Replacing the MCU jackscrew bearing

Product FCO CA08209

Magnus VLF Multi-Cassette Unit (MCU)

Background

The MCU jackscrew thrust bearing is noisy.

Solution

Replace the bearing assembly.

Parts/tools required

Part Number	Part Name	Quantity
518-01393A	Upgrade kit	1
• 368-00019 (item 0060)	Bearing	1
• 368-0024 (item 0050)	Bearing washer	1
• 316-00047 (item 0040)	Oil seal	1
• 304-00021 (item 0030)	Washer	1
• 52-3170 (item 0080)	Cap screw	1
• 52-3191 (item 0090)	Washer	1
• 89-0091	Bearing grease EP 2	1
• 404-00055	Viperlube grease	
Loctite 242		
Two wooden blocks		
Digital camera		

Procedure

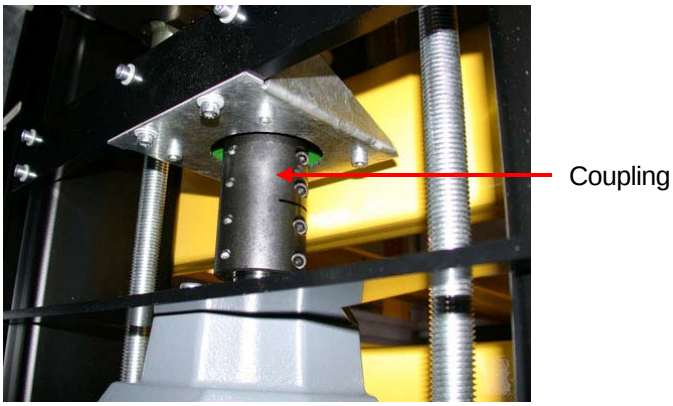
1. Open the MCU rear doors and remove the roof panel above the jackscrew.
2. Raise the MCU forks if they are at the bottom and place two wooden blocks on the two main forklift tubes of the main frame.



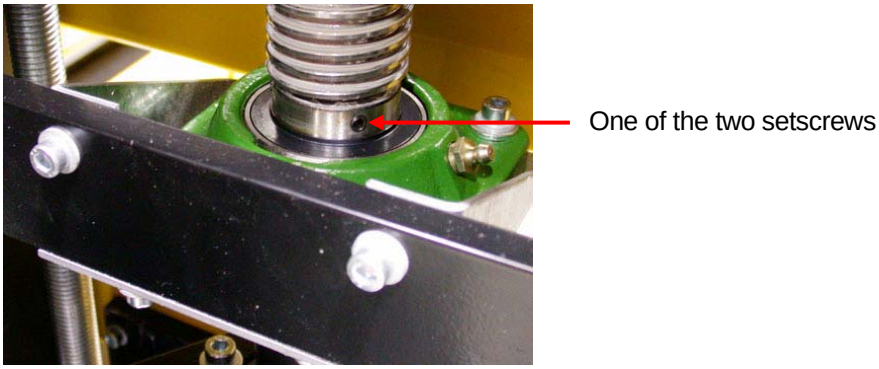
3. Lower the MCU forks onto the wooden blocks until the jackscrew begins to lift.

Caution: Ensure that there is no load on the jackscrew and that the forks are fully supported by the blocks.

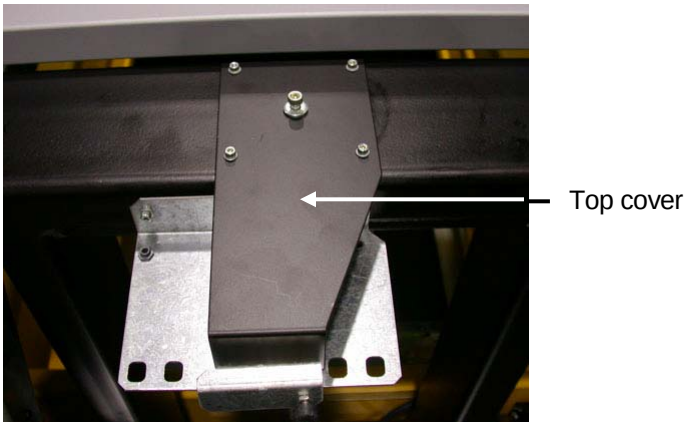
4. Turn the MCU power off.
5. Support the drive motor with a piece of foam or wood to prevent it from dropping when the coupling screws are loosened. Remove the drive motor and coupling from the jackscrew by loosening the four screws on the top half of the coupling.



6. Release the jackscrew from the bottom pillow block by loosening the two setscrews at the bottom of the jackscrew.



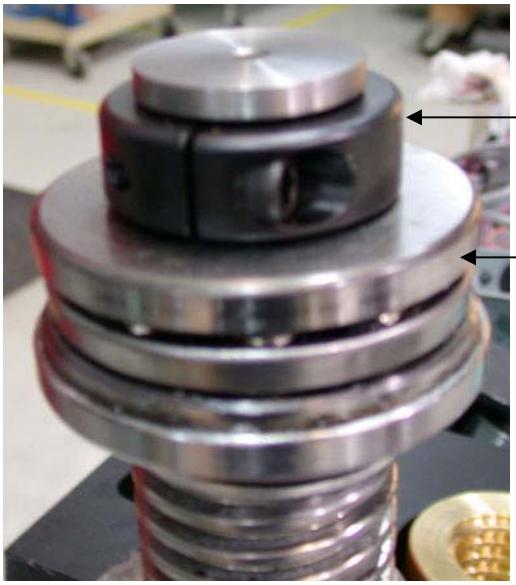
7. Remove the jackscrew top cover located on top of the MCU frame and remove the entire jackscrew from the bronze nut through the top of the frame.



8. Inspect the following for signs of damage, wear, or debris:
   - The bronze nut
   - The jackscrew
   - The jackscrew bearing assembly and seal
   - The bearing housing

   Take photos of any damage or wear that is observed and email them to Niels Broers and Martin Wight.

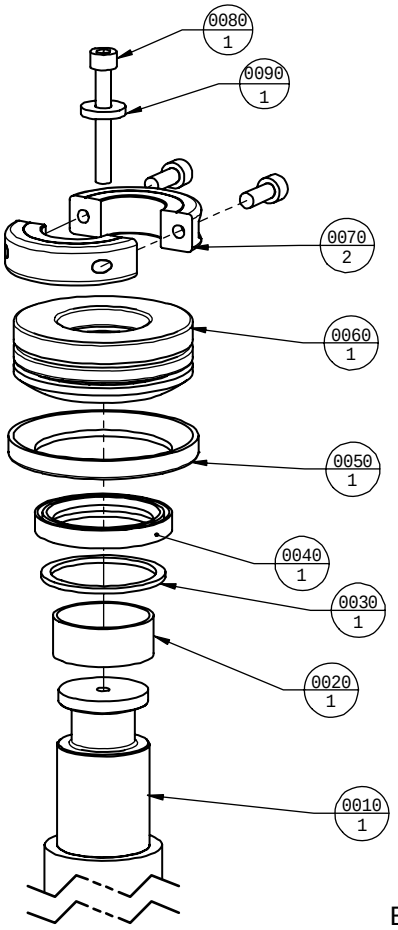
9. Remove the clamp collar at the top of the jackscrew by loosening the two collar screws.



10. Remove the seal and bearing assembly and replace them with new ones.
11. Reinstall the clamp collar. Apply Loctite 242 to the screws.
12. Apply EP 2 bearing grease to the bearing assembly.
13. Reinstall the jackscrew from the top of the frame into the bronze nut and pillow block.
14. Tighten the pillow block setscrew.
15. Install the drive motor and coupling. Tighten the four coupling screws to 19 Nm. See *Replacing the MCU Jackscrew Motor* for details on installing the motor.
16. Apply more grease to the bearing housing and replace the jackscrew cover on top of the frame.
17. Apply Viperlube grease to the jackscrew. Take care not to mix the bearing grease and the jackscrew grease.
18. Turn on the MCU power and raise the forks off the wooden blocks.
19. Remove the wooden blocks from the MCU frame and install any panels that were removed.

Test

Move the MCU forks up and down and listen for any bearing noise.



Extracted from 500-00522A-C

See also	Jackscrew assembly drawing 500-00522A
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