G 75 operating instructions

Pneumatic rivet holder
Article number 052-5651

Operating instructions · Version 05.10.2026

These instructions describe the function, connection, operation and maintenance of the G 75. Read them in full before use, keep them at the workplace and pass them on with the tool.

Intended use

The G 75 is used to support rivets during riveting, for example hot riveting in steelwork and bridge construction. It supports the existing rivet head while a separate riveting tool forms the closing head on the opposite side.

The rivet holder has no percussion mechanism of its own. Compressed air builds up an air cushion. Together with the opposing spring, this dampens vibration. The G 75 is held by its handle and supported by its pointed support screw.

Manufacturer

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Technical data

Details	Value
Article number	052-5651
Length	250 mm
Weight	9 kg
Maximum operating pressure	6 bar
Piston force at 6 bar	2,650 N
Piston diameter	75 mm
Piston stroke	90 mm
Piston weight	2,832 g
Maximum rivet diameter	27 mm
Tool socket	R 31 × 70
Air connection	G 3/8
Hose bore	13 mm

Noise and vibration

The G 75 has no percussion mechanism of its own. There is no continuous powered movement while holding. The piston moves when pressure is applied and released. No tool-specific noise or vibration emission values are stated for the G 75. During riveting, however, noise and vibration from the separate riveting tool may be transmitted through the rivet and workpiece. Air exhaust noise occurs during venting.

Working safely

WARNING indicates a hazard that can cause serious or fatal injury. The yellow warning triangle identifies the associated safety instruction.

Operators and workplace

Only instructed personnel may use the rivet holder. Before starting, agree clear signals with the riveting tool operator for starting, interrupting and ending riveting. Keep bystanders out of the work area.

Support and crushing points

⚠WARNING Crushing by the holding force

A rivet holder that slips or releases pressure can cause serious crushing injuries. Secure the tool by its handle, provide load-bearing support and keep hands away from crushing points.

Hold the rivet holder by its handle and support it securely using the pointed support screw. The support must withstand the holding force. Keep hands away from the area between the holder, rivet and support, and from moving parts. Secure the rivet holder against slipping and falling while applying and releasing pressure.

Hot parts and riveting

⚠WARNING Burns and flying parts

Hot rivets, workpieces and flying parts can cause serious injury. Do not touch hot parts, wear suitable protective equipment and secure the work area together with the riveting tool operator.

Do not touch hot rivets or workpieces. Use suitable eye, hearing, hand and foot protection for riveting. Do not use damaged or unsuitable inserts. Have riveting stopped immediately if the tool is insecure or behaves abnormally.

Compressed air and stored energy

⚠WARNING Residual pressure and spring force

Pressure remains trapped in the cylinder even after the rotary valve is closed. Uncontrolled movement or loose components can cause serious injury. Before removing the tool or working on it, fully release pressure using the procedure described; the spring force must still be secured separately during dismantling.

The rotary valve stays in its set position when released. It must be deliberately turned back to shut off the air supply. Closing it does not vent the cylinder. Before removal, changing the insert or maintenance, carry out the pressure-release procedure described in the following section.

Check hoses and connections before use. Do not use damaged connections. Do not carry the rivet holder by its hose. When working on the tool, also take account of the force of the internal compression spring.

Connection and operation

Before connecting

⚠WARNING Unintended pressure build-up

An open rotary valve or loose hose connection can cause uncontrolled movement and serious injury during connection. Close the rotary valve, isolate the supply and connect the hose without pressure; check the tool and connections first.

Close the rotary valve. Check the tool, insert, pointed support screw, handle and air connections for damage and secure attachment. Keep the compressed-air supply isolated; connect the supply hose without pressure. Set a maximum of 6 bar and use a hose with an internal diameter of 13 mm.

Holding the rivet

Place the suitable rivet-holder insert against the rivet head. Hold the G 75 by its handle and support it securely using the pointed support screw. Open the rotary valve in a controlled manner to build up the holding force. Only allow riveting to start when the holder is securely seated. Maintain secure seating throughout riveting.

Releasing pressure and removing the tool

⚠WARNING Trapped pressure and moving components

Closing the rotary valve does not vent the cylinder. During pressure release, the holder and piston may move and cause serious crushing injuries. Have riveting stopped, secure the tool and follow the entire procedure below. Do not loosen any threaded connection under pressure.

1. Have riveting stopped and close the rotary valve.
2. Isolate the compressed-air supply and depressurise the supply hose using the device provided for this purpose.
3. Remove the hose from the rivet holder. Pressure may still be trapped in the cylinder.
4. Secure the rivet holder. Carefully open the rotary valve and allow all cylinder pressure to escape through the open connection. Direct the escaping air away from people.
5. Remove the rivet holder only after pressure has been fully released. Close the rotary valve again before reconnecting.

Connection accessories

Optional connection accessories: Variacor 306-DV11MFG38 with G 3/8 female and male threads, and claw coupling 306-0304 (SKG 13) for a 13 mm hose. Fit the quick-release coupling at the hose end away from the tool. For venting, the connection on the holder must be open after removing the hose; do not use a self-closing coupling that blocks this venting route.

Changing the rivet-holder insert

The rivet-holder insert fits into the R 31 × 70 socket. There is no additional mechanical retainer.

⚠WARNING Residual pressure and unsecured insert

Trapped pressure can cause uncontrolled movement when changing the insert. The loosely fitted insert may fall out and cause injury. Complete the procedure “Releasing pressure and removing the tool” before changing it. Secure the tool and insert against falling; keep hands away from crushing points. Allow hot parts to cool.

1. Have riveting stopped. Close the rotary valve, isolate the compressed-air supply and depressurise the supply hose. Remove the hose. Secure the holder and carefully open the rotary valve so that all cylinder pressure escapes through the open connection.
2. Only after pressure is fully released, put the holder down securely. Secure the insert and pull it out of the socket. No additional retainer needs to be released to change the insert.
3. Clean the insert and socket and check for cracks, deformation and wear. Do not use damaged or unsuitable inserts.
4. Fit a suitable, undamaged R 31 × 70 rivet-holder insert into the socket. As there is no mechanical retainer, secure the insert against falling out during handling and positioning.
5. Close the rotary valve again before connecting. Connect as described in “Connection and operation”. Place the insert against the rivet head, hold the tool by its handle and support it securely using the pointed support screw. Build up the holding force in a controlled manner. Only allow riveting to start once securely seated.

Maintenance and troubleshooting

Cleaning and inspection

Before any work, disconnect the compressed-air supply and fully vent the rivet holder. Remove external dirt. Check the piston guide, cup seal, spring, pointed support screw, handle, rotary valve and connections for wear and damage. Supply clean, dry compressed air with the intended lubrication. We recommend replacing all wearing parts with article numbers beginning with 307- every twelve months. Replace earlier if worn or damaged.

Dismantling by qualified personnel

⚠WARNING Residual pressure and preloaded spring

Residual pressure and the compression spring can eject components when the tool is opened, causing serious injury. Disconnect the compressed-air supply and fully vent the cylinder using the procedure described. Restrain the spring force with a suitable device, secure components and release the force in a controlled manner. Only qualified personnel may open the tool.

Securely clamp the fully depressurised holder using suitable protective jaws. Unscrew the cylinder cover (2) in a controlled manner while restraining the spring force. Remove the compression spring (5), piston (3) and cup seal (4). Clean and inspect components; replace damaged or worn parts with suitable genuine spare parts. Lightly oil the cleaned parts and assemble in reverse order. Before returning to service, check for leaks and correct function with secure support.

The G 75 has no buffer. Routine buffer replacement does not apply to this tool. The rotary valve contains three disc springs and two nuts; preserve their order and orientation during repair.

Checks after repair

⚠WARNING Incorrect assembly and uncontrolled pressure build-up

Incorrectly assembled parts or insecure support can cause serious crushing injuries when pressure is applied. Check completeness and assembly before connecting. Test for leaks and correct function only with the tool secured and supported by a load-bearing support; keep hands away from crushing points. Fully release pressure again before further work.

In the event of a fault

⚠WARNING Uncontrolled pressure release

An insecure holder can slip or move uncontrollably and cause serious injury. Have riveting stopped immediately, secure the tool and release pressure using the procedure described. Do not return it to service until the fault has been clarified.

Observation	Check and remedy
Insufficient holding force	Check the compressed-air supply, hose and connections. Have the tool repaired if it leaks or the cup seal is worn.
Air loss	Stop operation; have the connection, valve and cup seal checked by qualified personnel.
Piston stiff	Fully vent and take the tool out of service. Have the piston guide, contamination and spring checked.
Tool remains pressurised after isolation	Closing alone does not vent it. Follow the pressure-release procedure described; do not loosen parts under pressure.

Spare parts

G 75 · Article 052-5651. Item numbers follow corrected drawing D24-K02 on the next page.

Item	Qty.	Description	Article number
1	1	Cylinder	052-4151
2	1	Cover	052-4152
3	1	Piston	052-4153
4	1	Cup seal	307-2057
5	1	Compression spring	304-7097
6	1	Pointed support screw	304-7305
7	1	Socket R3/8	304-6104
8	1	Complete rotary valve	052-0494
9	1	Rotary valve sleeve	052-2293
10	1	Rotary valve stem	052-2294
11	3	Disc spring 34x16.3x2 DIN 2093	304-7127
12	1	Spring pin 5x6 DIN 1481	304-3506
13	2	Nut R3/8 DIN 431	304-7347

Items 9 to 13 form part of the complete rotary valve assembly (8). They are not parts required in addition to the complete assembly.

Conformity and documents

The manufacturer's joint EC declaration of conformity applies to the G 75, article 052-5651. The specific machine must be identified in the associated completed and signed declaration. Keep the instructions and declaration together and pass them on with the tool.

The joint declaration cites Directive 2006/42/EC and DIN EN ISO 12100:2011-03, DIN EN 1299:2009-02 and DIN EN ISO 11148-4:2013-05. The specific function of the G 75 as a pneumatic rivet holder without its own percussion mechanism remains decisive.

G 75 exploded view

D24-K02 · Items as listed in the spare parts list. Item 8 is the complete rotary valve comprising individual parts 9 to 13. View for parts identification, not a dimensional drawing.

