

# Bombardier Challenger CL-600-2B16, CL-600, 2B19, CL-600-2C10, CL-600-2D24 Certified Sealed Lead Acid Battery Installations



## Specifics:

STC provides for the installation of Concorde valve regulated sealed lead acid (VRSLA) batteries in place of the original equipment nickel cadmium batteries.

The replacement batteries include externally mounted temperature sensors that duplicate those used in the original equipment batteries. It is permissible to replace both the APU and main battery or either the main battery alone or the APU battery alone under this STC.

The CL-600 Series aircraft are equipped with a dedicated battery charger for each battery. The only model that is suitable for charging Concorde VRSLA batteries is the Securaplane BC-1306 (P/N 100-1084-01). The BC-1306 is FAA-PMA approved and is included on the Illustrated Parts Catalog for all aircraft covered by this STC. The installation of Concorde batteries is only permissible on aircraft equipped with BC-1306 battery chargers.

## APU Battery:

- 1) Remove existing APU battery in accordance with (IAW) the Aircraft Maintenance Manual (AMM).
- 2) Install Battery Temperature Sensor TS-C11A on the RG-380E/44L battery IAW Concorde drawing 5-0448. Reuse the cover plate screws or use the screws provided in the kit to mount the temperature sensor.
- 3) Install RG-380E/44L APU battery with temperature sensor TS-C11A in the aircraft IAW the AMM.

- 4) Verify APU battery charger is Securaplane Model BC-1306. Modify wiring of mating connector P2 that connects to J2 of APU battery charger to activate SLA mode.
- 5) Perform operation testing of the APU battery and APU battery charge IAW the AMM.
- 6) Weigh the APU battery being removed and update weight and balance.

## Main Battery:

- 1) Remove existing Main battery in accordance with (IAW) the Aircraft Maintenance Manual (AMM).
- 2) Install Battery Temperature Sensor TS-C11B on the RG-223 IAW Concorde drawing 5-0320. Reuse the cover plate screws or use the screws provided in the kit to mount the temperature sensor.
- 3) Install RG-223 Main battery with temperature sensor TS-C11B in the aircraft IAW the AMM.
- 4) Verify Main battery charger is Securaplane Model BC-1306. Modify wiring of mating connector P2 that connects to J2 of APU battery charger to activate SLA mode.
- 5) Perform operation testing of the Main battery and Main battery charger IAW the AMM.
- 6) Weigh the Main battery being removed and update weight and balance.
- 7) STC includes temperature sensor kits 5-0166 (TS-C11A) and 5-0283 (TS-C11B) as well as installation instructions.

## FAA STC ST01646WI

## Canadian STC SA13-4

### Main Battery Upgrade –

Saft 1756-1 or 1756-3 (24V/17Ah) is replaced with RG-223 (24V/17Ah).

### APU Battery Upgrade –

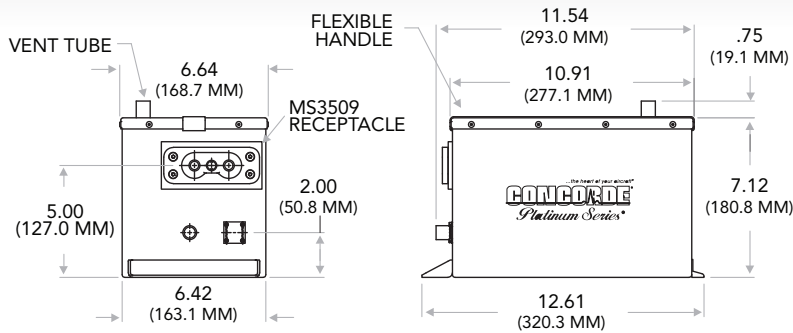
Marathon 020583-000 or 024453-000 or Saft 4078-24 or 40178-24 (24V/43Ah) is replaced with RG-380E/44L (24V/42Ah).

- Lower cost of acquisition
- Reduced cost per flight hour
- No deep cycling requirement
- No water replenishment
- No replacement of parts
- Hazmat Exempt
- Fully recyclable – the green solution
- Made in the U.S.A.

## FAA STC ST01646WI

### Main Battery

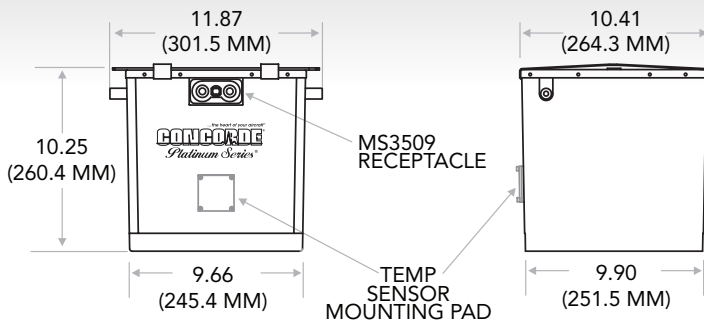
RG-223, 17 Ah



Part Number	Rated Capacity C1 in Ah	23°C / 74°F		-18°C / 0°F		-30°C / -22°F		Maximum Weight
		IPP	IPR	IPP	IPR	IPP	IPR	
RG-223	17 Ah	900	625	600	425	450	300	43 LB/19.5 KG

### Auxiliary Battery

RG-380E/44L, 42 Ah



Part Number	Rated Capacity C1 in Ah	23°C / 74°F		-18°C / 0°F		-30°C / -22°F		Maximum Weight
		IPP	IPR	IPP	IPR	IPP	IPR	
RG-380E/44L	42 Ah	1350	1000	875	750	750	600	89 LB/40.4 KG

### Miscellaneous

5-0166 Temperature Sensor Kit for TS-C11A (RG-380E/44)

5-0283 Temperature Sensor Kit for TS-C11B (RG-223)

Installation instructions included.