

MTX Terminator TNA251 Car Amplifier Teardown

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INTRODUCTION

In this teardown, we will be taking apart an MTX Terminator TNA251 Car Amplifier, and analyzing how it works. Let go of that volume button and grab your set of Allen wrenches- it's time for a teardown!



TOOLS:

- Phillips #2 Screwdriver (1)
- Allen Wrench (1)

Step 1 — MTX Terminator TNA251 Car Amplifier Teardown



- Let's take a look at a few of the specs on the MTX Terminator TNA Car Amplifier! It's:
- 150 watts RMS x 1 at 4 ohms (250 watts RMS x 1 at 2 ohms)
- Variable high- and low-pass filters (40-400 Hz, 12 dB/octave)
- Preamp- and speaker-level inputs
- Fuse rating: 30A x 2
- 11-3/4"W x 2-1/4"H x 7-3/16"D

Step 2 — Overview







- Take a general overview of the MTX Terminator TNA252 Car Amplifier.
- The first thing we notice are all the power and speaker terminals on the right side, then the RCA Line In/Out's on the left.
- There is also the EBC Port, Gain, X-over with variable frequency control, and High Level Input (HLI) on the left side of the amp.

Step 3 — Disassembly



- Let's get started with the actual teardown!
- Flip the amplifier upside-down, and, using a #2 Phillips Screwdriver, remove the 6 indicated screws.

Step 4 — Disassembly



- On the right side of the amp (power terminal side), use the Allen wrench from the previous step to remove the 9 indicated screws.
- Be careful not to misplace the screws.

Step 5 — Disassembly



- On the left side of the amp (RCA Side), use an Allen wrench to remove the 5 indicated screws.
- Be careful not to misplace the screws.

Step 6 — Disassembly



- Now that we've taken all the external screws out, let's take a look on the inside!
- All you have to do to get into the inside is lift the back cover off. Easy, right?

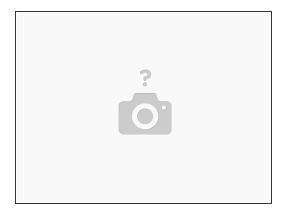
Step 7 — Main Circuit Board



- The internal parts of this Amplifier consist of:
- Main Circuit Board
- Transistors
- Resistors
- Diodes
- Capacitors
- Other components that help amplify, filter, and enhance the sound.

CAUTION: Be careful not to spill liquid onto this circuit-board!

Step 8 — MTX Terminator TNA252 Car Amplifier



- In this step, I'll explain how this MTX Terminator TNA252 Car Amplifier works.
- This amplifier requires an 8 gauge power wire that is connected directly to the battery with a fuse and a ground wire that is connected to the chassis of the vehicle.
- The amplifier is activated by the remote turn-on wire that is connected to the stereo.
- The stereo sends audio signals to the RCA input on the amplifier.
- The audio signals then get filtered and amplified by the internal components of the amplifier.
- These components include: capacitors, transistors, resistors, X-overs, etc.
- The amplified audio signals are then sent to the speakers, to put out sound!

Step 9 — Repairing





- To put back together the MTX Terminator TNA251 Car Amplifier, simply screw in all internal screws (silver screws) using the #2 Phillips Screwdriver.
- Then, screw in the sides (black hexagon shaped screws) using the Allen Wrench.
- Finally, place the back cover of the MTX Terminator TNA251 Car Amplifier on top of the sides, and screw the 6 black Phillips screws in using the Phillips Screwdriver.
- Congratulations you've finished the teardown of the MTX Terminator TNA251 Car Amplifier! Time to shove this amplifier in the back of your car and blast that music!