



RAUTOOL G 125/160

OPERATING INSTRUCTIONS 856693 US,CA/en

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RAUTOOL G 125/160

SAFETY INFORMATION

Use in line with provisions

The tool is intended exclusively for processing of the REHAU compression sleeve system in the size range 125 x 12.6 or 160 x 14.6.



Note:

Read all safety information and assembly instructions before the initial operation of the tool. Observe the information during operation and always keep the safety information with the tool.



In addition to the operating instructions, generally valid, legal and other binding regulations on accident prevention and protection must be observed and passed on.

General safety information:

1. Keep your workplace tidy and free of obstructions. Make sure there is always sufficient light.
2. Keep children, pets and unauthorised persons away from your workplace. Do not let other people touch the hydraulic hose, the tool or the cables.
3. Wear suitable work clothing. Do not wear loosely fitting clothes or jewellery. They may get caught in moving parts. Wear a hairnet if you have long hair. Use protective goggles!
4. Do not touch moving parts (risk of trapping fingers)!
5. Be aware. Only use the equipment if you have been instructed in how to handle it.
6. Keep your tools in a safe place. When not in use, tools should be kept in dry, locked rooms out of the reach of children.
7. The tool is only suitable for manufacturing REHAU compression sleeve joints of the sizes 125/160 mm. Do not use the tool or the electro-hydraulic unit for other purposes or sizes.

8. Only operate the equipment with REHAU original parts and accessories.
9. Only allow maintenance and repair work to be carried out in a specialised workshop authorised by REHAU. For work by external personnel, we do not assume any liability. The addresses of the authorised service centre can be obtained from your dealer or REHAU Sales Office.

Tool-specific safety information:

1. Protect the tool from moisture, extreme heat, oil and solvents.
2. Do not carry your hydraulic unit by the supply lead or hydraulic hose. Do not pull the equipment by the cable or hydraulic hose.
3. Make sure that the hydraulic hose and the supply lead are not damaged. Before initial operation, check the hydraulic hose and the supply lead for example for scuff marks, cuts, cracks, squashed points, kinking, etc. Never work with a damaged hydraulic hose or supply lead. Get damaged hydraulic hoses or supply leads replaced immediately at the REHAU service centre.
4. Do not touch any possible leaks in hydraulic hoses while the system is pressurised.
5. Do not try to disconnect the quick couplings while the system is pressurised.
6. In a disconnected state, the quick coupling must not be pressurised.
7. The hydraulic hose must be replaced for safety reasons (legal regulations) after 5 years at the latest by an authorised REHAU service centre. Make sure you observe this timeframe. The year of construction of the tool can be found on the warranty certificate. If anything is unclear, please contact your dealer or REHAU Sales Office.
8. Do not connect the pump/motor unit to any other cylinders or tools.

9. Only use single-phase alternating current for the voltage specified on the power specification label.
10. Do not expose the equipment to rain. Do not operate the equipment in damp or wet conditions and/or in an environment where there is a fire or explosion risk
11. Never leave the equipment unattended while connected to the mains supply.
12. Make sure that you use suitable extension cables.
13. Each time the tool is converted (e.g. to change the expander heads, clamping jaw sets), the mains cable must be removed to prevent the tool from being switched on accidentally.
14. To prevent the motor overheating, do not let the tool run for too long at maximum pressure.
15. The tool weight is max. 26 kg. Depending on the installation situation, we recommend two-man operation.



Caution!

REHAU does not assume any liability for damage or injury caused by unsafe use of the product, inadequate maintenance or improper application of the product or system. For planning and assembly, please use our valid Technical Information! You can obtain the current version of the document from your dealer or your REHAU Sales Office, or download from the REHAU Resource Center (www.na.rehau.com/resourcecenter).

RAUTOOL G 125/160

SCOPE OF DELIVERY

RAUTOOL G 125-160

- Base tool RAUTOOL G
Incl. 2 cylinders with handle, hydraulic hose, quick couplings and 4 long pins
- Expander mandrel
Incl. 2 short pins
- Transport case, basic
- Operating instructions
- Clamping jaw set 160
- Set reducers 125/160
- Expander head 125 x 11.4
- Expander head 160 x 14.6
- Y distributor with quick couplings
- Transport case, extension



Replacement parts/accessories (not included in the scope of delivery)

Roller pipe cutter 110-160

Art. No. 221016-001

Roller pipe cutter 50-125

Art. No. 137394-001



REHAU lubricant 500g

Art. No. 128953-003



RAUTOOL G 125/160

UNIT DESCRIPTION AND FUNCTIONING PRINCIPLE



Pos. No.	Unit element	Function
1	Electric motor	Electro-hydraulic motor for building up pressure in the work unit
2	Compression cylinder G1	Work units for supporting the clamping jaw sets 160 or expander set G1
3	Compression cylinder 160	A set comprising a short and a long clamping jaw.
3a	Long clamping jaw 160	Movable clamping jaw for the size 160
3b	Short clamping jaw 160	Fixed clamping jaw for the size 160
4	Set reducers 125/160	Pipe clamps size 125 for clamping jaw set 160. For pressing for size 125. A set comprising an eccentric and a centric reducer.
5	Pins G1	Fixing device of the clamping jaw set or expander set on the compression cylinder
6	Expander head 125 x 11.4	Expander for expanding the pipes, size 125 x 11.4
7	Expander head 160 x 14.6	Expander for expanding the pipes, size 160 x 14.6
8	Expander set G1	Expander device for expanding the pipes in connection with the expander head and the compression cylinder with 2 short pins
9	Short pins G1	Fixing device of the expander set on the compression cylinder
10	Y distributor	Distributor for connecting the two compression cylinders with the electric motor for the pressing process

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TOOL PREPARATION

Expansion

The cylinder must be connected directly to the motor via the hydraulic hose (quick coupling) and the control cable, for the expansion process.



Caution!

Make sure the quick coupling is properly engaged! The coupling may only be pressurised when it is locked in position!
Check connectors thoroughly for dirt, and clean if necessary!



The expander set is fully inserted into the cylinder and fixed in the cylinder using two short pins and one long pin.



Caution!

Pins should be fully inserted!
The tool may only be operated once the pins are fully inserted



The expander heads 125 or 160 are screwed directly onto the expander set. For this, the expander heads must be fitted so that they are flat and fully screwed in. Avoid any possible tilting when screwing the heads in.



Pressing

The expander set must be removed before pressing. To do this, pull out the long pin completely and pull the short pins as far as the stop. Pull out and remove the expander set from the cylinder.

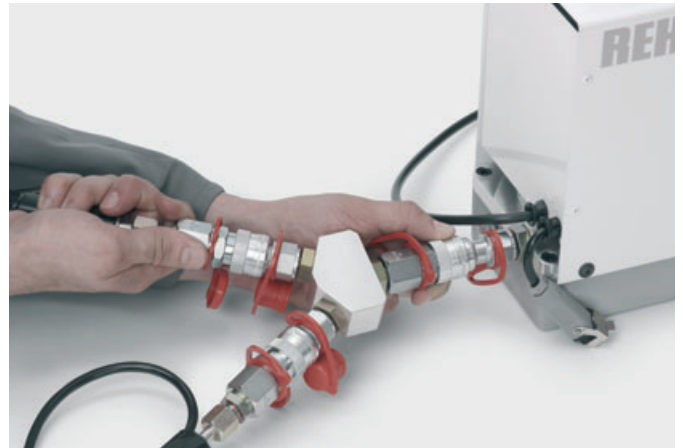


Both cylinders must be connected to the motor via a Y distributor, for the pressing function. Remove the hydraulic hose used during the expansion process and connect the Y distributor directly to the motor via the quick couplings or to the two hydraulic hose couplings.



Caution!

Only hydraulic hose couplings that are properly locked into position may be pressurised!



The control cable of one of the two compression cylinders must be connected to the motor (= master cylinder).



Caution!

Only the cylinder connected to the motor (master cylinder) can trigger the pressing process via the start button.



Slide first the long then the short clamping jaw on to both cylinders. Fix the clamping jaw on to the cylinder using the 4 long pins.



Caution!

Make sure the clamping jaw sets are correctly aligned (short, fixed clamping jaw flush with the cylinder edge)!



The long, movable clamping jaw has 2 pin positions. The first position is the start position, when the compression sleeve is still some distance from the fitting collar.



Caution!

Pins must be fully inserted.



The second position is the end position to slide the compression sleeve right up to the fitting collar.



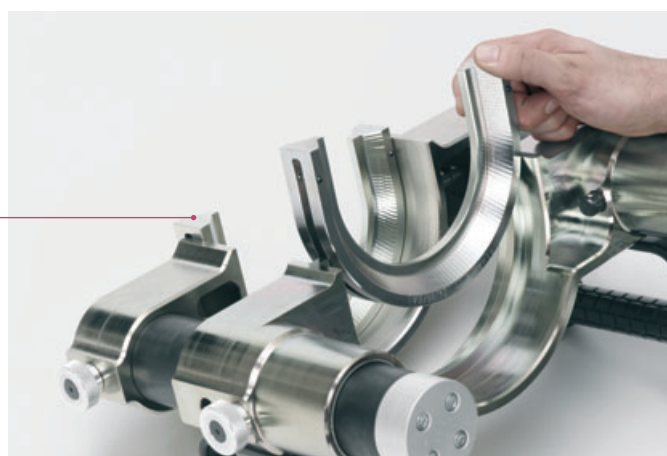
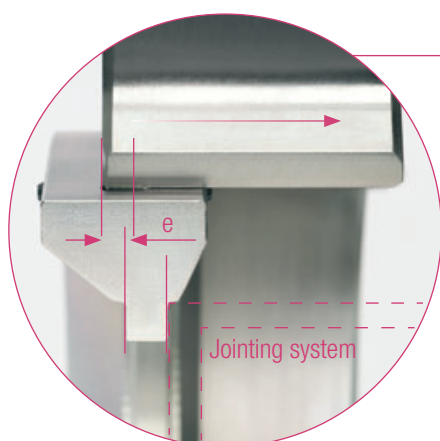
Caution!

Pins must be fully inserted.



Pressing process for the size 125

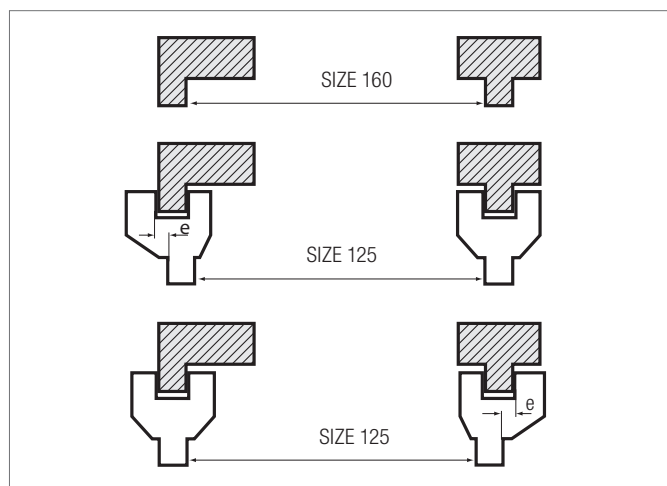
The reducers for the size 125 are clipped into the clamping jaw 160.



Caution!

Reducers must be fully clipped in.

The set of reducers comprises one eccentric and one centric reducer. Make sure that they are inserted with the eccentric reducer(s) up to the joint (compression sleeve or fitting collar).



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ASSEMBLY SEQUENCE/ESTABLISHING A COMPRESSION SLEEVE JOINT



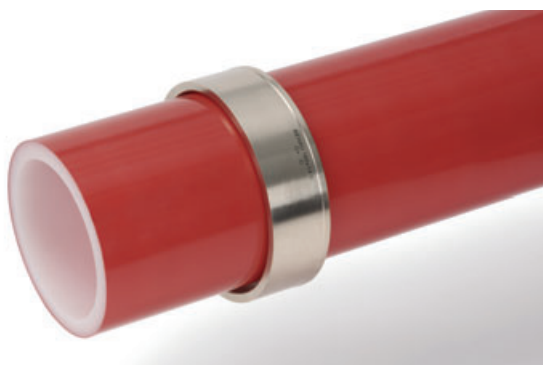
1. Cut the pipe into lengths of the required size with a square cut using a guillotine...



- ... Alternatively, you can also use the roller pipe cutter.

Caution!

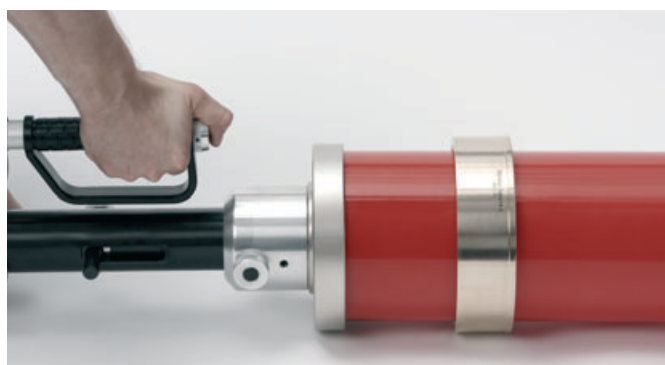
Do not use any type of saw or anything similar! The pipe must be cut into lengths so that the cut is square and burr-free!



2. Slide the compression sleeve on to the pipe.

Caution!

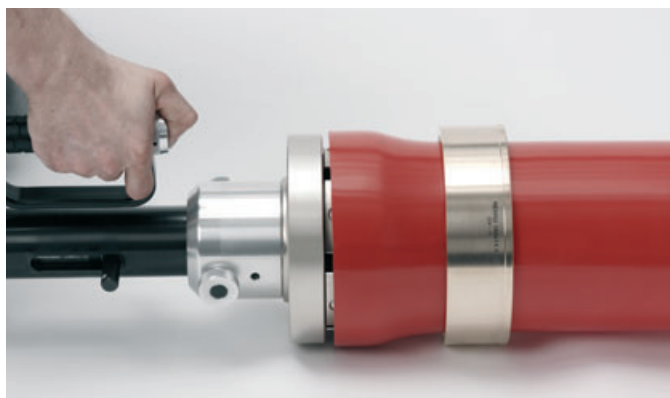
Internal bevelling must point in the direction of the pipe end that should be pressed.



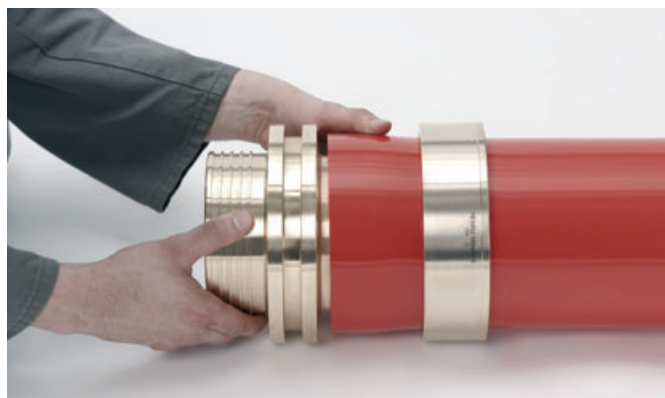
3. Expand the pipe once and, displacing the tool by 30°, a second time.

Caution!

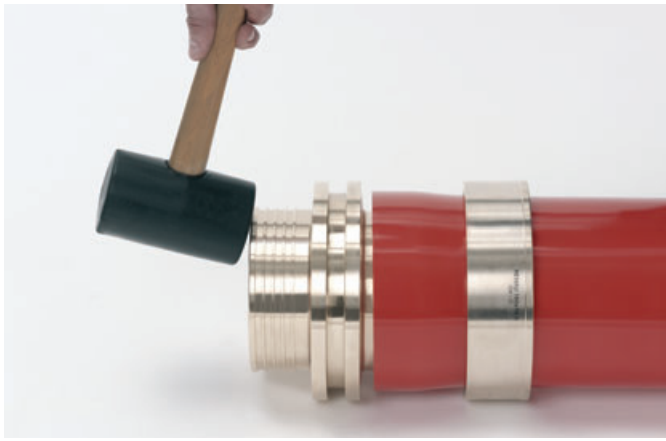
The compression sleeve must not be in the expansion zone. The minimum distance is 2 compression sleeve lengths. Insert the expander up to the stop and do not tilt it.



4. The insertion time of the fitting into the pipe can be affected by maintaining the expansion pressure while the expander head is fully open (end position during the expansion process).



5. Insert the fitting into the pipe. After a short time, the fitting sits securely in the pipe (memory effect).



6. There must be an even gap between the fitting collar and the pipe end. If necessary, the position of the fitting must be adjusted using a rubber mallet immediately after insertion.

Caution!

All sealing ribs of the fitting must be covered by the pipe!



7. Cover the pipe evenly with REHAU lubricant around the full circumference of the joint area.

Caution!

Only use REHAU lubricant!



8. Attach the clamping tool.

Caution!

Do not tilt the tool! The tool must be fitted so that the full surface area is in contact and at a right angle!



9. By actuating the pressure pushbutton on the master cylinder, slide the compression sleeve up to the fitting collar.

If necessary, change the positions of the pins on the movable clamping jaw to slide back the compression sleeve completely (see sections Tool preparation/Pressing).

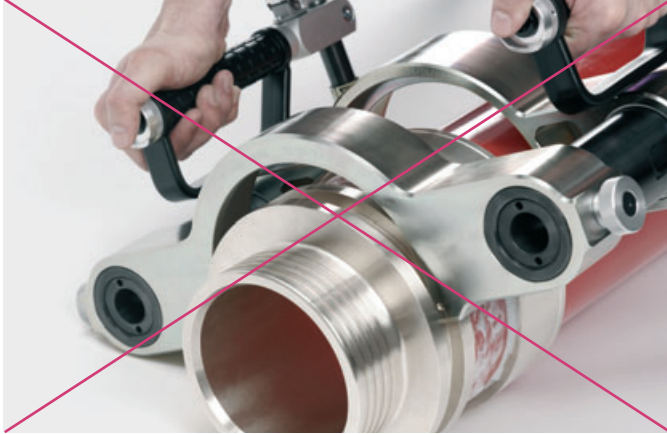


Caution!

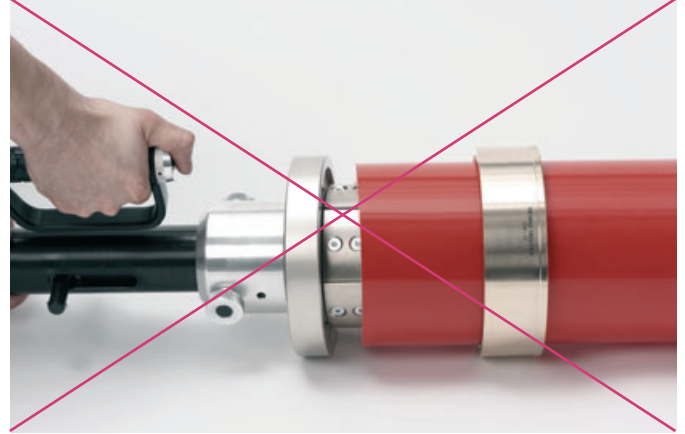
Failure to observe these instructions may result in damage to the jointing system, in damage to the tool and to personal injury!

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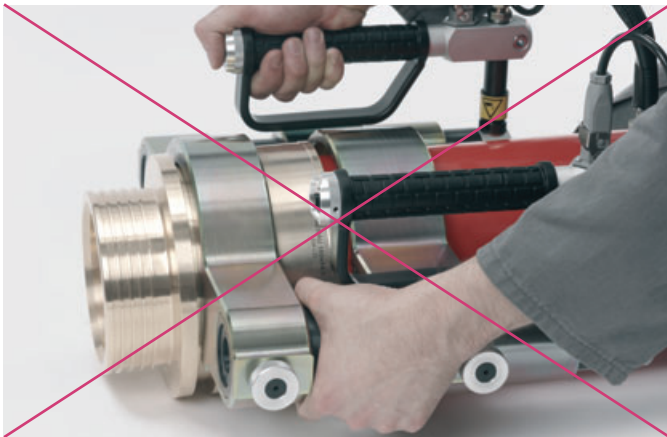
IMPORTANT INFORMATION



Always fit clamping jaws or jointing systems so that they lie flat and at a right angle!



Always insert the expander into the pipe up to the stop and do not tilt it.



Caution!

Do not touch moving parts (risk of trapping fingers)

Tips and tricks

- Using a rubber mallet, the compression sleeve can be tapped out a little before pressing, so that it may be possible to use the second pin hole immediately
=> No need to change the position of the pin
- For the size 125, the stroke can be increased by rotating the eccentric reducer.
=> No need to change the position of the pin
- To remove the air, raise the pump motor and lower the clamping tool. Actuate the tool several times without running at maximum pressures.

- After use, clean and oil the tool.
- Then store the tool in a dry place.

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TROUBLESHOOTING

Problem	Solution
Motor is not running	- Check whether socket used is live - Check the supply lead for defects, and if necessary get it replaced - Wrong start button pressed => actuate master cylinder with control cable connected
Motor is running but the tool doesn't work or only works to a limited extent	- the oil level, if necessary top up the oil - Remove the air from the unit
Unit doesn't reach pressure of 550 bar	Check the oil level, if necessary top up the oil
If the malfunction cannot be remedied, contact your local REHAU sales office for support.	

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