

1. PURPOSE

To determine if there is an inverter failure after a relay check failure error was displayed.

2. SCOPE

For installers to go through the below list of troubleshooting steps to identify if there is an inverter failure after a relay check failure error was displayed.

3. RESPONSIBILITY

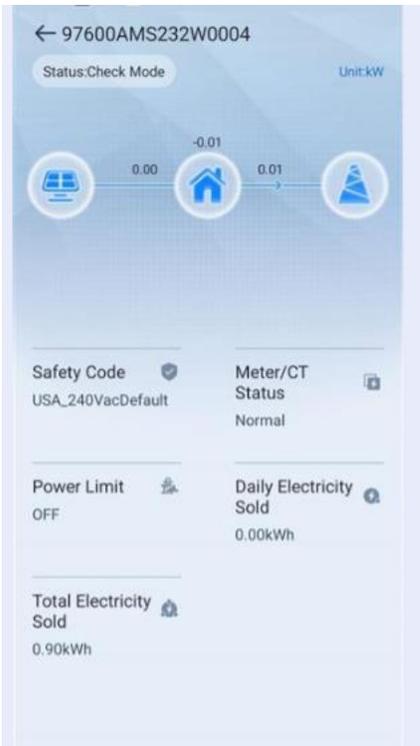
To be performed by a professional installer.

It is recommended to use a multimeter to measure the neutral-ground voltage of the AC output side of the inverter.

Reference video link: [Checking Voltage from Neutral to Ground](#)

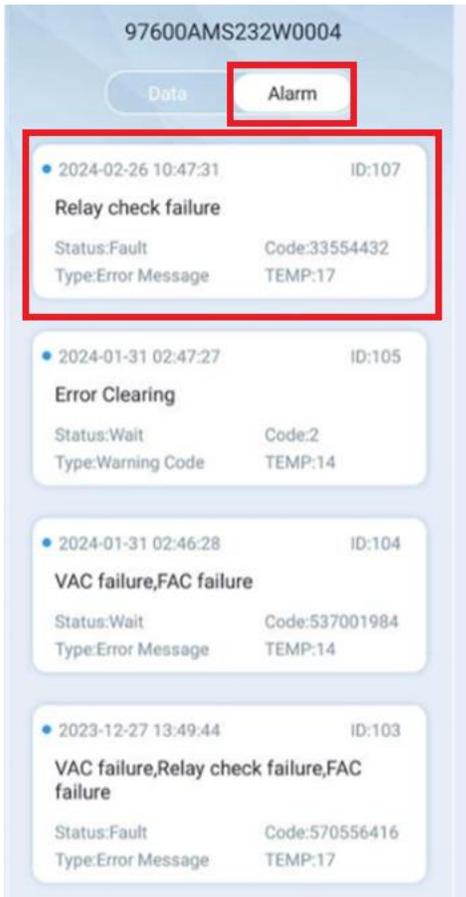
4. PROCEDURE

1. Confirm there has been a relay check failure error. Open the SolarGo App.



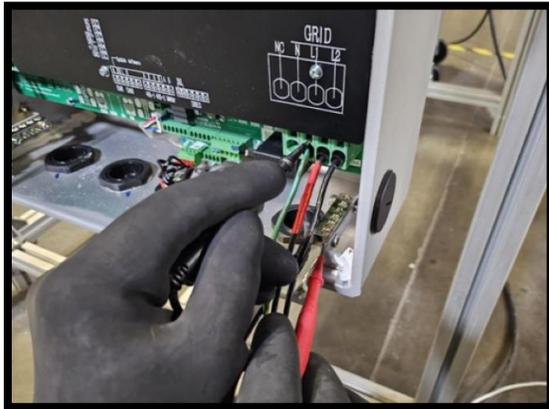
2. Click on alarm and confirm there is a relay check failure error displayed in SolarGo. Please collect a screenshot.

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3. Please restart the inverter.
4. If the inverter can work normally after restarting it is recommended to try the neutral-ground shorting and checking wiring insulation. If not, please continue to the next step.
5. Power down inverter.
6. Open inverter by removing the 4 screws holding the cover in place using a T20 screwdriver.
7. Place the 4 screws in a secure place, they will be needed to cover the inverter at the end.
8. Measure the AC voltage between the neutral wire and the ground terminal.

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9. Please take photos and provide images of the measurements.

10. The standard normal neutral wire to ground terminal voltage is 0 V.



11. There could be power on the neutral wire from grid, please check the grid wire. If there is not an issue with the grid wire, please provide photos and move onto the next step.

12. It could be the wires are not firmly connected, please check the wire connection carefully. If the wires are firmly connected, please provide photos and move onto the next step.

13. It could be there are some insulation issues with the ground wire, please check the wires for damages, such as exposed metal. If the ground wire is intact, please provide photos and move onto the next step.

14. Verify if the inverter fault LED indicator shows a red light every 5 minutes. Please provide photos.

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15. If everything with wiring and insulation is fine, the inverter has been restarted, but the inverter still reports an error and/or the inverter fault LED shows a red light every 5 minutes.

Please provide the requested photos to Customer Support:

- 1) Screenshot of relay check failure error in SolarGo App.
- 2) Photos of the measurements of the AC voltage between the neutral wire and the ground terminal.
- 3) Grid wire photos.
- 4) Photos of the wiring at different angles.
- 5) Ground wire photos.
- 6) Video or photo of inverter fault LED indicator shows a red light every 5 minutes.

5. ATTACHMENTS.

Revision History

Rev	Release Date	Description	Originator
A	03/25/2024	SOP Relay Check Failure	Anik Rubalcava

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