



SEW Maintenance Series

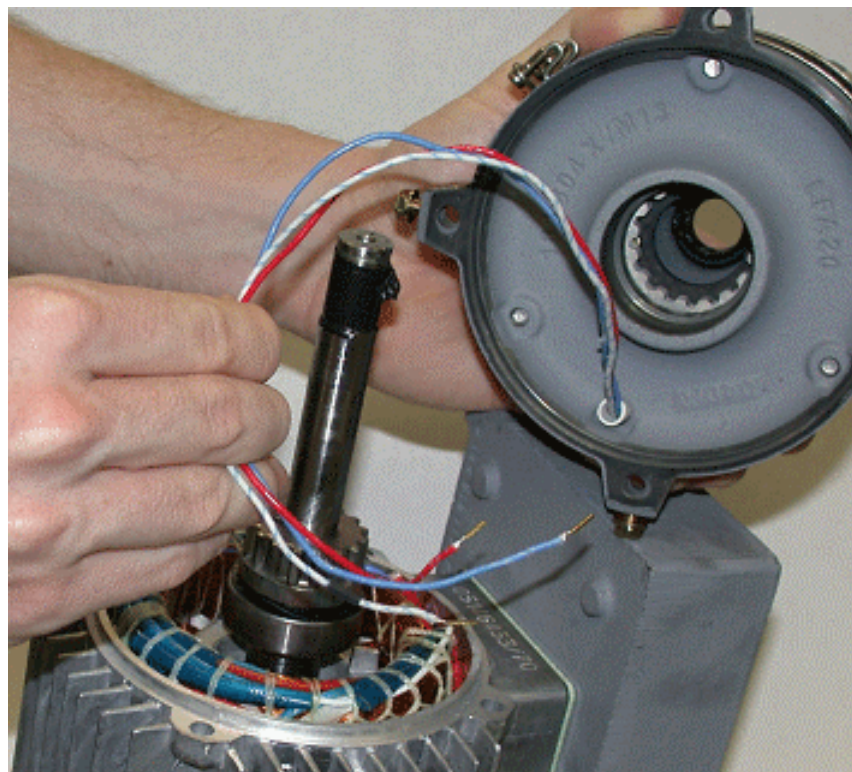
Complete Brake Replacement





Objectives

- After studying the contained information you will be able to accomplish the following:
 - Perform the removal of the existing brake
 - Perform the installation of the replacement brake





Tools and Materials

- What you will need:
 - 1 10mm Nut-driver
 - 1 8mm Nut-driver
 - 1 Medium Philips Screwdriver
 - 1 External Snapping Pliers
 - 1 Dead-blow Hammer
 - 1 Cutting Pliers
 - 2 Flat-tip Screw Drivers
 - 1 Replacement Brake
 - 1 Roll of Electrical Tape





Safety

- Always follow the proper lockout/tagout procedures.



- Make sure to use the proper safety equipment at all times.





Step 1

- Disconnect all power sources to the motor.



Step 2

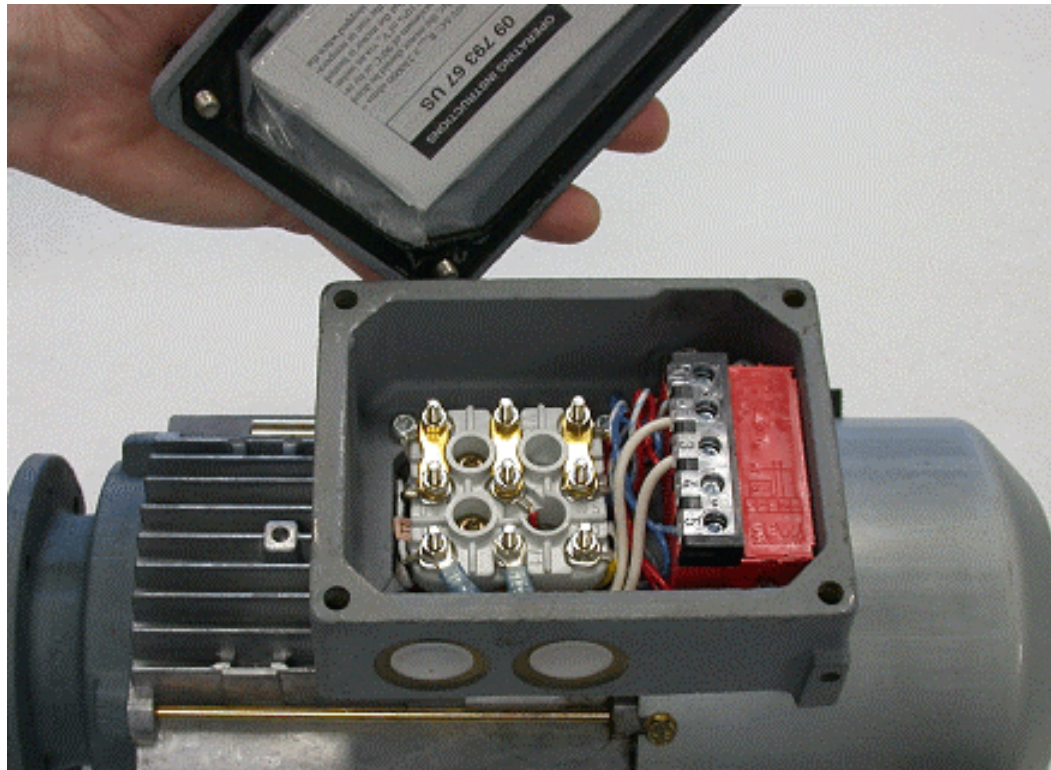
- Using the 10mm nut driver, loosen the 4 small screws that hold the conduit box cover into place.





Step 3

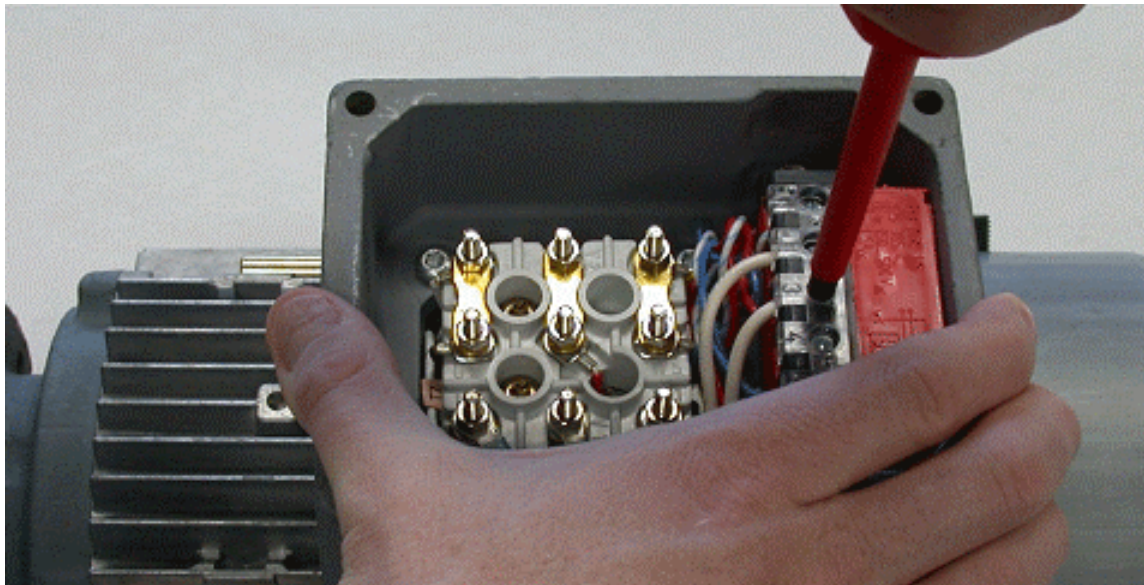
- Remove the conduit box lid from the conduit box.





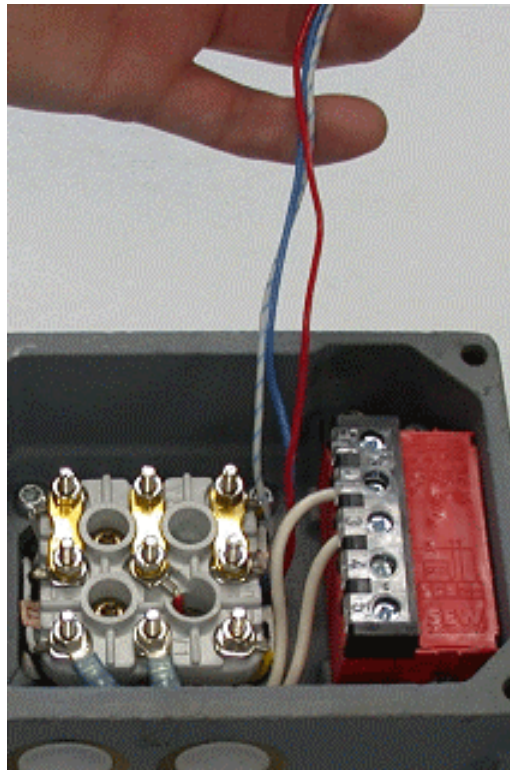
Step 4

- Using a Philips screw driver, remove the three brake wires from the rectifier.



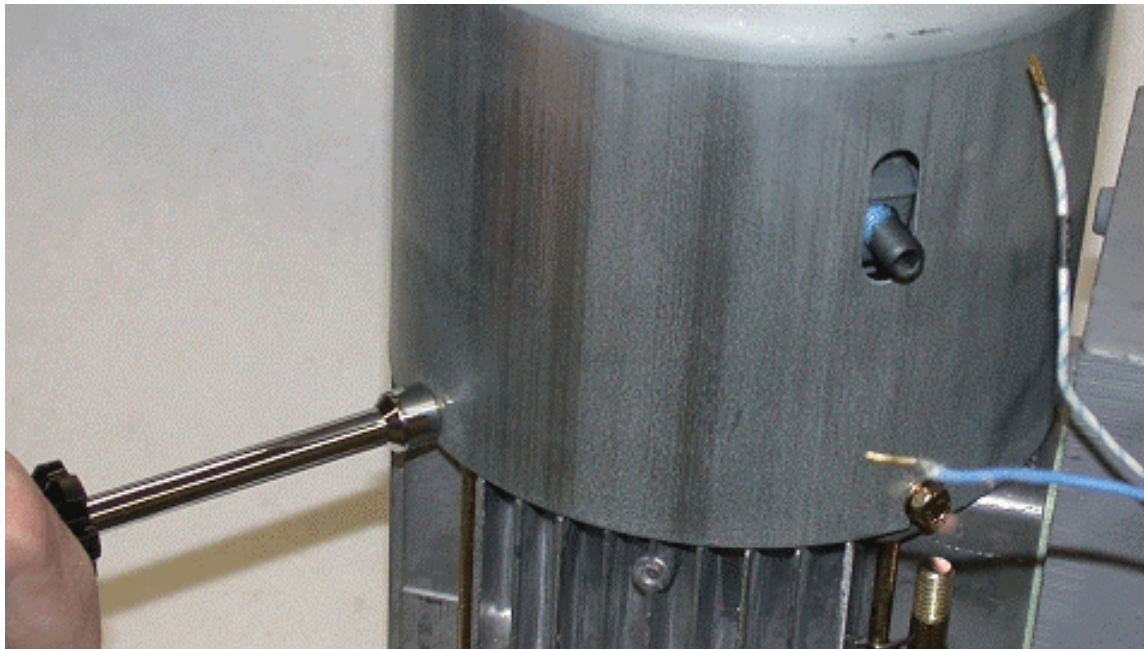
Step 5

- After removing the brake wires, straighten them as shown in the picture.



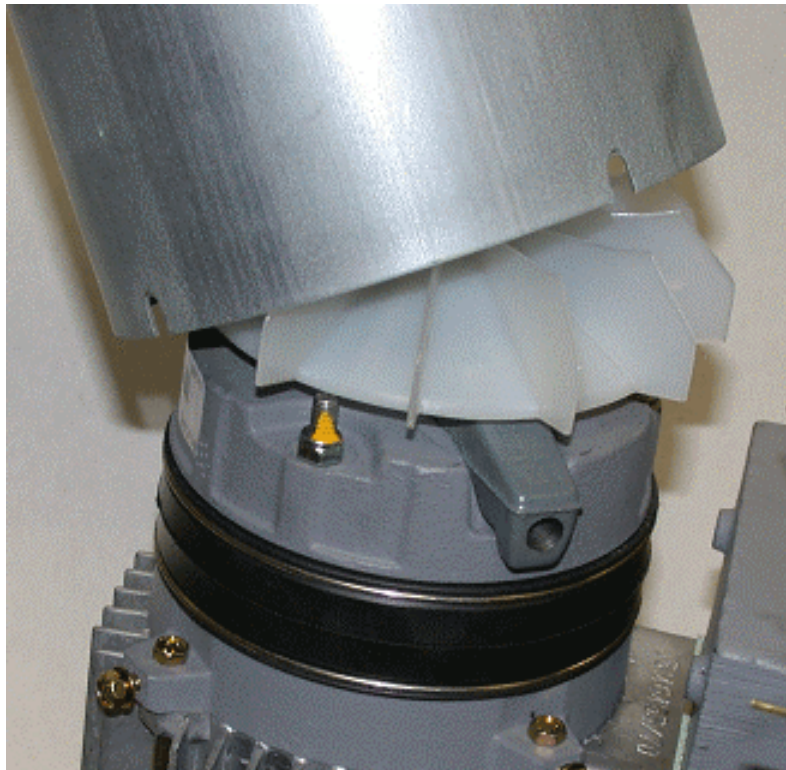
Step 6

- Using the 8mm nut-driver, loosen the 4 screws that hold the motor fan guard into place.



Step 7

- Remove the fan guard from the motor.



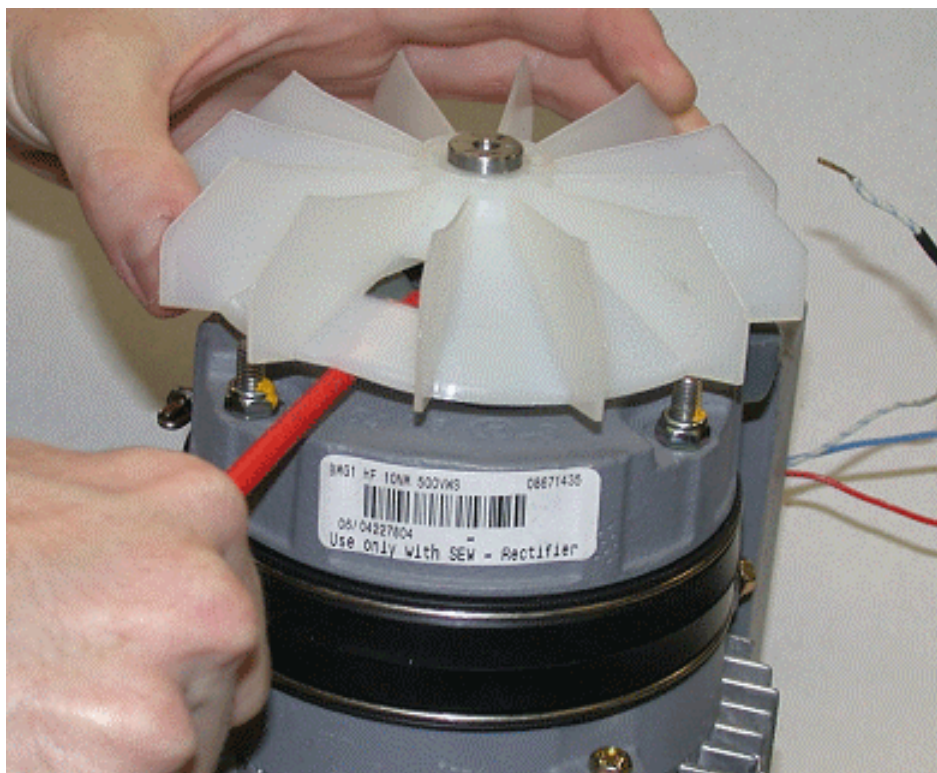
Step 8

- Using the small snapping pliers, remove the snapping that secures the motor fan.



Step 9

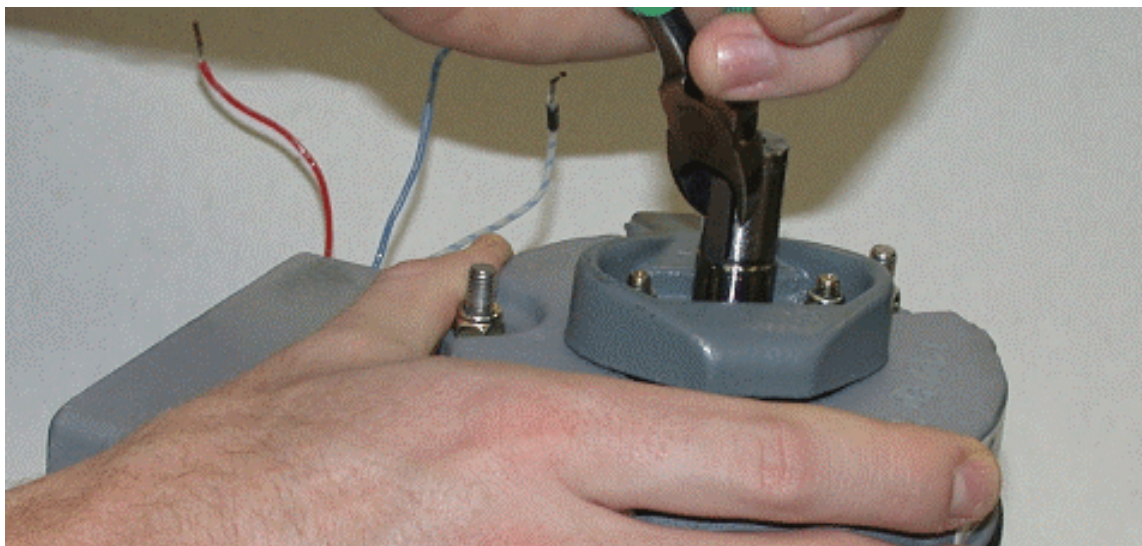
- With the flat-tip screwdriver, use a gentle prying action to remove the motor fan, using caution to not damage the fan.





Step 10

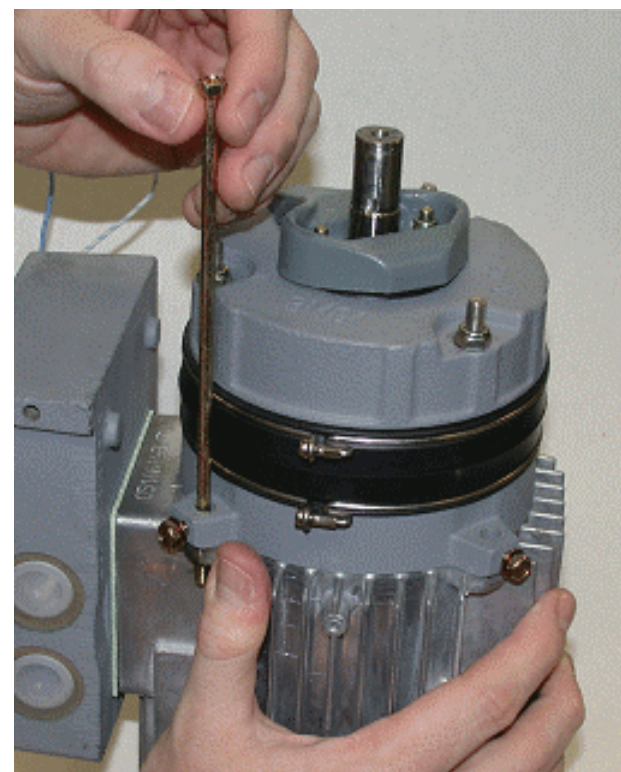
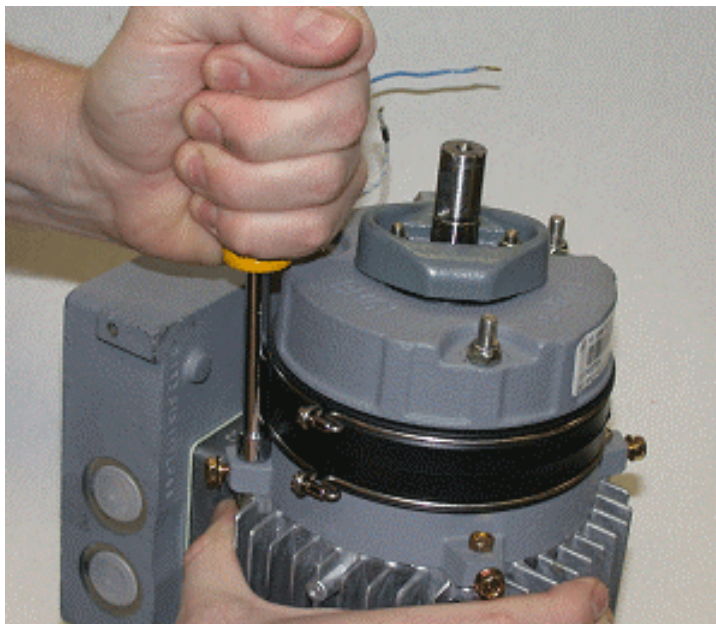
- Using the cutting pliers, remove the fan key from the rotor.





Step 11

- Using the 8mm nut driver, remove the 4 motor tension rods.





Step 12

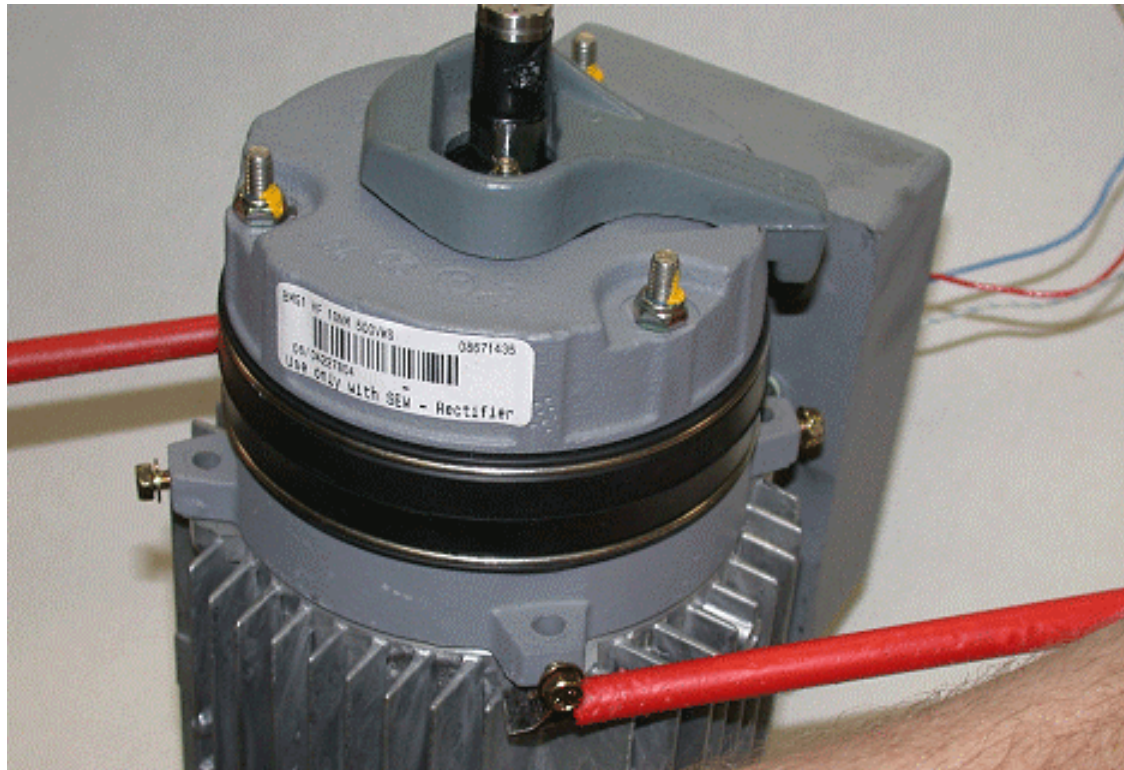
- Wrap the rotor end with tape to prevent the keyway from damaging the brake seal.





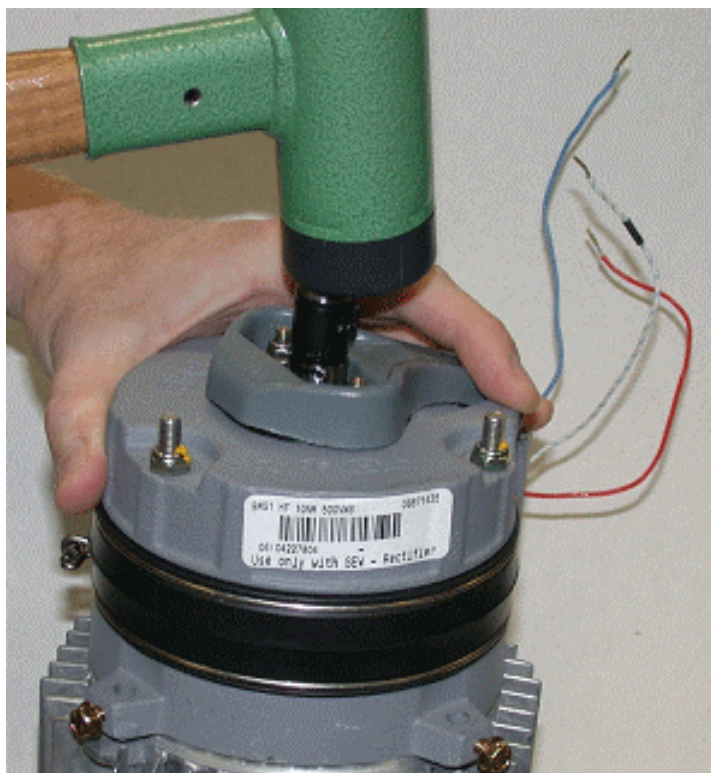
Step 13

- Using both flat head screwdrivers, pry the brake away from the stator



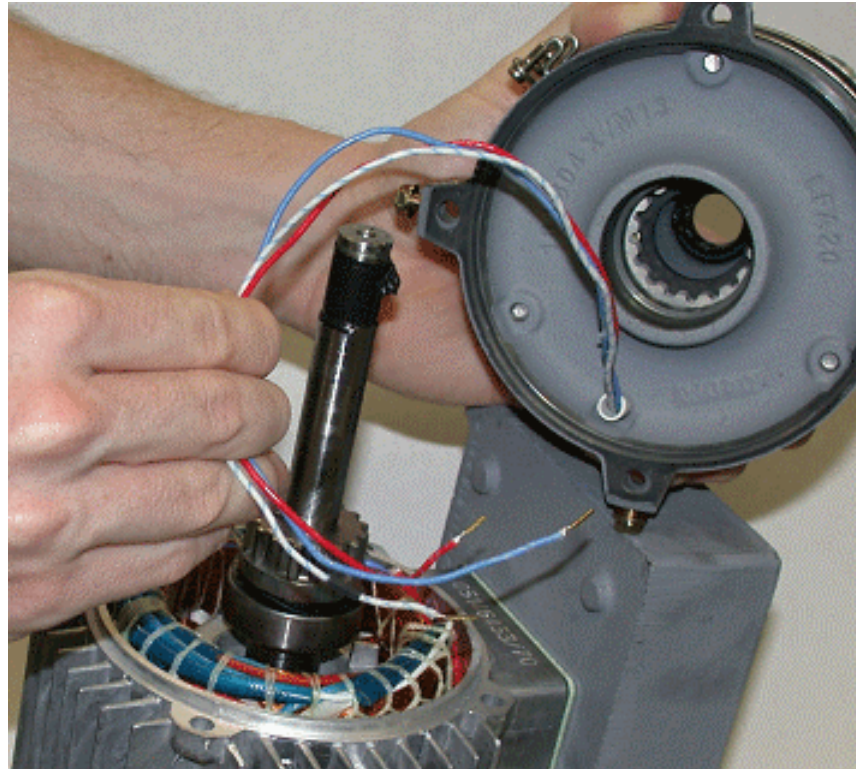
Step 14

- Using a dead blow hammer, lightly tap the end of the rotor shaft to completely disengage the brake from the rotor.



Step 15

- Slide the brake completely off the rotor shaft, ensuring that the brake wires are completely removed from the motor.



Step 16

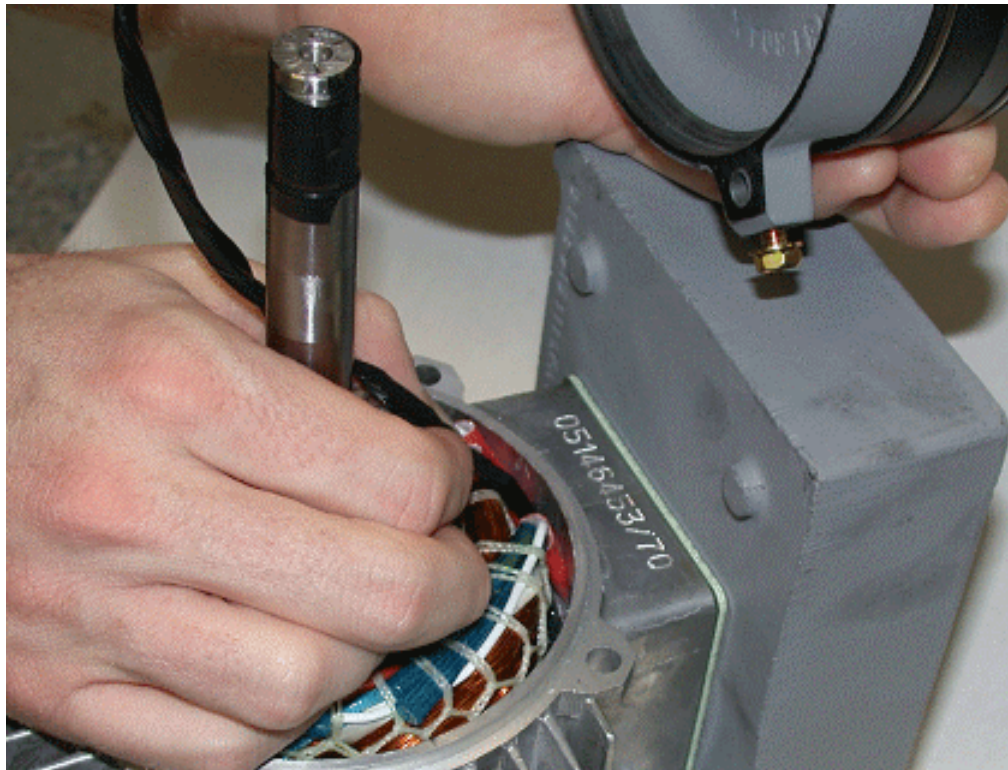
- Using the **new** brake, wrap its wires with tape to protect them from damage during re-installation.





Step 17

- Insert the brake wires into the relief of the stator and into the conduit box.



Step 18

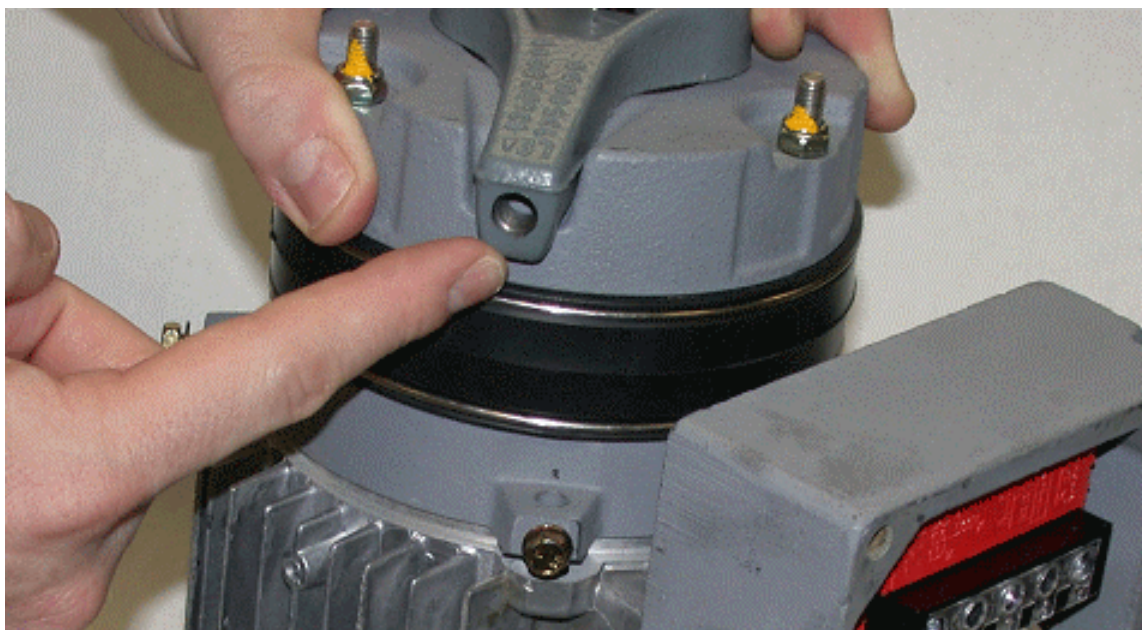
- Install the brake onto the rotor shaft while maintaining tension on the brake wires to avoid crimping them.





Step 19

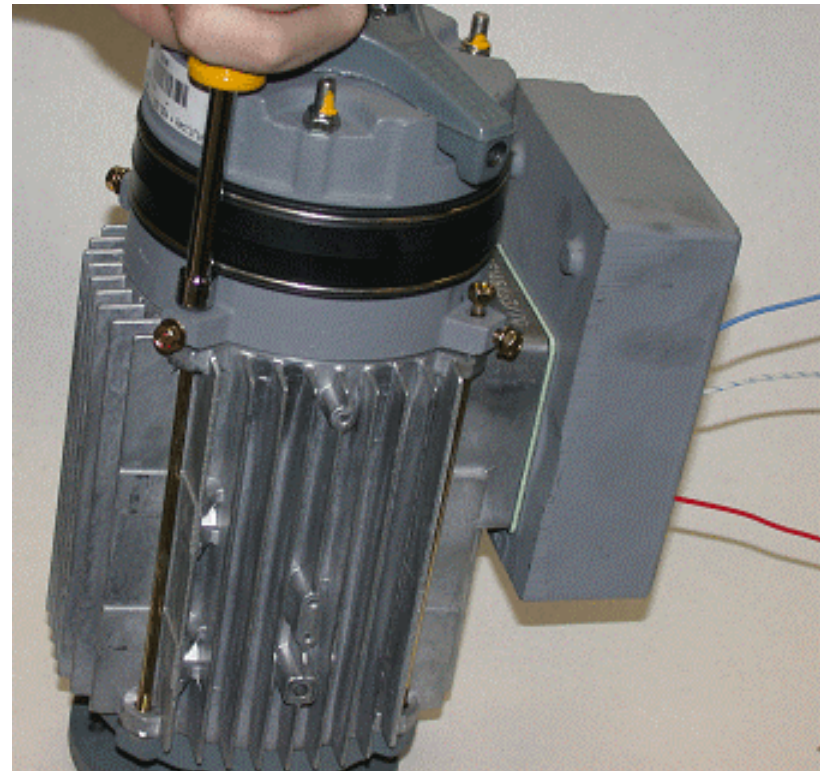
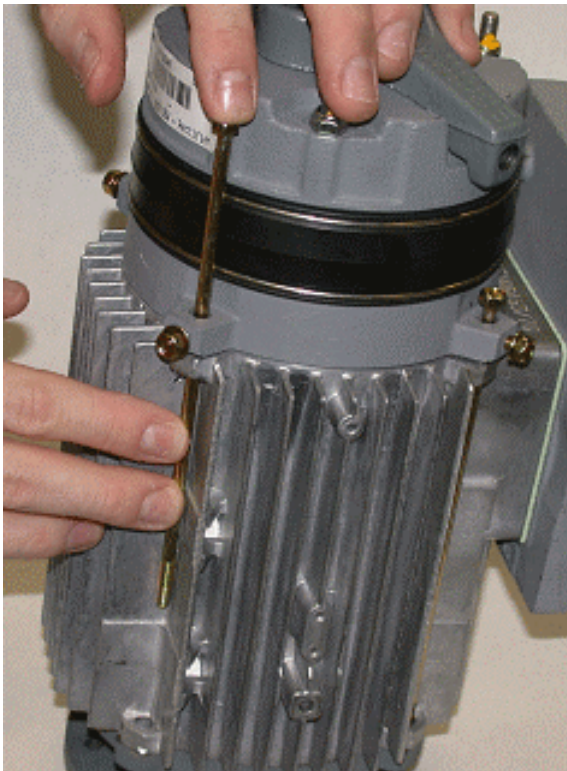
- Ensure that the brake release is aligned to its previous position so that the brake lever remains accessible when the brakemotor is placed back into operation.





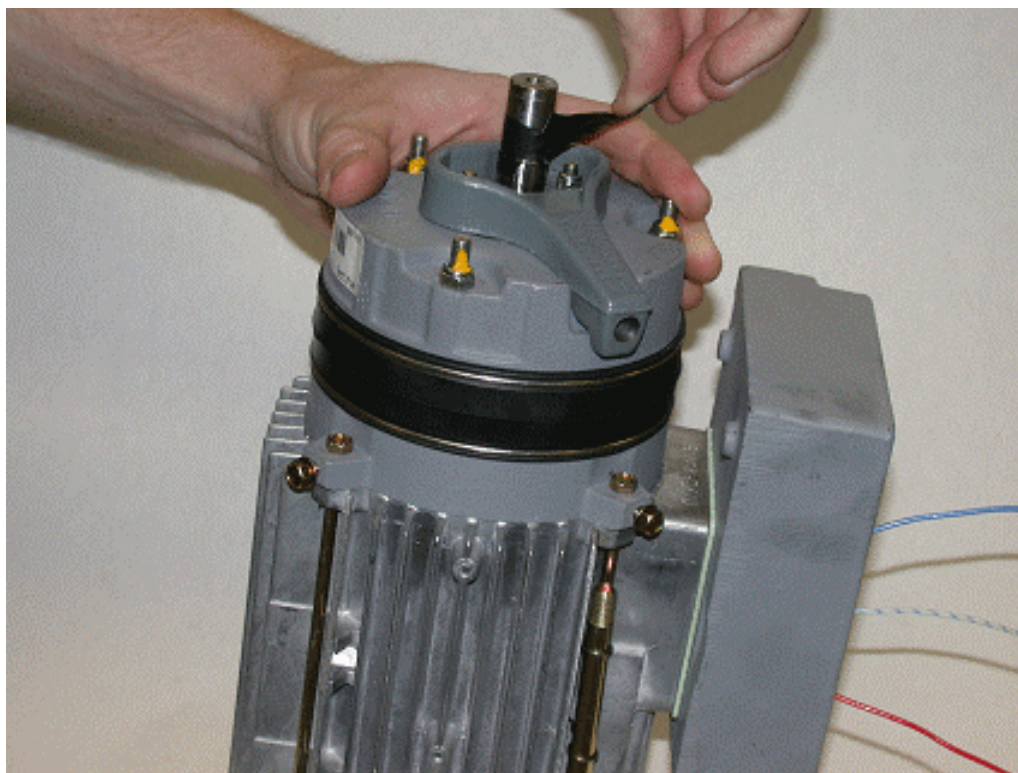
Step 20

- Insert the 4 tension rods into there respective positions. Tighten them using the 8mm nut driver.



Step 21

- Remove the protective tape from the end of the rotor shaft.





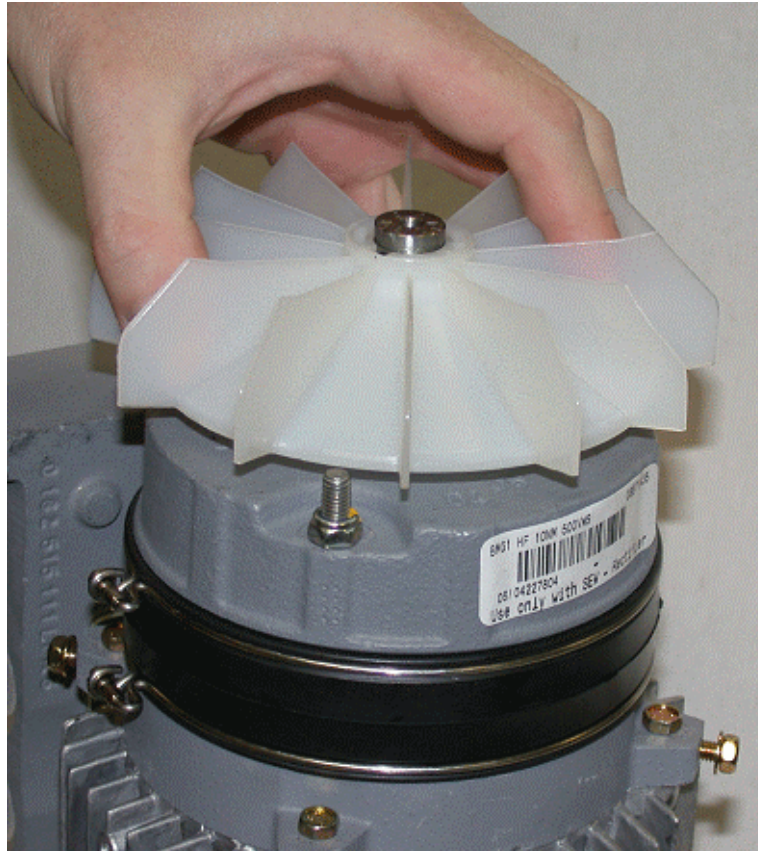
Step 22

- Insert the fan key and lightly tap it into place using the dead-blow hammer or rubber hammer.



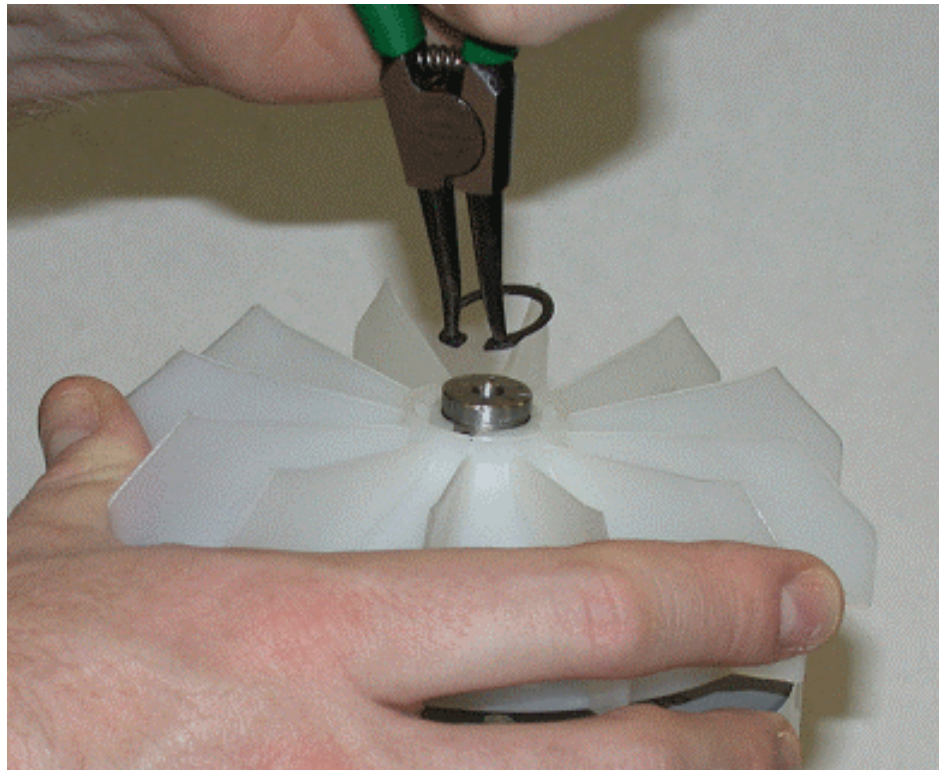
Step 23

- Install the fan onto the end of the rotor, ensuring that it seats completely.



Step 24

- Using the snapping pliers, re-install the snapping onto the end of the rotor shaft.





Step 25

- Install the fan guard, ensuring that the oval relief aligns with the brake release lever.





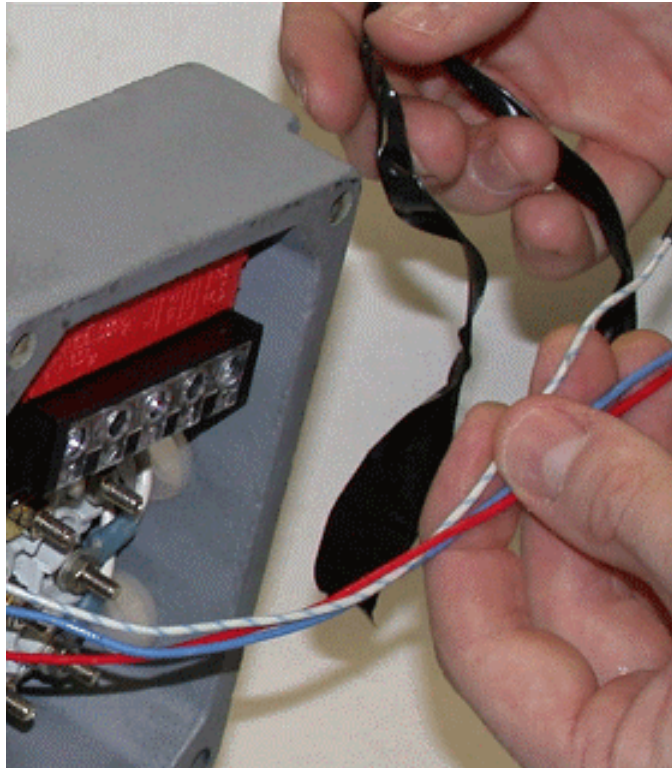
Step 26

- Using the M8 nut driver, tighten the 4 screws that secure the fan guard.



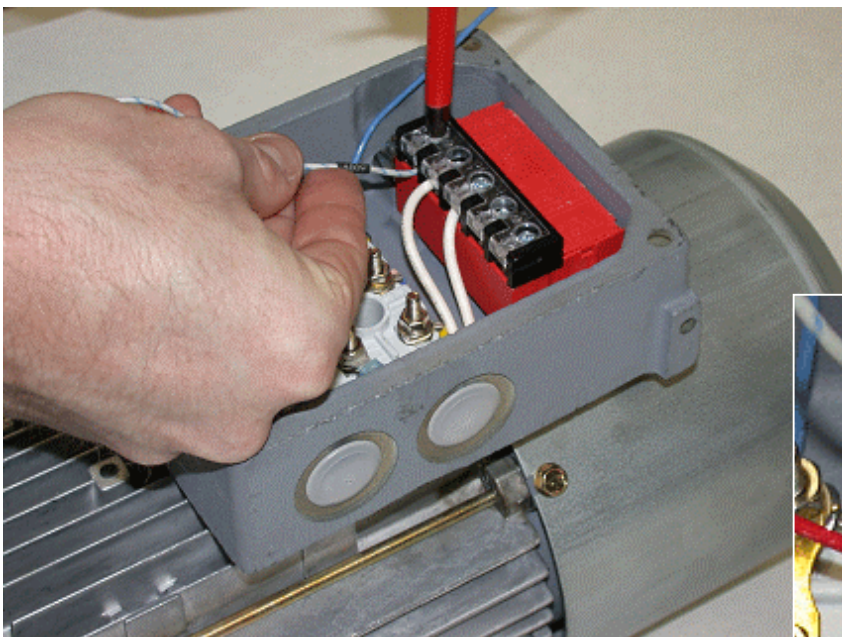
Step 27

- Remove the protective tape from the 3 brake wires.

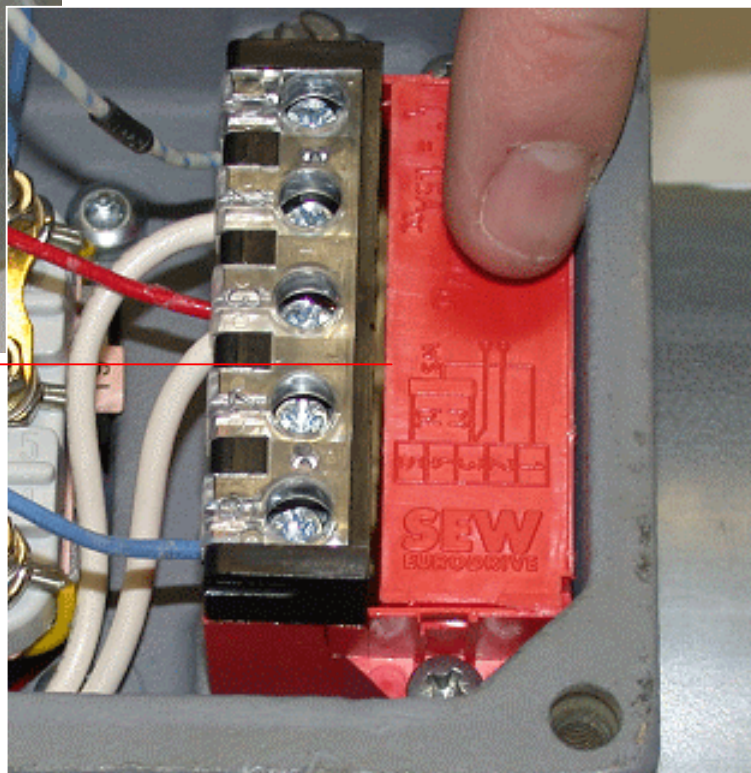


Step 28

- Using the Philips screw driver, install the 3 brake wires into the rectifier.

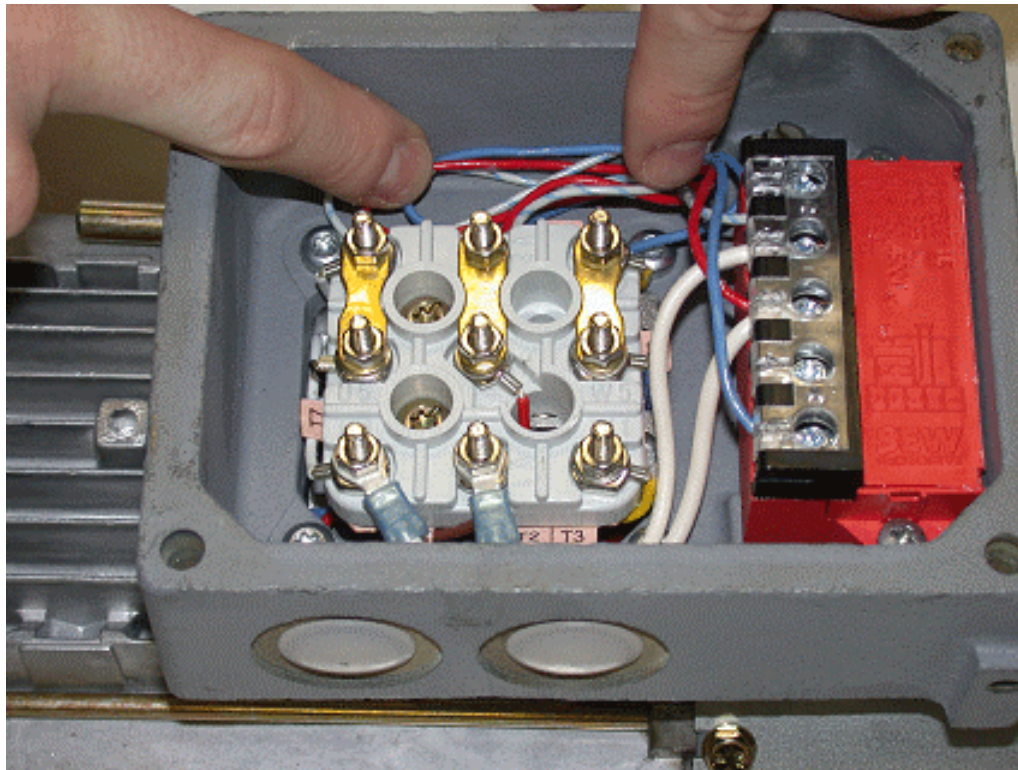


Refer to the wiring diagram found on the rectifier to determine the proper placement of the brake wires.



Step 29

- Carefully wrap and tuck the wires out of the way of the terminal block.





Step 30

- Reconnect the input power according to the diagram located on the inside of the conduit box cover.



Step 31

- Install the conduit box cover. Use the 10mm nut driver to tighten the 4 bolts.



Step 32

- Reconnect power and confirm the proper operation of the brakemotor and attached equipment.

