

## S E R V I C E N O T E

SUPERSEDES: None

**E2420A PREPROCESSOR FOR MOTOROLA 68040****Serial Numbers:** 3051A00000 / 3051A00190**Mis-Manufactured Printed Circuit Board**

There has been a mismanufacturing problem with the E2420A preprocessor. The ground plane on the printed circuit board is incomplete. This can cause the active circuitry on the preprocessor to have floating grounds leading to erratic behavior of the target system and/or preprocessor. Symptoms that have been seen to date are as follows:

- Target locks up on power up or briefly there after.
- Very erratic state listings
- State listings that are inaccurate very infrequently.
- Seemingly perfect operation.

**FAILURE IDENTIFICATION:**

- Hold the printed circuit board up to the light. The board is translucent so you can see internal traces.
- Locate the ground lug pin on the preprocessor board that can be used to connect a scope probe ground. This lug pin will have a “T” shaped trace connected to it in the circuit board.
- If the “T” shaped trace is connected to a large, half inch block of ground plane, the

*Continued*

DATE: 01 October 1991

**ADMINISTRATIVE INFORMATION**

SERVICE NOTE CLASSIFICATION:			
<b>MODIFICATION RECOMMENDED</b>			
ACTION CATEGORY:	<input checked="" type="checkbox"/> IMMEDIATELY <input type="checkbox"/> ON SPECIFIED FAILURE <input type="checkbox"/> AGREEABLE TIME	STANDARDS: Labor See Text	
LOCATION CATEGORY:	<input checked="" type="checkbox"/> CUSTOMER INSTALLABLE <input type="checkbox"/> ON-SITE <input checked="" type="checkbox"/> SERVICE CENTER	SERVICE INVENTORY: <input type="checkbox"/> RETURN <input type="checkbox"/> SCRAP <input checked="" type="checkbox"/> SEE TEXT	USED PARTS: <input type="checkbox"/> RETURN <input type="checkbox"/> SCRAP <input checked="" type="checkbox"/> SEE TEXT
AVAILABILITY:	PRODUCT'S SUPPORT LIFE		
AUTHOR: LH		ENTITY: 0800	
ADDITIONAL INFORMATION:			

preprocessor is good. If there is no such large block of ground plane, the preprocessor has been mismanufactured.

**Parts Required:**

E2420-66501 supplied through the Colorado Springs Division or SMO.

**Modification Instructions:**

Colorado Springs Division will replace any mismanufactured preprocessors. We presently anticipate that new, correct preprocessors will be available by October 24th, 1991. AFTER this time, a customer (or service center) will be able to send their faulty preprocessor to the Colorado Springs division (Attention of Lon Hintze) and have it exchanged for a good unit. Note that this is an EXCHANGE. We must have a faulty unit to issue a new preprocessor. The customer should keep his termination modules (PN 01650-63204). The customer will receive his new unit by fastest possible shipping after his faulty unit has been received.

**Important Interim Workaround:**

There is a work around that will allow customers to use their preprocessor while we are waiting for good units. An alternate ground path exists through pod 7 of the preprocessor. This pod is not normally used for state analysis. By connecting this pod to a spare logic analyzer pod (for 16540/41 and 16511B), a ground path for the preprocessor is created and the unit will be functional. For 80 channel analyzers you can disconnect pod2 (upper address) and connect the pod 2 analyzers cable to pod 7 of the preprocessor. Remember to unassign all of the pod 2 channels from the address label to get valid results. This should allow your customers to continue to make measurements with their preprocessor.