

General Information

An ultracapacitor will be installed in a limited number of United Parcel Service (UPS) chassis in one of the two battery locations. See [Fig. 1](#) for an example.

If the ultracapacitor and/or any components connected to the battery need to be removed/installed, the ultracapacitor must be in "Maintenance Mode." Press the START button for 10 seconds to switch to "Maintenance Mode," which is indicated by the following:

- There are no light emitting diodes (LEDs) activated—the ultracapacitor is not connected to a battery.
- A solid yellow LED is activated—the ultracapacitor is connected to a battery but there is no energy at the ultracapacitor terminals.

IMPORTANT: Do not connect or disconnect the ultracapacitor to or from the battery if the LED is solid green. The ultracapacitor should only be connected or disconnected to or from a battery when all LEDs are off or the yellow LED is activated.

See [Fig. 2](#) for an example of the ultracapacitor components.

If there aren't any activated LEDs, press and hold the START button for 10 seconds. "Run Mode" is indicated by a solid green LED. A solid green LED and a flashing yellow LED indicate that the ultracapacitor has entered "Run Mode" and is charging for the first time. See [Fig. 3](#) for a description of the ultracapacitor's operation modes. [Figure 4](#) shows the warning labels associated with the ultracapacitor.

NOTICE

In order to avoid damaging the ultracapacitor, follow the guidelines listed below:

- Do not connect the ultracapacitor in reverse polarity. Always verify correct polarity between the battery and ultracapacitor before installation.
- Never connect to an energy source at 36V or above.
- Do not drop the ultracapacitor.
- Use only properly sized tools on the terminals and mounting bolts.
- Always lift the ultracapacitor by the module body, never from the terminals of the device.

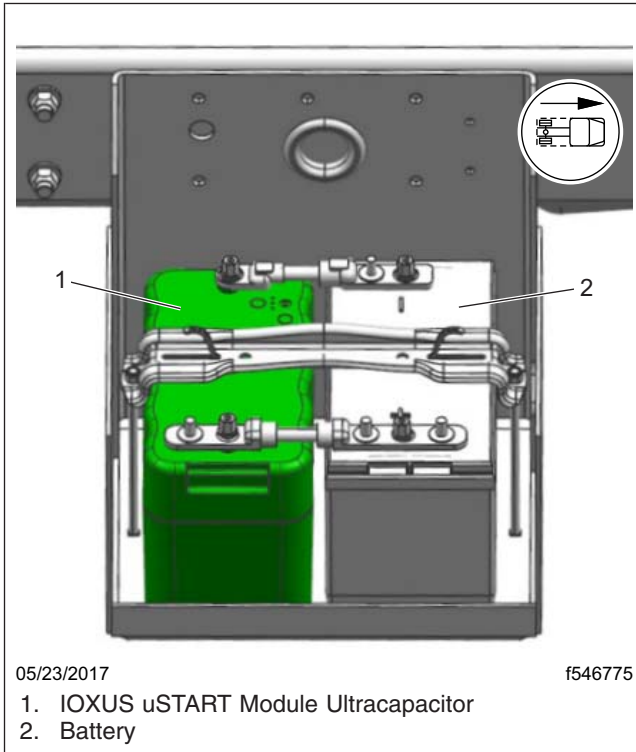


Fig. 1, Ultracapacitor and Battery (configuration may vary)

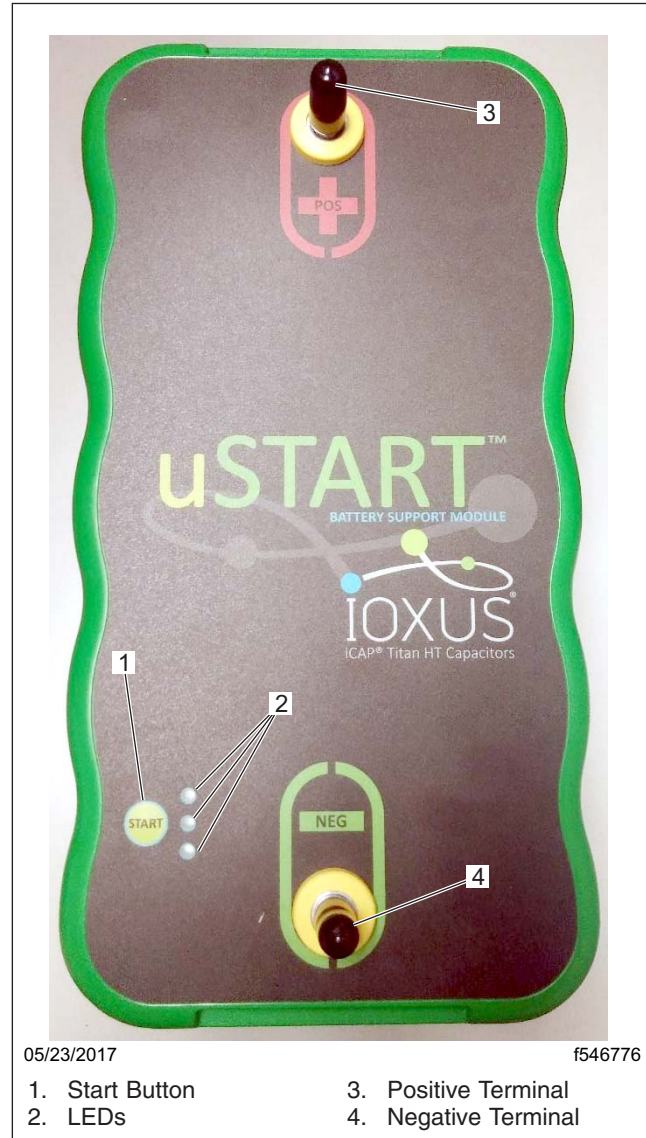


Fig. 2, Ultracapacitor Components

Recreational Vehicle
School Bus
Shuttle Bus

> Walk-In Van
S2

Freightliner Custom Chassis
Service Bulletin

Mode	GREEN	YELLOW	RED	Description
Maintenance	OFF	SOLID	OFF	uSTART™ is connected to battery. There is no energy at terminals. To switch to Run Mode, press button for 10 sec.
Run	SOLID	OFF	OFF	uSTART™ is active. To switch to Maintenance Mode, press button for 10 seconds. To initiate Jump Start Mode, press button for 3 seconds.
Jump Start	FLASH	FLASH	OFF	uSTART™ is charging for jump start.
	FLASH	SOLID	OFF	uSTART™ is ready for jump start. Start the vehicle immediately.
Fault	OFF	OFF	SOLID	uSTART™ is experiencing a fault. Please see user manual for instructions.

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Fig. 3, Ultracapacitor Operation Modes



Fig. 4, Ultracapacitor Warning Labels

Warranty

This is an informational bulletin only. Warranty does not apply.