Light Harmonic TAS G3-HX Amplifier Installation

This upgraded amplifier features a newly developed, innovative integration design that allows the our amplifier to work seamlessly with the OEM factory amplifier. By combining the two amplifiers into a single optimized assembly, this solution ensures perfect electrical and mechanical compatibility while preserving original vehicle functionality. The design significantly enhances heatsink efficiency, improves thermal transfer, and further optimizes the noise figure for cleaner, more precise audio performance. This represents a novel and advanced approach to amplifier upgrading, delivering higher performance without compromising OEM reliability or installation integrity.

1.Preparation

Turn off the vehicle power. Remove the original factory amplifier (Figure 1, bottom left). Prepare the new amplifier module (Figure 1, bottom right).

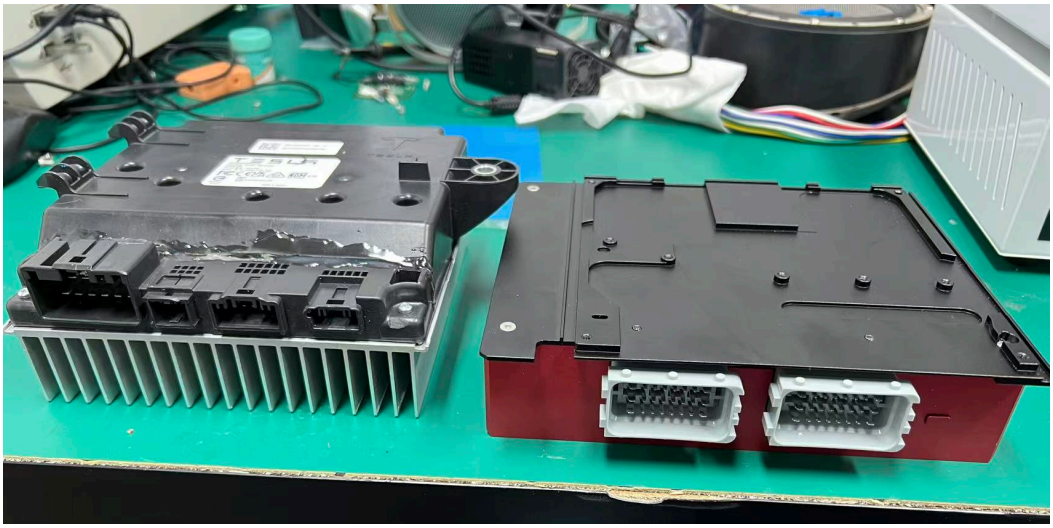


Figure 1

2. Remove the Original Amplifier Heatsink

Using a screwdriver, remove the fixing screws on the plastic housing of the original amplifier one by one. There are 9 screws in total. Keep all screws for later reinstallation (Figures 2 and 3).



Figure 2



Figure 3

3. Separate the Heatsink

Using tweezers, gently tap the plastic housing from the side with the handle of a screwdriver, or lightly pry along the edge of the housing with tweezers to loosen the heatsink. Remove the heatsink once it is loose.

Important: Avoid touching or damaging any components on the exposed circuit board (Figures 4 and 5). Put metal OEM heatsink away, we don't need it anymore. You could keep it in safe place if you might consider reverse the

installation to its OEM status.



Figure 4

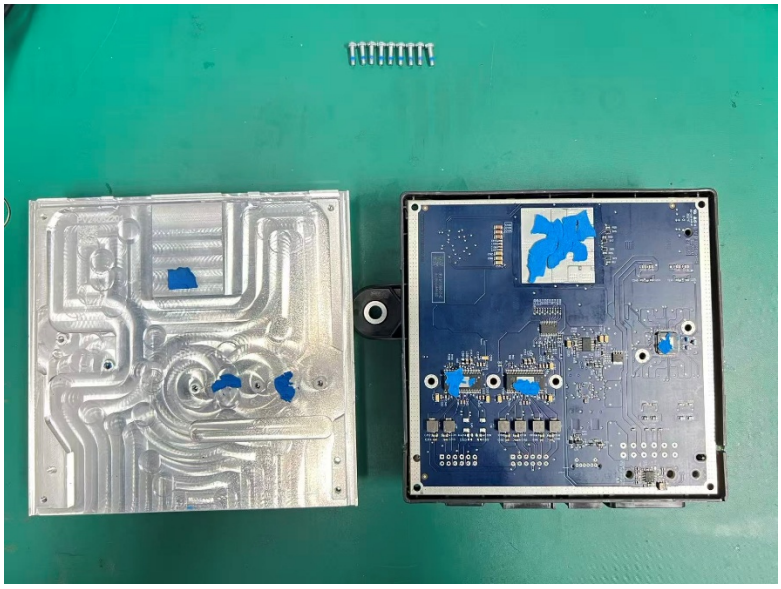


Figure 5

4.Clean Thermal Paste on OEM board

Remove the circuit board. There may be residual thermal paste on the heat-generating components. Clean it thoroughly using tissue paper or a soft cotton cloth.

Note: Do not use metal tools during cleaning, and do not dislodge any components (Figures 6 and 7)



Figure 6

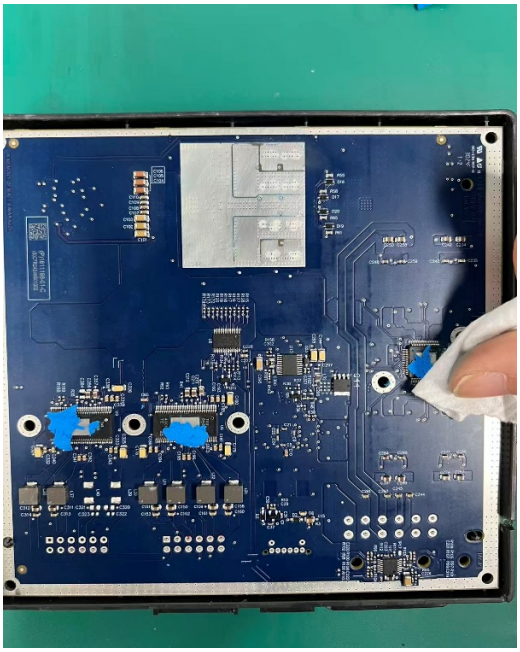


Figure 7

5. Prepare Pre-Installed Thermal Pads on the TAS Amplifier：

The upgraded amplifier is factory-installed with thermal pads. No additional thermal pads are required.

Before installation, peel off the protective release film (a thin transparent protective layer used to keep the thermal pad surface clean during storage and transport) from the surface of each thermal pad one by one. After all protective release films are removed, the thermal pads are fully prepared and ready for installation. (Figure 8 and 9)

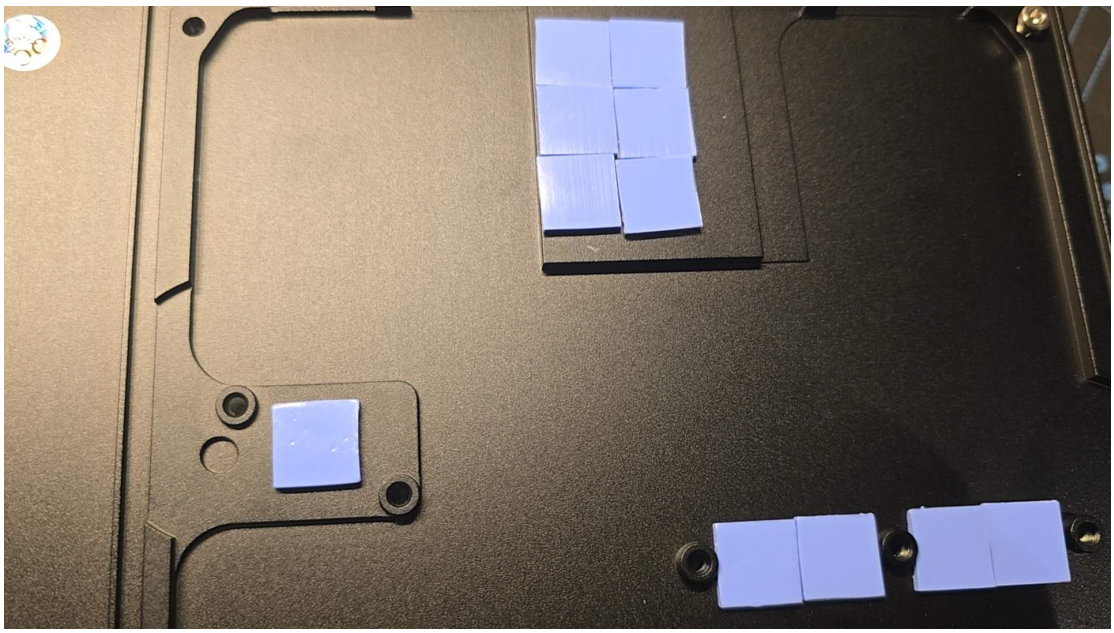


Figure 8

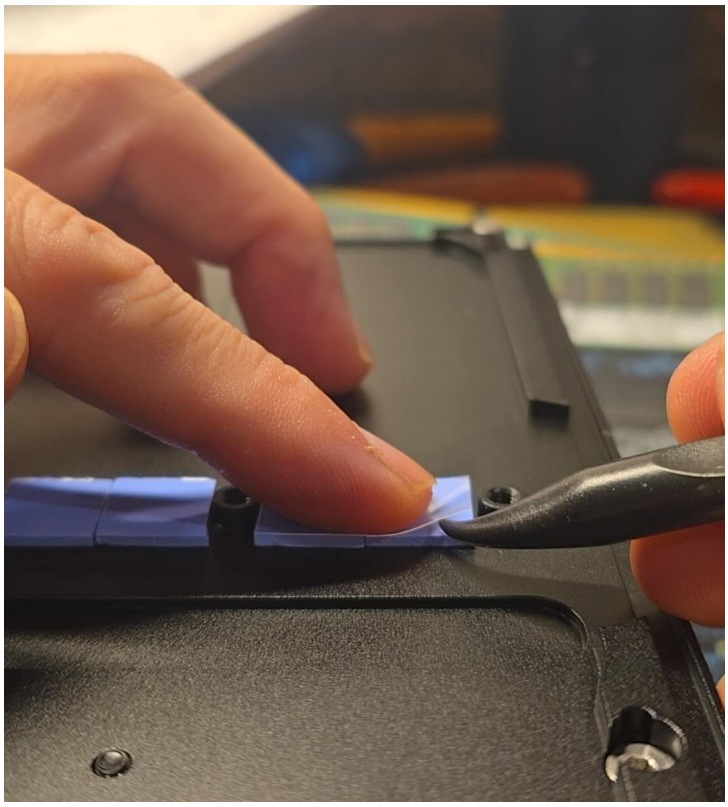


Figure 9

6. Mount the prepared original amplifier module onto the upgraded module. Ensure all four sides are properly aligned and that the connectors are oriented in the same direction. Reinstall the screws in the order shown in Figure 10

Important: Replace the screw at the upper-right corner with the supplied (One extended screw in the bag) Screw #10 in the (Figure 11)

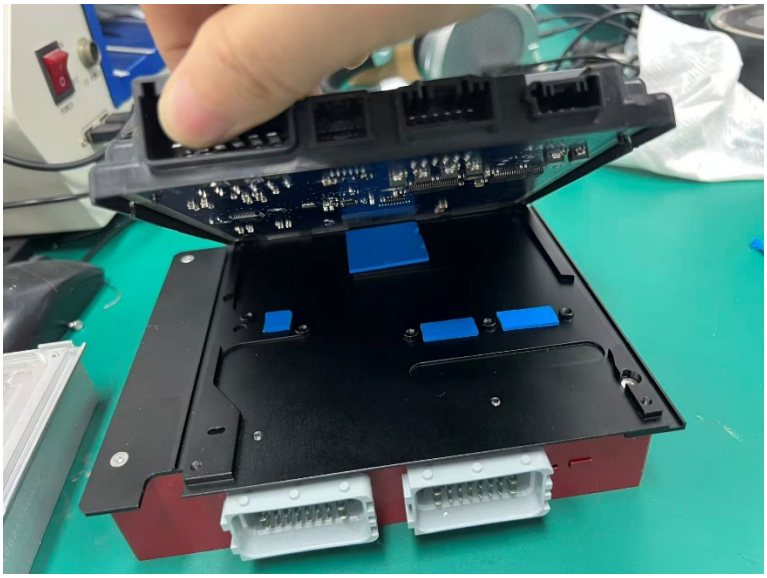


Figure 10



Figure 11

7**. Connect the Wiring Harness to the Amplifier**

Install the wiring harness by aligning the connector with the amplifier port. The purple locking latch is positioned on the outer side, and the connector is fully directional, ensuring it cannot be installed incorrectly. Gently push the connector into the amplifier socket until it is fully seated, then slide the purple locking latch to secure the connection. Once locked, the connector is firmly fixed and the installation is complete. (Figure 12)

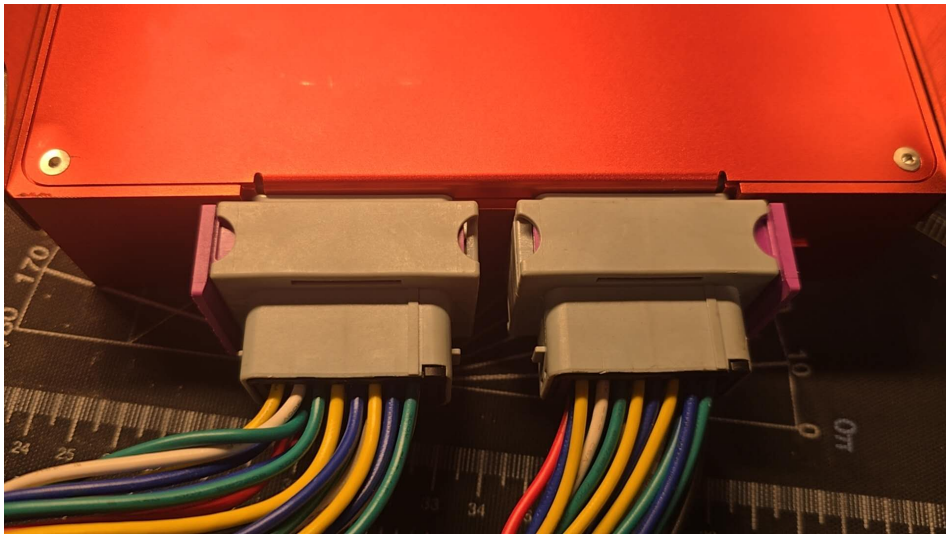


Figure 12