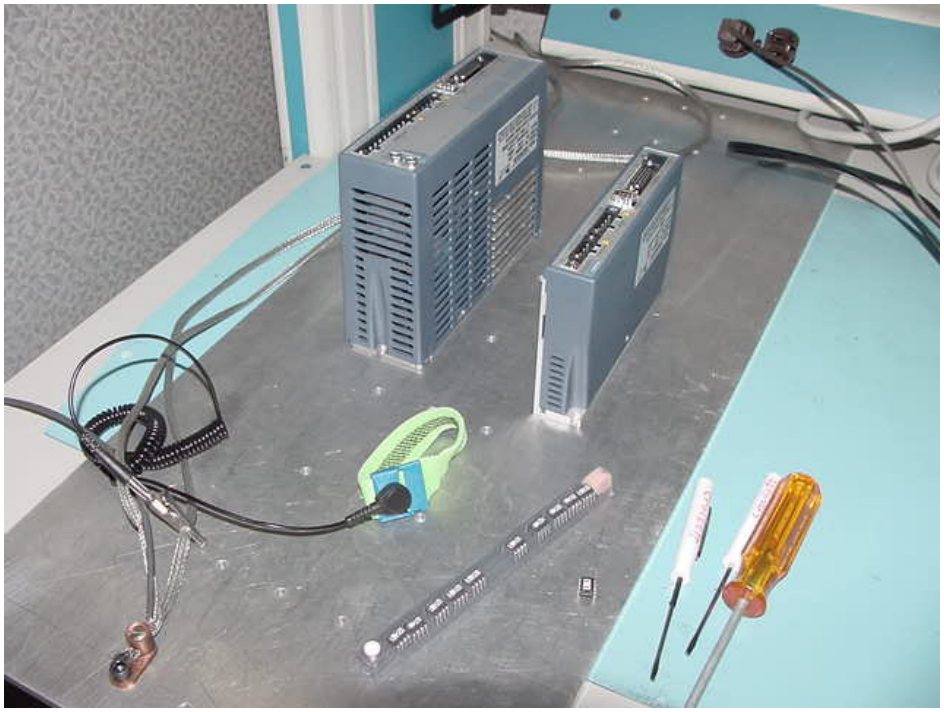
S200 Series Brushless Servo Drive
EPROM Upgrade

AC & DC version of the S200 is shown below in a work area that provides a static free work surface, grounded wrist strap, and necessary tools to accomplish the EPROM upgrade.

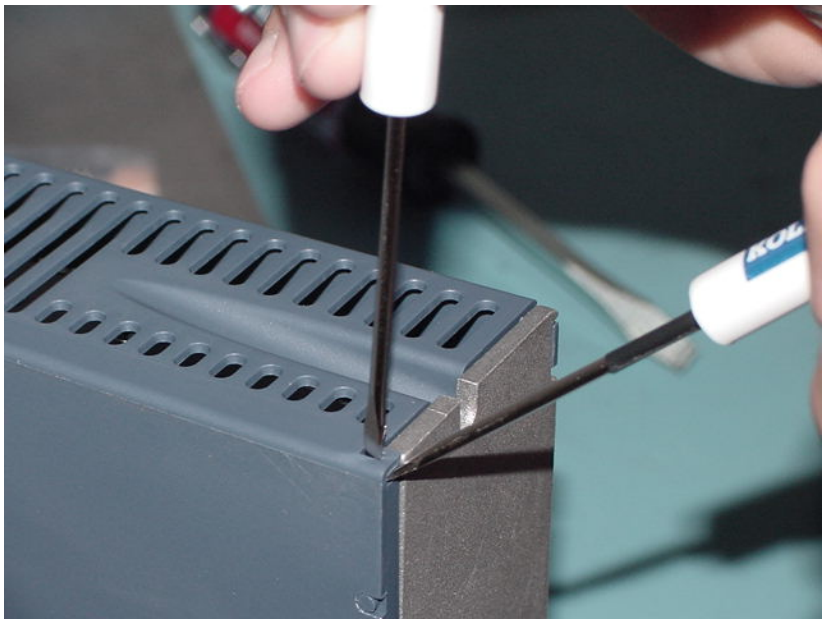


AC Version

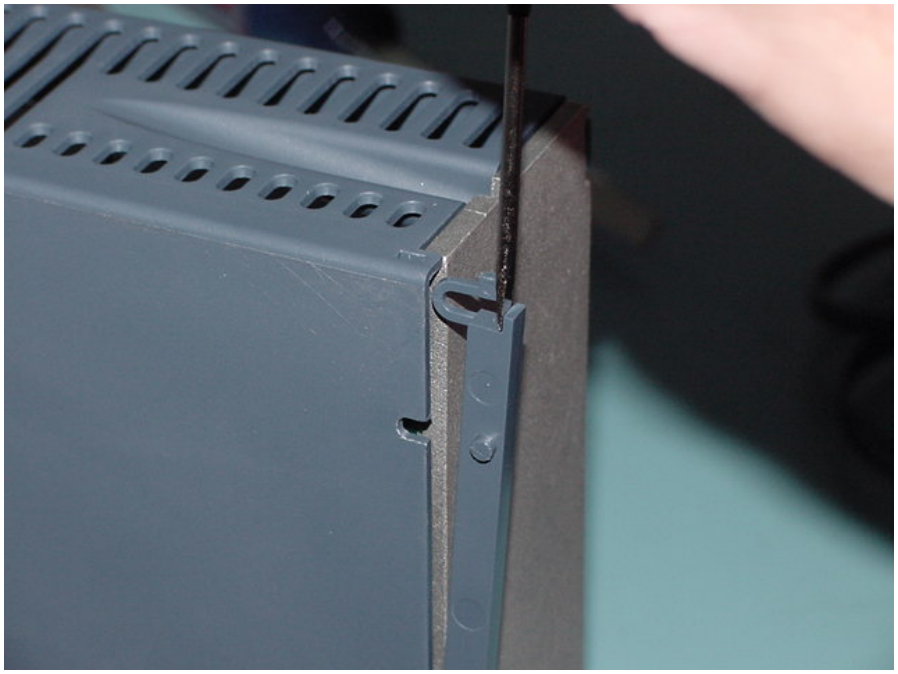
The AC version of the S200 product family is shown below. In order to remove and replace the EPROM, first remove the S200 AC model drive cover. This requires several steps of focused work . Perform all work with the drive in a static free work area. Use grounded wrist straps when coming in contact with the control board and its components.

Step 1 **Remove the part, AC insert, from its location.**

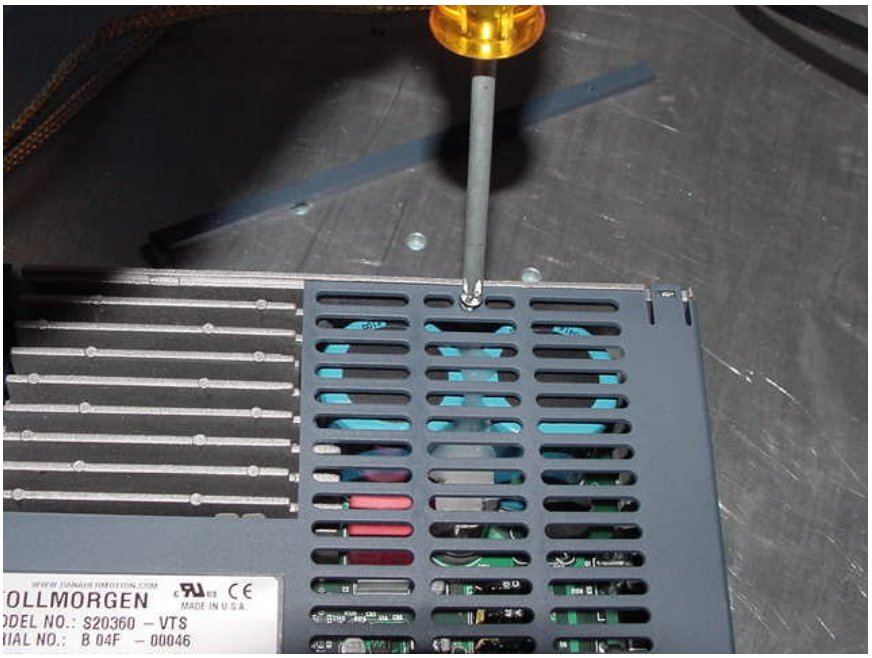
In the picture shown below (from the rear of the drive), AC insert is on the left. The small screwdriver is inserted into the top end opening with a *very* small amount of force, while applying slight pressure to the to rear opening as shown. See the next picture for expected results.



The AC insert is now ready for complete removal!



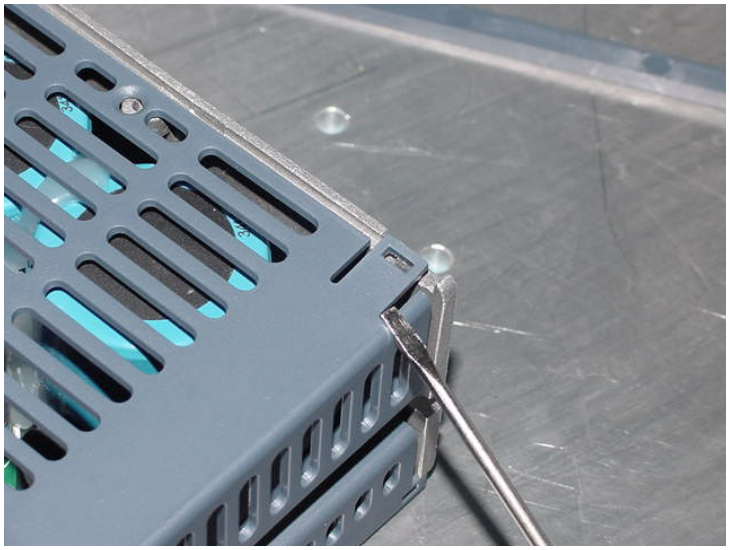
Step 2 **Remove the only screw (Philips) as shown.**



Step 3 **Remove the AC drive cover**.

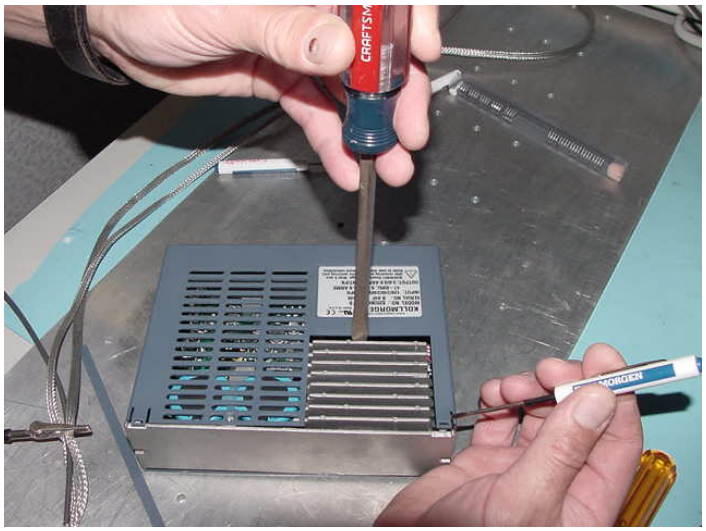
Two locking tabs need to be carefully lifted (do not break) as shown in the picture below. Please reference the following three pictures to see the method for removal.

#1.



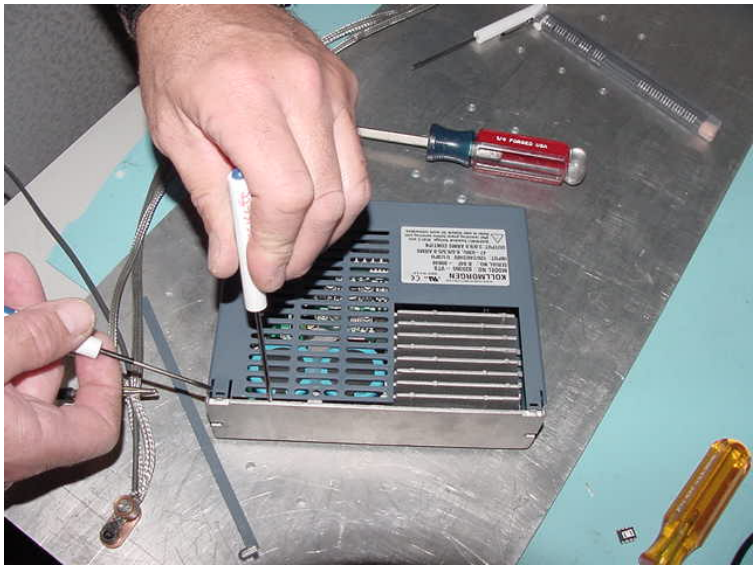
While lifting on the 1st tab, (as shown in #1) insert a larger, wide, flat screwdriver (shown below) between the drive cover and the last fin of the heatsink to separate and start the cover off to unlock the 1st tab.

#2.

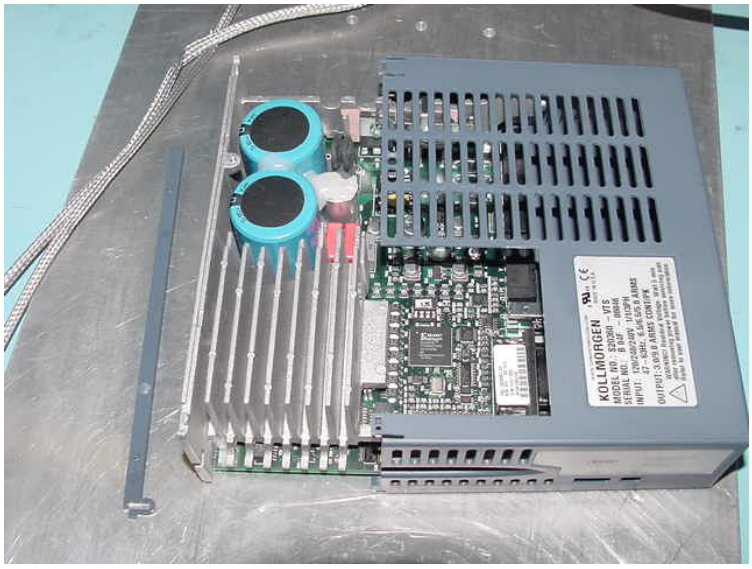


Carefully lift the remaining tab. The cover can be separated from the rear of the mounting heatsink as shown below/

#3.

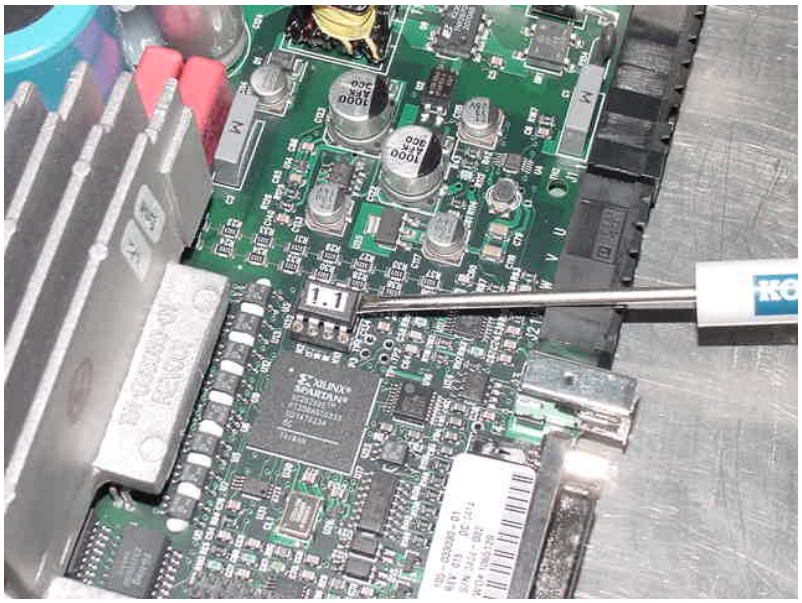


Now, remove the cover completely.



The EPROM /socket is now visible and accessible. Wear a static wristband when performing the following operations.

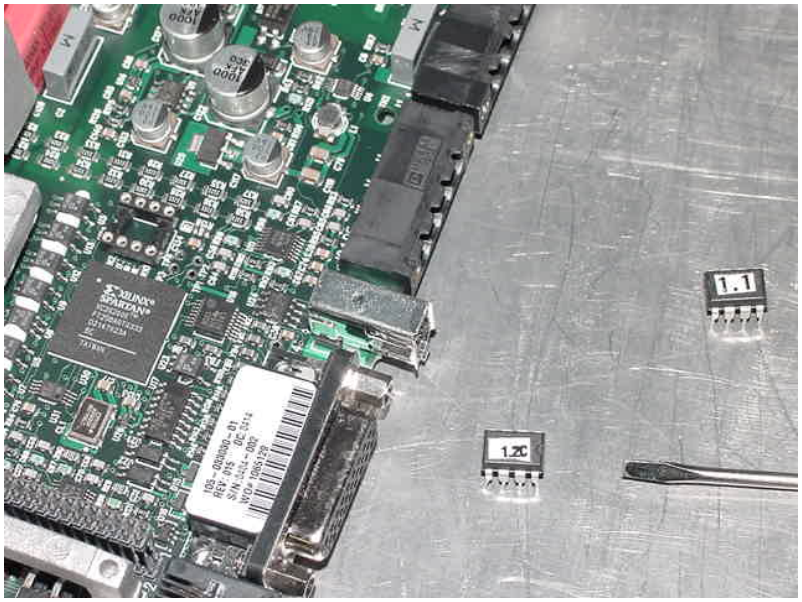
1. Prior to removal, note the orientation of the EPROM to the socket.
2. Using the flat blade of a small screwdriver to gently pry the EPROM from the socket.



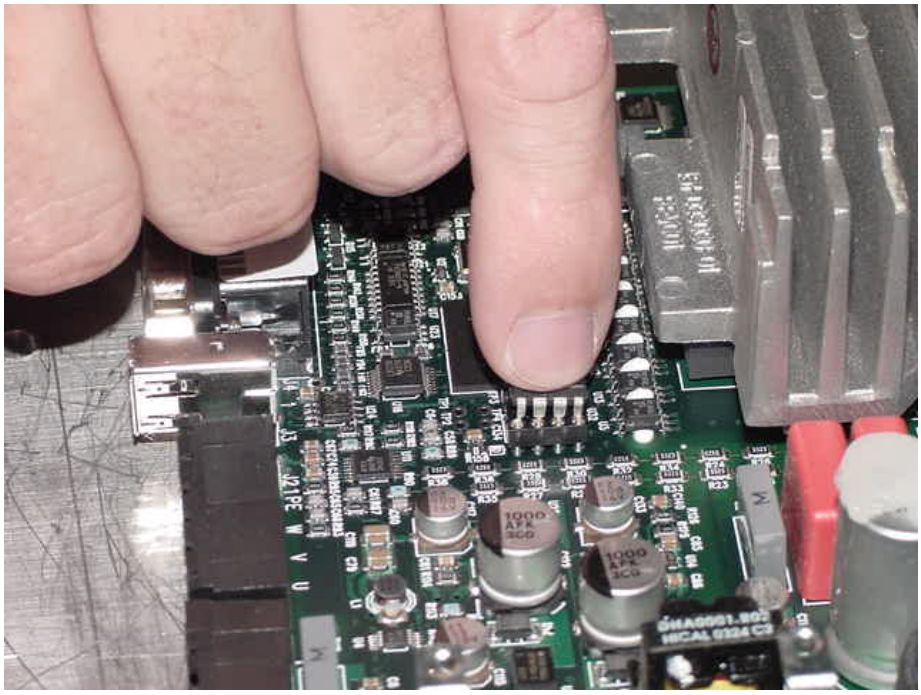
The EPROM and socket are clearly marked (with a small semicircle by the mfg.) to assure the proper insertion of the EPROM.

WARNING

Do not use the label on the EPROM for orientation. It is possible to insert the EPROM backwards.

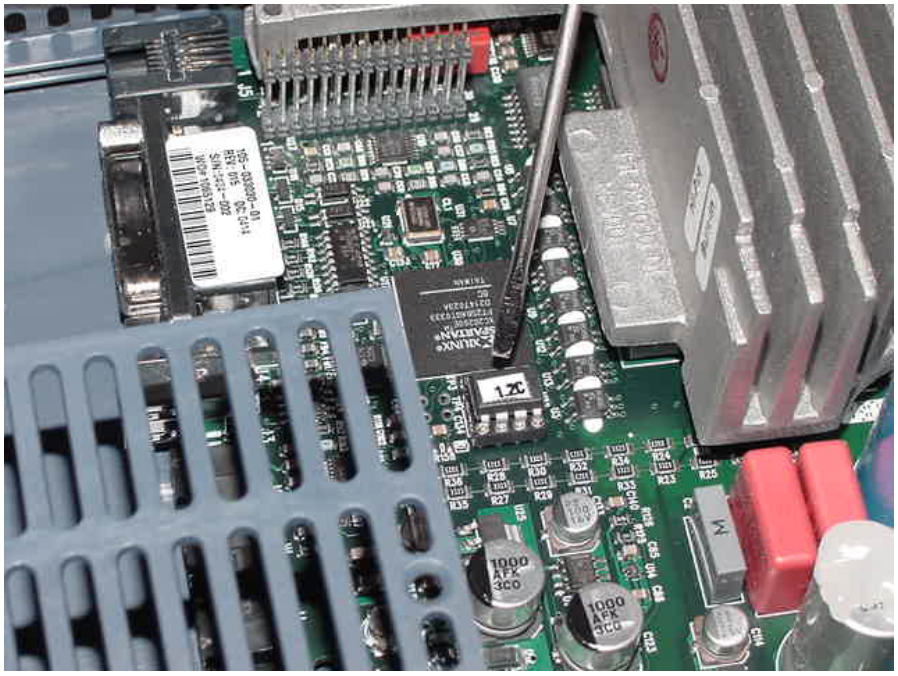


3. Wearing a wrist strap, insert the new EPROM into the socket by applying even pressure so that all 8 pins enter the socket at the same time.

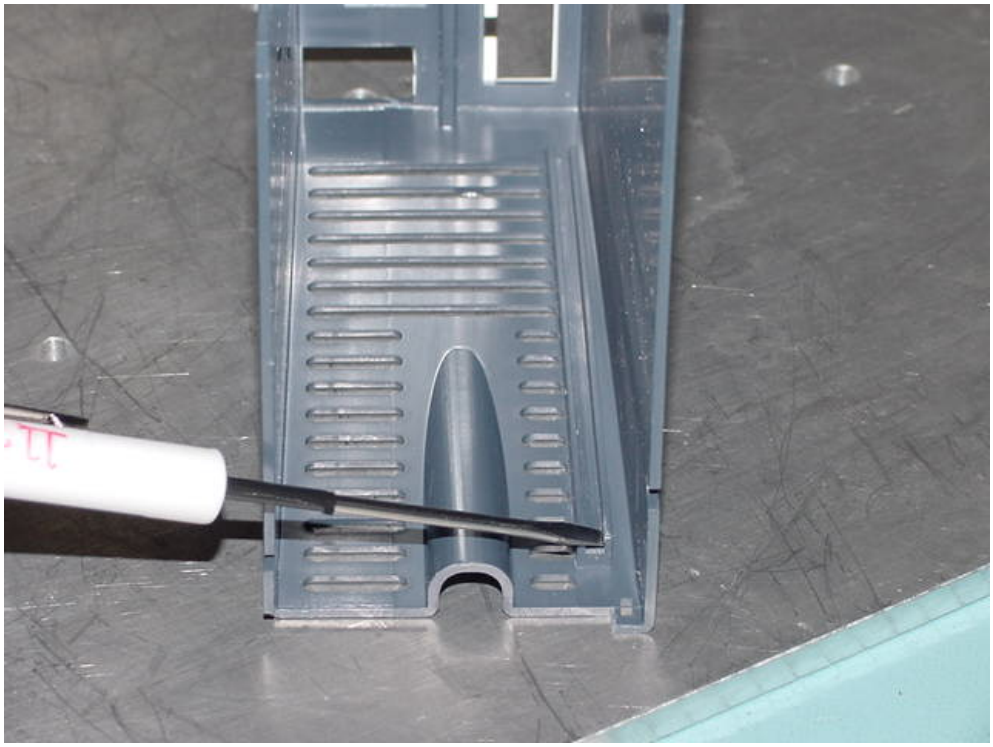


4. Look for any misalignment of the EPROM pins into the socket.

5. Double check orientation of the chip to the socket before reassembly of the drive cover.



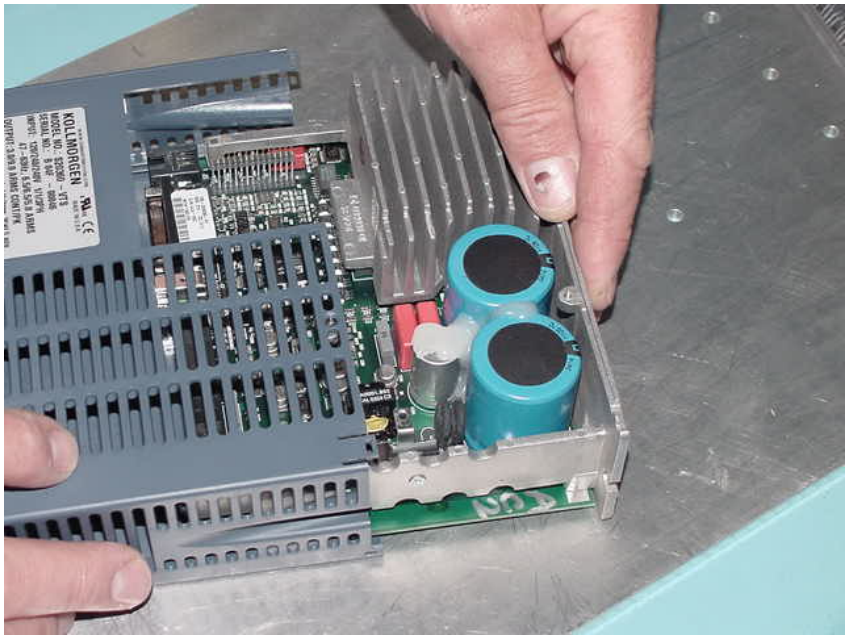
6. Locate the top and bottom circuit card guides to align the cover to the drive (bottom guide shown).



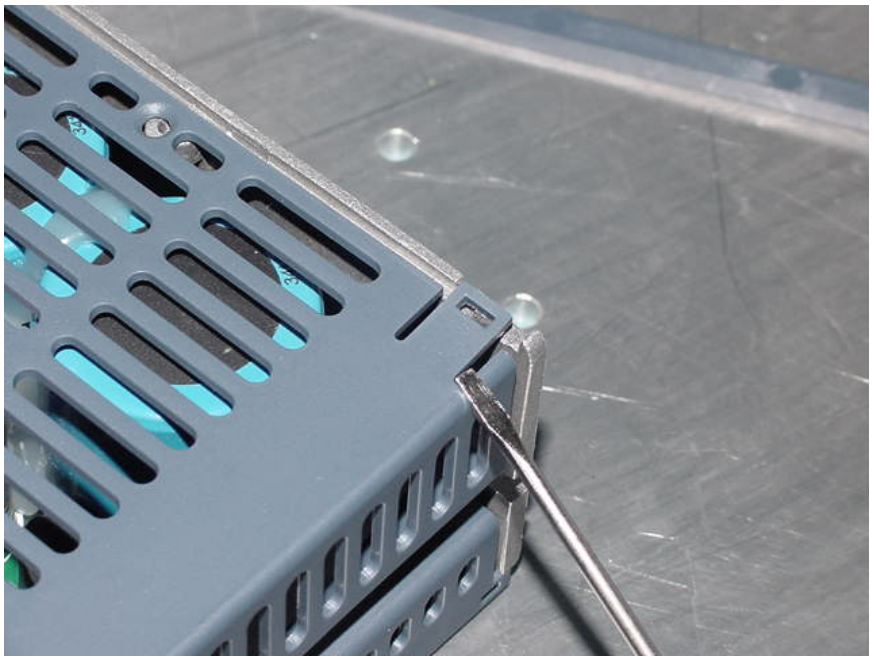
7. Once the cover is correctly started onto the drive, the installation process is performed in reverse order of the removal process. Press the cover onto the drive until the locking tabs come in close contact with the base of the heatsink.

NOTE

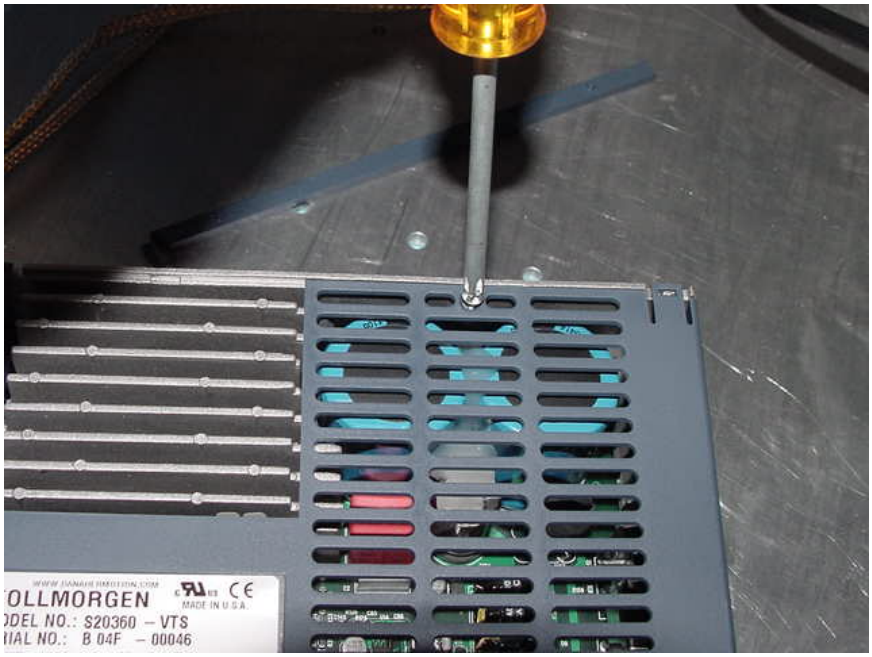
Do not force the cover on! It will break the plastic tabs. See Step 8.



8. Prior to fully seating the cover onto the drive, lift *BOTH* tabs to allow the lock to close over the metal portion of the heatsink (see picture below).

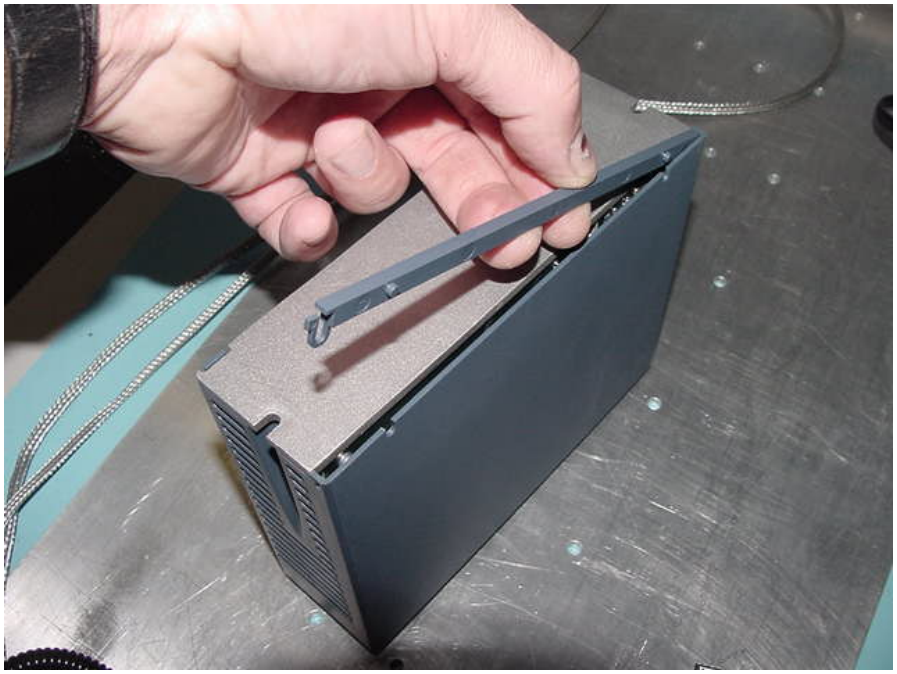


9. Once both locking tabs are seated, reinsert the single drive cover screw.

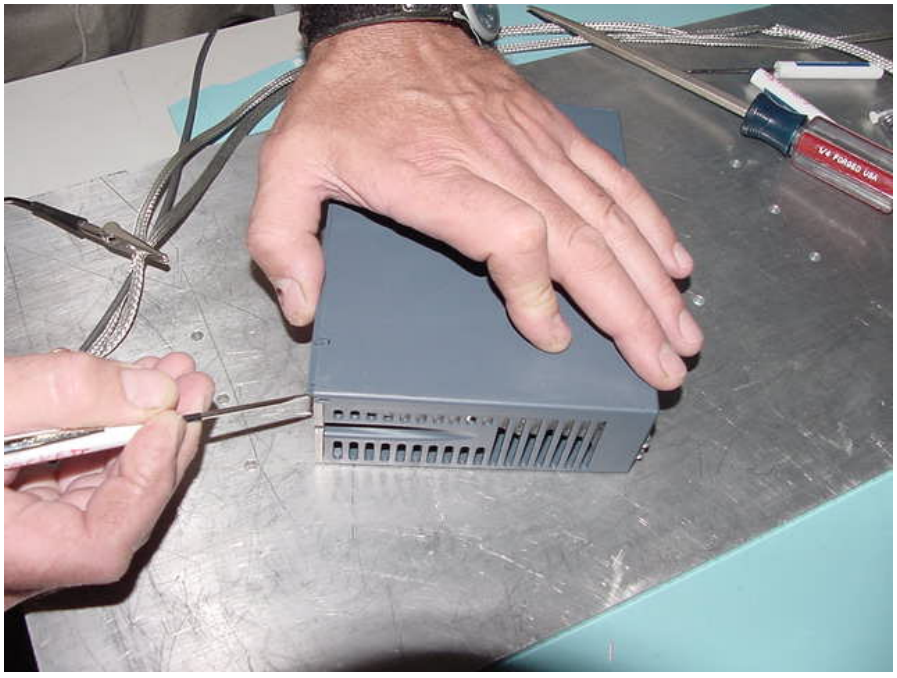


Step 4 **Reinstall the AC insert.**

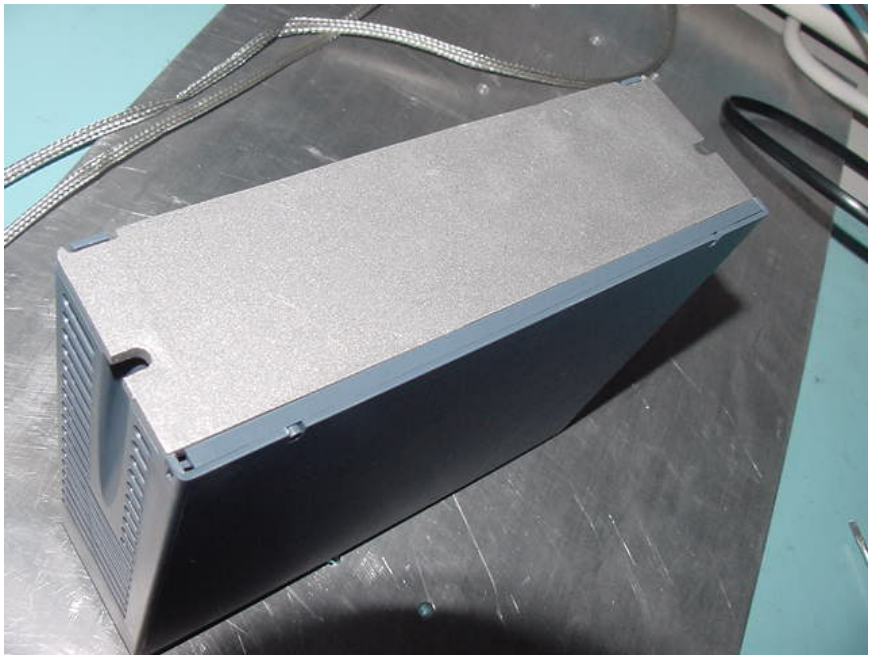
The two guide tabs found on the AC insert define its position. The bottom portion of the insert are started directly into the cover. Carefully install the hooked end to prevent damage to the insert . See the next picture.



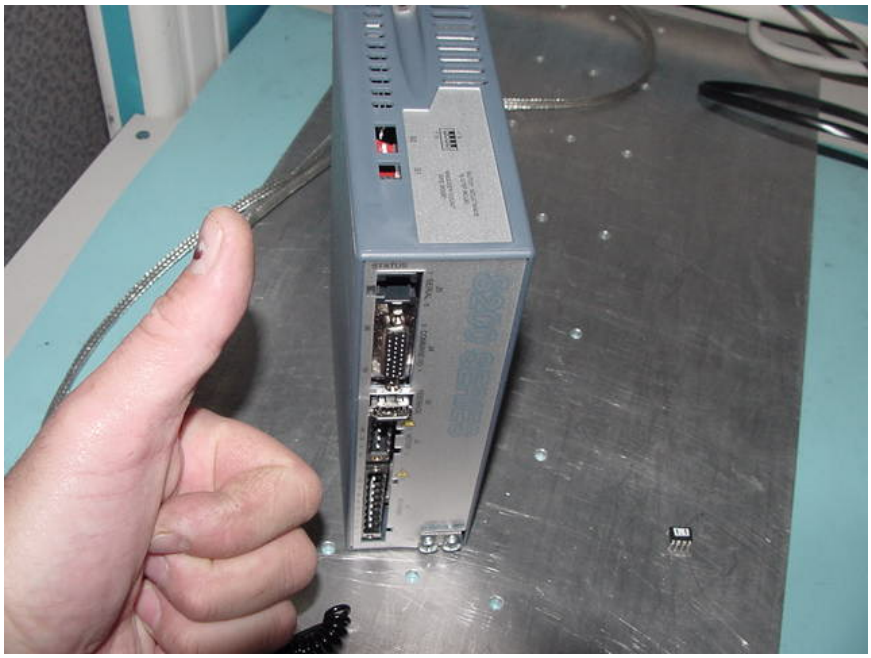
Slightly depress the hooked end of the insert before fully seating the part.



AC Insert shown fully in place and locked.



EPROM Upgrade on AC version of the S200 drive is finished!



DC Version

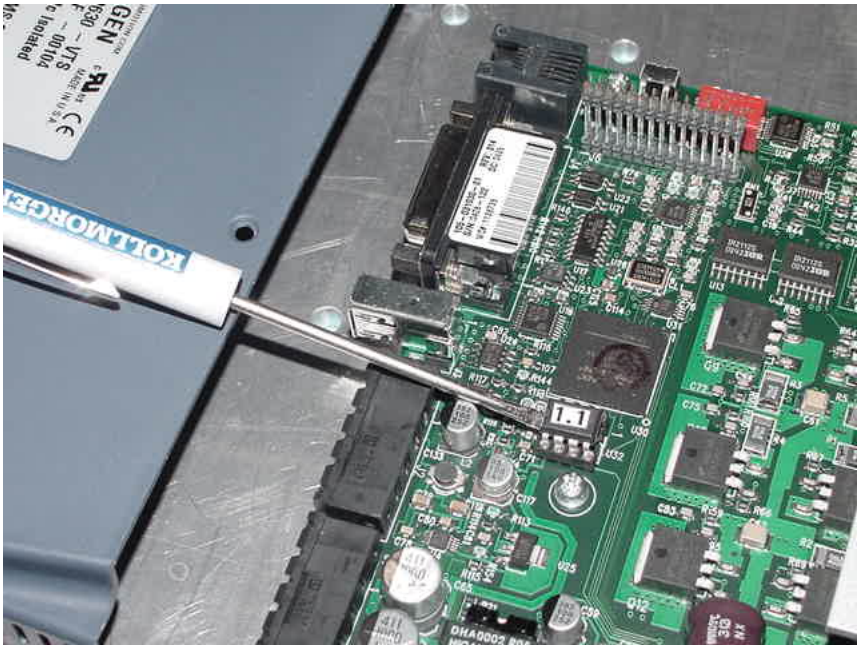
The DC version of the S200 product family is shown below. To remove and replace the EPROM, first remove the S200 drive's DC model cover. Perform all work with the drive in a static free work area. Use grounded wrist straps when coming in contact with the control board and its components.

The DC model cover is held into place by a single (Philips) screw. Remove this screw in a static free area using wrist straps when coming in contact with the control board and its components.

Remove the drive cover by simply separating the cover from the drive.

The EPROM /socket is now visible and accessible. Wear a static wristband when performing the following operations.

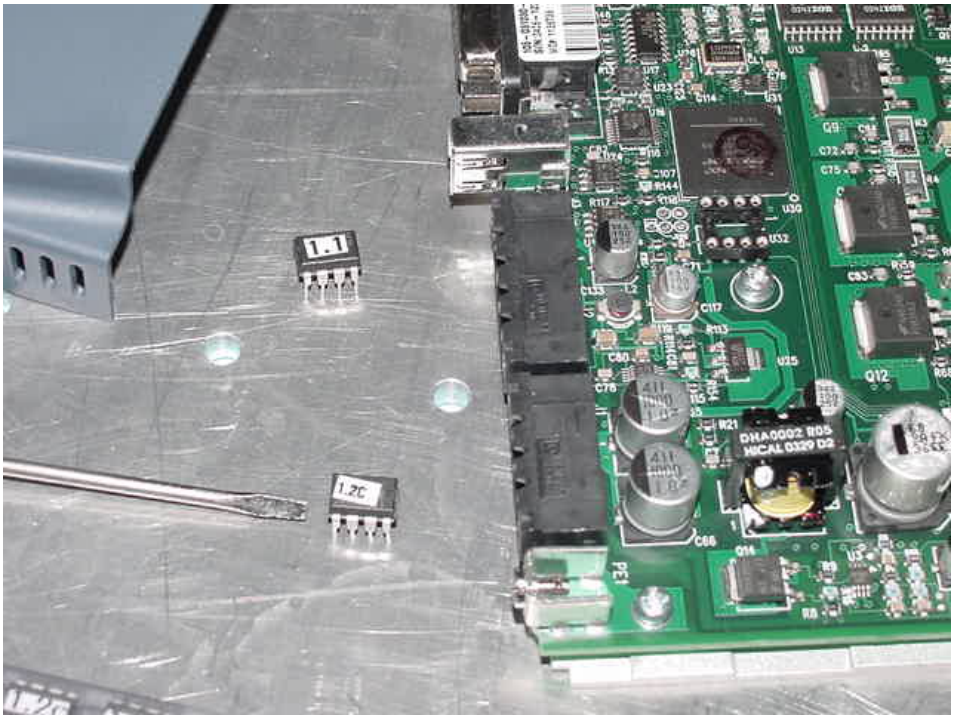
1. Prior to removal, note the orientation of the EPROM to the socket.
2. Using the flat blade of a small screwdriver, gently pry the EPROM from the socket.



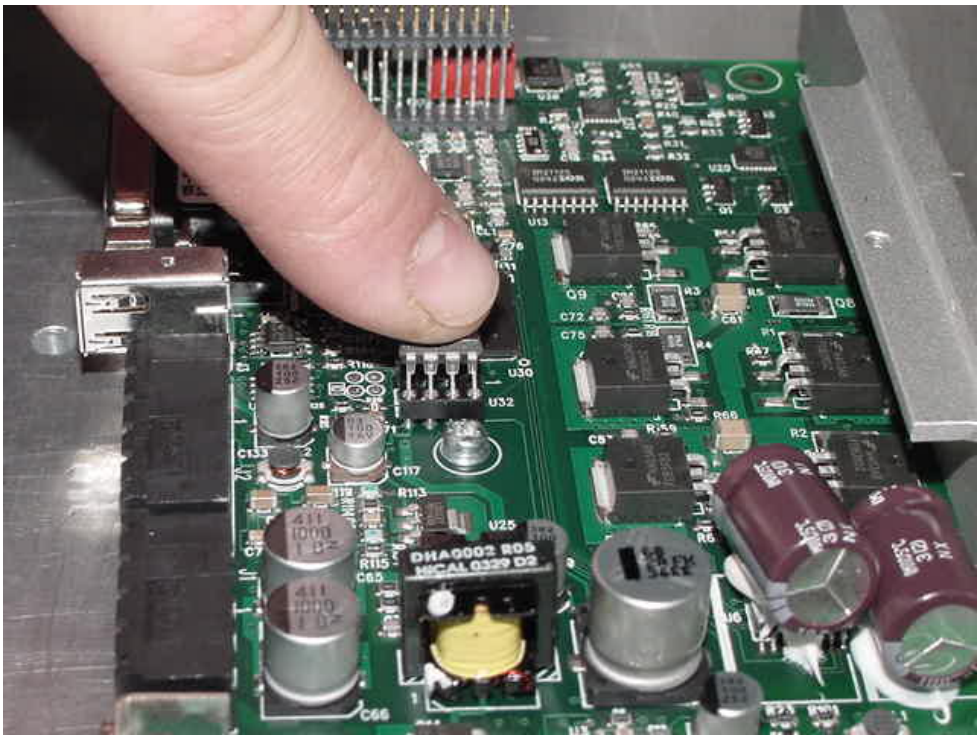
The EPROM and socket are clearly marked (with a small semicircle by the mfg.) to assure the proper insertion of the EPROM.

WARNING

Do not use the label on the EPROM for orientation. It is possible to insert the EPROM backwards.



3. Wearing a wrist strap, insert the new EPROM into the socket by applying even pressure so that all 8 pins enter the socket at the same time.

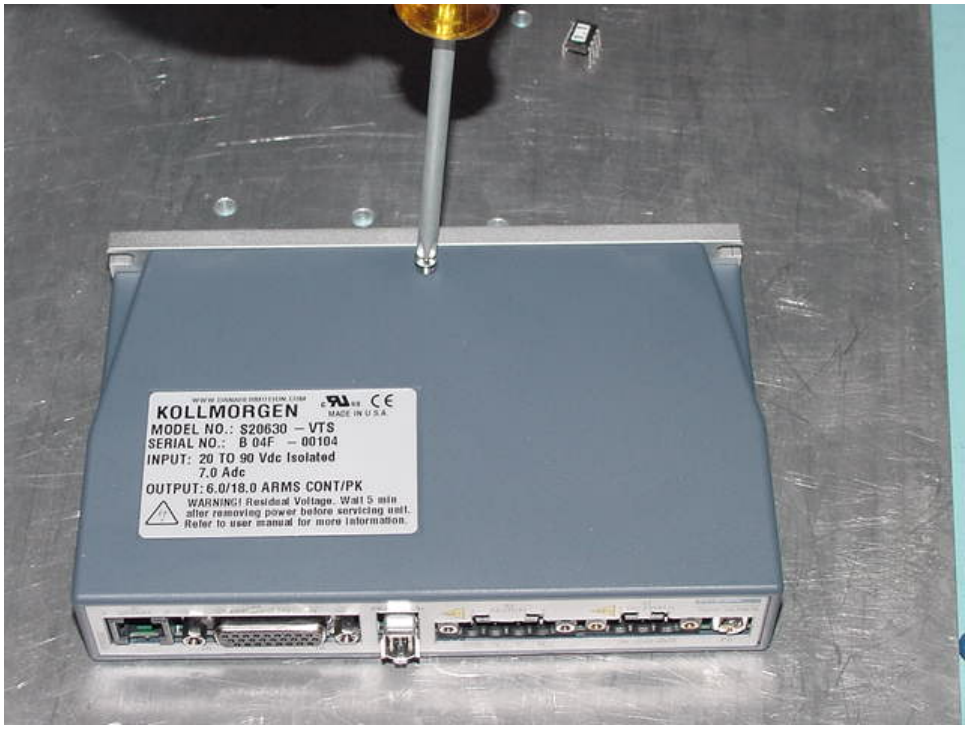


4. Look for any misalignment of the EPROM pins into the socket.

5. Double check the orientation of the chip to the socket before reassembly of the drive cover.

6. Place the cover back onto the drive with simple alignment of the single cover screw.

7. Reinsert the single drive cover screw.



EPROM Upgrade on DC version of the S200 drive is finished!

For questions concerning this procedure, contact Danaher Motion customer support:
Phone: 1-540-633-3400
Fax: 1-540-639-4162
Email: customer.support@danahermotion.com