## Peltier Module Application Notes

### Objective
Print the heat-conducting silicon grease on the radiator and milled surface by cold-conducting piece to enhance the heat-conducting efficiency.

### Technical Procedure

1. Preparing Work:
   1) Use ethanol absolute tampon to rub up both sides of cooling piece and installing sides of radiator and cold-conducting piece; inspect radiator and milled surface by cold-conducting piece and pick out pieces with concaves and protruded or sunk corners. Use blade to scrape possible burrs.
   2) Position: adjust the position of cold-conducting piece to face the center of silk-screen plate with the center of radiator and cold-conducting piece, and fix the position frame.

2. Working Procedure:
   1) Put the cold-conducting piece in the position frame and close to the frame with the clean side facing upwards;
   2) Paste the heat-conducting silicon grease on the silk screen;
   3) Put down the silk screen and use rubber blade to scrap the heat-conducting silicon grease on the silk-screen plate evenly and smoothly;
   4) Raise the silk screen to inspect the evenness of heat-conducting silicon grease.
   5) Put the radiator into the position frame and face it upwards;
   6) Repeat the procedure 2-4.

### Quality Standard
Silicon grease shall be evenly pasted without foreign substances and blank.

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### Objective
Assemble the radiator, cooling piece, cooling piece shell and the cold-conducting piece together

### Technical Procedure

1. Install the cooling piece shell on the cold-conducting piece and put the plane side upwards;
   Put the shell and cold-conducting piece into the installation package;
   Put the cooling piece into its shell and close the side without down-lead to the cold-conducting piece and the down-lead shall be the same direction with the opening of cooling piece. Note than the large assembling hole of radiator shall be directly face to the large screw plate and the small assembling with the small screw plate of the shell;

2. Put the print face of radiator toward the cooling piece on it and face the two assembling holes of radiator to the assembling holes of cold-conducting piece;

3. Put screws into the assembling hole of radiator;

4. Use pneumatic screwdriver to tighten screws (not too tight) and connect the radiator with cold-conducting piece.

### Quality Standard

1. Put the radiator downwards and the down-lead of cooling piece shall face to operator with black line on the left and red line on the right;

2. The cooling piece shall be installed with shell.

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# Fixing

## Objective
Connect radiator, cooling piece and cold-conducting piece together to enhance the heat-conducting efficiency

## Technical Procedure

1. **Preparing Work:**
   1) Turn on the air-conditioning power and adjust the pressure to 0.6 MP;
   2) Adjust the screwdriver to torque of 15KgF·cm.

2. **Working Procedure:**
   1) Put the components into the assembling clamp and turn on the pneumatic switch. The components shall be raised gradually and the pressure of cooling piece shall be 10.5Kg/cm² after clamping components;
   2) Use the screwdriver to tighten screws with torque of 15KgF·cm;
   3) Open assembling clamp and take off the component, and check the product to ensure the grounding protection of cooling pieces between the cold-conducting piece and the radiator.
   4) Deliver the assembled products to QC inspection platform for performance inspection.

## Quality Standard
The torques of both screws shall meet 15KgF·cm.

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