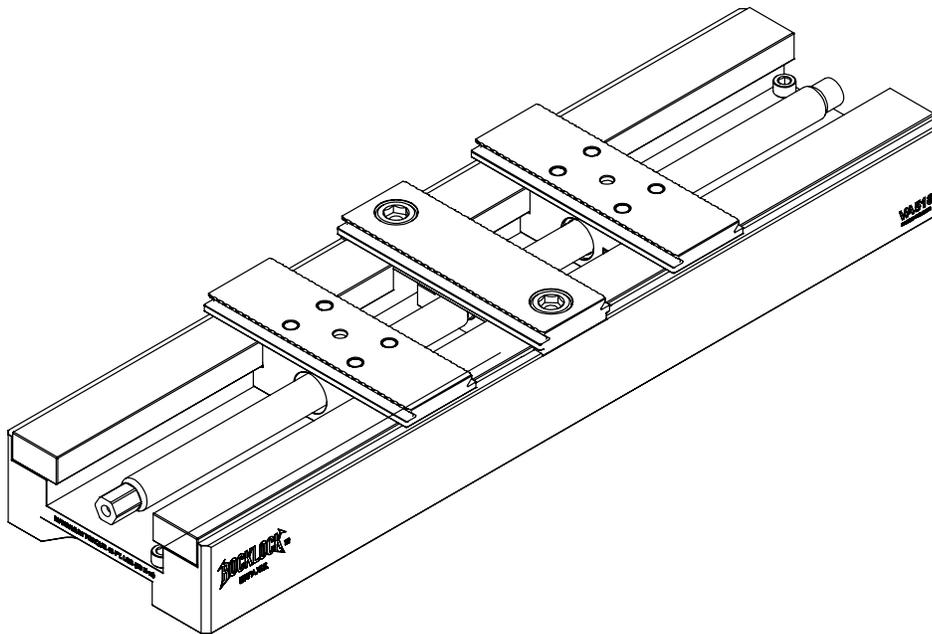
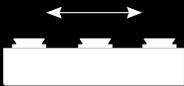
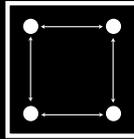
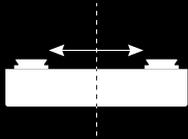


# 5<sup>th</sup> AXIS<sup>®</sup>

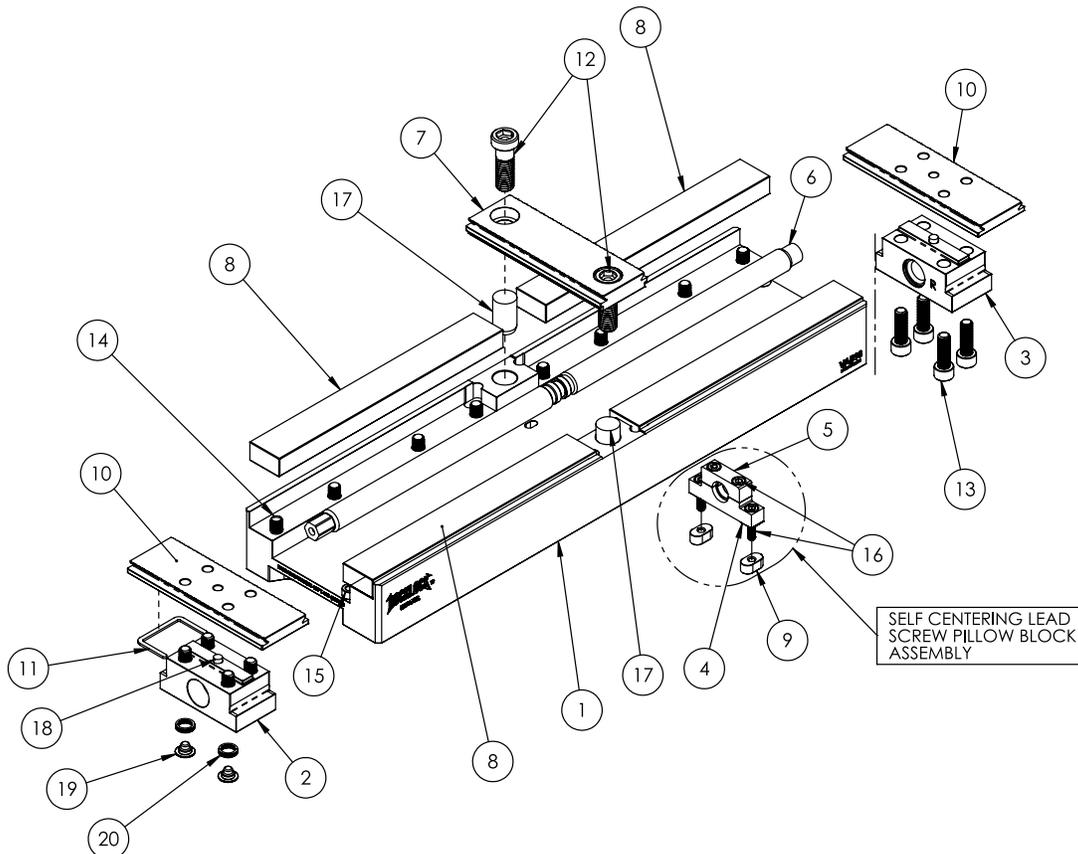
## VA518 VISE OWNER'S MANUAL



SCAN THIS QR CODE FOR  
ELECTRONIC VERSION OF  
OWNER'S MANUAL:

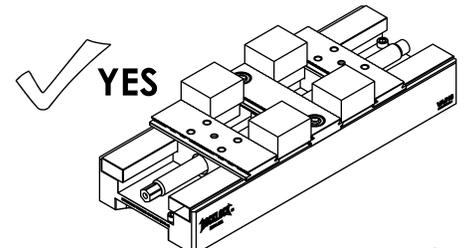
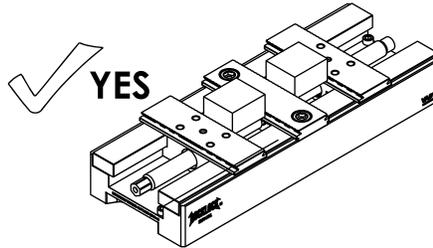
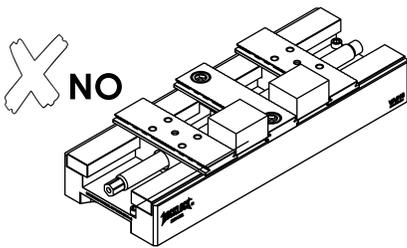
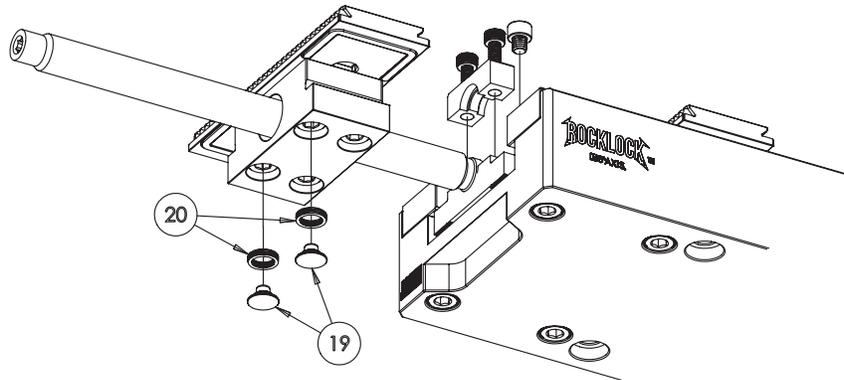
					
.375" Min 14.1" Max	.188" Min 6.2" Max	.375" Min	16.4" Max	96MM Pull Stud Spacing	Self-Centering

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	VA518-1	BASE, 5X18	1
2	VA56-2L	TRUCK, LEFT	1
3	VA56-2R	TRUCK, RIGHT	1
4	VA56-3B	BLOCK, BOTTOM	1
5	VA56-3T	BLOCK, TOP	1
6	VA518-4	SCREW, VA18, 16MM	1
7	VA513-5	LOW PROFILE STACKABLE CENTER BASE	1
8	VA518-6	LOCATING BLOCK	4
9	VA56-8	NUT	2
10	VA56-9	LOW PROFILE STACKABLE JAW BASE	2
11	VA56-10	WIPER SEAL	4
12	M12X35MM.LHSCS	LOW HEAD SOCKET CAP SCREW, M12X1.75X35MM	2
13	M8X025.SHCS	SOCKET HEAD CAP SCREW M8X1.25X25MM	8
14	M8X35MM.SHCS	SOCKET HEAD CAP SCREW M8X1.25X35MM	16
15	M6X6MM.SHCS	SOCKET HEAD CAP SCREW, M6X1X10MM	2
16	M5X20MM.SHCS	SOCKET HEAD CAP SCREW M5X.8X20MM	4
17	M16X30MM.DP	DOWEL PIN, M16X30MM	2
18	M6X10.DP	DOWEL PIN M6X10MM	2
19	HW.0520.FP	PIN, FRICTION, .520 STEPPED, BRASS	2
20	CS050-H2-S17	WAVE SPRING 17-4 C-TO-C W/SHIMS 0.50" OD K=115 LB/IN	2



# MAINTENANCE AND USE

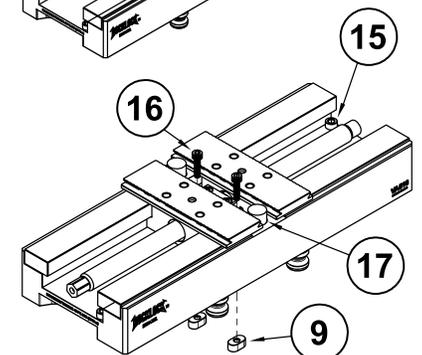
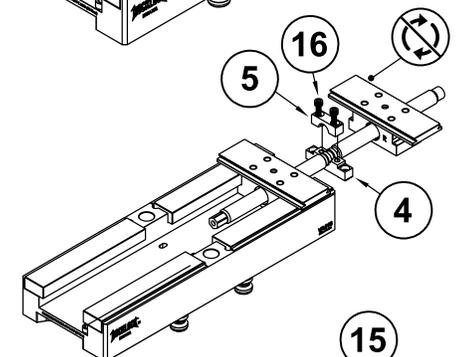
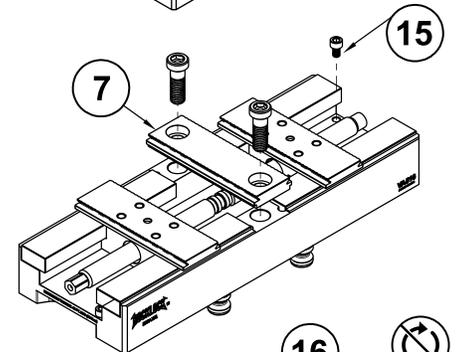
Use caution when sliding truck and jaw assembly out of base, as the Friction and Spring will eject themselves. Upon re-installation of the truck and lead screw assembly, the pins and springs must be assembled as shown, and compressed as the truck is slid into the base



## To Convert double station to self centering

- Unbolt and remove center jaw (7)
- Remove M6 stops from vise base (15)
- Slide truck and jaw assembly partially out of base
- Secure top and bottom center block to lead screw using 2x included M5 bolts (4) (5) (16)

\* DO NOT allow the truck/jaw assembly to rotate about the lead screw. This can cause the assembly to become out of time



## Centering the VA518 LiteVise

- Slide assembly back onto vise and clamp onto 2x Ø16mm alignment dowel pins, (17) do not rotate trucks
- (15) Reinstall M6 Stops
- Secure center block using remaining 2x M5 bolts and nuts. Torque all M5 to 75 in.lbs. (9)
- Your Lite vise is now re-centered. \*

\* If your vise does not have clearance between the nut and adjustment slot, see Detail A, and your vise does not close on center, contact customer support.

# MAINTENANCE AND USE

- Clean leadscrew with soft brush
- Use copper based anti-seize on leadscrew (Loctite P/N: LB8008C5-A)
- Do not let chips build up during use
- Do not torque vise past 60 Nm [45 Ft LBS]
- Do not side load vise (see illustration below)
- Clamping Force at max torque - 22.2 kN [5000 lbf]
- Weight: 11.33 Kg [25 lbs]

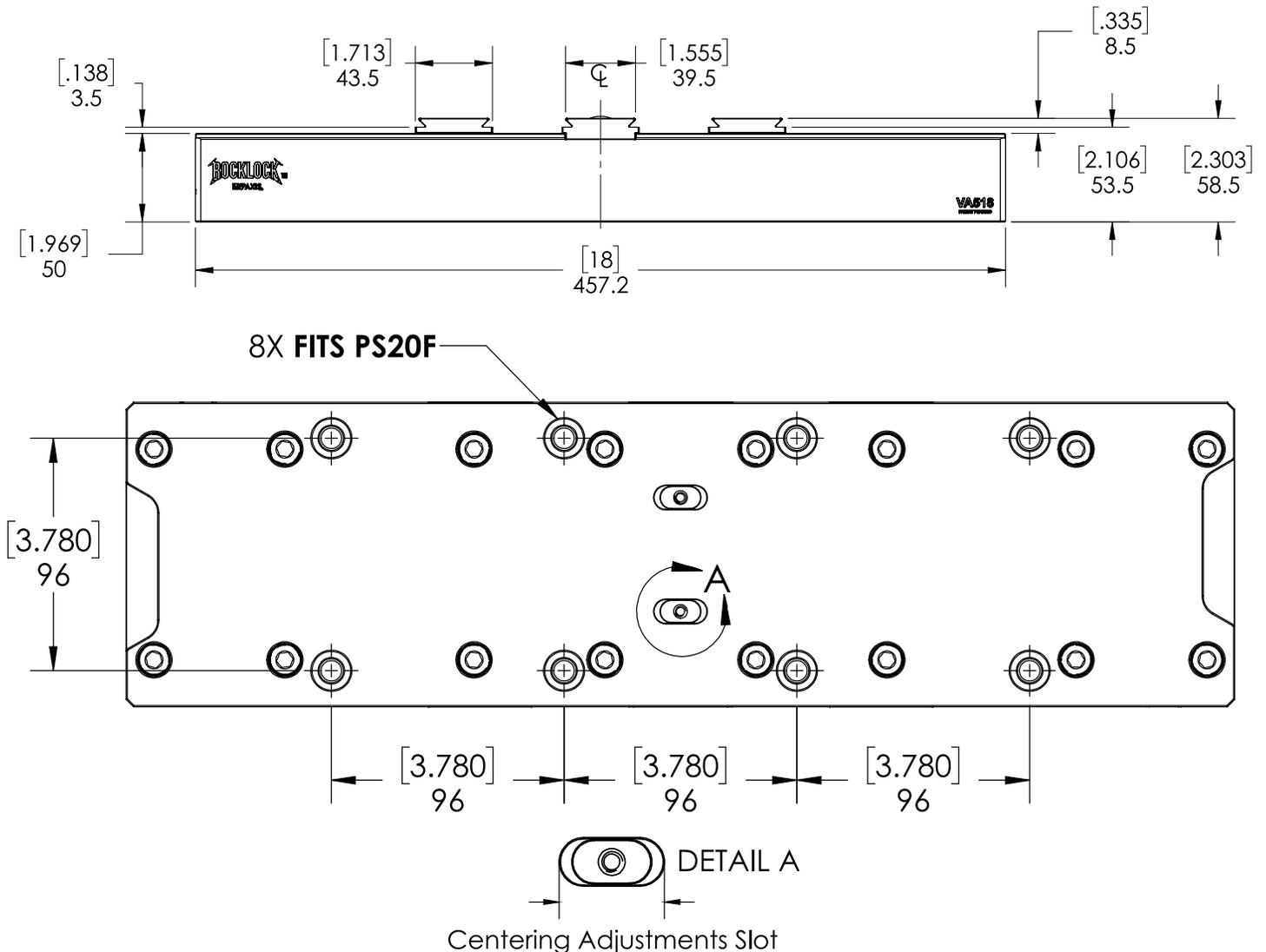
## Torque Values

- Lead Screw with Base Assembly: 60 Nm [45 Ft LBS] Max
- Lead Screw with Gripper Jaw: 60 Nm [45 Ft LBS] Max (13)
- Add actual Bolt Torques for re-assembly (12) (15) (16) (14) If fully disassembled

## Special Notes

- Failure to follow these instructions will cause self centering accuracy and/or repeatability to fail and may cause damage to the vise

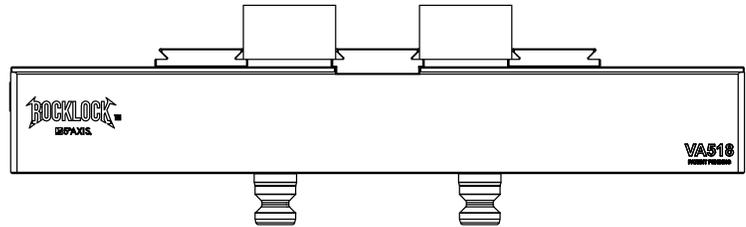
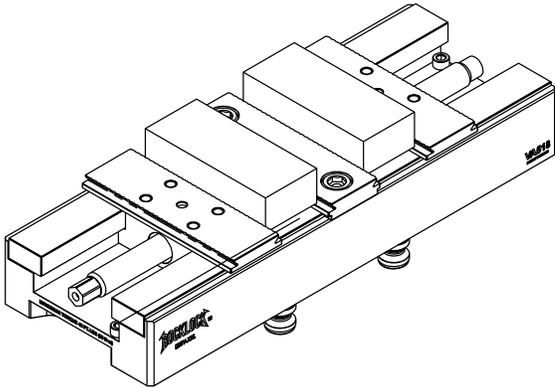
# DIMENSIONS



# CONFIGURATIONS

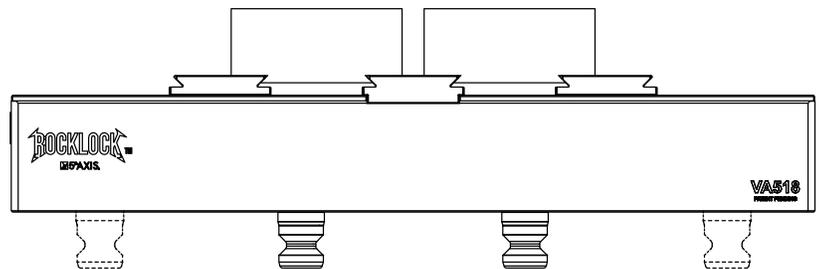
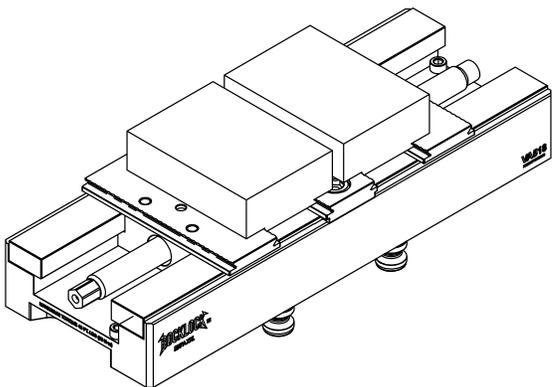
## Use Serrations For:

- Softer Materials (Aluminum and soft steels)
- Less Aggressive Machining



## Use Dovetail for:

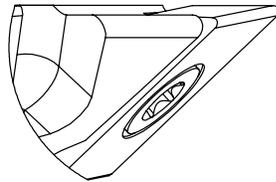
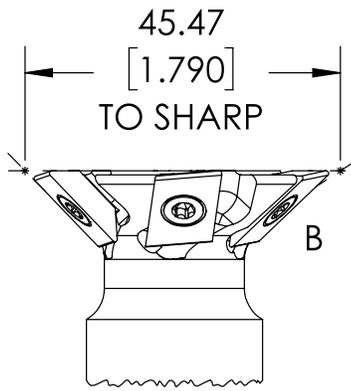
- Harder Materials
- Heavier Machining
- Parts Larger than the Vise
- May be used with up to 8 PS20F Pull Studs



(See next page for dovetail stock prep)

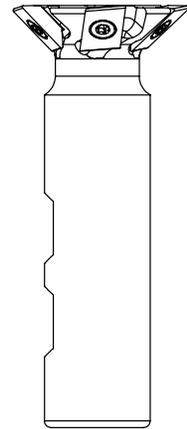
# DOVETAIL STOCK PREP

## DOVETAIL CUTTER

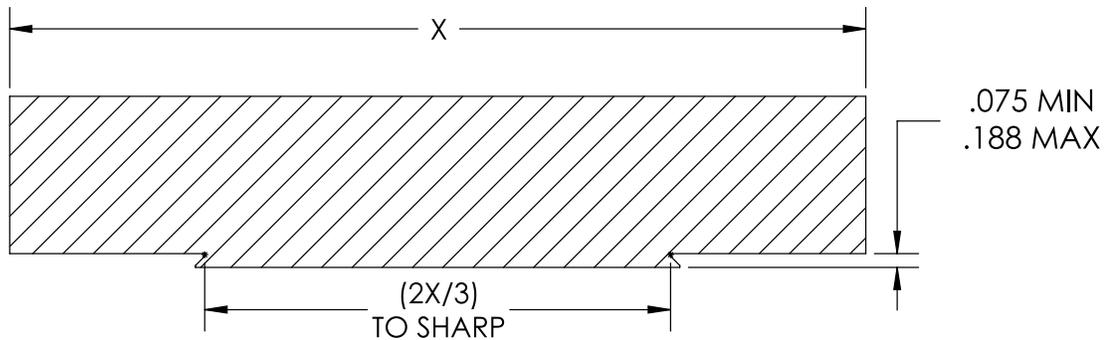
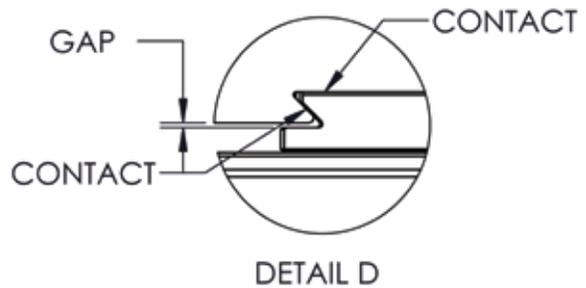
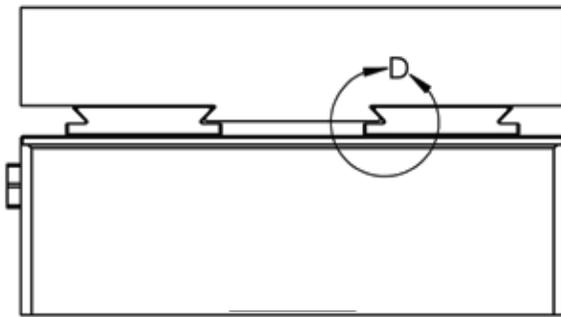
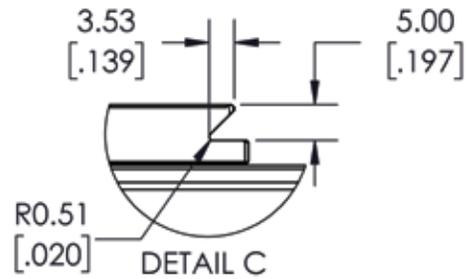
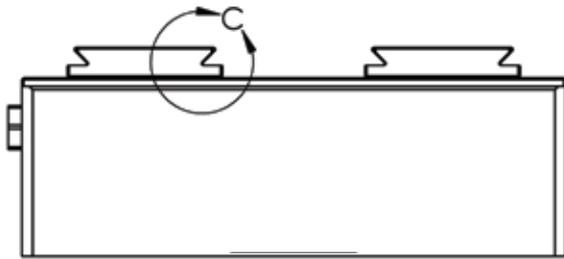


DETAIL B

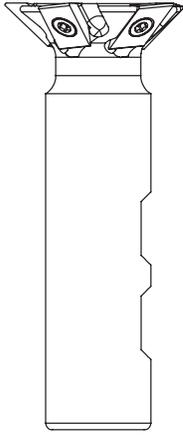
[R .0381 mm]  
R .015



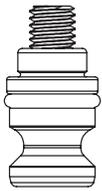
Base Assembly Low Profile Jaws  
Steel Grade: Stainless  
Hardness: HRC 42-47



# ACCESSORIES



- Shank Diameter (in) 1" (P/N: DC1750-45)
- Shank Diameter (mm) 25mm (P/N: DC1750-M)
- Insert Part Number: DC1750-B
- 45 Degrees
- Material H13 Tool Steel
- 5 Flute Cutter
- Cutting Diameter: 45.5mm [1.79in]



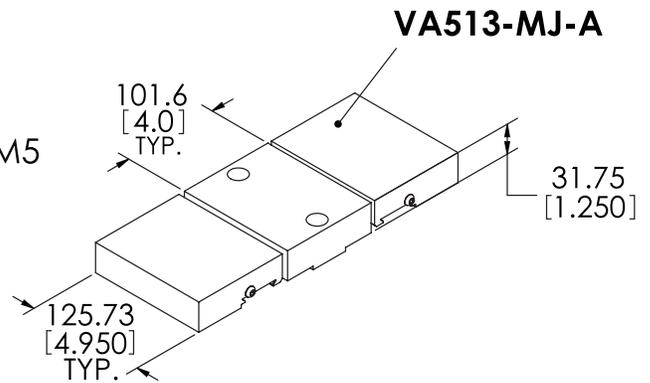
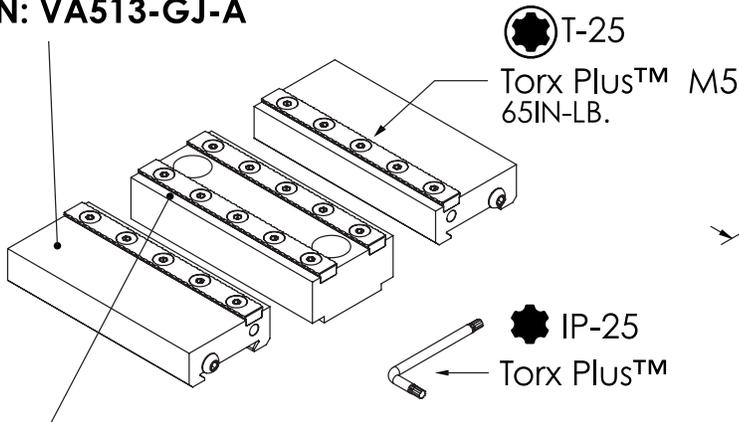
## 96mm Pull Studs P/N: PS20F

- For 96mm Rocklock
- Hardened 8620 Steel
- M10 Threads

## Installing Pull Studs

- Secure threaded stud only finger tight
- Only Grease precision surfaces
- Torque to 15 Ft-lbs via bottom hex head size 6mm

## Aluminum Gripper Jaws P/N: VA513-GJ-A

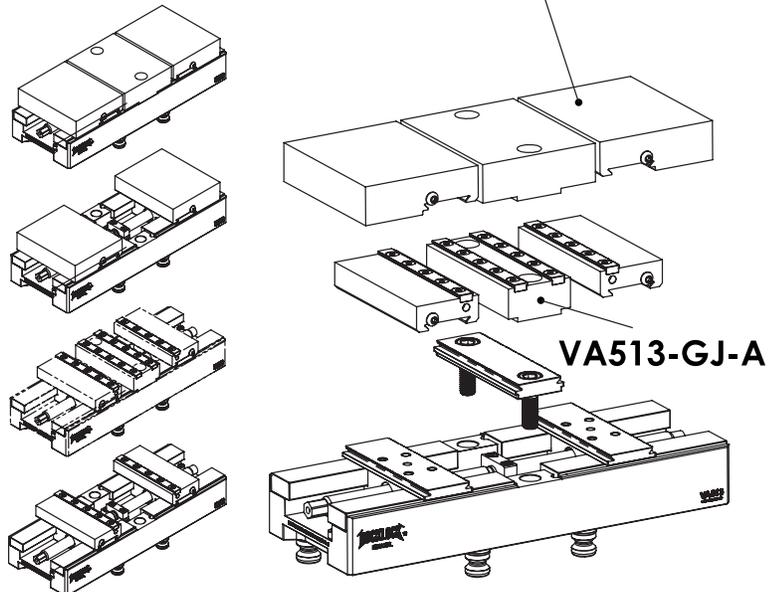


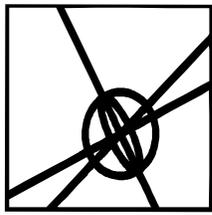
## Gripper Teeth P/N: VGT-VA5

\*Gripper Teeth are available for purchase as an accessory  
\*2 grippers per kit

## Aluminum Soft Jaws P/N: VA513-GJ-A

- 6061-T6 Aluminum
- Compatible with VA518 and VA513





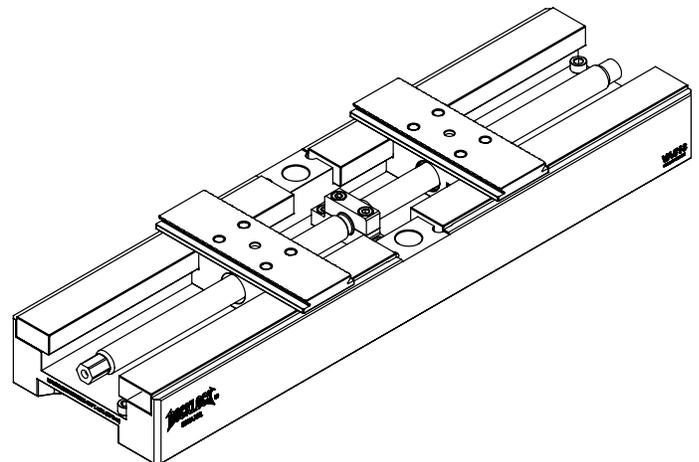
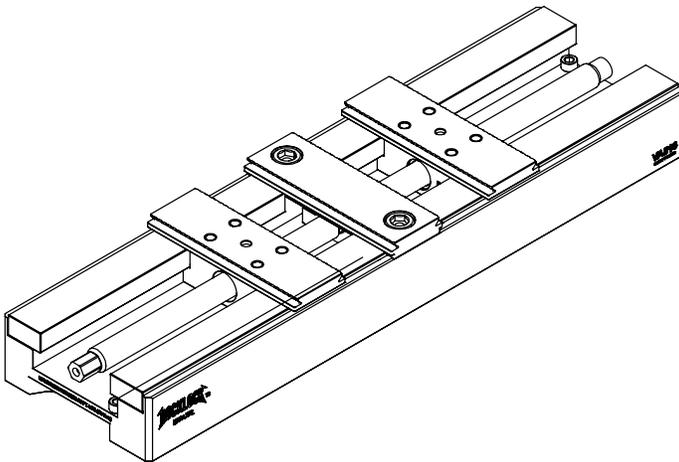
# 5<sup>th</sup> AXIS<sup>®</sup>

## VA518 OWNER'S MANUAL

Dual Station



Self Centering



AVAILABLE FOR DOWNLOAD AT:  
**5THAXIS.COM**

PHONE: 858-505-0432

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APPROVED  
11/01/24