



PROJECT MANAGER  
FIREFINDER

U.S. ARMY ELECTRONICS RESEARCH  
AND DEVELOPMENT COMMAND  
FORT MONMOUTH, NEW JERSEY 07703

**HUGHES**

GROUND SYSTEMS GROUP

# MAINTENANCE BULLETIN

AN/TPQ-36 Radar System AN/TPQ-37 Radar System		FILE NO. 135	REVISION:
SUBJECT Cleaning Circuit Cards		DATE: 5/2/90	CATEGORY: A
		SYSTEMS AFFECTED ALL	

THE MAINTENANCE TASK DESCRIBED ON THIS BULLETIN IS INTENDED FOR GENERAL SUPPORT (GS) AND DEPOT ECHELONS OF MAINTENANCE.

## 1. REFERENCES:

- a. Page 5-3, "Cleaning Cards", TM 11-5840-363-40 General Support Card Test and Repair Manual for Radar Set AN/TPQ-36 and Radar Set AN/TPQ-37.
- b. Page 4-17 "Cleaning Circuit Cards, DMWR 11-5840-363-1 Depot Maintenance Work Requirement (Circuit Card and Assembly Test and Repair) for Radar Set AN/TPQ-36 and Radar Set AN/TPQ-37.

## 2. CLEANING CIRCUIT CARDS:

References mentioned in paragraph 1a and 1b above are **RESCINDED** and the following procedure will be substituted in its place:

Circuit cards are cleaned by washing with mild liquid detergent, type 1, 1 oz., MIL-D-16791E (NSN 7930-00-282-9699 or equivalent) and deionize water and then allowing to air dry.

- a. Place about 4 ounces of clean soapy deionize water in a clean container of convenient size to accommodate a circuit card assembly.
- b. Hold the circuit card by the edges and semi-immersed in the container with the soapy deionize water.
- c. Scrub card with a small brush to remove dust particles and any other foreign material.

APPROVED BY CHIEF LMD:

*J. V. Waller*

PMFF

DATE:

8/9/90

d. Rinse circuit card in another container with clean deionize water.

e. Remove circuit card from container and allow to air dry before performing any other operations on the card.

3. DOCUMENTATION:

a. Enclosed for your convenience as ready reference are the pages from the manuals referred to in paragraph 1a and 1b above.

b. Changes to all applicable documentation will be reflected in the next submittal.

**CLEANING CARDS**

Circuit cards are cleaned by washing in clean isopropyl alcohol and then air drying.

**WARNING**

Isopropyl alcohol is flammable. Keep away from heat or open flame. Vapors may be harmful; use with adequate ventilation. Avoid prolonged breathing of vapor. Avoid eye contact. Do not take internally.

1. Place about 4 ounces of isopropyl alcohol in a polyethylene pan.

**CAUTION**

Do not allow sensitive components, such as potentiometers, to be immersed for more than 1 minute.

2. Hold the circuit card by the edges and semi-immersed in the pan containing the alcohol.
3. Scrub card with a small brush to remove residual contamination such as solder flux, metal chips, soil residues, or minor corrosion products.
4. Remove circuit card from the pan and allow to air dry for 15 minutes before performing any other operations on the card.

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## Section III. CLEANING AND INSPECTION

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### INTRODUCTION

The procedures in this section show how to clean and inspect the circuit cards and other electronic assemblies covered in this manual. All assemblies are cleaned and inspected prior to testing. The inspection is completed as part of the preshop analysis to determine the physical condition of the unit under test. Circuit cards and assemblies are also inspected after completion of repairs to ensure that the repaired unit meets applicable standards and is ready to be placed back into service.

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