

## CG-1 Glue Wheel & Wipe.

In order to get best performance from your CG-1 printer careful attention needs to be paid to the cleanliness and setup of the glue wheel and glue wipe.

### Tools Needed:

- Metric Allen Wrench set. (Note: M2 and M3 needed)
- CG-1 Accessory Kit Glue removal tool and sponge.
- Masking Tape.

In order to get best performance from your CG-1 printer careful attention needs to be paid to the cleanliness and setup of the glue wheel and glue wipe.

There are three primary issues to consider for best glue wheel and wipe performance.

1. Cleanliness: The glue wheel and wipe needs to be clean and free of old glue deposits.
2. Setup: The glue wipe needs to be correctly fitted and aligned over the glue wheel.
3. Wear: The Glue wipe wears over time and needs checking and replacement periodically.

### Definition of Good Glue Wheel Performance.

1. Model glue is applied evenly and consistently across the mat. This is visible during the first glue application to the mat at job start.
2. There is no dropping of either fresh glue or flakes of partially hardened glue onto the model area during builds.
3. Glue build up in and around the wheel and wipe during a model build is not excessive.

The glue wheel sub-system is located on the Y gantry at the top of the machine and is identified in the photo below. For convenience when identifying part numbers the drawing for the glue wheel sub-system is shown.

Fig 1: Glue Wheel sub-system top view.

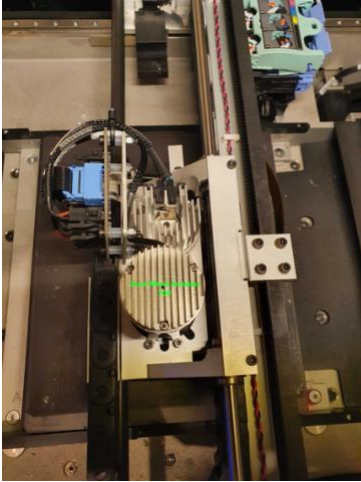
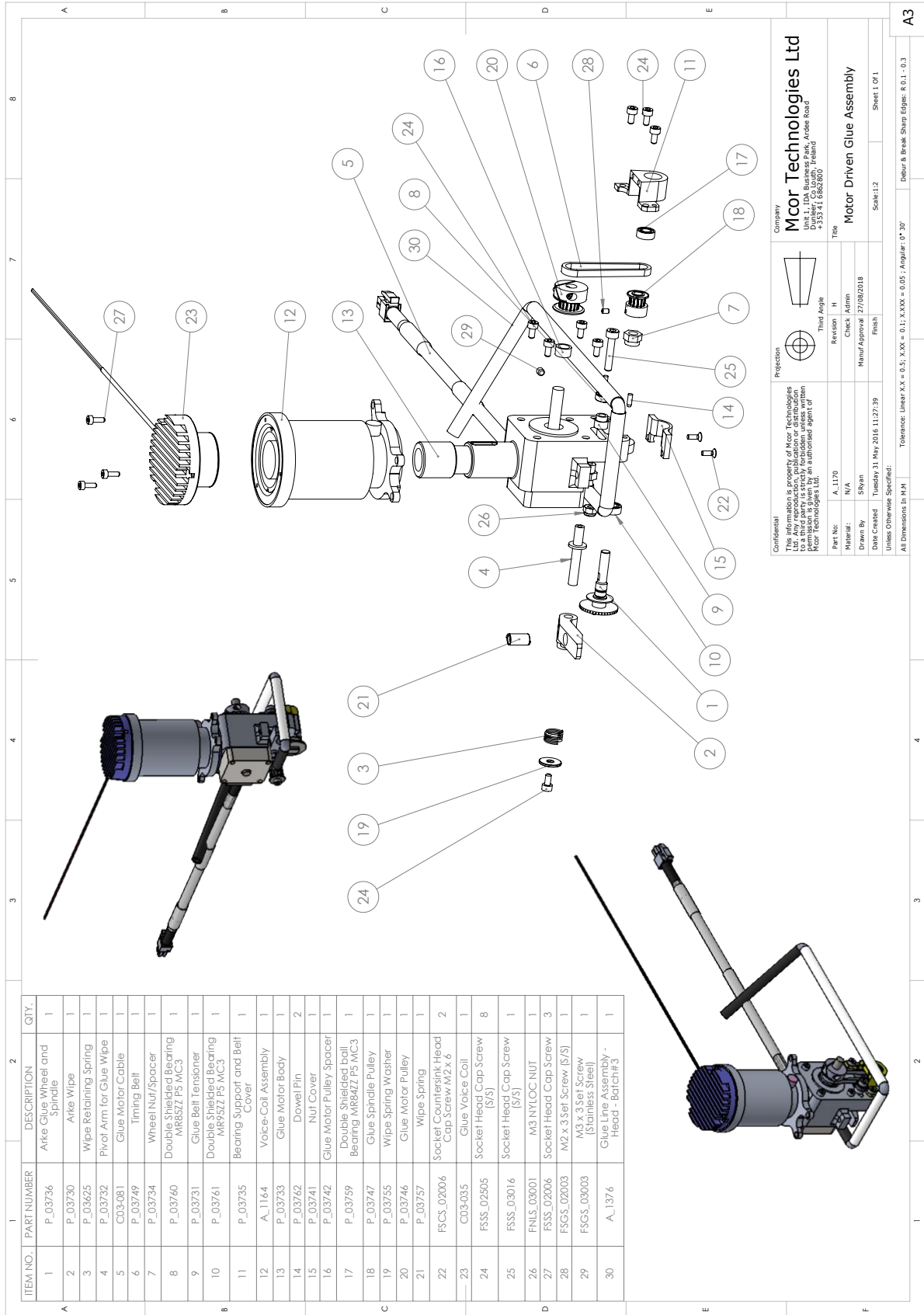


Fig 2: Glue wheel sub-system parts and assembly drawing.



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**Company:** Mcor Technologies Ltd  
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**Title:** Motor Driven Glue Assembly

**Part No:** A\_1170  
**Material:** N/A  
**Drawn By:** Snyan  
**Checked:** Admin  
**Manuf Approval:** 27/08/2018

**Projection:** Third Angle  
**Revision:** H  
**Scale:** 1:1

**Under Otherwise Specified:** DMS Created Tuesday 31 May 2016 11:27:39  
**All Dimensions in mm**  
 Tolerance: Linear XX = 0.5; X.XX = 0.1; X.XXX = 0.05; Angular O° = 30'

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Cleaning.

Glue Wheel and Wipe V1.00

The glue wheel should be cleaned at every job start using the special tool and a sponge provided in the CG-1 accessory kit.

**The glue wipe is a plastic component and the use of any form of rigid tool to remove glue will lead to damage to the component.**

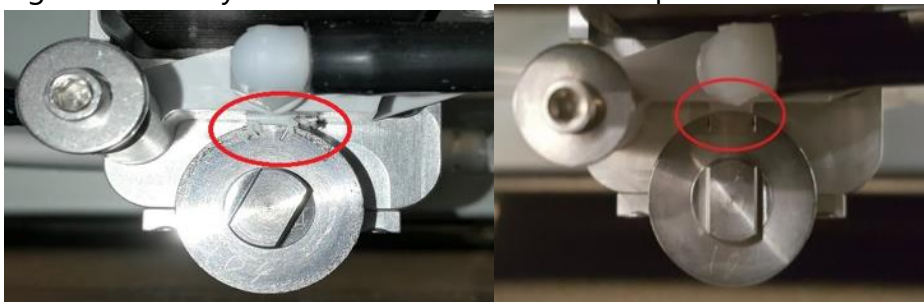
The small sponge can be dampened with water for cleaning purposes. In extreme cases careful use of a wooden toothpick can also help with glue removal.

Note: If your CG-1 has been inactive for more than 2-3 months glue may harden in the glue delivery tubing and you may need to contact us at [support@cleangreen3d.com](mailto:support@cleangreen3d.com) for details on how to recover the glue system.

There are two important areas to clean at the start of every print job. Occasionally, the printer will remind you to clean the glue wheel if there has been a long pause for maintenance (paper out or ink replacement pauses for example that happen while the printer is unattended)

- The glue wheel collects glue deposits over time and needs to be clean front and back.
- The contact area between the glue wipe and the top of the glue wheel needs to be clean. (see photos below LH photo is a front view of a dirty wheel and RH is clean) Any air gaps here due to poor cleaning could lead to glue droplets falling onto the build plate even on an idle printer.
- Occasionally, the printer will remind you to clean the glue wheel if there has been a long pause for maintenance (paper out or ink replacement pauses for example that happen while the printer is unattended)

Fig 3 and 4 Dirty and Clean Glue Wheels examples.



### Glue Wheel Setup.

For glue wheel setup it is recommended to drop the build plate out of the way using the settings/build plate menu, place a tray for to collect accidentally dropped parts and carefully disconnect power (at the X-Y PCB) and glue supply (at the gantry rear quick release fitting). You can then remove the entire glue system from the printer.

**Do not forget to seal the open glue supply tube with a piece of masking tape.**

The glue wheel position over the wheel is set by loosening a small m3 grub screw on the bottom of the glue assembly. Use a good quality hex wrench preferably without a ball end here to avoid damage.

Fig 6/7 Incorrect (Left) and Correct (Right) setup of the glue wipe and glue wheel.

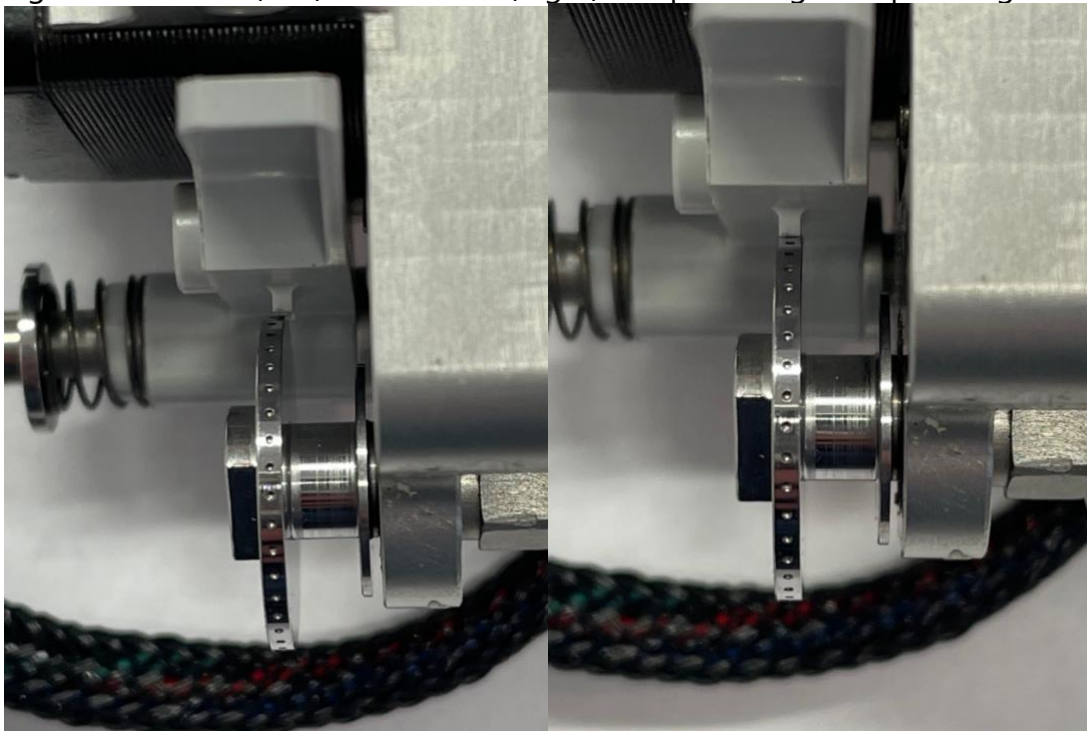
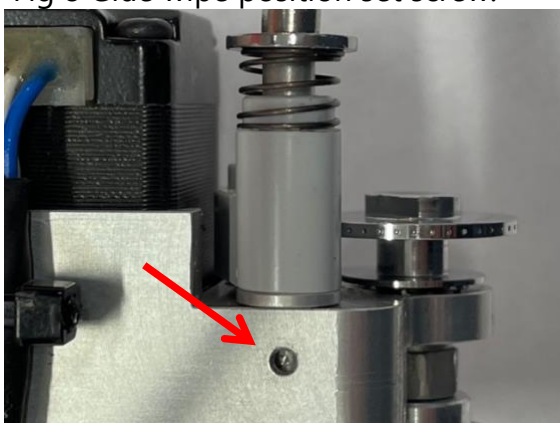


Fig 8 Glue wipe position set screw.



### Glue Wipe Replacement.

The glue wipe is a plastic component (PN P-03730-E) and as its designed to be spring against a rotating part it will wear needing replacement. The rate of wear is dependent on how busy the printer is with jobs but we recommend checking it at least once per year.

For convenience we've shown below comparison photos of a part with excessive wear and a new part. The feature we're looking at in these photos is only 1mm in depth so some form of handheld magnifier with 5-10X magnification is needed for inspection.

Figure 9/10 Badly worn (Left) and new glue wipe (Right). You can see the worn wipe has lost almost 50% of its height but also has a small lip on the bottom due to incorrect setup.

