## Replacing motor brushes (Models Pu 491, 800+, 5000Q, 8000Q)

## UNPLUG THE POWER UNIT FROM THE MAINS SUPPLY. DO NOT ATTEMPT TO WORK ON THE MACHINE IF IT IS PLUGGED IN. DO NOT TEST THE MACHINE WITH THE LID OFF.

- 1. Dismount the power unit from the wall, following procedures outlined in the operating manual (page 7).
- 2. Once you have removed the lid, you will see the top of the motor and the plastic casing of both brushes poking out on opposite sides.
- On top of the motor there are two brackets sunk into the housing, holding the brushes in place. These can be levered out very simply using a flatblade screwdriver.
- 4. The brushes will then become loose enough for you to pull them some of the way out sufficient enough for you to inspect. If there is no carbon left on one or both of the brushes, then a new pair should suffice to resolve the problem with your machine. If both have plenty of carbon graphite left, or one brush is worn all the way down while the other has 2cm + of life then you may well need another motor.
- 5. The brushes are connected to the motor by a wire that is spade-connected to the underside of the brush. Pull the brush free of this connection and replace with a new one.
- 6. It is absolutely critical when fitting the new brushes that the wire connecting the brushes to the motor is not touching the armature (the part in the middle that the brushes rub against as it rotates). Move the power unit into a good light and look down into the motor to ensure the wire is clear. If it touches the armature it will immediately be shredded when the machine starts and the motor will need to be rewired or replaced (we do not rewire motors).

Please note: the numbers adjacent to the instructions on this sheet do not necessarily correspond with the numbers on the accompanying sheet of pictures.