

BATTERY & CHARGE STATUS E.R.I.C. Cars (Excel 1515-5206 Controller)

QUICK START GUIDE

This Quick Start Guide provides information to help you understand the battery and charge status of your Visage equipped Club Car Precedent cars with E.R.I.C. chargers.



Terminology

When discussing batteries you may hear two different terms used when referring to the percentage displayed on the Visage Control Center and VDU, they are state of charge and BDI.

State of Charge - State of Charge is a measurement of how much energy is remaining in the battery pack and is displayed as a percentage.

Battery Discharge Indicator (BDI) -

BDI Percentage is the term used in Club Car diagnostic tools to display the State of Charge as reported from the Excel 1515-5206 motor controller.

Visage Control Center - Charge & Battery Status

Fleet Views

VISAGE

- The motor controller & Visage are not communicating over the LIN Bus
- = The motor controller detects the charger cable is plugged into the car receptacle. A white icon indicates the car is in Stage 1. The battery pack has not reached a high state of charge.
- = The motor controller detects the charger cable is plugged into the car receptacle. A green icon indicates the car is in Stage 2. The battery pack has reached a high state of charge.
 - = Green icon, battery is considered ok. State of charge is > 25%.
- **16%** = Yellow icon, battery is considered low. State of charge is between 10% & 25%.
 - **10%** = Red icon, battery is considered critically low. State of charge is < 10%.
- 78 = Charge alert detected for the specified car #. Alert reason displayed in Car Detail Status tab.

VISAGE

Visage Control Center Car Detail Status - Alert Types

Incomplete/failed charge:

An Incomplete/failed charge alert indicates that the car had been on the charger for at least six hours and was then unplugged prior to reaching a high state of charge.

Inoperable charger:

An inoperable charger alert indicates that the car has been on a charger for at least six hours and the motor controller has not reported an increased state of charge.





On Charge

When the charger is plugged into the car the Health Summary displays "On Charge".

At or Near Full Charge

While on charge and Stage 1 of the charge cycle is complete, the Health Summary page will display "At or near full charge".

Percentage Displayed

When the charger is disconnected from the car, the Health Summary page will display the State of Charge percentage as reported from the motor controller. Once the car has been driven and the batteries are under load, the controller will recalculate the data and provide a more accurate State of Charge percentage.



Excel System vehicles with the ERIC Charging system feature a dash mounted charge indicator light below the steering column that serves two functions: 1) Battery low state of charge warning, and 2) Charging confirmation.

Battery Low State of Charge Warning

- The light comes on and remains solid when the battery state of charge falls below 20%.
- The light begins flashing when the battery state of charge falls below 10%.

Charging Confirmation

• The light will flash three times and the reverse buzzer simultaneously will sound three times to indicate a battery charging session has begun.



E.R.I.C. - Charge Status Indicators

Charge Cycle Complete -

Verification of a completed charge cycle must be confirmed by viewing the status indicator lights on the ERIC charger.

| LIGHT | STATUS | | STATUS EXPLANATION |
|-------|-----------------|----------------|---|
| | Solid red | | Charger error. Reset charger power. |
| | Flashing orange | | Charger unable to complete charge. |
| | | Solid green | Charging is complete. Battery pack is fully charged. Stage 2 of charge cycle is complete. |
| | | Solid green | |
| | | Flashing green | Charging is in progress. Battery pack has reached a high state of charge. Stage 1 of charge cycle is in progress. Icon on VCC turns green. VDU Health Summary displays: "At or Near Full Charge". |
| | | Solid green | |
| | | Off | Charging is in progress. Battery pack has NOT reached a high state of charge. |
| | | Flashing green | Charge cycle has not reached Stage 1. Icon on VCC is white. VDU Health Summary displays: "On Charge". |
| | Solid blue | | AC power to charger is present. |