

TSS Bulletin

03-18-2013 Issue 37

Purpose – Provide clarity for replacement vacuum motor for Spectrum upright vacuum cleaners (all models), part number 272-9204.

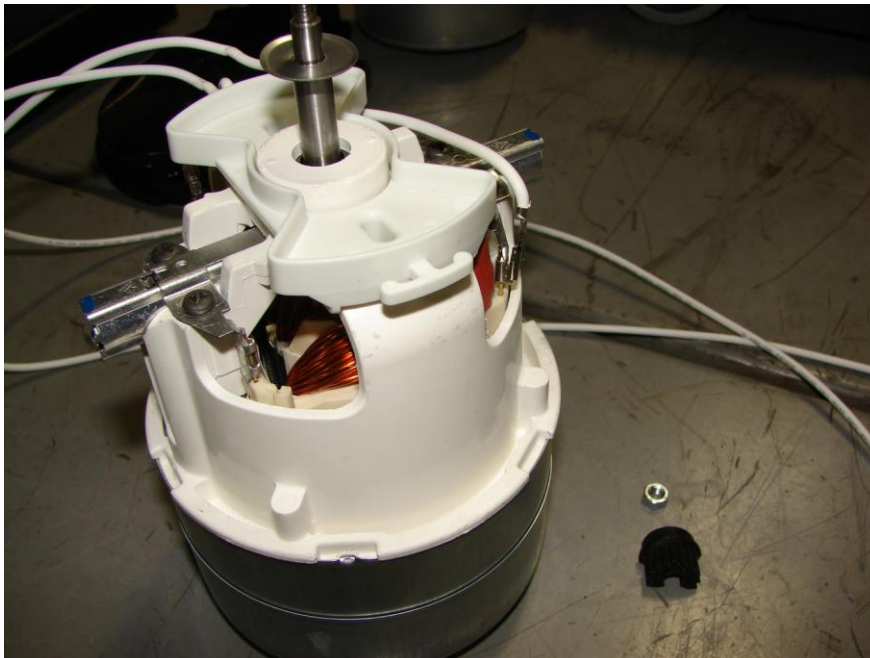
Nilfisk is providing one common vacuum motor for all models in the Spectrum range; this includes both the Dual motor and Single motor types. Some confusion has occurred about this vacuum motor not fitting dual motor applications due to the provision of a gear pulley/shaft extension. The extension is used in the single-motor applications, where it powers the brush roller. Dual-motor units have a dedicated brush motor, and from the factory the extension is absent on the vacuum motor. This may cause the customer to believe they have received the wrong part. This is not the case, as there is ample room for the extension in the base, and it will not interfere with the dual-motor setup.



Vacuum motors removed from black plastic housing. (Left) Replacement 272-9204, extension visible on top. (Right) Factory vac motor removed from dual-motor Spectrum 15D, notice no Extension extension.

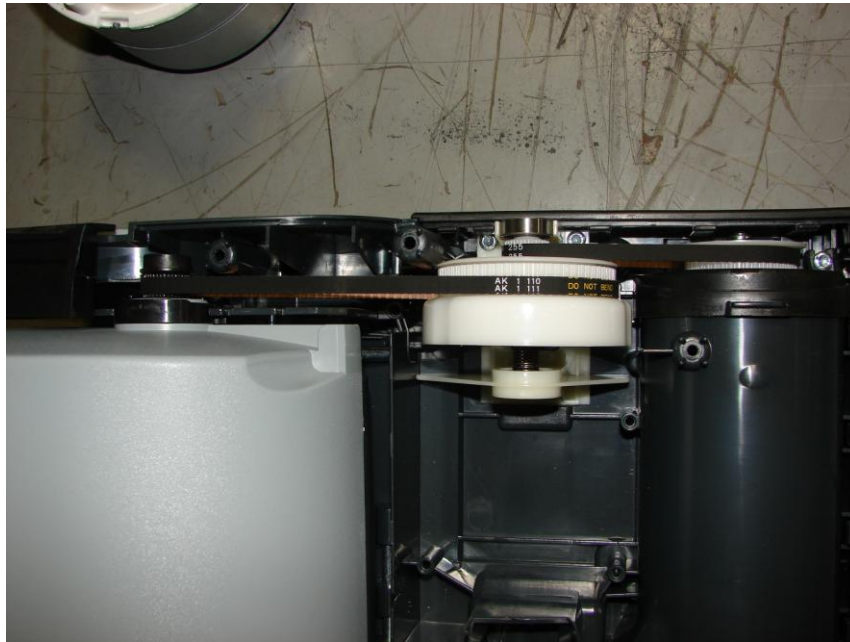


It is possible to remove the black plastic gear pulley; using 2 pairs of needle nose pliers. One grips the shaft and the other can turn the pulley, counter-clockwise.



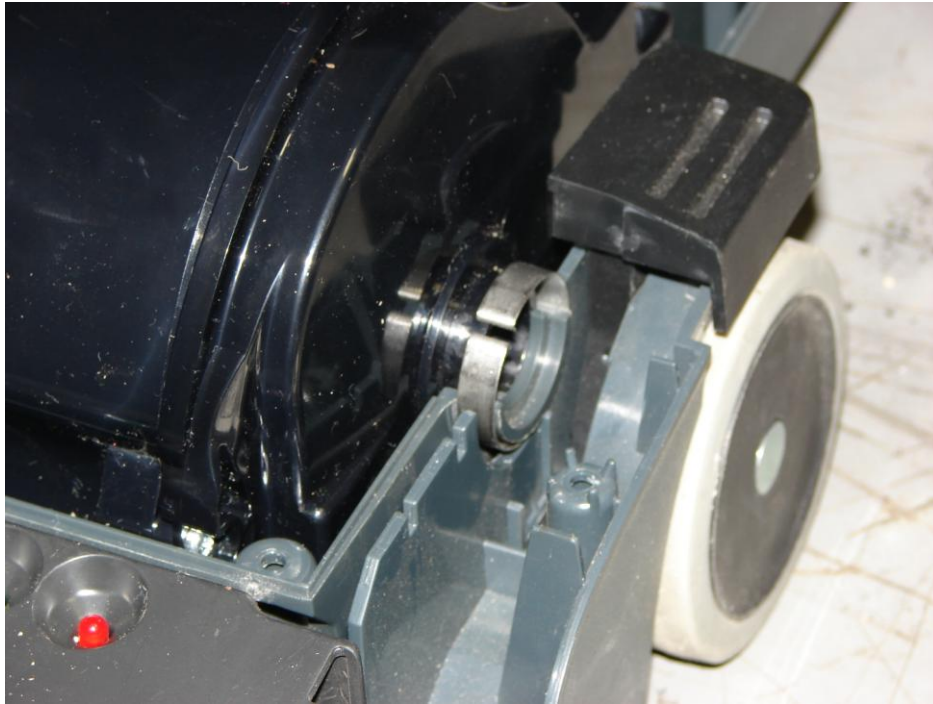
Aside from the carbon brushes...end users and techs are not supposed to be altering these motors.

Such modification is not necessary, the vacuum motor will fit in either dual-motor or single-motor applications. Below is the motor/belt arrangement of the single-motor unit:

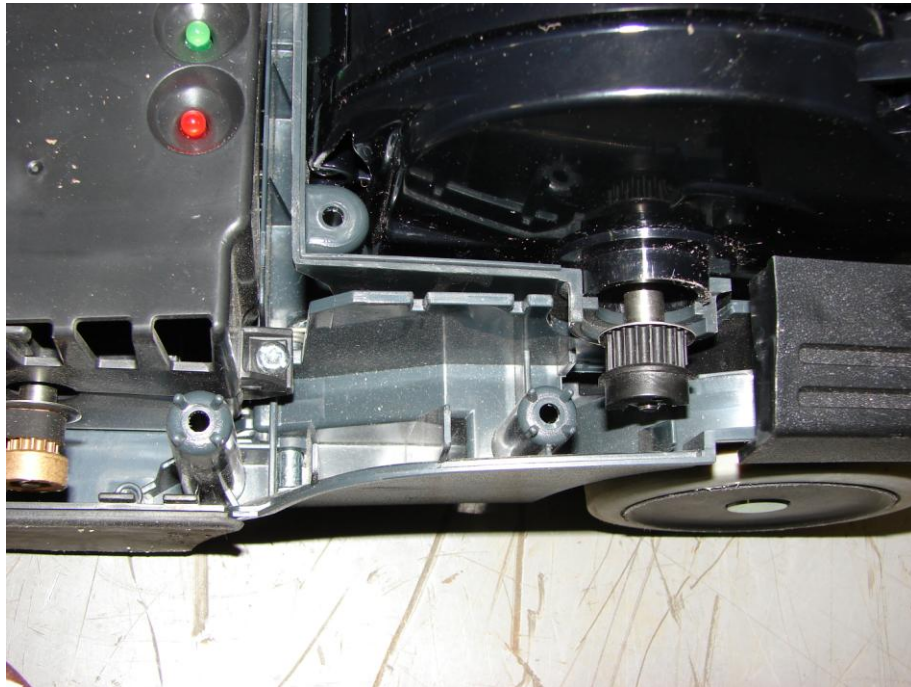


The vacuum motor is in the casing on the left, notice the pulley extending out the top with a belt that runs to an intermediate pulley setup in the middle, and then a second belt running to the brush roll on the right. (On a side note, there is a clutch release inside the intermediate pulleys...that way, if the brush roll becomes jammed it will not stop the vacuum motor from continuing to spin) You can also see the mounting holes below the intermediate pulley; this is where the brush motor would mount in dual-motor units, eliminating the first belt. The same base is used on both motor arrangements.

From the factory, dual-motor units do not have a vacuum with shaft extension.



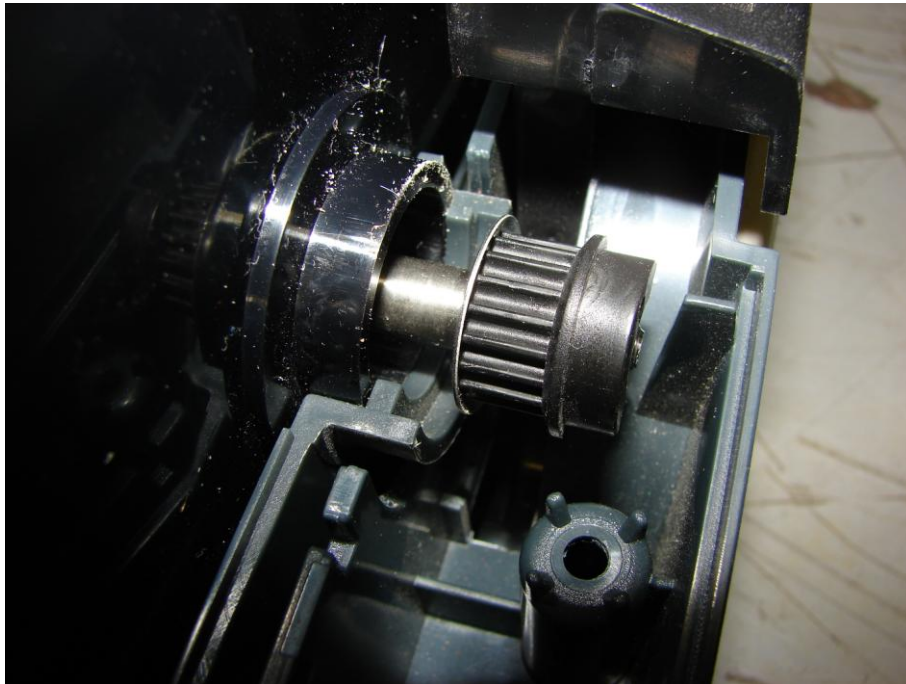
But if a replacement motor with shaft extension were installed, the pulley simply occupies the empty space and no belt is used.



Brush motor is visible on the left here (see gold colored pulley). No belt is needed from the vacuum motor pulley. There is no room for one either; the front of the brush motor housing occupies the space that belt would run to on the intermediate pulley setup. If you are not familiar with both setups, this could lead to confusion when seeing this motor installed. At first glance you might think that another belt is needed, or that you need different motor. You may also think that this motor will fit the base, but it does.

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There isn't any interference with the base moldings either, because the same base is used on both motor arrangements. This pulley will just spin along with the vacuum motor, and not interfere with anything.

Based on these findings, the 272-9204 replacement vacuum motor assembly will work fine when used in all Spectrum Uprights.