

115-12-35CD RACAL HEAVY DUTY, REGULATED, LINEAR DC POWER SUPPLY/BATTERY CHARGER

Installation / Operation Sheet

INSTALLATION

Materials: The 115-12-35CD RACAL is supplied with the following materials: (1) Standard three prong 115 VAC power cord; (4) rubber mounting grommets; (4) brass grommet inserts; (2) 4 amp fuses for 230 VAC applications; (1) Installation/Operation sheet; (1) schematic sheet.

Location/Mounting: Mount on wall, bulkhead, power rack shelf or other suitable mounting surface as close as possible to the equipment being powered. Vertical mounting will facilitate cooler operation but horizontal mounting is acceptable when this is impractical. A minimum of 6" space above and below the unit is recommended for adequate ventilation. The case is electrically isolated from both the input and output, (except for the safety/ground connection) so mounting on either a metal or non-metal surface is acceptable.

Use (4) #8, #10 or 1/4" screws or bolts with appropriately sized flat washers to mount the power supply. (Eyelet washers are provided for use with #8 screws). Install the rubber grommets into the mounting flanges prior to mounting. (Use WD-40 or similar lubricant, if necessary.)

AC Input: The 115-12-35CD RACAL is shipped from the factory ready to accept 115 VAC input. If the unit is used in a 230 VAC application, take the following steps before applying power to the unit:

- 1) Using a small flat tip screwdriver, pry open the plastic cover on the face of the input power module to expose the fuseholder assembly. Note that the fuseholder assembly comes from the factory oriented so that "115V" is visible through a small cut-out in the plastic cover.
- 2) Using the same screwdriver, pry out and remove the fuseholder assembly.
- 3) Remove the 8 amp fuse from the fuseholder. Remove the conversion clip which is on the opposite side of the fuseholder as the fuse. Save the fuse and conversion clip in case the unit will be used in a 115 VAC application at a later date.
- 4) Insert one 4 amp fuse into each side of the fuseholder.
- 5) Reinsert the fuseholder assembly into the input power module with the 230V designation on the assembly facing up.
- 6) Replace the provided power cord with an IEC approved power cord with appropriate plug for the available AC receptacle. The wide variety of 230 VAC connectors precludes the inclusion of a cord of this type with the packaging. *Note: If you are unable to obtain a cord with a female end which fits properly into the power supply, you may instead modify the provided power cord as follows:*

NEWMAR[®]

U.S. HEADQUARTERS
P.O. Box 1306 · Newport Beach, CA 92663
Phone: (714) 751-0488 · Fax: (714) 957-1621

ELECTRONIC POWER PRODUCTS
COMMUNICATION ■ NAVIGATION

EURO WAREHOUSE
Unit 7 Bessemer Park · 250 Milkwood Road
London SE 24 OHG UK · Phone: +44-171-738-4466
Fax: +44-171-738-6888

M40036350A

1) Cut off the three pin male end plug from the provided power cord and obtain an IEC approved 3 pin plug which is appropriate for the available AC outlet.

2) Install the plug onto the provided power cord according to the instructions of the manufacturer and in compliance with all relevant electrical codes. Observe the color coding of the cord wires as follows:

Brown.....AC Hot (fused)
Blue.....AC Neutral (fused @ 220 VAC only)
Green/Yellow Striped...AC Ground (safety, earth)

3) Insert the female end of the power cord into the input power module of the power supply. No adjustment or reconfiguration is necessary to accommodate 50 or 60 Hz input.

DC Output: Remove the black plastic output terminal cover. Attach DC wires to the output terminals and to load paying careful attention to polarity (+ to +, - to -). Replace cover to prevent accidental shorting of the output terminals.

OPERATION

When properly installed, operation is automatic and maintenance is minimal. Under normal conditions only the following need be checked:

1) When the power supply is plugged in and the power switch is on, the green indicator light on the front panel will illuminate. If it fails to do so, disconnect the power cord, check the input fuse(s) and ensure that the fuseholder is in the proper 115 or 230 VAC position. Check fuses and, if necessary, replace with same type and rating.

2) The 115-12-35CD is equipped with a cooling fan mounted within the unit. Ensure that the ventilated rear panel is kept free of obstruction to ensure cool operation of the unit at full current rating.

SPECIFICATIONS

Model/Description: 115-12-35CD RACAL / Heavy duty power supply/battery charger with thermally activated fan

Input: 95-125/190-250 VAC, 50-60 Hz. @ 15 amps;
110-125/220-250 VAC, 50-60 Hz. @ 35 amps

Output: 13.8 VDC (Internally adjustable $\pm 10\%$ from 13.6 VDC)

Output Current Rating: 35 amps continuous to 50° C (100 % duty, 24 hours/day); Derate linearly to 50 % duty @ 65° C (10 min. on, 10 min. off)

Operating Temperature: -40° C to +65° C, thermal shutdown @ 85° C (Case Temp)

Regulation: $\pm 2\%$ Line and Load

Ripple: 40 mV peak-to-peak

Thermal shutdown @ 85° C (Case Temp)

Protection: Automatic reset thermal shutdown, current limiting, over-voltage protection, conformal coating of PCB, input/output fusing

Case Features: Anodized aluminum heat sink, integral shock mounts, heavy duty terminal block, 115/230 VAC input selector, IEC AC input receptacle

Case Dimensions (H x W x D): 5.7" x 7.8" x 17.0"; 14.5cm x 19.8cm x 43.2cm

Weight: 30 lbs, 13.4 Kg.

NEWMAR[®]

**ELECTRONIC POWER PRODUCTS
COMMUNICATION ■ NAVIGATION**

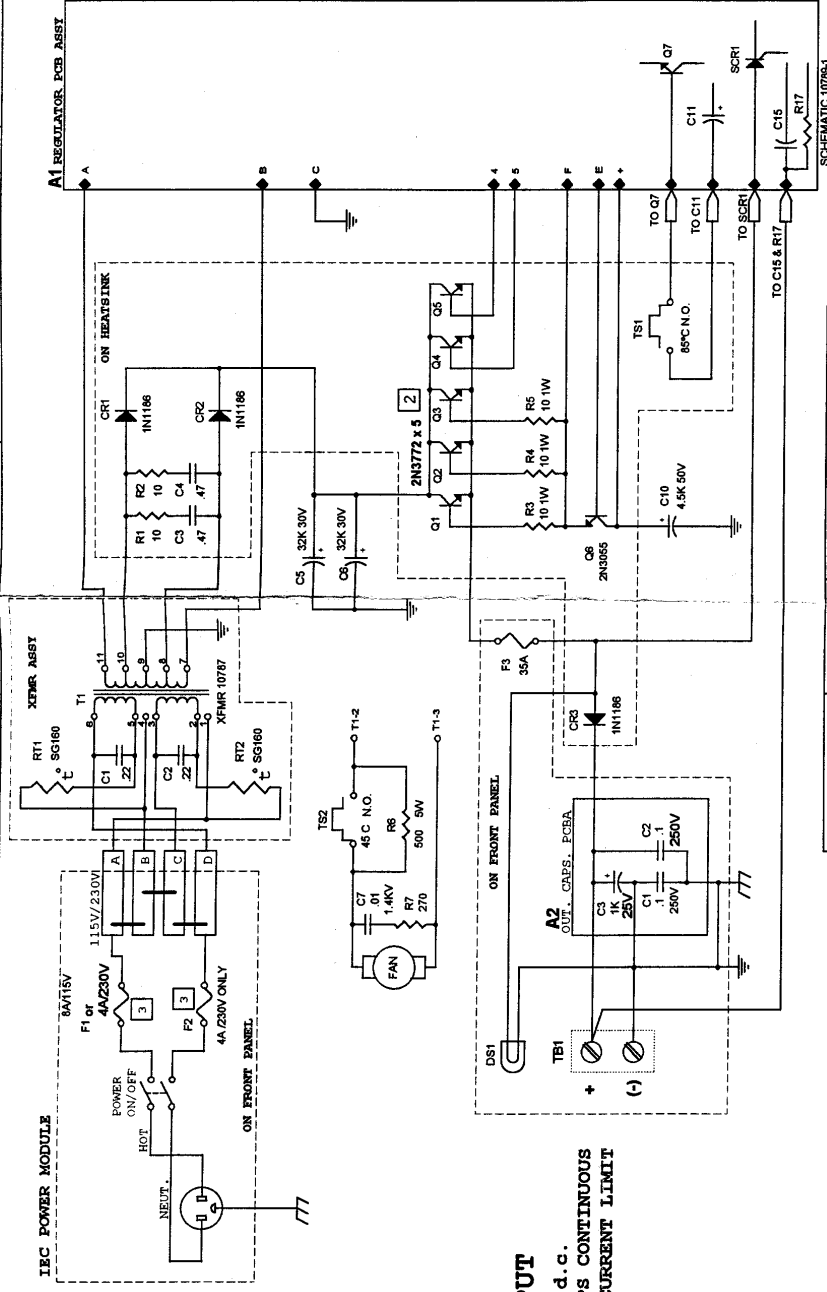
U.S. HEADQUARTERS

P.O. Box 1306 · Newport Beach, CA 92663
Phone: (714) 751-0488 · Fax: (714) 957-1621

EURO WAREHOUSE

Unit 7 Bessemer Park · 250 Milkwood Road
London SE 24 OHG UK · Phone: +44-171-738-4466
Fax: +44-171-738-6606

REVISIONS		
REV	DATE	ECO
NEW	10/1/88	2843
BEL	01/14/87	2658
A		
B	7/20/87	2684



OUTPUT
 13.8V d. c.
 35 AMPS CONTINUOUS
 37.5 CURRENT LIMIT

- [3] FOR 230V OPERATION, REMOVE 8A FUSE & JUMPER CLIP. INSTALL TWO 4A FUSE.
 - [2] SELECTED FOR HI BETA AND MATCHED.
 - 1. ALL RESISTORS ARE CARBON, 1/2 W, 5%.
 - ALL CAPACITORS ARE IN MFD (uf).
- NOTES: UNLESS OTHERWISE SPECIFIED.**

MODEL	TOP ASSY	A1 REGULATOR PCB ASSY	A2 SNUBBER PCB ASSY
115-12-35 CD RACAL	13635-0	10790-1	13468-0

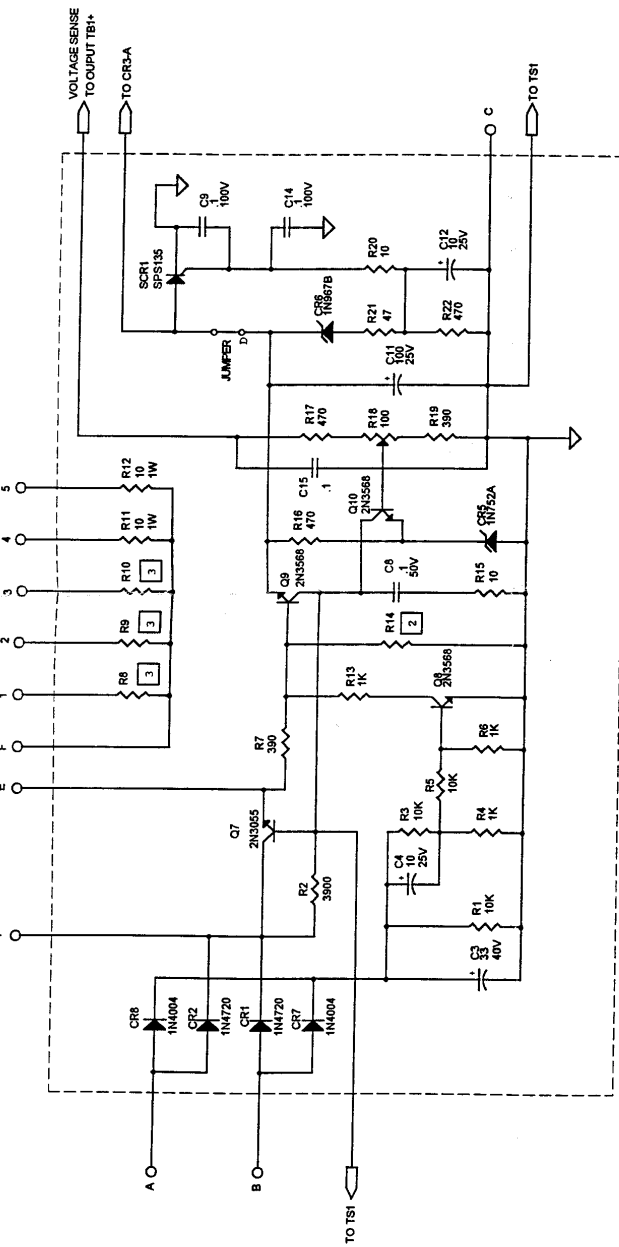
NEWMAR
 10790 AVE SANTA ANA, CA 92704
 TEL: (714) 751-0488 FAX: (714) 952-1823

UNIT SCHEMATIC, 115-12-35 CD RACAL

Document Number: **10788-1**

NO. 95A

REVISIONS			
REV	DATE	ECO	
NEW	10/11/66	2843	
JBL			2858
A	01/20/68		



NEWMAR 2811 W GARRY AVE SANTA ANA CA 92704 TEL: (714) 751-0488 FAX: (714) 957-1821	
Title: SCHEMATIC, REGULATOR PCB 115-12-35 CD RACAL	
Doc Number	10789-1
Rev	A
NO. 95A	NO. 1395

- [3] NOT INSTALLED.
- [2] SELECT VALUE IN TEST FOR CURRENT FOLDBACK AT 37.5 ± 2 AMPS.
- 1. ALL RESISTORS ARE CARBON, 1/2 W, 5%.
- ALL CAPACITORS ARE IN MFD (uF).

NOTES: UNLESS OTHERWISE SPECIFIED.

ORIGINAL