



## Service Information Letter

SIL# SL022105-001

SUBJECT: MARATHONNORCO AEROSPACE STATIC INVERTER

MODELS: PC-251-123E AND -123F

1. Summary

After the introduction of the PC-251-123E and PC-251-123F static inverters, a previously unavailable 200-volt ceramic capacitor became available. The use of these 200-volt capacitors will improve the reliability of the inverters. Changing to the higher rated capacitors is recommended but not required. The capacitors that may be changed are identified as C23 and C24. They are located on the front plate assembly of the inverters. Inverters with serial numbers greater than 12555 will have the 200-volt capacitors installed when built at our factory.

2. Planning Information

A. Effectivity

This Service Letter applies to Marathon Model PC-251-123E and model PC-251-123F Static Inverters.

The serial numbers affected are: 12555 and below.

Inverters that are in production, or that have serial numbers above 12555 will have the 200V capacitors for C23 and C24 installed.

B. Concurrent Requirements

None.

C. Reason

Capacitors C23 and C24 have been upgraded to 200V ceramic capacitors for HIRF qualified models PC-251-123E and PC-251-123F to improve product reliability.

D. Description

The affected assemblies are given below.

AFFECTED ASSEMBLIES	
ASSEMBLY	NOMENCLATURE
PC-251-123E	STATIC INVERTER
PC-251-123F	STATIC INVERTER

- E. Compliance

Marathon recommends compliance at a convenient maintenance interval or when the unit is returned for maintenance of any type.
  - F. Approval

No government approval required.
  - G. Manpower

An estimated 2 to 3 man-hours are required to perform the modification described herein, including removal of the inverter from the aircraft, modification and installation of the inverter in the aircraft.
  - H. Weight and Balance

Not affected.
  - I. Electrical Load Data

Not affected.
  - J. Software Accomplishment Summary

Not applicable.
  - K. References

Front Plate Assembly MNAI # 200293 (attached)  
Front Plate Assembly MNAI # 200384 (attached)  
Power Schematic MNAI # 500070(attached)  
Power Schematic MNAI # 500070(attached)
  - L. Other Publications Affected

CMM 24-20-14  
CMM 24-20-15
3. Material Information
- A. Material – Prices and Availability

PC-251-123E and PC-251-123F Static Inverters returned to Marathon for warranty repair will have the capacitors changed at no charge to the customer. PC-251-123E and PC-251-123F Static Inverters returned for repair that are out of warranty will have the capacitors changed as part of the repair and will be billed at the current list price. PC-251-123E and PC-251-123F Static Inverters returned only to have the capacitors changed will be billed at the current list price. The customer must pay all shipping costs.
  - B. Industry Support Information

Not Applicable.
  - C. Material Necessary For Each Inverter

New P/N	Description	Old P/N	Unit List Price	Special Instructions/Disposition
206-1008	Cap Rad 200V 1.0MFD	206-1007	6.30	*Return to Marathon
206-1009	Cap Rad 200V 0.01MFD	206-1004	0.38	*Return to Marathon

\* Customer is responsible for shipping charges. See section 5.C. for Shipping Address.

D. Re-identified parts

The upgraded PC-251-123E and PC-251-123F Static Inverters do not require re-identification.

E. Tooling - Prices and Availability

No special tooling is required for this change.

4. Accomplishment Instructions

- A. No immediate field action is required. When PC-251-123E and PC-251-123F inverters are removed for another reason and sent to an MNAI Authorized Repair Facility for service, capacitors C23 and C24 will be replaced with 200V parts as required on affected serial numbers.

5. Further Information

A. Warranty

The returned inverters will be evaluated and handled in accordance with the Warranty provisions given in the Product Support Agreement. If the inverter is under warranty and the capacitors need to be replaced, Marathon will replace the capacitors with the new parts at no cost. Upgrades of the capacitors at customer request will be billed at the standard rate for repair costs.

Warranty of the inverter is not affected by incorporation of this change by Marathon. Once the change has been completed and the inverter is returned, the unexpired portion of the warranty period will remain valid.

If the operator chooses to make the changes that are described in this Service Letter to the inverter in the field, any remaining warranty on the inverter is no longer applicable.

B. Repair Status Information

For repair status information please contact:

Marathon

Contact Telephone

Facsimile

E-mail

Sonia Nelson    254-741-5428    254-776-6558    snelson@mptc.com

C. Shipping Address

Customers shall return the PC-251-123E and PC-251-123F Static Inverters to the address below with the shipper of their choice:

MarathonNorco Aerospace, Inc.  
8301 Imperial Drive  
Waco, Texas, USA 76712

D. Technical Information

For technical questions please contact:

Marathon			
<u>Contact</u>	<u>Telephone</u>	<u>Facsimile</u>	<u>E-mail</u>
Tom Elkjer	254-741-5410	254-776-6558	telkjer@mptc.com
Brendan Ryan	254-741-5417	254-776-6558	bryan@mptc.com

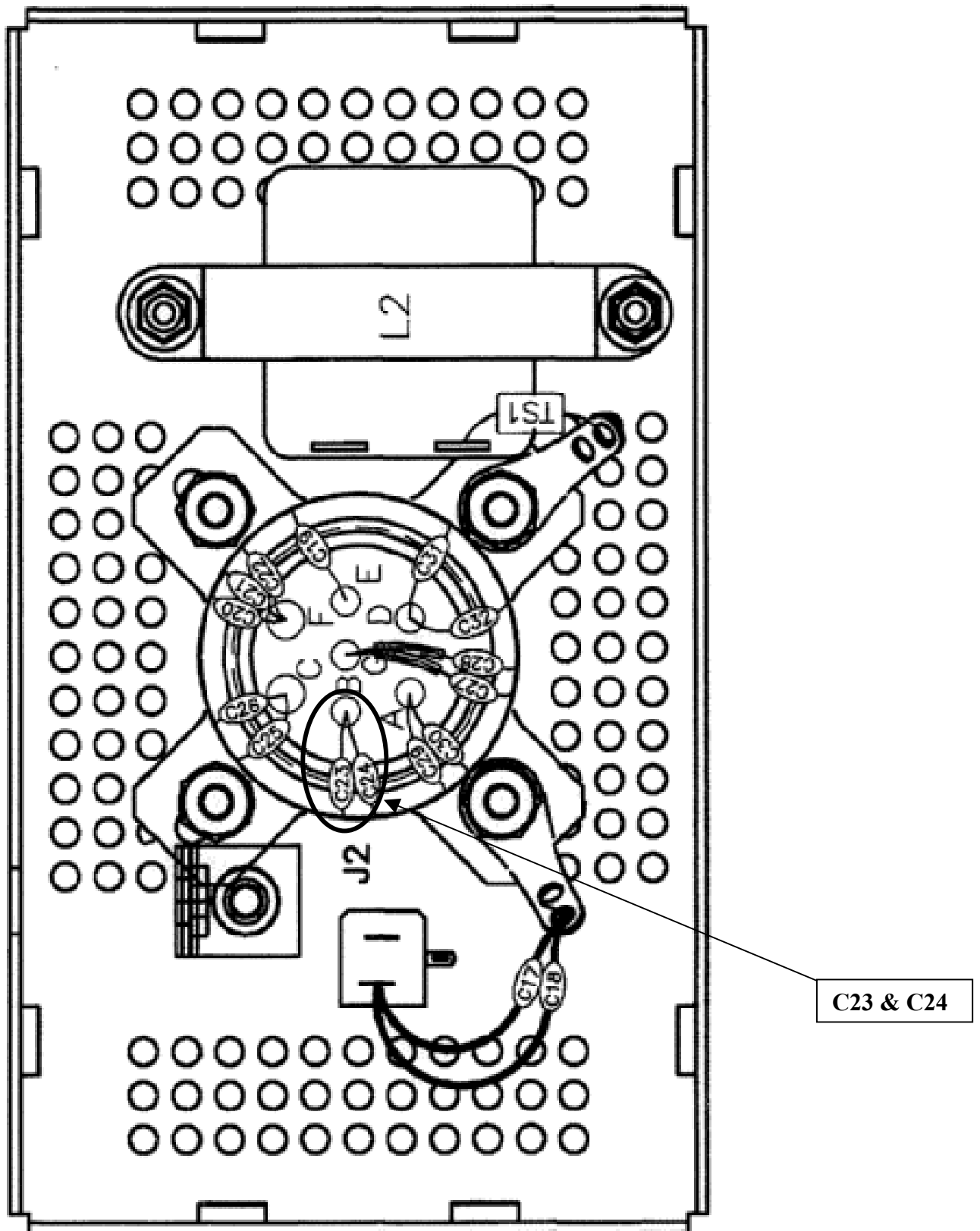


Figure 1  
Front Plate  
PC-251-123E

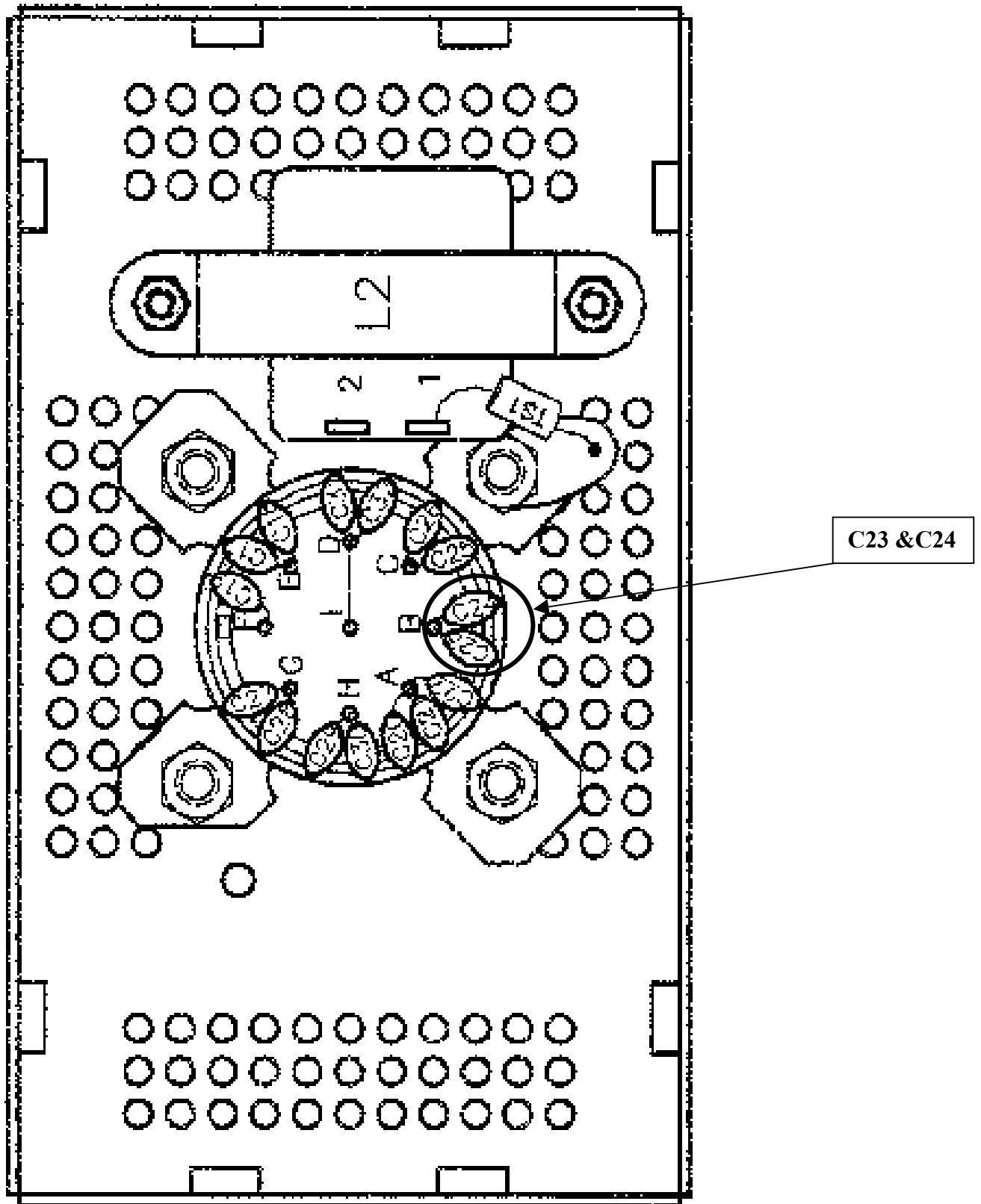
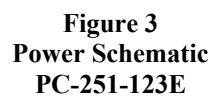
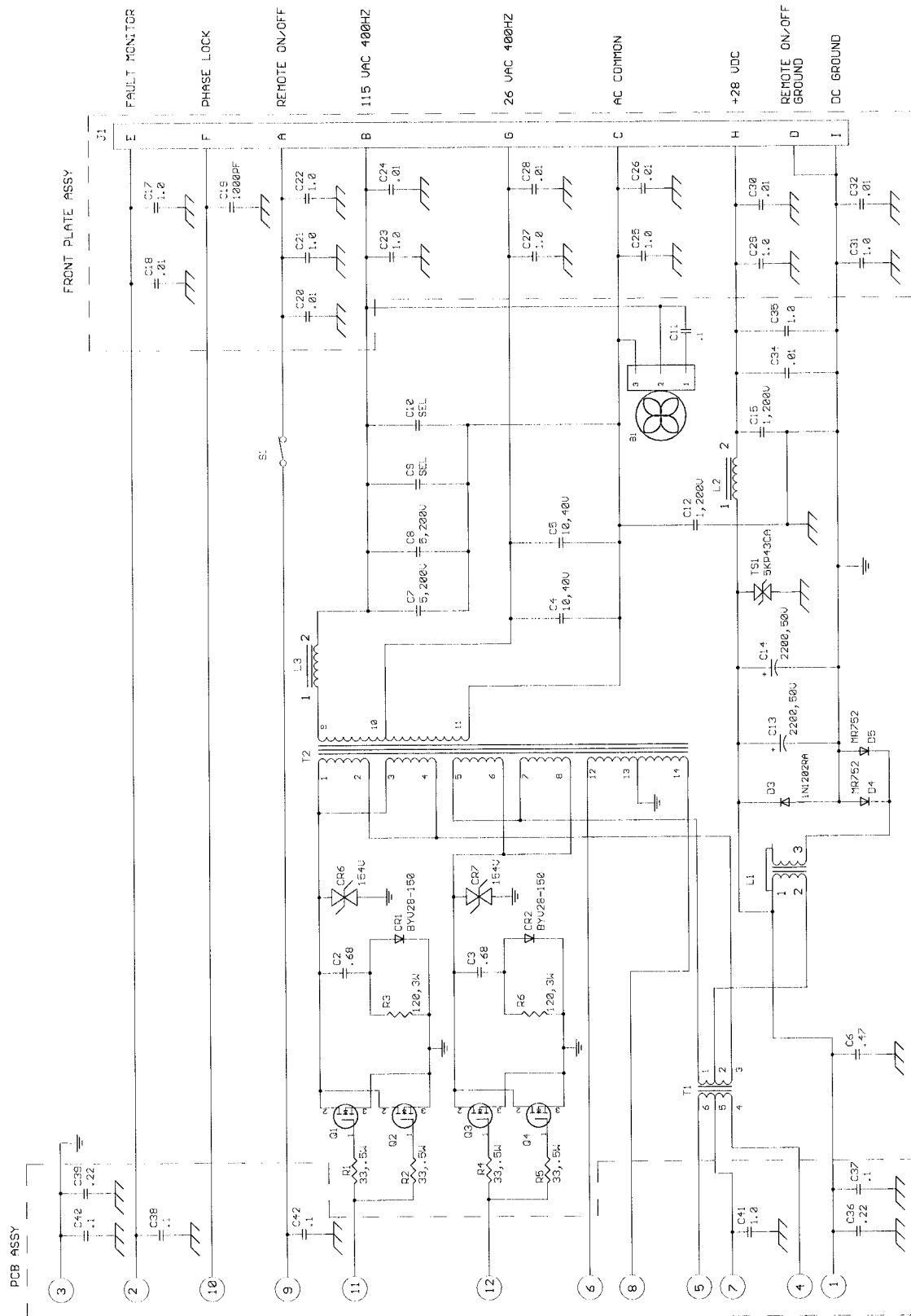


Figure 2  
Front Plate  
PC-2510123F





NOTES: UNLESS OTHERWISE SPECIFIED  
 1. CAPACITOR VALUES LISTED IN MICROFARADS.  
 2. RESISTOR VALUES LISTED IN OHMS

Figure 4  
 Power Schematic  
 PC-2510123F