

# Self-Centering Vise Owner's Manual





- Operating Instructions
- Care & Maintenance
- Warranty Information

## **Recommended Torque Specifications**

#### V75100

Maximum Torque for Vise Assembly: 45 ft lbs (61.01 Nm)

Maximum Torque for Shoulder Bolts: 25 ft Ibs (33.90 Nm)

Effective Clamping Force: 3100 lbs @ 45 ft lbs (13.5 kN @ 61.01 Nm)

#### V562 & V552

Maximum Torque for Vise Assembly: 55 ft Ibs (74.57 Nm)

Effective Clamping Force: 3600 lbs @ 45 ft lbs (16.01 kN @ 61.01 Nm)

#### V6105

Maximum Torque for Vise Assembly: 75 ft Ibs (101.69 Nm)

Effective Clamping Force: 3600 lbs @ 45 ft lbs (16.01 kN @ 61.01 Nm)

#### General Instructions

- •Use of 6 point socket and torque wrench is strongly recommended
- •Do not exceed maximum torque specification
- •Torque 1/2-13 (M12) Socket Head Cap Screws to 35 ft lbs (47.45Nm)

for V562/V552 or 50 ft lbs (67.79 Nm) for V6105

#### Additional Information

For model file downloads and compatibility information, please visit

our website at:

#### www.fifthaxis.com

See our products in action at:

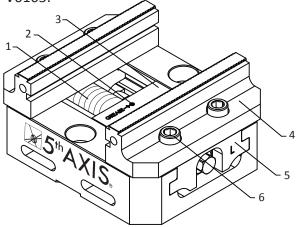
#### www.youtube.com/5thaxisfixtures

## Maintenance

**Keep the lead screw clean and coated with anti-seize.** Use a nylon or soft wire brush to clean chips and debris off the leadscrew (1). After the lead screw has been cleaned, re-apply a coat of anti-seize to the lead screw, ensuring that an even coat covers the threads. The recommended anti-seize for the leadscrew is copper-based anti-seize lubricant.

**Keep the center block filled with grease.** Remove the grease screw (2) that is located on top of the centering block (3). Add grease through the hole where the grease screw has just been removed. Remember to re-fill as necessary, ensuring that the center block is well lubricated. The grease used for the center block is anti-scoring, extreme pressure lubricant.

When re-installing jaws to the vise, locate each jaw (4) on the truck (5) using the locating pin, which is installed on the trucks. Once jaws are flush against the trucks, lightly close the vise on a gage block to ensure that the two gripping surfaces remain parallel. Once the vise is closed and gently gripping the gage block, torque down the jaw bolts (6) using either 25 ft-lbs (33.90 Nm) for V75100, 35 ft-lbs (47.45 Nm) for V562/V552 or 50 ft-lbs (67.79 Nm) for V6105.



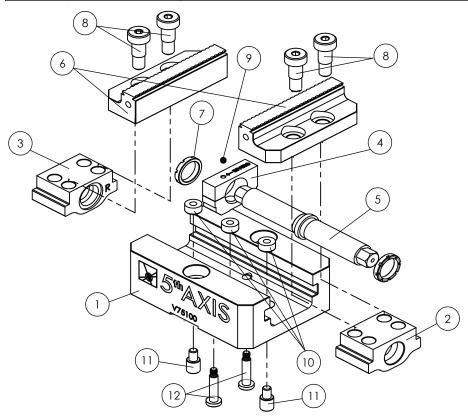
#### Accessories

- Steel Machinable Jaws
- Aluminum Machinable Jaws
- Replacement Jaws
- Dovetail Cutters

- Subplates & Risers
- Locating Pins
- ½-13 Socket Head Cap Screws
- Torques Wrenches

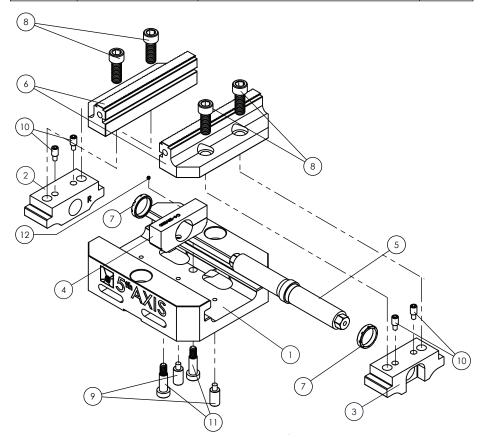
## Replacement Parts: V75100

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	V75100-1	VISE BASE, 75mm 5 AXIS VISE	1
2	V75100-2R	TRUCK, RIGHT, 75mm 5 AXIS VISE	1
3	V75100-2L	TRUCK, LEFT, 75mm 5 AXIS VISE	1
4	V75100-3	CENTER BLOCK, 75mm 5 AXIS VISE	1
5	V75100-4	LEAD SCREW, 75mm 5 AXIS VISE	1
6	V75100-5	VISE JAW, 75mm 5 AXIS VISE	2
7	V75100-6	CENTER BLOCK RING, 75mm 5 AXIS VISE	2
8	V75100-7	8mm M7 SHOULDER BOLT	4
9	V75100-8	M3 x 3 SET SCREW	1
10	TIM-34	THREADED METRIC INSERT	3
11	LPM8	8mm THREADED LOCATING PIN	2
12	V75100-9	5mm M4 SHOULDER BOLT	2
	V75100-4RK	LEAD SCREW REPLACEMENT KIT, 75mm 5AXIS VISE (1 x V75100-4, 1 x 75100-3, 2 x 75100-6)	



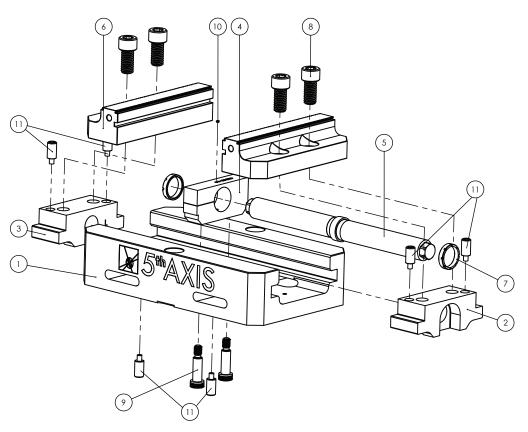
## Replacement Parts: V562/V552

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	V56124-1/V552-1	VISE BASE, 5 IN 5 AXIS VISE	1
2	V56124-2R	TRUCK, RIGHT, 5IN 5 AXIS VISE	1
3	V56124-2L	TRUCK, LEFT, 5IN 5 AXIS VISE	1
4	V56124-3	CENTER BLOCK, 5IN 5 AXIS VISE	1
5	V56124-4	LEAD SCREW, 5IN 5 AXIS VISE	1
6	V56124-5	VISE JAW, 5IN 5 AXIS VISE	2
7	V56124-6	CENTER BLOCK RING, 5IN 5 AXIS VISE	2
8	V56124-7	3/8-16 X 1.00 SHCS	4
9	LP375	.375 THREADED LOCATING PIN	2
10	LP250	.250 THREADED LOCATING PIN	4
11	V56124-8	5/16 X .75 SHOULDER BOLT	2
12	V56124-9	4-40 X .094 SET SCREW	1
	V56124-4RK	LEAD SCREW REPLACEMNT KIT, 5IN 5AXIS VISE (1 x V56124-4, 1 x V56124-3, 2 x V56124-6)	



## Replacement Parts: V6105

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	V6105-1	VISE BASE, 6IN 5 AXIS VISE	1
2	V6105-2R	TRUCK, RIGHT, 6IN 5 AXIS VISE	1
3	V6105-2L	TRUCK, LEFT, 6IN 5 AXIS VISE	1
4	V6105-3	CENTER BLOCK, 6IN 5 AXIS VISE	1
5	V6105-4	LEAD SCREW, 6IN 5 AXIS VISE	1
6	V6105-5	VISE JAW, 6IN 5 AXIS VISE	2
7	V6105-6	CENTER BLOCK RING, 6IN 5 AXIS VISE	2
8	V6105-7	1/2-13 X 1.00 SHCS	4
9	V6105-8	3/8 X 1.00 SHOULDER BOLT	2
10	V6105-9	4-40 X .094 SOCKET HEAD SET SCREW	1
11	LP375	.375 LOCATING PIN	6
	V6105-4RK	LEAD SCREW REPLACEMENT KIT, 6IN 5AXIS VISE (1 x V6105-4, 1 x V6105-3, 2 x V6105-6)	



### Warranty

All 5th Axis Inc. Workholding products are warranted against defects in material and workmanship for (1) year. Products deemed defective during the (1) year period shall be replaced without charge providing such defect is due to faulty material or workmanship and not caused by tampering, abuse, misapplication or improper installation. Failure to properly maintain and/or properly operate the product or part under normal conditions will void this warranty. This warranty does not cover any product or part that has been: worn out; abused; heated; ground or otherwise altered; used for a purpose other than that for which it was intended; or used in a manner inconsistent with any instructions regarding its use. Should a piece of equipment require major component replacement or repair during the warranty period, it will be handled in one of two ways:

1. If the Purchaser elects to take the responsibility of repairing the equipment and requests replacement part(s), the Purchaser or Sales Representative must contact the Factory for return authorization and a purchase order must be issued. Replacement part(s) will be promptly shipped and invoiced. The defective part(s) must be returned to the factory for inspection. If the defect(s) were due to faulty material or workmanship, credit will be issued to the customer.

2. The equipment can be returned to the 5th Axis factory to have the inspections, parts replacements and testing performed by factory personnel. Should it be necessary to return a piece of equipment or parts to the factory, the customer or sales representative must obtain authorization from the factory. If upon inspection at the factory, the defect was due to faulty material or workmanship, all repairs will be made at no cost to the customer during the warranty period.

5th Axis shall be limited to the replacement or repair of any 5th Axis product or part provided that such an item is returned to 5th Axis, transportation, shipping and postal charges prepaid, and there determined by 5th Axis to be covered by the warranty contained herein. The customer will assume all risk of loss or damage to product while in transit to 5th Axis.

THE ABOVE WARRANTY IS EXCLUSIVE, SUPERCEDES AND IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS. NO PERSON, AGENT OR DEALER IS AUTHORIZED TO GIVE ANY WARRANTIES ON BEHALF OF THE MANUFACTURER, OR TO ASSUME FOR THE MANUFACTURER ANY OTHER LIABILITY IN CONNECTION WITH ANY OF ITS PRODUCTS UNLESS MADE IN WRITING AND SIGNED BY AN OFFICIAL OF THE MANUFACTURER.

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Workholding solutions for 3, 4 and 5 axis vertical and horizontal machines



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@fifthaxis

7140 Engineer Rd. San Diego, CA 92111 Tel: 858-505-0432 Fax: 858-505-9344 email: sales@fifthaxis.com



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