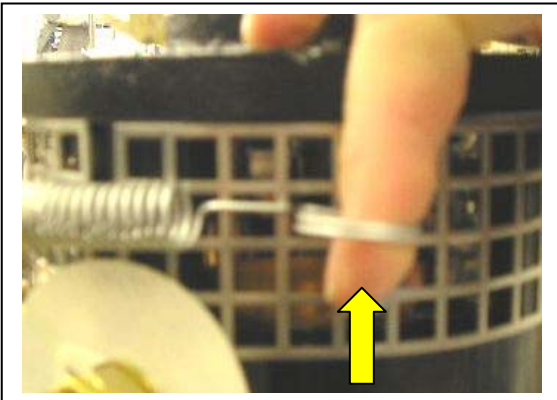
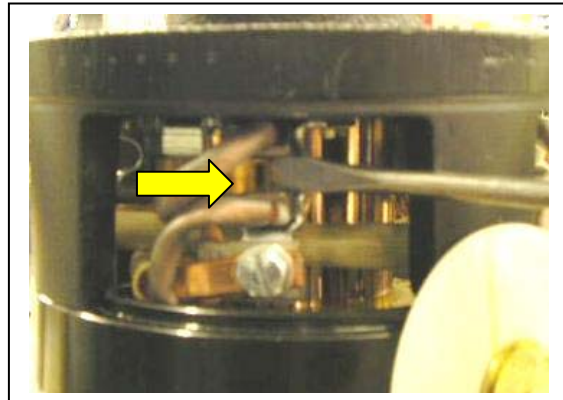


Thruster Brush-gear replacement instruction, 3kw +

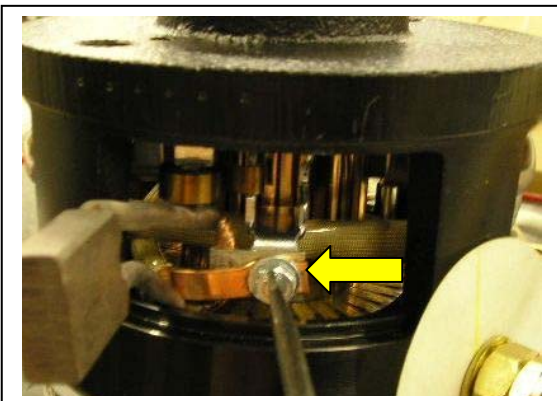
1. Before beginning any maintenance, ensure that the bow thruster is fully disconnected from it's power supply.



2. Un-fasten the motor shield clip and remove the motor shield from the unit, being careful not to damage it.



3. Use a flat headed screwdriver to pull back the brush retaining springs, allowing the brush to be slid back in it's housing.



4. Use the flathead screwdriver to remove the brush retaining screw, as shown.



5. Totally remove the old brush from the housing replacing with the new one. Replace the parts removed during stages 2 to 4 in reverse order.

Replacement part numbers:

589080 – 3.0kw 12-24v brush kit
589088 – 4.0kw 12v brush kit
589089 – 4.0kw 24v brush kit
589081 – 5.0-6.0kw 12v brush kit
589082 – 5.0kw 24v brush kit

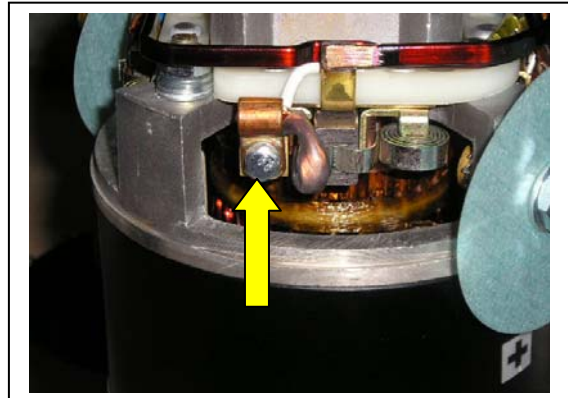
589083 – 6.0kw 24v brush kit
589084 – 8.0kw 24v brush kit
589090 – 9.6kw 48v brush kit
589085 – 10.8kw 24v brush kit
589086 – 15.0kw 48v brush kit

Thruster Brush-gear replacement instruction, 2.0 – 2.2kw

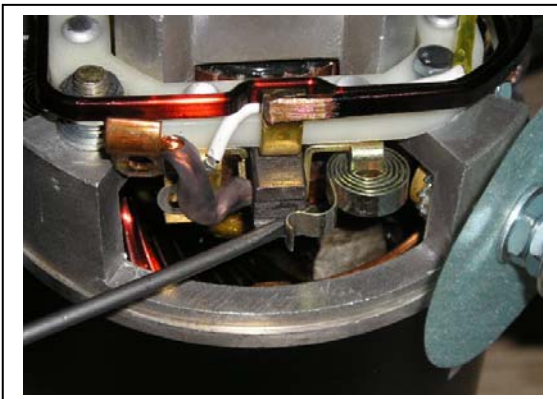
1. Before beginning any maintenance, ensure that the bow thruster is fully disconnected from it's power supply.



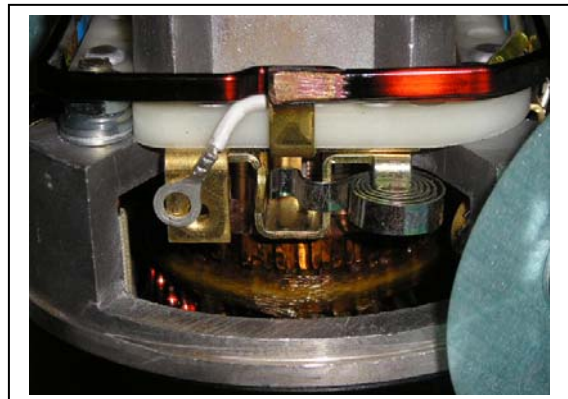
2. Use a spanner to remove the cover retaining screws, then lift off the cover, being careful not to damage any wires.



3. Use a 7mm socket to remove the brush retaining screw.



4. Use a flat headed screwdriver to pull back the brush retaining spring, allowing the old brush to be pulled out.



5. Replace with the new brush and repeat steps 2 to 4 in reverse order.

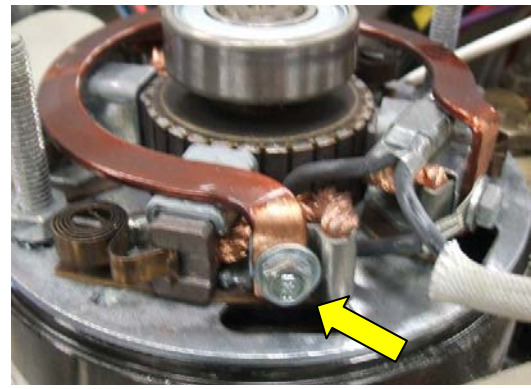
Replacement part numbers:
589087 – 2.0-2.2kw 12v brush kit

Thruster Brush-gear replacement instruction, 2,2kw “SILVER CAP” motor

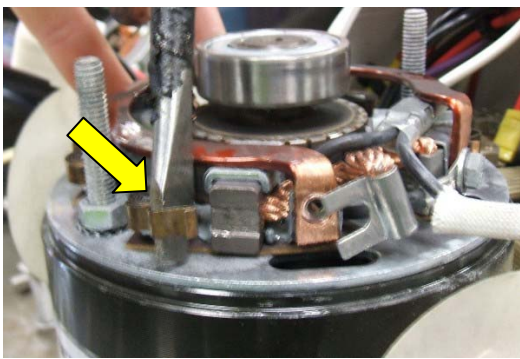
1. Before beginning any maintenance, ensure that the bow thruster is fully disconnected from it's power supply.



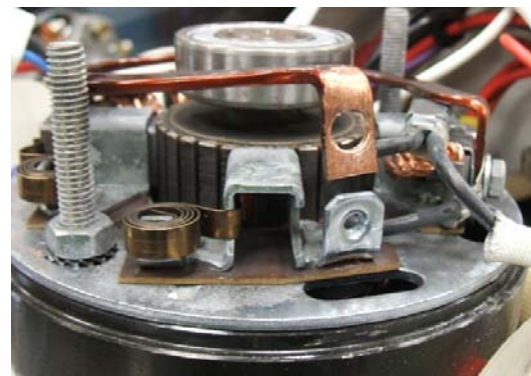
2. Use a spanner to remove the cover retaining nuts, then lift off the cover, being careful not to damage any wires.



3. Use a 7mm socket to remove the brush retaining screw.



4. Use a flat headed screwdriver to pull back the brush retaining spring, allowing the old brush to be pulled out.



5. Replace with the new brush and repeat steps 2 to 4 in reverse order.

Replacement part numbers:
589091 –2.2kw 12v brush kit for “SILVER CAP” motor