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MX350 MaxLock

Operating Instructions Manual
Manual de instrucciones de operación



ENGLISH

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WARNING:

Indicates a potential danger that requires correct action to avoid personal injury.

Vise Data

Use this to fill out information about your vise for quick reference.

Purchase Date: _____ - _____ - _____

Purchase Order: _____

Purchased From: _____

Delivery Date: _____

Serial No.: _____

Note:

Make sure to register your warranty online at kurtworkholding.com



Thank you for your purchase!
If you have any feedback or questions.

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Replacement of 5/8 - 11 Threaded Rod



1. When reassembling the hex drive (drive screw) to threaded rod, thread (2) 5/8 - 11 nuts onto the new threaded rod. 1/4 - 20 tapped hole should extend about 1 - 1/2" beyond nuts.



2. Tighten jam nuts on threaded rod. These will allow you to clamp threaded rod in vise without damaging threads.



3. With nuts clamped in vise install the hex drive (drive screw), #MX350-293 and torque to 120 ft. - lbs.



4. Install 1/4 - 20 cap screw and torque to 200 in. - lb.

Your new Kurt MX350 5-axis vise is ready for operation. Be sure to use caution when clamping your parts and DO NOT exceed the recommended maximum torque value of 40lbs of torque

Fig.1

Mounting hole pattern

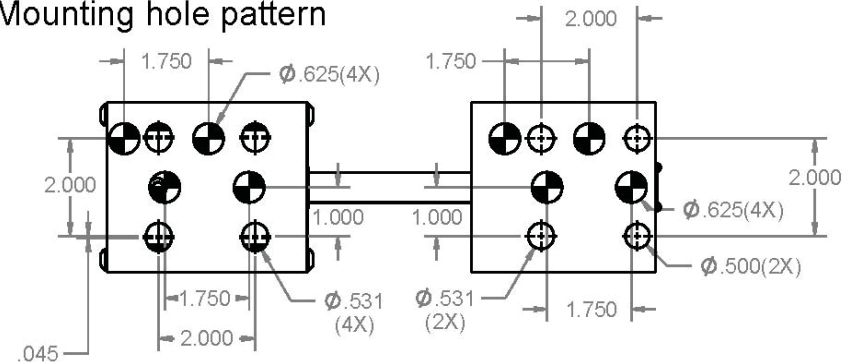
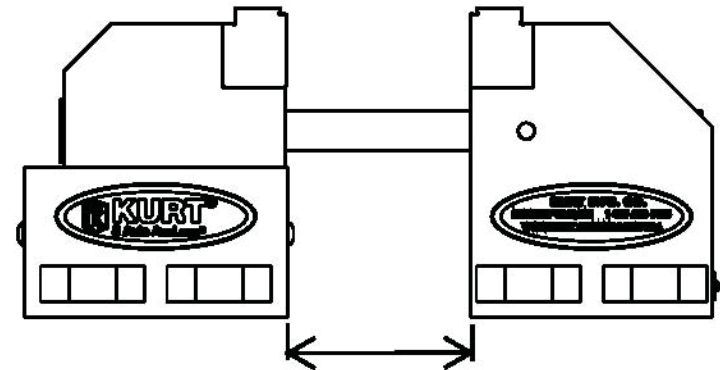


Fig.2



Set this distance at approximately 3/8 inch less than the thickness of your part.

Operating Instructions

For proper vise operation insert the handle on the hex end of the vise. Rotate clockwise to clamp and counterclockwise to unclamp your vise. This handle combined with the correct amount of torque will provide you with all the clamping force you will need to machine your parts. A high quality calibrated torque wrench can be used if needed. The maximum torque for the MX350 is 40ft. lbs. This will yield approx. 7000lbs of clamping force. DO NOT use any other type of pressure to open or close your vise.

To properly clamp a part in the MX350 5-axis vise and for the best accuracy and repeatability you should machine the horizontal surface of the jaw. (Fig. 4) This is best done after you have the vise completely set up and ready for operation. Insert a small piece of material in the vise just below the step in the jaw as shown in diagram 4. Tighten the jaws on the part and hold tight. Run the cutter down the horizontal surface on both sides of the vise removing approximately .005 of stock. Be careful not to cut the vertical surfaces if you can. This will true up the jaw and make for a very accurate repeatable vise. If you choose not to cut your jaws you can expect a tolerance of +/- .005 on the step. The standard jaw is hardened to 40RC and is coated with a black oxide treatment. Your vise is now prepared and ready for full operation. Be sure that all screws are tight and guards are in place.

NOTE: The tolerance build-up will affect the location of the step in the "Z" axis. Mill to clean up the horizontal surfaces of the step jaws when the greatest accuracy is needed. (Fig.4)

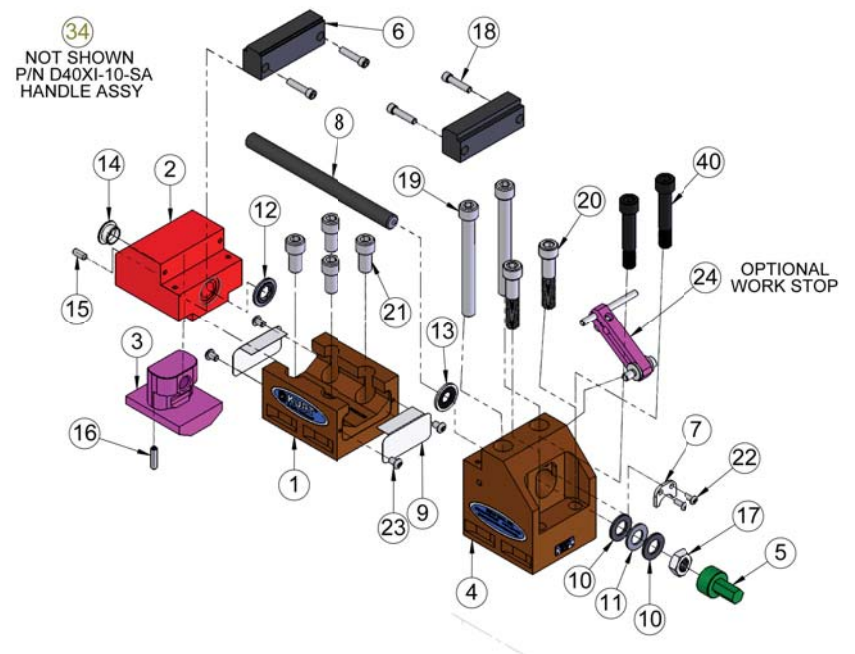


WARNING:

The use of handle extensions, air impact wrenches, breaker bars or hammer strikes are not recommended and will void the warranty if used. This can cause damage to the thrust bearing and screw threads.

33	D40-68	O-RING #024	4
34	D40XI-10-SA	HANDLE ASSEMBLY	1
35	MX350-111	KURT / 5 AXIS STICKER	2
36	MX350-313R	WEBSITE STICKER	1
37	MX350-314F	MAXLOCK STICKER	1
38	07-0230	DRIVE SCREW	2
39	MX350-102	SERIAL TAG	1
40	MX350-176	LOCATOR BOLT	2

MX350 Mechanical Drawing



MX350 Parts List

ITEM#	PART#	DESCRIPTION	QTY.
1	MX350-1	T-SLOT BASE	1
2	MX350-2	MOVABLE	1
3	MX350-3	NUT	1
4	MX350-6	STATIONARY	1
5	MX350-293	DRIVE, SCREW	1
6	MX350-236	HARD JAW PLATE	2
7	MX350-252	RETAINER, LOCKING	1
8	MX350-5-	5/8-11 THREADED ROD MODIFIED	1
9	MX350-248	CUSTOM CHIP GUARD	2
10	MX350-42	THRUST WASHER	2
11	MX350-41	THRUST BEARING	1
12	MX350-97	THREAD SEAL WIPER	1
13	MX350-211	INTERNAL BRUSH SEAL	1
14	MX350-12	PLASTIC CAP	1
15	01-3477	SHSS 1/4-20 X 5/8 LONG	1
16	01-3480	SHSS 1/4-20 X 1.0 LONG	1
17	MX350-163	JAM NUT	1
18	00-1294	SHCS 1/4-20 X 1 1/8 LONG	4
19	00-1431	SHCS 1/2-13 X 4 3/4 LONG	2
20	00-1425	SHCS 1/2-13 X 2 1/2 LONG	2
21	00-1419	SHCS 1/2-13 X 1 1/4 LONG	4
22	03-0022	BHCS 10-32 X 1/2 LONG	2
23	03-0020	BHCS 10-32 X 1/4 LONG	4
24	6AWS	WORKSTOP	1
25	MX350-276L	RAIL	1
26	MX350-276S	RAIL	1
27	MX350-291	4 BOLT NUT	2
28	MX350-53S	SLOT COVER	1
29	MX350-53L	SLOT COVER	1
30	MX350-259	DUAL WASHER	4
31	MX350-31	O-RING KEY	4
32	04-0107	5/8n X 1.00 LG DOWEL	4

Fig.3

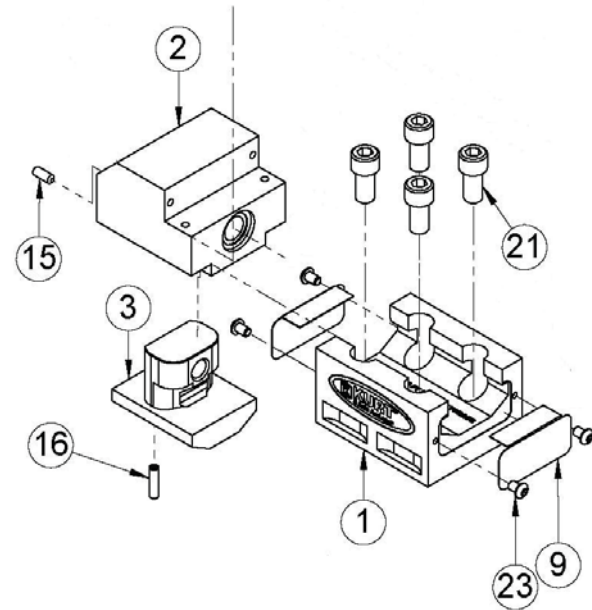
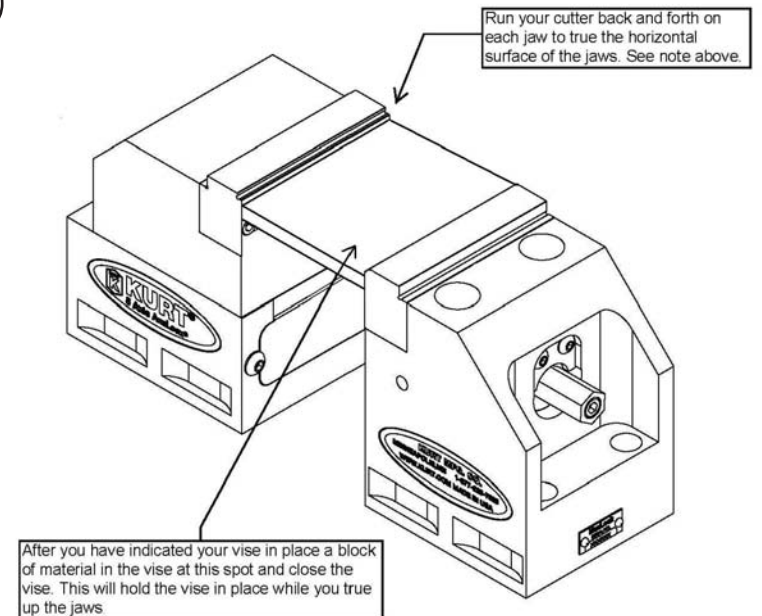
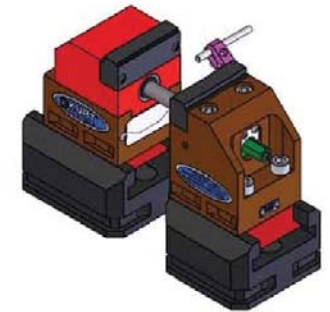
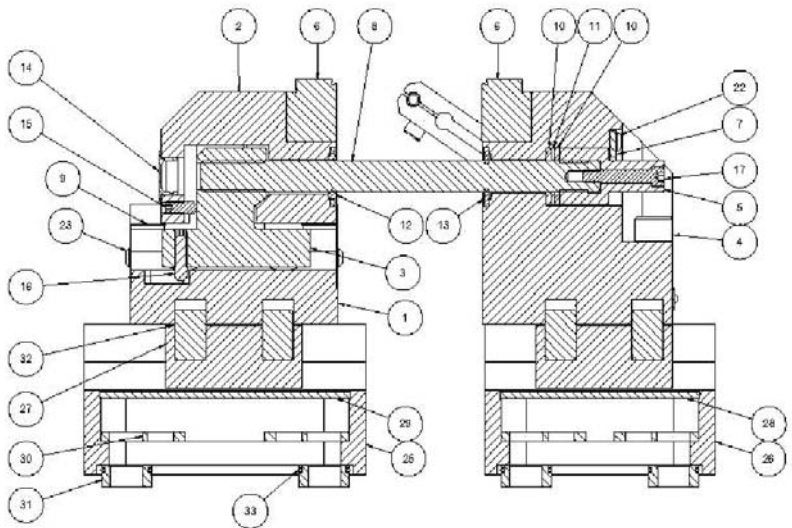
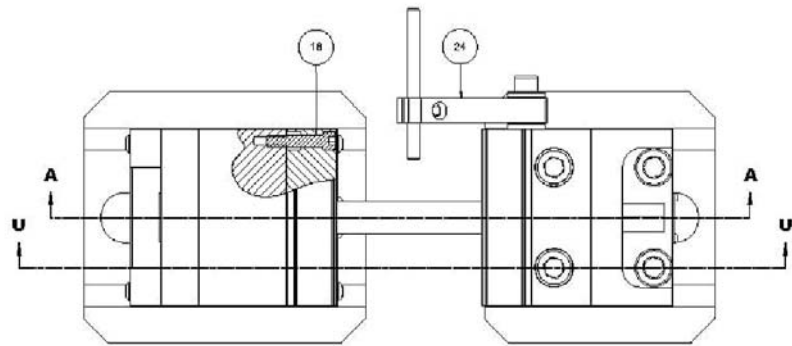


Fig.4





1:2 SCALE

- 34 HANDLE ASSEMBLY
- 35 STICHERPUNKT SHOWN
- 36 STICHERPUNKT SHOWN
- 37 STICHERPUNKT SHOWN
- 40 LOCATOR BOLTS NOT SHOWN

