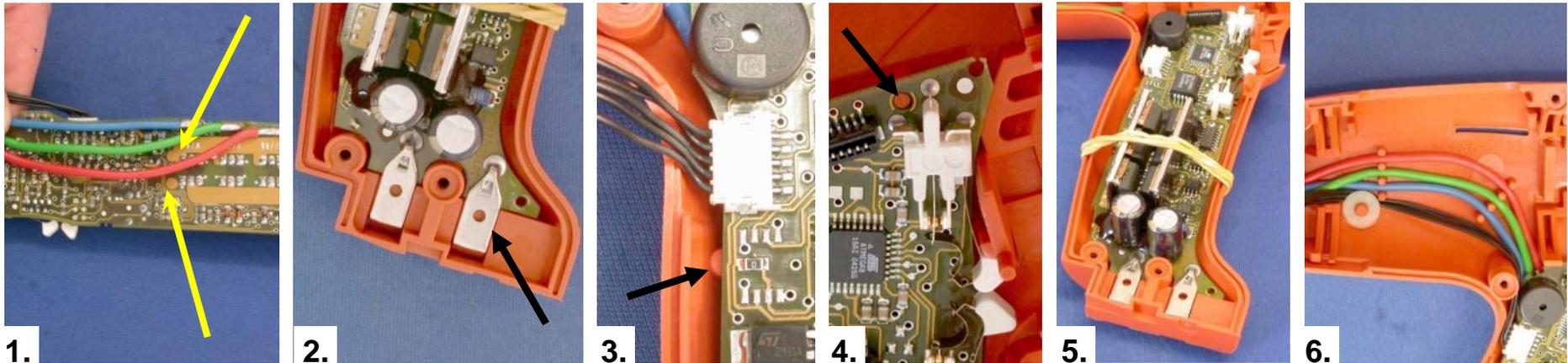
Tool:

- Loctite 270
- Socket head wrench:WAF 2.5
- Liquid grease: 040 122 0100 3
- ASM 9-6/150 or torque wrench with Allen screw: WAF 2.5

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5.6. Electronics

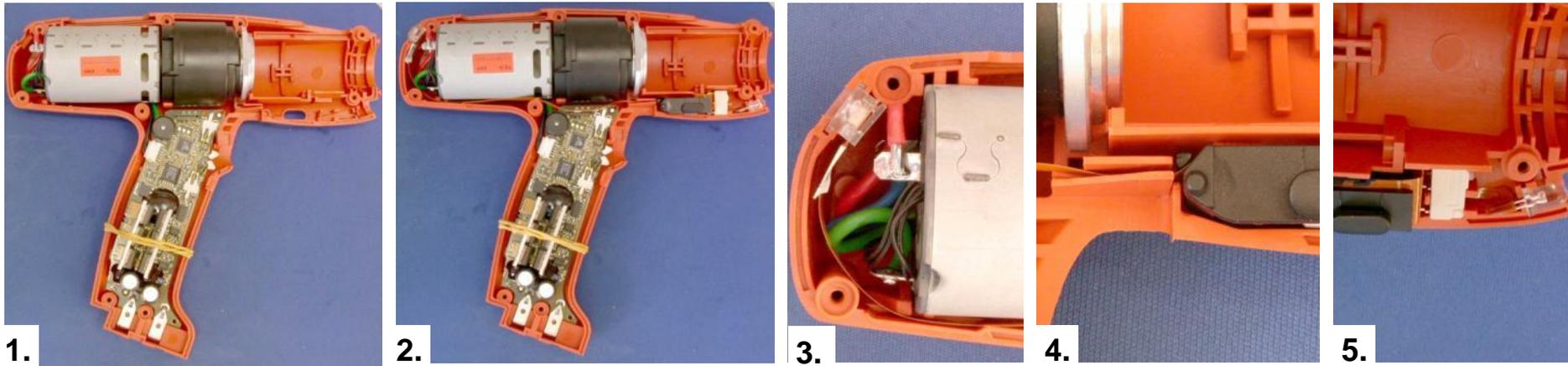


1. Lay stranded wires parallel to the electronics [\(15\)](#). **Pin support points must remain free!!!! (see arrows):**
2. Insert electronics [\(15\)](#) into motor housing [\(265\)](#). **See support points, pictures 2 to 4 (see arrows)!**
5. Electronics can temporarily be fixed with rubber.
6. Lay coloured stranded wires in motor housing. Fix black stranded control wires with plate [\(420\)](#). **Warning: coloured stranded wires must not cross!**

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5.7. Electronics film

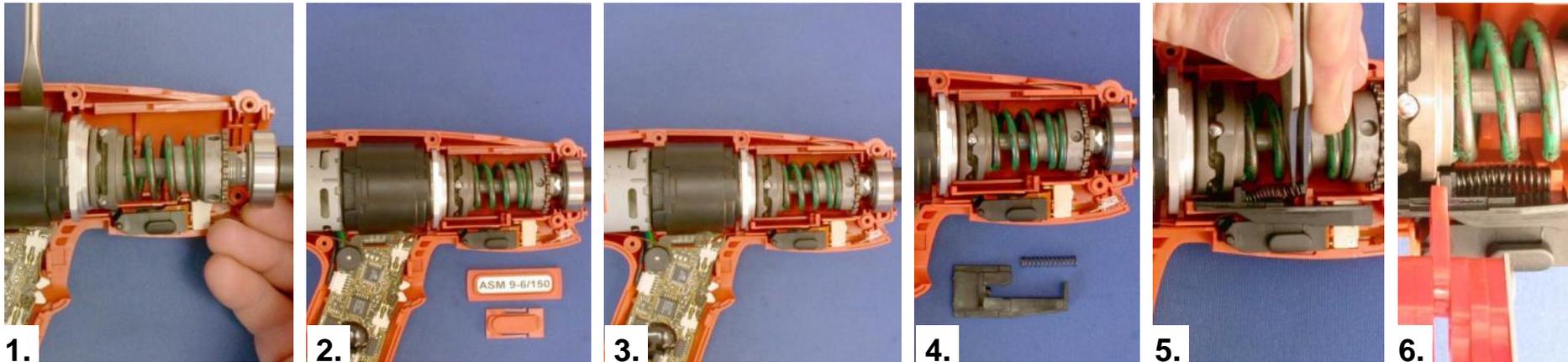


1. Insert motor [\(10\)](#) into motor housing [\(265\)](#) with transmission [\(20\)](#).
2. Insert electronics film [\(30\)](#).
3. Installation position of electronic film [\(30\)](#) on motor side.
4. Installation position of electronic film [\(30\)](#) on pushbutton [\(32\)](#).
5. Installation position of electronic film [\(30\)](#) on key switch and LED

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5.8. Slide switch



1. Gently lift transmission [\(20\)](#) insert pre-fitted head [\(110\)](#).
2. Picture: open tool with insert [\(300\)](#) and sliding cover [\(310\)](#).
3. Place insert [\(300\)](#) and sliding cover [\(310\)](#) in motor housing [\(265\)](#).
4. Picture: open tool with slide switch [\(320\)](#) and pressure spring [\(410\)](#).
5. Fit slide switch [\(320\)](#) and pressure spring [\(410\)](#) in motor housing [\(265\)](#).
6. Check play between slide switch [\(320\)](#) and adjusting ring [\(100\)](#).

Installation dimension: 0.7^{0.3} mm. Installation dimension can be corrected by sliding [\(165\)](#) the grooved ball bearing [\(200\)](#) back and forwards [\(see 5.3.\)](#).

Tool:

- Slotted screwdriver: 0.8x4x100
- Forceps
- Nozzle gauge: 0.4 - 1.0

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5.9. Pushbutton, motor housing



1.



2.



3.



4.



5.

1. Picture: open tool with pressure spring [\(330\)](#) and pushbutton [\(290\)](#).
2. Picture: pre-fitted housing cover [\(265\)](#).
3. **When attaching the housing cover [\(265\)](#) ensure that the electronics film [\(30\)](#) is not damaged!**
4. Picture: tool with attached housing cover [\(265\)](#), screws [\(340\)](#) and coded sleeve [\(280\)](#).
5. Screw screws [\(340\)](#) into motor housing [\(265\)](#) with 1.2 Nm ^{0.1 Nm} [\(265\)](#) and press open coded ring by hand

Tool:

- Cross-tip screwdriver PZ 1
- ASM 9-6/150 or torque wrench with Allen screw: WAF 2.5



5.10. Function test



Test:

1. Perform function test (according to 3.1.)
2. Set torque to minimum.
3. Perform function test with screwdriver test plate. Perform hard-base/soft-base screwdriving applications in clockwise and anti-clockwise direction approx 5 times.
4. Check type plate
5. Fit accessories

Tool:

- 9.6 or 12 V battery
- Screwdriver test plate 64108 001 00 7
- Adjusting wrench (torque) 32123002006
- Socket wrench insert WAF 13 62005013009
- Tool shank 1/4" 60513001004



6. Tools

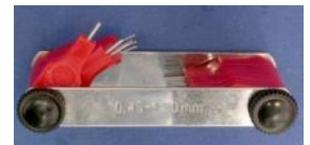
- 6.1. [All mechanical tools](#)
- 6.2. [Tools / workshop recommendation](#)
- 6.3. [Special tools](#)
- 6.4. [Lubricants](#)
- 6.5. [Adhesives, sealants and auxiliary substances](#)

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6.1. All mechanical tools

- **Machine vice** general retailers
- **Cross-tip screwdriver: PZ 1** general retailers
- **Slotted screwdriver: 0.8x4x100** general retailers
- **Circlip pliers: opener / straight 18-60 mm** general retailers
- **Circlip pliers: opener/stepped 3-10 mm** general retailers
- **Socket head wrench: 2.5 mm** general retailers
- **Round-nosed pliers** general retailers
- **Bar magnet** general retailers
- **Rubber (rubber ring)** general retailers
- **Forceps** general retailers
- **Torque wrench (for 1.0-1.3 Nm incl. Allen screw WAF 2.5 and PZ 1)** general retailers
- **Screwdriver test plate (hard-base + soft-base applications) 6 41 08 001 00 7**
- **Adjusting wrench (torque) 3 21 23 002 00 6**
- **Nozzle gauge: 0.45 -1.50** general retailers



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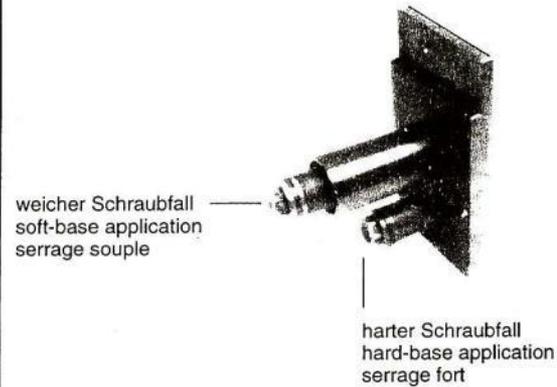
6.2. Tools / workshop recommendation

•	1x	EC motor cpt ET (17)	ASM: 12-12, 9-9, 9-2	5 41 99 013 80 0
			ASM: 12-9	5 41 99 014 80 0
			ASM: 9-6	5 41 99 015 80 0
			ASM: 9-4	5 41 99 016 80 0
			ASM: 9-6/150	5 41 99 017 80 0
•	1x	electronics film (30)		3 07 62 267 99 0
•	10x	ball (80)		4 17 08 017 00 2
•	9x	ball (90)		4 17 08 018 00 0
•	3x	ball (140)		4 17 08 014 00 1
•	1x	plate set (165)		3 24 08 310 99 0
•	1x	liquid grease		3 21 32 027 01 0
•	1x	grease		3 21 60 003 01 4
•	1x	loctite 27		
•	1x	screwdriver test plate (simulator: hard-base + soft-base applications)		6 41 08 001 00 7
•	1x	9.6 V battery		9 26 04 081 02 2
•	1x	12 V battery		9 26 04 083 02 9
•	1x	hexagonal socket wrench insert tool WAF 13		6 20 05 013 00 9
•	1x	tool shank 1/4" external hex		6 05 13 001 00 4
•	1x	coded sleeve set (7 different colours)		3 05 01 345 02 0



6.3. Special tools

Sonderwerkzeuge / Special tools / Outils spéciaux



Schrauberprüfplatte
Screwdriver test plate
Plaque d'essai pour visseuse

6 41 08 001 00 7

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6.4. Lubricants

Lubricant, operating name	Appearance	Technical data & consistency class	Use	Part number of the entire container and the container type	Quantity of grease and item
Greases					
0 40 <u>101</u> 0100 4 (previously Sst1)	Light brown, beige, naturally cloudy, ointment-like	Dripping point: approx. 180°C Application range: -30°C to +120°C NLGI:2	Normally loaded spur gears and roller bearings, as well as friction bearings with higher speeds	Tube 85 g 32160003014 Can 800 g 32132007011 Can 4500 g 32132010015	Fill head (110) on taper with grease, apply grease to ball seats (90+140) Apply approx. 1g to needle bearing bush (70)
0 40 122 0100 3		Name: Viscofuig PD 300 Alternative 04020500002 >>: 32132032026		Bottle 100 ml 32132027010	Drip lubricant on transmission wheels, transmission housing (20), motor pinion (10)

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6.5. Adhesives, sealants and auxiliary substances

Order no.	Name	Colour	Contents	Description	Position
09000600109	Loctite 270	Green	50 ml	Screw locking device/blind hole thread, high-rated fuse and fastening. To secure and seal thread connections. Vibration-resistant. Hard to remove. Favourable gap 0.05 mm, max. 0.12 mm, for threads <M 20, fine-pitch thread <M 40, -55C to +150C, hard to touch 15-30 min, reaches final hardness in 3 hours, storage time min 12 months	Secure screws (380)



7. Coded sleeves

Codier-Hülse

zur farblichen Kennung
von Varianten



Farbe	VE	Bestellnummer
schwarz	10	3 05 01 345 01 0
grau	10	3 05 01 346 01 0
grün	10	3 05 01 347 01 0
blau	10	3 05 01 348 01 0
rot	10	3 05 01 349 01 0
orange	10	3 05 01 350 01 0
gelb	10	3 05 01 351 01 0
Farb-Mix	7	3 05 01 345 02 0



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8. Modifications, extras, repair information

Distinguishing features:

Tool	Torque	Speed	Transmission			Pressure spring (120)		EC motor cpl ET (17)		Electronics (15)	Coding (280)
				i	th	Article codes	Wire Ø	Article code	Article code	Article code	
U-M	rpm	Nm									
				1x/3x/3x	3 01 09-		3 09 01-	5 41 99 01-	3 07 62-	3 05 01-	
9 – 2	0.9 ... 2.0	380	1:39,7	10/21/21	173 01 6 BU	2,3	367 00 4...BU	38 00 WH	268 99 0 WH	347 00 0 GN	
9 – 4	1.5 ... 4.0	800	1:18,2	28/21/12	175 01 8.....YE	2,6	368 00 2...YE	68 00 YE	271 99 0 YE	345 00 3 OG	
9 - 6	1.5 ... 6.0	600	1:23,9	19/21/16	185 01 8.....RD	3,0	371 00 0...GN	58 00 GN	272 99 0 GN	346 00 0 GY	
9 – 6 /150	1.5 ... 6.0	150	1:39,7	10/21/21	173 01 6.....BU	3,0	371 00 0...GN	78 00 RD	273 99 0 RD	351 00 0 YE	
9 – 9	2.0 ... 9.0	380	1:39,7	10/21/21	173 01 6 BU	3,3	372 00 0...RD	38 00.....WH	268 99 0 WH	345 00 3 BK	
12 – 9	2.0 ... 9.0	590	1:32,0	13/21/19	174 01 4.....GN	3,3	372 00 0...RD	48 00.....BL	270 99 0 BU	348 00 0 BL	
12 - 12	3.0 ... 12.0	460	1:39,7	10/21/21	173 01 6.....BU	3,6	373 00 0...WH	38 00.....WH	268 99 0 WH	349 00 0 RD	

The versions differ in their transmission ratios, pressure springs, batteries, motor housings and electronics (same hardware, different software).

Corresponding component versions are highlighted.

Transmission (20): cover plate colour

Pressure spring (120): pressure spring is painted

Electronics (17+15): type plate on electronics is coloured

FEIN Repair Tools



9.1. Battery information



1.+2. 12 V battery: can only be inserted in 12 V housing. > because it is coded

3.+4. 9.6 V battery: can be inserted in 9.6 V and 12 V housing.
> should only be used in 9.6 V tools, otherwise
the maximum speed is not reached.

5. 1250 mAh: indicates the battery capacity. If the measured value is less
than 60% of that stated on the battery, the battery is used.

5. 1505: battery production date: CW 15 / 2005