



Repair instructions



**Applies to:**

ASW 9-10; ASW 10-6; ASW 10-10; ASW 14-6 (PC); ASW 14-10 (PC);  
ASW 14-14 (PC); ASW 18-6 (PC); ASW18-12 (PC)



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**Models described**

**1 Models described**

These repair instructions describe how to repair the following models:

Model	Material number
3/8 in. angled head 	90102018010
1/4 in. angled head 	90102019010
1/4 in. angled head 	90102020010
1/4 in. QI angled head 	90102021010





## 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.

### 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.
	Caution: danger of crushing.
	Caution: danger of cutting.
	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.
	This spare part must always be replaced after disassembly.
	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.

[Further mandatory, prohibition and warning signs and symbols used in the respective repair instructions need to be added, also see ISO 7010]





## 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!**



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 respective individual 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

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## Safety instructions

### 5 Safety instructions

#### 5.1 Structure



##### **Signal word for the danger classification.**

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.



##### **Warning!**

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.



##### **Caution!**

Type and source of the danger.

Possible consequences.

Measure that must be taken in order to avoid this danger.

##### **Please note**





## Safety instructions

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



### **Please note:**

Type and source of the danger.

Damage to the product or its environment.

Measure that must be taken in order to avoid this danger.

## 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**

Slotted screwdriver	2 mm
Circlip pliers	
Punch	1.8 mm
Punch	5 mm
Plastic hammer	

**6.2 Special tools**

Assembly aid	SW0065
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**6.3 Lubricants and auxiliary substances required**

n.a.





## 7 Test and diagnostics options

### Test data

The permitted parameters for the machine can be found in the FEIN electronic information system.





## Disassembly

## 8 Disassembly

## 8.1 Disassembling the 1/4 in. ● angled head

## Tools:

- Slotted screwdriver, 2 mm



1. Remove the circlip (1).

 **Note!**

The circlip (1) is damaged during disassembly.  
The component needs to be replaced.





Disassembly

8.2 Disassembling the 1/4 in. QI  angled head

Tools:

- Circlip pliers



1. Push back the sleeve (1).
2. Remove the circlip (2).

 **Note!**

The circlip (2) is damaged during disassembly.  
The component needs to be replaced.



3. Remove the washer (3).

 **Caution!**

The spring (4) is tensioned.

Risk of injury

When opening the circlip (2), secure the washer (3) with your hand.

4. Remove the spring (4).



5. Remove the sleeve (5).
6. Remove the ball (6).



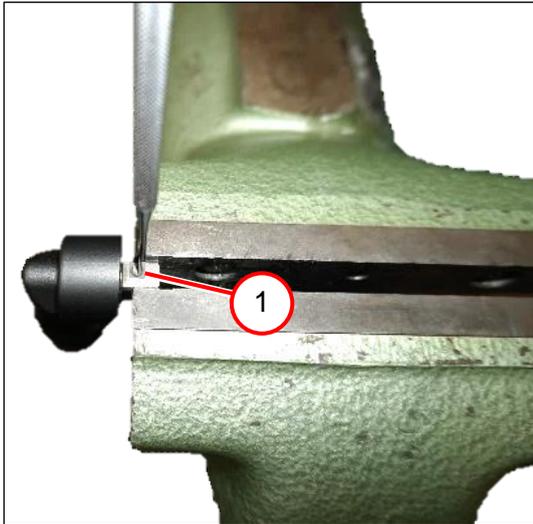


## Disassembly

8.3 Disassembling the 1/4 in.  angled head

## Tools:

- Punch, 1.8 mm diameter
- Plastic hammer



1. Punch through the bolt (1).



2. Remove the plug (2).
3. Remove the spring (3).

**Note!**

The spring (3) is damaged during disassembly.  
The component needs to be replaced.

4. Remove the bolt (4).

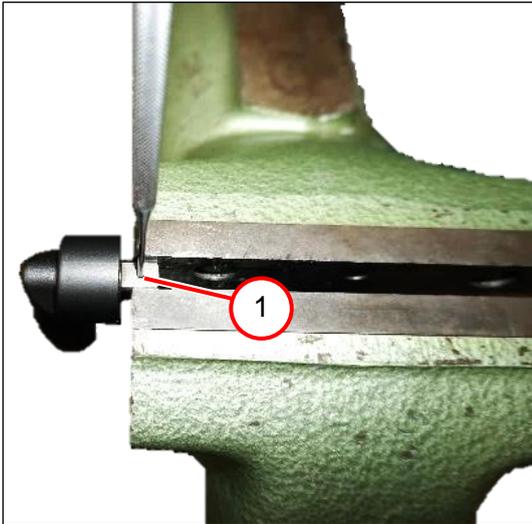




## 8.4 Disassembling the 3/8 in. angled head

**Tools:**

- Punch, 1.8 mm diameter
- Plastic hammer



1. Remove the bolt (1).



2. Remove the spring (2).

 **Note!**

The spring (2) is damaged during disassembly.  
The component needs to be replaced.





## 9 Assembly

### 9.1 Assembling the 1/4 in. angled head

**Tools:**

- Slotted screwdriver, 2 mm



1. Position the circlip (1).



#### Information

The circlip (1) must fully click into place in the groove.





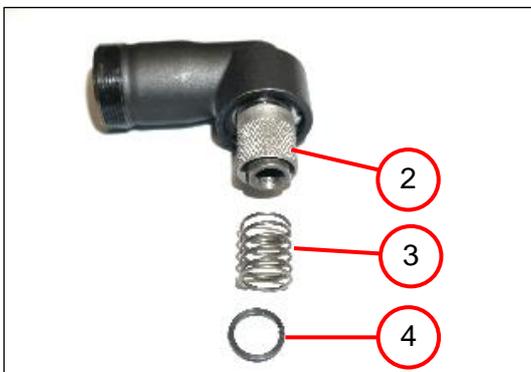
## 9.2 Assembling the 1/4 in. QI angled head

**Tools:**

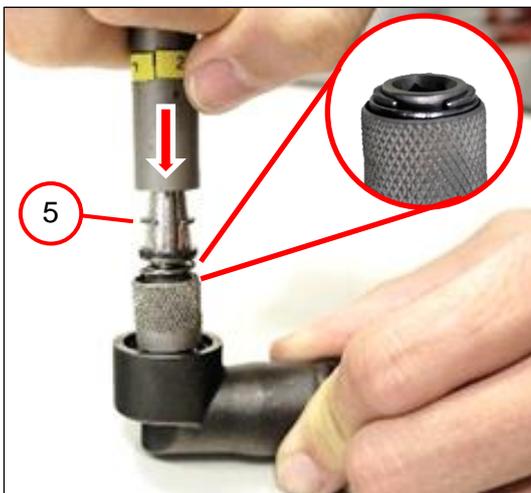
- SW0064 assembly aid



1. Position the ball (1).



2. Position the sleeve (2).
3. Position the spring (3).
4. Position the washer (4).



5. Position the circlip (5).

** Information**

Push the circlip (5) into the groove using the special tool.  
The circlip (5) must fully click into place in the groove.  
\*CLICK\*  

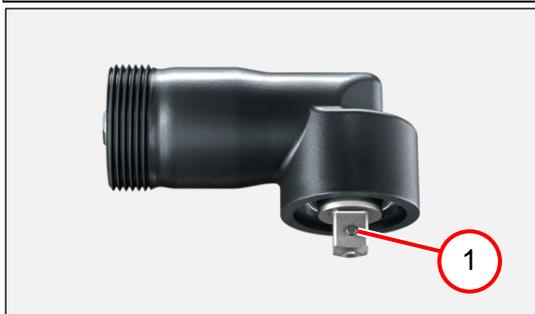




### 9.3 Assembling the 1/4 in. angled head

**Tools:**

- Punch, 5 mm diameter
- Plastic hammer



1. Position the bolt (1).



2. Position the spring (2).
3. Position the plug (3).

** Information**

The plug (3) must be level with the surface of the square.



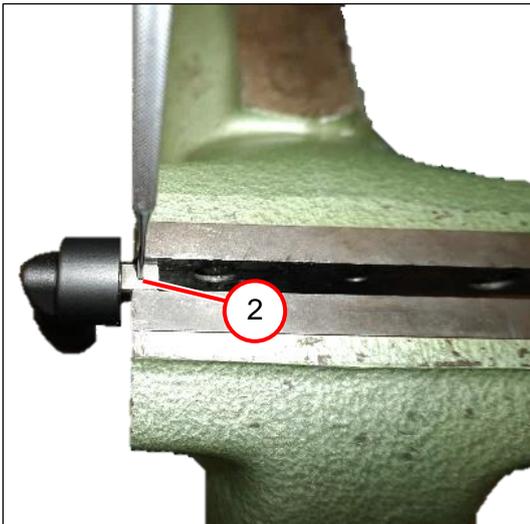
## 9.4 Assembling the 3/8 in. angled head

**Tools:**

- Punch, 5 mm diameter
- Plastic hammer



1. Position the spring (1).



2. Position the bolt (2).



## 10 Inspection following repairs

A visual and functional check must always be performed after carrying out repair and maintenance work. The regulations and legal requirements applicable in the respective country apply.

Minimum tests recommended for this type of machine:

Screws (AccuTec)	
Always:	Visual inspection Speed check Insert tool Check the torque Perform screwdriving test (e. g., test device 6 41 08 001 00 7)

