

# Chapter 4 Maintenance

## 4.1 Introduction

This chapter contains instructions for periodic maintenance, testing and troubleshooting for the G3L-1929-160 Multi-Carrier Power Amplifier (MCPA).

## 4.2 Periodic Maintenance

**NOTE** Check your sales order and equipment warranty before attempting to service or repair unit. Do not break seals on equipment under warranty or warranty will be null and void. Do not return equipment for warranty or repair service until proper shipping instructions are received from factory.

Periodic maintenance requirements for the MCPA are listed in Table 4-1.

Table 4-1 Recommended Periodic Maintenance

Task	Interval	Action
Cleaning	3 Months	Inspect for debris especially around front panel vents. Remove dust with a soft cloth/brush or vacuum cleaner
Performance tests	Optional	Perform testing in accordance with Paragraph 4.3.

## 4.3 MCPA Performance Tests

MCPA Performance tests are only performed at the factory. Refer to the troubleshooting instructions in Section 4.4.

## 4.4 Troubleshooting

Perform the instructions in Table 4-2 in the case of an MCPA fault or alarm.

Table 4-2 Troubleshooting

Step	Action
1	Check for proper DC supply voltage.
2	Set the OFF/ON/RESET switch momentarily to RESET (Up) position.
3	Contact your field representative or the factory if fault does not clear.

## 4.5 MCPA Removal and Replacement

Perform the instructions in Table 4-3 to remove and replace a MCPA.



**CAUTION: Do not slam the MCPA into the system during installation. Using excessive force can damage the MCPA connector.**



**CAUTION: When removing the MCPA from the system, support the MCPA to prevent the rear of the MCPA from suddenly dropping when the guide rail disengages from the track. Dropping the MCPA can damage the rear multi-pin connector. The MCPA weighs approximately 28.60 lbs. (12.97 kg).**

Table 4-3 MCPA Removal and Replacement

Step	Action
1	Set MCPA OFF/ON/RESET switch to OFF (down).
2	Loosen two quarter-turn fasteners that secure MCPA to the subrack.
3	With steady even pressure, use handle on front of the MCPA to pull the MCPA out of the system.
4	To replace MCPA, set MCPA OFF/ON/RESET switch to OFF (down).
5	Turn quarter-turn fasteners to Unlocked position.
6	Insert MCPA into subrack. Turn quarter-turn fasteners to locked position to secure MCPA.

## 4.6 Return For Service Procedures

When returning products to Powerwave, the following procedures will ensure optimum response.

### 4.6.1 Obtaining An RMA

A Return Material Authorization (RMA) number must be obtained prior to returning equipment and to reduce delays in receiving repair service. Please contact our Repair Department at (714) 466-1000 to obtain this number, or FAX your request to (714) 466-5816.

### 4.6.2 Repackaging for Shipment

To ensure safe shipment of a component, it is recommended that the original packing materials be reused. If this is not possible, use suitable shipping cartons and foam inserts to prevent damage in transit.