



A COMPANY OF THE GROUP



OFFICINA MECCANICA LOMBARDA S.r.l.

COPY OF THE ORIGINAL

INSTRUCTION MANUAL

5 AXIS CLAMPING VICE



Code: 10705922 - May 2023

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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.

- 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 qualified 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 accidental 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 crushing hazard 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 the clamping 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 be verified in regular intervals. Use suitable static 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! Insufficient and improper maintenance 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.

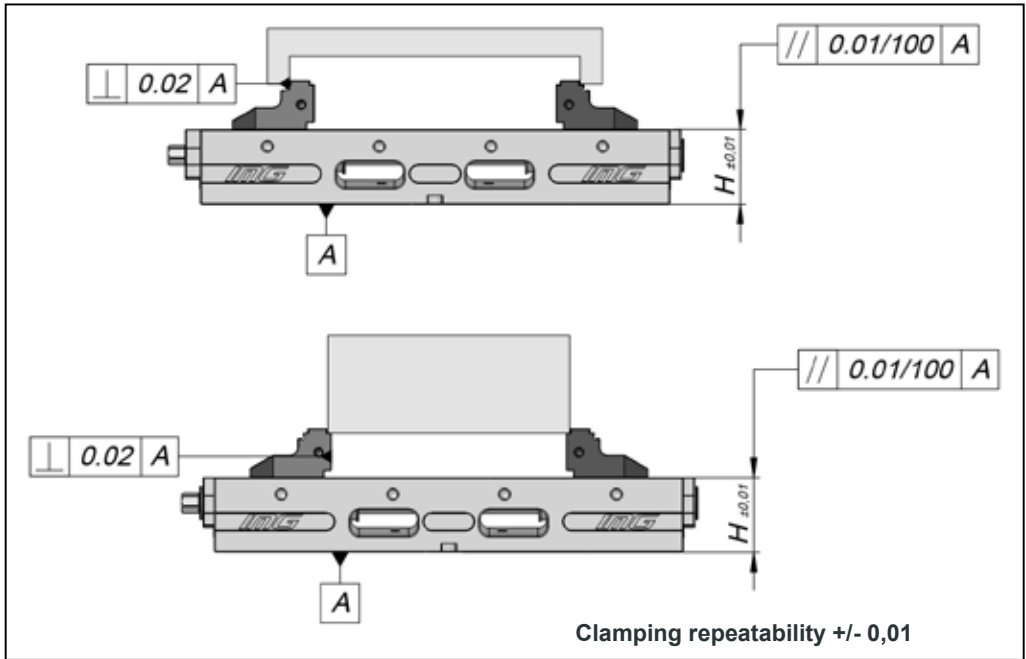
The following hazardous materials are used: Lubricants such as oil and grease can contain poisonous agents. They must not pollute the environment. The disposal must be carried out by a suitable waste management company.

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

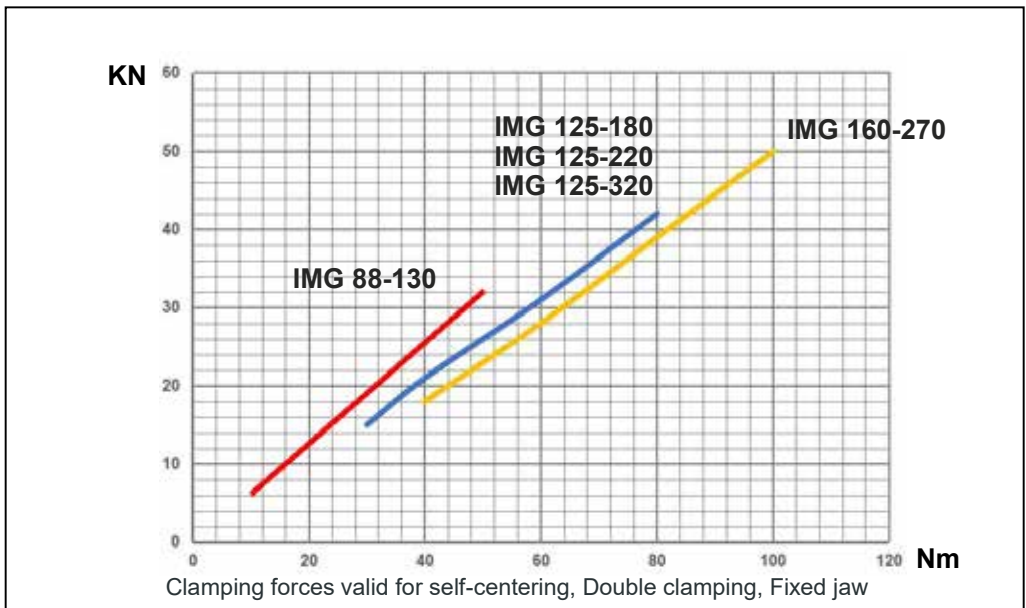
For any problems or questions please contact OML directly or one of our authorized offices.

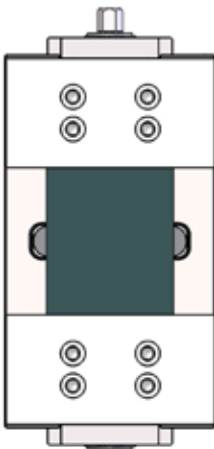
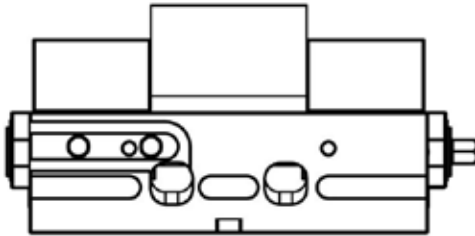
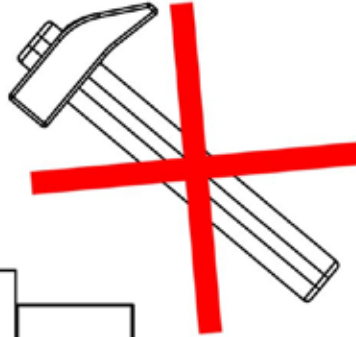
ALL REGULATIONS ACCORDING TO THE PREVIOUS POINTS MUST BE OBSERVED. THE USE ON MACHINE TOOLS HOWEVER, ALWAYS CAUSES SOME RESIDUAL RISKS, THAT HAVE TO BE ELIMINATED BY THE USER BY SUITABLE SAFETY ACTIONS.

Clamping tolerances

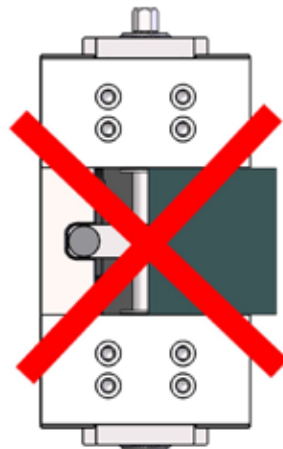


Clamping force





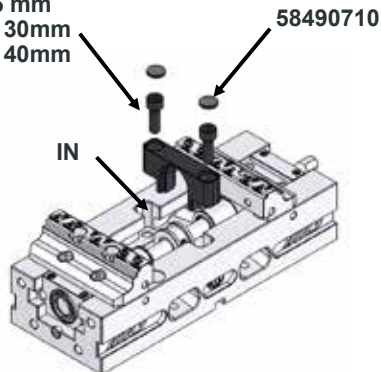
YES



NO

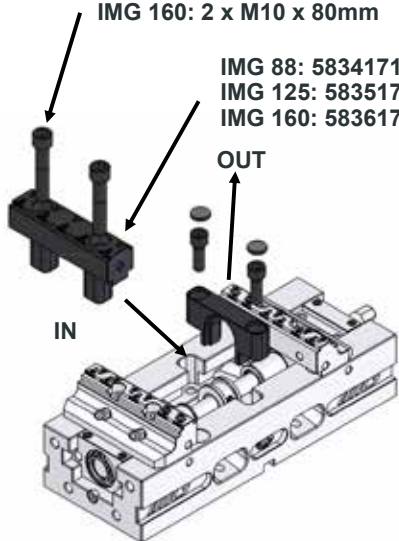
Clamping types

IMG 88: 2 x M6 x 25 mm
 IMG 125: 2 x M10 x 30mm
 IMG 160: 2 x M10 x 40mm



Self-centering

IMG 88: 2 x M6 x 50
 IMG 125: 2 x M10 x 70mm
 IMG 160: 2 x M10 x 80mm

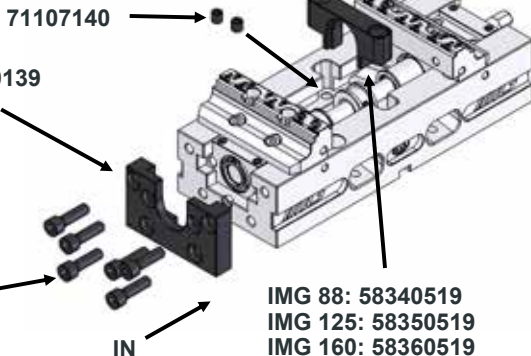


IMG 88: 58341719
 IMG 125: 58351719
 IMG 160: 58361719

Double clamping

Fixed jaw

IMG 88: 58341019
 IMG 125-180: 583510139
 IMG 125: 58351019
 IMG 160: 58361019



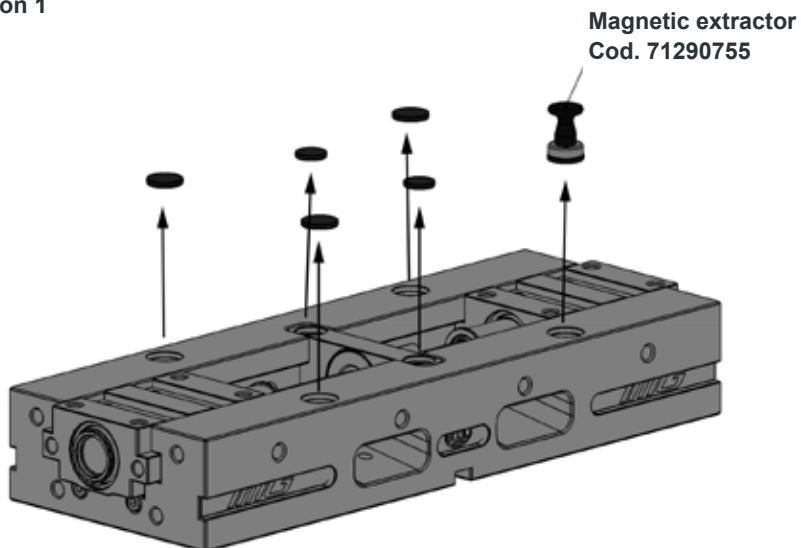
IMG 88 4 x M6 x 12mm
 2 x M8 x 30mm

IMG 125 / IMG 160 4 x M10 x 30mm
 2 x M10 x 20mm

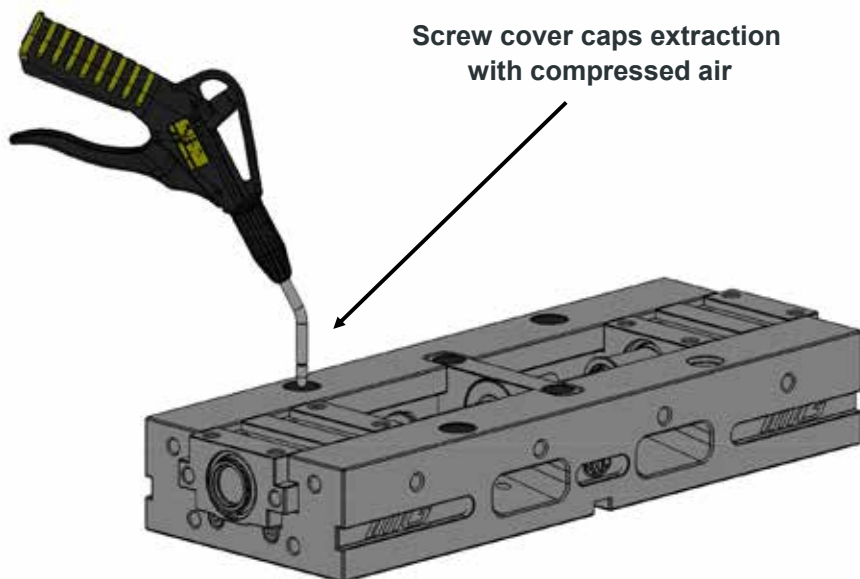
IMG 88: 58340519
 IMG 125: 58350519
 IMG 160: 58360519

Screw cover caps extraction

Solution 1



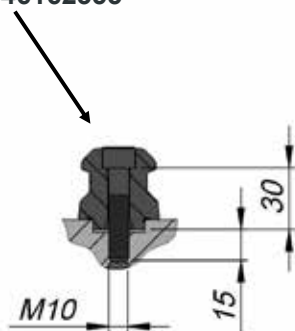
Solution 2



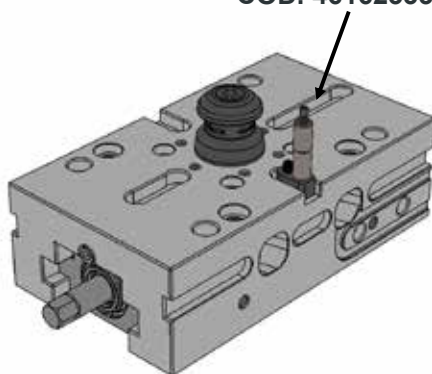
IMG 88 - IMG 125 - IMG 160 with APS 140

APS 140 fixing pin kit and key for single use

COD. 46162355



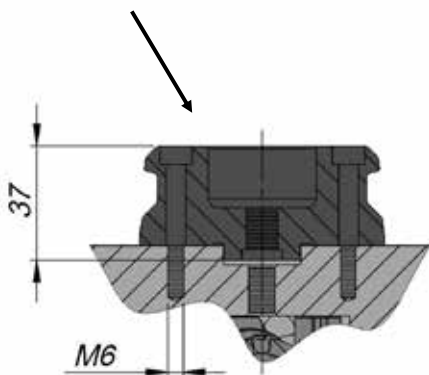
COD. 46162333



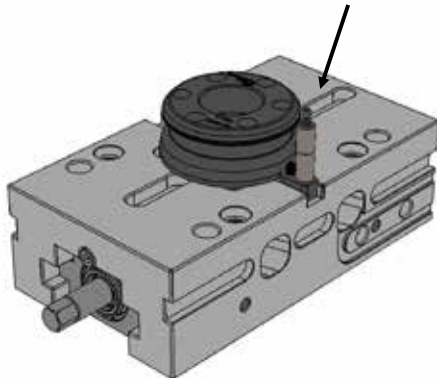
IMG 125 - IMG 160 with APS 190

APS 190 fixing pin kit and key for single use

COD. 46162635

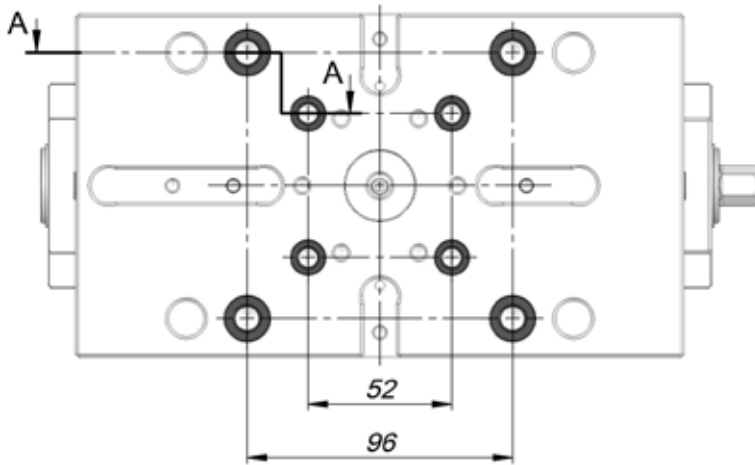


COD. 46162333

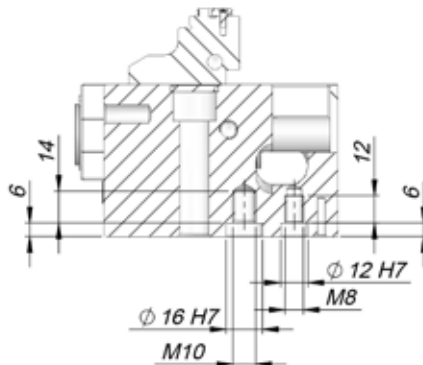


Use on Lang Quick-Point zero point system

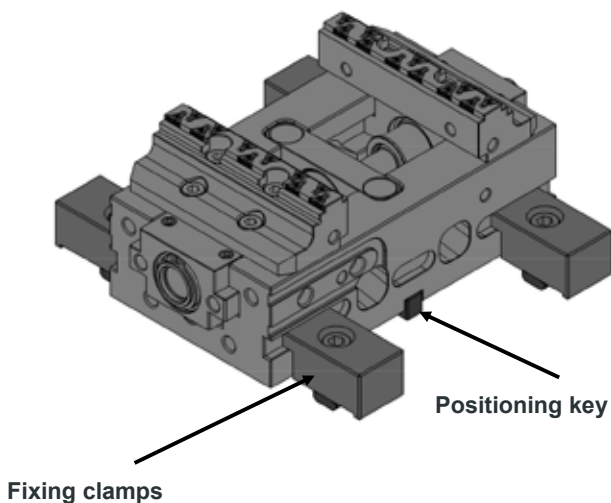
- IMG 88-130 = LANG 52 mm
- IMG 125-180 = LANG 52—96 mm
- IMG 125-220 = LANG 52 - 96 mm
- IMG 125-230 = LANG 96 mm
- IMG 160-270 = LANG 96 mm
- IMG 160-420 = LANG 96 mm



SECTION A-A



IMG 88 - IMG 125 - IMG 160



Positioning key for "T" slots

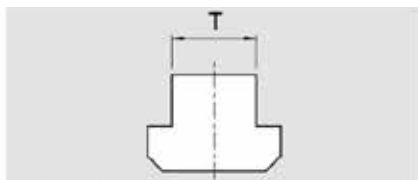


IMG 125 - 160	mm 12 - h6
mm 12 - h6	58351392
mm 14 - h6	58351393
mm 16 - h6	58351394
mm 18 - h6	58351395
mm 20 - h6	58351396
mm 22 - h6	58351397



IMG 88 - 130	A	B	H	D
58341393	12	14	17	10
58341395	16	18	17	10

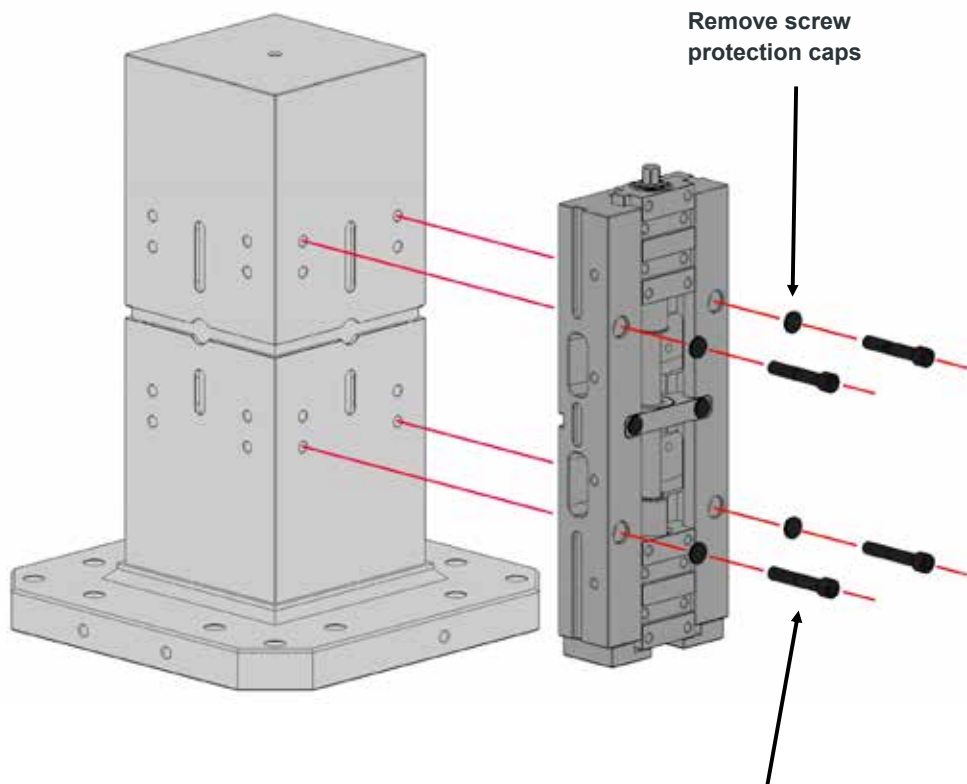
Pair of clamps



Type	mm 12	mm 14	mm 16	mm 18	mm 20	mm 22
IMG 88	58012792	58012793	58012794	58012795	58012796	58012797
IMG 125 / 160	58022792	58022793	58022794	58022795	58022796	58022797

Direct mounting on plate or tombstone IMG 88—IMG 125 - IMG

Example of tombstone mounting



Screws TCEI M12x70

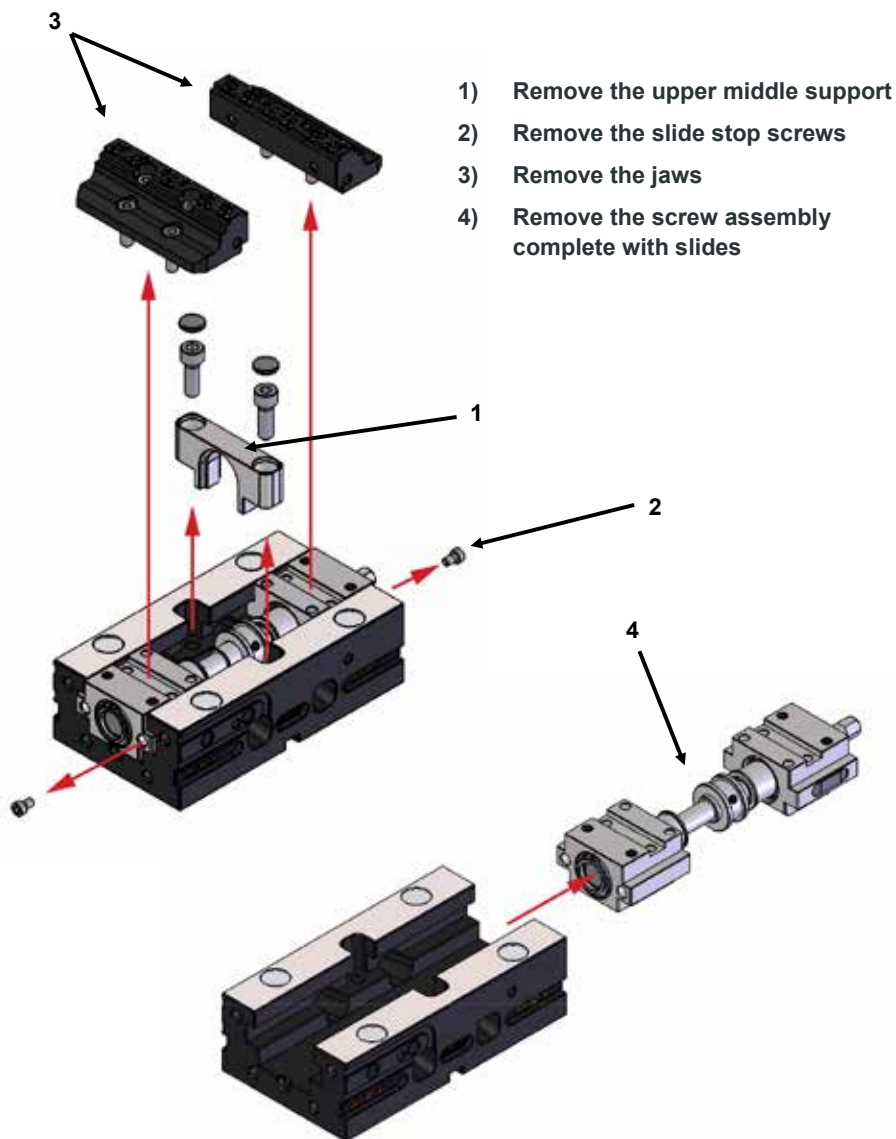
For all the models

IMG 125—IMG 160

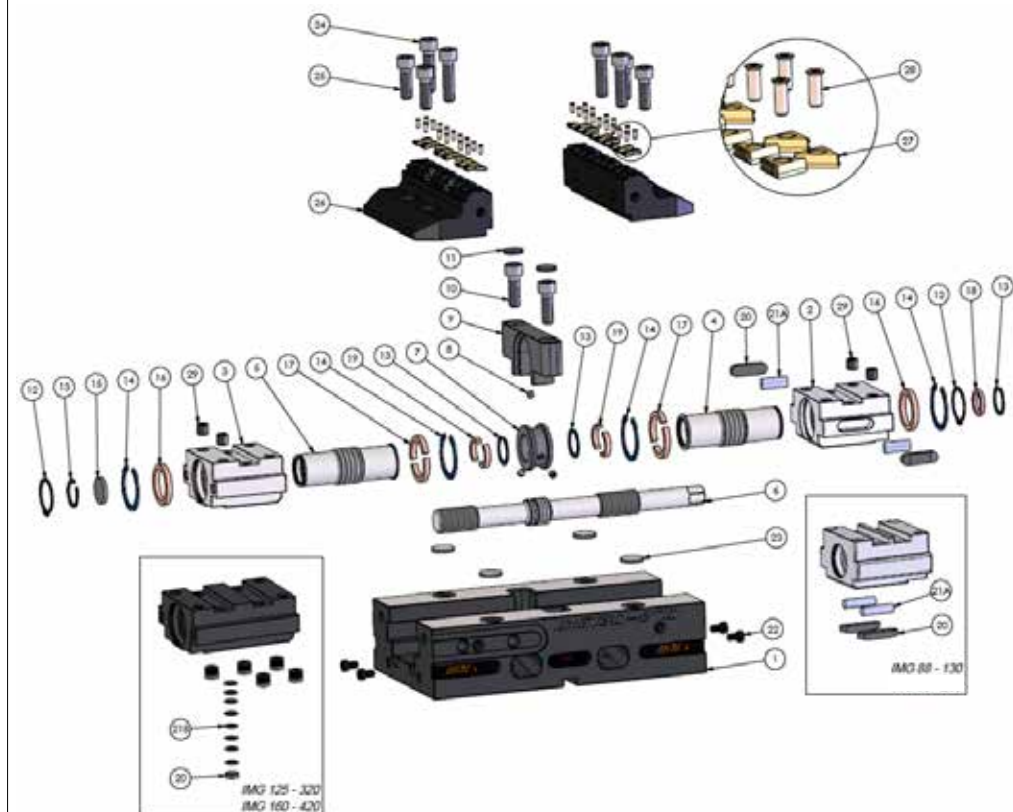
For IMG 88

Screws TCEI M6x50

IMG 88 - IMG 125 - IMG 160



IMG 88 - IMG 125 - IMG 160



IMG 88 - IMG 125 - IMG 160

POS.	DESCRIPTION	88 - 130		125 - 180		125 - 220		125 - 320		160 - 270		160 - 420	
		N° PC	CODE	N° PC	CODE	N° PC	CODE	N° PC	CODE	N° PC	CODE	N° PC	CODE
1	IMG BASE	1	58340110	1	58350130	1	58350110	1	58350120	1	58360110	1	58360120
2	LEFT SLIDE WAY	1	58340212	1	58350232	1	58350212	1	58350222	1	58360212	1	58360222
3	RIGHT SLIDE WAY	1	58340211	1	58350231	1	58350211	1	58350221	1	58360211	1	58360221
4	LEFT BUSH	-	-	-	-	1	58350612	1	58350622	1	58360612	1	58360622
5	RIGHT BUSH	-	-	-	-	1	58350611	1	58350621	1	58360611	1	58360621
6	OPERATIONAL SCREW	1	58340310	1	58350330	1	58350310	1	58350320	1	58360310	1	58360320
7	OPERATIONAL SCREW STOPPER	1	58340410	1	58350430	1	58350410	1	58350410	1	58360410	1	58360410
8	SCREW STEEL FOR SCREW STOPPER	3	71112510	3	71112520	3	71112520	3	71112520	3	71112520	3	71112520
9	SELF CENTRING PIVOT	1	58340510	1	58350530	1	58350510	1	58350510	1	58360510	1	58360510
10	SCREW ICE FOR PIVOT	2	71113046	2	71113084	2	71113084	2	71113084	2	71113084	2	71113084
11	ALU CAP	2	58490740	2	58490710	2	58490710	2	58490710	2	58490710	2	58490710
12	SEEGER	-	-	-	-	2	71251428	2	71251428	2	71250130	2	71250130
13	SEEGER	4	71251520	4	71251525	4	71251522	4	71251522	4	71251525	4	71251525
14	SEEGER	-	-	-	-	4	71251536	4	71251536	4	71251540	4	71251540
15	CAP	1	58340810	1	58360810	1	58350810	1	58350810	1	58360810	1	58360810
16	EXTERNAL BRONZE RING	1	58340740	1	58360720	2	58350740	2	58350740	2	58360740	2	58360740
17	INTERNAL BRONZE RING	4	58340730	4	58350750	4	58350730	4	58350730	4	58360730	4	58360730
18	EXTERNAL BRONZE RING	-	-	-	-	1	58350720	1	58350720	1	58360720	1	58360720
19	INTERNAL BRONZE RING	-	-	-	-	4	58350710	4	58350710	4	58360710	4	58360710
20	SLIDE WAY BRAKE	2	58340910	2	58350910	2	58350910	4	58360215	2	58350910	6	58360215
21	RUBBER (A) - SPRING (B)	2	71381151 (A)	4	71381151 (A)	4	71381151 (A)	32	71290838 (B)	4	71381151 (A)	48	71290838 (B)
22	SCREWS	2	71113726	2	71113726	2	71113726	2	71113726	4	71113726	4	71113726
23	ALU CAP	4	58490740	4	58495710	4	58495710	4	58495710	4	58495710	4	58495710
24	VITE TCEI PER GANASCIA	4	71113047	4	71113066	4	71113065	4	71113065	4	71113086	4	71113086
25	VITE TCEI PER GANASCIA	4	71113044	4	71113064	4	71113064	4	71113064	4	71113084	4	71113084
26	JAW	2	58341210	2	58351210	2	58351210	2	58351210	2	58361210	2	58361210
27	SINTEGRIP INSERT	-	-	-	-	-	-	-	-	-	-	-	--
28	SCREW FOR INSERT	14	58450210	22	58450210	22	58450210	22	58450210	30	58450210	30	58450210
29	SCREWS	8	71112122	8	71112131	4	71112131	8	71112131	4	71112140	8	71112140



TCI



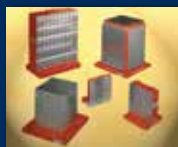
MCI



CV



CV-S



FMS



SINTERGRIP



APS



CLAK SYSTEM



GENIUS



CAM SYSTEM



HOLDING CLAMPS



VARI CLAMP



JAWS



SINTEX



FAST CLAMPS



TWIN VISE



IMG



TDM



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