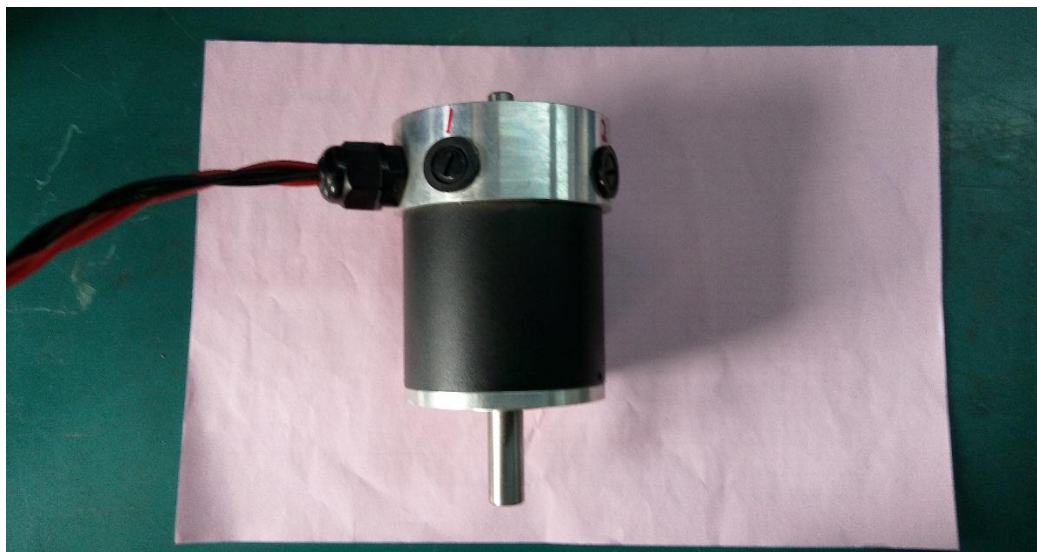




Cleaning method of carbon brush dust in MMP Motors/Gearmotors:

1. Mark the position of the brush holders on End bell either #1 and #2 for a two-pole motor or #1, #2, #3 and #4 for a four-pole motor (shown).



2. Remove the brush caps in order, starting to the right of the wire exit.



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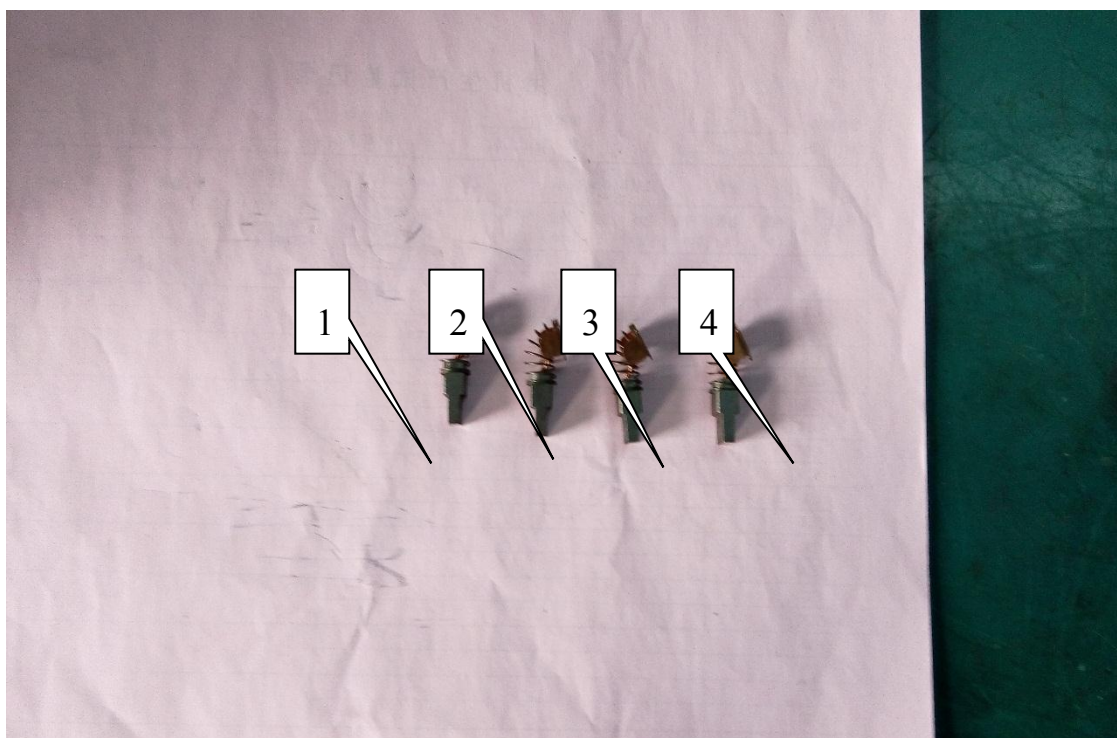
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3. Remove the brushes in the same order and lay them on a sheet of paper.



4. Lay brushes on paper and label according to their corresponding brush holders.

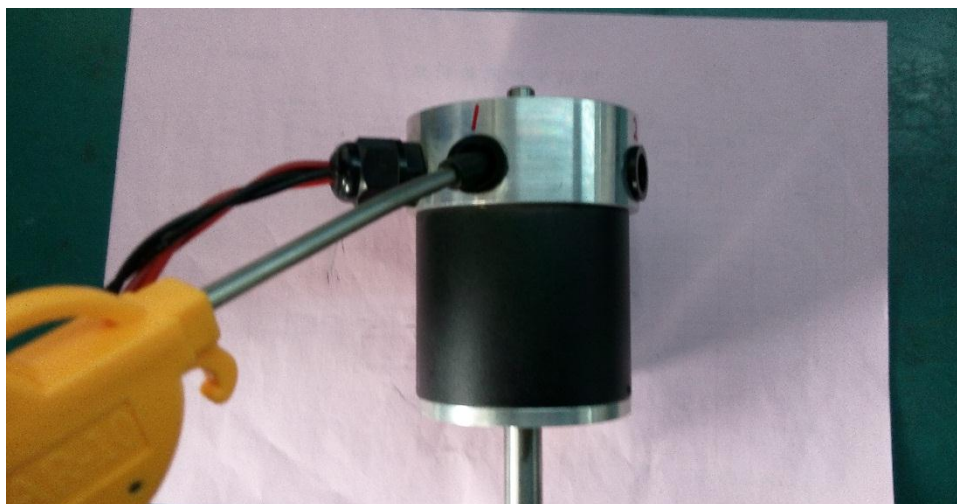




5. Start blowing into brush hole #1 with air gun continuously for 30 seconds.

The excess carbon dust will be discharged from the other brush hole(s).

Repeat process for remaining hole(s).



6. Replace brushes and brush caps in order, ensuring that the springs are not bound and are free to compress.



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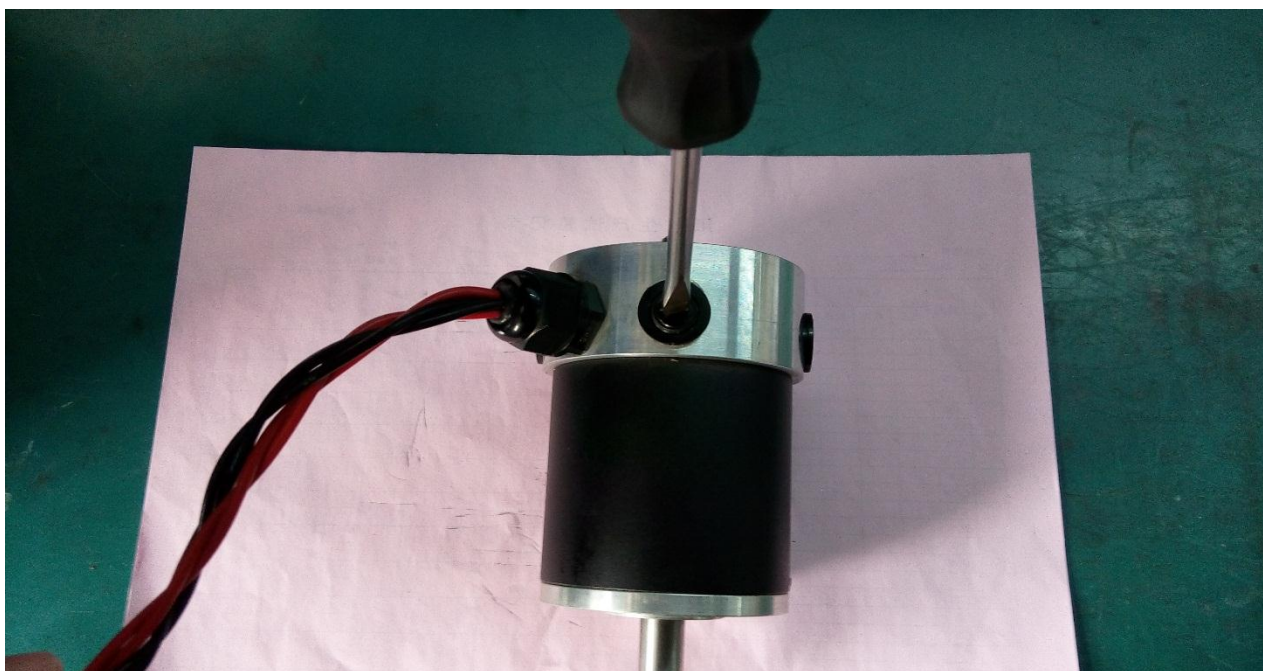
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6. When brush caps are mounted, the tightening force should be minimal to avoid shifting of the copper sleeve in brush holder. Specific recommended brush cap tightening torques are shown below.

Also, it is recommended to use one drop of light-strength thread locker on the threads of the brush caps to ensure they don't become loose due to shock or vibration.



Recommended Brush cap tightening torque levels:

MMP Series:

D22, S22, BL58: 71 oz-in

D33, S27, D40: 85 oz-in

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