3A PROCESSOR MAINTENANCE DATA

COMMON SYSTEMS

1. GENERAL

1.001 This addendum supplements Section 254-300-301, Issue 1. Place this pink sheet ahead of Page 1 of the section.

1.002 This addendum is issued to add 14A circuit pack extender information to the backplane tools and materials.

2. CHANGE TO SECTION

2.001 On page 6 at the end of paragraph 1.08 add the following:

Installation Test and Diagnostic

1.08.1 A 14A circuit pack extender is used in the performance of field tests to locate shorts, opens, or grounds in backplane wiring. This circuit board is not to be used as a general tool. Caution must be emphasized and only qualified test and installation personnel should use this piece of apparatus.

1.08.2 The 14A extender is a five-layer board containing two signal layers, one ground layer, and two pad layers. The board size is 12.61 inches by 3.67 inches by 0.062 inches. The 14A extender provides the following functions:

- Capability of individual open or closed signal from each backplane terminal to the test circuit board terminal. This is accomplished via a subminiature switch.
- Front access to any 947 connector backplane terminal.
- Signal terminal grounding capabilities.
- Signal-to-signal shorting capabilities.

1.08.3 The assembled 14A extender board consists of:

- One multilayer board
- One 82-pin 947A connector
- One 82-pin 946C plug
- Ninety-two Augat lead sockets
- Seventy-six SAE switches
- Four jumper strips.

1.08.4 Heed the following warnings prior to the general procedure for using the 1A extender.

Warning 1: The circuit pack to be tested has to be a 1A technology circuit board (FA, FB, or FC).

Warning 2: Prior to initial insertion of the extender board, lubricate the 946C connector terminal with KS-19416, L2 lubricant.

Warning 3: With proper maintenance and lubrication the 946C and 947A connectors should be replaced every 500 insertions maximum. Periodic inspection of these connectors is recommended.

Warning 4: Each switch should be used for a maximum of 5000 switching operations.

Warning 5: Jumper and pins should be used for a maximum of 5000 insertions.

Warning 6: The extender board should be electrically tested periodically to guarantee the following requirements:

- ***Resistance of 0.75 ohms maximum***
- ***Capacitance of 50 picofarad maximum***
- ***Impedance of 70 ohms minimum***
- ***Time delay less than or equal to 2 nanoseconds.***

1.08.5 The general procedure for using the 14A extender follows:

(1) Remove power from the frame to be tested.

(2) Observing warnings, remove the circuit pack to be tested.

(3) Insert 14A extender board in the vacated slot.

(4) Install the circuit pack into the slide assembly of the extender board.

(5) Restore power to the frame.

(6) Test circuit pack backplane wiring.