



Benchtop Constant Current Regulator
and Portable Field Unit Option

Spare Parts

SP_3068, Rev. A, 2020/08/26


**ADB
SAFEGATE**

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Note

See your sales order contract for a complete warranty description.

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ADB SAFEGATE LED light fixtures (with the exception of obstruction lighting) are warranted against electrical defects in design or manufacture of the LED or LED specific circuitry for a period of 4 years from date of installation, per FAA EB67 (applicable edition).



Note

See your sales order contract for a complete warranty description.

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Unintended uses, includes the following actions:

- Making changes to equipment that have not been recommended or described in this manual or using parts that are not genuine ADB SAFEGATE replacement parts or accessories.
- Failing to make sure that auxiliary equipment complies with approval agency requirements, local codes, and all applicable safety standards if not in contradiction with the general rules.
- Using materials or auxiliary equipment that are inappropriate or incompatible with your ADB SAFEGATE equipment.
- Allowing unskilled personnel to perform any task on or with the equipment.

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1.0 Introduction

The CFB is a desktop 200 VA ferroresonant CCR used to bench test airfield fixtures. It offers manual control for 5-step (2.8 A – 6.6 A) operation and can be used to test both incandescent and LED fixtures. Its integrated touchscreen provides additional functionality including manual control of output current settings and mode control to provide for automatic cycling through all CCR step settings. The CFB includes a replaceable plug-to-receptacle cord set extension. A portable field unit version is also available. This version can be powered using 120Vac 60 Hz or can be powered from +12 VDC using a vehicle battery. The field unit option is provided in a water resistant case.



1.1 Product Introduction

This section describes the ADB Safegate Benchtop constant current regulators.

1.2 Benchtop Power Supply

Uses

- Benchtop 200 VA CCR for bench testing of airfield fixtures
- Portable 200 VA CCR version for field testing of airfield fixtures

2.0 Parts

2.1 Codification

Ordering Code

CFB - 0 2 X 0

Input Power Type

- 1 = 120 VAC, 60 Hz/Benchtopy
- 2 = 240 VAC, 60 Hz/Benchtopy
- 3 = 220 VAC, 50 Hz/Benchtopy
- 4 = 240 VAC, 50 Hz/Benchtopy
- 5 = 120 VAC, 60 Hz or +12 VDC/Field



2.2 Illustrations

Figure 2: Benchtopy CCR Rear View

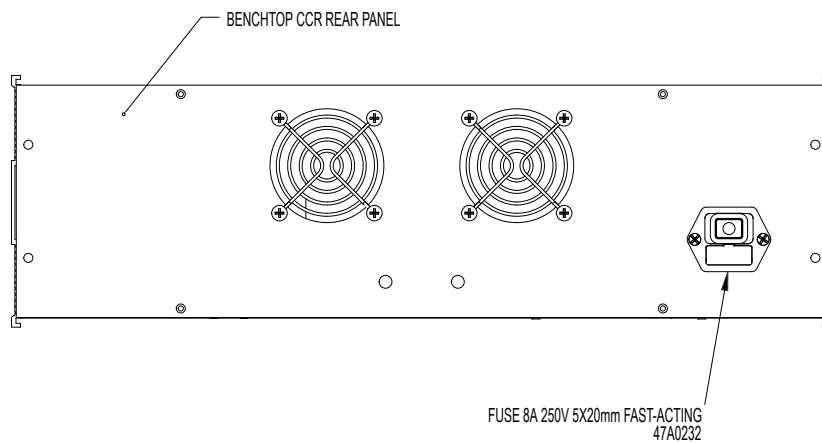


Figure 3: Benchtop CCR Component Panel

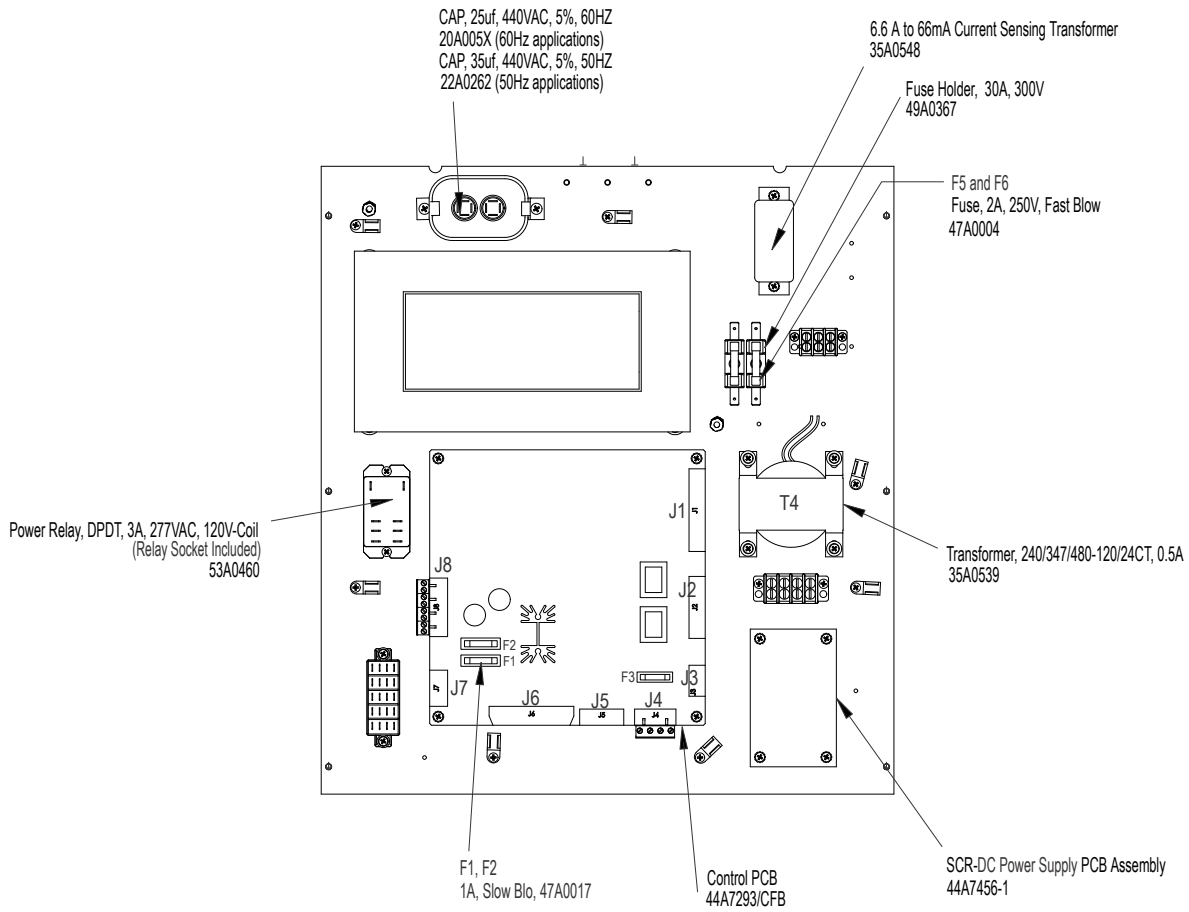
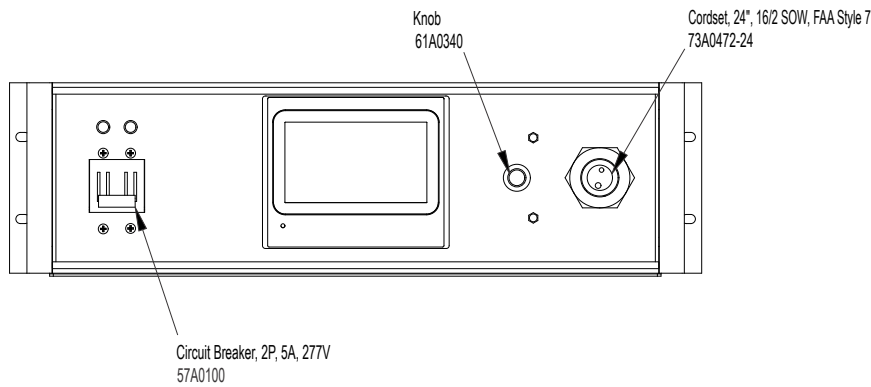
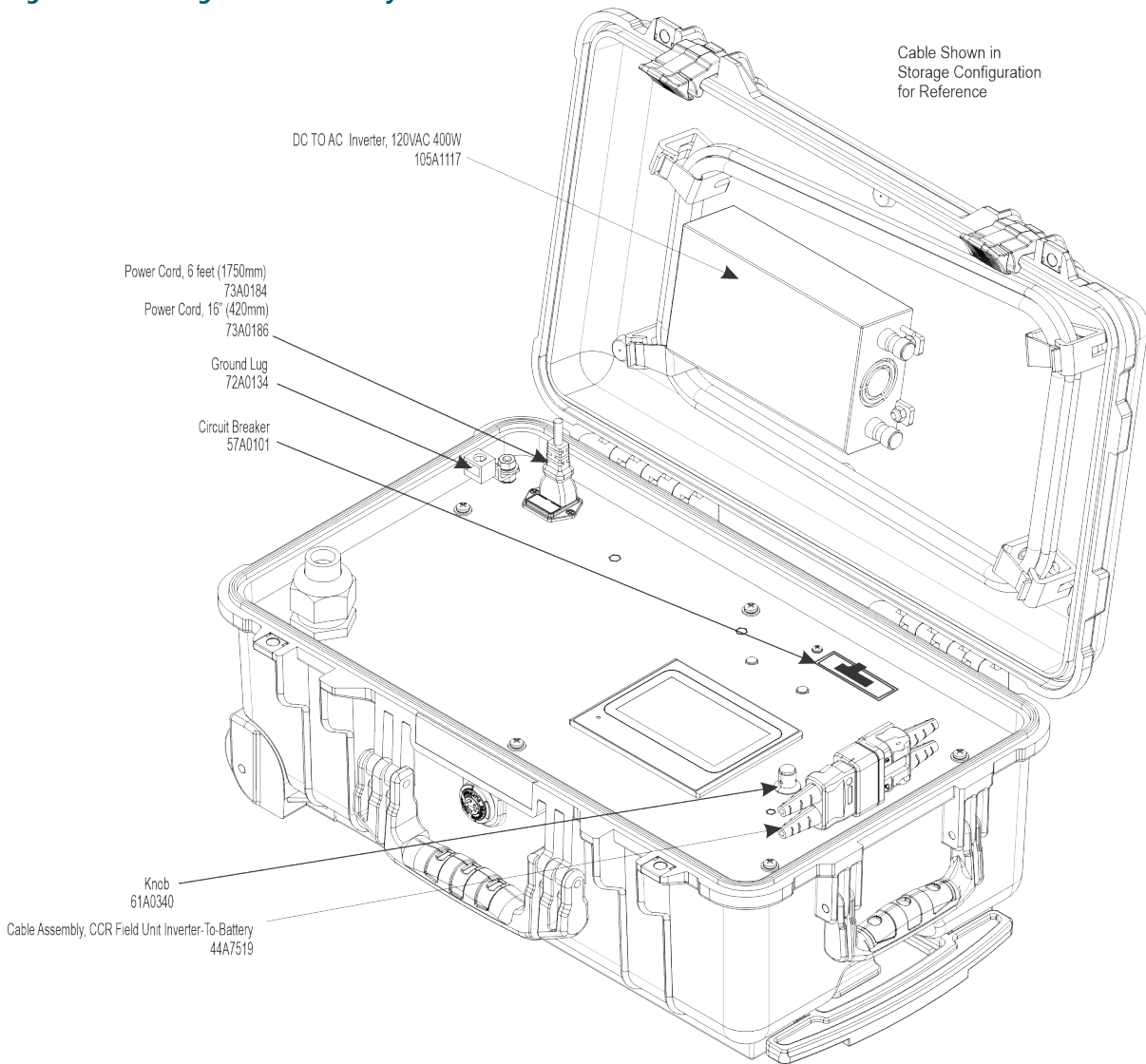


Figure 4: Benchtop CCR Front Panel



2.3 Options

Figure 5: Water Tight Case Assembly

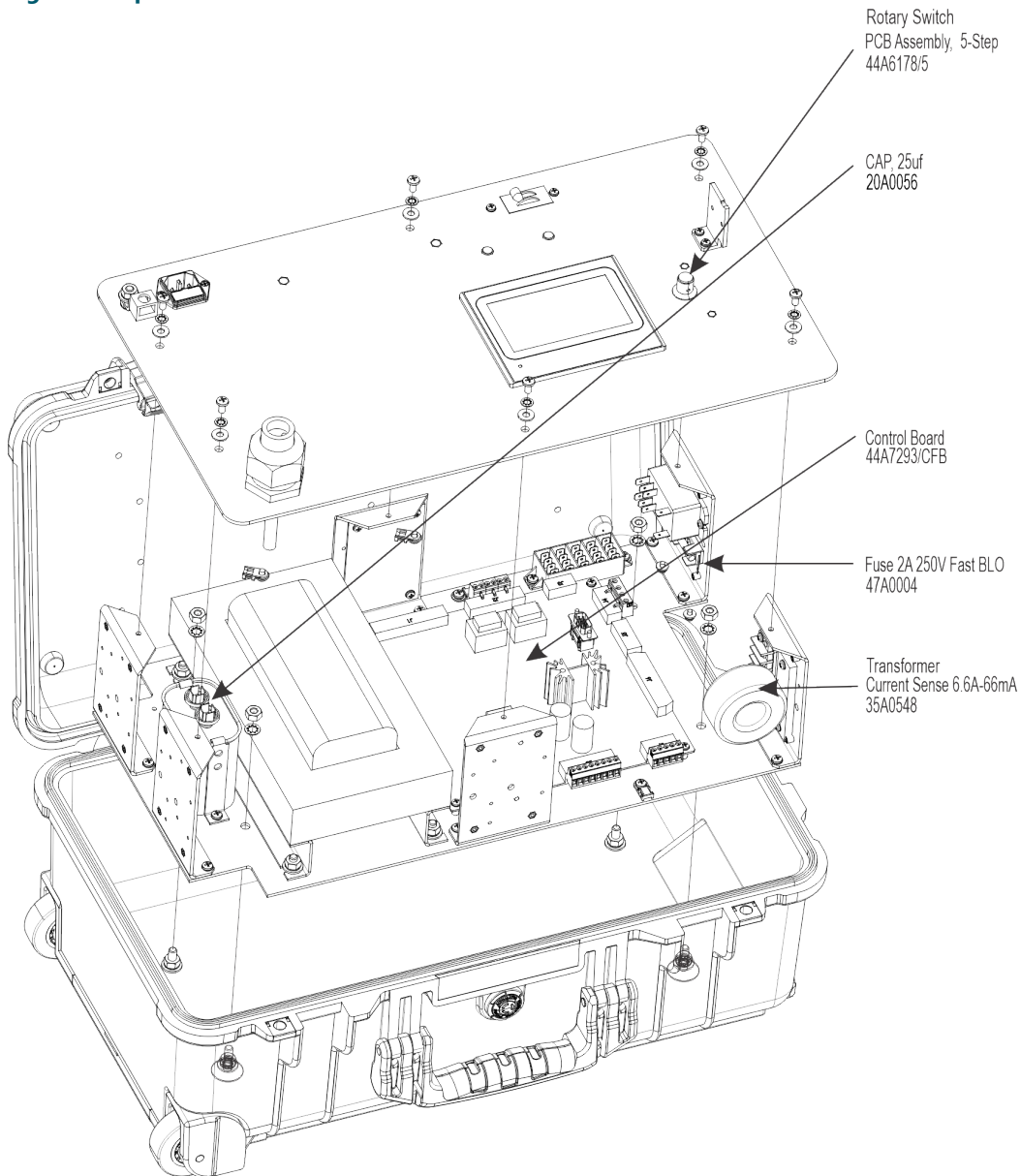


CAUTION

- Do not connect the power inverter to a battery with a load connected to the Field CCR.
- Turn off the power switch to the Field CCR prior to connecting to the power inverter.

Failure to observe these cautions may result in equipment damage.

Figure 6: Exploded View



Wagan Tech® Elite™ Pure Sine Power Inverters convert 12V DC power into 120V AC power.

Inverter manual available at: <http://www.wagan.com/elite-400w-pro.html>

- TrueRated Power™: 400W
- Surge power: 800W
- AC output: 120V*
- Frequency: 60Hz
- Socket type: U.S. standard grounded (2x)
- Maximum efficiency: 90%
- Output waveform: Pure sine wave
- Total harmonic distortion: < 3%
- USB power port: 2.1A (NOT USED)
- Overload protection: Automatic shutdown

- Overheating protection: Thermal cooling fan with automatic shutdown
- Short circuit and reverse polarity protection: Internal thermal fuse
- DC input: 12V
- Input range: 10V to 15V
- High voltage protection: 15.5 V \pm 0.5 V
- Low battery audible alarm: 10.5V \pm 0.5V
- Low battery auto shutdown: 9.5V \pm 0.5V
- No load current draw: < 0.4A
- CE certified and RoHS compliant
- Dimensions WxLxH (in.): 6.0 x 8.0 x 2.0 (150 x 200 x 50 mm)
- Weight: 2.0 lbs

2.4 Spare Parts

It is recommended to create a sufficiently large stock of spare parts to maintain the CFB unit. Consider acquiring approximately 10% spare final assemblies (with a minimum quantity of 1) for the total amount of equipment in the field. This allows for repairs to be made in the shop. Components that are more likely to need replacement, such as fuses, should be stocked at higher quantities, while PCB sub assemblies should be stocked in smaller quantities. For the CFB unit, it is recommended to have at least one entire CFB unit as a spare.

For the CFB unit, see the table below for spares.

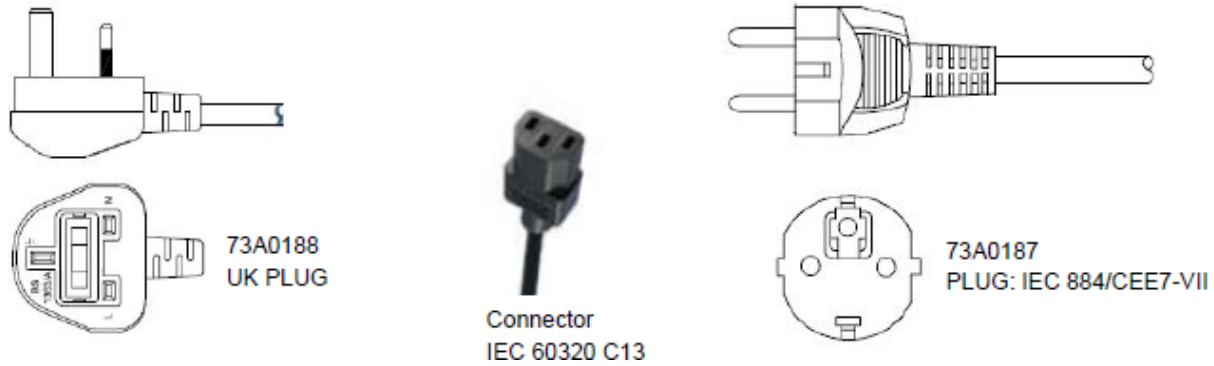
Table 1: Spares

Part Number	Description	CFB Type	Notes	Recommended Spares
44A7293/CFB	Control PCB	All	Figure 22	1
44A7671/10	Touch Screen	All	Figure 22 and Figure 5	1
44A7456-1	SCR-DC Power Supply Assembly	All	Figure 22	1
47A0017	Fuse, 1A, Slow Blow	All	Figure 22	4
47A0232	Fuse, 8A, Fast Blow	All	Figure 22	2
47A0004	Fuse, 2A, Fast Blow	All	Figure 22	4
73A0109-6	Cord Set Extension, 6-foot, 16 AWG, 2C, 600 V, Style 1 & 8	Benchtop Unit	Figure 2	1
73A0109-8	Cord Set Extension, 8-foot, 16 AWG, 2C, 600 V, Style 1 & 8	Field Unit	Figure 5	1
73A0184	Power Cord, 6 ft (1750mm) 115v, 60hz	CFB210/250	Figure 5	1
73A0185	Power Cord, 6 ft (1750mm) 240v, 60hz	CFB220	Figure 2	1

Table 1: Spares (continued)

Part Number	Description	CFB Type	Notes	Recommended Spares
73A0186	Power Cord, 16-in (420mm)	CFB250	Figure 5	1
73A0187	Power Cord, IEC 884/CEE7-VII, 6 ft (1750mm) 50hz	CFB230, CFB240	Figure 7	1
73A0188	Power Cord, UK PLUG BS1363A, 6 ft (1750mm) 50hz	CFB230, CFB240	Figure 7	1

Figure 7: EU Plug and UK Plug Types



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