## DUAL AXIS TRACKING ASSEMBLY INSTRUCTIONS

**BRODBECK IRONWORKS LLC** 

**REVISION -**

Contact Brodbeck Ironworks LLC for any questions or concerns before operating this equipment

IF YOU HAVE ANY ISSUES WITH ASSEMBLY OR MISSING PARTS PLEASE CONTACT US IMMEDIATELY

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## Parts List:

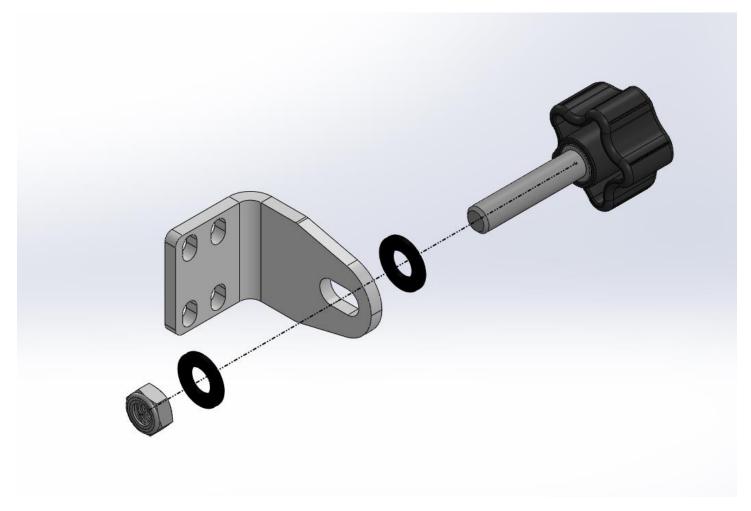
ITEM	DESCRIPTION	QTY	IMAGE		
1	1/4" BUTTON HEAD SCREW 5/8" LG	6			
2	TRACKING ARM	1			
3	2 X 72 TRACKING HINGE PIVOT	1			
4	2 X 72 TRACKING PIVOT KNOB MOUNTING BRACKET	1			
5	3/8" THIN NYLOCK NUT	1			
6	½" TEFLON WASHER .020" THK	1			
7	FIVE ARM KNOB WITH 3/8"-16 THREAD 1-3/4" LONG STUD, 1-1/2" WIDE HEAD PHENOLIC	1			

8	WASHER FLAT NYLON .312 ID X .500 OD X .06 THK BLACK	3	
9	2 X 72 DUAL AXIS TRACKING ARM BASE	1	
10	2 X 72 DUAL AXIS CLEVIS LINK	1	
11	3/8-16 SOCKET HEAD SCREW 3/4" LG	2	
12	3/8" THREADED TAPERED HANDLE	1	
13	LOBED TRACKING KNOB 3/8" THREADED	1	

## **TOOL LIST**

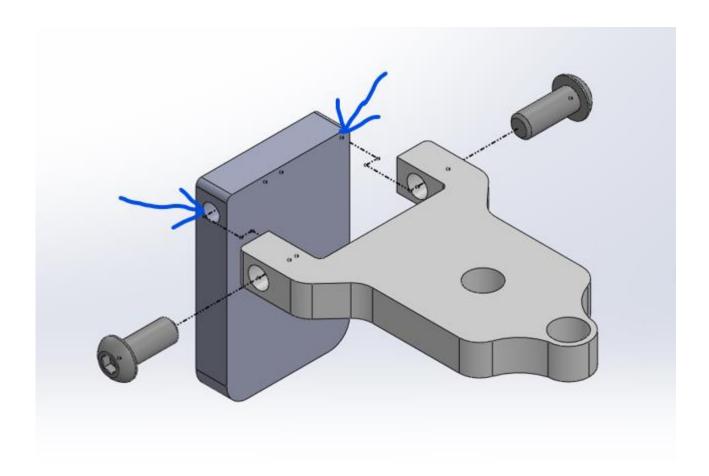
- 9/16" COMBO WRENCH OR SOCKET
- 5/32" ALLEN (HEX) WRENCH
- 5/16" ALLEN (HEX) WRENCH
- THREAD LOCKER (BLUE)
- VISE

## **DUAL AXIS TRACKING ASSEMBLY**



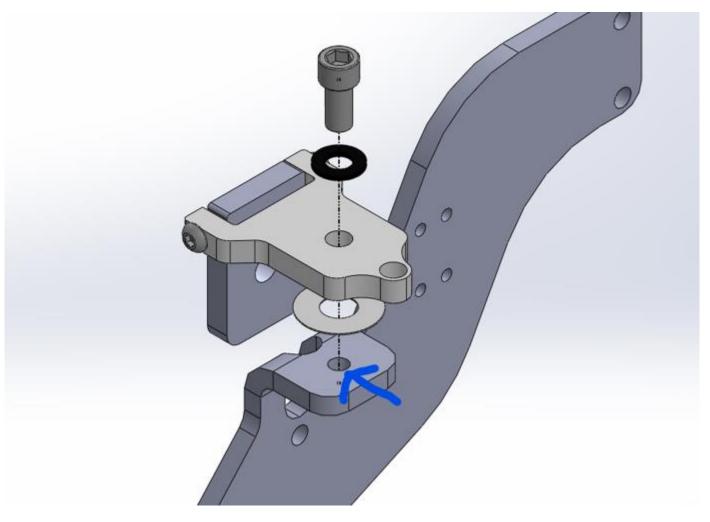
Install the 5 Arm Knob into the 2 X 72 Tracking Pivot Knob Mounting Bracket with a 3/8 Nylon Washer on each side. Use the 3/8 lock nut to secure the knob to the bracket. The knob should be able to slide and spin freely in the slot with minimal wobble inside the slot.

It is recommended to use a vise to put the when threading the lock nut onto the knob.



Install the Tracking Arm to the Tracking Arm hinge using the  $1/4-20 \times 5/8$  button head screws. Apply Thread Locker (Blue Arrow) to the thread inside the Tracking Arm screws. Hand tighten only.

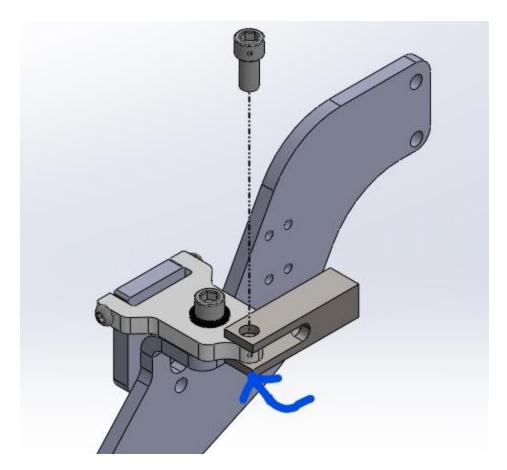
The Tracking Arm should rotate freely in the hinge with no side to side (axial) movement.



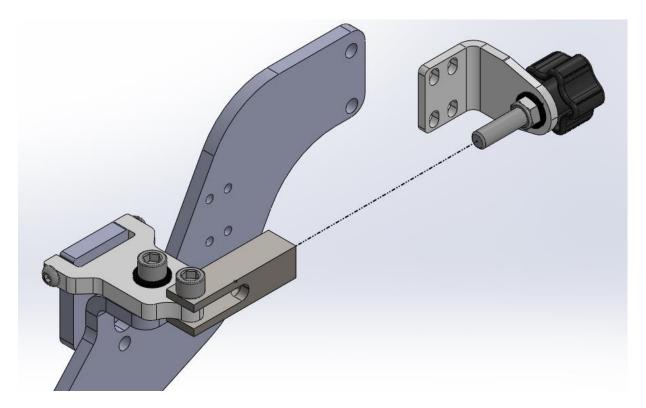
Install the Tracking Arm Hinge onto the Tracking Arm Base using the 3/8 Socket Head screw and black nylon washer. Be sure to put the thin nylon washer in between the hinge and the base.

Apply thread locker (Blue Arrow) to the internal threads of the Tracking arm base.

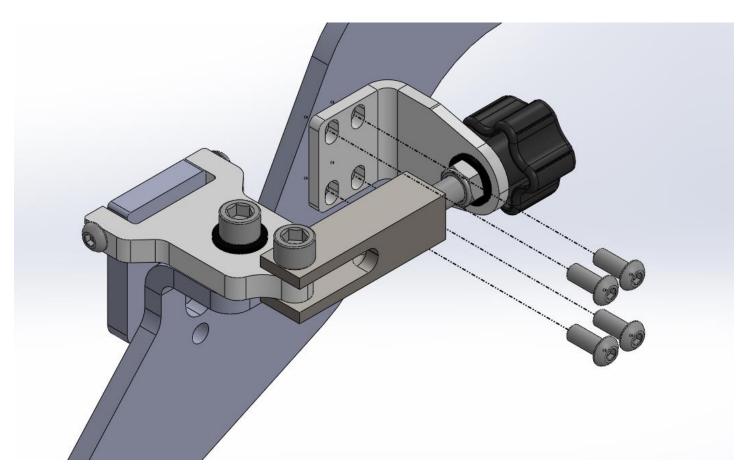
Hand tighten so the Hinge pivots freely on the socket head screw with no up and down movement.



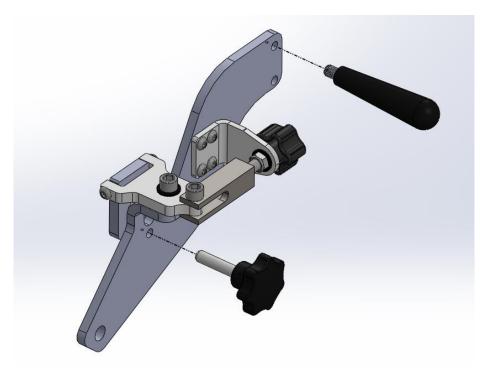
Secure the Clevis to the Tracking Arm Hinge using the remaining 3/8 socker head screw. Apply thread locker to the threads in the link (blue arrow). The threads should be on the bottom side.



Thread the Dual Axis Clevis Link onto the 5 Arm Knob.



Install the Pivot Knob Bracket to the Tracking Arm Base using the remaining  $1/4-20 \times 5/8$  screws. Apply thread locker to the screws.



Install the tapered handle and 7 lobe knob.