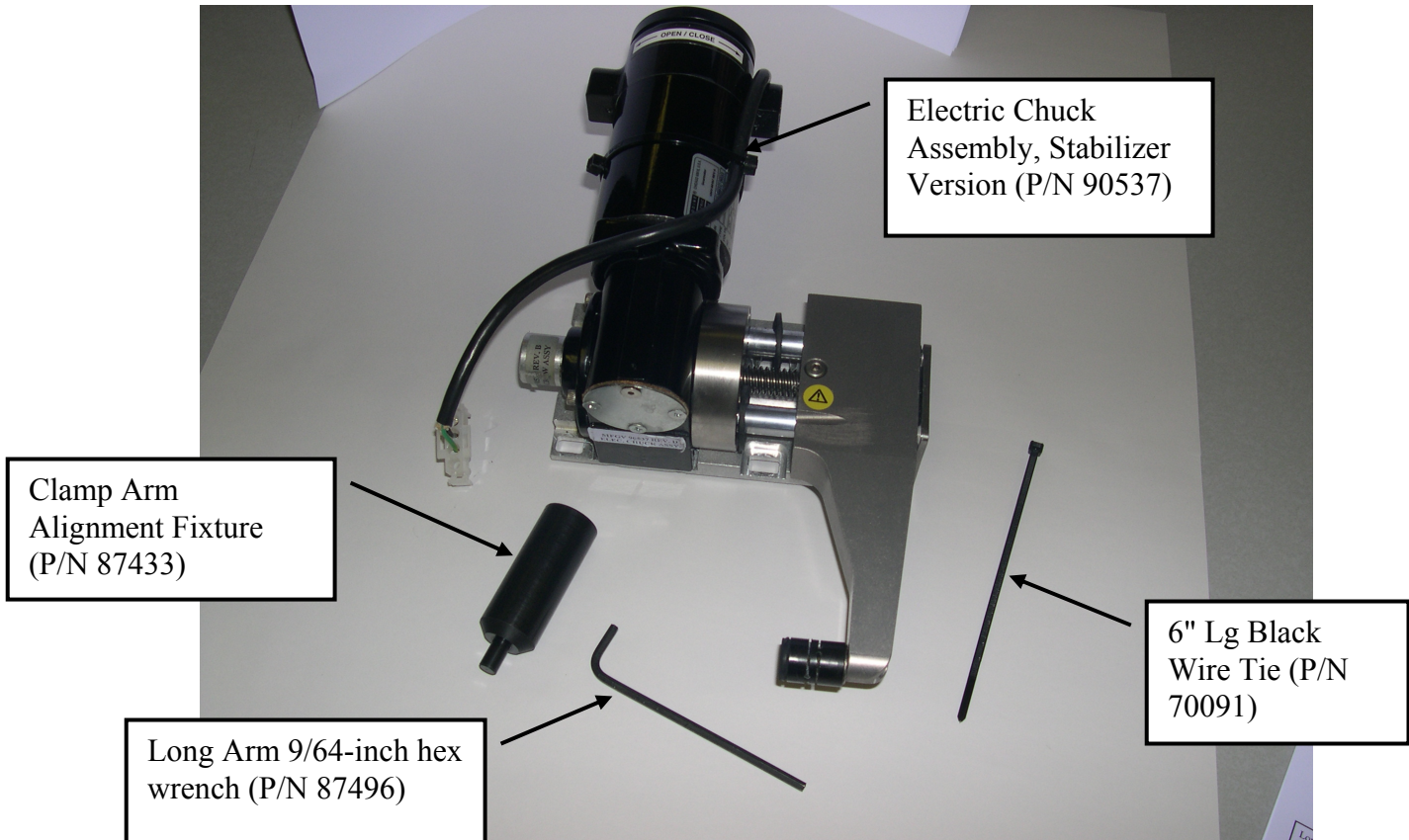


**11190368 6E-6ES-6EM-6EL-7E -- Replacement of the Electric Chuck Assembly**

**Contents of the Kit**



**Not Shown in Picture**

Four (4) 1/4-inch -20 x 5/8-inch Stainless Steel Sockethead Capscrews

Four (4) 1/4-inch Lockwashers

There may be a UPS ARS tag (not shown in picture) included as well. If so, you will use this tag to ship the old Electric Chuck Assembly back to National Optronics.

**NOTE**

The procedure is the same for any 6E edger and for 7E edgers with an Electric Chuck. (Refer to "11190934 7E-7EA -- Replacement of the Pneumatic Clamp Assembly" for directions to replacing a pneumatic chucking system.)

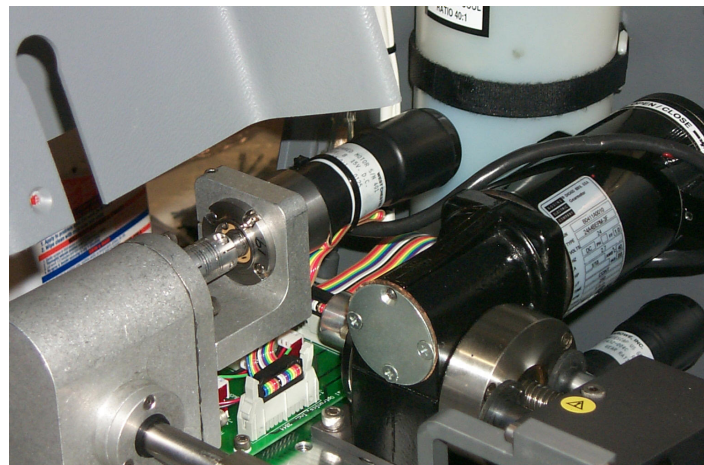
## The Procedure

### Part 1: Remove the Old Electric Chuck Assembly

1. Turn off the power switch on the edger.
2. Using a 3/32-inch hex wrench, remove the #8-32 screws holding the motor cover in place.  
**NOTE:** Depending on the age of the machine, there may be 3 or 4 screws—remove all of them.

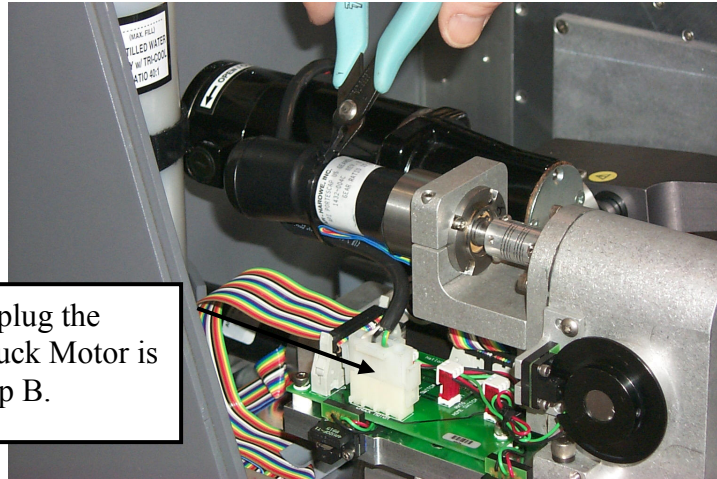


3. Remove the motor cover.



4. Remove the old electric chuck assembly:

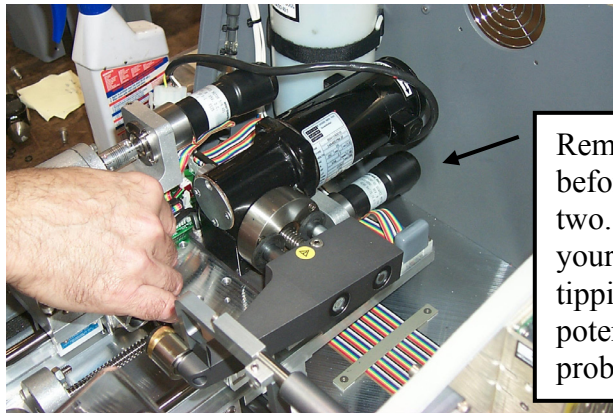
A. Clip the Wire Tie on the Axis Servo Motor, as shown below:



Unplug the  
Chuck Motor is  
Step B.

B. Unplug the Chuck Motor.

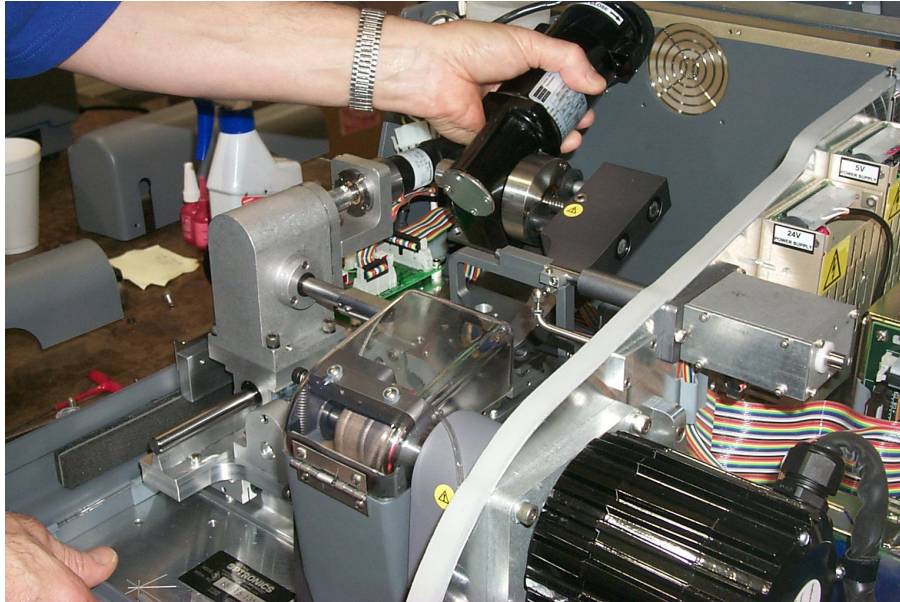
C. Using a 3/16-inch ball driver or a 3/16-inch hex wrench, remove the four (4) 1/4-20 screws holding the electric chuck assembly in place. **NOTE:** Depending on the age of the machine, there may be a rectangular block under one of the screws—if so, remove it as well.



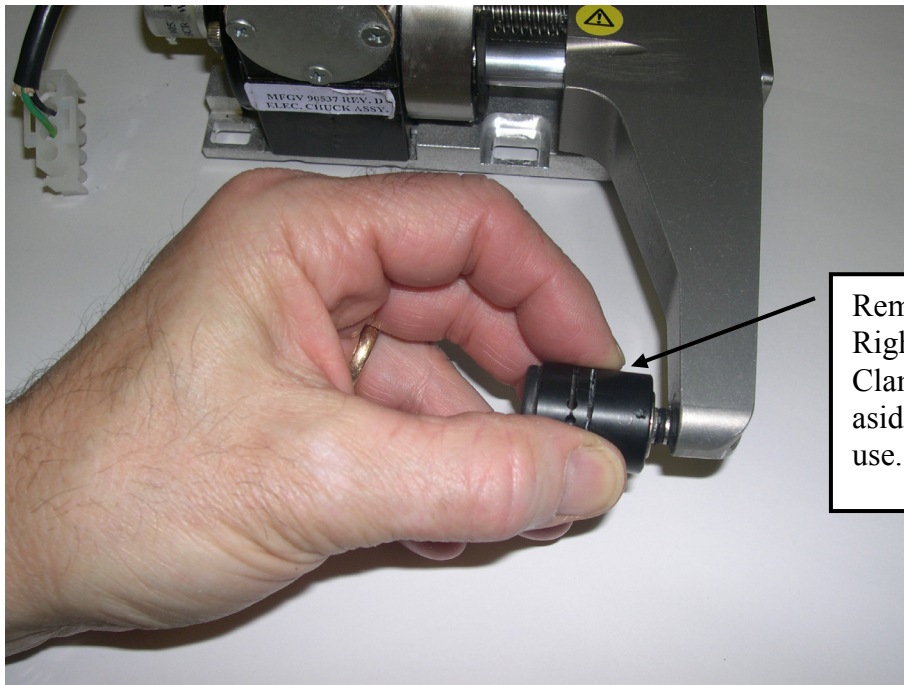
Remove the back two screws  
before removing the front  
two. Then support it with  
your hand to prevent it from  
tipping over suddenly and  
potentially damaging the  
probe C-body.

D. Discard the screws (and the block if it had one) that you removed in the previous step.

- E. While ensuring that you do not damage the probe C-body, carefully lift the old electric chuck assembly out, as shown below:

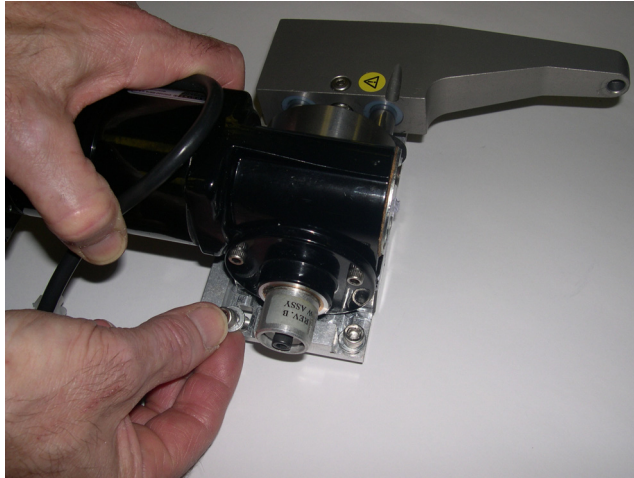


- F. Remove the right side clamp from the old electric chuck assembly and set it aside to be attached to the new electric chuck assembly. Also, save the old electric chuck assembly to be returned to National Optronics.

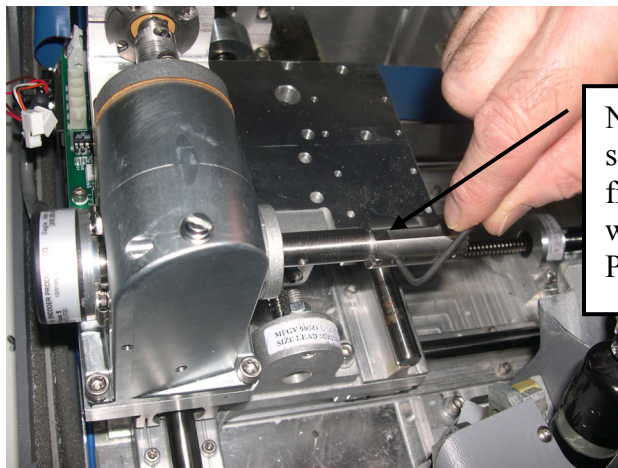


## Part 2: Attaching the New Electric Chuck Assembly, Stabilizer Version (P/N 90537)

1. Remove the contents of the Kit, setting the box that the kit came in aside for reuse when shipping the old Electric Chuck Assembly back to National Optronics.
2. Using the four (4) screws and lockwashers supplied with the kit, position the screws in the four slots as shown below:



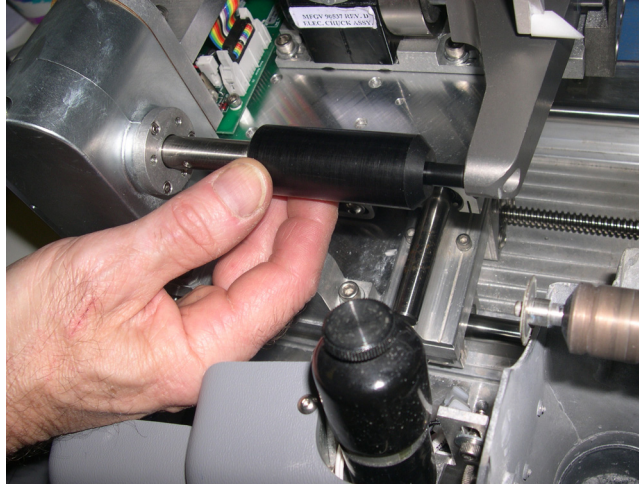
3. Place the new Electric Chuck Assembly into position, being careful not to damage the Probe C-body when moving it into position.
4. Push the Electric Chuck Assembly to the right as far as it will so that the edges of the left mounting screws are against the left edges of their slots. Then lightly tighten each of the screws, leaving them loose enough to swivel the new Electric Chuck Assembly on the plate.
5. Using a 3/32-inch hex driver, loosen the set screw and remove the replaceable chuck from the unit as shown below:



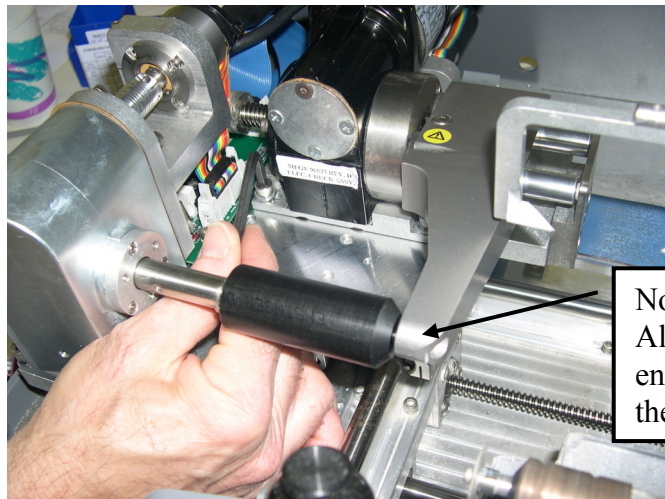
Note the orientation of the set screw: If it is facing the front, as shown here, you will reinstall it that way on Page 7.

6. Manually rotate the Chuck Release Wheel **open** as far as it will go. (The Chuck Release Wheel has a label indicating “Open” and “Close.”)

7. Place the Clamp Arm Alignment Fixture (P/N 87433) onto the shaft. This will be a tight fit—you may need to tilt and wiggle the Fixture to position it properly.



8. Slide the Clamp Arm Alignment Fixture on the Axis Shaft as far as it will go.
9. Manually rotate the Chuck Release Wheel, closing it so that the tip of the Clamp Arm Alignment Fixture will engage into the opening on the Clamp Arm, the opening into which the Right Side Clamp inserts. (If it does not align vertically, see Note below.)
10. Once the Clamp Arm Alignment Fixture is fully engaged into the opening on the Clamp Arm, tighten the four screws securing the new Electric Chuck Assembly into position, as shown below:



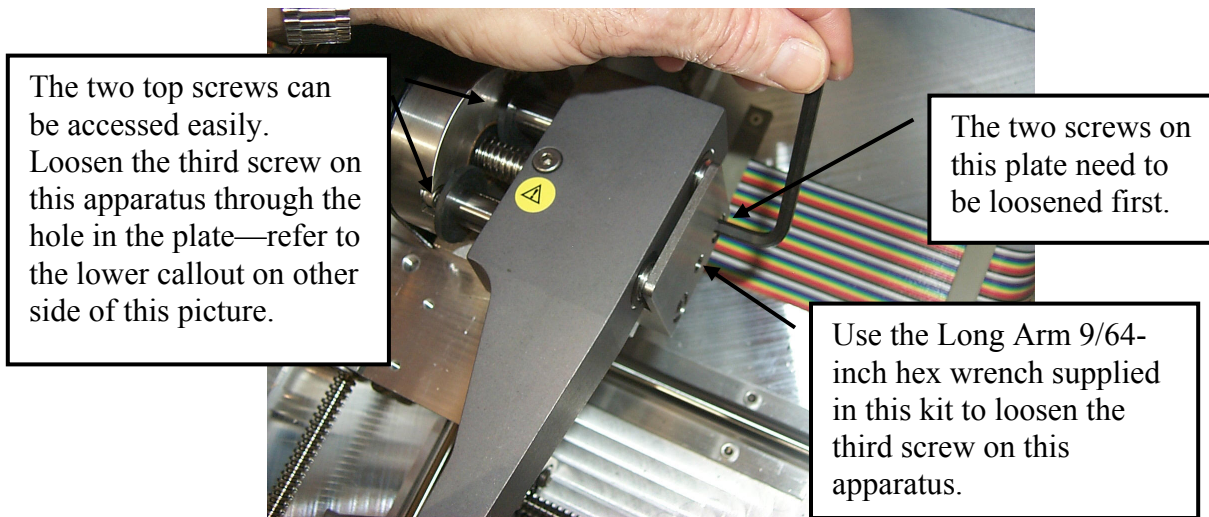
Note that the Clamp Arm Alignment Fixture is fully engaged into the opening on the Clamp Arm.

11. Manually rotate the Chuck Release Wheel **open** so that you can remove the Clamp Arm Alignment Fixture.

12. Remove the Clamp Arm Alignment Fixture.

**NOTE**

If the tip of the Clamp Arm Alignment Fixture will NOT engage into the opening on the Clamp Arm because it is too high or too low (*vertical misalignment*), then follow these steps: (1) Loosen the five screws shown below. (2) Manually move the end of the Clamp Arm up or down until it vertically aligns with the Clamp Arm Alignment Fixture. (3) Tighten the five screws back down and proceed to use the Clamp Arm Alignment Fixture to achieve horizontal alignment (Steps 9 through 12 above).



13. Reattach the Right Side Clamp.

14. Align the slots in the replaceable chuck with the locating pin on the Axis Gearbox Shaft. Then slide the replaceable chuck on the shaft as far as it will go. Make sure that the replaceable chuck slides to the left until the locating pin is fully seated in the slot.

15. Replace the motor cover. **NOTE:** Depending on the age of the machine, there may be an unused hole in the motor cover (at the location where the rectangular block was removed).

16. Plug the new Electric Chuck Assembly into the power source (where you unplugged the old Electric Chuck Assembly in Step B on Page 3).

17. Use the Wire Tie supplied with this kit to secure the power cable to the Servo Motor (the same place where you removed the Wire Tie in Step A on Page 3).

18. Place the old Electric Chuck Assembly in the box that held the new Electric Chuck Assembly (Stabilizer Version).

19. If a UPS ARS tag was supplied with the kit, follow the directions from UPS for applying the UPS ARS tag and shipping the box back to National Optronics.