

# Modification Recommended Service Note

Supersedes:  
N4691D-02

## N4691D Electronic Calibration Module (ECal)

Serial Numbers: MY57450000- MY59410001

**The Problem** – A resonance can develop in the heater circuit which can cause an RF tone between 140 MHz and 150 MHz to be injected onto the signal path.

### Parts Required:

| P/N         | Description                      | Qty. |
|-------------|----------------------------------|------|
| N4690-63004 | PCA, 2-port MW ECal Bottom Board | 1    |

### ADMINISTRATIVE INFORMATION

|               |  |                            |                                   |   |
|---------------|--|----------------------------|-----------------------------------|---|
| ACTION        | <input type="checkbox"/> ON SPECIFIED FAILURE                                | STANDARDS                  |                                   |   |
| CATEGORY:     | <input checked="" type="checkbox"/> AGREEABLE TIME                           | LABOR:                     | 1.0 Hours                         |   |
| LOCATION      | <input type="checkbox"/> CUSTOMER INSTALLABLE ( <b>No Parts involved</b> )   | SERVICE:                   | <input type="checkbox"/> RETURN   | USED <input checked="" type="checkbox"/> RETURN |
|               | <input checked="" type="checkbox"/> SERVICE CENTER                           | INVENTORY:                 | <input type="checkbox"/> SCRAP    | PARTS: <input type="checkbox"/> SCRAP           |
| CATEGORY:     | <input type="checkbox"/> ON-SITE ( <i>active On-site contract required</i> ) |                            | <input type="checkbox"/> SEE TEXT | <input type="checkbox"/> SEE TEXT               |
|               | <input type="checkbox"/> CHANNEL PARTNERS                                    |                            |                                   |   |
| AVAILABILITY: | PRODUCT'S SUPPORT LIFE   | NO CHARGE AVAILABLE UNTIL: | 31 DEC 2024                       |   |
|               | <input checked="" type="checkbox"/> Calibration Required                     | PRODUCT LINE:              | WN                                |   |
|               | <input type="checkbox"/> Calibration NOT Required                            | AUTHOR:                    | SS                                |   |

ADDITIONAL INFORMATION:

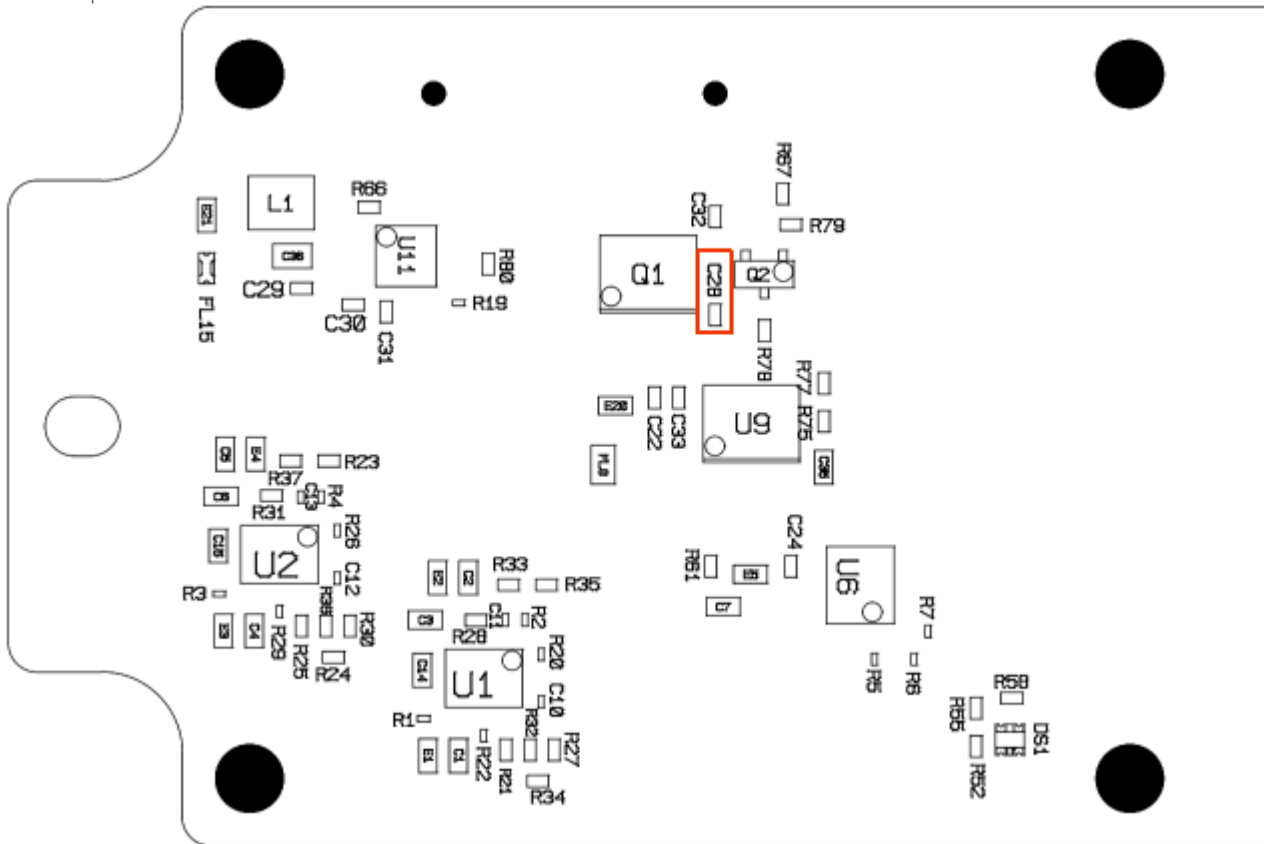
### Situation:

The heater circuit in the N469xD ECal modules was initially designed with a dampening capacitor. It was found in a small number of ECal modules that a resonance can develop in this circuit after the modules is warmed up. This resonance can cause an RF tone between 140 MHz and 150 MHz to be injected onto the signal path.

The dampening capacitor was eliminated in all ECal modules with serial prefix MY5941 and above.

### Solution/Action:

Open the ECal module and remove the N4690-63004 printed circuit board. On this board, locate the C28 capacitor indicated here:



If this capacitor has been removed, no further action is required. Reassemble the ECal module.

If this capacitor exists on this board, this capacitor should be carefully unsoldered and removed, or the N4690-63004 printed circuit assembly should be replaced. Once this is done, reassemble the ECal module.

Revision History:

| Date         | Service Note Revision | Author        | Reason for Change     |
|--------------|-----------------------|---------------|-----------------------|
| 03 Dec 2021  | 01                    | Scott Stewart | As Published          |
| 23 Sept 2024 | 02                    | NMT           | Revised serial number |