

## EXTENDED HEADING TUBE 'XTHT'

THESE INSTRUCTIONS EXPLAIN HOW TO REPLACE THE STANDARD HEADING TUBE WITH EXTENDED HEADING TUBE 'XTHT' AND CORRESPONDING EXTENDED CON ROD

VERSION 1.0 APRIL 2020

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### REMOVAL OF OLD HEADING TUBE

1. Disconnect #57 Ball Screw from #63 Con-rod.



2. Loosen #83 Groove Wheel Screw to slide off the Grooved Wheel #82 from the Worm #80
3. Remove the Worm by tapping out a Worm Bearing #81



4. Remove #51 Heading Collar Screw from #16 Heading Collar
5. Lift off the #66 Top Mounting assembly from the #64 Heading Tube.



6. Loosen the nut for #88 Worm Box Stud

7. Slide off the worm box along with the #90 Bearing Washer (white)
8. Remove the two # 54 Top Frame Stud nuts
9. Lift off the #64 Heading Tube and attached #72 Top Frame casting.



#### INSTALL NEW HEADING TUBE

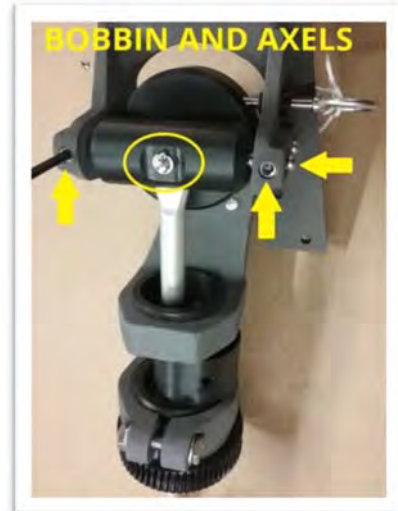
10. The new #64 Heading Tube 'XTHT' comes attached to #72 Top Frame assembly. Install these parts with #54 Top Frame Studs and fasten with nuts

#### REMOVE OLD #63 CON ROD

11. Loosen the 2 #40 Axle Screws that hold the #3 Bobbin in place
12. Jiggle the #3 Bobbin sideways to help get the #47 Axles removed

INSTALL NEW #63 CON ROD AND RE-ASSEMBLE

13. Re-set the #47 Axles by first removing the set screws and **coating the threaded holes with Loctite**. Note the set screws are meant to jam onto the SS Axles. There is a hole in the plastic #1 Axle Sleeve for the set screw to fit through. Also note that the cotter pin on the Bobbin should be facing outwards.
14. Slide the #86 Worm Box and #90 Bearing Washer (white) back onto the XTHT
15. Slide on the #66 Top Mounting assembly
16. Line up the hole in the #16 Heading Collar with the hole in the #64 Heading Tube
17. Install #51 Heading Collar Screw using **Loctite**
18. Push-up the #86 Worm Box to the bottom of the #85 Worm Gear Wheel leaving **half a milometer clearance** (need feeler gauge) between the #16 Heading Collar and the top of the #85 Worm Gear Wheel
19. Tighten #88 Worm Box Stud nut
20. Re-connect #57 Ball Screw Set into the Con Rod
21. Adjust the length of the Conrod so that the #19 Drive Sleeve is in the center of the 2 #36 Drive Rods



22. Tighten the 2 Lock Nuts

23. Re-assemble the #80 Worm and Axle, #81 Worm Bearing and #82 Grooved Wheel (set screw to lock in place)

