MODULAR CLAMPING SYSTEMS

COPY OF THE ORIGINAL

INSTRUCTION MANUAL

5 AXIS CLAMPING VICE

IMG

SMW AUTOBLOK

Code: 10705922 Printed January 2020

Overview

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INSTRUCTION MANUAL
5 Axis clamping vice

Thank you for purchasing an Original OML product.

This instruction manual contains the installation and maintenance of the IMG vice.

OML reserves the right to make changes without notice.

This instruction manual is a part of the work holding and must be passed to the new owner in case of sale.

This instruction manual may not be in whole or in part-copied without our written agreement.

Please read the instruction manual carefully before installation and use and always follow the regulations.

Please note especially the sections which are marked with the following signs:

- Danger of injury or danger to life if instructions are not followed.
- Danger of damage to the work holding, the machine or the components.

General Safety Instructions

 **Danger!**

 **General precept sign!**

 **General warning sign!**

 **Warning of hand injuries!**

 **Danger to the environment!**

 **Follow the instructions!**

 **Warning of risk of crushing!**

 **Warning of suspended load!**

1. Correct use

OML clamping systems work safely and troublefree, if they are used according to their specification i.e. to clamp components on machine tools. Any other use can cause hazards. For any damages resulting herefrom OML is not responsible.

2. Demands on operators

This OML product must be installed, operated and maintained only by qualifi ed and regularly trained personnel.

3. Visual inspection

Please check the product for visible damage prior to use!

4. Transport

Please use suitable lifting gear for product heavier than 16 kg!

5. Safety Precautions

- Maintenance and actuation must be carried out at stopped machine only.
- Maintenance and set up work must be carried out in safe areas only.
- During installing, connecting, adjusting, runoff and testing, it must be ensured, that no accidential actuation of the clamping unit can be carried out by the worker or any other persons.

6. Max. speed

The clamping unit is intended for stationary use only, and must not be used under rotation!

7. Danger of injury

- Danger of injury because of missing accessories.
- When actuating the clamping system there is increased chrushing hazzard due to the stroke of the moving components of the clamping system.
- Never reach for the clamping system while the spindle of machine is rotating.
- Prior to working at the clamping system, make sure, that the spindle of the machine cannot be started.
- Work pieces that are clamped with too low clamping pressure, can be ejected!
- Excessive clamping pressure can cause damage or breakage of the individual components of teh cklamping system. Work pieces can be released.

8. Clamping force

The clamping force of the clamping system can vary, depending on its condition (lubrication and contamination). The clamping forces have to verifi ed in regular intervals. Use suitable staic grip force gages.

9. Maintenance

The stationary clamping system has to be maintained in regular intervals. Check the condition by measuring the grip force with a grip force gage. Maintenance must be carried out at stopped machine only.

Replace damaged parts with original OML spare parts only.

Maintenance must be carried out at stopped machine only! Insuffi cient and improper maintenace voids any warranty from OML.

10. Environment protection

Danger for environment when handling incorrect! Incorrect handling of environment hazardous materials, especially the disposal, may result in environmental damage.

- Always follow below instructions.
- In case environmentally hazardous material polluted the environment always take suitable actions immediately. If in doubt, inform the local authority about the pollution.

The following hazardous materials are used: Lubricants such as oil and grease can contain poisonous agents. They must not pollute the environment. The disposal must be carried out by a suitable waste management company.

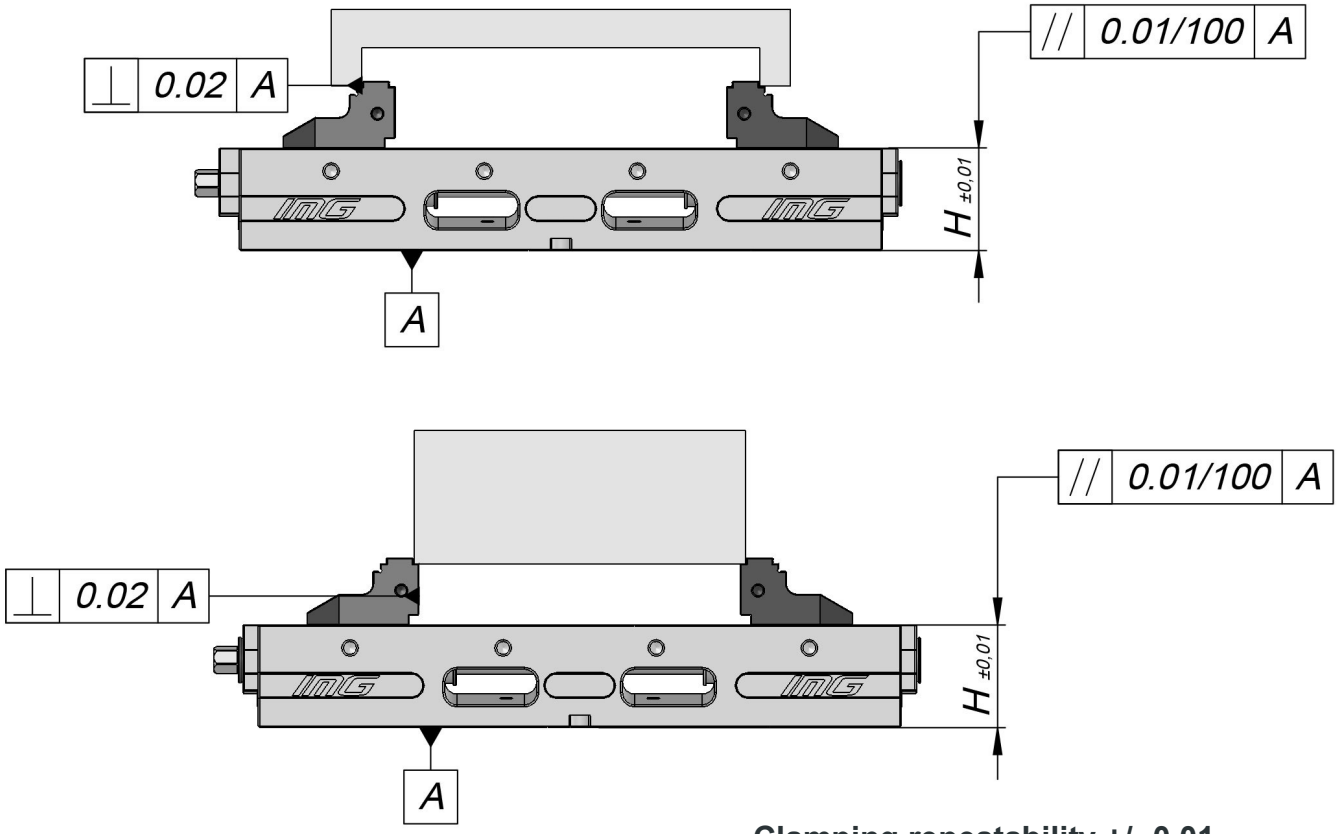
For a proper function of the work holding, use original OML lubricant only.

For any problems or questions please contact OML directly or one of our authorized offices.

ALL REGULATIONS ACCORDING TO THE PREVIOUS POINTS MSUT BE OBSERVED. THE USE ON MACHINE TOOLS HOWEVER, ALWAYS CAUSES SOME RESIDUAL RISKS, THAT HAVE TO BE ELIMINATED BY THE USER BY SUITABLE SAFETY ACTIONS.

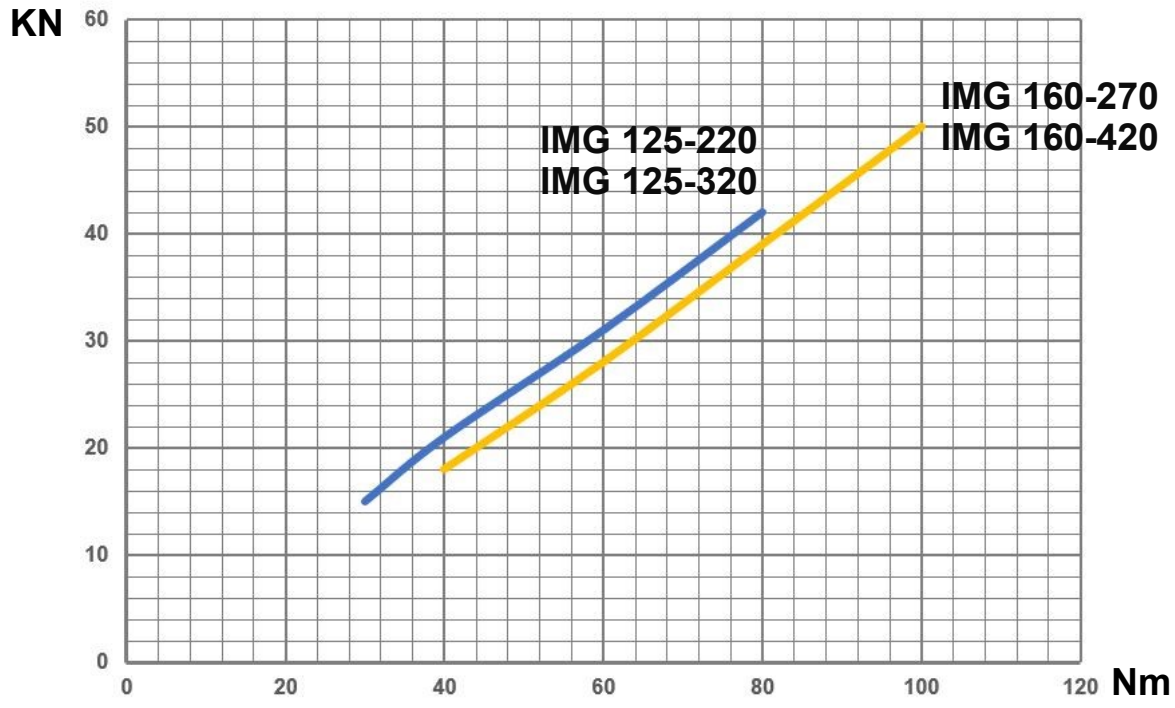
Technical Data

Clamping tolerances



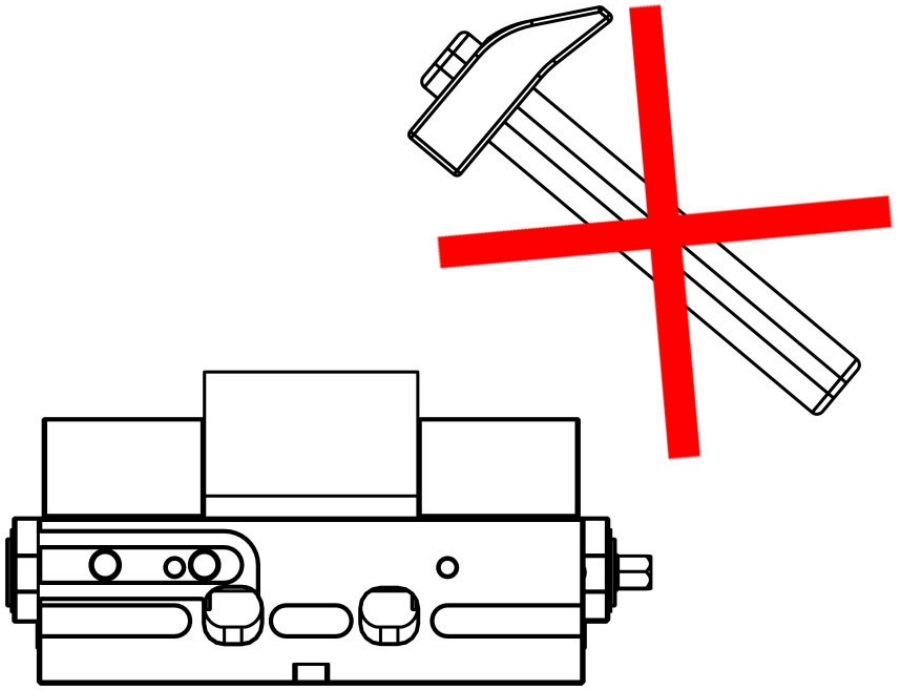
Clamping repeatability +/- 0,01

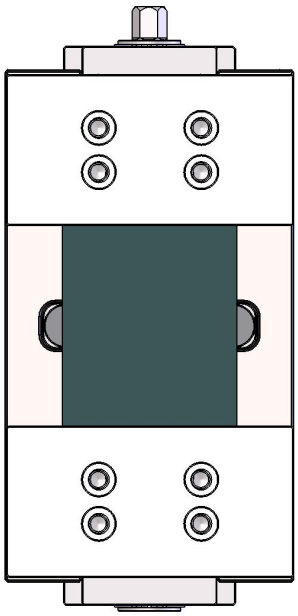
Clamping force

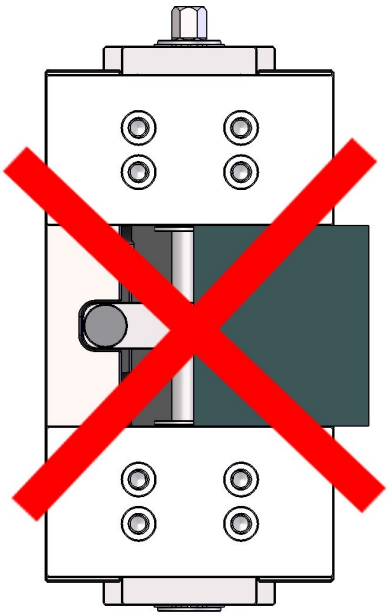


Clamping forces valid for self-centering, Double clamping, Fixed jaw

Usage Notes

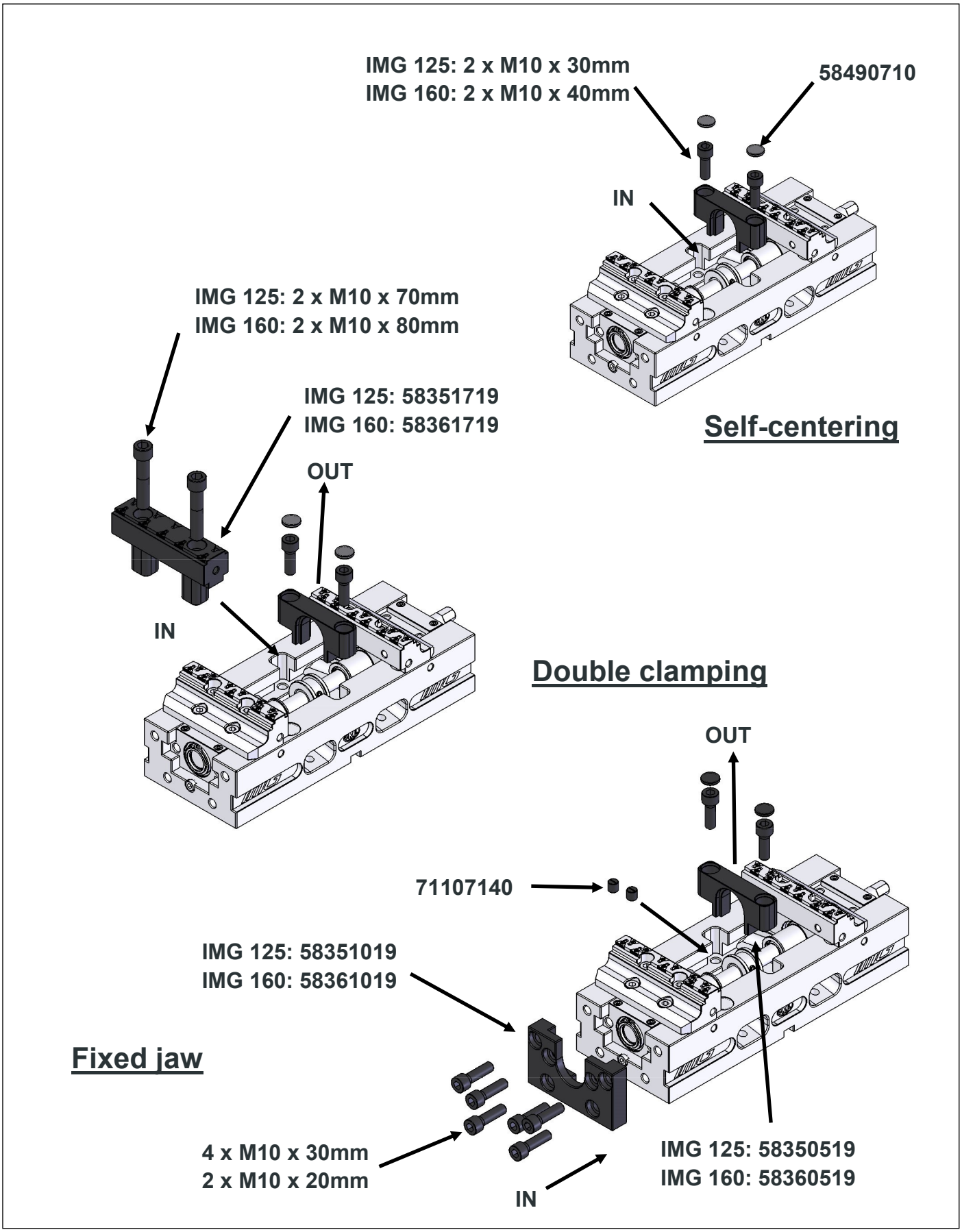






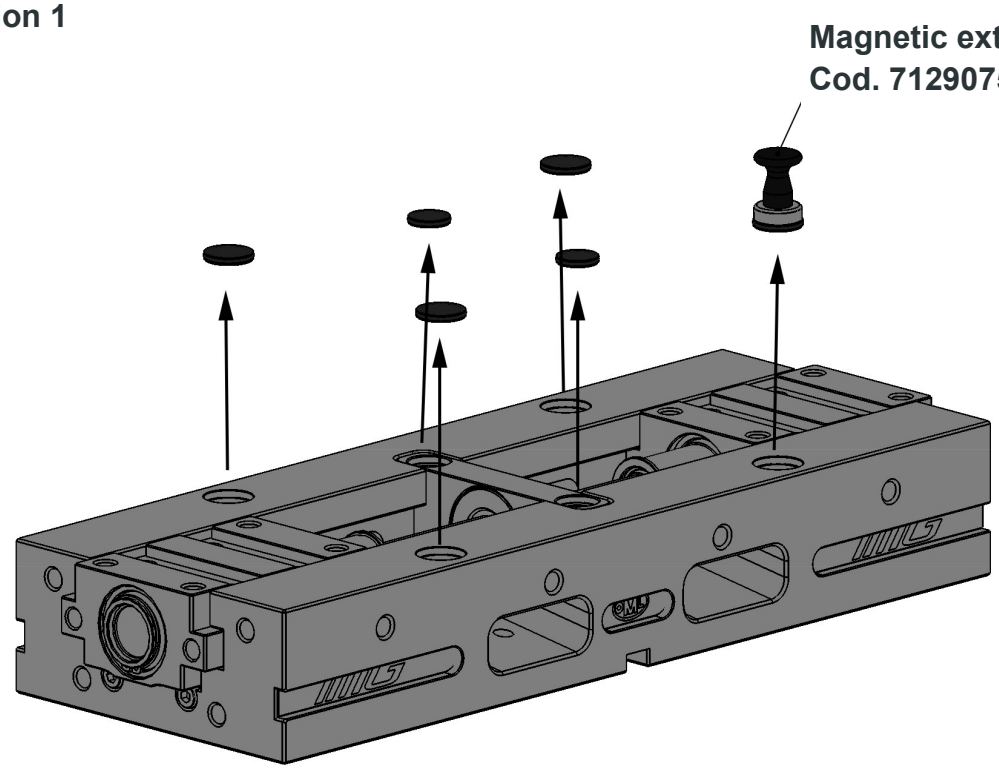
YES **NO**

Clamping types

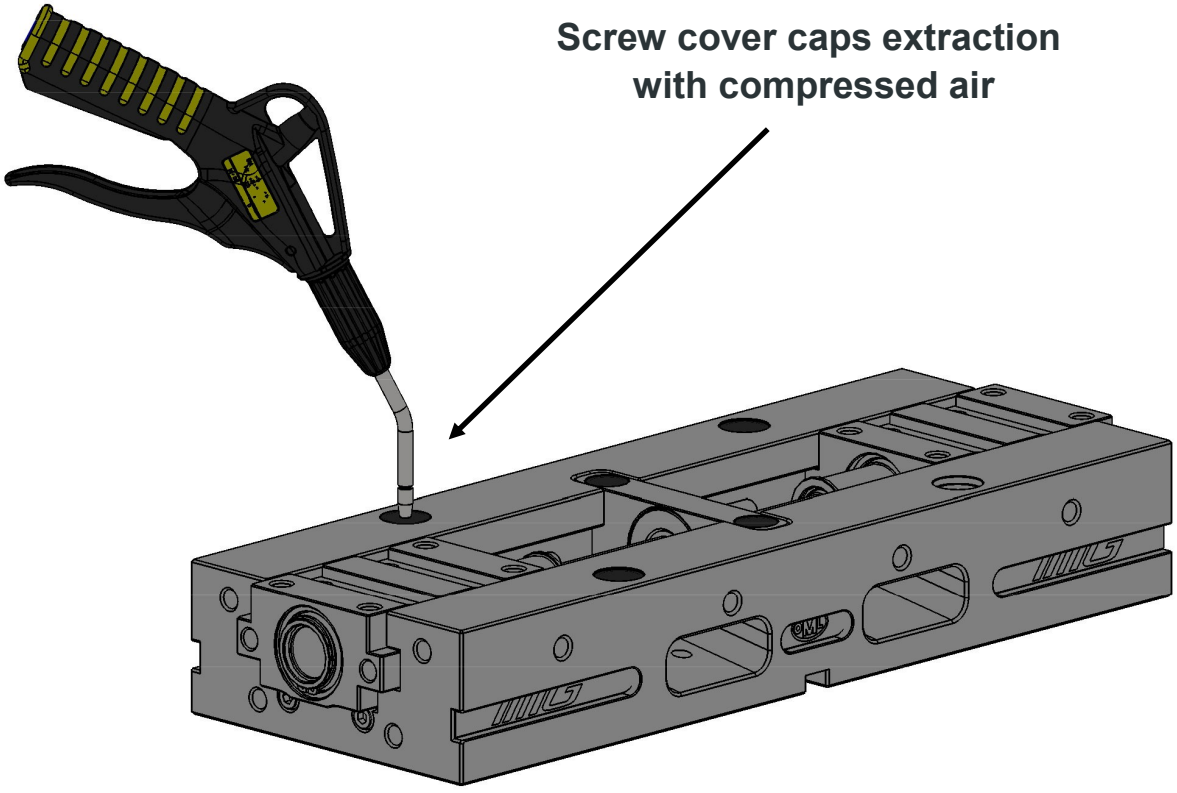


Screw cover caps extraction

Solution 1

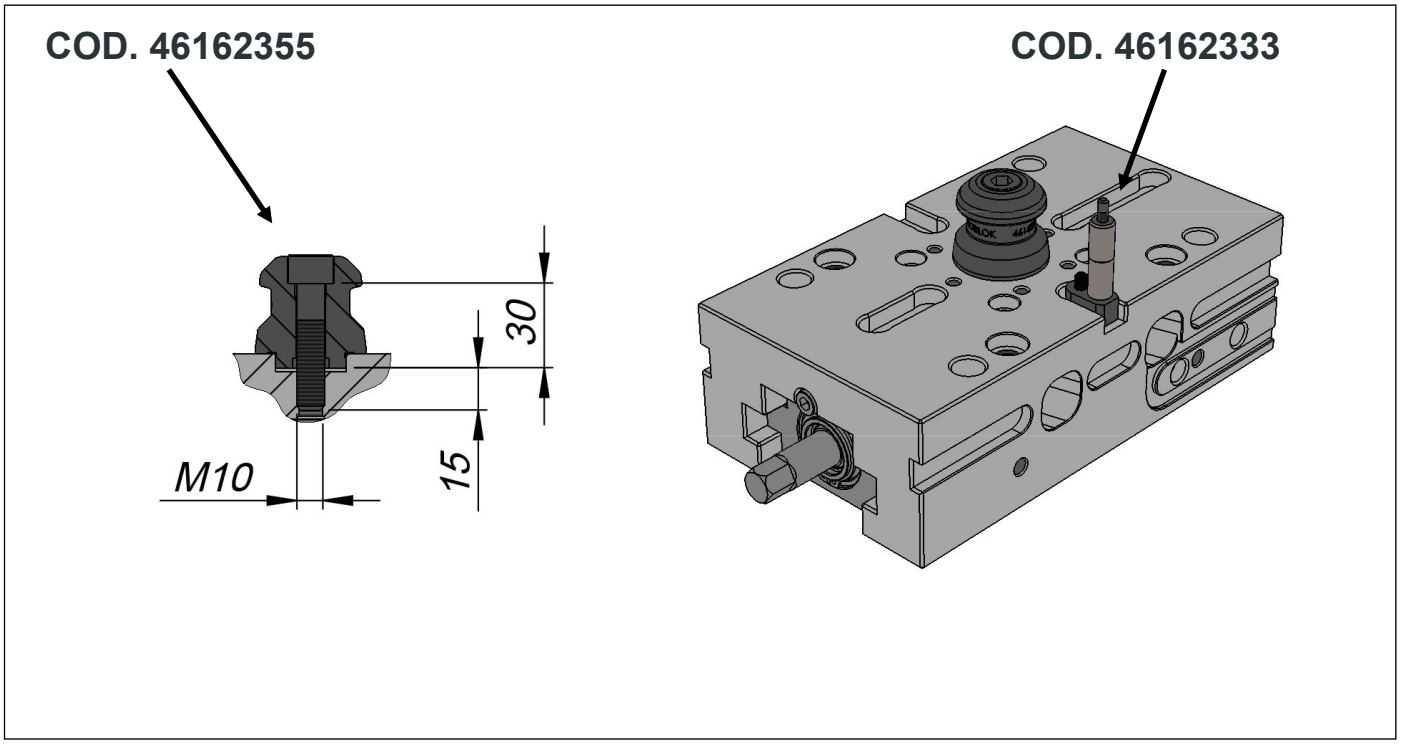


Solution 2



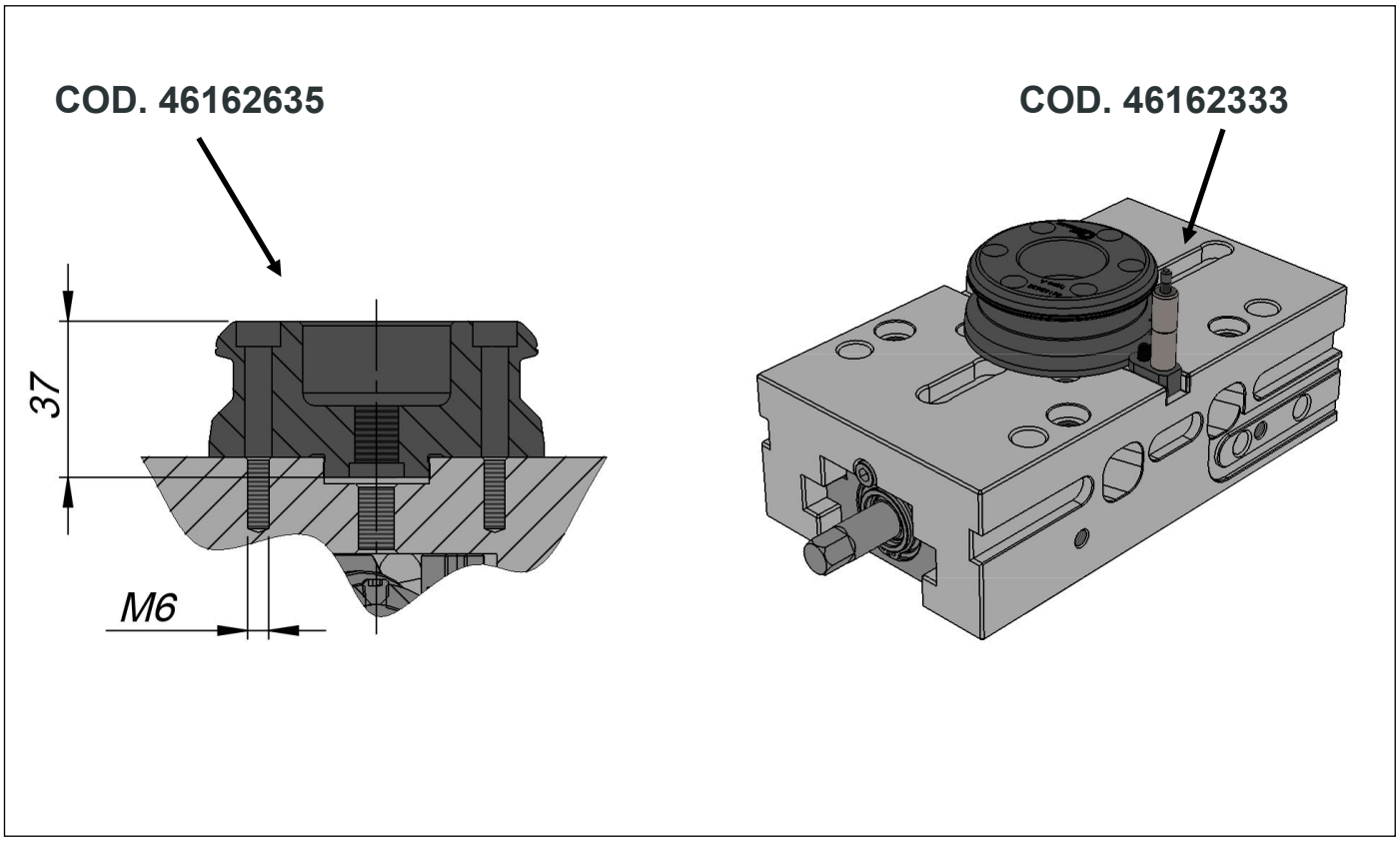
IMG 125 - IMG 160 with APS 140

APS 140 fixing pin kit and key for single use



IMG 125 - IMG 160 with APS 190

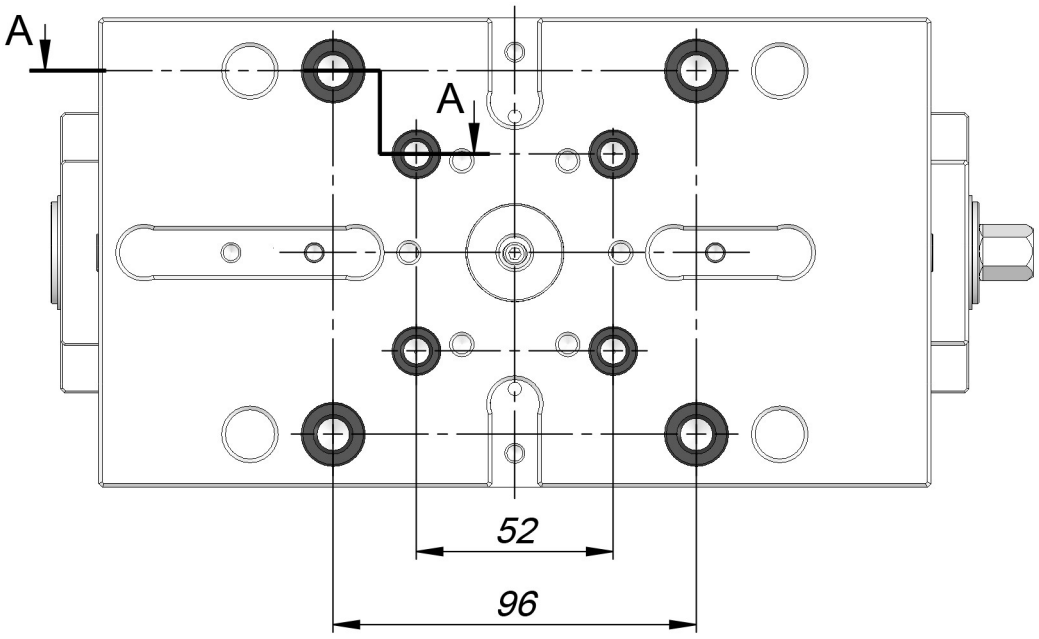
APS 190 fixing pin kit and key for single use



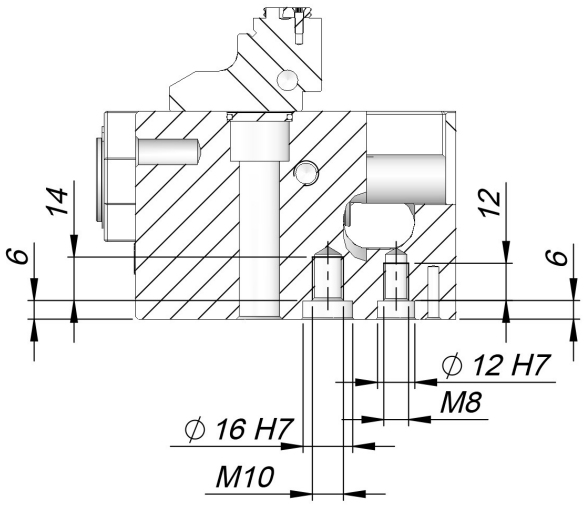
Installation

Use on Lang Quick-Point zero point system

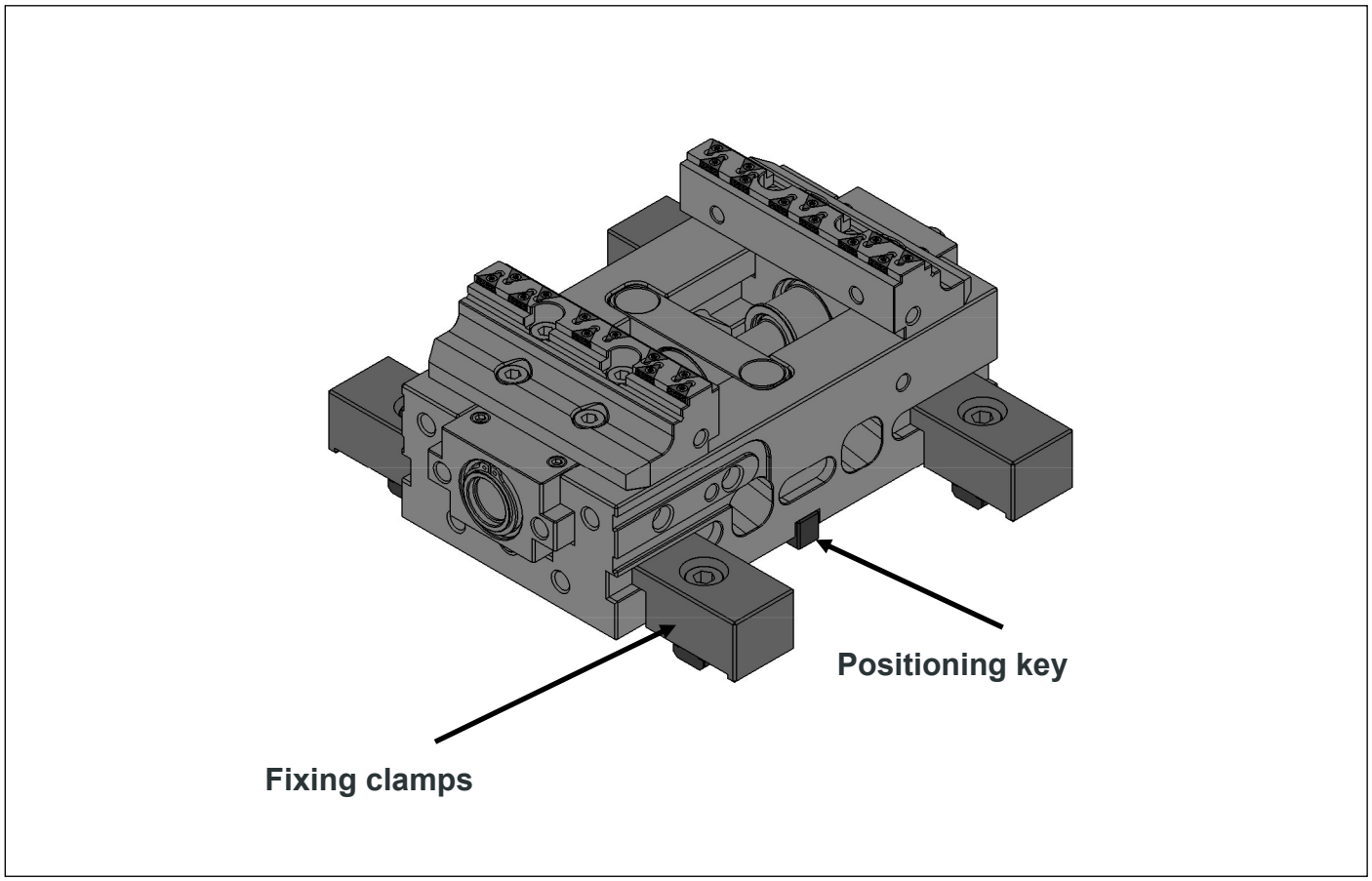
IMG 125-220 = LANG 52 - 96 mm
IMG 125-230 = LANG 96 mm
IMG 160-270 = LANG 96 mm
IMG 160-420 = LANG 96 mm



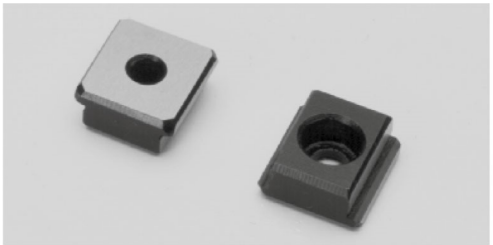
SECTION A-A

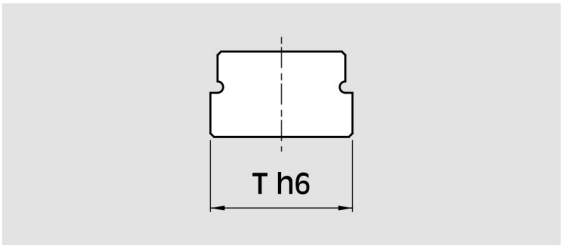


IMG 125 - IMG 160



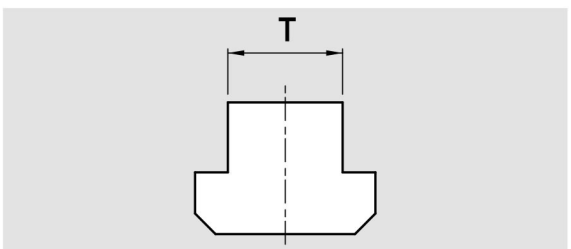
Positioning key for “T” slots





	mm 12 - h6	mm 14 - h6	mm 16 - h6	mm 18 - h6	mm 20 - h6	mm 22 - h6
Id. No.	58351392	58351393	58351394	58351395	58351396	58351397

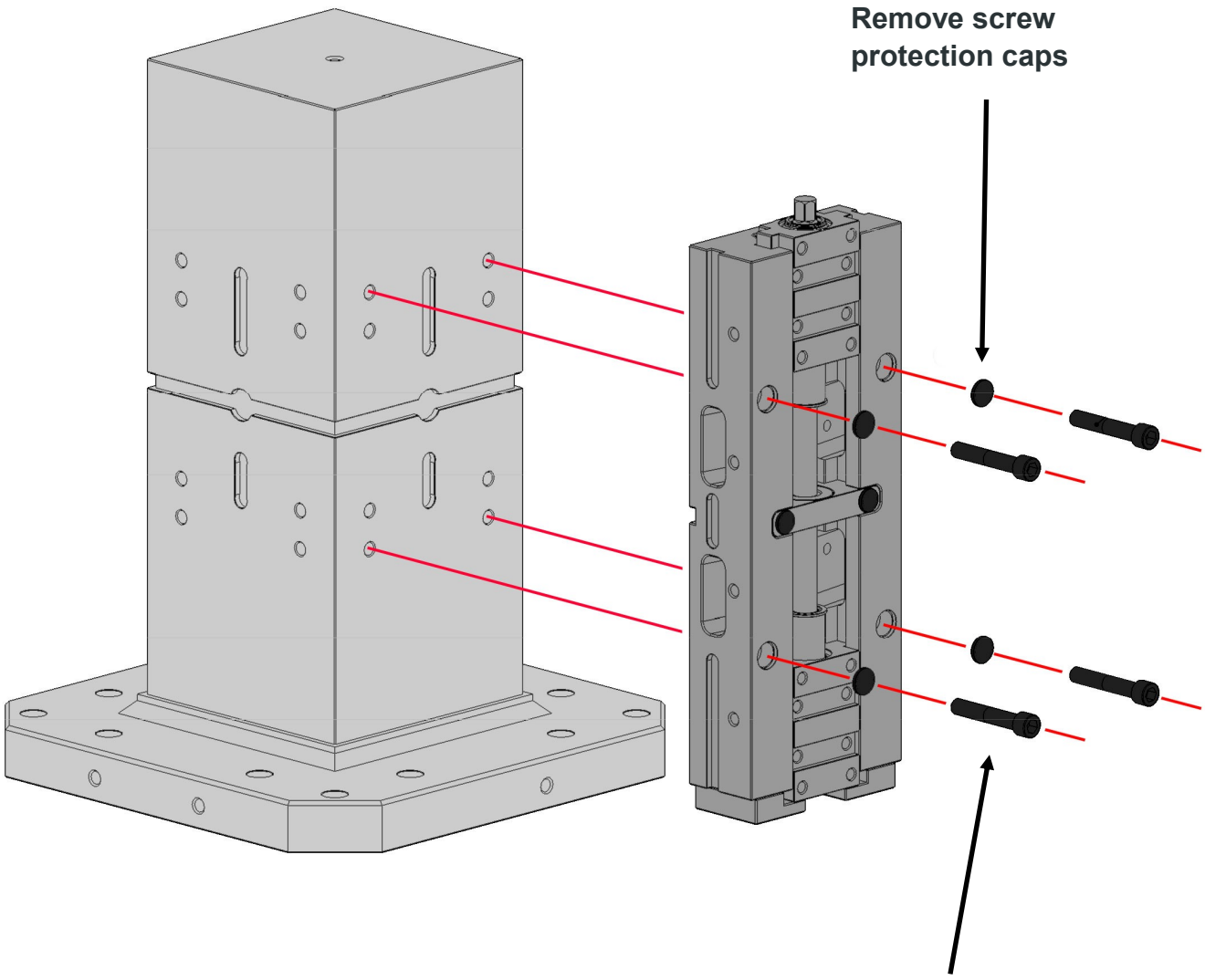
Pair of clamps



	mm 12	mm 14	mm 16	mm 18	mm 20	mm 22
Id. No.	58022792	58022793	58022794	58022795	58022796	58022797

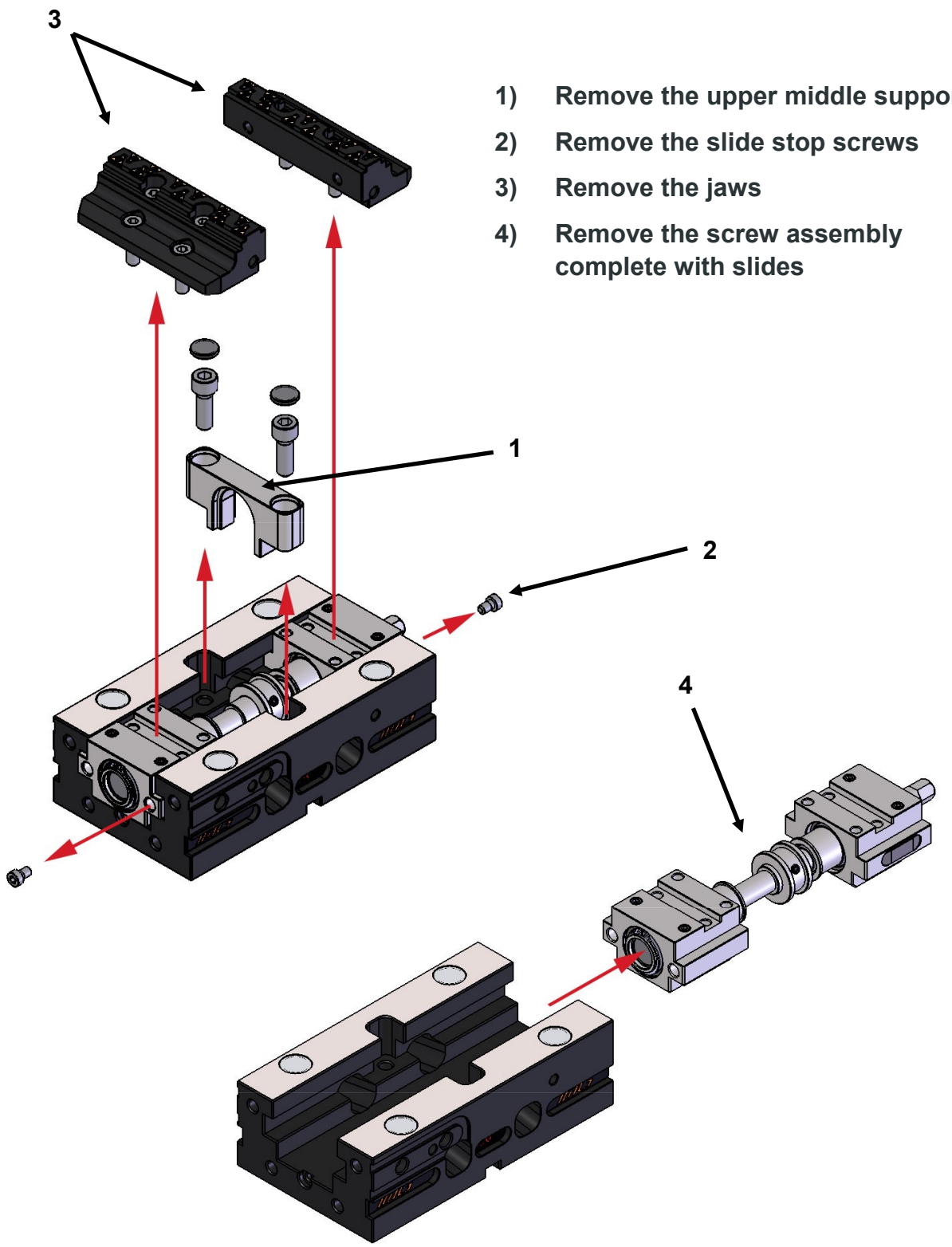
Direct mounting on plate or tombstone IMG 125 - IMG 160

Example of tombstone mounting



Disassembly

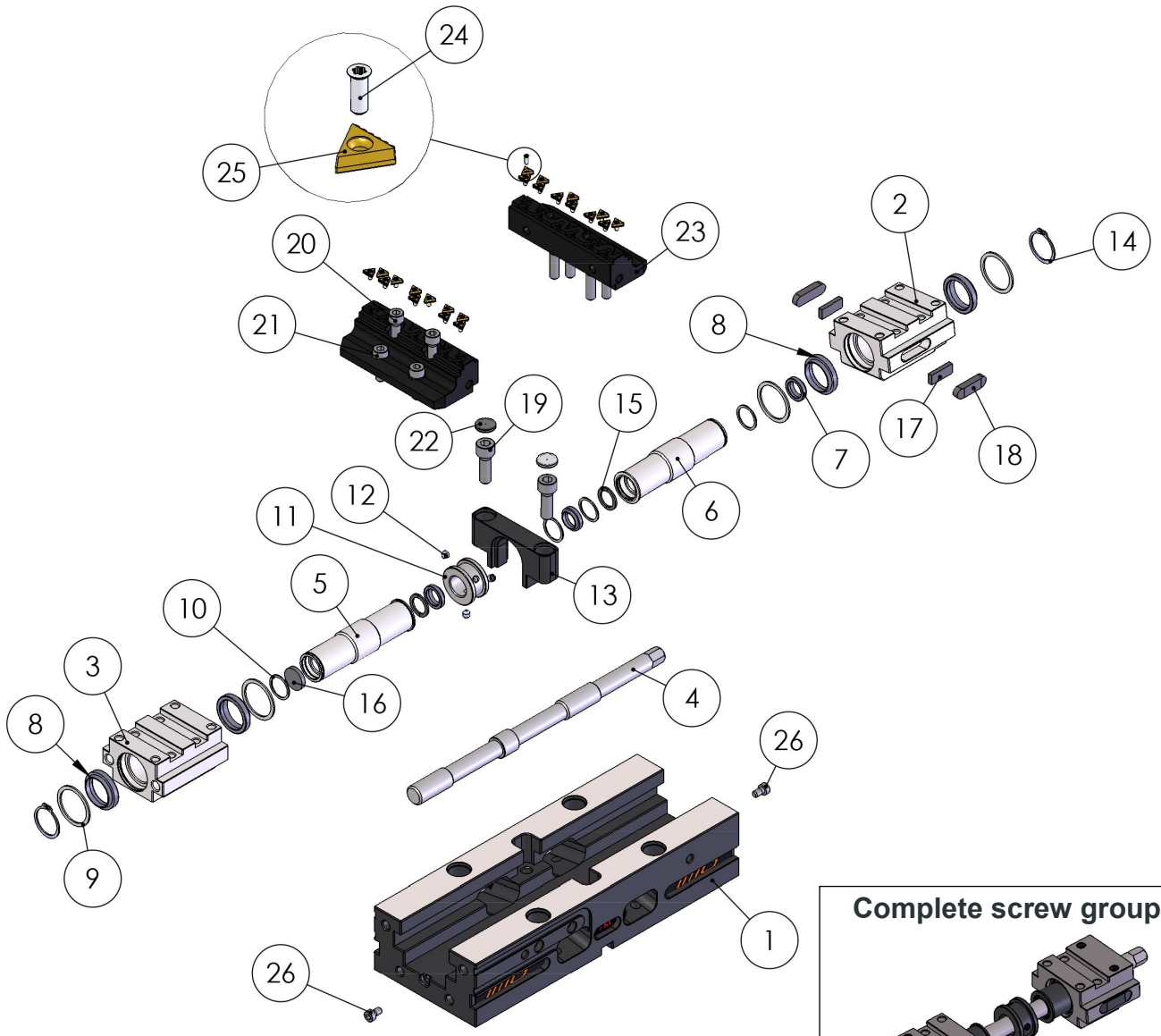
IMG 125 - IMG 160



1) **Remove the upper middle support**
2) **Remove the slide stop screws**
3) **Remove the jaws**
4) **Remove the screw assembly complete with slides**

Spare part list

IMG 125 - IMG 160



Complete screw group

IMG 125-220 - cod. 58359010
IMG 125-320 - cod. 58359020
IMG 160-270 - cod. 58369010
IMG 160-420 - cod. 58369020

1	IMG base	8	Bronze ring	15	Stopper ring	22	Cap
2	Right slide way	9	Elastic ring	16	Cap	23	Sintergrip jaw
3	Left slide way	10	Elastic ring	17	Rubber	24	Screw
4	Operation screw	11	Stopper screw	18	Key	25	Sintergrip insert
5	Left bush	12	Screw	19	Screw	26	Screw
6	Right bush	13	Upper support	20	Screw		
7	Bronze ring	14	Seeger	21	Screw		

Note

Note