

These operating instructions provide important information for the correct operation of your puller!

Read the instructions in full, keep them in a safe place and pass them on to any sub-sequent owner.

All safety instructions are always intended for your own safety!

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## SAFETY INFORMATION



✓ Only use the puller for its intended purpose.

✓ The puller is a precision tool. Despite the rugged and robust design, you should handle the puller with care.

✓ To prevent damage and hazards by incorrect use, observe the operating instructions and keep them in a safe place.

✓ If you give the puller to another person, make sure that the operating instructions are included.

✓ Check that the puller is in good condition before using it. Damaged or worn parts must be replaced before use.

✓ Use only original spare parts and accessories for your GEDORE puller. Never use worn, modified or defective spare parts or accessories.

✓ Wear goggles and protective clothing when working. For more safety, use the GEDORE safety film 5.10.

✓ Adopt a firm footing when working.

✓ Before pulling, ensure that the hooks are in contact with the part to be pulled and are firmly tightened so that the spindle operates centrally along the axis of the puller.

✓ Avoid sudden changes in the torque. Controlled pulling can be achieved by using a torque wrench.

Do not exceed the maximum permissible load for your puller. Overtightening the puller can cause the material to fracture and inflict serious injuries.

If it is necessary to heat parts before pulling, the puller must never be heated with them. Heat can impair the strength of your puller.

Pullers with hydraulic thrust spindles should only be operated with a torque wrench.

If the puller becomes stiff or parts slip due to overtightening, release the tension. Reposition the puller or use the next larger model.

Do not use extensions to increase the torque. Pull by hand only.

Do not put anything between the hooks and the part to be pulled. The tips of the hooks must be in full contact with the component.

Do not use electric or pneumatic power or percussion drivers.

Do not change the type and/or properties of the hooks or the crossbar.

## FUNCTIONAL UNITS

### 2-arm puller (mechanical)

- a Hexagonal spindle head
- b High-strength threaded steel spindle
- c Crossbar to transmit the force
- d Hooks with clamps
- e Hook tensioner
- f Exchangeable\* spindle tip (ball or conical tip)

\* depending on the model

### 3-arm puller (hydraulic)

- a Hydraulic thrust spindle with hexagonal head (SW 12 / 17)
- b Threaded spindle cap (SW 32 / 36 / 41)
- c Crossbar to transmit the force
- d Hooks with clamps
- e High-strength hydraulic grease thrust spindle
- f Hook tensioner
- g Hydraulic cylinder with thrust piece

## INTENDED PURPOSE

Your puller is only suitable for the specified purpose. Your puller was constructed exclusively for controlled pulling of suitable parts. Any other additional use of your puller is considered an abuse of the specified purpose.

The company does not accept liability for damage incurred in this way, nor will it, in this case, accept any other claims under the guarantee.

## CONTROLLED PULLING (2 AND 3-ARM, MECHANICAL)

Fig. 1 – 5



### OBSERVE THE SAFETY INSTRUCTIONS

The puller is suitable as an inside or outside puller by reversing the hooks.

- 1 Screw the threaded spindle (b) from above into the crossbar (c).
- 2 Push the hooks (d) onto the crossbar (c).
- 3 Put the puller in place and enclose the part to be pulled **completely** with the hooks (d). The ends of the crossbar must project by at least **3 mm** beyond the hook heads.

Use the screws (e) or the clips to fasten the hooks to the crossbar vertically to the direction of pulling.

Turn the threaded spindle (b) by hand as far as possible so that the tip (f) makes contact at the centre.



### Caution!

To avoid jamming and slipping, always ensure that the puller is aligned vertically to the component.

- 5 Operate the puller by applying a wrench, a box spanner or a torque wrench to the hexagonal head (a) of the threaded spindle, gripping it with one hand only and pulling evenly.



### Note:

Ensure a firm footing. Do not bend over the puller and avoid jerking the puller.



### Caution!

Do not use extensions to increase the torque and never exceed the specified maximum load. If the component cannot be pulled, release the tension and use a puller with a higher load specification for this task (possibly with a hydraulic spindle).

## CONTROLLED PULLING (2 AND 3-ARM, HYDRAULIC)

Fig. 6 – 10



### OBSERVE THE SAFETY INSTRUCTIONS

The puller is suitable as an outside or inside puller by reversing the hooks.



### Note:

The hydraulic grease thrust spindle is designed for safe and controlled pulling with a force of up to 12 t / 15 t. Before use, check that the thrust spindle (a) is screwed far enough into the cap (b) so that the **thrust piece** is in the hydraulic cylinder (g) at the **initial position**.

- 6 Loosen the stud in the cap (b) and unscrew the cap from the threaded spindle (e).
- 7 Screw the threaded spindle (e) from below into the crossbar (c) of the puller until the threaded spindle projects by approx. 60 mm from the top of the crossbar.
- 8 Screw the cap (b) fully onto the threaded spindle (e) and fasten it by screwing in the stud.

- 9 Push the hooks (d) onto the crossbar (c) and put the puller in place on the component. Enclose the part to be pulled **completely** with the hooks (d). The ends of the crossbar must project by at least **3 mm** beyond the hook heads.

Use the clip (f) or screws to fasten the hooks on the crossbar vertically to the direction of pulling. Turn the threaded spindle (e) with a **wrench** (SW 32 / 36 / 41) on the cap (b) as far as possible so that it makes contact centrally.

**Caution!**

Forces up to several tonnes occur during hydraulic pulling. Always ensure the correct position of the puller and vertical alignment to the component.

- 10 Screw the thrust spindle (a) with a **torque wrench** (SW 12 / 17) into the cap (b). The thrust piece of the hydraulic cylinder (g) is operated and releases the component.

**Note:**

The maximum stroke of the thrust piece in the hydraulic cylinder is 12 mm.

**Caution!**

Use **only a torque wrench** and never exceed the specified maximum load. If the component cannot be pulled, release the tension and use a puller with a higher load specification for this task.

- 10 Pull the released component fully off by turning the cap (b) with a wrench (SW 32 / 36 / 41).

After use, turn the thrust spindle (a) (SW 12 / 17) back to its initial position and push the thrust piece back into the hydraulic cylinder.

**SERVICING**

Always keep the threads of the spindle and the crossbar clean. Oil the threaded steel spindle lightly as necessary. The hydraulic grease thrust spindle requires little maintenance.

Protect the puller against damage, corrosion and dirt by keeping it in a clean and dry place after use.

Clean the outside of the puller with a clean, dry cleaning cloth. Do not use cleaner's solvent or other chemical solvents.

**MEASURES & UNITS**

All specifications of the dimensions, thread sizes, the maximum load values and the article numbers are contained in the GEDORE manufacturer's catalogue "Tool Directory".

**ACCESSORIES**

On overview of the various possible combinations of pullers and hook sets is included on the last page of these operating instructions.

See the manufacturer's catalogue from GEDORE for all necessary specifications for various models of pullers, hook sets, extensions and other accessories.

Always replace pullers, hooks and extensions as a complete set. Use only original spare parts and accessories from GEDORE.

**ENVIRONMENTAL PROTECTION**

The pullers, hooks and accessories are made of recyclable materials and must be disposed of accordingly.

**WARRANTY**

We provide a 24 month guarantee for this GEDORE product.

Your puller is a high-quality product. All drop forged parts are marked. This ensures a consistent manufacturing process. For this reason, we grant a further year's guarantee. To register, please send us a copy of the original receipt or invoice.

The warranty and guarantee apply for any complaints from the date of purchase and only covers materials and production faults of original components.

We retain the right to repair or replace products.

Products subject of complaints must be sent postage and freight-free to GEDORE KG, Remscheid, Germany. Any claim for compensation or discounts only arise if we cannot rectify the defect.

Damage caused by incorrect handling or non-compliance with the operating instructions and damage caused by acts of force or normal wear are not covered under the warranty terms.