Service Information Letter

SIL# SL033106-002

SUBJECT: MARATHONNORCO AEROSPACE STATIC INVERTER

MODELS: PC-251-2A and PC-251-2B

The Fault Monitor circuit of PC-251-2A and PC-251-2B has been upgraded to provide 500mA of current. This upgrade is not required for units in service. The change will be made to inverters as they are returned for repair or other reasons.

1.0 PLANNING INFORMATION

1.1 Effectivity

Model PC-251-2A (serial number 14501 and below)
Model PC-251-2B (serial number 14560 and below)

Inverters that have serial numbers above14501 for the Model PC-251-2A and above 14560 for the Model PC-251-2B will have the upgrade installed during production.

1.2 Reason

Q1 in the Fault Monitor circuit was changed from a 2N5323 to a TIP32C for it's higher current rating.

1.3 Description

This service letter describes the changes that will be performed by MNAI to accomplish the upgrade for the Model PC-251-2A and Model PC-251-2B inverters.

1.4 Approval

No government approval required.

1.5 Manpower

An estimated 3 to 4 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.

1.6 Material –Cost and Availability

The following parts are required for these modifications:

Quantity	P/N	MarathonNorco Stock #	Description	Cost
1	200753	Same	PCB Assy PC-251-2A/-2B	Call for current price

1.7 Tooling
No special tooling required.

1.8 Weight and Balance
Not affected.

1.9 Electrical Load Data
Not affected.

1.10 References
CMM 24-20-32
Other references: Schematic # 500208 (attached).

1.11 Other Publications affected
None.

2.0 ACCOMPLISHMENT INSTRUCTIONS

No immediate field action is required. When PC-251-2A and PC-251-2B inverters are removed for another reason and sent to an MNAI Authorized Repair Facility for service, upgrading the inverter will be included with the service.

3.0 WARRANTY/COST INFORMATION

When PC-251-2A/-2B inverters are removed for another reason and sent to an MNAI Authorized Repair Facility for service, upgrading the inverter will be included with the service. The standard warranty terms and repair costs are applicable.

PC-251-2A/-2B inverters that are sent to MNAI Authorized Repair Facilities for upgrade only will be billed at the regular rate in effect at the time of return. The standard warranty terms and repair costs are applicable.

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

Shipping Address

Customers shall return the PC-251-2A and PC-251-2B Static Inverters to the address below using the shipper of their choice:

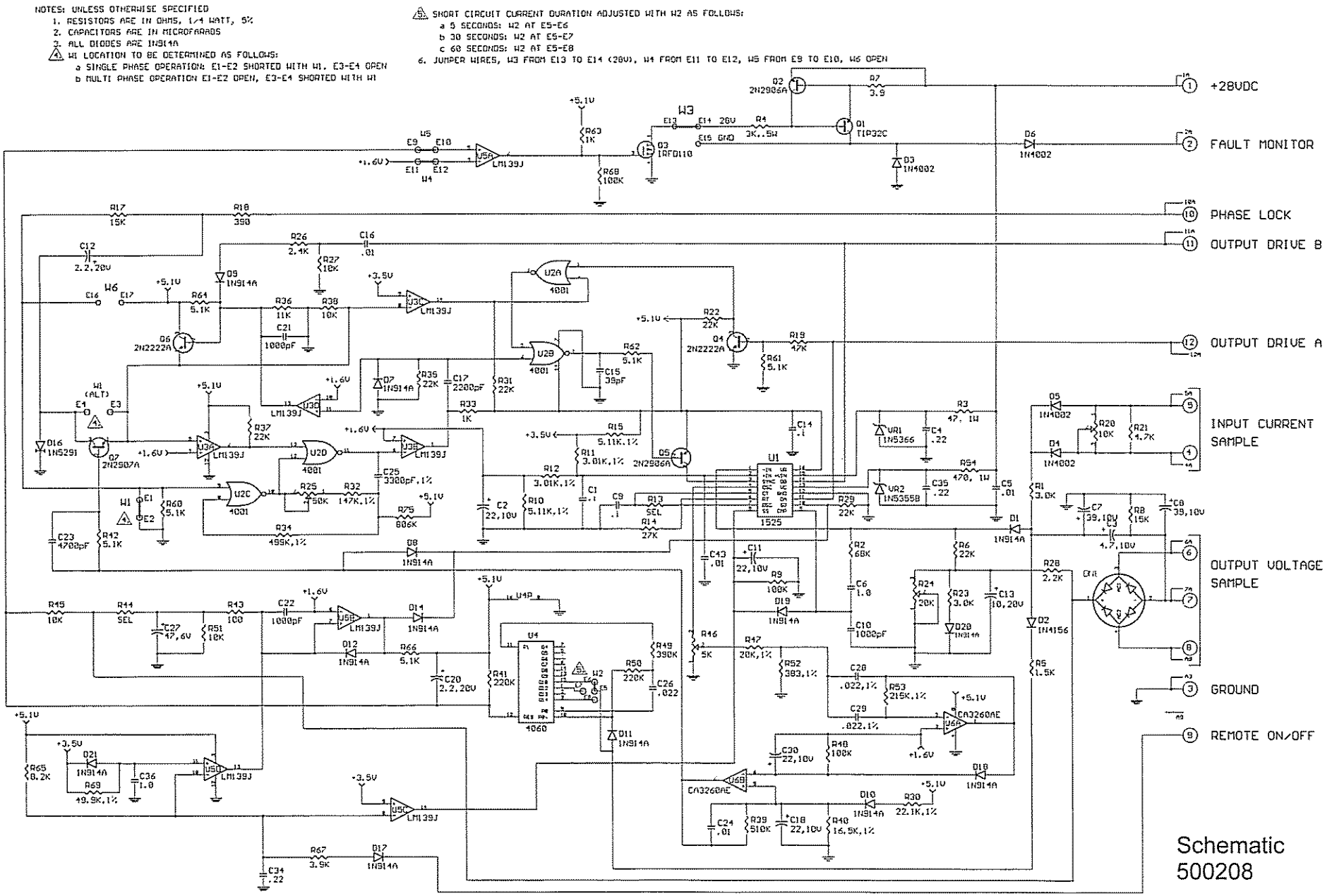
MarathonNorco Aerospace, Inc.
8301 Imperial Drive
Waco, Texas, USA 76712

Technical Information

For technical questions please contact:

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

Figure 1


NOTES: UNLESS OTHERWISE SPECIFIED
1. RESISTORS ARE IN OHMS, 1/4 WATT, 5%
2. CAPACITORS ARE IN MICROFARADS
3. ALL DIODES ARE 1N914A
4. W1 LOCATION TO BE DETERMINED AS FOLLOWS:
a SINGLE PHASE OPERATION: E1-E2 SHORTED WITH W1, E3-E4 OPEN
b MULTI PHASE OPERATION E1-E2 OPEN, E3-E4 SHORTED WITH W1
5. SHORT CIRCUIT CURRENT DURATION ADJUSTED WITH W2 AS FOLLOWS:
a 5 SECONDS: W2 AT E5-E6
b 30 SECONDS: W2 AT E5-E7
c 60 SECONDS: W2 AT E5-E8
6. JUMPER WIRES, W3 FROM E13 TO E14 (28V), W4 FROM E11 TO E12, W5 FROM E9 TO E10, W6 OPEN
+28VDC
FAULT MONITOR
PHASE LOCK
OUTPUT DRIVE B
OUTPUT DRIVE A
INPUT CURRENT SAMPLE
OUTPUT VOLTAGE SAMPLE
GROUND
REMOTE ON/OFF
Schematic 500208