VTL Amplifiers, Inc. 4774 Murietta Street, Suite 10 Chino, California 91710 USA



Tel (909) 627-5944 Fax (909) 627-6988 e-mail mail@vtl.com/ http://www.vtl.com/

Dear VTL Customer:

CAUTION! Tubes are not installed in the amplifiers.

Please insert the Output tubes onto the tube sockets before turning on the amplifier.

See instructions below:

Replacing tubes



Turn off the rear rocker switch and remove the power cable before removing any covers from the amplifier.

Follow the steps below to remove the cage of the amplifier:

1. Locate the left and right covers on the cage. With a #2 Phillips screw driver, remove the four screws flat head screws on the top side of the two covers.



2. Locate the two screws on the side of the left and right covers. Remove these two screws with the #2 Phillips screw driver also.



- 3. Save these screws in a safe place so that they can be re-used to fasten the cage back to the amplifier.
- 4. Remove the left and right covers of the cage and locate the tube sockets for the output tubes on the deck of the amplifier. For the MB-185 amplifier, there should be a total of 8 sockets for the EL34 output tubes, 4 on the left side and 4 on the right side of the cage covers.

NOTE: Since the MB-185 amplifier has the Auto Bias feature, the output tubes can be inserted into any socket position and the bias will be automatically adjusted during the amplifier's power on cycle. The hand written number on the top of the tube indicates a VTL numbering system obtained during our tube selection process.



5. Insert the output tubes into each of the output tube sockets from tube # 1 to # 4 on the left side of the cover and 5 to 8 on the right side of the cover.



Hold onto the upper portion of the tube towards its tip. Lower the tube onto the socket, making sure that the pins from the tube matches the holes in the socket. There are either two pins on the tube which are spaced at a wider distance from each other than the rest of the pins (9 pin miniature tubes), or there is a locating keyway in the middle of the tube (8 pin octal tubes). Make sure that these locators go into the side of the socket which matches. Press the tube firmly into its socket, using a gentle force and a slight "rocking" motion. When the tube is properly and completely inserted into the socket it should be firmly implanted and does not give in to any movement at all when you try to rock it.

5. After the output tubes are firmly located in their sockets, restore the left and right top covers back onto the cage. Fit the original screws onto cover and use the #2 Phillips screw driver to tighten the screws. Do not overtighten and make sure the screws are in securely.