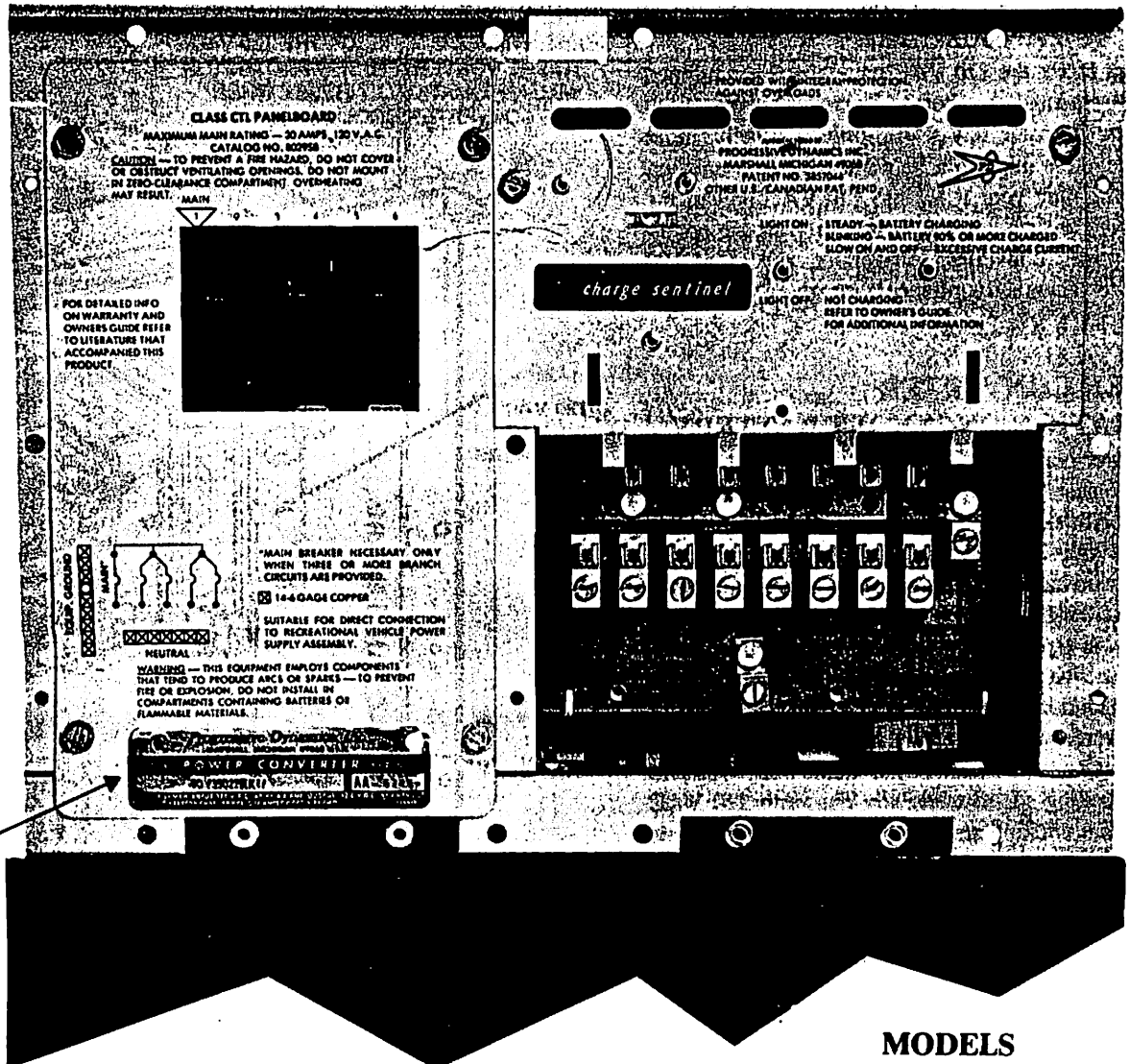


7300 & 7600 SERIES ELECTRICAL CONTROL CENTER OWNER'S MANUAL



& MODEL
NUMBER LABEL

7300 SERIES SHOWN

MODELS

PD-7338
PD-7340
PD-7348
PD-7648
PD-7655



Progressive Dynamics Inc.
507 Industrial Road, Marshall, Mich. 49068
Phone (616) 781-4241

INTRODUCTION

Congratulations. Your R.V. is equipped with the very latest and most advanced Electrical Control System. Your new Electrical Control Center is designed as a combination distribution panelboard/power converter. The distribution panelboard gives you overcurrent protection for all the 120 VAC wiring in your R.V. The power converter changes the incoming 120 VAC down to a safe 12 VDC to power your interior lights, fans, pumps, etc.

120 VAC PANELBOARD

On most R.V.s the 120 VAC panelboard is equipped with a 30 amp main breaker and 3 or more branch circuit breakers. On some R.V.s with only 2 branch circuit breakers, there might not be a main 30 amp breaker. When you plug your R.V. into 120 VAC power, the panelboard distributes the power to your air conditioner, power converter, refrigerator, and other 120 VAC receptacles and appliances throughout your coach.

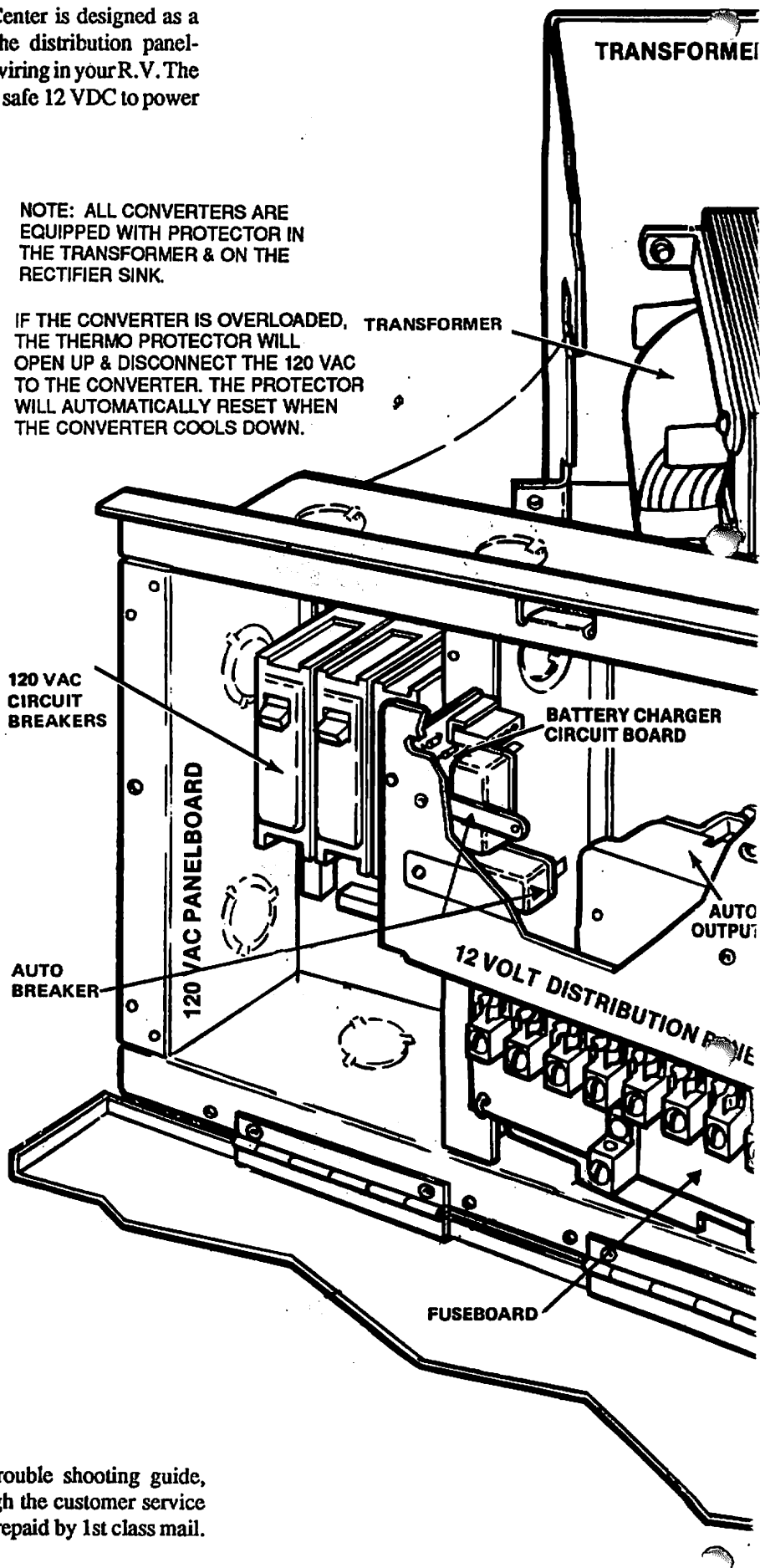
POWER CONVERTER

OPERATION ON 12 VOLT BATTERY

The power converter section of the electrical control center consists of the transformer module and the 12 volt distribution panel. The transformer module contains the individual 12 VDC fuses for all the circuits from the converter. The removable printed circuit board for the battery charger is also housed in the 12 volt panel. Your power converter is equipped with an automatic power changeover relay which is located in the 12 volt distribution panel. This automatic relay transfers R.V. power from the transformer to the R.V. battery. On converters equipped with the automatic relay, you will hear a clicking sound when you plug into 120 VAC power. The clicking sound tells you the converter is operating. When plugged into 120 VAC power, all the 12 volt lights, fans, etc. are operating directly from the transformer of the converter. In this condition the battery is held in reserve. The battery will be charged in this condition.

NOTE: ALL CONVERTERS ARE EQUIPPED WITH PROTECTOR IN THE TRANSFORMER & ON THE RECTIFIER SINK.

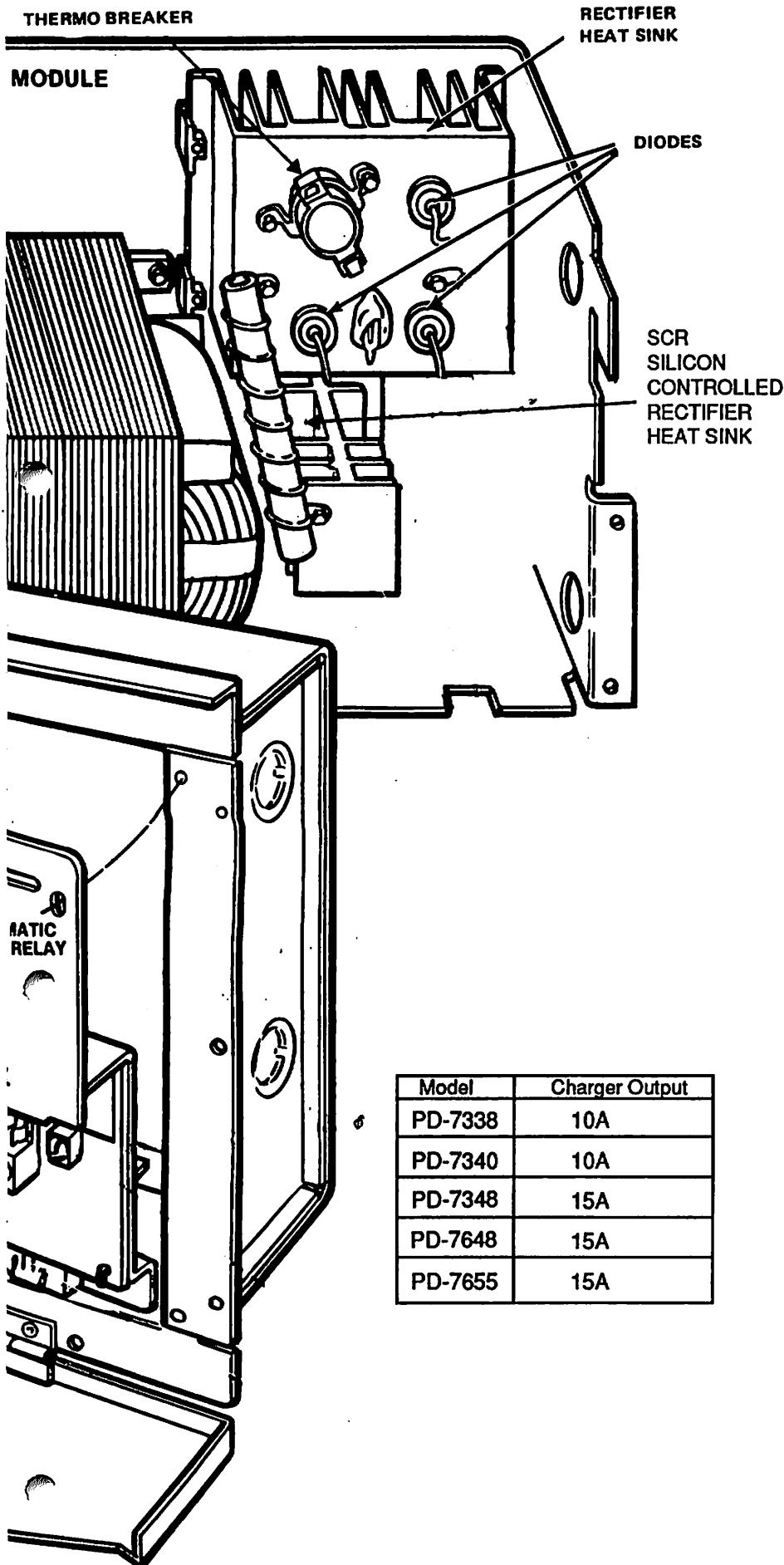
IF THE CONVERTER IS OVERLOADED, TRANSFORMER THE THERMO PROTECTOR WILL OPEN UP & DISCONNECT THE 120 VAC TO THE CONVERTER. THE PROTECTOR WILL AUTOMATICALLY RESET WHEN THE CONVERTER COOLS DOWN.



CONVERTER REPAIR MANUAL

A complete converter repair manual with parts lists, trouble shooting guide, Electrical Schematics, and pricing may be ordered through the customer service department at Progressive Dynamics, Inc. Price is \$9.00 prepaid by 1st class mail.

TYPICAL INTERNAL VIEW



POWER CONVERTER OPERATION ON 120 VAC

Your power converter is equipped with the automatic power relay and is normally in the BATTERY position. When you wish to run self contained on battery power only, you merely have to turn on the lights or any 12 volt appliance.

When your power converter is operating on battery, the 12 volt battery power enters the converter through the power relay and on through the 12 volt distribution panel to the various 12 volt appliances. The battery is then supplying power to the same appliances as the transformer was previously powering.

BATTERY CHARGER OPERATION

The battery charger portion of your power converter is fully automatic. When your R.V. is plugged into 120 VAC power, the charger will automatically bring your battery to a full charge condition then taper off to a trickle charge to maintain full charge condition. Warning: Check your R.V. battery water level weekly.

CHARGE SENTINEL LIGHT (L.E.D.)

A visual indication of the amount of current that is charging your battery from the power converter. However, this is only an indication of a charge to the battery. If any problems occur with the charge sentinel light, you should put an ammeter between the converter and battery to see if the charger is working correctly.

LIGHT (L.E.D.) INDICATES

1. Continuous bright light. Battery is being charged. This will change to a flashing light as explained in number 3.
2. Continuous bright light on all the time: Battery is being over charged. Loss of water in the battery is an indication of this condition.
3. Flashing light: Battery has reached approximately 90% of full charge. It will continue to flash several times a second as long as the battery is over 90% of full charge under normal conditions.
4. No Light:

A. Battery is fully charged. This condition happens to a few units, but is a normal condition.

B. No charge going to the battery.

Warning: The charge sentinel will not work when there is no battery in the R.V. or when the converter is not plugged into 120 VAC power.

C. L.E.D. (Light Emitting Diode) is defective. Replace L.E.D. or replace the P.C. board.

5. Light stays on after converter or 120 VAC power is unplugged: P.C. board is defective. Have it repaired or replaced.

Model	Charger Output
PD-7338	10A
PD-7340	10A
PD-7348	15A
PD-7648	15A
PD-7655	15A

TROUBLE SHOOTING PROCEDURES BEFORE REMOVING CONVERTER

If the R.V. has a converter problem, check the following items before removing the converter.

- (1) Make sure 120 volt A.C. power is connected to the R.V.
- (2) Check the circuit breakers in the R.V. distribution box to make sure they are ON.
- (3) Check the fuses and circuit breakers on the power converter to make sure they are ON.
- (4) Disconnect 120 VAC power to the R.V. and remove the front cover of the power converter. Check all wiring for loose connections. Make sure wires are connected to the proper circuits.

PROBLEM:

12 volt lights, fans and motors operate properly on converter or transformer but will not operate on battery power.

Using a 12 volt test light or hydrometer, test the condition of the battery to be sure it is fully charged. Check all battery terminals for loose or dirty connections. Check the negative connection where it attaches to the R.V. frame.

Using a 12 volt test light, check between the negative terminal and the battery positive terminal on the 12 VDC DISTRIBUTION PANEL to be sure the battery voltage is reaching the converter. If there is no voltage at this point, check for blown or tripped fuses or breakers between the battery and the converter. If there is no voltage at this point, test between the same negative terminal and the positive load terminal on the converter output fuse. If you have no voltage here, test the battery-transformer switch or relay.

If the converter has a battery-transformer switch, be sure it is in the BATTERY position. Check for continuity through the switch. If the converter has an automatic relay, be sure it operates freely and there is good contact between the points. Check for continuity through the relay points. You may have to bend the contacts for a better connection. Never file the contacts.

If none of the above locates the problem, contact customer service.

PROBLEM:

12 Volt lights, fans and motors operate properly on battery power but will not operate from the converter or transformer.

Check the 120 VAC power cord for firm connection. Check the 120 VAC distribution panel for tripped circuit breakers.

With the 120 VAC power turned off, check for loose connections in the wiring compartment. Test all wiring to the transformer to be certain the transformer is receiving power. On manual converters, be certain the switch is in the TRANSFORMER position. Check for continuity through the switch. On Automatic converters, listen for a clicking sound when the 120 VAC is turned on. If you fail to hear the click, check the relay for dirt or other obstructions on the armature coil. If the relay won't energize, check for bad diodes. (See diode replacement procedure below.)

If none of the above locates the problem, contact customer service.

PROBLEM:

Converter supplies power to RV lights, fans, and motors but does not charge battery.

With the power turned off, check the converter for loose wires in the 12 volt distribution panel.

With an ammeter installed in the positive line between the converter and the battery, there should be a steady current flow. This will vary from the maximum charge rate marked on the model number plate located on the AC panel board cover down to a minimum of 1 amp when the voltage reaches 13.6 volts.

At that point, the charge sentinel light should proceed to flicker and the ammeter should show an intermittent on/off charge. When a no charge condition exists, first jumper the DC autobreaker on the back left of the DC distribution panel. This is mounted between the circuit board and the large relay in the center of the panel. If this does not solve the problem, the circuit board should be replaced or sent back to the factory for repair.

If none of the above locates the problem, contact Customer Service.

PROBLEM:

Converter overcharges the battery.

With all 120 VAC power turned off, check the wiring to the converter to be sure the hot lead (positive) from the battery is connected to the BATTERY POSITIVE terminal on the 12 VDC.

Also check for capacitors on the blue load circuits. They are sometimes incorrectly used as electronic filters for motors and radios. We recommend the PD-734 electronic filter to eliminate radio noise. Be sure all connections to the circuit board are tight and the plug to the circuit board is firmly in place.

Replace the printed circuit board and see if the charging stops. Printed circuit boards may be returned to the factory for testing and repair. The printed circuit board is located in the 12 VDC distribution panel.

If replacing the printed circuit board doesn't correct the overcharging problem completely, remove the printed circuit board again and see if all charging to the battery stops. If this doesn't stop all charging to the battery, the SCR (silicon controlled rectifier) must be replaced. The SCR is located in the transformer module. (See cut-away illustration inside this manual.) The procedure for SCR replacement is the same as diode replacement shown below.

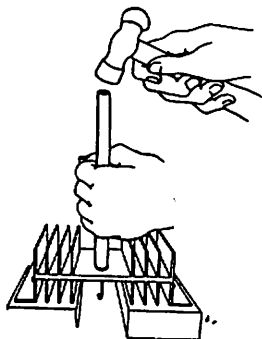
If none of the above solves the problem, contact customer service.

PROBLEM:

Converter trips 120 VAC circuit breaker each time the R.V. is plugged in.

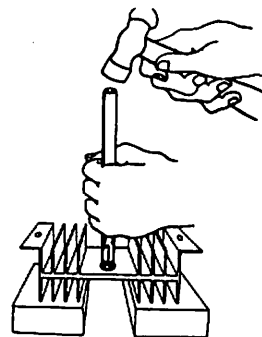
This problem is normally caused by shorted diodes in the rectifier section of the converter. With the power turned off, remove the transformer module from the back of the electrical control center. It is not necessary to remove the entire unit.

Use a soldering iron to remove all wires connected to the diodes. Make a wiring sketch to be sure the wires are correctly installed when you replace the diodes or rectifier. Remove the rectifier heat sinks by unbolting or drilling out the pop rivets. Remove the diodes by following the sequence illustrated below. It is best to preplace all diodes to prevent further problems.



Removing Rectifier Diodes

**FOR CUSTOMER SERVICE:
616/781-4241**



Installing Rectifier Diodes

After replacing the diodes, re-install the rectifier heat sinks being careful to replace the insulating washers between the heat sink and the case. Solder all wires per your sketch and replace the transformer module on the electrical control center.

PROGRESSIVE DYNAMICS

SERVICE MANUAL

710778

Rev. A

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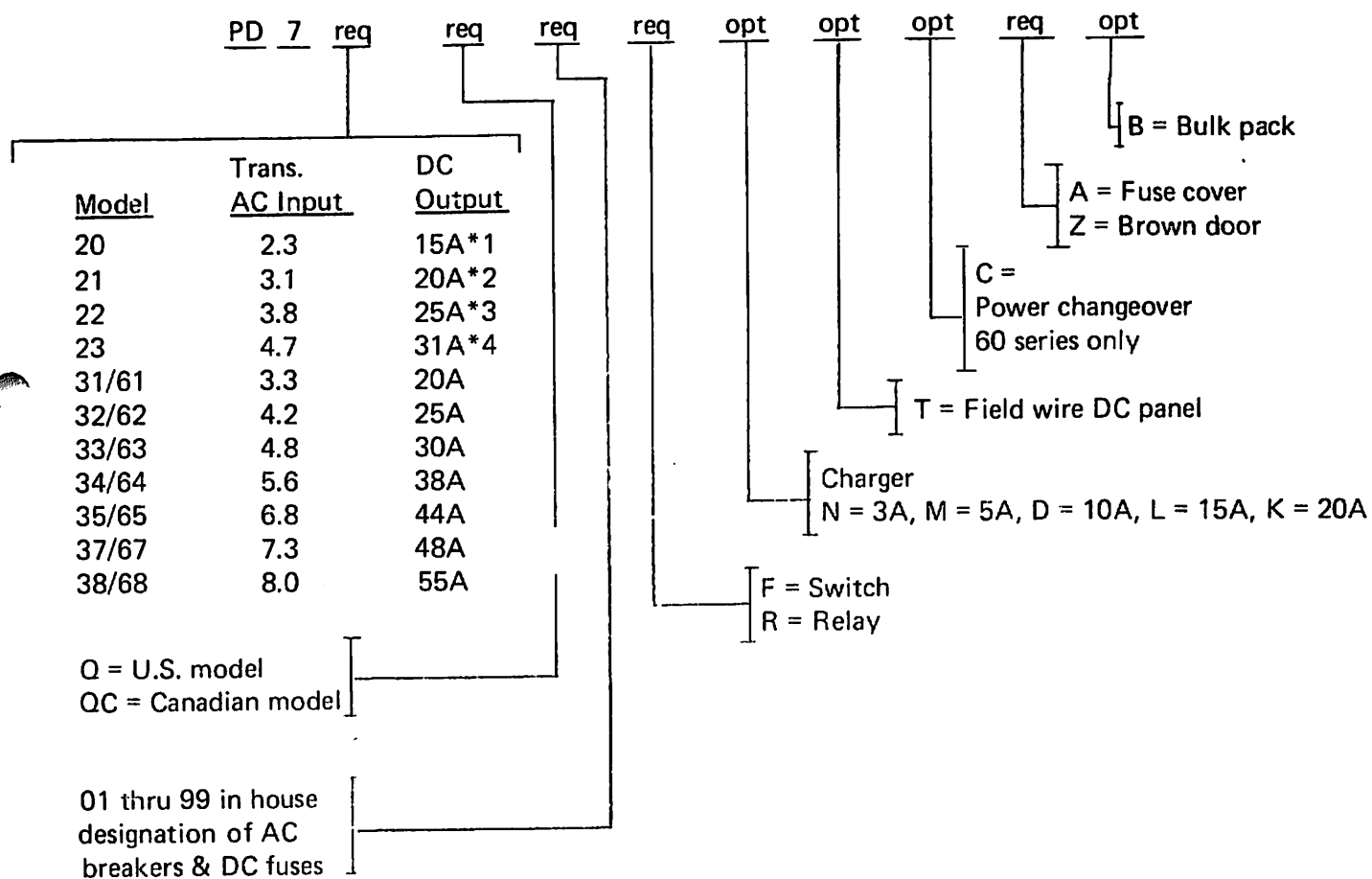
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**TROUBLE SHOOTING THE ELECTRICAL CONTROL
CENTER POWER CONVERTER**

Models PD 720Q-723Q, PD731Q-738Q,
PD731-733, PD743-746, PD753-756,
PD761Q-768Q, PD773-776, PD7220
7231, 7338, 7348, 7648, 7655

PD720 THRU PD768 MODEL NUMBER MAKE-UP

OPTIONS NOT AVAILABLE ON ALL MODELS



*1 *2 - Canadian model not available

*3 - "C" model 3.2 amps input, 21 amps output.

*4 - "C" model 4.0 amps input, 26 amps output.

"CQ" not available.

"CQ" not available.

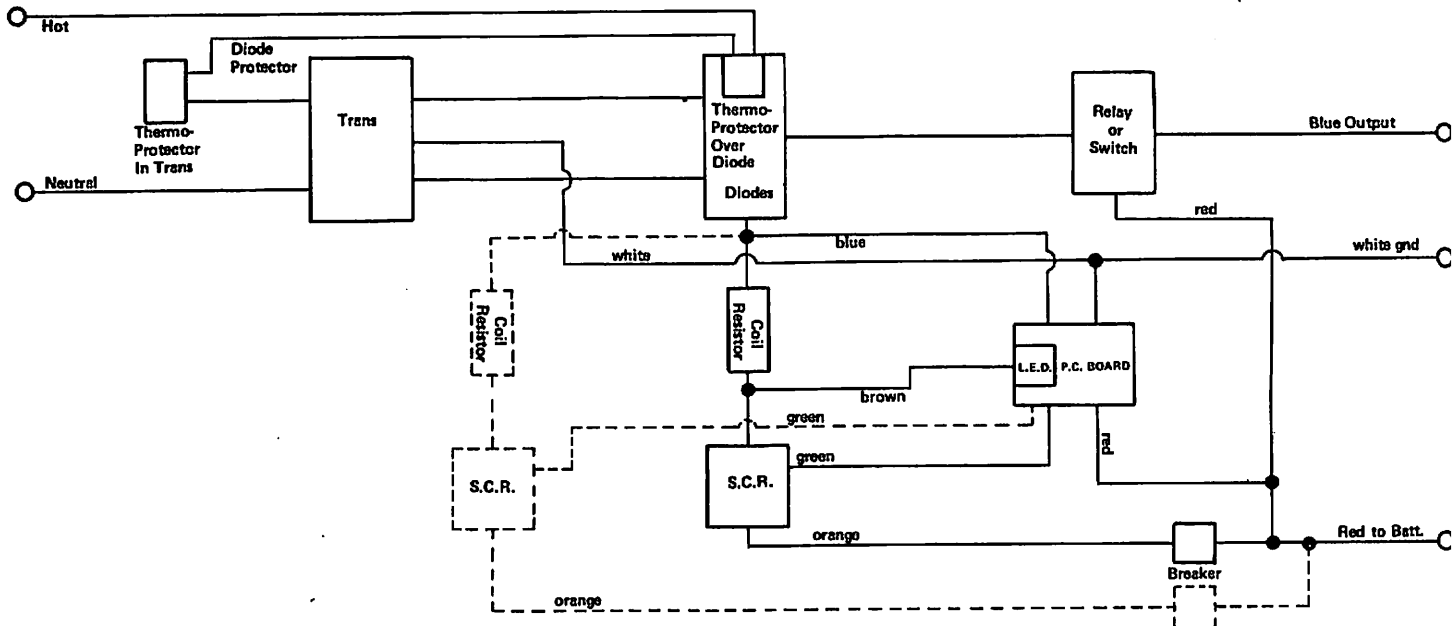
PROGRESSIVE DYNAMICS STANDARD MODEL POWER CONVERTERS

- PD6806 6 Amp Power Converter, UL & CSA approved, with manual battery to converter switch, two (2) 15 Amp fused DC output circuits, a dual 15 Amp AC circuit breaker, 115 VAC convenience outlet, bulk pack
- PD6809 9 Amp Power Converter, UL & CSA approved, with manual battery to converter switch, two (2) 15 Amp fused DC output circuits, a dual 15 Amp AC circuit breaker, 115 VAC convenience outlet, bulk pack
- PD6815 15 Amp Power Converter, UL & CSA approved, with manual battery to converter switch, two (2) 15 Amp fused DC output circuits, a dual 15 Amp AC circuit breaker, 115 VAC convenience outlet, bulk pack
- PD7220 20 Amp Power Converter, UL & CSA approved, with a 3 Amp battery charger, dual 20/15 AC circuit breaker installed, with the 15 Amp connected to the Converter circuit, a DC fuse board, with three (3) standard output circuits, and one (1) isolated circuit, automatic battery to converter relay, single pack
- PD7231 31 Amp Power Converter, UL & CSA approved, with a 5 Amp battery charger, dual 20/15 Amp AC circuit breaker installed, with the 15 Amp connected to the Converter circuit, a DC fuse board, with three (3) standard output circuits, and one (1) isolated circuit, automatic battery to converter relay, single pack
- PD7338 38 Amp Power Converter, UL & CSA approved, with a 10 Amp battery charger, one (1) dual 20/15 Amp AC circuit breaker installed, with the 15 Amp connected to the converter circuit, a DC fuse board, with seven (7) standard output circuits, and three (3) isolated circuits, automatic battery to converter relay, a brown door, bulk pack
- PD7348 48 Amp Power Converter, UL & CSA approved, with a 15 Amp battery charger, one (1) dual 20/15 Amp AC circuit breaker installed, with the 15 Amp connected to the converter circuit, a DC fuse board, with seven (7) standard output battery to converter relay, brown door, bulk pack
- PD7648 48 Amp Power Converter, UL & CSA approved, with a 15 Amp battery charger, one (1) dual 20/15 Amp AC circuit breaker installed, with the 15 Amp connected to the converter circuit, a DC fuse board, with seven (7) standard output circuits, and three (3) isolated circuits, automatic battery to converter relay, automatic generator to shore power transfer relay, bulk pack
- PD7655 55 Amp Power Converter, UL & CSA approved, with a 15 Amp battery charger, one (1) dual 20/15 Amp AC circuit breaker installed, with the 15 Amp connected to the converter circuit, a DC fuse board, with seven (7) standard output circuits, and three (3) isolated circuits, automated battery to converter relay, automatic generator to shore power transfer relay, bulk pack

TROUBLE SHOOTING THE ELECTRICAL CONTROL CENTER

The electrical control center consists of three basic modules:

1. **Transformer module:** Contains the transformer that reduces the 115 VAC to 12 VAC and the rectifiers that change the 12 VAC to 12 VDC.
2. **12 Volt distribution panel:** Contains the 12 VDC replaceable fuses, the power switch (automatic relay or manual switch) and the optional battery charger PC board.
3. **115 VAC distribution panel:** Contains the 30 amp main input breaker and the individual branch circuit breakers for all the branch circuits.



How the converter works:

Referring to the above diagram with the converter power switch in the transformer position, and 115 VAC available, the converter will supply the 12 VDC to operate the R.V. lights, fans, motors, etc.

When the power switch is in the battery position, the battery supplies the 12 Volt power to the lights, etc.

On units with the option "R", the automatic relay switches to the transformer position as soon as the 115 VAC power is connected to the R.V. and then switches to the battery when the 115 VAC power is removed.

On units with option "F", you must depress the manual switch to the transformer or battery position.

The optional battery charger is a solid state device which senses the condition of the battery and controls the charger output to the battery bringing it up to a fully charged condition. The control then senses when the battery is charged and drops the charge rate down to a safe trickle charge to maintain the battery. The following charge rates correspond to the option letters: N-3 Amp, M-5 Amp, D-10 Amp, L-15 Amp and K-20 Amp.

WARNING -----WARNING -----WARNING

Disconnect all 115 VAC power to the recreational vehicle and remove the positive terminal from the battery before removing any of the components of the converter. If this procedure is not followed, damage may result to the PC boards.

The following color codes are used on the output circuits of all P.D. power converters:

Blue: There may be from 1 to 8 blue wire output circuits. These are 12 Volt positive load circuits.
Caution: At no time should a blue load circuit be connected to the battery.

Red: There may be from 1 to 4 red wires. These are the 12 Volt positive leads for the battery charging circuit or the battery feed wires. All wires should be connected together as one and connected to the battery positive terminal.

White: These are the common negative (ground) circuits including the battery circuit. All ground wires should be connected together and grounded to the frame of the R.V.

CHARGE SENTINEL LIGHT (L.E.D.)

A visual indication of the amount of current that is charging your battery from the power converter. However, this is only an indication of a charge to the battery. If any problems occur with the charge sentinel light, you should put an ampmeter between the converter and battery to see if the charger is working correctly.

LIGHT (L.E.D.) INDICATES

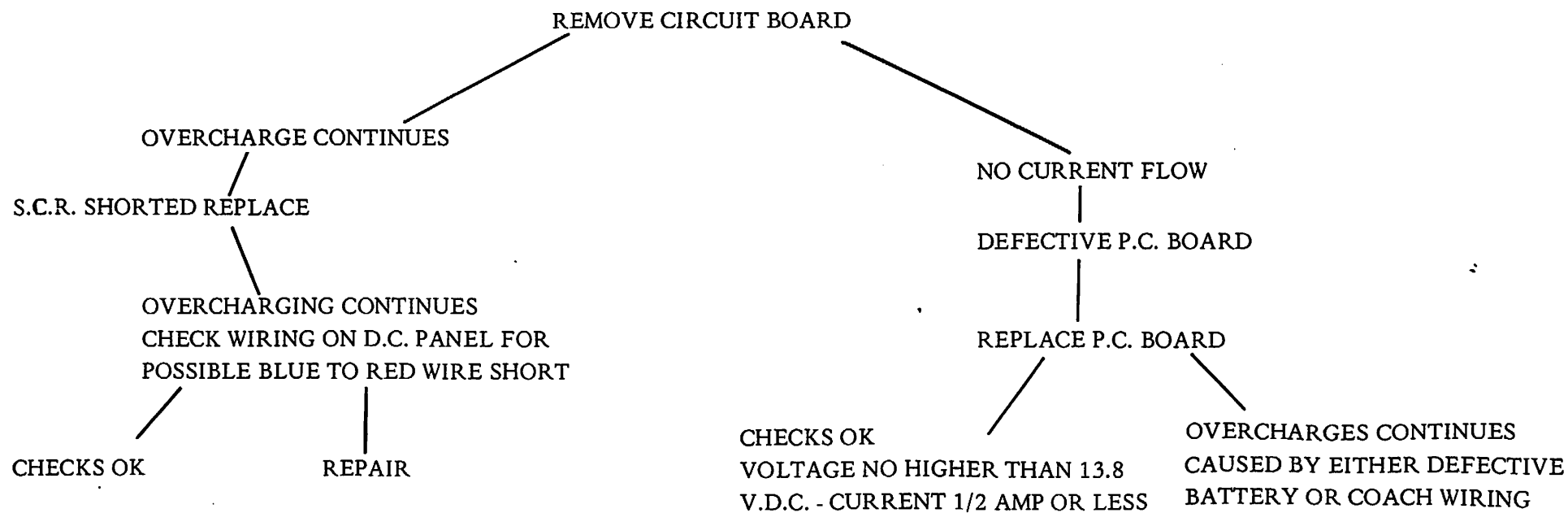
1. Continuous bright light: Battery is being charged. This will change to a flashing light as explained in number 3.
2. Continuous bright light on all the time: Battery is being over charged. Loss of water in the battery is an indication of this condition.
3. Flashing light: Battery has reached approximately 90% of full charge. It will continue to flash several times a second as long as the battery is over 90% of full charge under normal conditions.
4. No light:
 - A. Battery is fully charged. This condition happens to a few units, but is a normal condition.
 - B. No charge going to the battery.
Warning: The charge sentinel will not work when there is no battery in the R.V. or when the converter is not plugged into 115 VAC power.
 - C. L.E.D. (Light Emitting Diode) is defective. Replace L.E.D. or replace the P.C. board.
5. Light stays on after converter or 115 VAC power is unplugged. P. C. board is defective.. Have it repaired or replaced.

TROUBLE SHOOTING CHARTS

PROBLEM: CONVERTER OVERCHARGES THE BATTERIES

INITIAL TEST

PLACE AMPMETER IN SERIES WITH BATTERY POSITIVE CURRENT MEASURES 1 AMP OR HIGHER AND VOLTAGE ACROSS BATTERY TERMINALS IS 13.8 V.D.C. OR HIGHER, RED L.E.D. CHARGE SENTINEL MAY STAY ON ALL THE TIME.



PROBLEM: CONVERTER POWERS LIGHTS, FANS, MOTORS BUT BATTERY DOES NOT SUPPLY POWER.

INITIAL TEST

CHECK FOR BATTERY VOLTAGE PRESENT AT CONVERTER D. C. PANEL.

NO VOLTAGE PRESENT

TROUBLESHOOT CONNECTIONS TO THE
BATTERY

YES VOLTAGE PRESENT

CHECK FOR BATTERY VOLTAGE AT
FUSE HOLDERS

YES VOLTAGE PRESENT

CHECK FOR BLOWN FUSES OR
DEFECTIVE WIRING

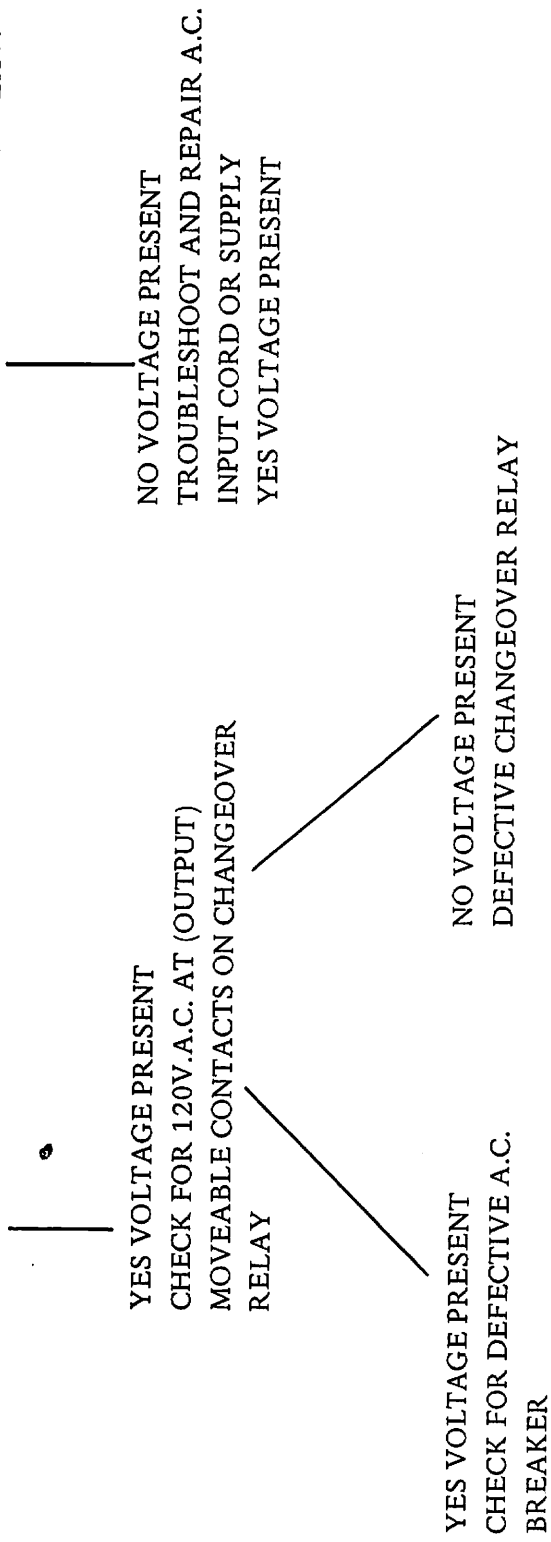
NO VOLTAGE PRESENT

CHECK FOR DEFECTIVE RELAY OR
SWITCH ON D. D. PANEL

PROBLEM: COACH CIRCUITS RECEIVE NO A.C. ON SHORE POWER.

INITIAL TEST

CHECK FOR 120V. A.C. SHORE POWER AT THE NORMALLY CLOSED CONTACTS ON CHANGEOVER RELAY.



PROBLEM: GENERATOR CHANGE OVER SYSTEM NOT WORKING

INITIAL TEST

DOES RELAY PULL IN WHEN GENERATOR STARTS

YES RELAY ACTIVATES
CHECK FOR 120V.A.C. AT N.O.
TERMINALS ON CHANGE OVER
RELAY

NO VOLTAGE CHECK GENERATOR OUTPUT
AND REPAIR

YES VOLTAGE
CHECK SWITCHABLE CONTACTS
(OUTPUT) OF CHANGE OVER
RELAY FOR SAME VOLTAGE

YES VOLTAGE THE SAME AFTER
30-90 SECONDS DELAY, CHECK FOR
VOLTAGE AT MAIN BREAKER TO
NEUTRAL ON LEFT HAND BANK OF
BREAKERS

YES VOLTAGE PRESENT
CHANGE OVER CHECKS OK

NO VOLTAGE
DEFECTIVE TIME DELAY

NO RELAY FUNCTION
CHECK FOR 120V.A.C. FROM GENERATOR
AT BLACK AND WHITE WIRES ON POTTED
BRIDGE

NO VOLTAGE
CHECK GENERATOR OUTPUT AND
REPAIR

YES VOLTAGE PRESENT
CHECK RED (+) AND BROWN (-) WIRES FROM
POTTED BRIDGE TO CHANGE OVER RELAY FOR
165V.D.C.

NO VOLTAGE PRESENT
DEFECTIVE POTTED BRIDGE

YES VOLTAGE PRESENT
CHECK RELAY COIL FOR 5-6 THOUSAND OHMS
RESISTANCE

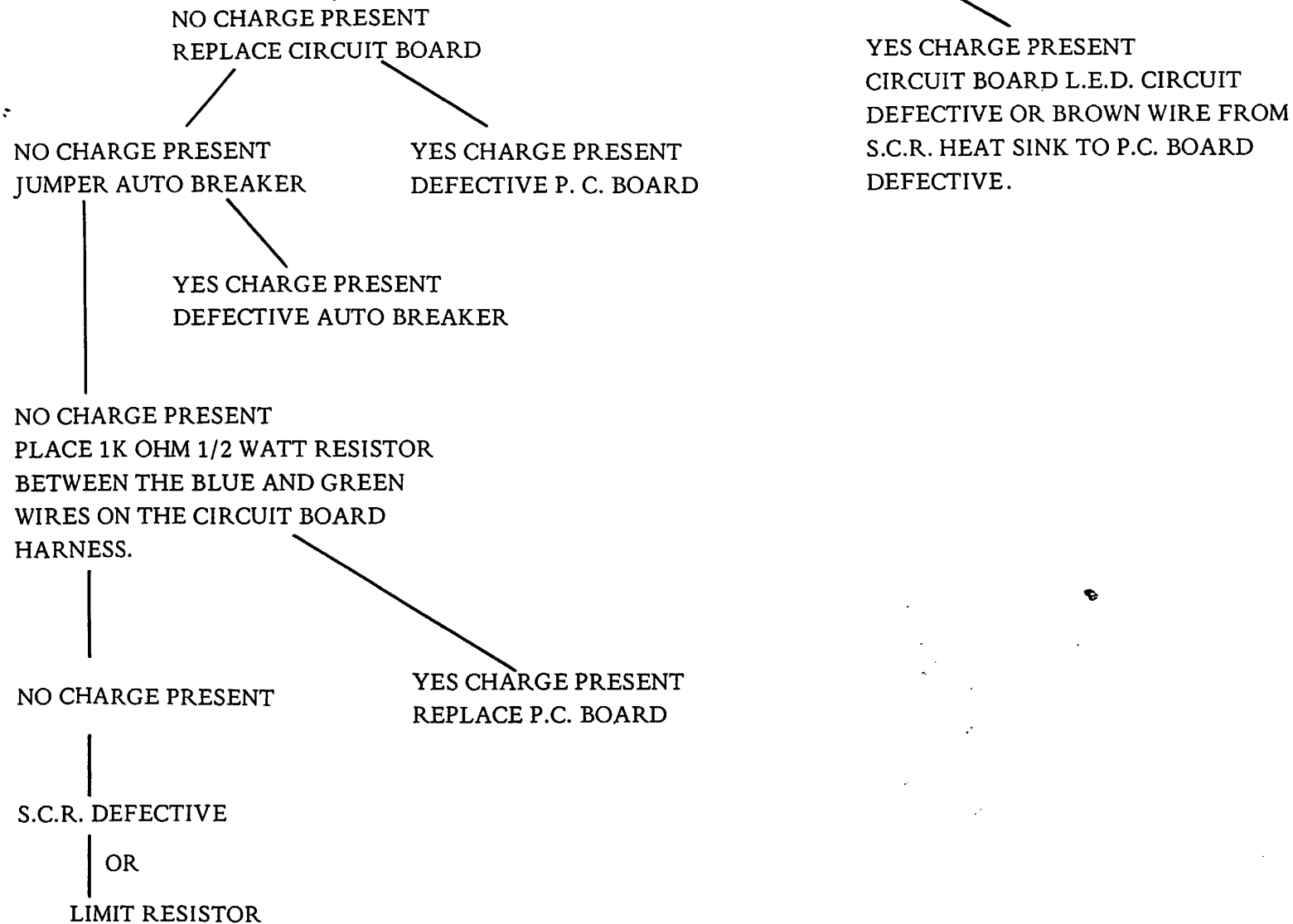
YES CORRECT RESISTANCE
CHANGE OVER SYSTEM OK

NO RESISTANCE PRESENT
DEFECTIVE CHANGE OVER RELAY

PROBLEM: CONVERTER DOES NOT CHARGE BATTERY BUT DOES SUPPLY POWER TO LIGHTS, FANS, MOTOR.

INITIAL TEST

WITH BATTERY VOLTAGE BELOW 12.5 VOLTS AND AMPMETER IN SERIES: CHECK FOR CHARGE CURRENT FLOWING TO THE BATTERIES.



PROBLEM: INTERFERENCE IN RADIO OR T.V. WHILE OPERATING ON 12 V.D.C.

HUM OR BUZZ IN AUDIO, LINES ROLLING UP
THROUGH PICTURE ON T.V. MAY BLOW FUSE

- STEP 1 Make sure 12V power line is
connected to battery charger
output and battery is hooked up.
- STEP 2 Install L-C Filter as close to power
input of appliance as possible. PD-734 Electronic
Electronic Filter is available. See page 27.
- STEP 3 Noise is being induced into the audio by
unfiltered D.C. wires either too close to
speaker or appliance itself. Wiring must be
physically moved to control interference.

POPPING OR CLICKING NOISE THAT IS IN TIME WITH
THE BLINKING OF CHARGE SENTINEL L.E.D.

Check number on back of P.C. board
Check page No. 12 to verify that
R.F. board is in place.

Check to make sure charge line is
not run very close to appliance

PROBLEM: INTERFERENCE IN RADIO OR T.V. WHEN VENT OR FURNACE FAN IS RUNNING

This noise is radiated from the motor running

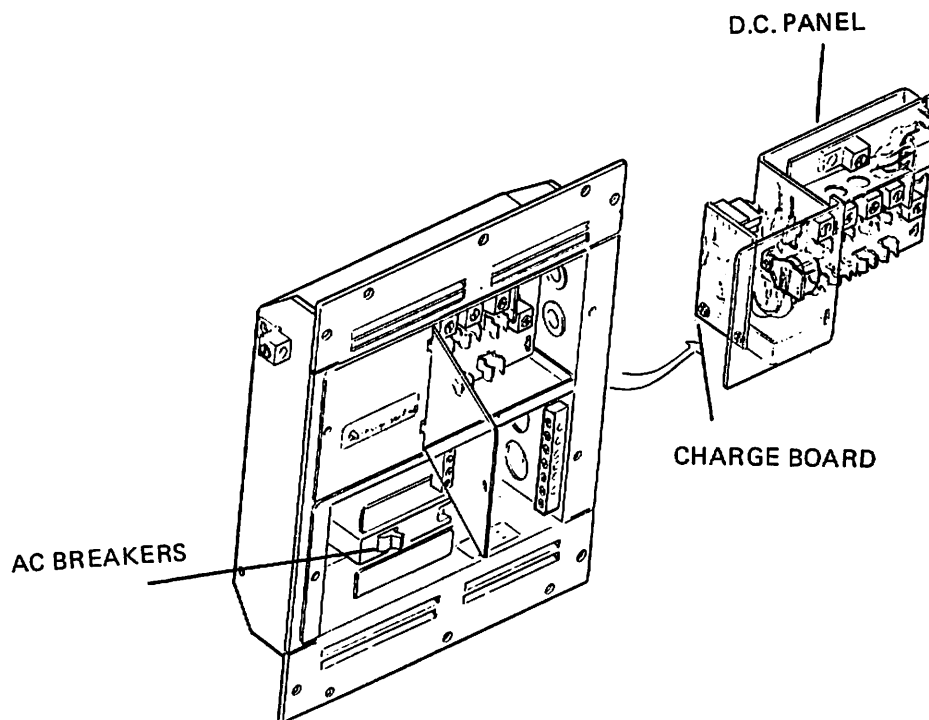
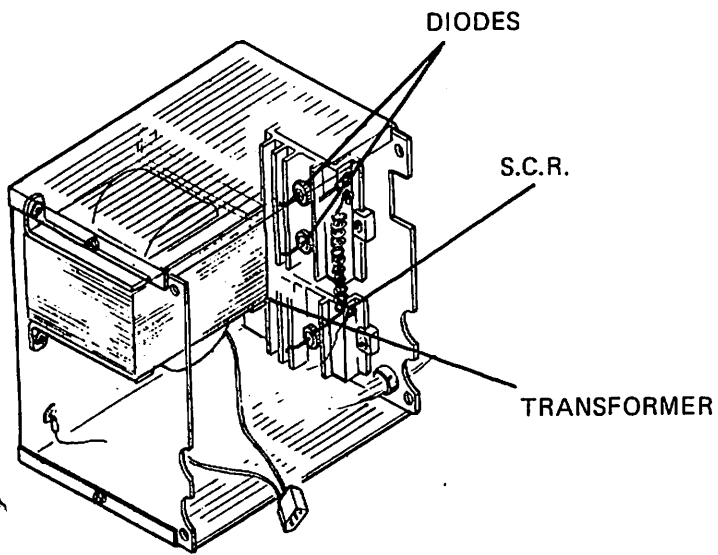
A .5 MFD feed through capacitor with the case grounded should be installed in series with the power line to the motor.
As close to the motor as possible.

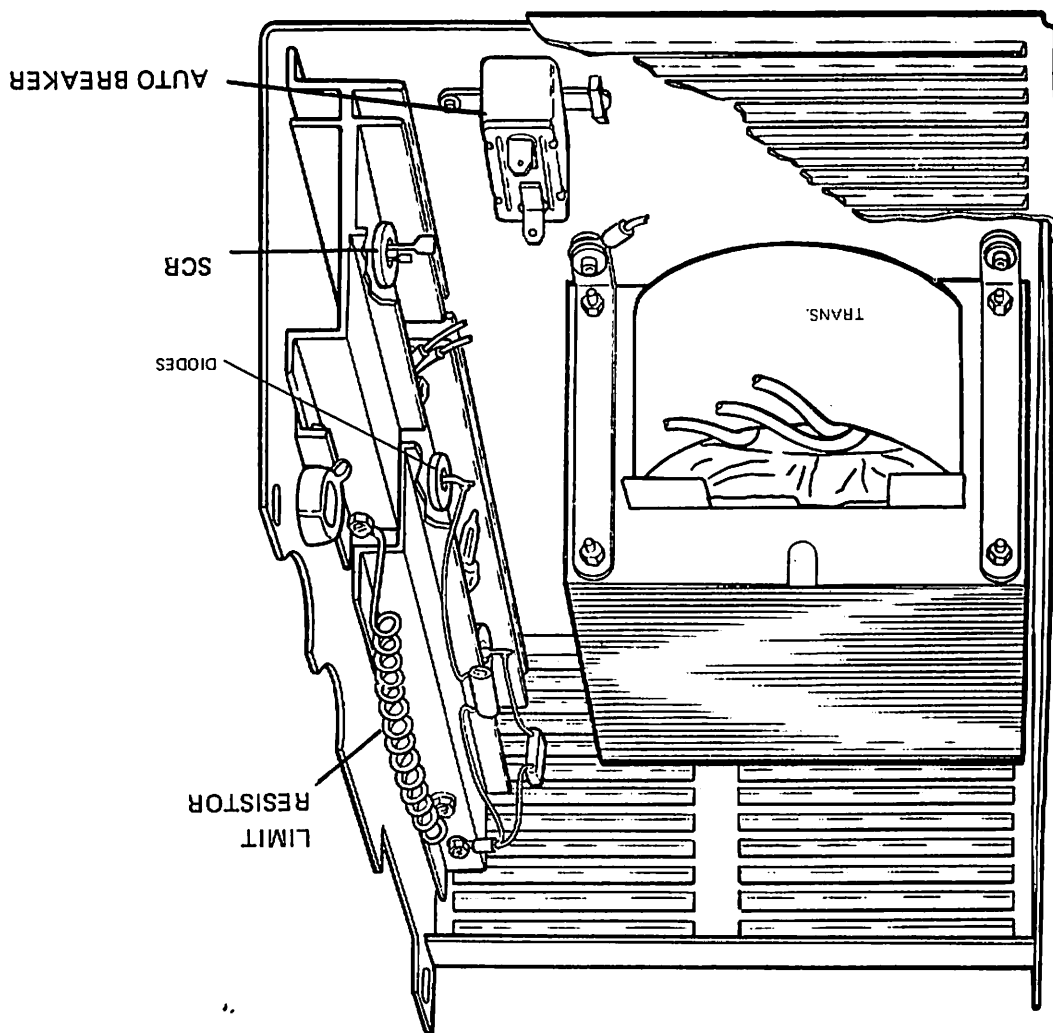
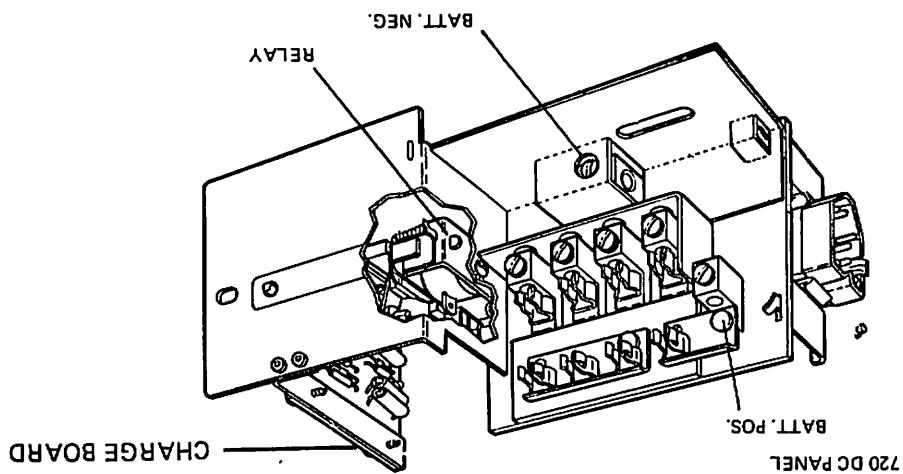
PROCEDURE FOR REPLACEMENT OF CHARGER CIRCUIT BOARD

1. Disconnect battery charge line from terminal on the right hand of the DC distribution panel and cap with appropriate size wire nut.
2. Disconnect AC power from input of converter.
3. Remove the (2) screws holding the DC panel to the panel board and tip forward.
4. Remove (2) 1/4 inch screws holding the printed circuit board to the bracket and unplug from wiring harness.
5. Install new printed circuit board and reverse procedure to reinstall.

PC BOARD IDENTIFICATION

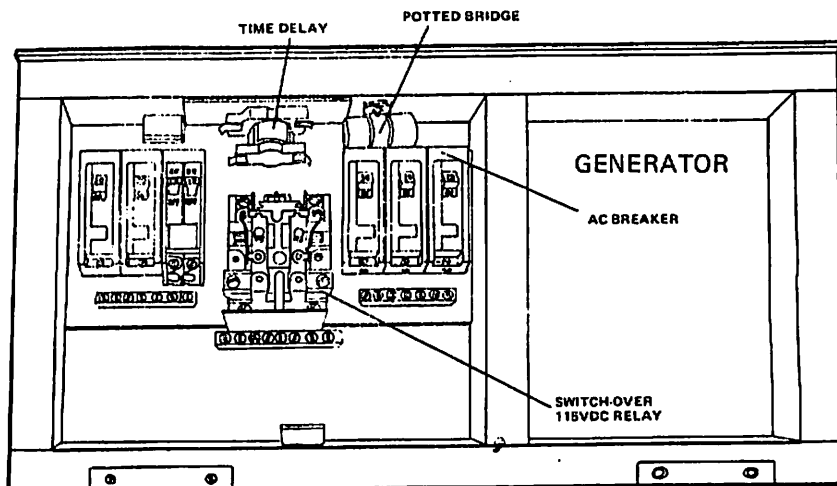
Number on Board	Board Assembly Number	Description
102508) 103544)	802896	4 Pin Board W/O LED Indicator
103544	803704	4 Pin W/Brown Wire and LED Indicator
103544	803704	5 Pin W/LED Indicator
104143	804397	5 Pin RF Board W/LED Indicator
104230	804510	6 Pin W/O LED Indicator 3 Amp Only
*103849	804044	6 Pin W/LED Indicator
104307	804775	6 Pin RF Board W/LED Indicator
106836	804775	
107335	PD-683	6 Pin Step-Charger Board
Replaced by 804775		





PD-760-776

SHORE POWER
AC BREAKER



TRANSFORMER
SECTION

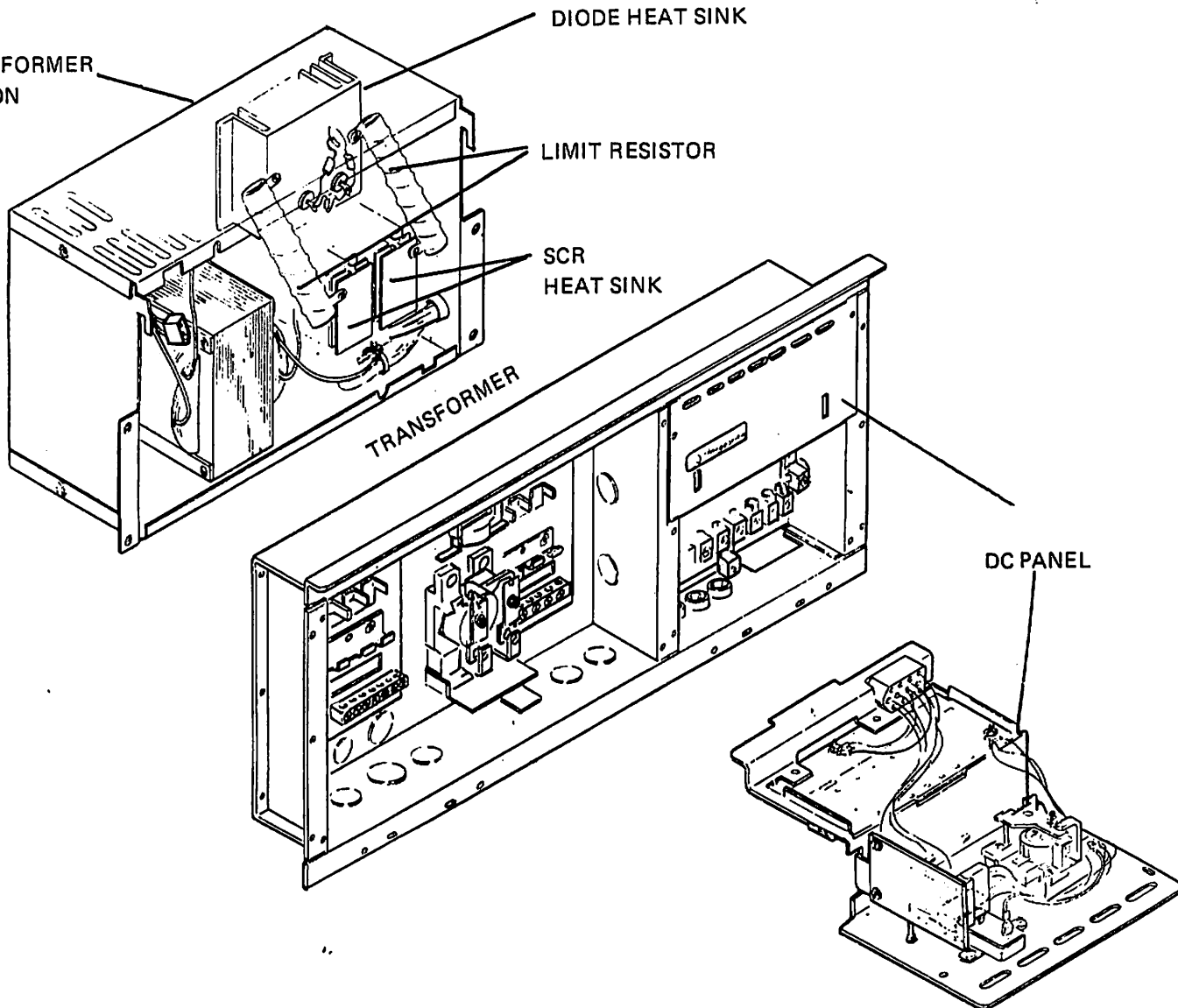
DIODE HEAT SINK

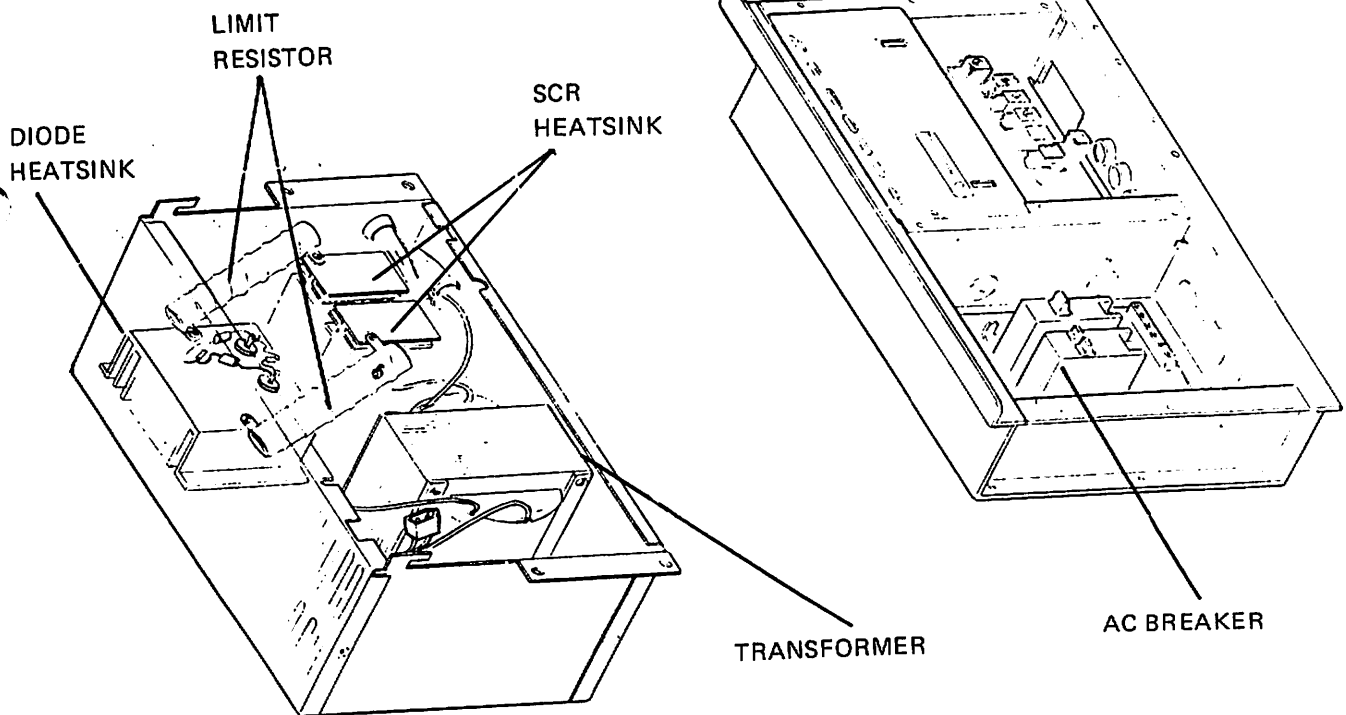
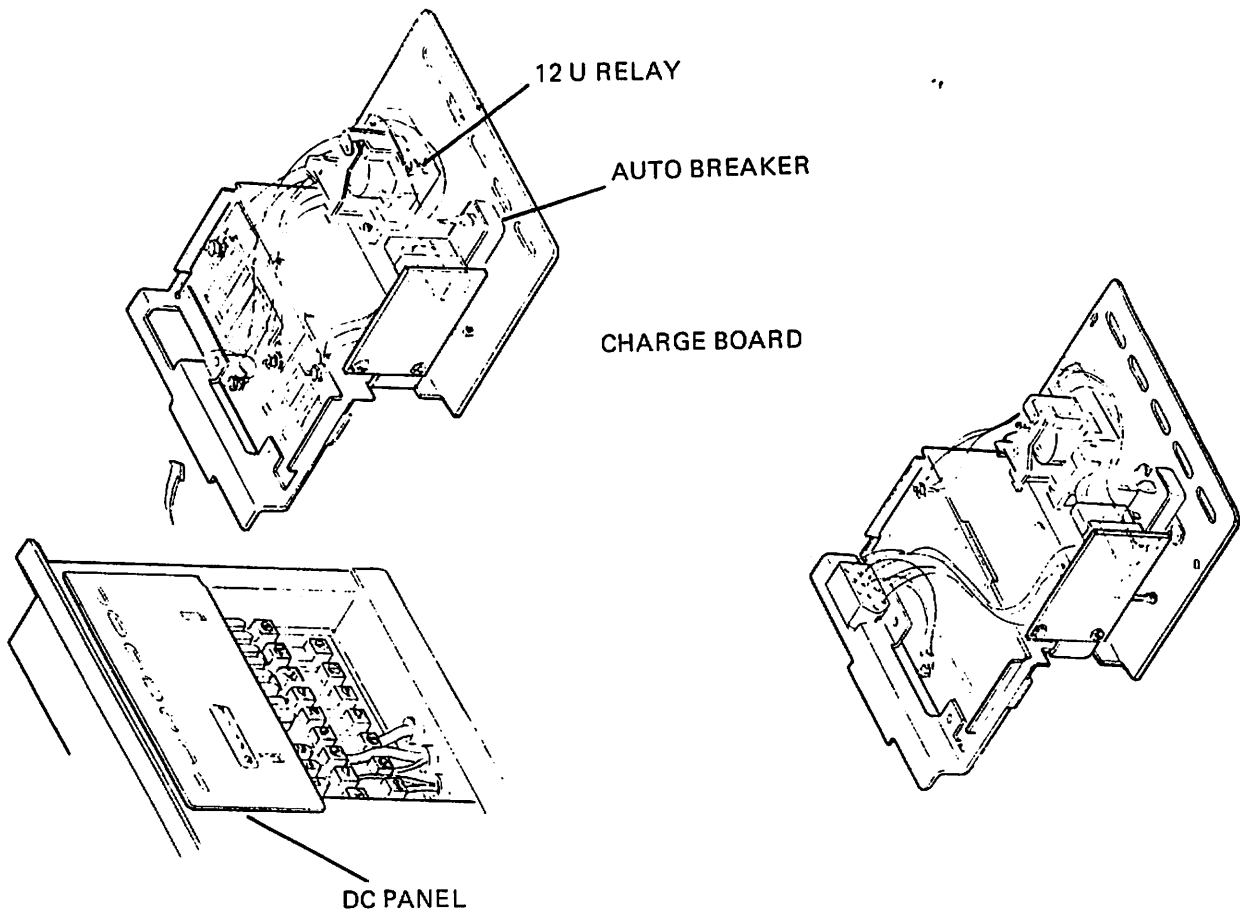
LIMIT RESISTOR

SCR
HEAT SINK

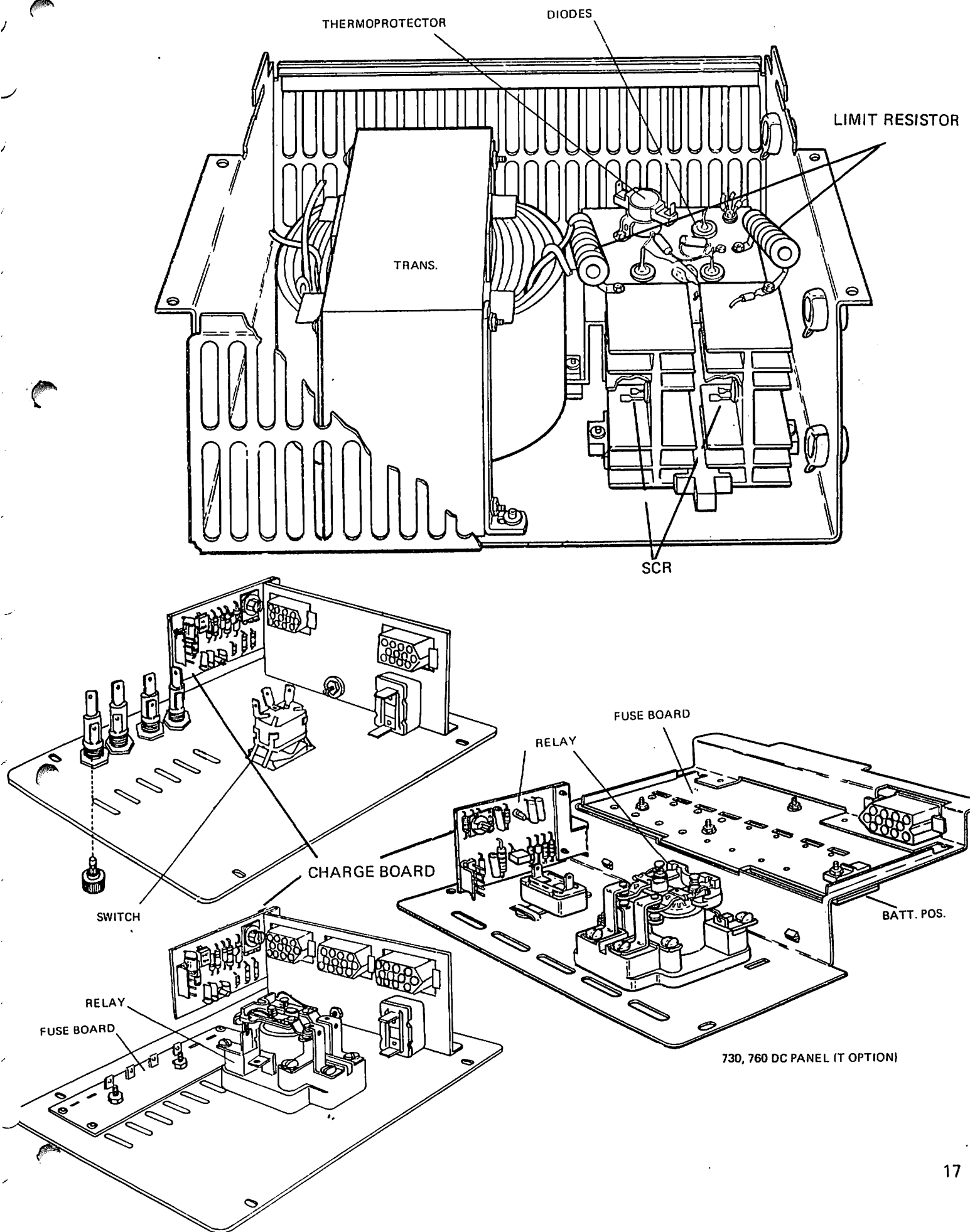
TRANSFORMER

DC PANEL

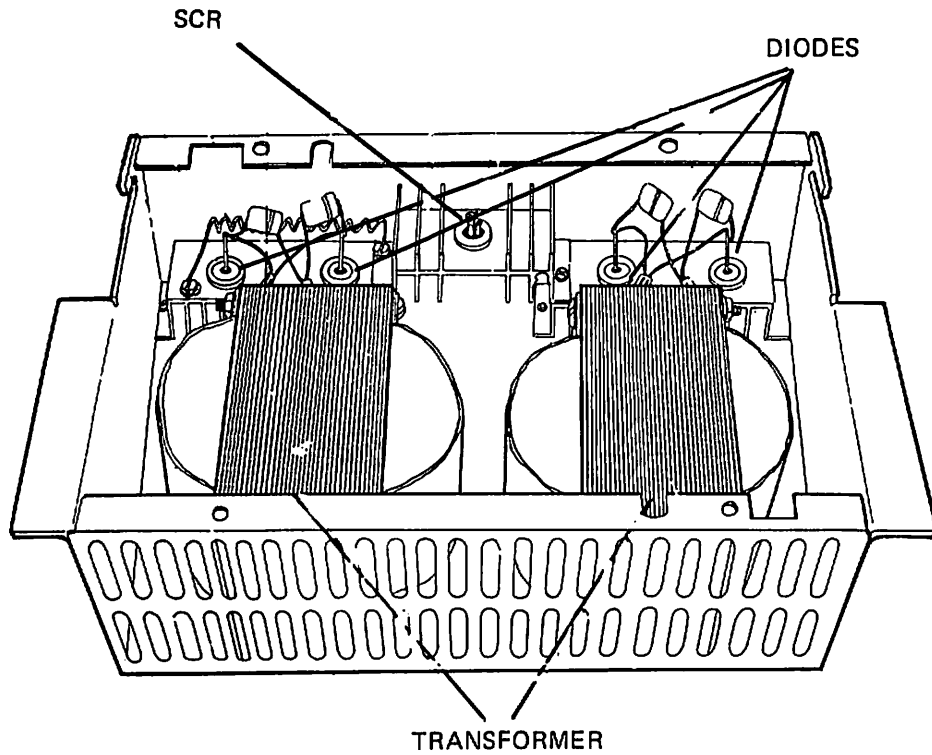




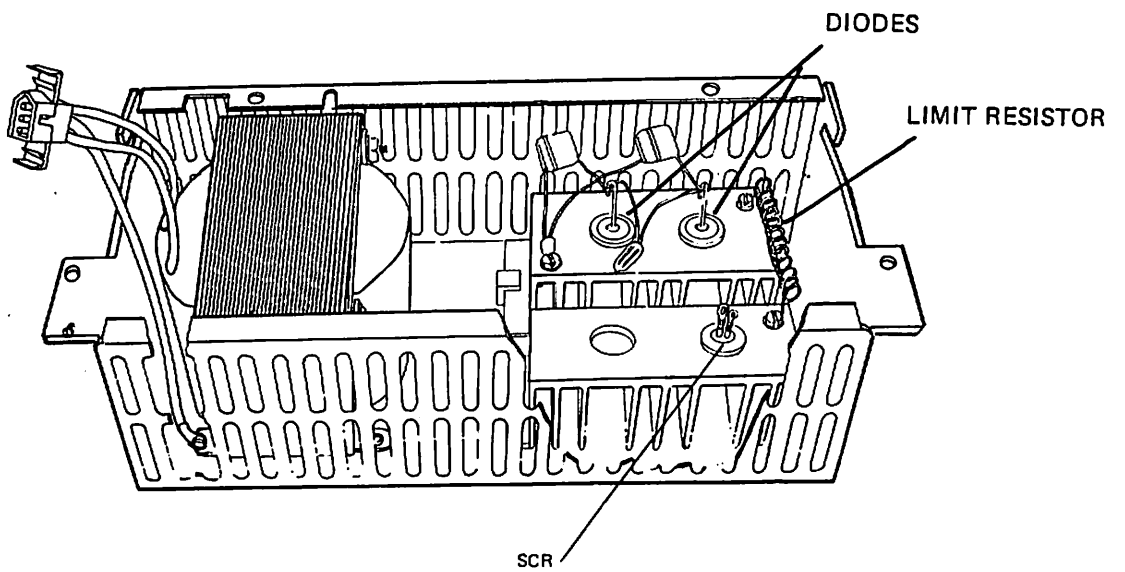
PD-734-738 TRANSFORMER MODULE



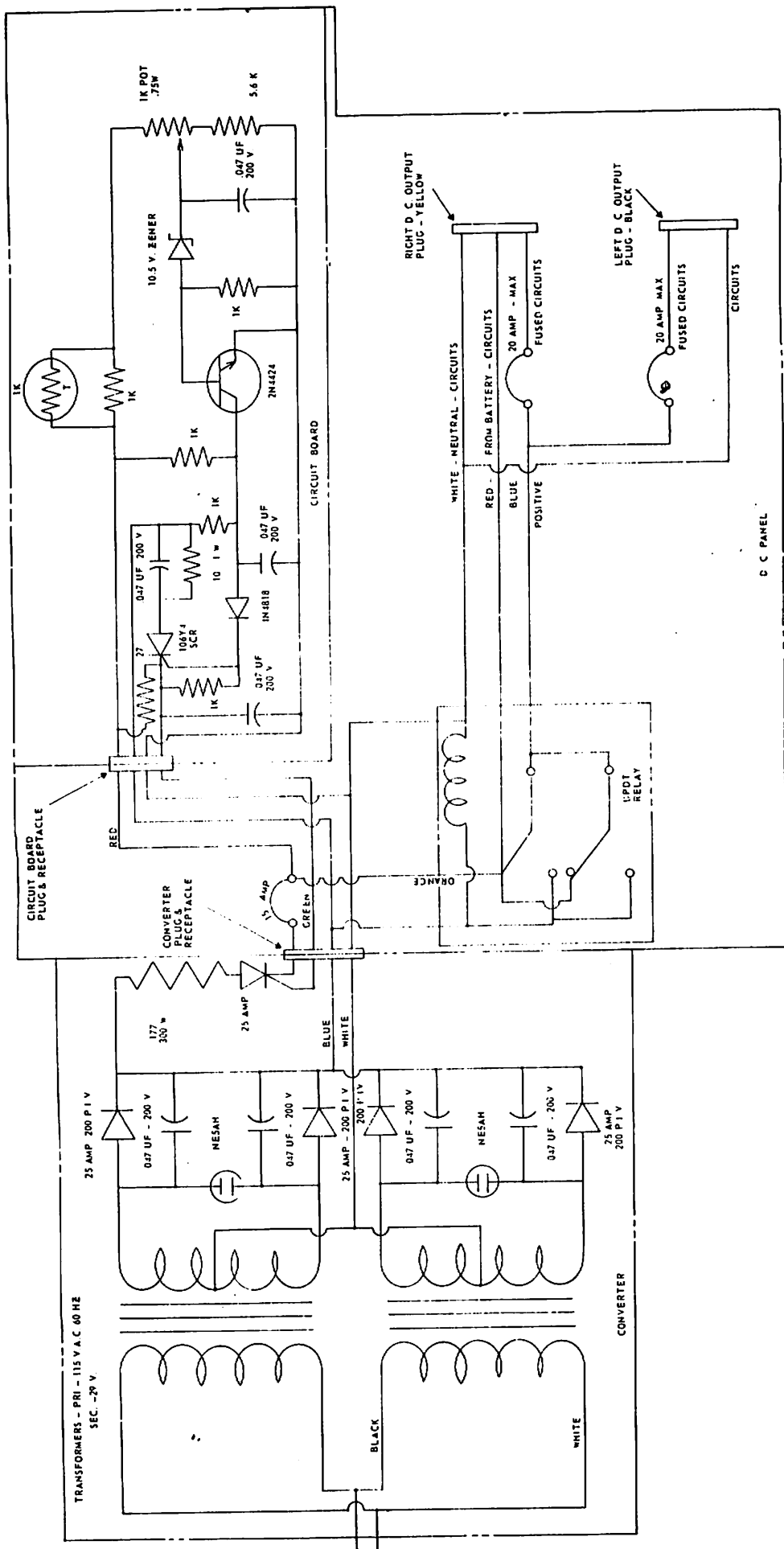
MODELS PD 743-776



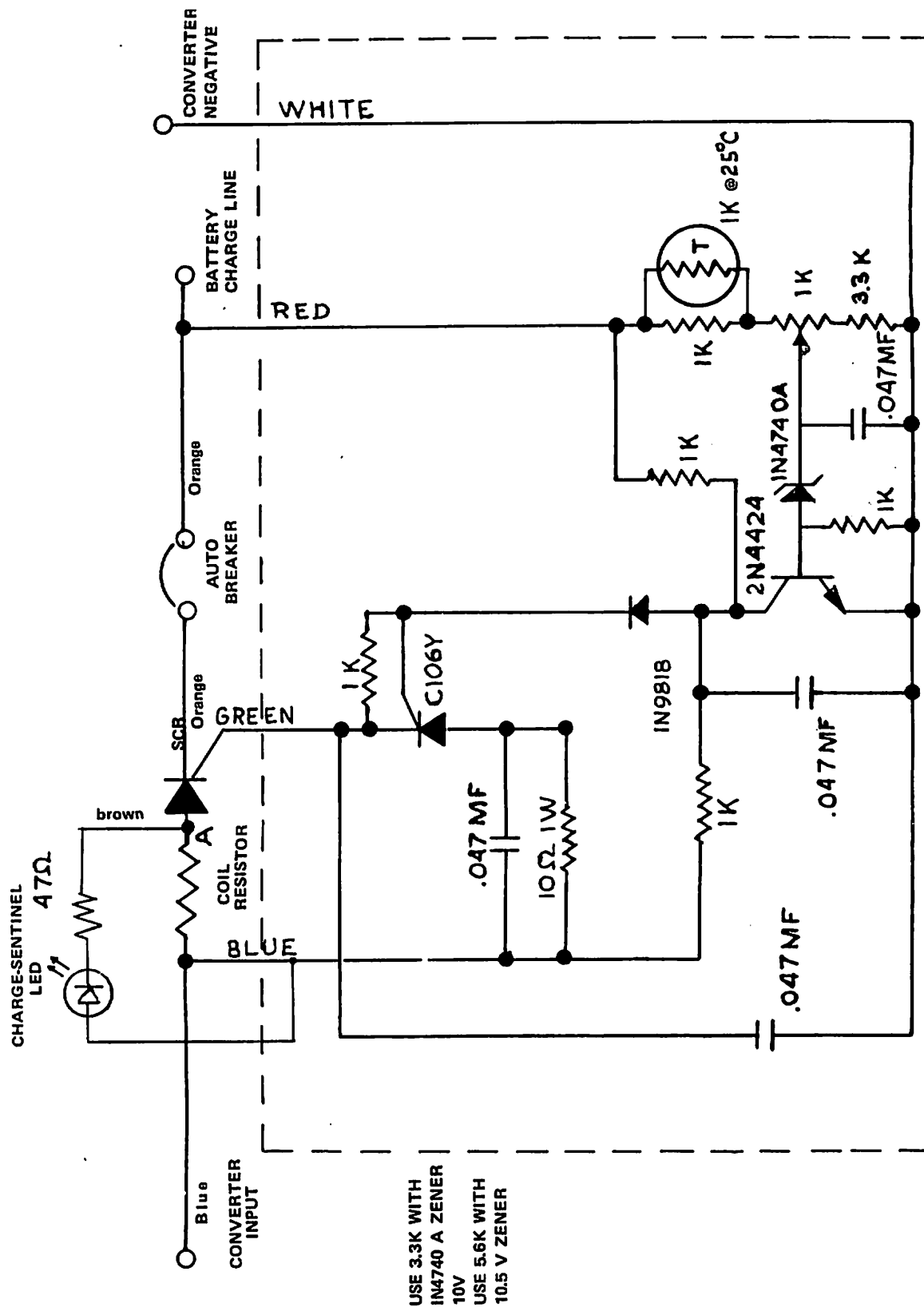
731, 732, 733, 763 TRANSFORMER MODULE



Model Numbers PD 743-746, PD 753-756 and PD 773-776

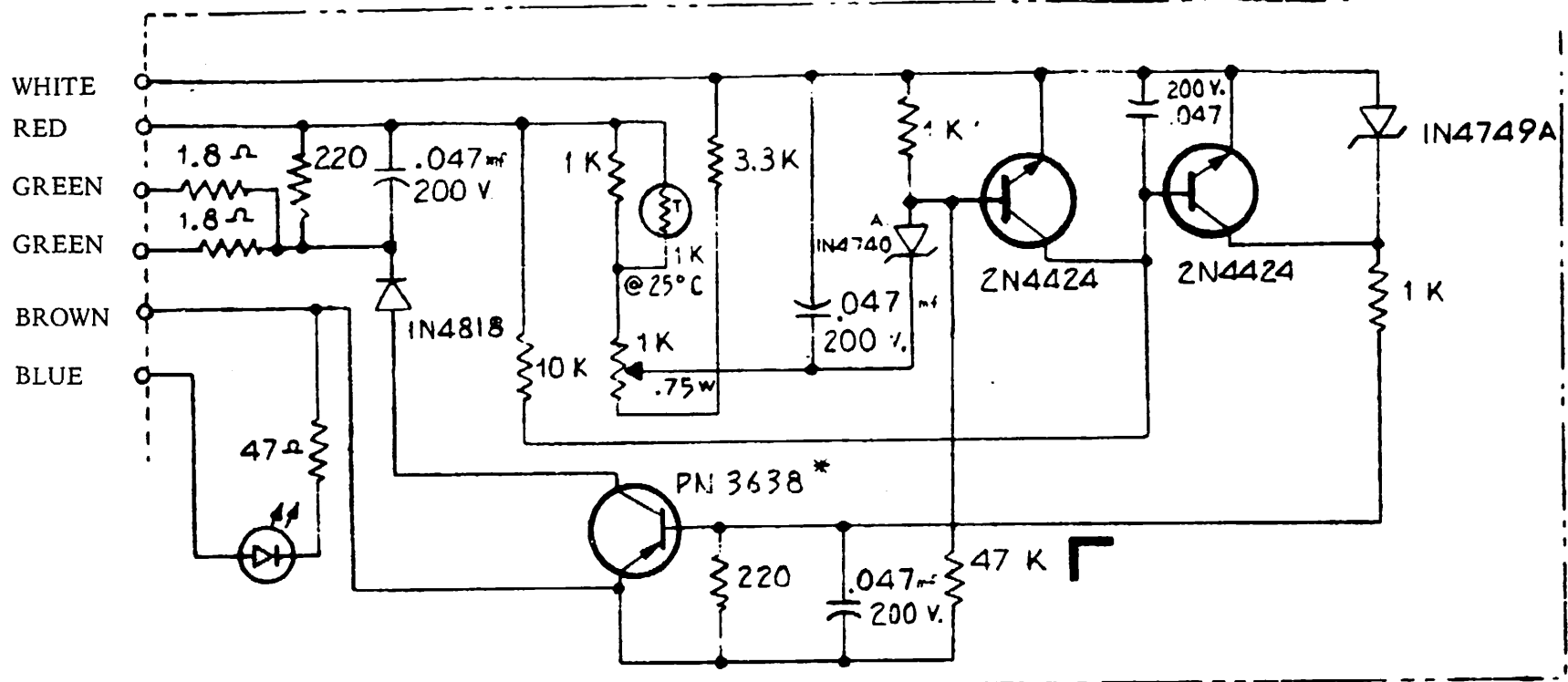


NOTE
UNLESS OTHERWISE SPECIFIED ALL RESISTORS 1/2W
ALL VOLTAGE SPECIFICATIONS ON COMPONENTS ARE
MINIMUM - HIGHER RATINGS MAY BE USED



NOTES:

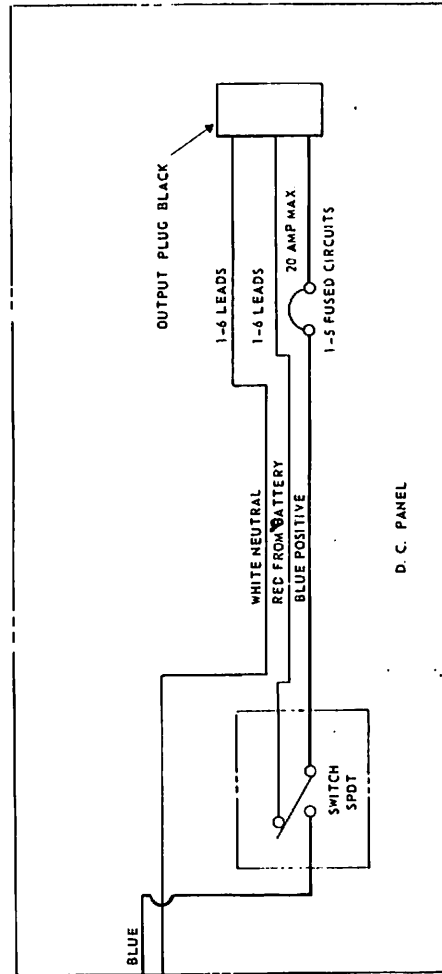
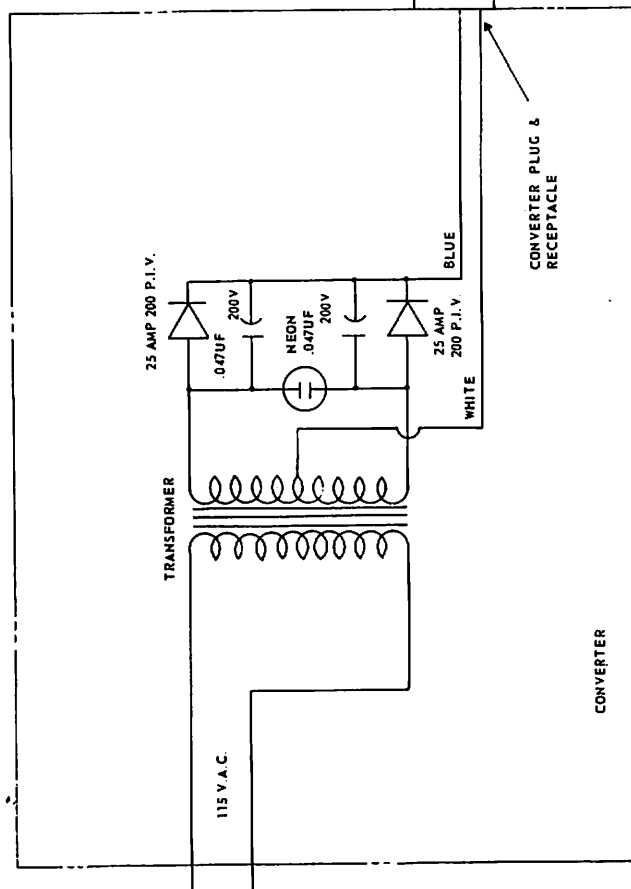
- Unless otherwise specified -
1. All fixed resistors 1/2 W.
 2. All voltage specs. on components are minimum - higher ratings may be used.
 3. Capacitors 200 V Extended



NOTE:
All fixed resistors 1/2 W.

104307 CIRCUIT BD.
106836

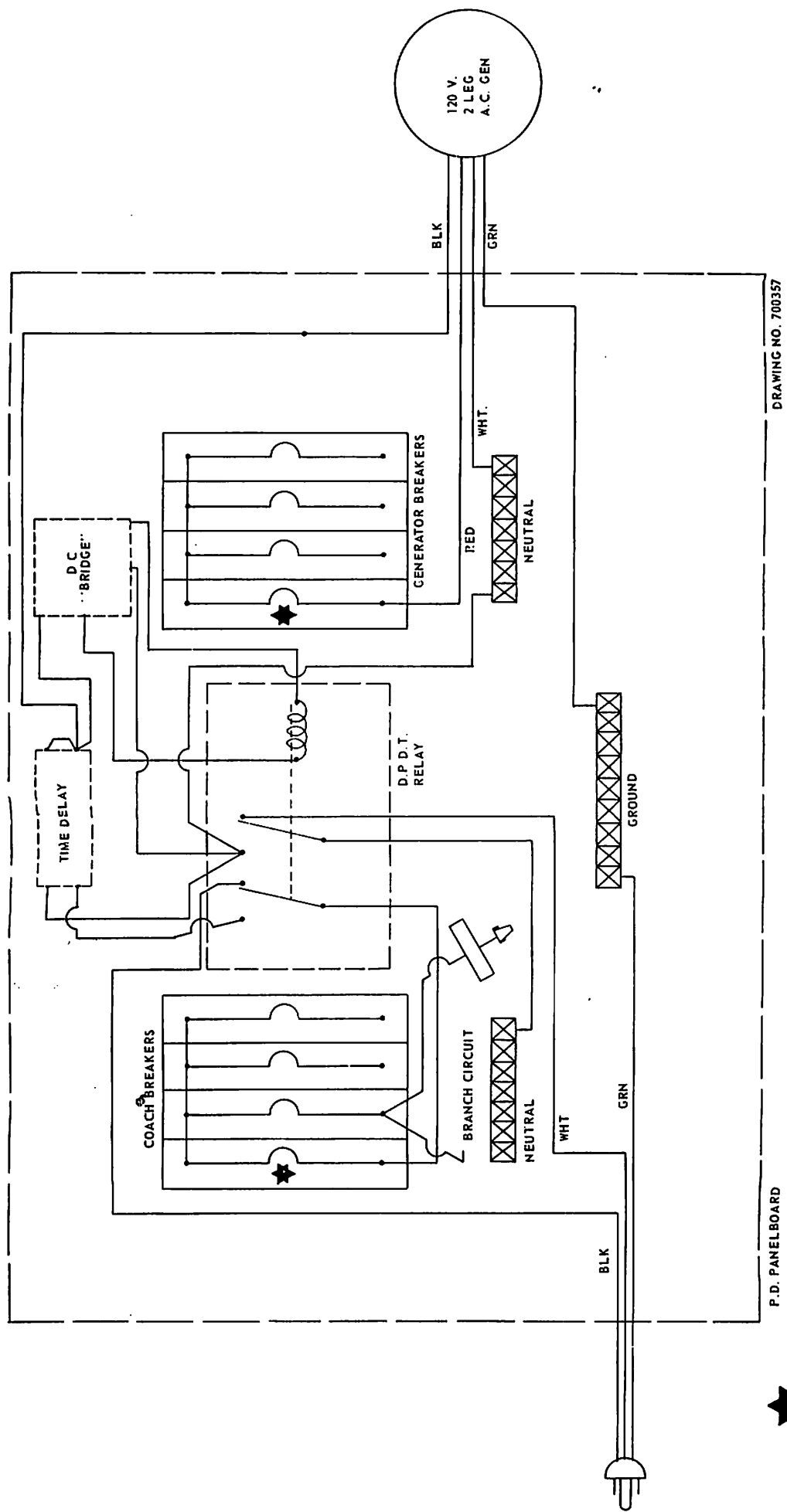
To test for a drain on the BATT. connect AMP meter between the converter CHARGE LINE and the BATT. POSITIVE TERMINAL. With the converter disconnected from SHORE POWER, read the amount of discharge on the AMP meter. The converter has a NORMAL DRAIN of approx. 0 to 20 ma. If you read HIGHER than 20 ma. start removing the wiring or fuses from the output of the converter. Also make sure there is nothing connected to the BATT. If removing the wiring or fuses does not correct the problem, then the PC Board or the SCR might be defective and have to be replaced.



DRAWING NO. 700361

D. C. PANEL

NOTE:
UNLESS OTHERWISE SPECIFIED --- ALL RESISTORS $\frac{1}{2}$ W
ALL VOLTAGE SPECIFICATIONS ON COMPONENTS ARE
MINIMUM - HIGHER RATINGS MAY BE USED.



DRAWING NO. 700357

P.D. PANELBOARD



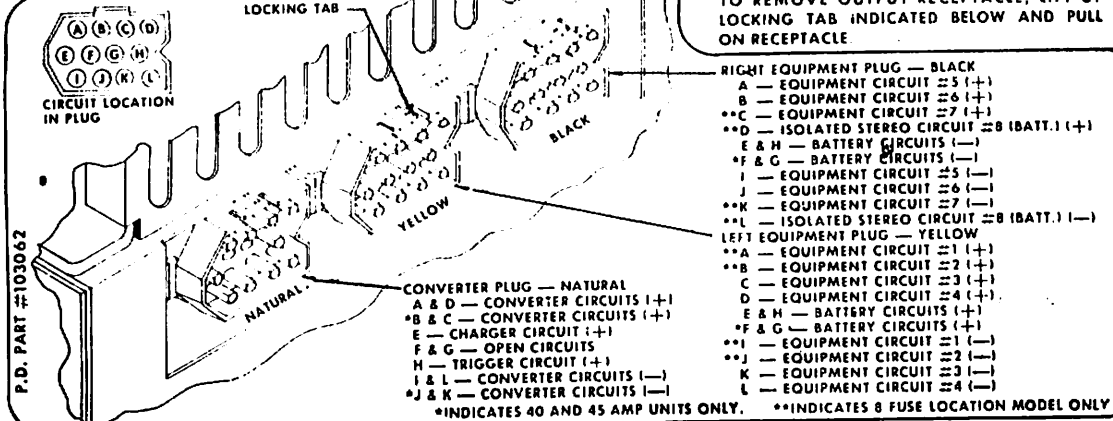
MAIN BREAKER REQ'D ONLY WITH 3 OR MORE BRANCH BREAKERS

ELECTRICAL SYSTEMS CONTROL CENTER OUTPUT PLUG SEQUENCING — OUTPUT PIN IDENTIFICATION

USE OUTPUT RECEPTACLE
MANUFACTURED BY: MOLEX PRODUCTS CO.
DOWNERS GROVE, ILL.
PART NUMBER: 03-12-1121 60515

OBSERVE PLUG COLOR CODING WHEN CONNECTING RECEPTACLES. SERIOUS DAMAGE COULD RESULT IF MISCONNECTED. DISCONNECT ALL RECEPTACLES BEFORE SERVICING D.C. SECTIONS OF CONTROL CENTER.

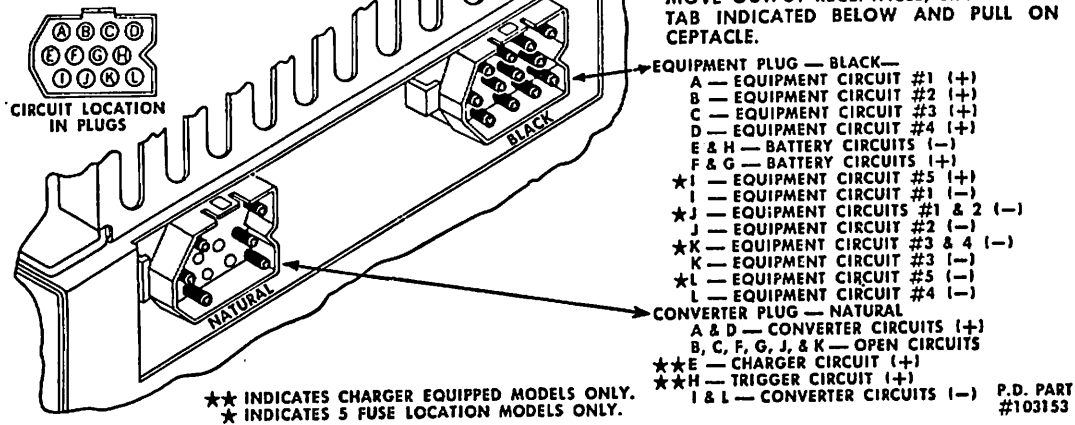
TO REMOVE OUTPUT RECEPTACLE, LIFT UP LOCKING TAB INDICATED BELOW AND PULL ON RECEPTACLE



ELECTRICAL SYSTEMS CONTROL CENTER OUTPUT PLUG SEQUENCING — OUTPUT PIN IDENTIFICATION

USE OUTPUT RECEPTACLE MANUFACTURED
BY: MOLEX PRODUCTS CO.,
DOWNERS GROVE, ILL. 60515
PART NUMBER: 03-12-1121

OBSERVE PLUG COLOR CODING WHEN CONNECTING RECEPTACLES. SERIOUS DAMAGE COULD RESULT IF MISCONNECTED. DISCONNECT ALL RECEPTACLES BEFORE SERVICING D.C. SECTIONS OF CONTROL CENTER. TO REMOVE OUTPUT RECEPTACLE, LIFT UP LOCKING TAB INDICATED BELOW AND PULL ON RECEPTACLE.



ORDERING INFORMATION

Send check or money order payable to:

Progressive Dynamics, Inc.
507 Industrial Road
Marshall, MI 49068
Attn: Parts Department

or

Call 616-781-4241 for Phone Orders.

There is a minimum billing of \$25.00 on C.O.D. orders

PROGRESSIVE DYNAMICS' RV PARTS PRICE LIST

PART #	DESCRIPTION	LIST
100715	25 AMP DIODE	\$10.88
104860	25 AMP SILICON CONTROLLED RECTIFIER (SCR)	\$14.59
100766	.047 UFD CAPACITOR	\$1.92
100338	NEON BULB SPIKE SUPPRESSOR	\$1.92
102167	N OPTION LIMIT RESISTOR .7 OHMS	\$11.52
104273	M OPTION LIMIT RESISTOR .25 OHMS	\$12.80
103835	D&K OPTION LIMIT RESISTOR .177 OHMS	\$12.80
104132	L OPTION LIMIT RESISTOR .111 OHMS	\$12.80
103205	10 AMP AUTO BREAKER QC TERMINALS	\$12.80
102881	15 AMP AUTO BREAKER QC TERMINALS	\$12.80
104133	25 AMP AUTO BREAKER SCREW STUDS TERMINALS	\$12.80
101245	RELAY SPDT 12 VOLT COIL	\$48.00
104126	RELAY SPDT 12 VOLT COIL 720 SERIES	\$48.00
102084	RELAY DPDT 110 VOLT DC COIL	\$48.00
802941	POTTED BRIDGE ASSEMBLY	\$48.00
802943	TIME DELAY RELAY	\$48.00
	MAIN STAB BAR ASSEMBLY AC BREAKER	\$32.00
3500	20 AMP GFCI BREAKER	\$84.48
103743	15 AMP GFCI BREAKER	\$84.48
102862	30 AMP MAIN AC BREAKER	\$12.80
102863	20 AMP AC BRANCH BREAKER	\$12.80
102864	15 AMP AC BRANCH BREAKER	\$12.80
103526	30/20 AMP AC BREAKER	\$24.32
103121	15/15 AMP AC BREAKER	\$24.32
102861	20/15 AMP AC BREAKER	\$24.32
804510	3 AMP PC BOARD 720 SERIES	\$38.40
803704	5 PIN PC BOARD	\$48.00

PROGRESSIVE DYNAMICS' RV PARTS PRICE LIST

PART #	DESCRIPTION	LIST
804775	6 PIN PC BOARD	\$48.00
PD683	STEP CHARGER BOARD	\$81.92
103829	THERMAL PROTECTOR FOR DIODES	\$14.59
101312	TRANSFORMER 6 AMP	\$35.84
101313	TRANSFORMER 10 AMP	\$44.80
100961	TRANSFORMER 15 AMP	\$53.76
100443	TRANSFORMER 35 AMP	\$128.00
830718	TRANSFORMER 38 AMP	\$125.44
830686	TRANSFORMER 48 AMP	\$166.40
830630	TRANSFORMER 55 AMP	\$179.20
807437	25 AMP SCR HEAT SINK ASSEMBLY	\$26.88
804456	BROWN DOOR 14 1/2 IN. BY 11 IN.	\$19.20
804458	BROWN DOOR 20 1/4 IN. BY 11 IN.	\$22.40
	DOOR LATCH ASSEMBLY FOR ABOVE DOORS	\$6.40
	GENERIC DC DISTRIBUTION PANEL (SUBJECT TO MODEL & AVAILABILITY)	\$115.20
	GENERIC TRANSFORMER SECTION (SUBJECT TO MODEL & AVAILABILITY)	\$371.20
1124	ROUND BLACK FUSE CAP	\$1.92
700104	ROUND FUSE HOLDER ASSEMBLY	\$3.84
101441	SQUARE FUSE CAP	\$1.92
101417	SQUARE FUSE HOLDER ASSEMBLY	\$4.48

MINIMUM ORDER \$25.00