

ARNOLD IZ1

Operations Manual

A. General Information

Arnold IZ1 is a double acting hydraulic vise which needs an exterior source of hydraulic high pressure. Normal clamping pressure is 20 kN at 250 Bar (4500 lbs at 3600 psi); clamping travel is 15mm (0.59")

There are three sets of hydraulic connection points:

- On two sides are two ¼" connectors (in and out)
- On the bottom are two holes (in and out) which can be used to feed pressure into the vise from a base plate. This allows for several vises to be mounted and operated together without the need for external hoses or tubing.

The vises are shipped with all holes plugged.

Arnold IZ1 has a movable jaw and a fixed jaw.

The fixed jaw is attached to the vise body with four screws and located with keys.

The movable jaw is attached to a serrated slide using a "T" nut which allow the movable jaw to be positioned in several positions to fit the workpiece.

Arnold IZ1 is shipped with machinable Jaws made of mild steel.

Optional hard jaws (60RC) are available.

B. Cleaning

For proper operation it is necessary that all internal components are clean. The vise is hermetically sealed to prevent chips from entering the system, but it is recommended to clean the inside periodically and use high quality hydraulic fluids and coolants.

C. Maintenance

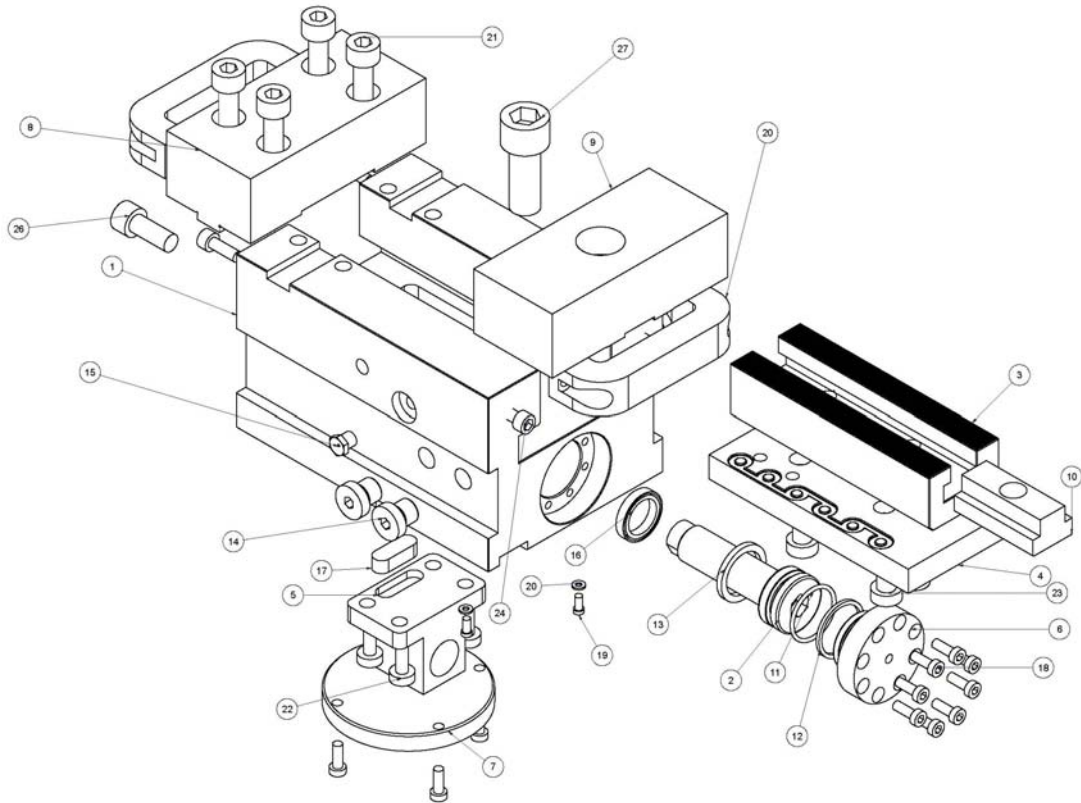
Since the vise is totally sealed it is important to lubricate the vise frequently. There are lubrication holes on the sides of the vise to facilitate this

If there are operating problems, then it may be necessary to replace the hydraulic seal (16). To do this it is necessary to remove the rear cover (18) and to pull out the piston (2). To do this remove the rear screw (26) and then use a hex wrench in the piston end to extract it. The seal (16) is likely to remain inside the cylinder and may have to be pulled out with a hook.

D. Warning!

Never exceed maximum pressure of 400Bar (5800psi).

ARNOLD IZ1 - Components



ID	Quantity	Order number	Description
1	1	996010125	Body
2	1	996020125	Piston
3	1	996030125	Jaw slide
4	1	996040125	Jaw plate
5	1	996050125	Connector
6	1	996060125	Rear cover
7	1	996070125	Bottom Cover
8	1	996080125	Fixed jaw
9	1	996090125	Movable jaw
10	1	996010125	Long T-nut
11	1	996110125	O-ring
12	1	996120125	Washer
13	1	U26023204	Gasket
14	4	U70000114	1/4" Plug
15	2	951080090	Lubrication points
16	1	996130125	Seal
17	1	996140125	Key
18	12	996150125	Screw M5x14
19	2	U70000113	Screw M4x8
20	2	U70000112	Handle screws
21	4	910510160	Screw M10x40
22	4	910410090	Screw M8x20
23	4	900380200	Screw M10x20
24	4	996160125	Screw M6x20
25	2	996170125	Handle
26	1	910642125	Screw M10x25
27	1	991090160	Screw M16x40