ELECTROSTATIC DISCHARGE (ESD) - MAINTENANCE PRACTICES

EFFECTIVITY: ALL

1. General

   A. This section gives the maintenance practices for handling electronic components or systems ESD susceptible.

   B. The procedures in this section are given in the sequence below.

   C. The procedures in this section are given in the sequence below. The tasks identified with (♦) are part of the Scheduled Maintenance Requirements Document (SMRD).

TASK NUMBER	*DESCRIPTION*	*EFFECTIVITY*
20-40-00-910-801-A	ELECTROSTATIC DISCHARGE (ESD) - STANDARD PRACTICES	ALL

TASK 20-40-00-910-801-A
EFFECTIVITY: ALL

2. ELECTROSTATIC DISCHARGE (ESD) - STANDARD PRACTICES

A. General

(1) This task gives the maintenance practices for handling electronic components or systems ESD susceptible.

(2) Electrostatic protection shall be maintained at a potential above a "zero" voltage ground potential as long as all items in the system are at the same potential. For this, all conductors in the environment, including personnel, shall be bonded or electrically connected and attached to a known ground or contrived ground (as on aircraft). This section gives the procedure to create an equipotent balance between all items and personnel.

B. Zones and Accesses

Not Applicable

C. Tools and Equipment

ITEM	*DESCRIPTION*	*PURPOSE*	*QTY*
GSE 444	Wrist Strap	For handling electronic components or systems ESD susceptible	
GSE 445	Wrist Strap Test	For handling electronic components or systems ESD susceptible	

D. Auxiliary Items

Not Applicable

E. Consumable Materials

Not Applicable

F. Expandable Parts

Not Applicable

G. Persons Recommended

QTY	*FUNCTION*	*PLACE*
1	Does the task	Where applicable

H. Preparation

SUBTASK 841-002-A

(1) Make sure that the ESD workstation table is in perfect conditions for use.

(2) Remove all items from the work area, such as paper, tape, styrofoam cups and clothing that can cause static electricity. Because these items are insulators, static charges will not discharge even when these items are on a grounded surface.

NOTE: ALL ESDS devices are identified with the ESD symbol (Figure 201).

I. Grounding Integrity Test (Figure 202)

SUBTASK 710-002-A

(1) Put on and adjust the GSE 444 until you get a direct contact with the skin (5).

(2) Do the grounding integrity test of the GSE 444 as follows:

(a) Connect the ground cord (4) to the wrist strap (5).

(b) Connect the plug of the ground cord to the GSE 445 (1).

(c) Press the test button (3) for 2-3 seconds.

Result:

1. The green (OK) LED (2) comes on. It indicates that the wrist strap and ground cord assemblies operate correctly.

NOTE: If the red (no OK) LED (2) comes on, do a check of the GSE 444 assembly and replace it if necessary.
Do the integrity test again whenever you remove or replace the GSE 444.

(d) Disconnect the plug of the ground cord from the GSE 445 (1).

J. Standard Practices

SUBTASK 910-002-A

(1) Connect the plug of the ground cord to an ESD grounded point.

(2) You are now safely grounded and can start your work.

NOTE: When you do the work with ESDS devices, make sure that the ground connections are in good conditions.

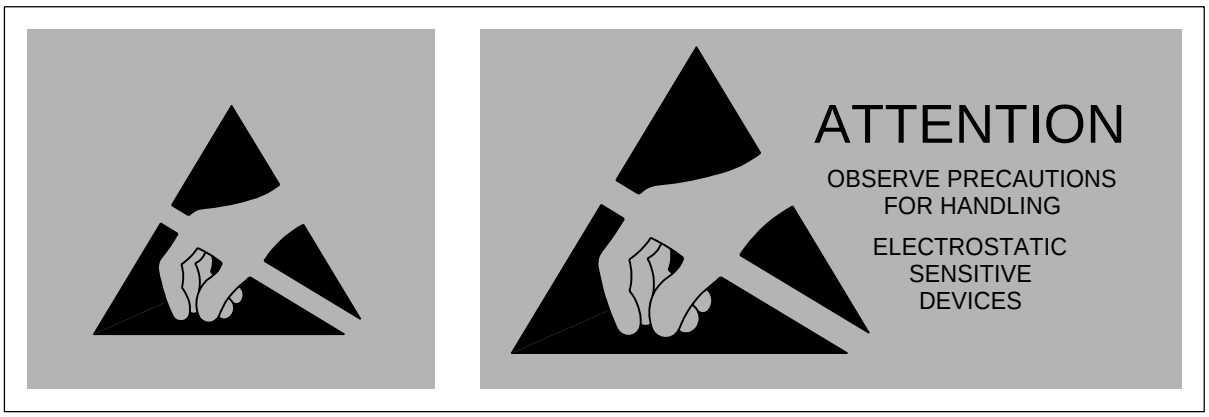
K. Follow on

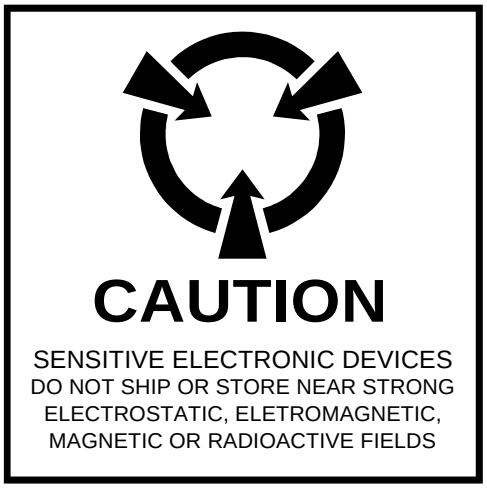
SUBTASK 842-002-A

(1) Go back to the procedure of the related task.

EFFECTIVITY: ALL

ESD Labels - Maintenance Practices
Figure 201





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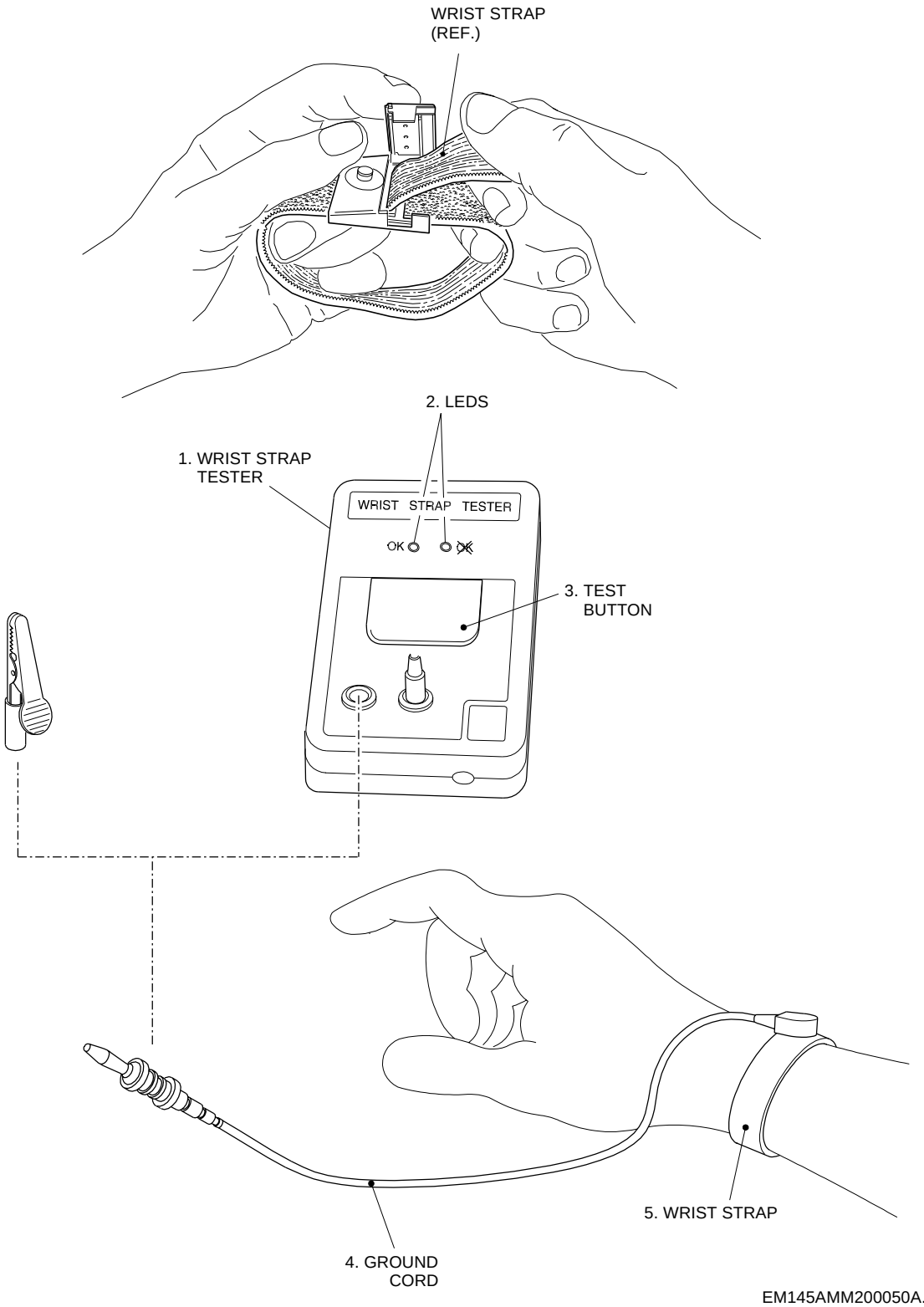
EFFECTIVITY: ALL

Adjusting and Testing of Wrist Strap Assembly - Maintenance Practices
Figure 202



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