Balancer Hub Spacer Upgrade - FCO CA06550

Product	FCO priority
Magnus VLF	Next visit

Machines affected Machines from MT017 to MT033

Background

Some early machines had the balancer assemblies incorrectly assembled—missing spacers (items 0115 and 0116 in figure 1). The spacers prevent the plastic hub from deforming when the M5 screws (item 0120) are tightened. The six mounting holes in the plastic hub must have a diameter of 8 mm to accept the spacers. Without the spacers, the M5 screws can:

- work loose and cause the balancer to fail (the balancer would be too loose and the weights would not be held in the proper position).
- deform the hub and cause the weights to bind.

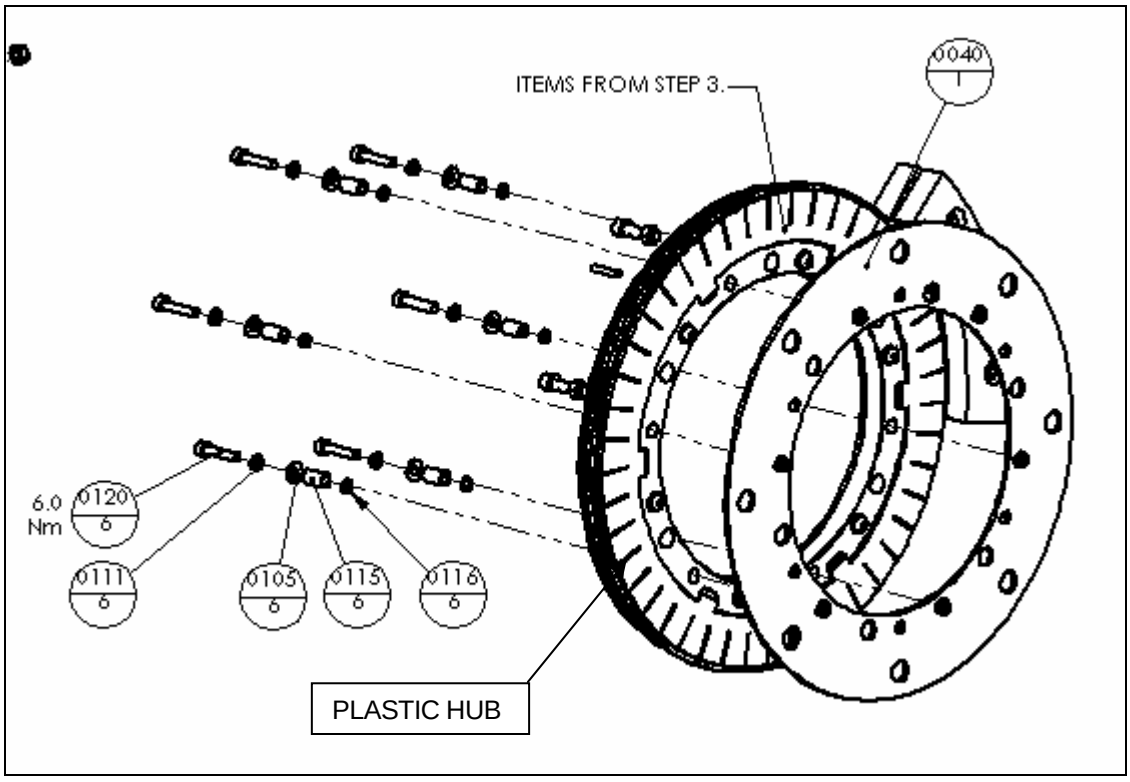


Figure 1: Balancer assembly - 50-2529A (version A shown)

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Solution

Check machines MT017 to MT033 to see if the balancer hub spacers are missing. If they are missing, install the spacers from kit # 512-00220A.

Note: The balancer has been redesigned to improve reliability and version B (50-2529B) is currently used in production. Ideally, the balancers in all machines should be upgraded to version B, but you need to consider that the upgrade procedure is very extensive and requires up to 8 hrs to complete. See FCO CA04926.

Time required 0.5 hr

Parts required

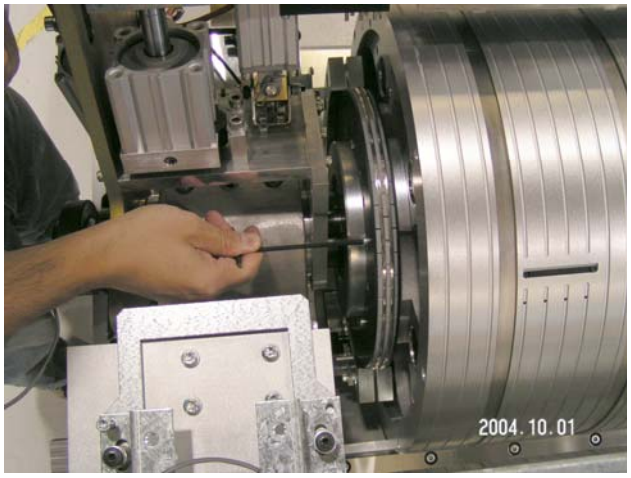
Part Number	Part Name	Quantity
512-00220A	KIT,HUB SLEEVES FOR DRUM BALANCERS,MTA	1

Tools required

- 4mm hex key
- 8.0 mm drill bit
- Loctite 242

Procedure

1. Move the roller and TEC backbones to the up position and idle the drum.
2. Remove one M5 screw to check if there are spacers in the hub (the hub is made of white plastic).



- If the balancer hub mounting hole has a spacer, then no upgrade is required. Apply Loctite 242 to the screw threads of the M5 screw and tighten it back into place.
- If the balancer hub mounting hole is 5.0 mm, then no upgrade is required. Apply Loctite 242 to the screw threads of the M5 screw and tighten it back into place.
- If the balancer hub mounting hole is 8.0 mm and the spacer is missing, continue to step 3 to add the spacers.

3. Turn a 8 mm drill bit by hand into the 8 mm hole in the hub to clear any burrs.
4. Apply Loctite 242 to the screw threads and install the spacer, screw, and washers (Figure 1 - items 0116, 0115, 0105, 0111, and 0120).

   Note: If the screw does not align with the PEM nut at the bottom of the hole, loosen the other five M5 screws to position and align the screw to the PEM nut.



5. Repeat steps 3 and 4 for the other five balancer hub fasteners.
6. Repeat steps 2 to 4 on the second balancer.
7. Check if the balance weights are free to move with approximately 10 lbs of force.

See also	Drum balancer assembly drawing – 50-2529B Drum Balancer Upgrade Procedure – see FCO CA04926
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