

## CGMB Infrared Diode Operation Instructions

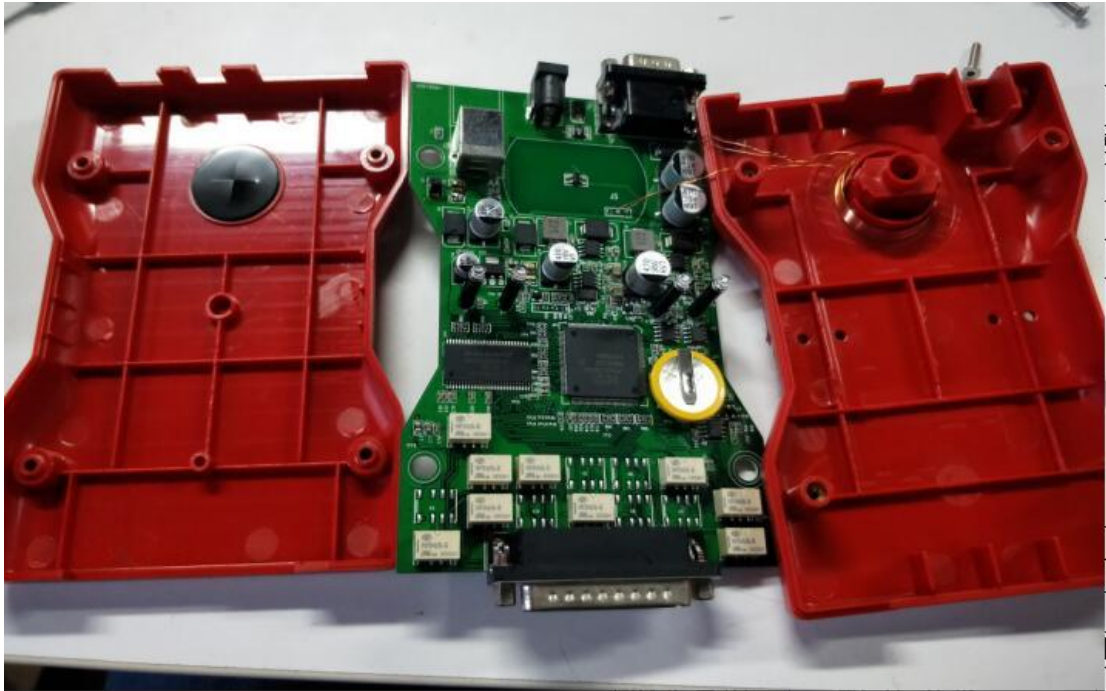
Please follow the steps below:

**1. Device function check** :Before operation,please be sure that the device is in a normal working state that could read key successfully;

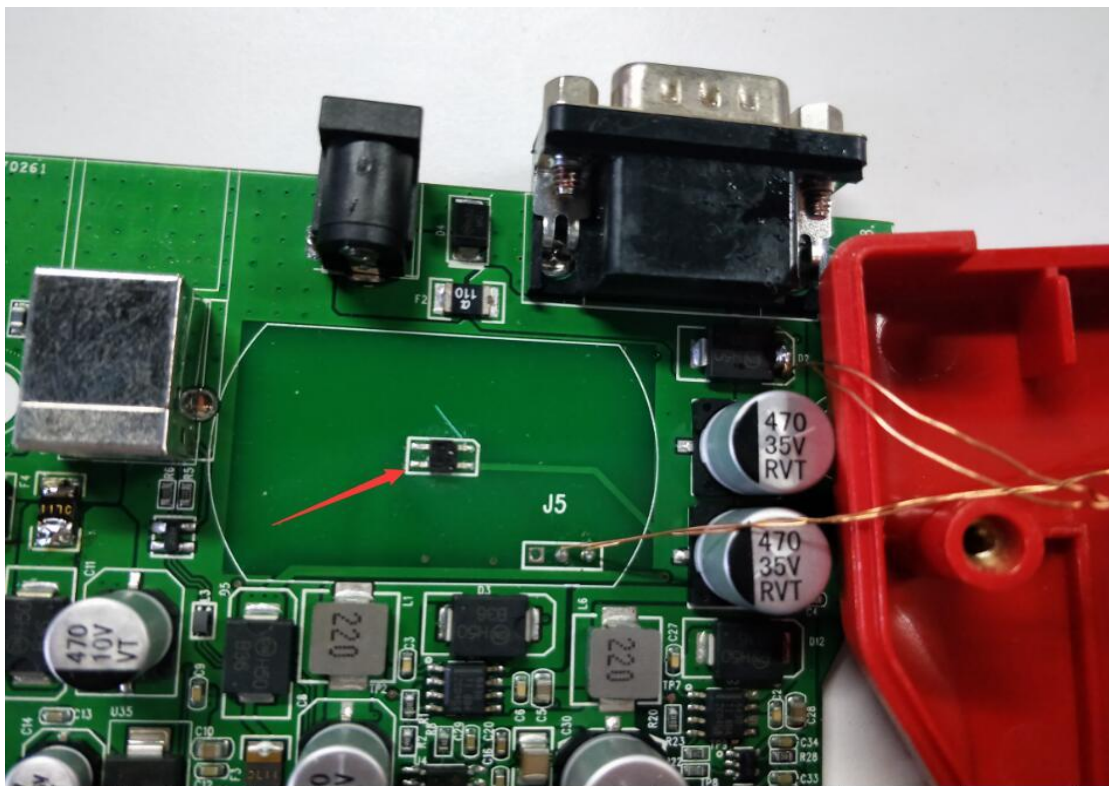
Next to disconnect the USB and 12V power supply and ready to disassemble the CGDI MB shell, as shown picture below: **(Note: Use a suitable Allen screwdriver, do not use brute force to prevent the screw from sliding, the removed screws are stored)**



**2.Open the enclosure of the device** : Open the device shell gently by hand, as shown picture below: **(Note: Do not force to open it to prevent the wire of the induction coil from being torn off!)**

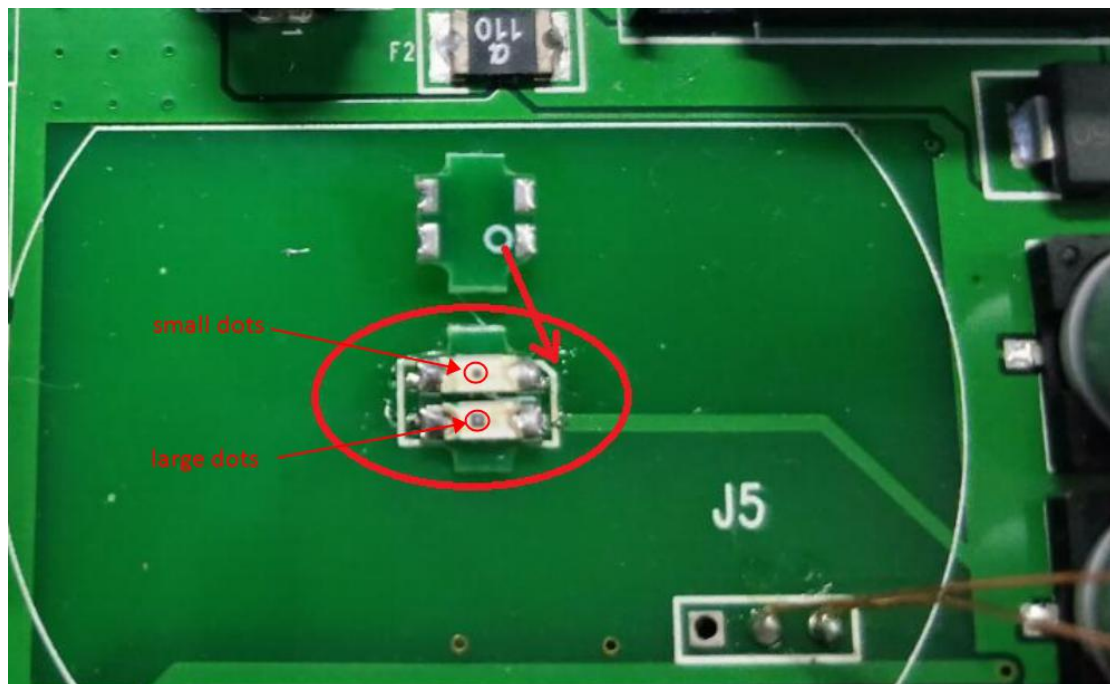


**3. Take the original infrared Diode :** Use a soldering iron to add tin on both sides of the old infrared device, drag it after heating, and then remove the old infrared device, as shown below: (The temperature of the soldering iron should not be too high, the time should not be too long, to prevent long-term heating damage to the PCB board, certain Welding capacity)

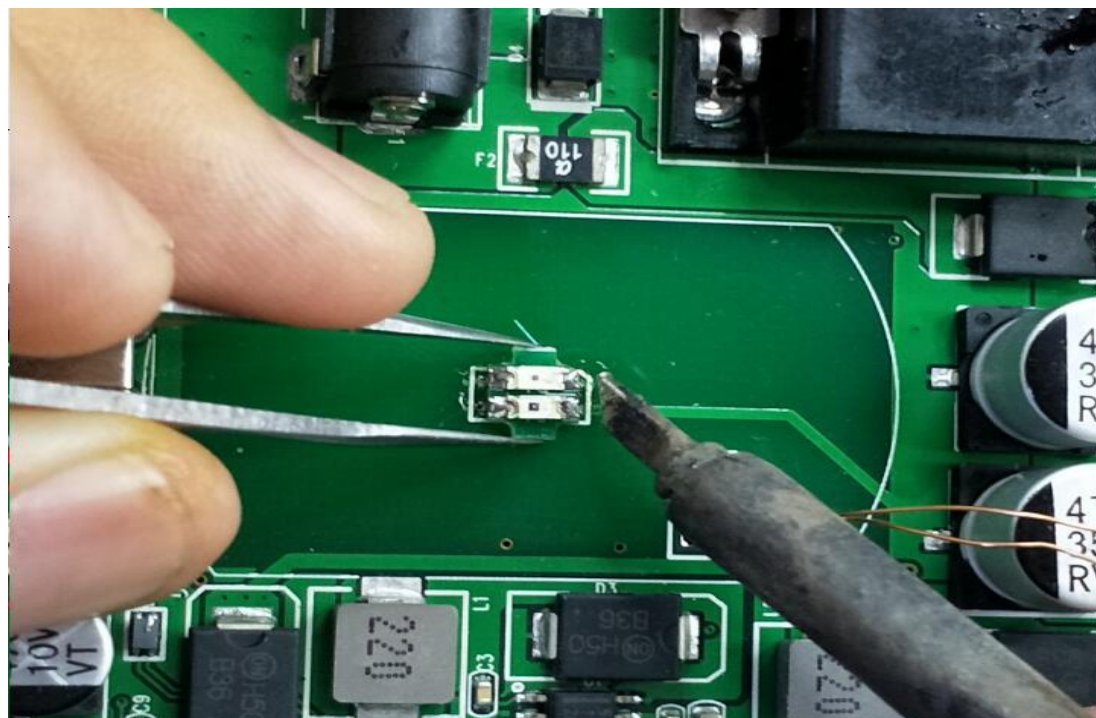


**4. Place a new infrared board.** Use a soldering iron to flatten the original pad with a soldering iron, and then use tweezers to place the new infrared board on the original pad

as shown in the figure, as shown below: (Infrared has a direction, the bottom 1 foot circle is aligned with the missing corner on the PCB Where there are small dots above and large dots below)



**5. Weld new infrared board.** Hold the new infrared board with tweezers, and solder the four feet with a soldering iron, as shown below: (The temperature of the soldering iron should not be too high, the time should not be too long, to prevent long-term heating damage to the infrared lamp, observe the pins after soldering, There can be no tin short circuit and virtual soldering, and a certain welding capacity is required)





6. **Install the top shell.** After welding, buckle the upper shell and PCB board, as shown below:

- Note: (1) Note that the four indicator LEDs must be aligned with the holes;  
(2) The wires of the induction coil should be arranged well, and cannot fall into the infrared induction area to prevent it from blocking the infrared transceiver;  
(3) Do not use brute force to buckle the shell, you must confirm the two steps above and then close the cover.



7. **Test function** : Please do not tighten the screws after closing the cover. At this time need to plug USB and 12V to read a key with all direction. If software shows that read successfully, then you could start to tighten screws. As shown in the figure below: (Do not tighten the screws before the reading is successful)



**8. Install the bottom case :** Put the four previously removed screws into the back shell and tighten with a screwdriver. The replacement operation is all completed! As shown below:

