# Translation of the original instructions

## Chipping hammer – FK 715.4

English version D09 · 08.10.2026

Lettering hammer with loop handle and R 10.3 × 36 shank



**Read in full before use. Keep available at the workplace and pass on with the tool.**

| Item | Shank | Retainer |
|---|---|---|
| FK 715.4 | R 10.3 × 36 | No retainer |

**WARNING: No mechanical chisel retainer is fitted. The lettering chisel can be ejected. Never start the hammer in free air. During operation, continuously guide the chisel by hand and press it against the workpiece.**

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# Explanation of symbols

The safety signs help you recognise important information quickly. Always also follow the accompanying text: it describes the hazard and the protective measures required.

| Sign | Meaning | What must be observed? |
|---|---|---|
|  | General warning sign | Warns of a hazard. The accompanying warning describes the possible injury and how to avoid it. |
|  | Hot surface | The inserted tool or workpiece may be hot. Do not touch without protection; allow to cool before changing the tool. |
|  | Read the instructions | Read the instructions in full before first use and keep them available at the workplace. |
|  | Wear eye protection | Wear suitable eye protection with side shields when working. Use any required face protection in addition. |
|  | Wear hearing protection | Wear suitable hearing protection during operation. Also protect people in the affected work area. |
|  | Wear safety footwear | Wear safety footwear when working to protect your feet, particularly against falling parts. |
|  | Wear protective gloves | Choose protective gloves suitable for the task, particularly when handling sharp-edged, hot or cold parts. Do not reach into moving parts. |
|  | Wear respiratory protection | Use respiratory protection appropriate to the material and risk assessment if engineering measures are insufficient. This sign does not specify a particular filter type or protection class. |

## Signal words in the text

**⚠WARNING: The hazard described can result in serious or fatal injury.**

**⚠CAUTION: The hazard described can result in minor or moderate injury.**

**NOTICE: This information concerns possible property damage.**

Yellow triangles warn of hazards. Blue circles indicate required actions or protective measures. For measures that depend on the task, the conditions described in the text apply; respiratory protection and gloves in particular must be selected to suit the task.

# FK 715.4 version

FK 715.4 has loop handle 052-0300 and no mechanical chisel retainer. The air connection is G 1/4 female. A 5 m plastic hose with quick-release coupling is supplied.

| Article / version | Shank / bushing position |
|---|---|
| 052-60921 · FK 715.4 | R 10.3 × 36 · 1a |

## Drawing and spare parts

The general drawing and corresponding spare-parts list are in Chapters 9 and 10.

## Recommended connection accessories

A 5 m plastic hose and quick-release coupling are supplied. Frölich & Klüpfel recommends an optional Variacor swivel joint of the appropriate type for all tools. It facilitates hose routing and can reduce twisting, coiling and kinking, relieving the operator. A large unobstructed flow area supports the compressed-air supply.

For the FK 715.4 with G 1/4 female thread: Variacor G 1/4 female × G 1/4 male, swivels through 90° and rotates through 360° – 306-DV7MFG14

Suitable hose couplings and connection components are available as accessories in the shop. A 5 m plastic hose and quick-release coupling are supplied.

For connection at the hose end away from the hammer, with a compatible coupling system: plug nipple KR 1/4 – 306-0825

Connection sequence: hammer → short hose with threaded connection → quick-release coupling. Optional: threaded Variacor between hammer and hose. Do not fit a quick-release coupling directly at the tool inlet. Use threaded connections made of hardened steel or a material with comparable impact resistance. The coupling and plug must be compatible. Size the air supply for 0.22 Nm³/min and a maximum of 6 bar at the tool. Assemble and disconnect components according to their manufacturers’ instructions; blue links open the shop.

## Design and assembly

Cylinder 052-0172 has no rope thread. Spring caps from other F+K hammers are not assigned to this cylinder. The chisel bushing guides the shank but does not retain it against ejection. See chapter 13 for notes and limits.

# 1 Use and limitations

FK 715.4 is a handheld pneumatic lettering hammer for lettering and sculpting suitable stone materials. The trigger on the loop handle controls the impact action. The lettering chisel is not mechanically locked.

## Intended use

- Cut lettering and contours in suitable stone materials.
- Carry out fine chiselling and sculpting with lettering chisels suited to the tool.
- Match the insert tool and working method to the material and task.
- Use only suitable, undamaged insert tools.

During operation, the lettering chisel must be held continuously by hand in the guide bushing and pressed against the workpiece. This manual guidance is not a technical retaining device. A different shank shape or arbitrary accessories do not extend the intended use.

Secure the workpiece. Do not use the lettering chisel as a lever or drive it in so deeply that it jams.

## Intended users and working conditions

Operation is restricted to instructed persons who understand these instructions and can assess the hazards of their task. Repairs and work on internal components must be carried out by qualified personnel. Work with secure footing, adequate space to move and a safely supported or secured workpiece. These operating instructions must accompany the hammer whenever it is passed on, including when loaned or hired out. The operator must be instructed in its safe use.

Check the material, coatings, service lines and ambient conditions before starting. Work inside vessels or confined spaces requires workplace authorisation, safe ventilation and the necessary protective measures. Do not work on vessels that are closed, pressurised or have not been safely cleaned.

## Avoid foreseeable misuse

- Never operate in free air or without continuous manual guidance and workpiece contact.
- Do not use as a lever or strike the housing with a hammer. Do not free a jammed chisel by continuing to hammer or by forcing it sideways.
- Do not lock the trigger in the operating position or remove or modify safety components. Do not point at people or animals.
- Do not use in potentially explosive atmospheres or on live electrical components. Electrical insulation and suitability for potentially explosive areas have not been established.

**Applies exclusively to article 052-60921 with R 10.3 × 36 shank.**

# 2 Mechanical safety

WARNING indicates a hazard that can result in serious or fatal injury. CAUTION indicates a hazard that can result in minor or moderate injury. NOTICE concerns possible property damage.

### ⚠WARNING Compressed air and unintended starting

Unintended movements and whipping hoses can cause serious injury. A pressurised hose can whip if disconnected or torn off. Before every tool change, cleaning or maintenance operation, shut off the air supply and disconnect the hammer from the compressed-air supply. No separate venting step is required at the tool. When disconnecting, follow the instructions for the hose coupling used. The full procedure is described in Chapter 5.

- Before use, check hoses, couplings and connections for damage and secure fitting. Have defective connections replaced.
- Use only suitable compressed-air components rated for the supply pressure. Maximum 6 bar at the tool. Do not use other compressed gases.
- Never direct compressed air at the body. Do not grab a whipping hose; shut off the supply at a safely accessible point.
- Protect hoses against being driven over, sharp edges and hot surfaces; route them to avoid trip hazards and tensile loads on the hammer.

### ⚠WARNING Ejected tools and fragments

Ejected parts can seriously injure operators and bystanders. No mechanical chisel retainer is fitted. The lettering chisel can be ejected. Never start in free air. Continuously guide the chisel manually in the bushing and press it against the workpiece.

Wear eye protection with side shields; also wear face protection where the task requires it. Screen the work area against flying fragments and keep bystanders away. A face shield does not replace the required eye protection. Keep body parts out of the direction of impact and ejection.

### ⚠WARNING Unloaded blows and crushing

Uncontrolled movement and pinch points can cause serious injury. Hold the hammer by its handle and guide the lettering chisel with the other hand. Do not reach onto the cutting edge or between chisel and workpiece. Release the trigger and wait for standstill before lifting off.

Wear safety footwear and suitable protective clothing. Keep the handle clean and free of oil. Secure small workpieces with a suitable clamping device. Do not hold them with your free hand close to the inserted tool. Maintain secure footing even when breaking through the material.

**Do not continue using blunt, broken or deformed tools. The striking face must be flat and undamaged. Do not quench heated tools in water; damage to the material creates a risk of fracture.**

# 3 Health and working environment

**⚠WARNING Dust and harmful substances**

Inhaling hazardous dust or fumes can cause serious respiratory disease. Stone working can release harmful dust, particularly dust containing crystalline silica. Check the stone material and existing coatings before work. If substances are unknown or particularly hazardous, stop work until clarified.

Reduce emissions as close as possible to their source using suitable workplace extraction installed independently of the hammer. Direct exhaust air and dust away from the breathing zone. Avoid raising dust during cleaning; do not blow it off with compressed air. Use the respiratory protection selected through the risk assessment if engineering measures are insufficient. The filter type and protection class depend on the substance present.

**⚠WARNING Noise**

High sound levels can permanently damage hearing. The hammer produces high noise levels. Wear suitable hearing protection and also protect people nearby. Operate only with the silencer fully fitted and functioning. If the noise becomes noticeably louder, stop the hammer and have it checked. Arrange work procedures, screening and time spent in the area to reduce noise exposure.

**⚠WARNING Hand-arm vibration and repetitive strain**

Vibration can damage nerves, blood vessels and joints. Guide the hammer with the force needed for safe control and effective feed pressure; avoid unnecessarily high gripping forces. Use suitable, sharp tools and remedy wear promptly. Limit exposure time according to the workplace risk assessment and alternate tasks wherever possible.

Plan task changes and recovery periods according to the workplace risk assessment. Keep hands warm and dry. If you experience tingling, numbness, pain or unusual discolouration of the fingers, stop work, inform the responsible person and seek medical assessment. Emission values alone cannot be used to determine a safe daily operating time.

**⚠WARNING Hot and cold surfaces**

Hot tools and workpieces, and handle areas that have become very cold, can cause burns or cold injury. Allow hot parts to cool before touching them and wear suitable gloves.

The inserted tool and material being worked on can become hot; expanding compressed air can cool areas of the handle. Allow parts to cool before changing the tool and use suitable gloves. Select gloves according to the cutting, heat and cold hazards; they must allow a secure grip. Gloves are not a substitute for vibration reduction.

**⚠WARNING Electric shock, fire and explosion**

Damaged electricity or gas lines can cause serious or fatal injury. Identify vulnerable service lines before starting work and have them secured or isolated. Take account of ignition sources and flammable materials in the work area.

Before working on walls or components, determine the location of electrical wiring and gas, water and other service lines. Have affected energy sources safely isolated. Chiselling can produce sparks. Remove or secure flammable materials and observe any required work permits. The hammer is not an electrically insulated tool.

## Residual risks

Even when used correctly, risks remain from flying fragments, noise, vibration, dust, hot or cold surfaces and unintended movements when breaking through. Adapt protective measures to the specific task before starting work.

# 4 Technical data and emissions

| Characteristic | Value |
|---|---|
| Maximum operating pressure | 6 bar |
| Weight | 1.1 kg |
| Length | 149 mm |
| Air consumption | 0.22 Nm³/min |
| Air connection | G 1/4 female |
| Impact rate | 4,400 $min^{-1}$ |
| Piston stroke | 30 mm |
| Piston diameter | 12 mm |
| Piston weight | 18 g |

## Controls

- Trigger on the handle: starts the percussion movement when pressed; release to stop.
- Air connection on the handle: connection to a supply regulated to a maximum of 6 bar.
- Chisel bushing: guides the matching shank but does not lock it. No idle-running protection is fitted.
- Nipple 052-0219 on the handle: compressed-air line connection. No flow regulation as on the A version is fitted.

## Vibration and noise emission values

| Measured quantity | Value | Measurement method and uncertainty |
|---|---|---|
| Vibration value | 4.9 m/s² | DIN EN 28662-1/-2; K = 2.4 m/s² |
| Sound pressure level | 96.0 dB(A) | DIN EN ISO 15744; ±3.0 dB(A) |

# Notes on measured values and workplace exposure

The stated emission values were measured under specified laboratory conditions. Comparison with other tools requires the same measurement standards and comparable test conditions. The stated measurement uncertainties must be taken into account.

These measured values do not describe actual exposure at every workplace and are not sufficient on their own for the workplace risk assessment. Exposure during work may be higher. It depends, among other things, on the working method, inserted tool, workpiece, condition of the hammer, workplace layout and exposure duration. A person’s physical condition also influences the health risk.

The employer must assess the actual conditions of use and exposure times and specify suitable protective measures. Workplace measurements are required if the available data are insufficient. The stated measured values cannot be used to derive a universally safe daily operating time.

Prolonged or high exposure to hand-arm vibration can damage blood vessels, nerves and joints. Follow the protective measures in Chapter 3. If you experience tingling, numbness, pain or unusual discolouration of the fingers, stop work, inform the responsible person and seek medical assessment.

Frölich & Klüpfel recommends involving the occupational physician in the assessment and ensuring the necessary occupational health surveillance. Symptoms should be identified early and work procedures and protective measures adjusted accordingly.

# 5 Connection and safe shutdown

## Before each start-up

1. Check tool type and shank. Inspect hammer, handle, trigger, silencer, chisel bushing, lettering chisel and lines. Do not start if damaged.
2. Check the workplace, material and surroundings. Secure the workpiece, arrange protection against flying fragments and dust reduction, keep people away and put on personal protective equipment.
3. Insert a matching lettering chisel, continuously guide it by hand in the bushing and press it firmly against the workpiece. Keep the trigger clear until starting. The chisel is not locked against ejection.
4. Guide the lettering chisel manually at all times and hold it firmly against the workpiece. Operate the trigger gradually only with firm workpiece contact. Never start in free air.

## Connection

**⚠WARNING Unintended starting and whipping hose**

When compressed air is admitted, unintended starting or a loose hose connection can cause serious injury. Do not press or lock the operating control. Check the seating of the inserted tool and the connections before admitting air; secure the hammer and hose. Admit air slowly and shut it off immediately if anything unusual occurs.

1. Shut off the supply. Prepare the hose and coupling for safe connection according to their manufacturers’ instructions.
2. Connect a short, suitable hose to the hammer with a threaded connection, optionally via a threaded Variacor; position the quick-release coupling only at the hose end away from the hammer. Do not press the trigger. Route the hose so that the hammer can be guided freely.
3. Provide clean, dry, lubricated compressed air; check the filter and air preparation unit. The employer must limit the pressure at the tool to a maximum of 6 bar using an upstream pressure regulator. The hammer has no pressure limiter of its own. A flow control does not replace a pressure regulator.
4. Hold hammer and chisel securely, point away from your body and other people and open the air supply slowly. Do not operate the trigger. Shut off immediately if leakage or unexpected movement occurs.

# Safe shutdown and disconnection

**⚠WARNING Pressurised hose connection**

Disconnecting a pressurised connection can cause the hose to whip and inflict serious injury. Shut off the air supply and secure it against reopening. Secure the hose and coupling and disconnect them according to the coupling manufacturer’s instructions. Do not loosen a pressurised threaded connection.

1. Release the trigger and wait until movement stops. Secure the hammer and inserted tool against falling or uncontrolled movement.
2. Close the air supply at the designated shut-off device and secure it against unintended reopening.
3. Secure the hose and coupling against uncontrolled movement. Follow the disconnection sequence and protective measures specified by the coupling manufacturer; the supply line may be pressurised independently of the tool.
4. Release the coupling according to its instructions and disconnect the hammer completely from the compressed-air supply. Secure it against unintended reconnection.

**The tool does not require separate venting. This does not replace safe disconnection of the hose connection. Do not loosen a pressurised threaded connection.**

**Connection sequence: hammer → screwed-on hose → quick-release coupling. A 5 m plastic hose and coupling are supplied. Do not fit a quick-release coupling directly to the hammer. Protect lines against damage and avoid trip hazards.**

# 6 Changing the inserted tool

**⚠WARNING Unintended blows during tool changes**

Unintended blows can cause serious hand injuries. Completely disconnect the compressed-air supply before removing the lettering chisel. Never reach into the chisel socket. Do not operate the trigger during changes; allow hot parts to cool.

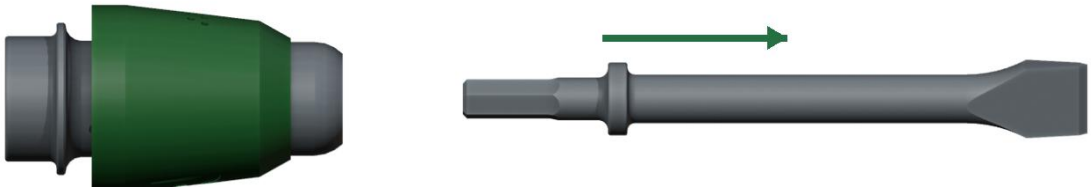
## Selecting a suitable tool

Chisels complying with DIN 8530 may be used regardless of manufacturer. Shank and dimensions must match the fitted chisel bushing. Permitted versions are listed in the version table. Do not modify the bushing to accommodate unsuitable tools.

Inspect cutting edge, shank and striking face. Reject tools with cracks, chips, severe deformation or wear. The striking face must be flat and undamaged.

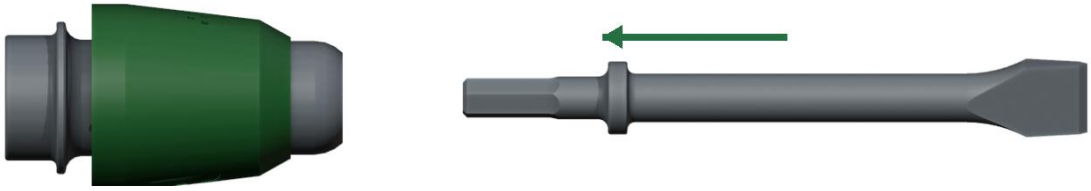
Schematic illustration of tool changing. Shape and shank may vary by version. Select the appropriate insert tool using the version table.

### Preparation and removal



Completely disconnect the hammer from the compressed-air supply. Hold the lettering chisel, allow it to cool, then remove it from the bushing. Clean and inspect socket and shank. Do not reach into the socket.

# Inserting and guiding the lettering chisel



1. Select a suitable, undamaged lettering chisel and insert the shank into the chisel bushing.
2. Hold the lettering chisel by hand in the guide bushing. Keep hands away from the cutting edge, workpiece contact and pinch points. Hold the hammer securely by its handle.
3. Press the lettering chisel firmly against the workpiece. Only then operate the trigger and maintain contact pressure throughout operation.

**⚠WARNING No mechanical chisel retainer**

No mechanical chisel retainer is fitted. During operation, continuously hold the lettering chisel in the bushing and press it against the workpiece. Release the trigger immediately if guidance or contact is lost.

Before lifting off the workpiece or releasing the lettering chisel, release the trigger and wait for complete standstill.

Even when changes are frequent, change tools only after completely disconnecting the compressed-air supply.

Do not reach onto the cutting edge or between lettering chisel and workpiece. Keep body parts outside the impact direction and possible ejection path.

## Restarting

Connect after checking according to chapter 5. For the functional test, manually guide the lettering chisel and press it firmly against the workpiece, then operate briefly. No free-running test. Stop immediately if noise is unusual, running is uneven or the guide is worn.

WARNING: Sensitive starting does not prevent tool ejection. No idle-running protection is fitted. Unloaded blows can injure people and damage the hammer.

# 7 Operation and handling malfunctions

## Cutting lettering and contours

**⚠WARNING Tool ejection and flying fragments**

The lettering chisel has no mechanical retainer and can be ejected, causing serious injury. Continuously guide the chisel manually and press it against the workpiece. Never start in free air. Keep body parts outside the ejection path, wear eye protection and keep bystanders away.

1. Choose the working position so that the material and tool can be controlled. Take account of the direction of material removal and possible breakthrough; nobody may be endangered behind the working area.
2. Hold the hammer securely by its handle. Use the other hand to guide the lettering chisel continuously in the bushing and maintain workpiece contact. Do not reach onto the cutting edge or between chisel and workpiece.
3. Operate the trigger progressively. Slight pressure gives sensitive starting. Work only with workpiece contact. Avoid unnecessarily high grip force, sideways levering and unloaded blows.
4. Release the trigger and wait until movement stops before withdrawing the chisel from the material or changing the working position. Do not drive the chisel in too deeply or force it sideways when withdrawing it.

## Interrupting work

Release the trigger (the only stop function); the hammer stops immediately. Disconnect according to chapter 5 before setting down or leaving. If the air supply fails, release the trigger and shut off: if the trigger is held, the hammer can restart when pressure returns. Restart according to chapter 5.

## If the chisel jams

**⚠WARNING Sudden release of forces**

When a jam is released, the hammer, chisel or material being worked on can move suddenly and cause serious injury. Release the control, secure the tool and material, and shut off and disconnect the compressed-air supply as described in Chapter 5. Release the jam only in a controlled manner; consult qualified personnel if the forces acting on the parts are unclear.

1. Release the trigger immediately. Do not continue hammering, use the hammer as a lever or pull on the hose.
2. Secure the hammer and workpiece against uncontrolled movement. Shut off and disconnect the supply as described in Chapter 5.
3. Have an assessment made of how the jam can be removed without an uncontrolled release of forces. Do not release clamped or stressed parts in an uncontrolled manner. If safe release is not possible, consult qualified personnel.
4. After freeing the chisel, have the lettering chisel, bushing and hammer inspected for damage. Replace damaged parts before further operation.

## In the event of a dangerous malfunction

**⚠WARNING Uncontrolled movement and loose parts**

A hammer that continues running, a loose inserted tool or a whipping hose can cause serious injury. Stop work immediately. If the tool does not stop, close the air supply at a safely accessible shut-off point. Keep your distance, do not reach into moving parts and do not attempt to restart while the fault remains unexplained.

Stop immediately if there is unusual noise, increased vibration, worn tool guidance, leakage or a trigger that does not return. If the hammer does not stop when released, shut off the air at a safely accessible point. Do not reach into moving parts.

Once movement has stopped, disconnect the hammer from the compressed-air supply and label it to prevent reuse. Have qualified personnel rectify the cause of the fault; do not attempt to restart while the fault remains unexplained. If a hose is whipping, keep your distance and shut off the air supply.

## After work

With the hammer disconnected from the compressed-air supply, check it for damage, clean it and lubricate it according to Chapter 8. Report defects. Allow the inserted tool to cool and store the tool and accessories safely.

# 8 Care and maintenance

**⚠WARNING Starting during maintenance**

Unexpected starting during maintenance can cause serious impact and crushing injuries. Shut off and disconnect as described in Chapter 5 before any work. Only qualified personnel may work on internal components. Item numbers refer to Chapters 9 and 10.

## Checks and care by instructed persons

| Time or occasion | Check and action |
|---|---|
| Before every use and after changing the tool | Inspect lettering chisel, chisel bushing, trigger, handle, silencer and air connections. Do not start if defective. |
| After use and when dirty | Clean external surfaces gently. Do not push dirt into the holder or air connection; do not blow off dust. |
| During operation | Ensure lubrication and correct operation of the air preparation unit; watch for leakage and changes in sound, vibration and performance. |
| After damage, jamming or repair | Inspection by qualified personnel and documented release before returning to service. |

The hammer must be operated with lubricated compressed air. Use a suitable resin-free lubricating oil. Recommended product: compressed-air lubricating oil in the 10 ml Liquid bottle, part number 307-1654. The 10 ml refers to the container size, not the dosage. Adjust the oil supply to the conditions of use and operating duration. Avoid running dry. If excessive oil escapes, reduce the oil supply; adequate lubrication must still be ensured.

After about 120 operating hours or at least every six months, whichever comes first: qualified personnel must dismantle and clean the hammer. Inspect chisel bushing, trigger, silencer, threaded connections and air connections for wear, damage and secure fit.

# Work by qualified personnel

**⚠WARNING Unintended starting during dismantling**

Unintended starting can cause serious impact and crushing injuries. Before opening the hammer, disconnect the air supply completely as described in Chapter 5 and prevent reconnection. Secure parts against falling. Internal work is restricted to qualified personnel.

1. Use only spare parts obtained from Frölich & Klüpfel. Do not clamp the handle or clamping nut.
2. With the hammer disconnected, loosen the clamping nut (right-hand thread) and dismantle according to the drawing. Replace worn parts.
3. We recommend replacing wear parts with article numbers beginning 307- every twelve months. Work on internal components is reserved for qualified personnel; chisel bushings may be replaced only by F+K service.
4. Insert the piston into the cylinder. Fit tubular valve 052-0114 and cylinder cover 052-0113 according to the drawing.
5. The stepped side of the cylinder cover must cover the cylinder. The pin-hole markings on the cylinder and cover must align.
6. Always replace buffer 307-2541 when replacing the control assembly.
7. Continue assembly according to this model’s drawing and parts list. Remove the valve only as a complete assembly.
8. A defective valve generally also requires replacement of the valve bushing; this work is reserved for qualified personnel. Do not apply assembly instructions for other handle types.
9. These notes are not complete repair instructions.

## Checks after repair

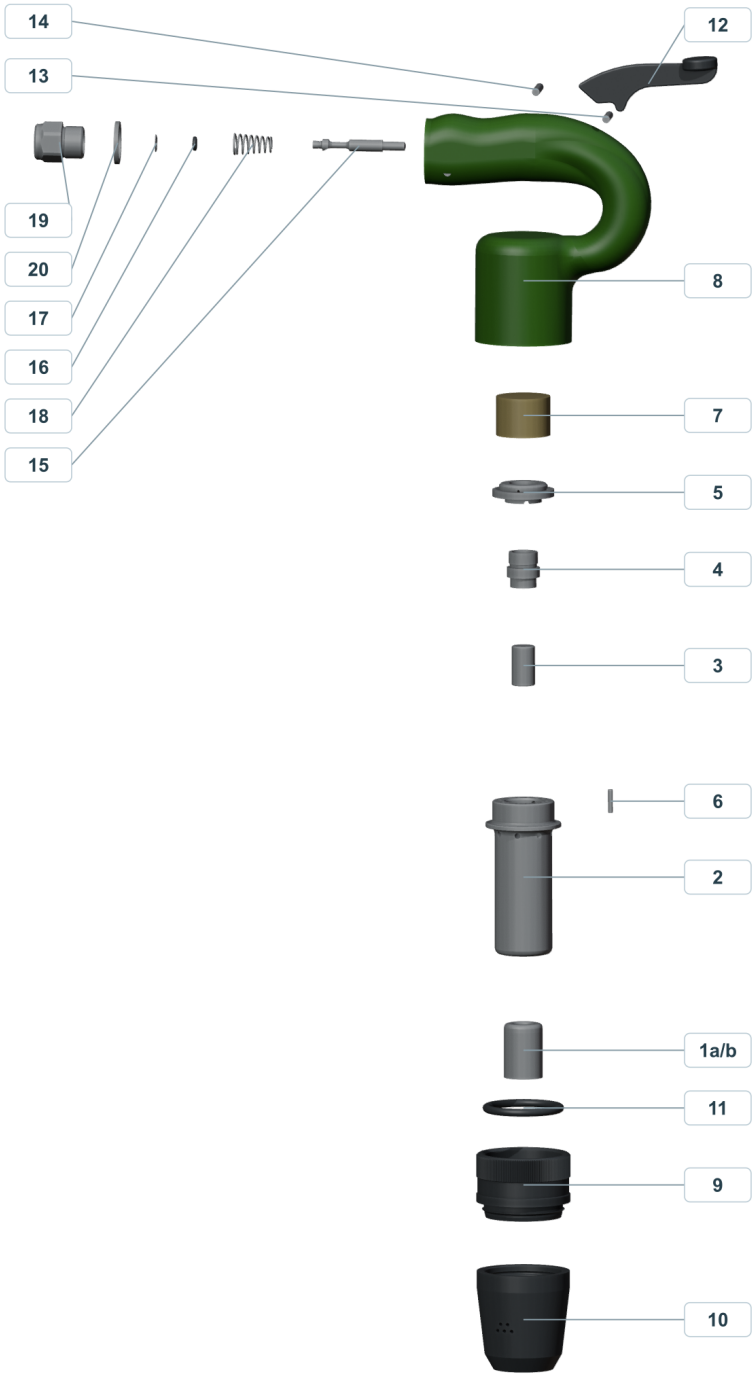
**⚠WARNING Incorrect assembly and tool ejection during testing**

Incorrectly assembled parts or an ejected lettering chisel can cause serious injury. Before connecting, check completeness, assembly and guidance. Test only with continuous manual chisel guidance and firm workpiece contact. No unloaded blows; no mechanical retainer is fitted.

1. After every repair, check completeness, assembly, guidance and tightness. Test only with a manually guided lettering chisel and firm workpiece contact; check stopping when the trigger is released.
2. No unloaded blows. Record the test result and responsible person.
3. Return to service only after a successful test.

# 9 Exploded view FK 715.4

Schematic parts identification. Blue links open spare parts in the shop.




## 10 Spare parts

| Item | Qty. | Description | Part number |
|---|---|---|---|
| 1a | 1 | Bushing R 10.3 × 36 | 052-7233 |
| 1b | 1 | Bushing R 10.0 | 052-7235 |
| 2 | 1 | Cylinder | 052-0172 |
| 3 | 1 | Piston | 052-0112 |
| 4 | 1 | Valve sleeve | 052-0114 |
| 5 | 1 | Cylinder cover | 052-0113 |
| 6 | 1 | Pin | 304-3431 |
| 7 | 1 | Buffer | 307-2541 |
| 8 | 1 | Complete handle | 052-0300 |
| 9 | 1 | Clamping nut | 052-0058 |
| 10 | 1 | Silencer | 307-2540 |
| 11 | 1 | O-ring | 307-2439 |
| 12 | 1 | Trigger | 052-0309 |
| 13 | 1 | Pin | 303-1272 |
| 14 | 1 | Pin | 303-1273 |
| 15 | 1 | Valve | 052-0305 |
| 16 | 1 | O-ring | 307-2445 |
| 17 | 1 | Serrated ring | 304-5292 |
| 18 | 1 | Compression spring | 304-7103 |
| 19 | 1 | Nipple | 052-0219 |
| 20 | 1 | Sealing ring OK-3/8 | 313-531773 |
| 21 | 1 | Hose without coupling | 330-0160 |
| 22 | 1 | Coupling | 306-0805 |

**NOTICE – Damage to the cylinder**
Incorrect removal or replacement of the chisel bushing can damage the cylinder. Have chisel bushings replaced exclusively by F+K Service. Do not remove or replace them yourself.

**NOTICE – Damage to the hammer**
Reusing the old buffer when replacing the upper cover, lower cover or control plate can damage the hammer. Always replace buffer 307-2541 during this work.

**Variants and spare-parts orders**
Bushing 052-7233 for R 10.3 × 36. Older R 10.0 bushing 052-7235 is only a spare-part alternative; these instructions apply to article 052-60921. Nipple 052-0219 on the handle as shown in the drawing. Handle (8) is also available complete (052-0300). Connection accessories not illustrated: hose (21) and coupling (22).

# 11 Troubleshooting, storage and disposal

**⚠WARNING Unintended starting during troubleshooting**

With compressed air connected, unexpected movement or a whipping hose can cause serious injury. Before inspection, stop, shut off and disconnect completely as described in Chapter 5; secure against reconnection. Do not attempt to start while the fault remains unexplained. Only qualified personnel may inspect and repair internal components.

The following table helps identify faults with the tool stopped and disconnected.

| Fault | Possible cause | Action |
|---|---|---|
| Does not operate | Rust, dirt or wear in the valve mechanism, piston, piston bore or bushing | Inspection by qualified personnel; have the tool cleaned, lubricated or repaired. |
| Does not operate after assembly | Incorrect assembly or defective compression spring | Have qualified personnel check assembly and the spring. |
| Irregular operation | Valve sleeve mechanism or valve dirty or worn; excessive lubrication | Stop; have qualified personnel inspect, clean or repair the tool. |
| Low impact performance | Insufficient air supply or dirty strainer | Check the supply; do not raise pressure above 6 bar. Have the strainer cleaned correctly with the system depressurised. |
| Air blows through the hammer | Foreign matter in the piston bore | Have the tool professionally dismantled and cleaned. |
| Does not stop or guide is worn | Fault in trigger mechanism or chisel bushing | Shut off the air supply; do not continue using the tool; contact Service. |

## Transport and storage

Disconnect the hammer from the compressed-air supply before transport. Carry it by the handle, never by the hose. Pack the inserted tool securely for transport; hot or sharp-edged parts must not endanger anyone. Secure the tool against sliding and falling.

Clean and lubricate before extended periods out of use. Store in a dry, clean place protected against unauthorised use; protect the air connection against dirt. Before using again, perform the checks in Chapter 5.

**⚠WARNING Health hazards from cleaning agents**

Cleaning agents can harm the skin, eyes and respiratory tract; flammable agents also present a fire hazard. Work only with the tool completely disconnected from the compressed-air supply. Observe material compatibility and the safety data sheet, provide adequate ventilation, keep ignition sources away and apply the specified protective measures.

Internal cleaning and preservation must be carried out only by qualified personnel at the customer’s premises or by the manufacturer’s service department. Flush the assembled hammer with dearomatised kerosene only while disconnected from the compressed-air supply; do not operate it with compressed air during flushing. Allow the flushing agent to drain and immediately lubricate according to Chapter 8. Use degreasing cleaners that do not attack O-rings for individual parts; clean plastic parts only with suitable cleaners. Follow the safety data sheet, ventilate well and keep ignition sources away.

## Decommissioning and disposal

Disconnect the tool from the compressed-air supply. Collect lubricant residues and contaminated cleaning agents and dispose of them according to the safety data sheet and local requirements; do not allow them to enter the ground or wastewater system. Have the tool professionally dismantled and send the materials for appropriate recycling.

## Service

“F. u. K.” Frölich & Klüpfel Drucklufttechnik GmbH & Co. KG
Wernerstr. 32 · 42285 Wuppertal
Telephone +49 (0) 202 89002-0 · info@froelich-kluepfel.de

# 12 Conformity and documents

The joint EC declaration of conformity for the hammer versions specified in it is supplied separately on paper. These operating instructions do not replace that declaration.

## Associated EC declaration of conformity

The specific machine details and signature are given in the manufacturer’s separate declaration.

The technical documentation for assessing tool ejection is not yet complete. Publication of these instructions does not constitute a final conformity or safety assessment.

| Field | Details |
|---|---|
| Manufacturer | „F. u. K.“ Frölich & Klüpfel Drucklufttechnik GmbH & Co. KG, Wernerstr. 32, 42285 Wuppertal |
| Product covered by these instructions | FK 715.4; article 052-60921 |
| Directive | 2006/42/EC |
| Standards used for internal assessment | DIN EN ISO 12100; DIN EN ISO 11148-4. Tool-ejection assessment pending. |
| Signatory | M. Aschhoff, Managing Director |
| Person authorised to compile the technical file | M. Aschhoff, Managing Director<br>Frölich & Klüpfel Drucklufttechnik GmbH & Co. KG<br>Wernerstr. 32, 42285 Wuppertal |
| Individual machine details | Type, item number, serial number and year of manufacture as stated in the enclosed paper declaration |

Place and date of issue are given in the declaration to be supplied separately.

## Document version and enquiries

Identification: BA FK 715.4 EN D09 · 08.10.2026. For enquiries, state tool type, article number and serial number if present.

Keep these instructions and the declaration of conformity with the tool and pass the documents on with it.

# 13 Notes on the absence of a chisel retainer

FK 715.4 has no mechanical chisel retainer. Cylinder 052-0172 has no rope thread; no suitable spring cap is assigned. O-ring 307-2439 in the spare-parts list is not a chisel retainer.

## Tool ejection and manual guidance

WARNING: Operating without workpiece contact can eject the loose lettering chisel. The operator and people nearby can be seriously injured. Never point the tool at people and never operate it in free air.

Throughout operation, manually guide the lettering chisel in the bushing and press it against the workpiece. Before lifting off or releasing the chisel, release the trigger and wait for standstill. Completely disconnect the compressed-air supply before every change.

Sensitive starting and trigger design aid control. They do not prevent tool ejection. Neither idle-running protection nor a proven technical chisel-retention system is fitted.

Wear eye protection with side shields, screen off the work area and keep bystanders away. Manual guidance and warnings do not replace technical retention. Technical assessment of this hazard remains open; no proven sufficient risk reduction is claimed here.