

**Op #:** A-10

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### Introduction:

This procedure documents replacing the armature and brushes for any P56AN family motor.



**Op #:** A-20

#### Recommended tools:

7/16" socket wrench
Small soft hammer
Flathead screwdriver
Phillips screwdriver
Small channel locks
non-metallic spacer (4 x 3.5 x 3.5" in this case)
Flat tipped rod



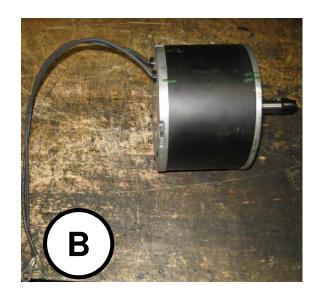
**Op #:** A-30

A. Locate 7/16 "socket wrench



- B. Locate motor needing armature and brushes replaced
- C. Remove both existing bolts with wrench

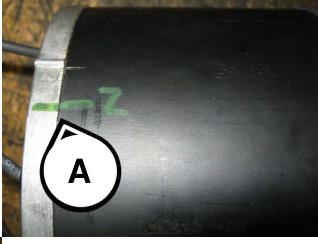


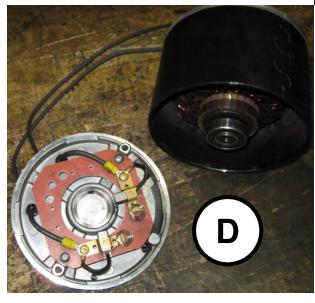




- A. Mark alignment of motor and cap
- B. Locate soft hammer and flat screwdriver
- C. Remove bottom cap with screwdriver and hammer tapping evenly around motor
- D. Fully remove bottom cap from motor assembly









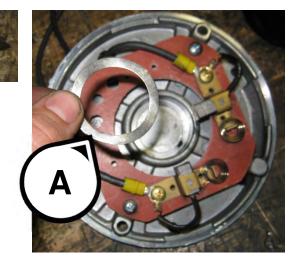


*Op #:* A-50

A. Locate wavy washer and set aside



B. Locate Phillips screwdriver



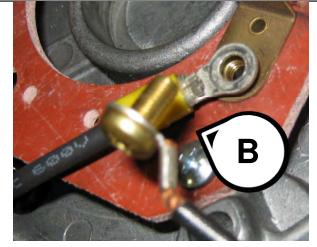
C. Pull back spring and slide out brush head

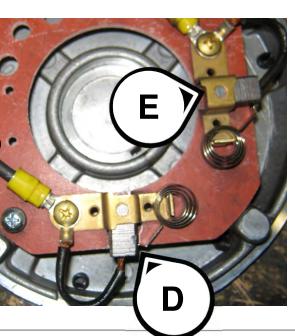
D. Unscrew screw and remove brush

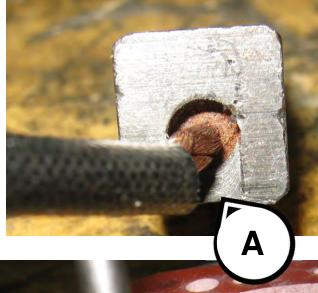


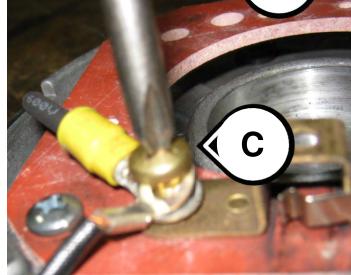


- A. Note the orientation of the new brushes (open side down)
- B. Slide both ring terminals over screw
- C. Tighten screw down
- D. Pull back spring and set brush into non- engaged position
- E. Replace other brushes as needed



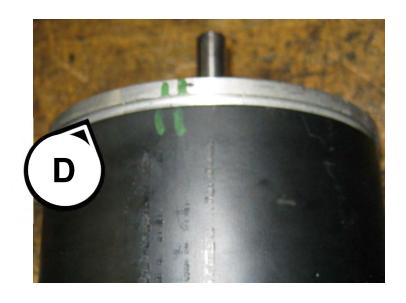


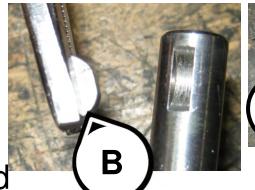


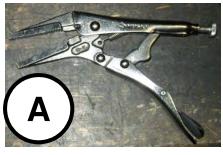


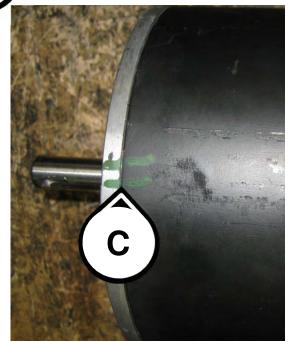


- A. Locate channel locks
- B. Remove key with channel locks
- C. Mark alignment of top cap
- D. Loosen top cap with flathead screwdriver and hammer









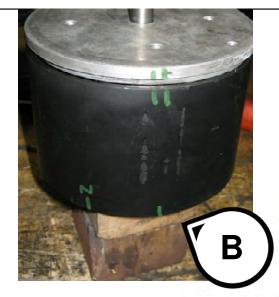


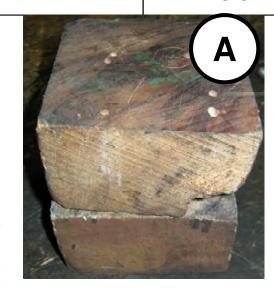
**Op #:** A-80

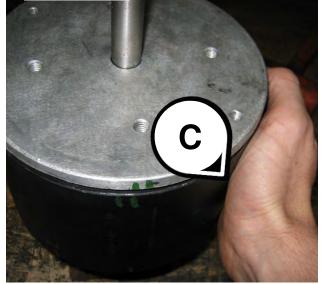
- A. Locate non metallic spacers
- B. Place motor bearing on top of spacer
- C. Grab motor casing with both hands and push down

D. Fully remove armature



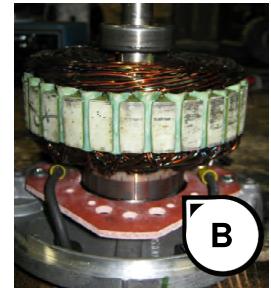


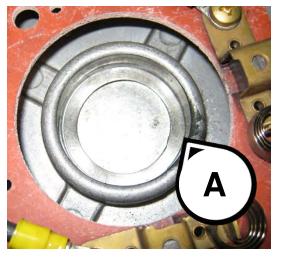


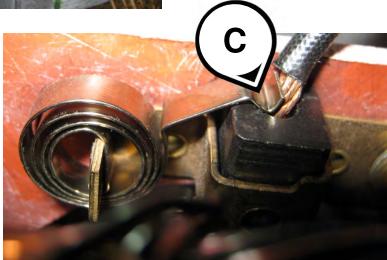




- A. Insert wavy washer into base
- B. Slide new armature over wavy washer
- C. Engage all brushes by pulling back brush spring and pushing in the brush and releasing spring



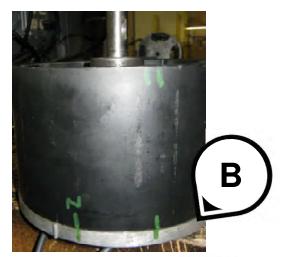


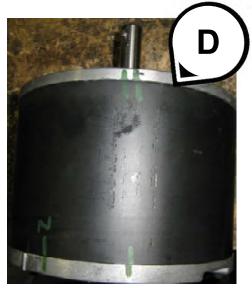


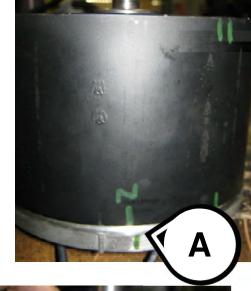


<u>Op #:</u> A-100

- A. Align bottom cap and slide motor casing over armature. Be careful as magnets grab armature
- B. Tap casing in place
- C. Align top cap over shaft onto motor casing
- D. Hammer top cap in place





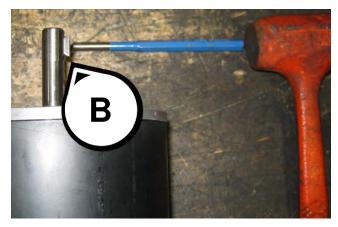


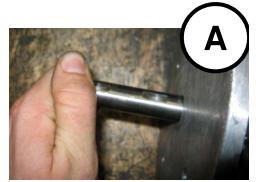


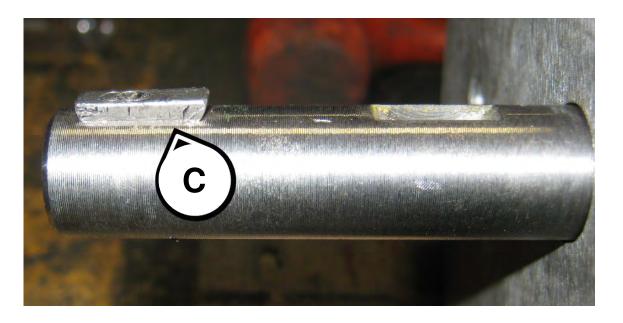


<u>Op #:</u> A-110

- A. Check that shaft turns smoothly
- B. Set key in keyway
- C. Tap key until it sits fully in keyway









- A. Thread bolts into motor
- B. Tighten bolts with 7/16 "socket
- C. Replacement for motor brushes and armature complete





