GPWS/WINDSHEAR - REMOVAL/INSTALLATION

EFFECTIVITY: ALL

1. General

    A. This section gives the procedures to load the terrain database/envelope modulation database PCMCIA card into the EGPWS. The database is supplied by Honeywell.

    B. Get access to the EGPWS computer through access panel 223 KLW in the Cockpit.

    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*
34-41-00-470-801-A	TERRAIN DATA BASE - LOADING	ALL

TASK 34-41-00-470-801-A
EFFECTIVITY: ALL

2. <u>TERRAIN DATA BASE - LOADING</u>

A. General

(1) This section gives the procedures to load the terrain database/envelope modulation database PCMCIA card into the EGPWS in the aircraft.

B. References

REFERENCE	DESIGNATION
AMM MPP 06-41-03/100	- COMPONENT LOCATION
AMM SDS 23-51-00/1	
AMM SDS 31-51-00/1	
AMM SDS 34-41-00/1	
AMM TASK 20-40-01-860-801-A/200	ENERGIZATION OF THE AIRCRAFT WITH AN EX-TERNAL POWER SOURCE

C. Zones and Accesses

ZONE	PANEL/DOOR	LOCATION
223	223 KLW	Cockpit Internal Panel

D. Tools and Equipment

ITEM	DESCRIPTION	PURPOSE	QTY
Commercially available	PCMCIA card	To load the database	

E. Auxiliary Items

Not Applicable

F. Consumable Materials

Not Applicable

G. Expandable Parts

Not Applicable

H. Persons Recommended

QTY	FUNCTION	PLACE
1	Does the task	Cockpit

I. Preparation

SUBTASK 841-002-A

(1) Energize the aircraft with the External DC-Power Supply (AMM TASK 20-40-01-860-801-A/200).

(2)   Make sure that these systems are operational and on:

–   Airborne Audio System (AMM SDS 23-51-00/1).

–   Aural Warning System (AMM SDS 31-51-00/1).

–   GPWS/Windshear (AMM SDS 34-41-00/1).

(3)   Open access panel 223KLW (AMM MPP 06-41-03/100).

J.   Loading Procedure (Figure 401) (Figure 402)

SUBTASK 470-002-A

(1)   Make sure that power to the EGPWS is on and the COMPUTER OK LED on the EGPWS front panel is on. Refer to Figure 401.

(2)   Open the door on the EGPWS front panel.

(3)   Put the database PCMCIA card into the PCMCIA card slot.

NOTE: Make sure that the PCMCIA card contains the database to be loaded.

(4)   While the loading is in progress, make sure that the IN PROG LED comes on and the COMPUTER OK LED goes off.

(5)   When the loading is complete, the XFER COMP LED must come on.

(6)   Remove the PCMCIA card from the EGPWS.

(7)   After approximately 15 seconds, make sure that the COMPUTER OK LED comes on to show that the contents of the PCMCIA card were successfully loaded.

(8)   Do the check of installation as follows:

(a)   The check is done with the ST (self test) function.

(b)   The ST function can be started from the EGPWS with the ST button behind the front panel door.

(c)   The term ″ST Button ″ means to initiate the ST sequence from the EGPWS front panel.
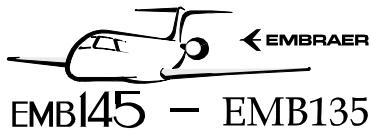
(d)   The EGPWS ST function has six levels that show the current condition and configuration of the EGPWS, the fault and warning history, and the condition of the inputs.

(e)   To help navigate through the various levels, there are two cancel functions:

1   Short cancel (push and hold the ST button more than 0.5 seconds but less than two seconds).

2   Long cancel (push and hold the ST button more than two seconds but less than eight seconds).

(f)   The short cancel and long cancel functions operate differently depending on the ST level.
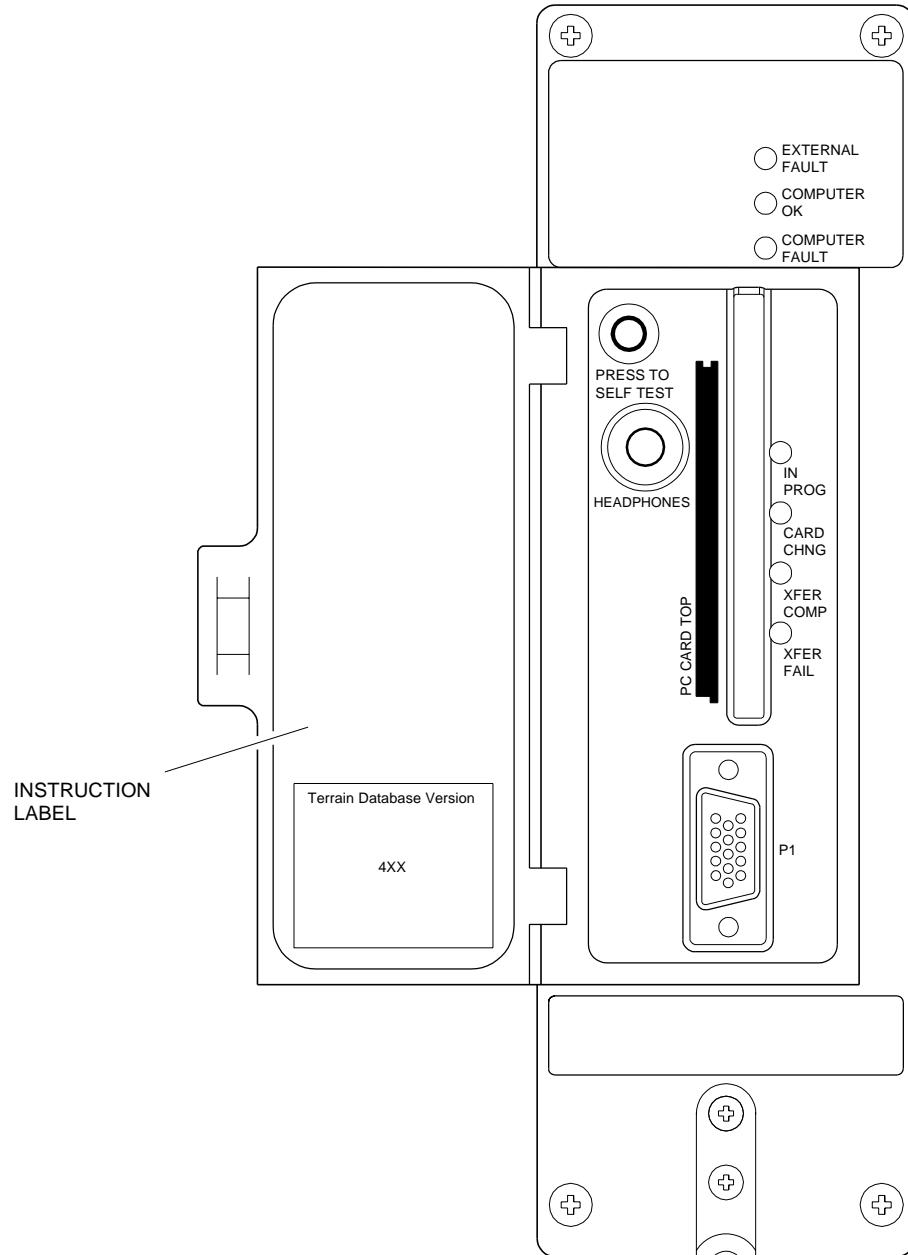
(g)   To start an ST sequence or to continue from level-to-level, push and hold the ST button for more than 0.5 seconds but less than two seconds. It is identical to the short cancel sequence.

(h)   The procedure guides the operator directly to Level 3 ST, system configuration and skips most of Level 1 and Level 2.

    <u>1</u>   Push the ST Button to initiate Level 1 ST.

        <u>NOTE:</u> If program pin parity error is annunciated, ST will not execute until the aircraft configuration is valid.

    <u>2</u>   After Level 1 ST message starts, push the ST button to cancel Level 1 and start Level 2.

    <u>3</u>   After Level 2 ST message starts (CURRENT FAULTS...), hold the ST button for five seconds to cancel Level 2.

    <u>4</u>   When you hear the PRESS TO CONTINUE message, push the ST button to start Level 3 self-test, system configuration.

    <u>5</u>   Make sure that these messages are annunciated:

        <u>NOTE:</u> Make sure that the correct versions are annunciated.

        •   TERRAIN DATABASE VERSION

        •   ENVELOPE DATABASE VERSION

    <u>6</u>   When the ST finishes Level 3, the PRESS TO CONTINUE message is annunciated. If the ST button is not pushed, the ST sequence terminates.

(9)   Use permanent black marking material to mark on the instruction label that is inside the front panel door to show that this modification was done. Refer to Figure 401.

(10) Close the door on the EGPWS front panel.

K.   Follow-on

SUBTASK 842-002-A

    (1)   Close access panel 223KLW (AMM MPP 06-41-03/100).

    (2)   De-energize the aircraft (AMM TASK 20-40-01-860-801-A/200).

EFFECTIVITY:: ALL
EGPWS Front Panel
Figure 401

EXTERNAL
FAULT

COMPUTER
OK

COMPUTER
FAULT

PRESS TO
SELF TEST

HEADPHONES

IN
PROG

CARD
CHNG

XFER
COMP

XFER
FAIL

PC CARD TOP

INSTRUCTION
LABEL

Terrain Database Version

4XX

P1

EM145AMM341078A.DGN

EMB-145 - AMM 1285

34-41-00

470-801-A/400
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EMBRAER
EMB145 – EMB135
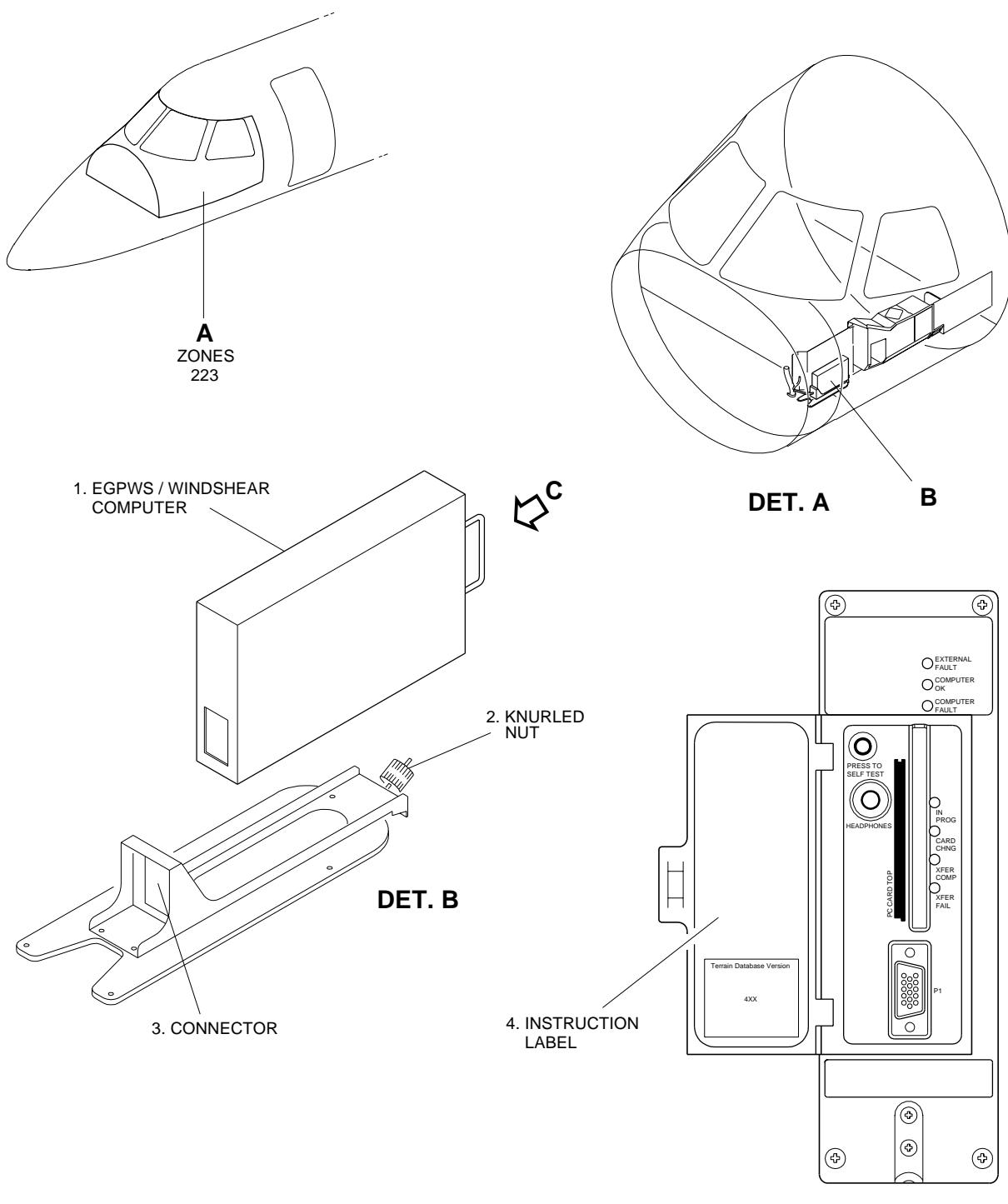
EFFECTIVITY:: ALL
Enhanced Ground-Proximity Warning System - Terrain Database
Figure 402

A
ZONES
223

1. EGPWS / WINDSHEAR
COMPUTER

C

DET. A

B

2. KNURLED
NUT

DET. B

3. CONNECTOR

4. INSTRUCTION
LABEL

EXTERNAL
FAULT

COMPUTER
OK

COMPUTER
FAULT

PRESS TO
SELF TEST

HEADPHONES

IN
PROG

CARD
CHNG

XFER
COMP

XFER
FAIL

PC CARD TOP

Terrain Database Version

4XX

P1

VIEW C

EM145AMM341079A.DGN