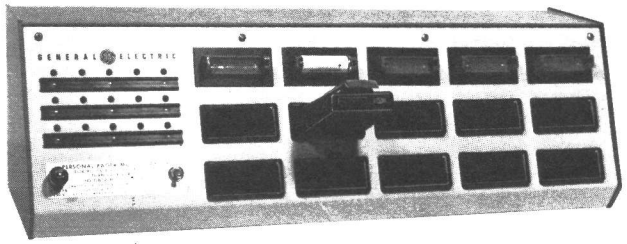
MOBILE RADIO

# MAINTENANCE MANUAL

## Personal Pager
## DESK CHARGER COMBINATIONS 391L1B2X AND 391M1B2X
## MULTI-CHARGER COMBINATIONS 392L1B1X AND 392M1B1X


DESK CHARGER



MULTI-CHARGER

### SPECIFICATIONS *

| | 391L1B2X | 391M1B2X | 392L1B1X | 392M1B1X |
|---|---|---|---|---|
| Input Voltage (50/60 Hz) | 121 | 220 | 121 | 220 |
| AC Power (Watts) | 3 | 3 | 4 | 4 |
| Charge Time (hrs) | 16 | 16 | 16 | 16 |
| Charge Currents | 15 mA | 15 mA | 15 mA | 15 mA |
| Size Inches | | | | |
| Width | 4 1/16" | 4 1/16" | 24 1/8" | 24 1/8" |
| Depth | 5 1/2" | 5 1/2" | 7 3/16" | 7 3/16" |
| Height | 2 1/2" | 2 1/2" | 7 5/8" | 7 5/8" |
| Weight | 1 1/2 lb. | 1 1/2 lb. | 18 7/8 lb. | 18 7/8 lb. |

*These specifications are intended primarily for the use of the serviceman. Refer to the appropriate Specification Sheet for the complete specifications.

GENERAL ELECTRIC

Maintenance Manual LBI30404D
DATAFILE FOLDER - DF0068

391L1B2X AND 391M1B2X
392L1B1X AND 392M1B1X

# TABLE OF CONTENTS



## ILLUSTRATIONS



# COMBINATION NOMENCLATURE

| 1st Digit | 2nd Digit | 3rd Digit | 4th Digit | 5th Digit | 6th Digit | 7th Digit | 8th Digit |
|---|---|---|---|---|---|---|---|
| **3** Charger | **9** Pager | **1** Desk | **L** 121 VAC 50/60 Hz | **1** 16-Hour | **B** Multi-Socket | **1** Vintage | **X** Not Range Sensitive |
| | | **2** Wall | **M** 220 VAC 50/60 Hz | | | **2** Vintage | |

**WARNING**

No one should be permitted to handle any portion of the equipment that is supplied with high voltage; or to connect any external apparatus to the units while the units are supplied with power. KEEP AWAY FROM LIVE CIRCUITS!

## DESCRIPTION

General Electric Desk Charger and Multi-Charger Combinations for nickel-cadmium batteries used with Personal or Executive Pager radios, will provide a continuous C/10 charge rate and will recharge a fully discharged battery 100% in 16 hours. Both the Desk Charger and the Multi-Charger are available for 121 and 220 VAC, 50/60 Hz operation.

The Desk Charger is capable of recharging, simultaneously, a Pager with battery and a spare battery (See Figure 1). Two RED LED indicators, one labeled UNIT for the Pager with battery and one labeled BATTERY indicate when the Pager or battery is in the Pager or battery charging insert, proper contact has been made and the battery is charging.

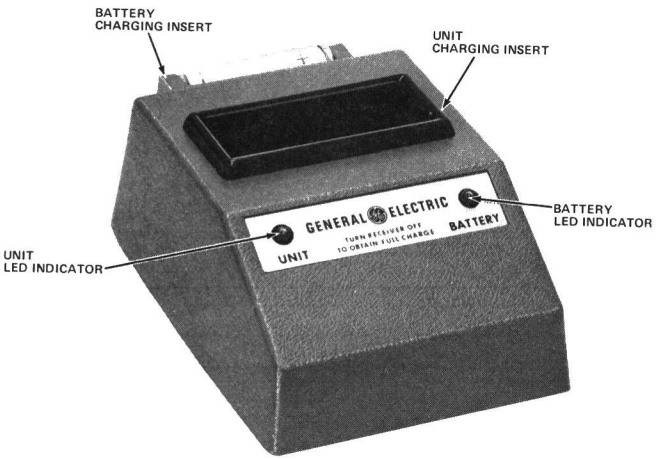



Figure 1 - Desk Charger

The Multi-Charger has 15 charging inserts and is capable of simultaneously recharging 15 Pager Units. The inserts are arranged in three rows of five and each insert has a RED LED indicator and identification strip (See Figure 2). The LED indicators indicate when a unit is in a charging insert, proper contact has been made and the battery is being charged.

Spare battery charging inserts may be added to the Multi-Charger as options.

## OPERATION

Temperature characteristics of nickel-cadmium batteries, prevent a full charge at temperature extremes. For a maximum charge, recharge the battery at room temperatures of between 65° to 85° Fahrenheit whenever possible.

To use the desk charger, connect the power cable to a 121 or 220-Volt AC 50/60 Hz source depending upon the charger combination (See Figure 1). Place the Pager into the charging insert with the speaker facing the front of the charger, or place the battery into the battery insert. The RED LED indicator labeled UNIT or BATTERY will light, indicating the battery is being charged. To charge the battery to 100% capacity, let it stay in the charging insert for at least 16 hours.

To use the Multi-Charger, connect the power cable to a 121 or 220 VAC, 50/60 Hz source depending upon the charger combination (See Figure 2). Place the OFF-ON switch in the ON position. Place a pager into a charging insert. A RED LED indicator will light, indicating the battery is being charged. To charge a battery to 100% capacity, let it stay in the charging insert at least 16 hours.

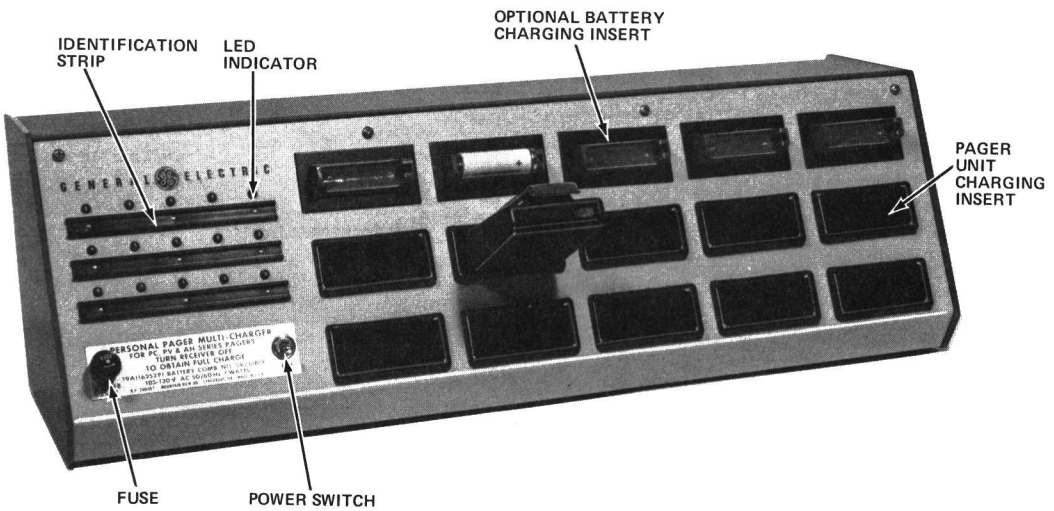



Figure 2 - Multi-Charger

# CIRCUIT ANALYSIS

## Desk Charger

The 16-hour desk charger contains a power supply and two charging circuits. References to symbol numbers mentioned in the following text can be found on the applicable schematic and outline diagram or parts list (See Table of Contents).

AC voltage developed across the secondary of transformer T501 or T502 is rectified by rectifiers CR1 and CR2. The rectified outputs are applied to the charging circuits.

The charging circuits are series resistances consisting of CR3 and R1, and CR4 and R2 which determines the C/10 constant current charge rate (15 milliamps). The charging current is applied to the battery when the battery is in the UNIT charging insert or the spare battery charging insert. The RED LED indicator will light when positive contact has been made with the battery contacts. Charging current for the UNIT charging insert is applied to the battery through charging contacts E1, E2 and E3. Charging current for the spare battery charging insert is applied to the battery through charging contacts E4 and E5.

## Multi-Charger

The 16-hour multi-charger charger contains a power supply and 15 charging circuits. References to symbol numbers mentioned in the following text can be found on the applicable schematic and outline diagram or parts list (see Table of Contents).

AC Voltage developed across the secondary of transformer T801 or T802 is rectified through full-wave rectifiers CR16 and CR17. The rectified output is applied to the charging circuits.

The charging circuits are series resistances R1 through R15 and CR1 through CR15. Each charging circuit determines a C/10 constant current charging rate (15 milliamps). The charging current is applied to a battery when a pager is in a charging insert.

# MAINTENANCE

## Disassembly

To gain access to the desk charger circuitry for servicing, remove the four Phillips-head screws in the bottom of the charger. Carefully lift off the housing.

To gain access to the multi-charger circuitry, remove the four Phillips-head screws along the top of the front panel, and swing open the panel.

## Troubleshooting

Should a difficult service problem arise, the following checks should aid the service technician in locating the difficulty.

## Desk Charger

| Symptom | Procedure |
|---|---|
| Battery will not charge | 1. Check to see if LED indicator is on (UNIT or BATTERY).<br>2. If an LED indicator is on, try a known good battery.<br>3. If both LED indicators are off, check fuse F501 or F502.<br>4. If only one LED indicator is on, insure proper contact between the charging contacts of the defective charging circuit and the battery terminals.<br>5. Check CR1 or CR2 and T501 or T502. |

## Multi-Charger

| Symptom | Procedure |
|---|---|
| Battery will not charge | 1. Check to see if LED indicator for the charging insert is on.<br>2. If the LED indicator is on try a known good battery.<br>3. If none of the LED indicators will come on, inserting a battery, check fuse F801 or F802, switch S801, diodes CR16 and CR17, and T801 or T802.<br>4. Insure proper contact between charging contacts and battery terminals. |

# INSTALLATION

## Desk Charger

The desk charger can be located on a desk or table top, or other flat surface. The location should be close to a 121 or 220-Volts AC, 50/60 Hz source. If the radio is to be used while charging, the charger should be located so that it is convenient to the operator.

The multi-charger may be located on a table top or shelf, or may be mounted on a wall or other vertical surface. Two mounting holes approximately 16 inches apart are provided in the back of the charger for wall mounting. The mounting location should be close to a 121 or 220-Volt AC, 50/60 Hz source. To mount the multi-charger on a wall:

1. Make sure that the power cable is disconnected. Then remove the four Phillips-head screws along the top of the front panel and swing down the panel.
2. Use the charger as a template and mark the mounting holes.
3. Mount the charger using two 1/4-inch lag screws or #14 wood screws as required.
4. Replace the front cover and plug in the power cable.

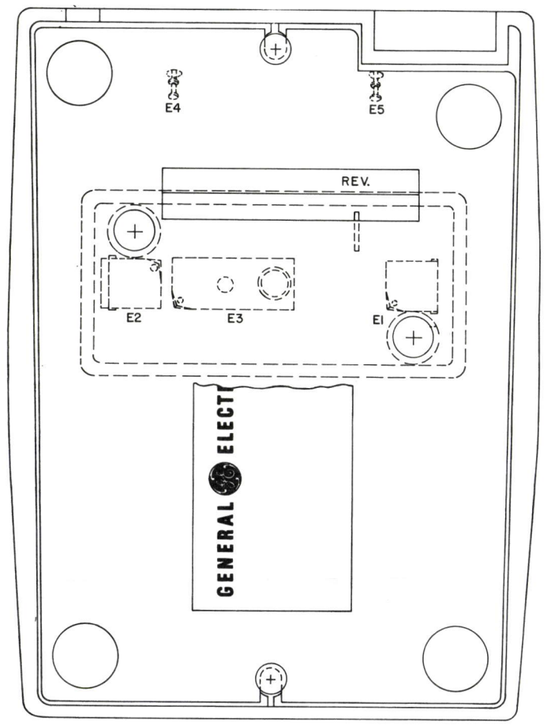
## 240 VAC OPERATION

Desk Charger Combination 391M1B2X is normally connected for 220 VAC operation. To change to 240 VAC operation, remove fuse F502 from TB501-4 and connect F502 to TB501-2. Refer to note 1 on the schematic diagram.

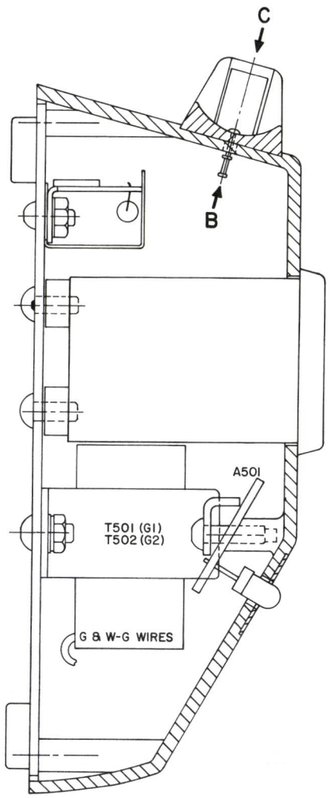
GENERAL ELECTRIC COMPANY • MOBILE COMMUNICATIONS DIVISION
WORLD HEADQUARTERS • LYNCHBURG, VIRGINIA 24502 USA

GENERAL ELECTRIC

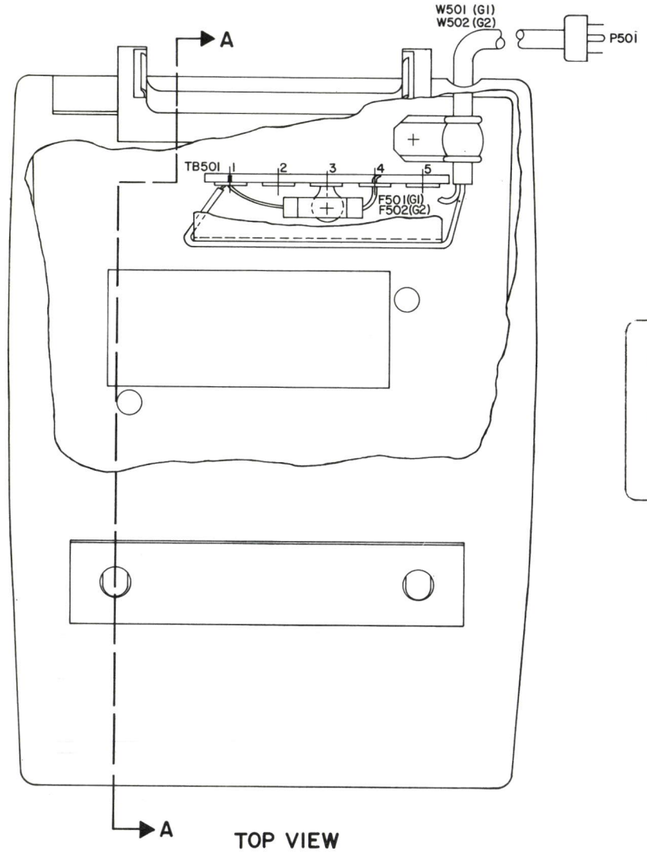
• Trademark of General Electric Company U.S.A.
Printed in U.S.A.



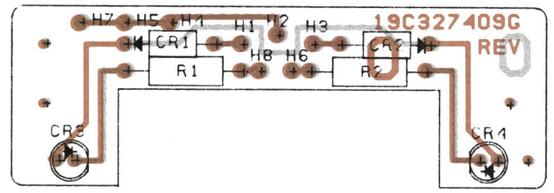

BOTTOM VIEW



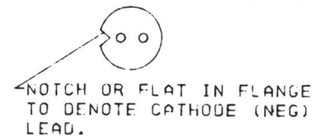

SECT. A-A



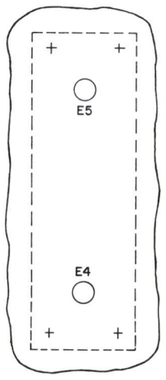

TOP VIEW



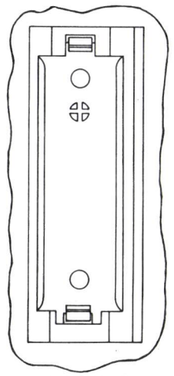

LEAD IDENTIFICATION FOR CR3 & CR4



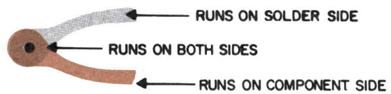

(19C327411, Rev. 1)
(19B227597, Sh. 1, Rev. 0)
(19B227597, Sh. 2, Rev. 0)




VIEW-B



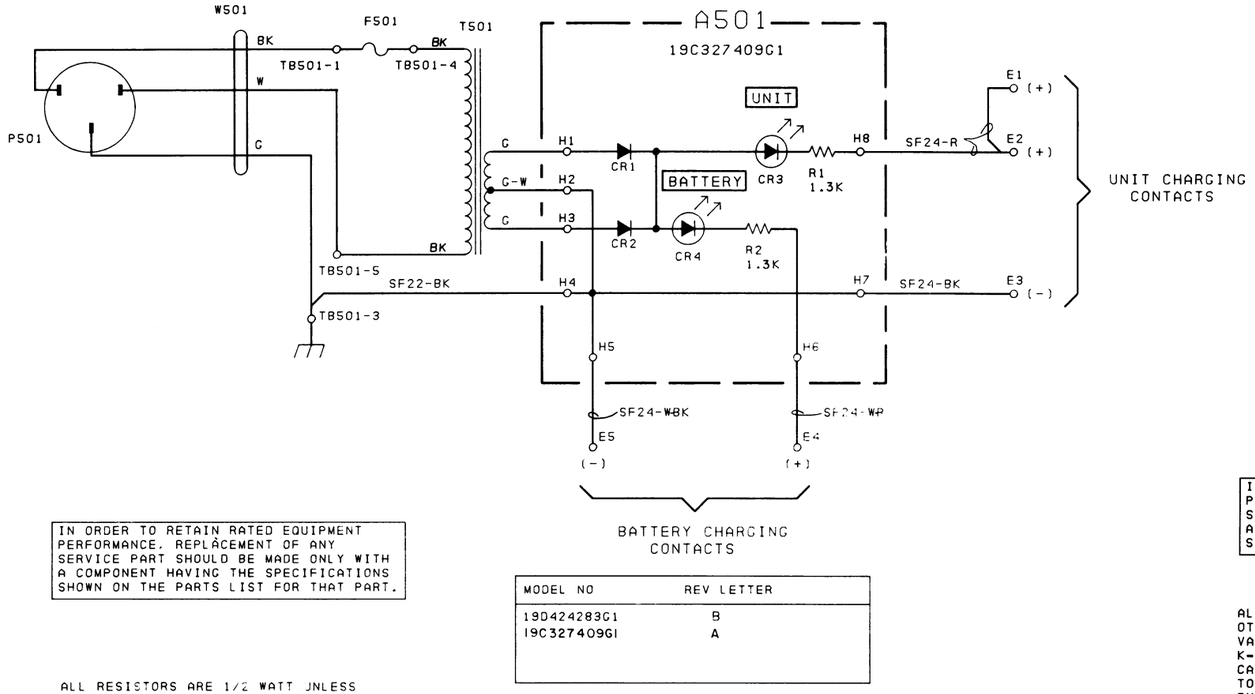
VIEW-C




(19D424823, Rev. 0)

## OUTLINE DIAGRAM

DESK CHARGER COMBINATIONS
391L1B2X AND 391M1B2X

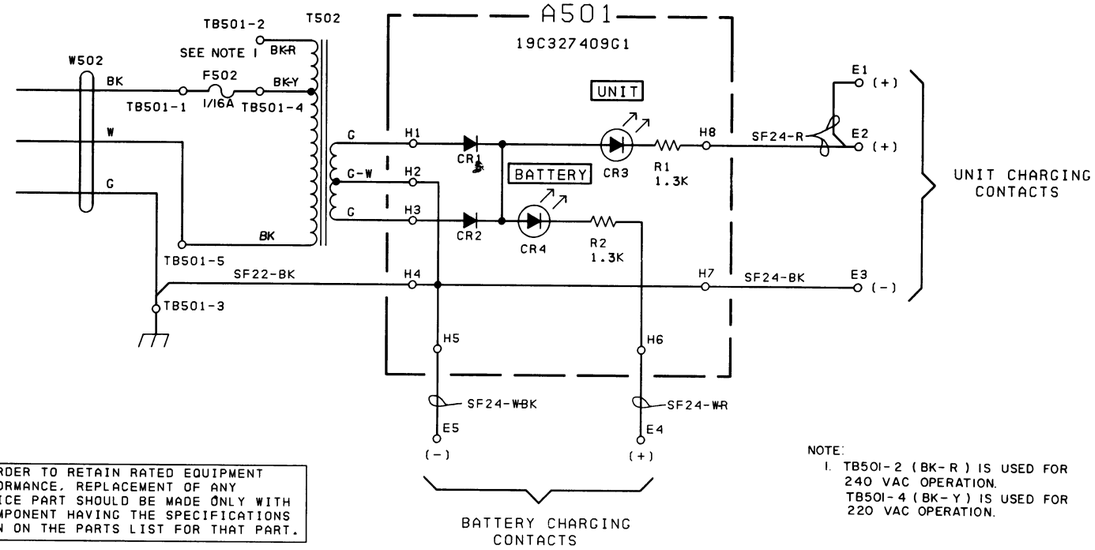



IN ORDER TO RETAIN RATED EQUIPMENT PERFORMANCE, REPLACEMENT OF ANY SERVICE PART SHOULD BE MADE ONLY WITH A COMPONENT HAVING THE SPECIFICATIONS SHOWN ON THE PARTS LIST FOR THAT PART.

ALL RESISTORS ARE 1/2 WATT UNLESS OTHERWISE SPECIFIED AND RESISTOR VALUES IN OHMS UNLESS FOLLOWED BY K=1000 OHMS OR MEG=1,000,000 OHMS. CAPACITOR VALUES IN PICOFARADS (EQUAL TO MICROMICROFARADS) UNLESS FOLLOWED BY UF=MICROFARADS. INDUCTANCE VALUES IN MICROHENRYS UNLESS FOLLOWED BY MH=MILLIHENRYS OR H=HENRYS.

| MODEL NO | REV LETTER |
|---|---|
| 19D424283G1 | B |
| 19C327409G1 | A |

(19C327407, Rev. 3)




IN ORDER TO RETAIN RATED EQUIPMENT PERFORMANCE, REPLACEMENT OF ANY SERVICE PART SHOULD BE MADE ONLY WITH A COMPONENT HAVING THE SPECIFICATIONS SHOWN ON THE PARTS LIST FOR THAT PART.

ALL RESISTORS ARE 1/2 WATT UNLESS OTHERWISE SPECIFIED AND RESISTOR VALUES IN OHMS UNLESS FOLLOWED BY K=1000 OHMS OR MEG=1,000,000 OHMS. CAPACITOR VALUES IN PICOFARADS (EQUAL TO MICROMICROFARADS) UNLESS FOLLOWED BY UF=MICROFARADS. INDUCTANCE VALUES IN MICROHENRYS UNLESS FOLLOWED BY MH=MILLIHENRYS OR H=HENRYS.

| MODEL NO | REV LETTER |
|---|---|
| PL19D424283G2 | C |
| PL19C327409G1 | A |

NOTE:
1. TB501-2 (BK-R) IS USED FOR 240 VAC OPERATION. TB501-4 (BK-Y) IS USED FOR 220 VAC OPERATION.

(19C327408, Rev. 5)

# SCHEMATIC DIAGRAM

## DESK CHARGER COMBINATIONS 391L1B2X AND 391M1B2X

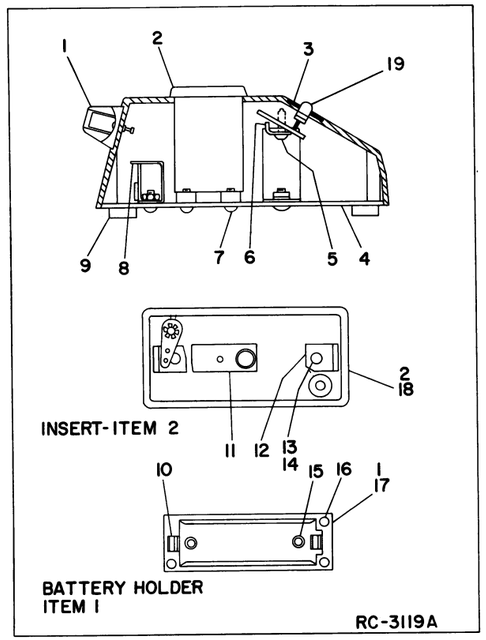
## PARTS LIST

LBI30402C

DESK CHARGER
19D424283G1 121 VAC COMBINATION 391L1B2X
19D424283G2 230 VAC COMBINATION 391M1B2X

| SYMBOL | GE PART NO. | DESCRIPTION |
|---|---|---|
| A501 | | CHARGER BOARD 19C327409G1 |
| | | - - - - - - - - DIODES AND RECTIFIERS - - - - - - |
| CR1 and CR2 | 4037822P1 | Silicon, 1000 mA, 400 PIV. |
| CR3 and CR4 | 19A134354P6 | Diode, optoelectronic: red; sim to Hew. Packard 4650. |
| | | - - - - - - - - - - RESISTORS - - - - - - - - - - |
| R1* and R2* | 3R77P132J | Composition: 1.3K ohms ±5%, 1/2 w. |
| | | Earlier than REV A: |
| | 3R77P152J | Composition: 1.5K ohms ±5%, 1/2 w. |
| | | - - - - - - - - - - FUSES - - - - - - - - - - |
| F501 | 19A116658P2 | Fuse, enclosed link: 1/8 amp at 250 v; sim to Bussman GJV 1/8. |
| F502* | 19A134948P3 | Fuse, enclosed link: 1/16 amp at 250 v; sim to Bussman MDV 1/16. |
| | | In REV B & earlier: |
| | 19A116658P1 | Fuse, enclosed link: 1/16 amp at 250 v; sim to Bussman GJV 1/16. |
| | | - - - - - - - - - - PLUGS - - - - - - - - - - |
| P501 | | (Part of W501). |
| | | - - - - - - - - - - TRANSFORMERS - - - - - - - - |
| T501* | 19A134695P1 | Power, step-down: rectifier, single phase, Pri: 117 v, 50/60 Hz, Sec 1: 25/25 ±2 VRMS. |
| | | In REV A & earlier: |
| | 19B209017P1 | Power: rectifier, single phase, Pri: 117 v, 50/60 Hz, Sec 1: 25/25 ±2 VRMS. |
| T502* | 19A134695P2 | Power, step-down: rectifier, single phase, Pri: 220/240 v, 50/60 Hz, Sec 1: 25/25 ±2 VRMS. |
| | | In REV A & earlier: |
| | 19B209017P2 | Power: rectifier, single phase, Pri: 220/240 v, 50/60 Hz, Sec 1: 25/25 ±2 VRMS. |
| | | - - - - - - - - - TERMINAL BOARDS - - - - - - - - |
| TB501 | 7775500P11 | Phen: 5 terminals. |
| | | - - - - - - - - - - CABLES - - - - - - - - - - |
| W501 | 19A136912G1 | Power: approx 8 feet long. (Includes P501). |
| W502 | 19A136912G2 | Power: approx 8 feet long. |
| | | BATTERY HOLDER 19B216914G2 |
| | | - - - - - - - - - - TERMINALS - - - - - - - - - - |
| E4 and E5 | 19A115296P1 | Terminal, standoff: sim to Cambridge Thermionic Corp X1558-BB. |

| SYMBOL | GE PART NO. | DESCRIPTION |
|---|---|---|
| | | MECHANICAL PARTS (SEE RC3119) |
| 1 | 19B216914G2 | Battery holder assembly. (Includes items 10, 15-17). |
| 2 | 19C317366G4 | Insert assembly. (Includes items 11-14, 18). |
| 3 | NP280286 | Nameplate, faceplate. |
| 4 | 19B233369G1 | Base. |
| 5 | 19A116773P108 | Tap screw, Phillips POZIDRIV®: No. 7-19 x 1/2. |
| 6 | 19A136832P1 | Angle. |
| 7 | N136P1305C6 | Tap screw, phillips head: No. 6-32 x 5/16. |
| 8 | 19B219105P2 | Fuse cover. |
| 9 | 19A116417P1 | Bumper, plastic. |
| 10 | 19B216876P1 | Contact. |
| 11 | 19A127739G1 | Contact. |
| 12 | 19B216851P1 | Contact. |
| 13 | N136AP503C | Tap screw, Phillips POZIDRIV: No. 2-32 x 3/16. |
| 14 | N404P8C13 | Lockwasher, internal tooth: No. 2. (Not Used). |
| 15 | 19A115296P1 | Terminal, standoff: sim to Cambridge Thermionic Corp X1558-BB. (E4, E5). |
| 16 | N136P504C | Tap screw, phillips head: No. 2-32 x 1/4. |
| 17 | 19C317408P2 | Holder. |
| 18 | 19E500908P1 | Insert. |
| 19 | 19A134521P1 | Lens, panel light. |




## PRODUCTION CHANGES

Changes in the equipment to improve performance or to simplify circuits are identified by a "Revision Letter," which is stamped after the model number of the unit. The revision stamped on the unit includes all previous revisions. Refer to the Parts List for descriptions of parts affected by these revisions.

REV. A - Charger 19D422283G1&G2
REV. A - Charger Board 19C327409G1
To increase charging current.
Changed R1 and R2.

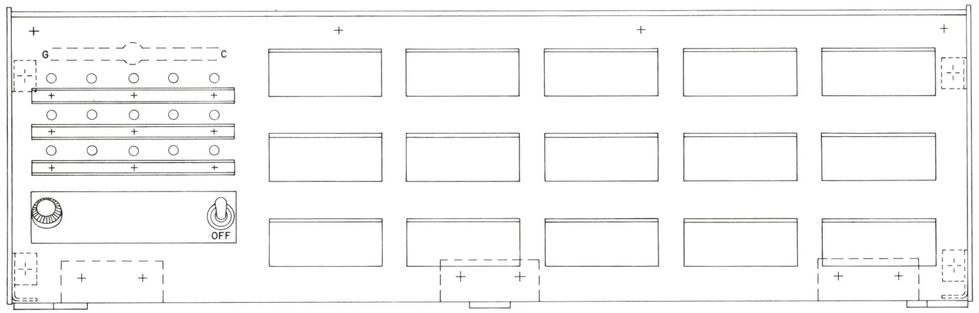
REV..A - Charger 19D424283G1&G2
To improve tranformer regulation.
Changed T501 and T502.

REV. B - To improve transformer regulation.
Changed T501 and T502.

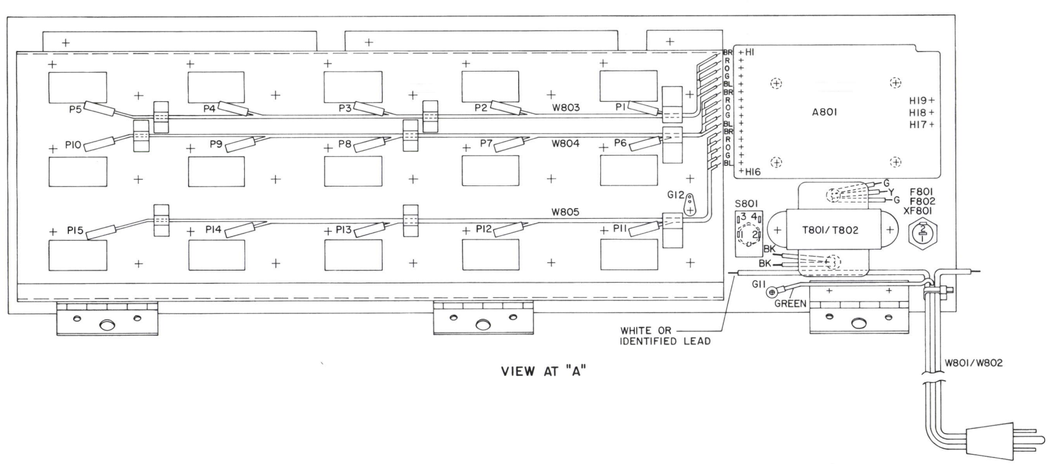
REV. C - Charger 19D424283G2
To prevent fuse from blowing when power is initially applied.
Changed F502.



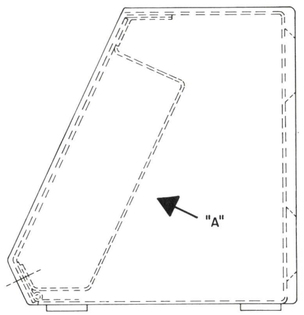
*COMPONENTS ADDED, DELETED OR CHANGED BY PRODUCTION CHANGES



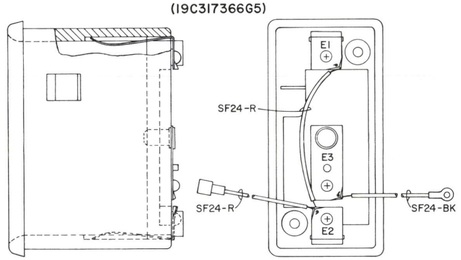

FRONT VIEW



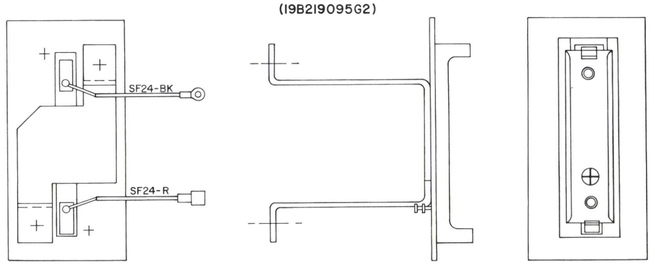

VIEW AT "A"

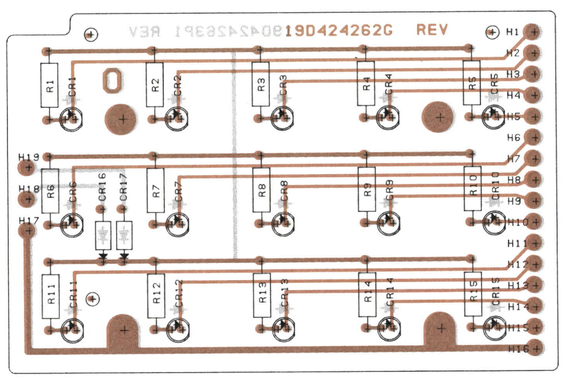



INSERT
(19C317366G5)

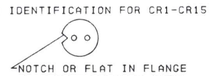



HOLDER
(19B219095G2)

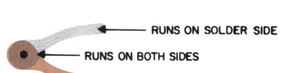



LEAD IDENTIFICATION FOR CR1-CR15



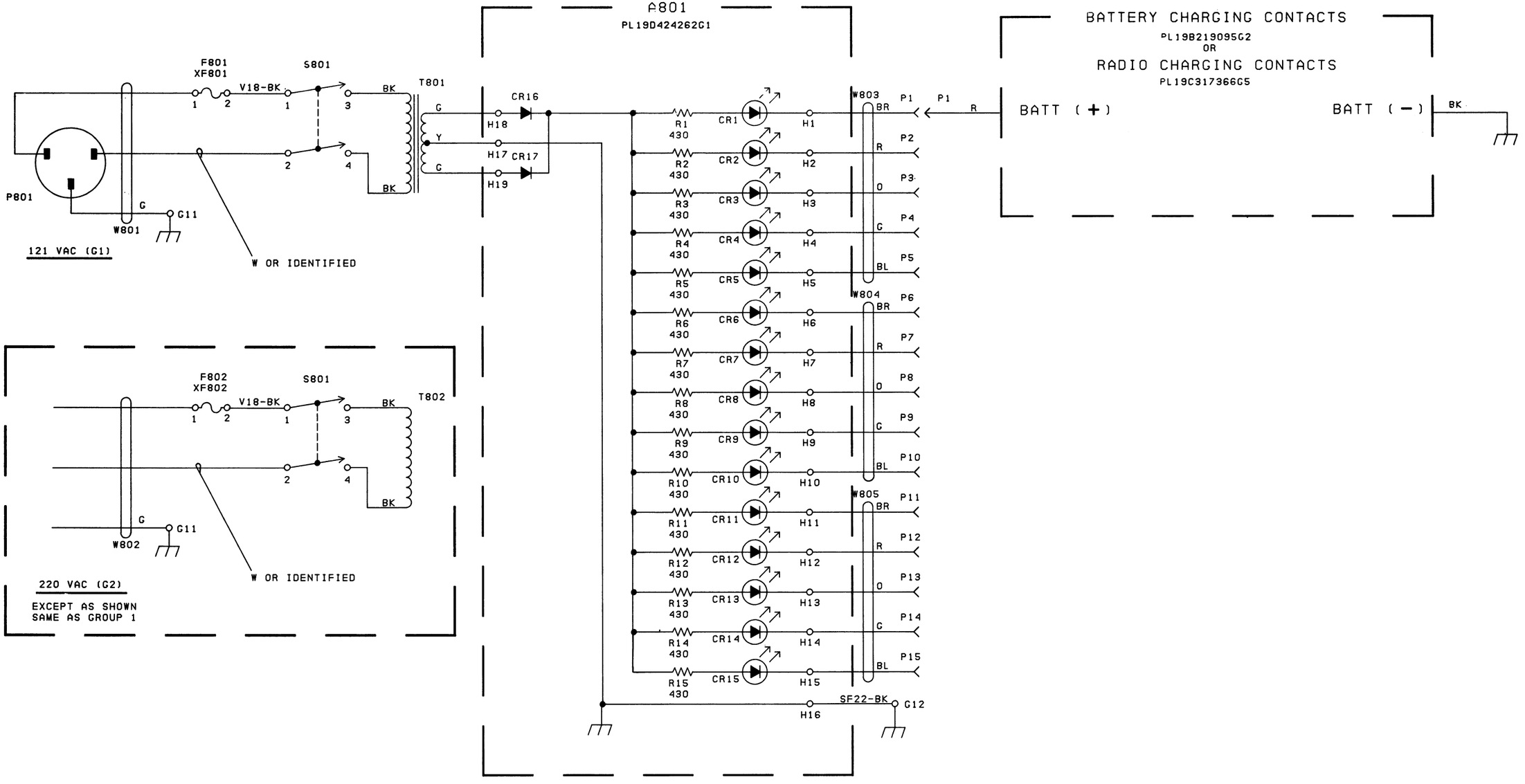

(19C327427, Rev. 1)
(19B227609, Sh. 1, Rev. 0)
(19B227609, Sh. 2, Rev. 0)




## OUTLINE DIAGRAM

(19D424836, Rev. 0)

MULTI-CHARGER COMBINATIONS
392L1B1X AND 392M1B1X




| MODEL NO | REV LETTER |
|---|---|
| 19D424289G1<br>19D424289G2<br>19D424262G1 | A |

ALL RESISTORS ARE 1/2 WATT UNLESS OTHERWISE SPECIFIED AND RESISTOR VALUES IN OHMS UNLESS FOLLOWED BY K=1000 OHMS OR MEG=1,000,000 OHMS. CAPACITOR VALUES IN PICOFARADS (EQUAL TO MICROMICROFARADS) UNLESS FOLLOWED BY UF=MICROFARADS. INDUCTANCE VALUES IN MICROHENRYS UNLESS FOLLOWED BY MH=MILLIHENRYS OR H=HENRYS.

IN ORDER TO RETAIN RATED EQUIPMENT PERFORMANCE, REPLACEMENT OF ANY SERVICE PART SHOULD BE MADE ONLY WITH A COMPONENT HAVING THE SPECIFICATIONS SHOWN ON THE PARTS LIST FOR THAT PART.

(19D424264, Rev. 2)

## SCHEMATIC DIAGRAM

**MULTI-CHARGER COMBINATIONS 392L1B1X AND 392M1B1X**

## PARTS LIST

LBI30403A

MULTICHARGER
COMBINATION 392L1B1X 19D424289G1 121 VAC
COMBINATION 392M1B1X 19D424289G2 220 VAC

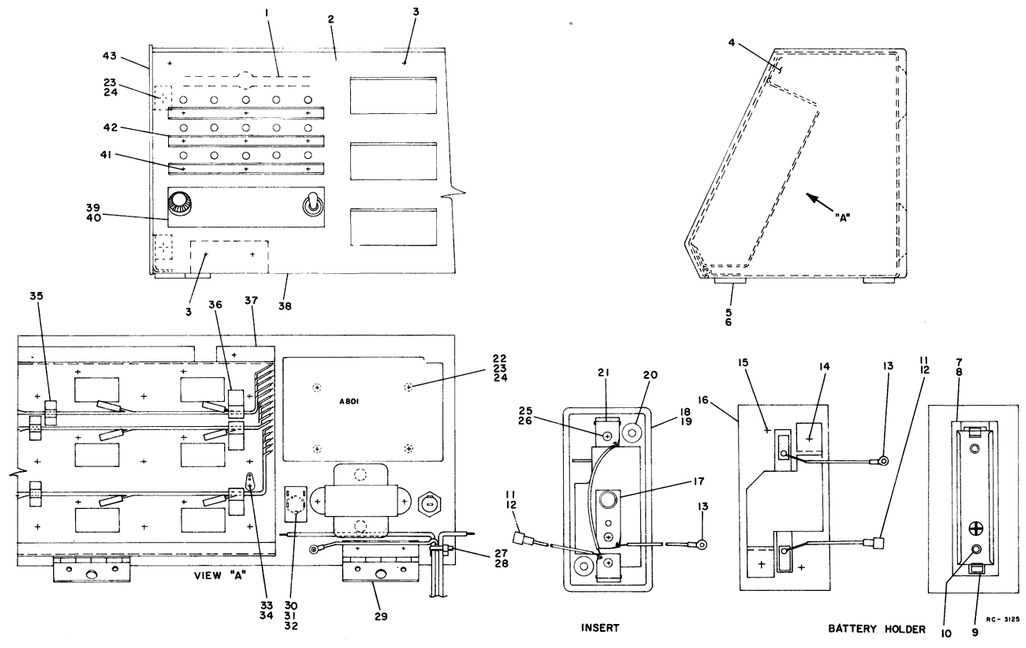
| SYMBOL | GE PART NO. | DESCRIPTION |
|---|---|---|
| A801 | | MULTICHARGER 19D424262G1 |
| | | - - - - - - - - DIODES AND RECTIFIERS - - - - - - - - |
| CR1 thru CR15 | 19A134354P6 | Diode, optoelectronic: red; sim to Hew. Packard 5082-4650. |
| CR16 and CR17 | 4037822P1 | Silicon, 1000 mA, 400 PIV. |
| | | - - - - - - - - - - RESISTORS - - - - - - - - - - |
| R1 thru R15 | 3R77P431J | Composition: 430 ohms ±5%, 1/2 w. |
| | | - - - - - - - - - - - FUSES - - - - - - - - - - - |
| F801 | 1R16P1 | Quick blowing: 1/2 amp at 250 v; sim to Littelfuse 312.500 or Bussmann AGC-1/2. |
| F802* | 7487942P1 | Slow blowing: 1/4 amp at 250 v; sim to Bussmann MDL-1/4. |
| | | Earlier than REV A: |
| | 1R16P13 | Quick blowing: 1/4 amp at 250 v; sim to Littelfuse 312.250 or Bussmann AGC-1/4. |
| | | - - - - - - - - - - - - PLUGS - - - - - - - - - - |
| P801 | | (Part of W801). |
| | | - - - - - - - - - - - SWITCHES - - - - - - - - - - |
| S801 | 5491899P2 | Toggle: DPST, 6 amps at 125 VAC/VDC; sim to Cutler-Hammer 8370K8. |
| | | - - - - - - - - - - TRANSFORMERS - - - - - - - - - - |
| T801 | 19A134178P1 | Power, step-down: Pri: 121 VRMS, 50/60 Hz., Sec: 1500 VRMS, 60 Hz. |
| T802 | 19A134178P2 | Power, step-down: Pri: 220 VRMS, 50/60 Hz., Sec: 1500 VRMS, 60 Hz. |
| | | - - - - - - - - - - - CABLES - - - - - - - - - - - |
| W801 | 19B227086G3 | Power: approx 6 feet long. Includes (P801) and 19B209260P2 terminal. |
| W802 | 19B227086G4 | Power: 3 conductor; approx 6 feet long. Includes: |
| | 19B209260P2 | Terminal, solderless: wire range No. 20-16; sim to AMP 41733. |
| W803 | | CABLE ASSEMBLY 19B227729G1 |
| | | - - - - - - - - - - - PLUGS - - - - - - - - - - - |
| P1 thru P5 | | Connector. Includes: |
| | 19B209505P21 | Contact, female: wire size No. 18-24. |
| | 19B209505P201 | Shell. |
| W804 | | CABLE ASSEMBLY 19B227729G1 |
| | | - - - - - - - - - - - PLUGS - - - - - - - - - - - |
| P6 thru P10 | | Connector. Includes: |
| | 19B209505P21 | Contact, female: wire size No. 18-24. |
| | 19B209505P201 | Shell. |

| SYMBOL | GE PART NO. | DESCRIPTION |
|---|---|---|
| W805 | | CABLE ASSEMBLY 19B227729G1 |
| | | - - - - - - - - - - - PLUGS - - - - - - - - - - - |
| P11 thru P15 | | Connector. Includes: |
| | 19B209505P21 | Contact, female: wire size No. 18-24. |
| | 19B209505P201 | Shell. |
| | | - - - - - - - - - - SOCKETS - - - - - - - - - - |
| XF801 | 19B209005P1 | Fuseholder: 15 amps at 250 v; sim to Littelfuse 342012. |
| | | INSERT ASSEMBLY 19C317366G5 |
| | | - - - - - - - - - - TERMINALS - - - - - - - - - - |
| E1 and E2 | 19B216851P1 | Contact. |
| E3 | 19A127739G1 | Contact. |
| | | MECHANICAL PARTS (SEE RC3125) |
| 1 | NP280291PA | Nameplate. |
| 2 | 19B219023G3 | Plate. |
| 3 | N80P13004C6 | Machine screw: No. 6-32 x 1/4. |
| 4 | 19C317192G4 | Side plate. |
| 5 | 19A134365P1 | Rubber bumper. |
| 6 | 19A134366P1 | Rivet, tubular. |
| 7 | 19B216914G2 | Holder. (Includes items 8-10). |
| 8 | 19C317408P2 | Holder. |
| 9 | 19B216876P1 | Contact. |
| 10 | 19A115296P1 | Terminal, stud: sim to Cambridge Thermionic Corp. X1558-BB. (E4, E5). |
| 11 | 19B209505P20 | Contact, electrical: male, wire size 18-24. |
| 12 | 19B209505P101 | Connector shell. |
| 13 | 7491823P1 | Terminal, solderless: wire size 26-22 AWG. |
| 14 | 19B201074P206 | Tap screw, Phillips POZIDRIV®: No. 4-40 x 3/8. |
| 15 | N136P504C | Tap screw: No. 2-32 x 1/4. |
| 16 | 19B219080G1 | Plate. |
| 17 | 19A127739G1 | Contact. (E3). |
| 18 | 19C317366G5 | Insert. (Includes items 11, 12, 13, 17-21, 25, 26). |
| 19 | 19E500908P1 | Insert. |
| 20 | 19B201074P304 | Tap screw, Phillips POZIDRIV®: No. 6-32 x 1/4. |
| 21 | 19B216851P1 | Contact. (E1, E2). |
| 22 | 7150186P111 | Spacer, sleeve. |
| 23 | 7141225P3 | Hex nut: No. 6-32. |
| 24 | N404P13C6 | Lockwasher, internal tooth: No. 6. |
| 25 | N136P503C | Tap screw: No. 2-32 x 3/16. |
| 26 | N404P8C13 | Lockwasher, internal tooth: No. 2. |
| 27 | 19A115185AP5 | Retainer strap: sim to Panduit Corp. SST-1. |
| 28 | 19A115185P2 | Retainer strap: sim to Thomas and Betts TY-525M. |
| 29 | 19B216619G1 | Hinge. |
| 30 | 7115195P2 | Hex nut: No. 15/32-32. |
| 31 | 7115130P11 | Lockwasher: No. 15/32; sim to Shakeproof 1222-1. |
| 32 | 4033394P1 | Nut, knurled: No. 15/32-32. |
| 33 | 19B201074P305 | Tap screw, Phillips POZIDRIV®: No. 6-32 x 5/16. |
| 34 | 4036994P1 | Terminal, solder: sim to Zierick Mfg Corp 505. |
| 35 | 19A134403P1 | Clip, cable. |
| 36 | 19A134403P4 | Clip, cable. |
| 37 | 19D413686P2 | Support. |
| 38 | 19D413322G3 | Support. |
| 39 | NP280287 | Nameplate. (Used with 19D424289G1). |
| 40 | NP280290 | Nameplate. (Used with 19D424289G2). |
| 41 | 19B200525P4 | Rivet, tubular. |
| 42 | 19A136890G1 | Guide. |
| 43 | 19C317192G3 | Plate. |

## PRODUCTION CHANGES

Changes in the equipment to improve performance or to simplify circuits are identified by a "Revision Letter," which is stamped after the model number of the unit. The revision stamped on the unit includes all previous revisions. Refer to the Parts List for descriptions of parts affected by these revisions.

REV. A - Multi-Charger 19D424289G2
To prevent fuse from blowing when power is initially applied.
Chsnged F802.






*COMPONENTS ADDED, DELETED OR CHANGED BY PRODUCTION CHANGES