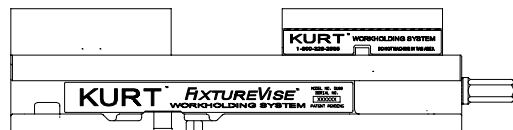
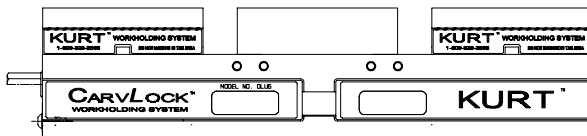


# KURT

# CarvLock / FixtureVise

## Carvable Jaw Block

## Assembly & Disassembly Guide



P/N CARV-95, REV C

quincy\Prod. Setup info\JawKits\Jawkit setup guide

02/18/03

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REVISION HISTORY

REVISION A  
APRIL 1999

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Rev. B  
08/15/00

\*\*\*\*\*

Rev. C  
02/09/01

**Kurt CarvLock and Fixture Vice  
Quick change, Machinable Jaw Blocks  
Instruction Sheet**

**Sec. 1.0**

**ASSEMBLY INSTRUCTIONS**

**Caution: Movable Jaw Blocks when assembled will snap forward and down. When installing jaw blocks keep fingers and hands clear from the underside of Movable Jaw Block. Failure to keep fingers and hands clear could result in personal injury. SEE DIAGRAM #2 CAUTION PINCH POINTS.**

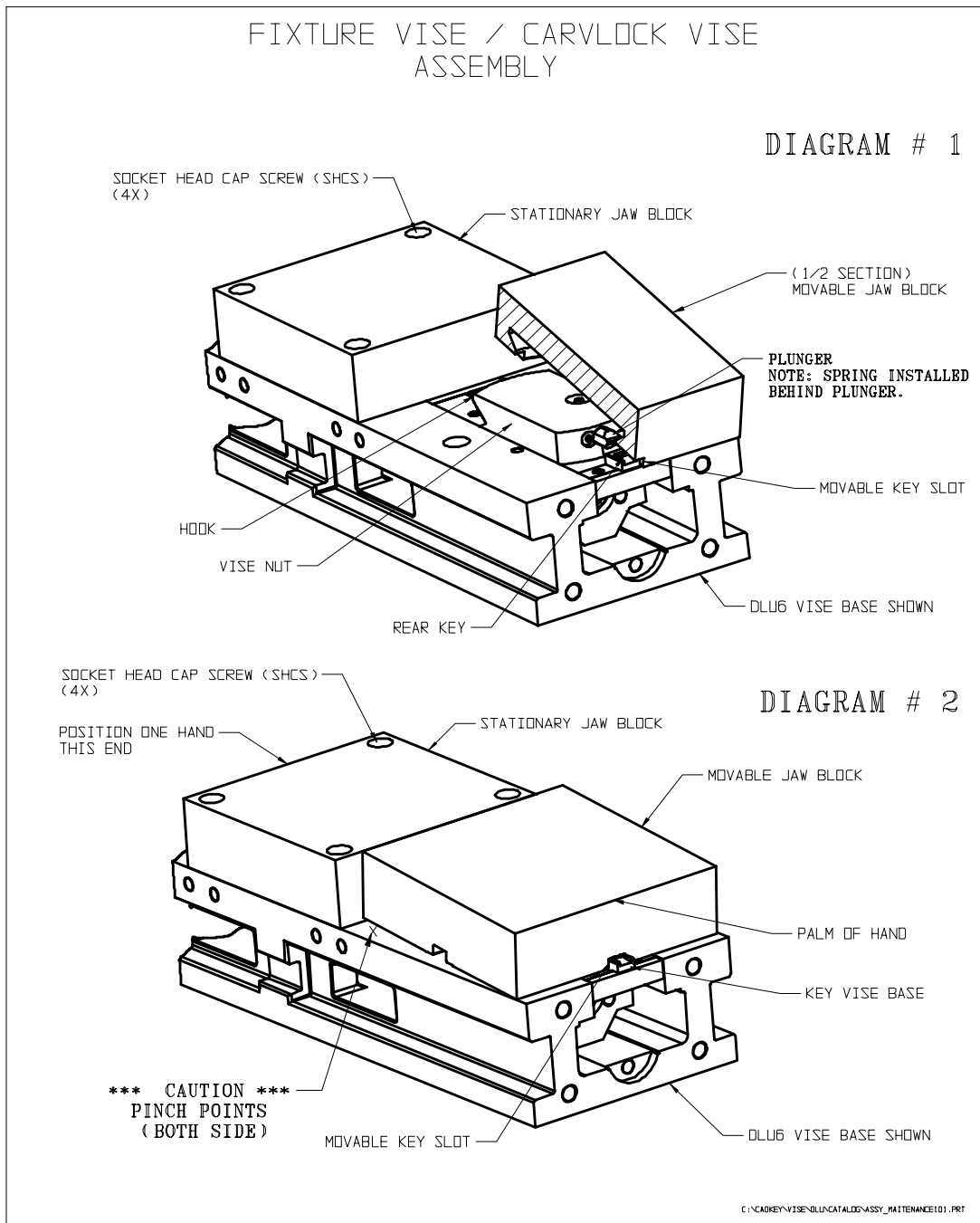
**Spring Note:** Optional Jaw Block kits, Cast iron Jaw Blocks 2.50" and 3.25", Aluminum Jaw Blocks 3.25", and EZ-Lock Jaw Blocks require a higher rated spring supplied with the JawKit. This spring **must** be installed in the Front Nut, (hex end) behind the Plunger. (See diagram #1) Installation of this spring is required in the ClusterTower, CarvLock, and in the FixtureVise mounted in a vertical position only. **Failure to install this spring could result in personal injury and improper function of the vise.**

Note: Before installing Jaws, clean all surfaces and keys to help assure accurate alignment.

1. Position Stationary Jaw block on Vise base. Note: Stationary keyways have a close fit to the Keys in the Vise base. Be careful not to force the Stationary onto the keys. Forcing and /or misalignment can cause damage to Stationary keyway surfaces.
2. Install and tighten the Socket Head Cap Screw (SHCS). See diagram #1.
3. Position the Movable Jaw, (Movable Jaw has the machined cavity in bottom side) by aligning the Key slot in the Movable with the rear Key on the Nut. The Plunger will be positioned on the inside machined cavity. See diagram #1.
4. Note: Refer to diagram #2 for hand positions. See **Caution** above for this step. With one hand on opposite end of the Stationary Jaw for

support, use the palm of other hand to push the Movable Jaw block forward until Movable drops over the hook of the Nut. See diagram #2.

5. Close Vise Jaw blocks completely to set alignment and assure proper location.





# CAUTION:

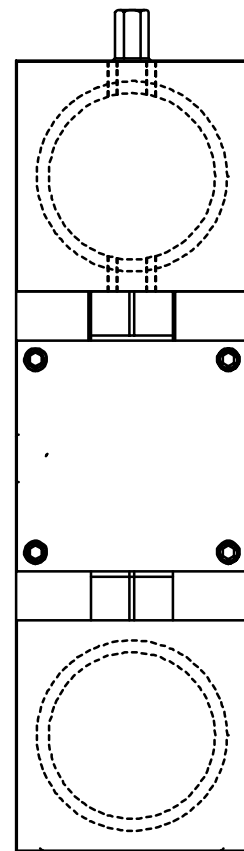
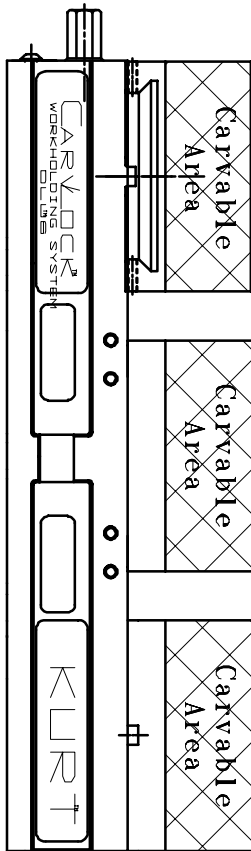
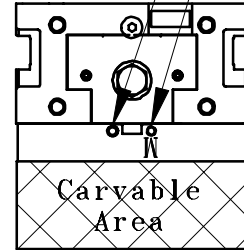
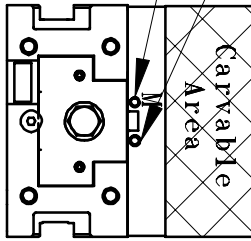
When Vise is used in vertical position with cast 3.25 jaws

lock top jaw in place with

M6 set screw (Metric Version Vise)

Note: Metric set screw marked with "M"

1/4-20 set screw (Inch Version Vise)



path: quincy\cadkey\lvise\dlu\dlu6c\inst\safety

**Kurt CarvLock and Fixture Vise  
Quick change, Machinable Jaw Blocks  
Instruction Sheet**

**Sec. 2.0**

**DISASSEMBLY INSTRUCTIONS (CarvLock / FixtureVise)**

1. Loosen and remove the SHCS from the Stationary Jaw block.
2. Lift Stationary Jaw straight up from Vise base keys.
3. Place a Flat Tip screwdriver in the key slot of the Movable Jaw block as shown in diagram #3.
4. Pull screwdriver upward prying the Movable Jaw block up. See diagram #4.
5. Lift Movable Jaw block off the Vise base.



FIXTURE VISE / CARVLOCK VISE  
DISASSEMBLY

DIAGRAM # 3

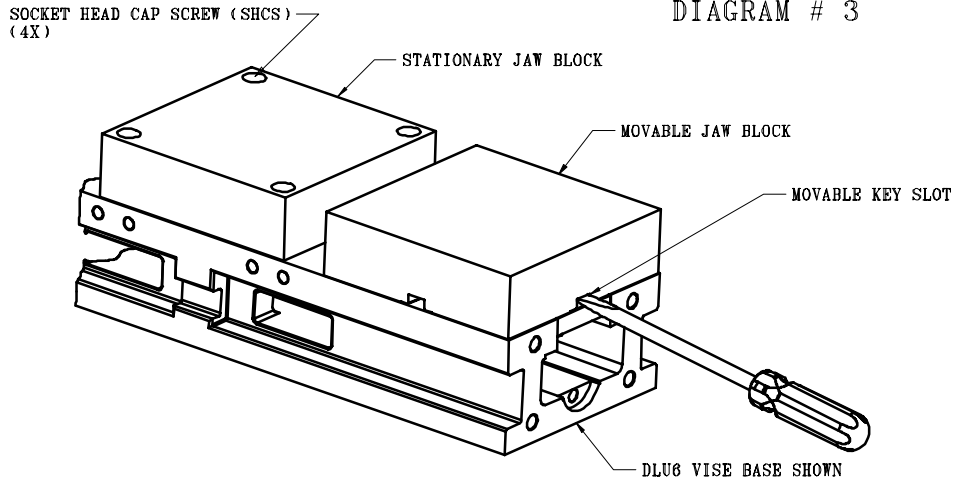
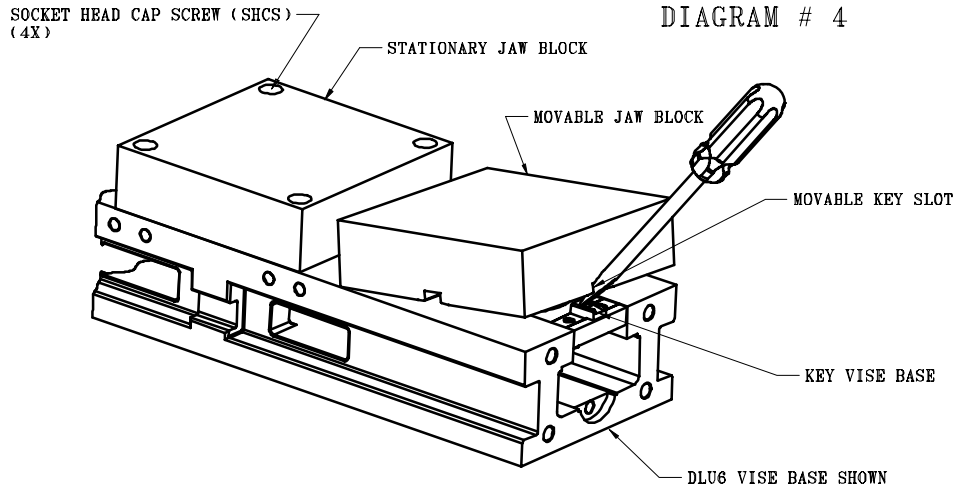


DIAGRAM # 4



C:\CADKEY\VISE\DLU6\CATALDO\ASSY\_MAINTENANCE102.PRT

<p style="text-align: center;"><b>Kurt CarvLock and Fixture Vice Quick change, EZLock Jaw Blocks Instruction Sheet</b></p>
--

**Sec. 3.0**

**ASSEMBLY INSTRUCTIONS**

**Caution: Movable EZLock Jaw Blocks when assembled will snap forward and down. When installing jaw blocks keep fingers and hands clear from the underside of Movable EZLock Jaw Block. Failure to keep fingers and hands clear could result in personal injury. SEE DIAGRAM #2 CAUTION PINCH POINTS.**

**Spring Note:** Optional Jaw Block kits, Cast iron Jaw Blocks 2.50" and 3.25", Aluminum Jaw Blocks 3.25", and EZ-Lock Jaw Blocks require a higher rated spring supplied with the JawKit. This spring **must** be installed in the Front Nut, (hex end) behind the Plunger. (See diagram #1) Installation of this spring is required in the ClusterTower, CarvLock and in the FixtureVise mounted in a vertical position only. **Failure to install this spring could result in personal injury and improper function of the vise.**

Note: Before installing Jaws, clean all surfaces and keys to help assure accurate alignment.

Refer to diagrams #5 and #6 for EZLock assemblies.

1. Position Stationary Jaw block on Vise base. Note: Stationary keyways have a close fit to the Keys in the Vise base. Be careful not to force the Stationary onto the keys. Forcing and /or misalignment can cause damage to Stationary keyway surfaces.
2. Install and tighten the Socket Head Cap Screw (SHCS). See diagram #5.
3. Position the Movable EZLock Jaw, (Movable EZLock Jaw has the machined cavity in bottom side) by aligning the Key slot in the Movable with the rear Key on the Nut. The Plunger will be positioned on the inside of the machined cavity. See diagram #1.
4. Note: Refer to diagram #2 for hand positions. See **Caution** above for this step. With one hand on opposite end of the Stationary Jaw for support, use the palm of other hand to push the Movable EZLock Jaw block forward until Movable drops over the hook of the Nut. See diagram #2.

FIXTURE VISE / CARVLOCK VISE  
WITH EZLOCK OPTION  
ASSEMBLY

DIAGRAM # 5

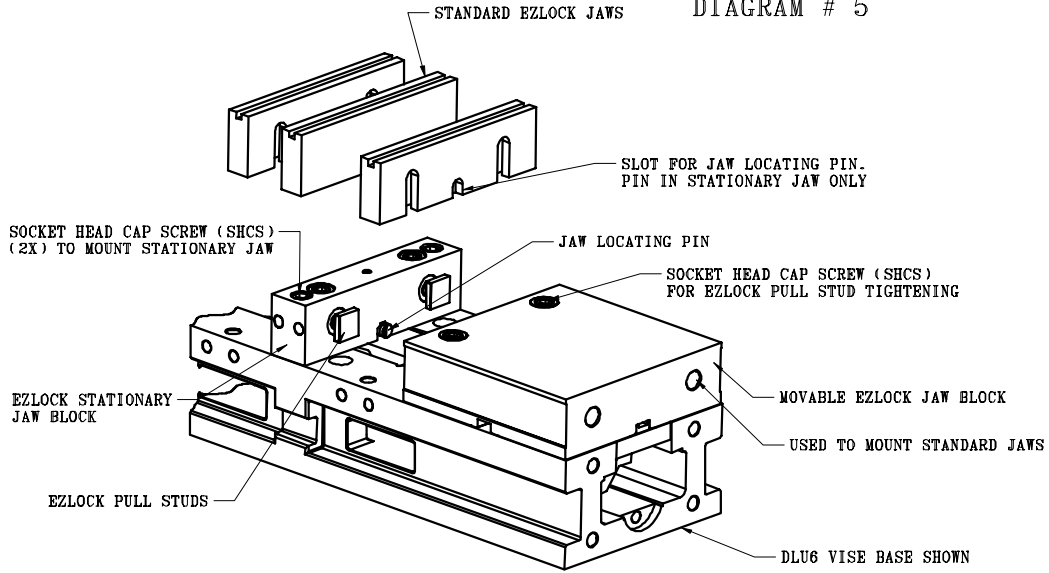
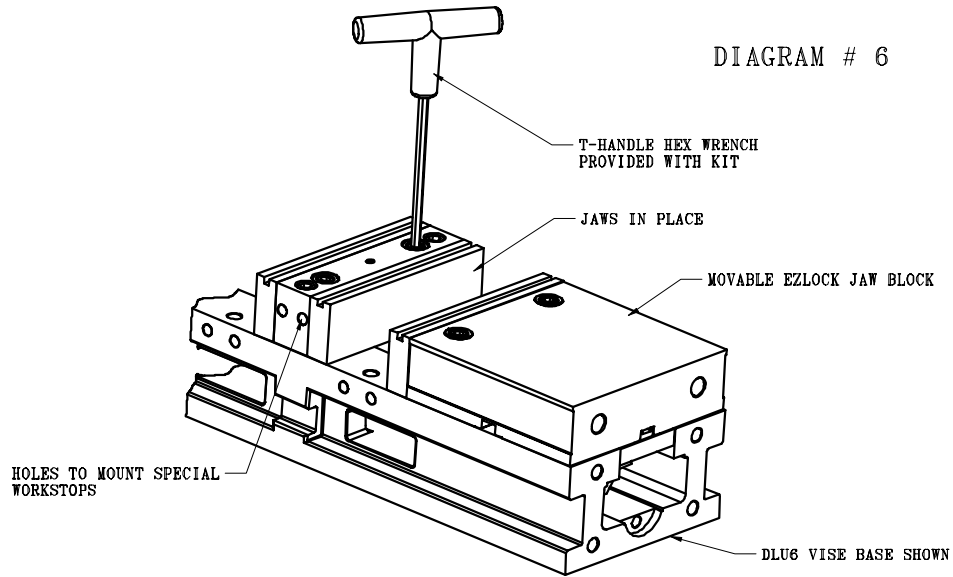


DIAGRAM # 6



C:\CADKEY\VIS\EZLOCK\CATALOUE\ASSY\_MAINTENANCE101.PRT

5. Place EZLock Jaws over the pull studs. On the stationary jaw, part is aligned to the Jaw Locating Pin. Tighten the Socket Head Cap Screws (SHCS) for EZLock pull studs with the T-Handle Hex wrench provided. **Caution:** Do Not over tighten these (SHCS) as pull studs can be damaged by over tightening. Use only T-Handle that was provided with kit. You will not be able to over tighten with T-Handle wrench.

<p style="text-align: center;"><b>Kurt CarvLock and Fixture Vice Quick change, EZLock Jaw Blocks Instruction Sheet</b></p>
--

Sec. 4.0

**DISASSEMBLY INSTRUCTIONS (CarvLock / FixtureVise)**

Refer to diagrams #7 and #8 for EZLock dis-assembly.

6. Loosen the SHCS from the Stationary & Movable Jaw block that hold the EZLock jaws in place with T-Handle wrench and remove Jaws.
7. To remove Stationary Jaw from Vise base, remove the two (SHCS) from the Stationary Jaw and lift jaw off. **Note:** If you have a single station Fixture Vise you will have four (SHCS) to remove.
8. Place a Flat Tip screwdriver in the key slot of the Movable EZLock Jaw block as shown in diagram #7. **Note:** Jaws must be off Movable EZLock Jaw block.
9. Pull screwdriver upward prying the Movable EZLock Jaw block up. See diagram #8.
10. Lift Movable Jaw block off the Vise base.
11. If you are using the extruded aluminum jaws you will need to remove the Stationary Jaw Locating Pin. To remove this pin remove the (SHCS) in diagram #8 and the pin will be free to take out of slot. Installation would be just the opposite making sure you have cleaned the pocket pin sits in completely of all chips.

FIXTURE VISE / CARVLOCK VISE  
WITH EZLOCK OPTION  
DISASSEMBLY

DIAGRAM # 7

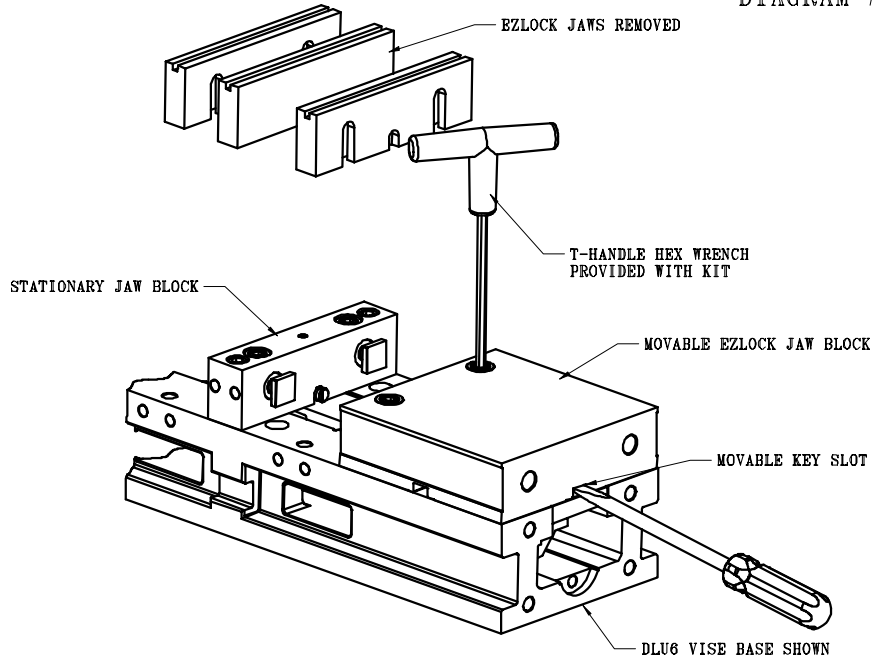
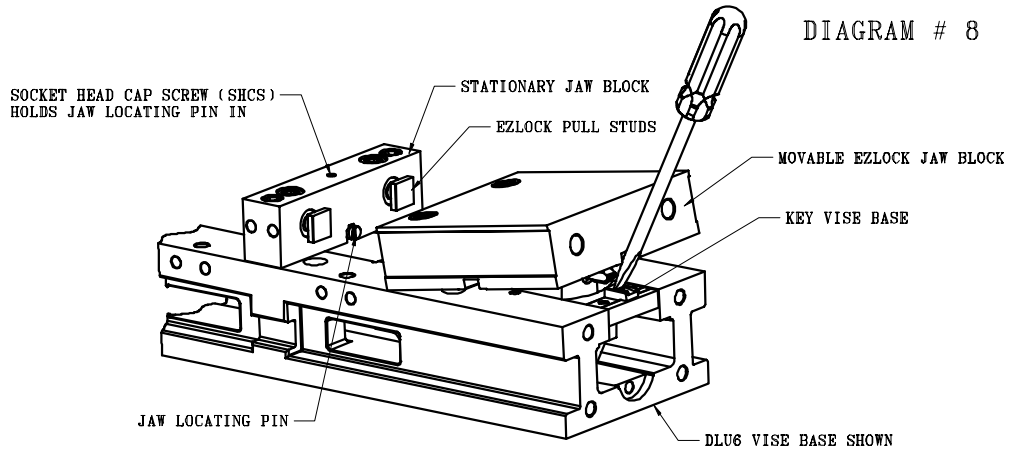


DIAGRAM # 8



C:\400KEYVISE\EZLOCK\CATALIB\ASSY\_MAINTENANCE102.PRT

<p>Kurt CarvLock <b>CLUSTERTOWER</b> Quick change, Machinable Jaw Blocks Instruction Sheet</p>
--

Sec. 5.0

**Caution:** Movable Jaw Blocks when assembled will snap forward and down. When installing jaw blocks keep fingers and hands clear from the underside of Movable Jaw Block. Failure to keep fingers and hands clear could result in personal injury. SEE DIAGRAM #2,

**Caution:** 3.25" Cast Ductile Iron Jaw Blocks are not recommended to be used with the ClusterTower unless used in a Conversion setup **ONLY**. When requirements of clamping a wider part, the top Jaw Block **MUST** be locked in place to prevent from falling off. Use extreme caution when setting up in the convertible mode. **Failure to follow this could result in personal injury.**

**Spring Note:** Optional Jaw Block kits, Cast iron Jaw Blocks 2.50" and 3.25", Aluminum Jaw Blocks 3.25", and EZ-Lock Jaw Blocks require a higher rated spring supplied with the JawKit. This spring **must** be installed in the Front Nut, (hex end) behind the Plunger. (See sketch #1) Installation of this spring is required in the ClusterTower and in the CarvLock mounted in a vertical position only. **Failure to install this spring could result in personal injury and improper function of the vise.**

## **ASSEMBLY INSTRUCTIONS**

Refer to diagrams #9 through #15 for assembly of Jaw Kits.

Note: Before installing Jaws, clean all surfaces and keys to help assure accurate alignment.

1. Position Stationary Jaw block on Vise base. Note: Stationary keyways have a close fit to the Keys in the Vise base. Be careful not to force the Stationary onto the keys. Forcing and /or misalignment can cause damage to Stationary keyway surfaces.
2. Install and tighten the Socket Head Cap Screw (SHCS). See diagram #9.

3. Position the top Movable Jaw Block, (Movable Jaw has the machined cavity in bottom side) by aligning the Key slot in the Movable with the Key on the Nut. See diagram #10. Note: Part will hang from plunger inside of the machined cavity.
4. Note: Refer to diagram #2 for hand positions. See first **Caution** above for this step. Push the Movable Jaw block downward and inward until Moveable drops over the hook of the Nut. See diagram #11.
5. Close the top Jaw block completely to the Stationary Jaw set.
6. Continue to close pulling the lower Nut assembly upward until it is approximately in the center between the Stationary Jaw and the Base. See diagram #12.
7. Place lower Movable Jaw Block aligning it to the Key and Keyway and with the Plunger inside the machined cavity. See diagram #13.
8. Lift upward and inward until upper part of the Jaw Block drops over the nut hook. See diagram #14.
9. With Jaw Blocks in-place, close both stations completely to set alignment and assuring proper location of Jaw Blocks.



DIAGRAM 9

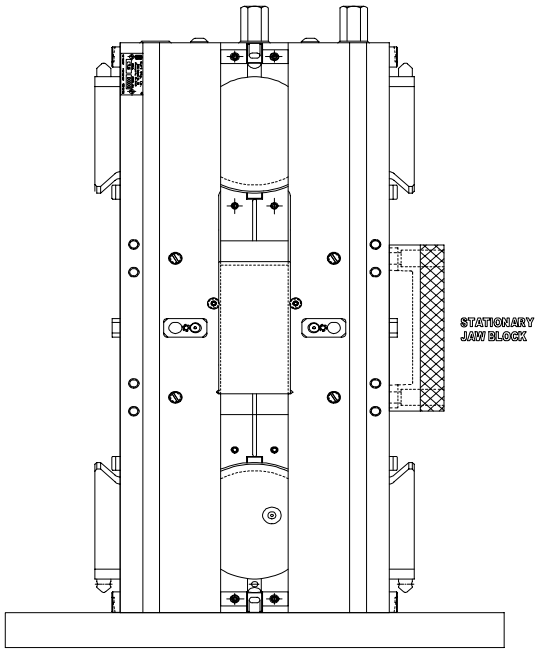


DIAGRAM 10

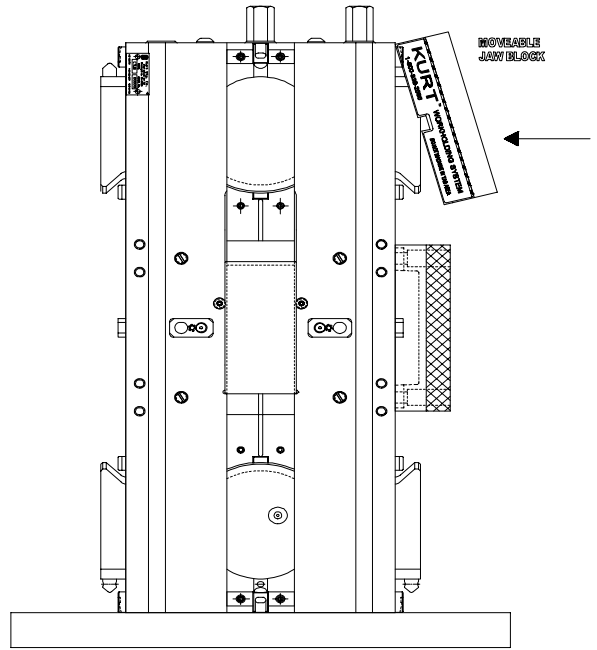


DIAGRAM 11

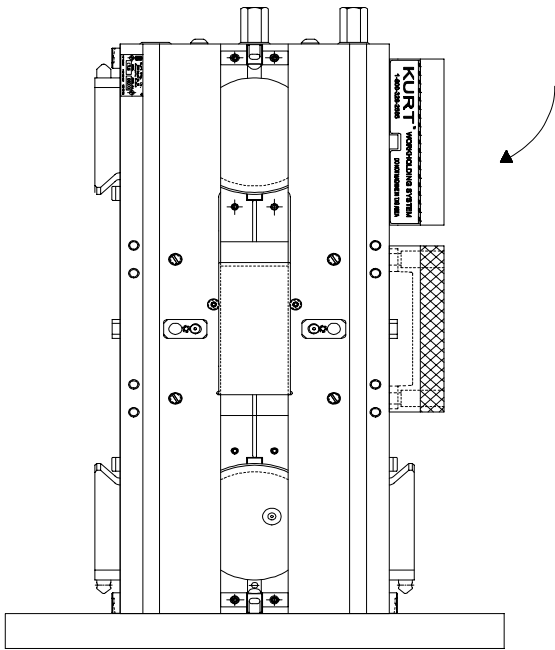


DIAGRAM 12

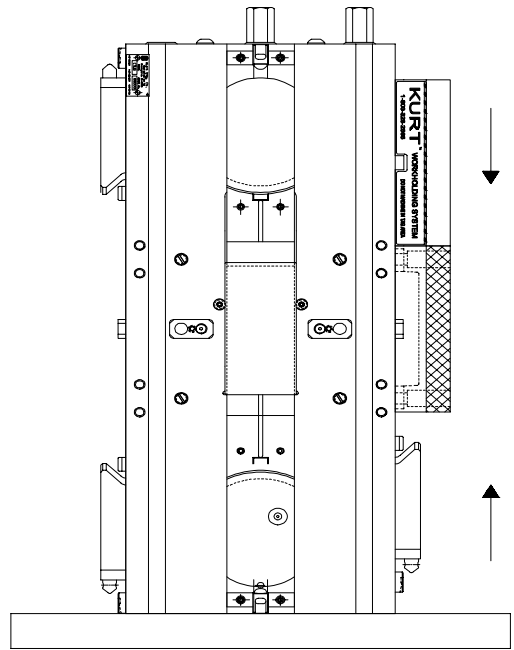


DIAGRAM 13

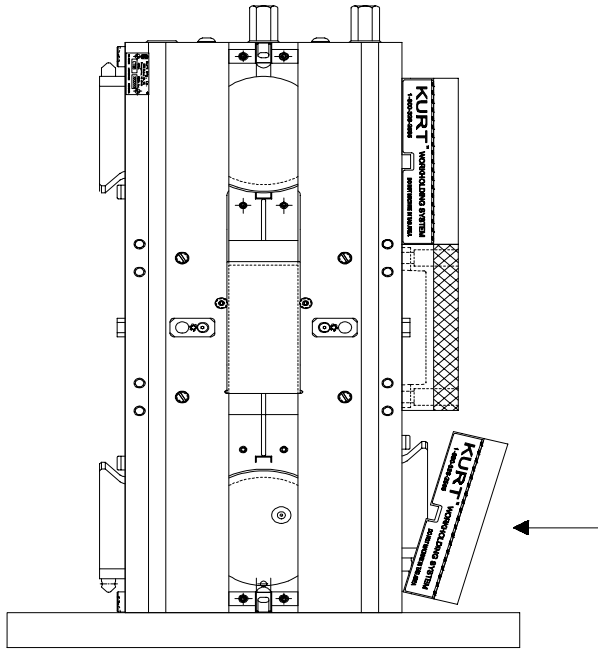


DIAGRAM 14

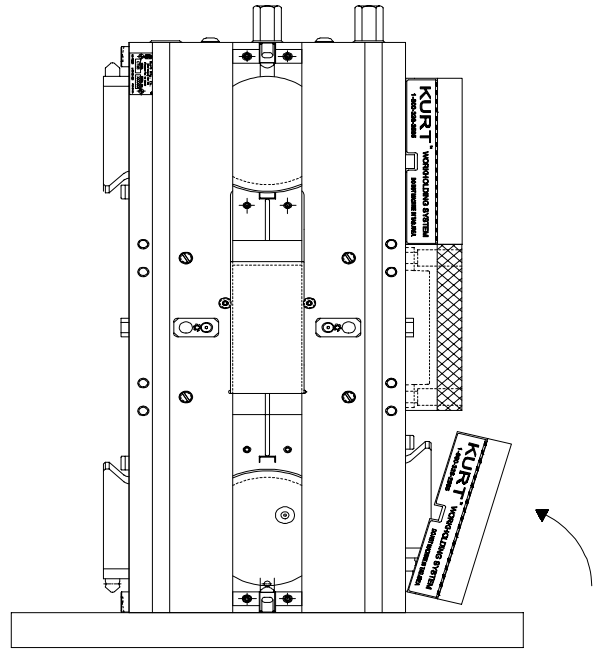
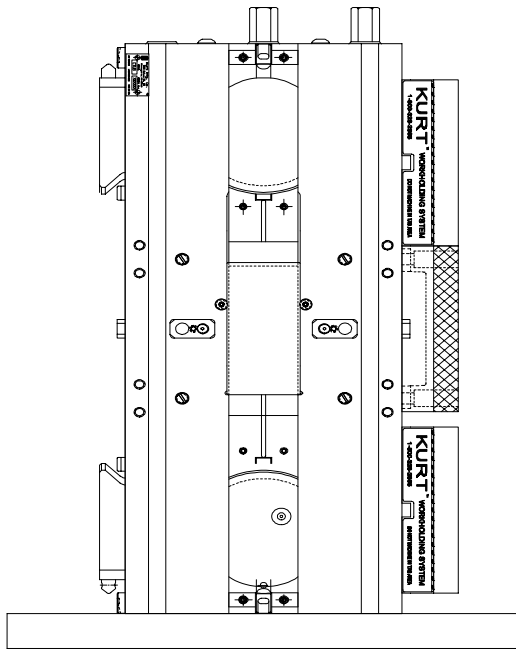


DIAGRAM 15



<p>Kurt CarvLock <b>ClusterTower</b> Quick change, Machinable Jaw Blocks Instruction Sheet</p>
--

Sec. 6.0

**DISASSEMBLY INSTRUCTIONS**

Refer to sketches #16 through #23

1. To assure proper removal of Jaw Blocks, Completely open both stations.
2. Close top Movable Jaw completely making contact with the Stationary Jaw. See diagram #16.
3. Continue closing until lower Jaw set has equal spacing between the Stationary Jaw Block and the base. See diagram #17. (Space between Movable and Base will need to be enough to fit fingers under. May need to increase depending on gap needed.)
4. Lift upward and outward the lower Jaw Block allowing it to pivot from the Cluster Tower. See diagrams #18, and #19.
5. Begin opening the top Jaw Block until Jaw is close to full opening. See diagram #20.
6. Install a flat tip Screw Driver into the notch of the upper Jaw Block.
7. **Caution: Before completing the next step, Keep in mind the Jaw when being removed will fall forward. And depending on type of Jaw, you will be supporting the full weight of the Jaw with one hand once it's pried off. Use extreme caution to avoid the Jaw from dropping down and cause bodily harm and or damage to equipment.**
8. Pull Screw Drive outward until plunger has cleared the machined cavity of the Jaw Block. See diagram #22.
9. Remove the Socket Head Cap Screws holding the Stationary Jaw Block. Pull Stationary straight outward off the Keys.

DIAGRAM 16

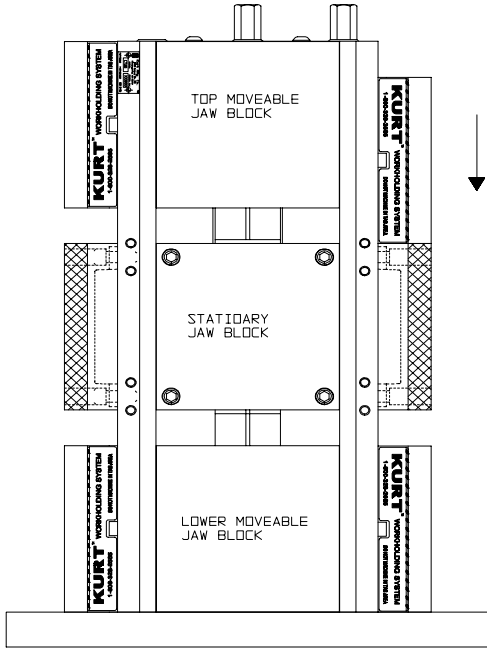


DIAGRAM 17

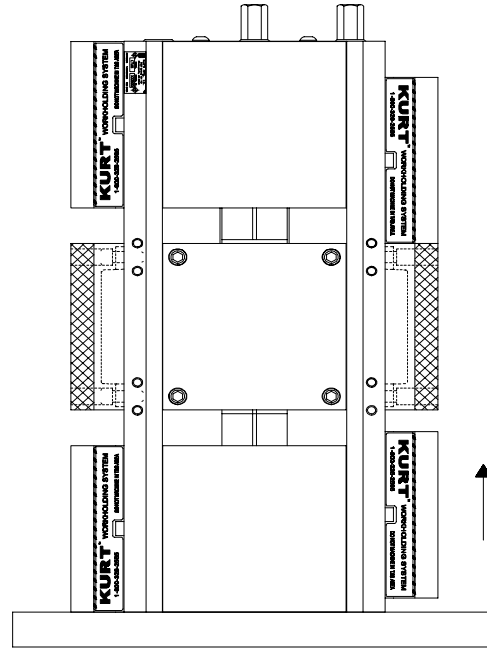


DIAGRAM 18

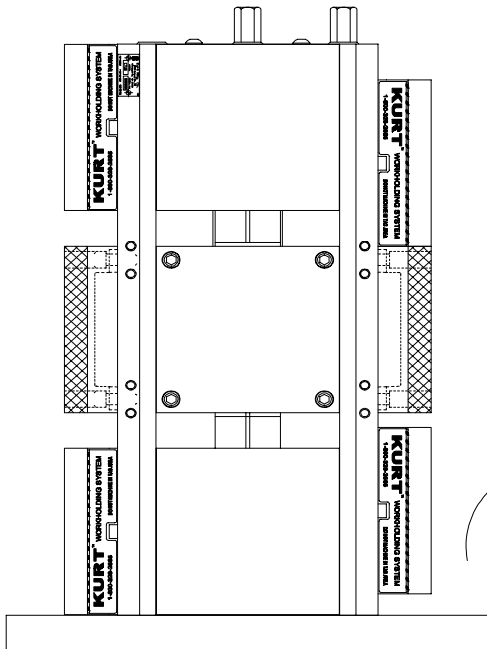


DIAGRAM 19

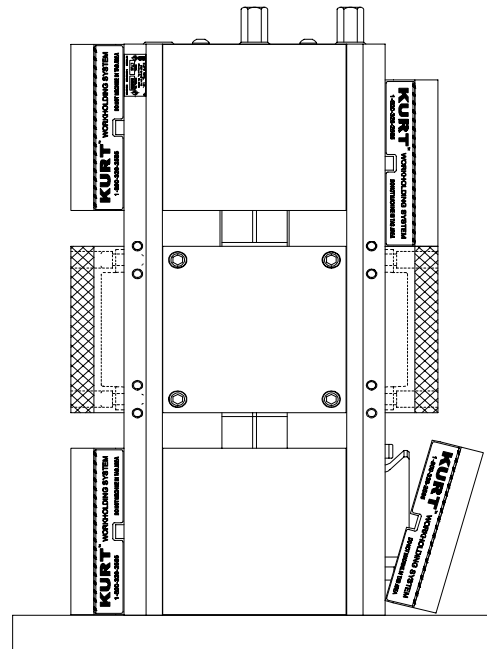


DIAGRAM 20

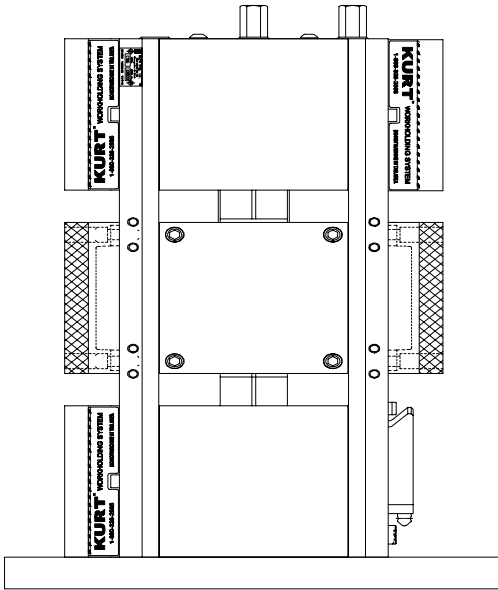


DIAGRAM 21

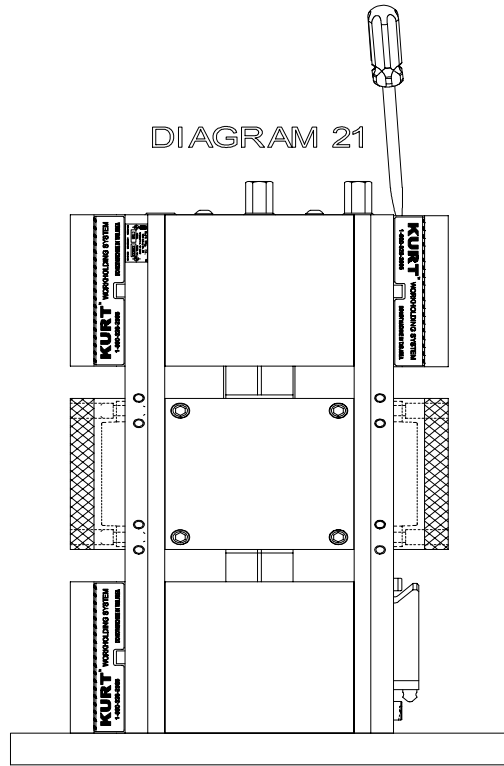


DIAGRAM 22

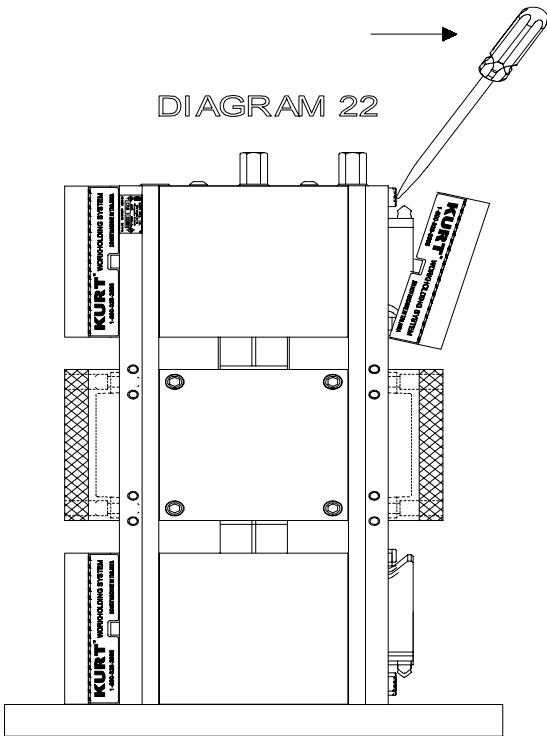
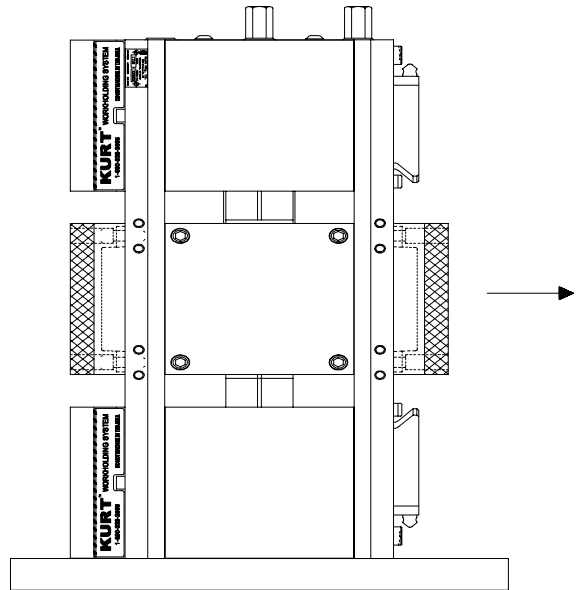


DIAGRAM 23



<p style="text-align: center;"><b>Kurt CarvLock and ClusterTower</b> <b>Stationary Key option</b></p>
---

**Sec. 7.0**

The Stationary Key if needed can be removed to accommodate setups using the Conversion option. Clamping single longer parts that are required to be located down on the Vise bed.

These Keys must also be removed and replaced with a provided step Key included in the EZ-Lock Jaw Kit.

Removal of Key:

6. Remove (2) FHCS, (Flat Head Cap Screws).
7. Using the same Allen Wrench, insert Allen into center hole of the Key.
8. Turn counter clockwise until key has been pressed out.
9. Once Key has been removed, turn the SHSS (Socket Head Set Screws) back into the threaded hole in the Body.

Reinstall new Key:

10. Note: This key is a pressed fit to the keyed slot of in the Body. Assure proper alignment before and during reinstallation.
11. Once keys are in line, press completely in place.
12. To assure repeatability accuracy of the Stationary Jaw Block, tap each Key outward before installing and tightening the FHCS.
13. Reinstall the FHCS and tighten.

<p style="text-align: center;"><b>Kurt FixtureVise</b> <b>Stationary Key option</b></p>
---

Sec. 8.0

The Stationary Keys will needed to be removed to accommodate setup change over from the use of Carvable Jaw Blocks to Standard Jaw Plate or EZ-Lock Jaw Blocks.

Removal of Key:

1. Remove the (2) FHCS, (Flat Head Cap Screws) and the (2) SHCS (Socket Head Cap Screw) from the Keys.
2. Install Allen Wrench into center SHSS (Socket Head Set Screw) and turn clockwise.
3. Turn counter clockwise until key has been pressed out.
4. Once Key has been removed, turn the SHSS back into the threaded hole in the key.

Reinstall new Key:

5. Note: This key is a pressed fit to the keyed slot of in the Body. Assure proper alignment before and during reinstallation.
6. Note: Keys Must be installed with the Countersink and chamfered hole toward the outside.
7. Once keys are aligned, press completely in place.
8. To assure repeatability accuracy of the Stationary Jaw Block, tap each Key outward before installing and tightening the FHCS.
9. Reinstall the FHCS first and tighten.
10. Install SHCS then tighten.

## Sec. 9.0

### CUSTOMER SERVICE

**For additional information or question about your vise, Please contact Kurt Manufacturing at 1-800-328-2565 between the hours of 7:00 a.m. and 4:30 p.m. Central Standard Time.**

### REPLACEMENT PARTS

Contact your Kurt Manufacturing representative for the names of your local Kurt distributors for a complete list of replacement parts and pricing. Your representative can also provide you with a Kurt Manufacturing Product Catalog containing all products and accessories for your Workholding needs.

### FACTORY CONTACT

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Minneapolis, MN 55413  
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Fax: 612-623-3902  
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Web Site: [www.kurt.com](http://www.kurt.com)