BOMBARDIER

MODIFICATION SUMMARY PACKAGE

1 CERTIFYING AUTHORITY NO.	2 MODEL / TYPE	3 MODSUM NO. COMPLETE [X]	4 SHEET
N/A	BD-700-1A10 BD-700-1A11	**IS700-34-0009**	1 OF 19

5 CURRENT REVISION												
	A											

6 PRIME DESIGN ACTIVITY

BOMBARDIER INC. [ ] 3AB48

BOMBARDIER INC., MONTRÉAL [X] 88308 LEARJET INC. [ ] 24210

BOMBARDIER INC., DOWNSVIEW [ ] 71867 SHORT BROTHERS PLC [ ] K4585

7 SUPPLIER NAME AND CAGE CODE

BA (88308)

8 TITLE

Navigation - EGPWS - Configuration Strapping for Alternate Mode 6 Aural Altitude Callouts

10 APPROVED INITIATING DOCUMENT

CAR	GX700-513

9 MAJOR ASSY OR COMPONENT AFFECTED

N/A

BASKET MODSUM

[ ] SEE INDIVIDUAL AUTH DOCUMENTS

11 DESCRIPTION OF MODIFICATION

To provide alternate EGPWS Mode 6 aural altitude callouts annunciation by re-configuring the program pins to match the selected callout menus listed on Table 1 (see sheet 6) .

12 REASON FOR MODIFICATION

To allow EGPWS Aural Mode 6 altitude callouts annunciation that would better adapt to the customers aircraft operation during approach procedures, in lieu of the baseline aural altitude callout annunciations " 100, 50, 30" (Pre SB 700-31-024 or 700-1A11-31-005) or "50, 30, 10" (Post SB 700-31-024 or 700-1A11-31-005).

13 ENGINEERING REMARKS

THIS MODSUM AUTHORIZES MODIFICATIONS THAT MAY NOT BE SUPPORTED BY BOMBARDIER PARTS LOGISTICS. ALL INFORMATION REQUIRED TO PERFORM THIS MODIFICATION IS PROVIDED WITHIN THIS ENGINEERING PACKAGE.

APPROVED BY: Saif Mozaffar ODA # 234	DATE: 21-11-08
APPROVED IN ACCORDANCE WITH TRANSPORT CANADA DAO NO. 93-Q-02	

THE TECHNICAL CONTENT OF THIS MODSUM IS ACCEPTED BY THE FAA UNDER THE CANADA/USA BILATERAL AVIATION SAFETY AGREEMENT.

THE TECHNICAL CONTENT OF THIS MODSUM IS ACCEPTED BY THE JAA AND BY EASA IN ACCORDANCE WITH ESTABLISHED PROCEDURES.

14 RELATED MODSUM

IS700-34-0002

16 PRODUCTION EFFECTIVITY

N/A

15 ENGINEERING VALIDITY

9002 - 9999

17 RECOMMENDED SERVICE EFFECTIVITY

9002-9999

18 CLASS	19 AIRWORTHINESS CLASSIFICATION
C	LEVEL 1** [ ] LEVEL 2* [X] LEVEL 3 [ ]

**DCCP OR *ACRL & SOC OR FAA FORM 8110-3 REQUIRED

BOMBARDIER

MODIFICATION SUMMARY PACKAGE

AUTHORIZATION SHEET

3 MODSUM NO.	4 SHEET
IS700-34-0009	2

5 CURRENT REVISION	A			
21 ORIGINATOR	Francois Pelletier			
22 DESIGN	2008.11.21			
23 DESIGN AUTHORITY	21-11-08			
24 ~~PP&C~~ CSE PJCT OFFICE				
5 CURRENT REVISION				
21 ORIGINATOR				
22 DESIGN				
23 DESIGN AUTHORITY				
24 PP&C				

25 REVISION DESCRIPTION

Rev A - Initial Release

Global Express Product Release Group - Approved
GX Service Engineering Only - Montreal

Date: 21 NOV. 08

BOMBARDIER

MODIFICATION SUMMARY PACKAGE

ENGINEERING DOCUMENTS

3 MODSUM NO.	4 SHEET
IS700-34-0009	3

5 CURRENT REVISION	A											

28 ENGINEERING DOCUMENTS

DOCUMENT NO.	DOCUMENT TITLE	REVISION	EFFECTIVITY (IF DIFFERENT FROM MODSUM BLOCK 16)	NOTES
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Global Express Product Release Group - Approved
GX Service Engineering Only - Montreal
Date: 21 Nov. 08

29 ENGINEERING DOCUMENT NOTES

Limitations

This IS ModSum is only applicable to aircraft with EGPWS Computer P/N 965-0976-040-206-206.

Parts Required:

Wire P/N B0801150-22-9 (55PC0211-22-9 - CAGEC 06090) or equivalent

Special Tools:

N/A

Procedure:

The purpose of this MOD is to provide instructions to re-configure the program pins to match the EGPWS Mode 6 aural altitude callout for selected callout menu per Table 1.

Notes:

a) Others EGPWS Mode 6 aural altitude callout configurations were intentionally not included in the Table 1 due a potential conflict that may occur between the EGPWS and the Integrated Avionics Computer (IAC) system that generates altitude awareness callout "Minimums, Minimums".

b) If an altitude callout menu containing the normal "500" callout is selected, then activation of the Smart callout feature will make that "500" callout function as a Smart callout.

A. Aircraft Setup

(1) Make sure that the aircraft is in standard configuration for maintenance. Refer to TASK 12-00-00-867-801.
(2) Obey all electrical/electronic safety precautions. Refer to TASK 24-00-00-910-801.
(3) Set the circuit breaker that follows to OUT (on aircraft pre SB 700-24-045) or LOCKED (on aircraft, Serial No. 9123 and subsequent or aircraft post SB 700-24-045) (refer to TASK 24-00-00-863-801):

SYSTEM NAME	CIRCUIT BREAKER NAME	BUS NAME
NAV	GPWS	DC 1

(4) Remove the external avionics-compartment access-panel 140BB. Refer to TASK 52-45-11-000-801. For Global 5000 remove the avionics-rack closing skin panel 232JRF and 232KRF. Refer to TASK 25-72-01-000-801.

B. Modification

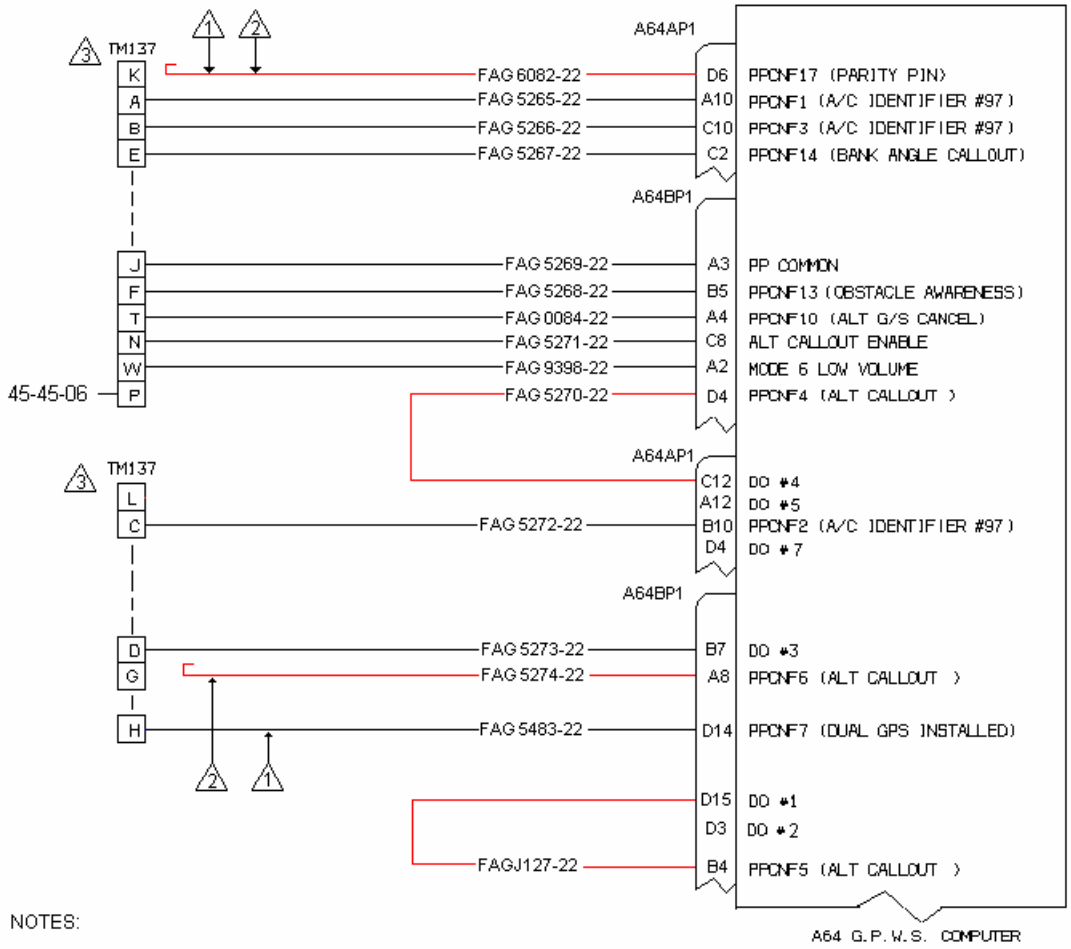
(1) Remove the EGPWS computer. Refer to TASK 34-42-01-000-801.
(2) Get access to the back of connector A64AP1 and/or A64BP1.
(3) Remove the connector backshell.
(4) From the Table 1, choose the desired alternate EGPWS Aural Mode 6 Callout and perform the selected Menu wire strapping.

Note:
Connector A64AP1 is an ITT Cannon Arinc 600 connector. For the removal and installation of the contact pin, refer to the Wiring Manual, Chapter 20-17-60.

(5) Install the connector backshell.
(6) Install the EGPWS computer. Refer to TASK 34-42-01-400-801.

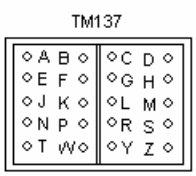
TABLE 1

ID	EGPWS Mode 6 Aural Callout Configuration	Note
21	50, 30,10	See figure 1
21+Smart Callout	50, 30,10 + 500 Smart Callout	See figure 2
26	60, 30, 10	See figure 3
26+Smart Callout	60, 30, 10 + 500 Smart Callout	See figure 4
40	1000, 50, 30, 10	See figure 5
40+Smart Callout	1000, 50, 30, 10 + 500 Smart Callout	See figure 6
47	2500	See figure 7
47+Smart Callout	2500 + 500 Smart Callout	See figure 8
52	50, 30, 20, 10	See figure 9
52+Smart Callout	50, 30, 20, 10 + 500 Smart Callout	See figure 10
68+Smart Callout	2500, 500, 50, 40, 30, 20, 10 + 500 Smart Callout	See figure 11



NOTES:

1. The PARITY PIN should be connected to A64AP1, PROGRAM PIN COMMON if an even number of configuration pins, PPCNF1-PPCNF16, are connected to PROGRAM PIN COMMON or DO#1-6.
2. Cap and Stow Wire per A/C Wiring Manual Chapter 20.
3. TM137



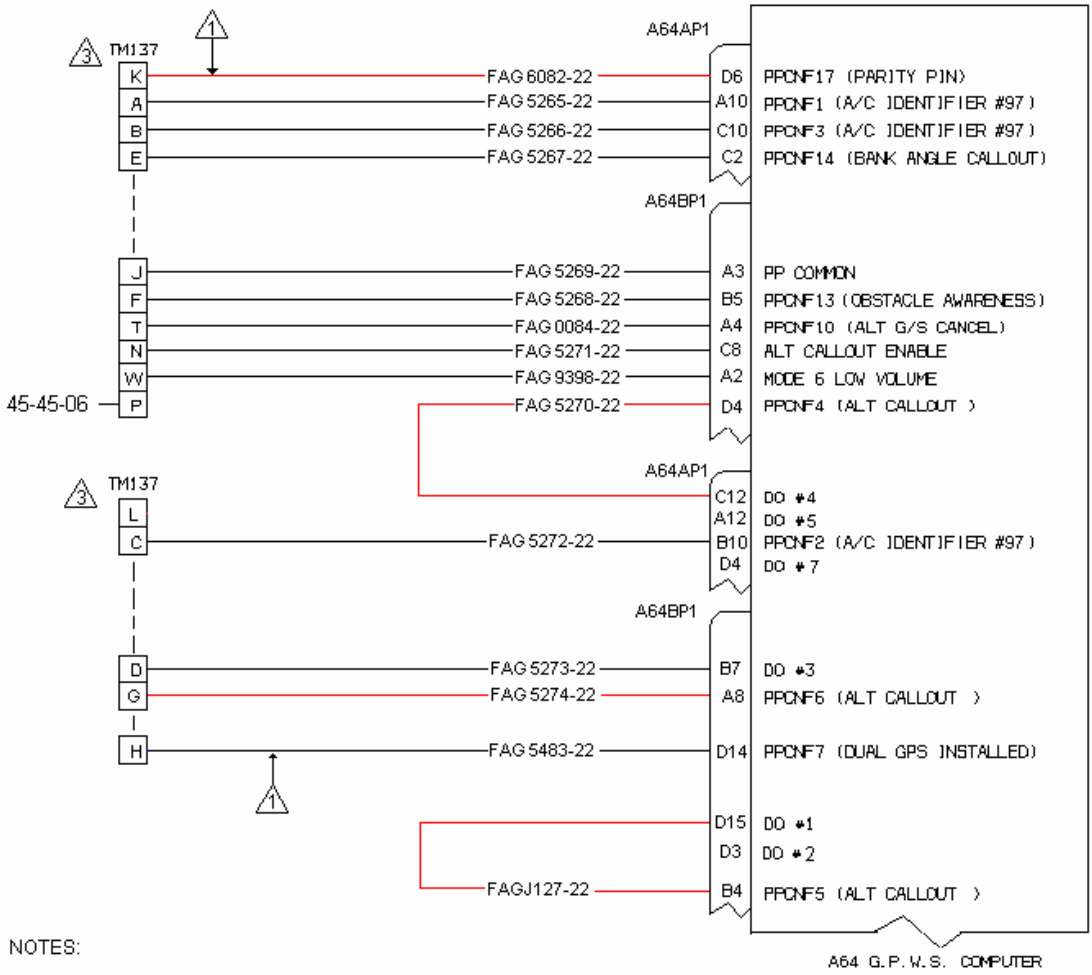
Bussing Configuration
Contact P/N M39029/22-191

FIGURE - 1

STRAPPING CONFIGURATION EGPWS CALLOUT MODE 6

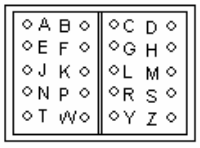
MENU 21 (50, 30, 10)

REFERENCE - WIRING DIAGRAM GC568-0020 (34-42-01)



NOTES:

1. The PARITY PIN should be connected to A64AP1, PROGRAM PIN COMMON if an even number of configuration pins, PPCNF1-PPCNF16, are connected to PROGRAM PIN COMMON or DO#1-6.
2. Cap and Stow Wire per A/C Wiring Manual Chapter 20.
3. TM137

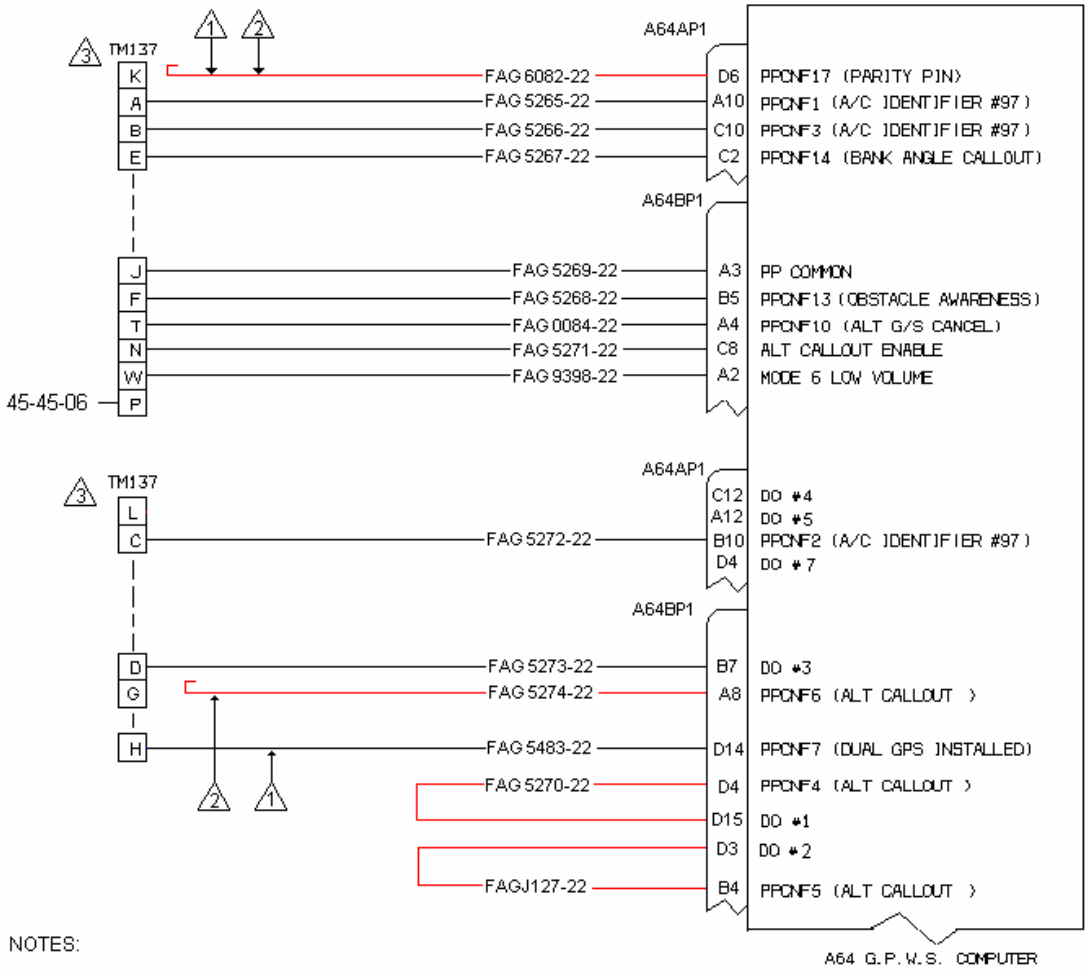


Bussing Configuration
Contact P/N M39029/22-191

FIGURE - 2

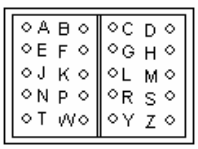
STRAPPING CONFIGURATION EGPWS CALLOUT MODE 6
MENU 21 + SMART CALLOUT (50, 30, 10 + 500 Smart Callout)

REFERENCE - WIRING DIAGRAM GC568-0020 (34-42-01)



NOTES:

1. The PARITY PIN should be connected to A64AP1, PROGRAM PIN COMMON if an even number of configuration pins, PPCNF1-PPCNF16, are connected to PROGRAM PIN COMMON or DO#1-6.
2. Cap and Stow Wire per A/C Wiring Manual Chapter 20.
3. TM137



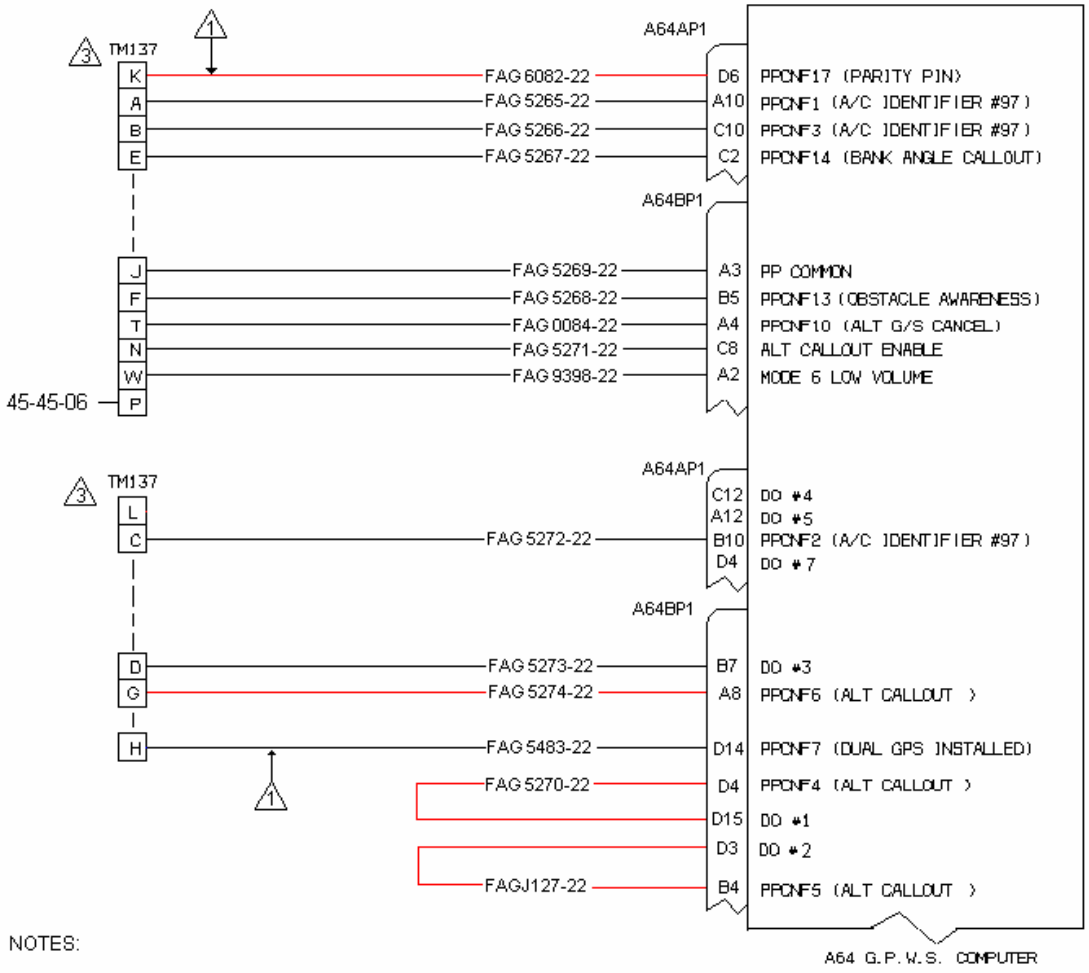
Bussing Configuration
Contact P/N M39029/22-191

FIGURE - 3

STRAPPING CONFIGURATION EGPWS CALLOUT MODE 6

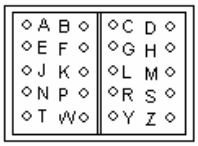
MENU 26 (60, 30, 10)

REFERENCE - WIRING DIAGRAM GC568-0020 (34-42-01)



NOTES:

1. The PARITY PIN should be connected to A64AP1, PROGRAM PIN COMMON if an even number of configuration pins, PPCNF1-PPCNF16, are connected to PROGRAM PIN COMMON or DO#1-6.
2. Cap and Stow Wire per A/C Wiring Manual Chapter 20.
3. TM137



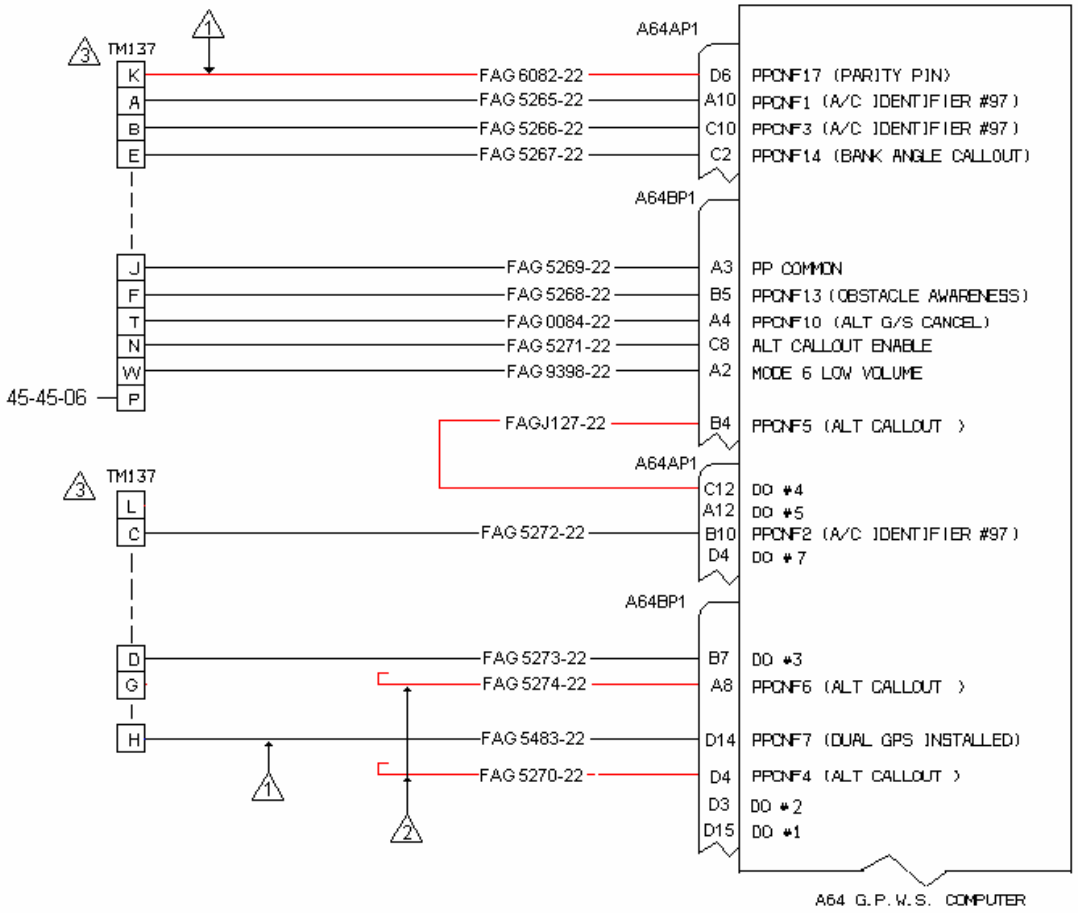
Bussing Configuration
Contact P/N M39029/22-191

FIGURE - 4

STRAPPING CONFIGURATION EGPWS CALLOUT MODE 6

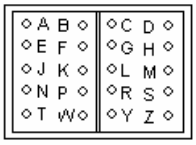
MENU 26 + SMART CALLOUT (60, 30, 10 + 500 Smart Callout)

REFERENCE - WIRING DIAGRAM GC568-0020 (34-42-01)



NOTES:

1. The PARITY PIN should be connected to A64AP1, PROGRAM PIN COMMON if an even number of configuration pins, PPCNF1-PPCNF16, are connected to PROGRAM PIN COMMON or DO#1-6.
2. Cap and Stow Wire per A/C Wiring Manual Chapter 20.
3. TM137



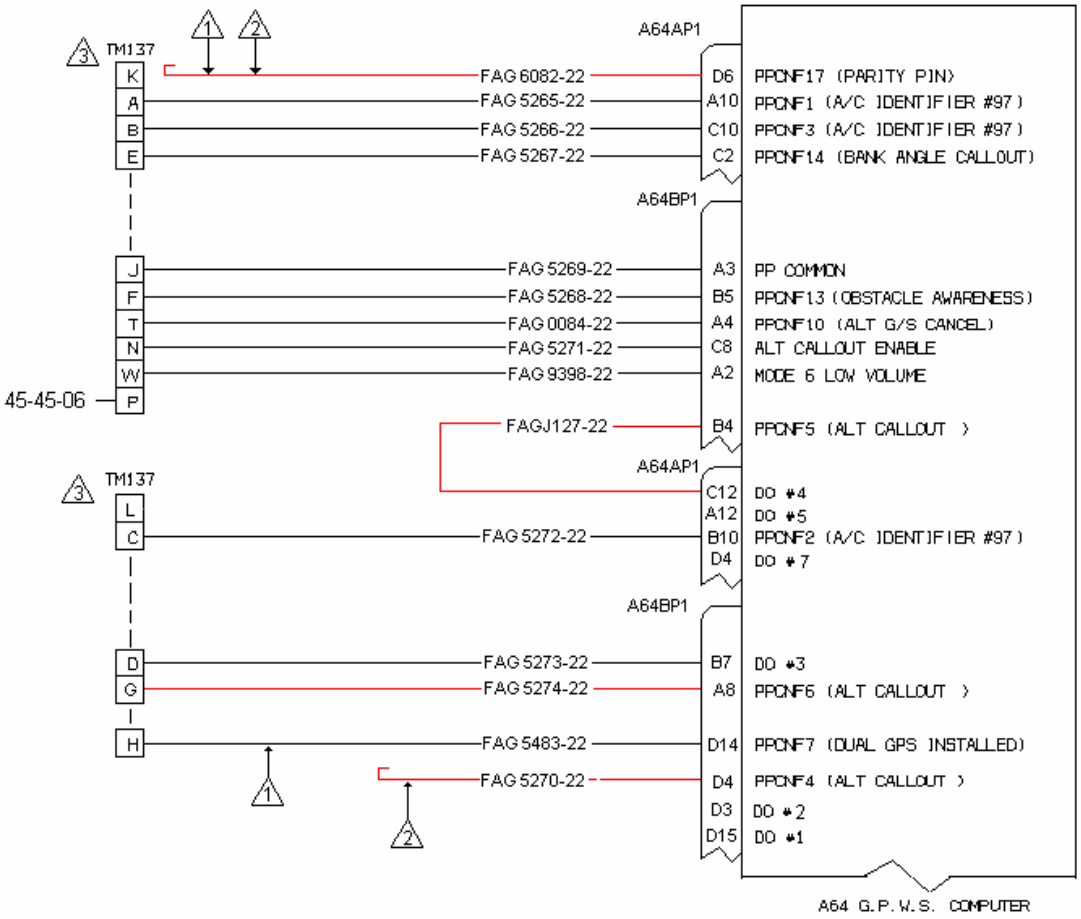
Bussing Configuration
Contact P/N M39029/22-191

FIGURE - 5

STRAPPING CONFIGURATION EGPWS CALLOUT MODE 6

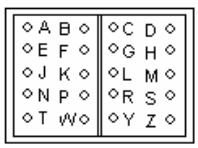
MENU 40 (1000, 50, 30, 10)

REFERENCE - WIRING DIAGRAM GC568-0020 (34-42-01)



NOTES:

1. The PARITY PIN should be connected to A64AP1, PROGRAM PIN COMMON if an even number of configuration pins, PPCNF1-PPCNF16, are connected to PROGRAM PIN COMMON or DO#1-6.
2. Cap and Stow Wire per A/C Wiring Manual Chapter 20.
3. TM137

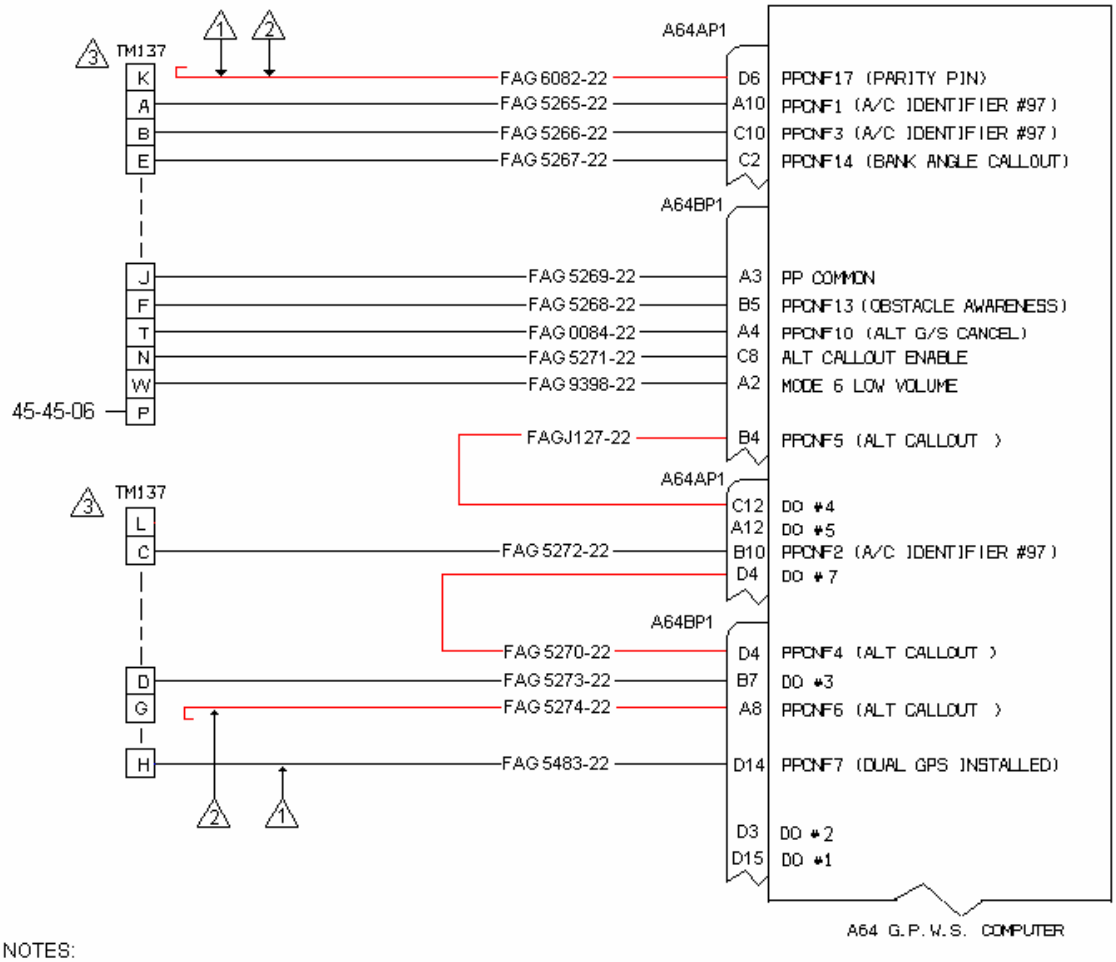


Bussing Configuration
Contact P/N M39029/22-191

FIGURE - 6

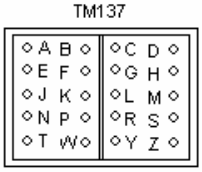
STRAPPING CONFIGURATION EGPWS CALLOUT MODE 6
MENU 40 + SMART CALLOUT (1000, 50, 30, 10 + 500 Smart Callout)

REFERENCE - WIRING DIAGRAM GC568-0020 (34-42-01)



NOTES:

1. The PARITY PIN should be connected to A64AP1, PROGRAM PIN COMMON if an even number of configuration pins, PPCNF1-PPCNF16, are connected to PROGRAM PIN COMMON or DO#1-6.
2. Cap and Stow Wire per A/C Wiring Manual Chapter 20.
3. TM137

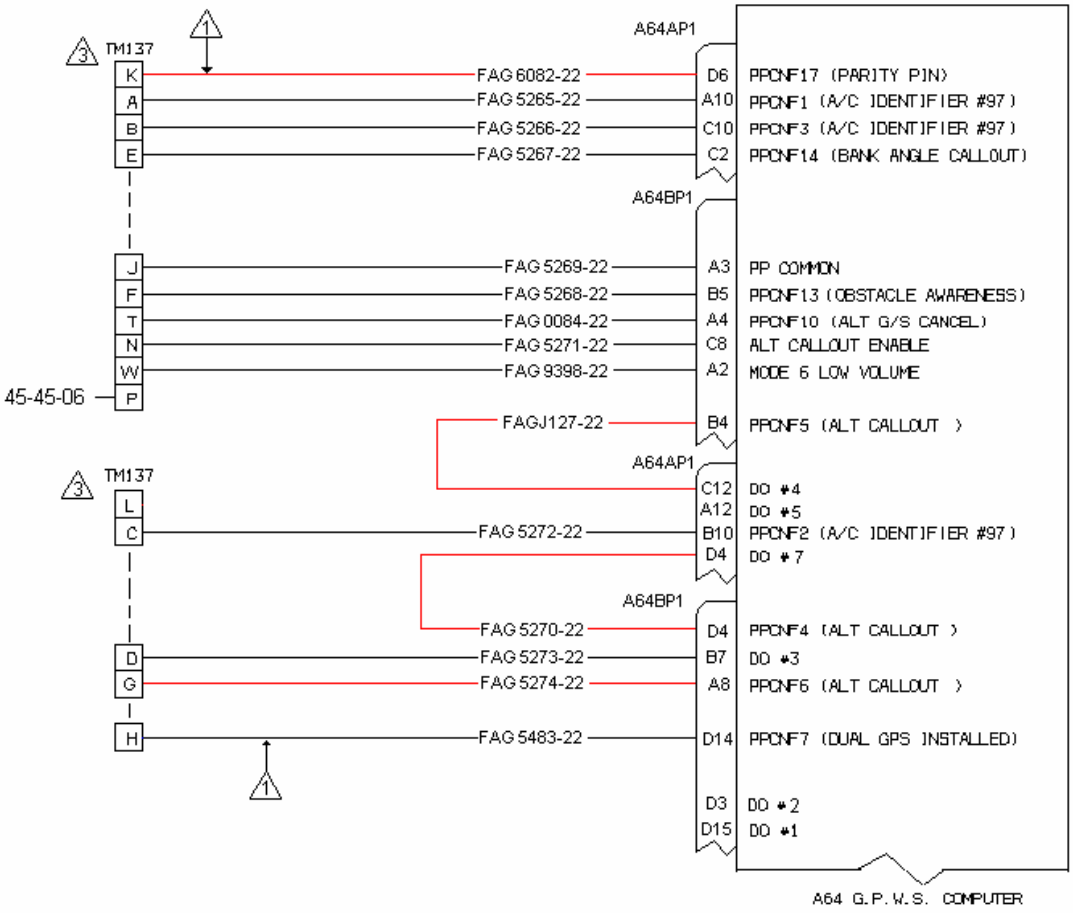


Bussing Configuration
Contact P/N M39029/22-191

FIGURE - 7

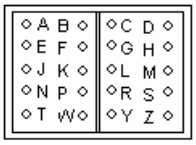
STRAPPING CONFIGURATION EGPWS CALLOUT MODE 6
MENU 47 (2500)

REFERENCE - WIRING DIAGRAM GC568-0020 (34-42-01)



NOTES:

1. The PARITY PIN should be connected to A64AP1, PROGRAM PIN COMMON if an even number of configuration pins, PPCNF1-PPCNF16, are connected to PROGRAM PIN COMMON or DO#1-6.
2. Cap and Stow Wire per A/C Wiring Manual Chapter 20.
3. TM137

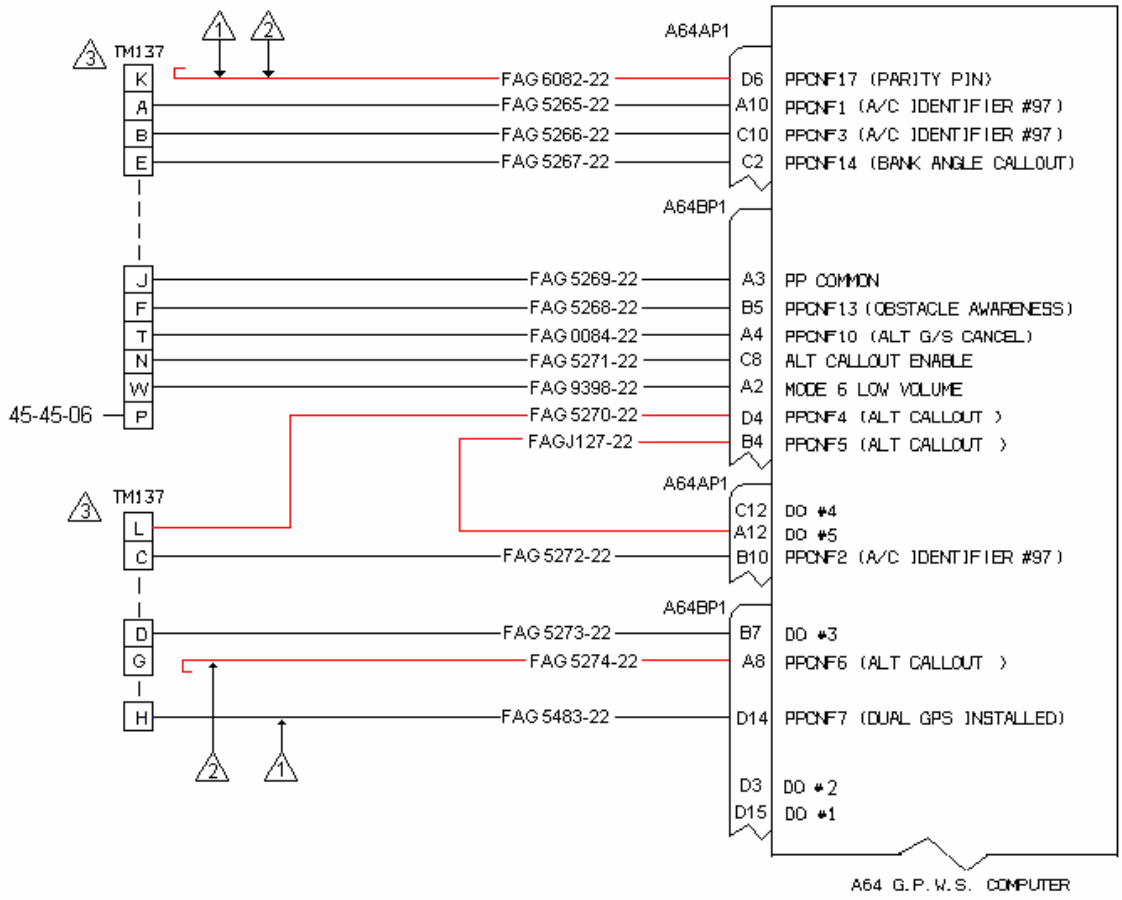


Bussing Configuration
Contact P/N M39029/22-191

FIGURE - 8

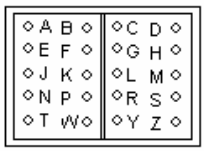
STRAPPING CONFIGURATION EGPWS CALLOUT MODE 6
MENU 47 + SMART CALLOUT (2500 + 500 Smart Callout)

REFERENCE - WIRING DIAGRAM GC568-0020 (34-42-01)



NOTES:

1. The PARITY PIN should be connected to A64AP1, PROGRAM PIN COMMON if an even number of configuration pins, PPCNF1-PPCNF16, are connected to PROGRAM PIN COMMON or DO#1-6.
2. Cap and Stow Wire per A/C Wiring Manual Chapter 20.
3. TM137

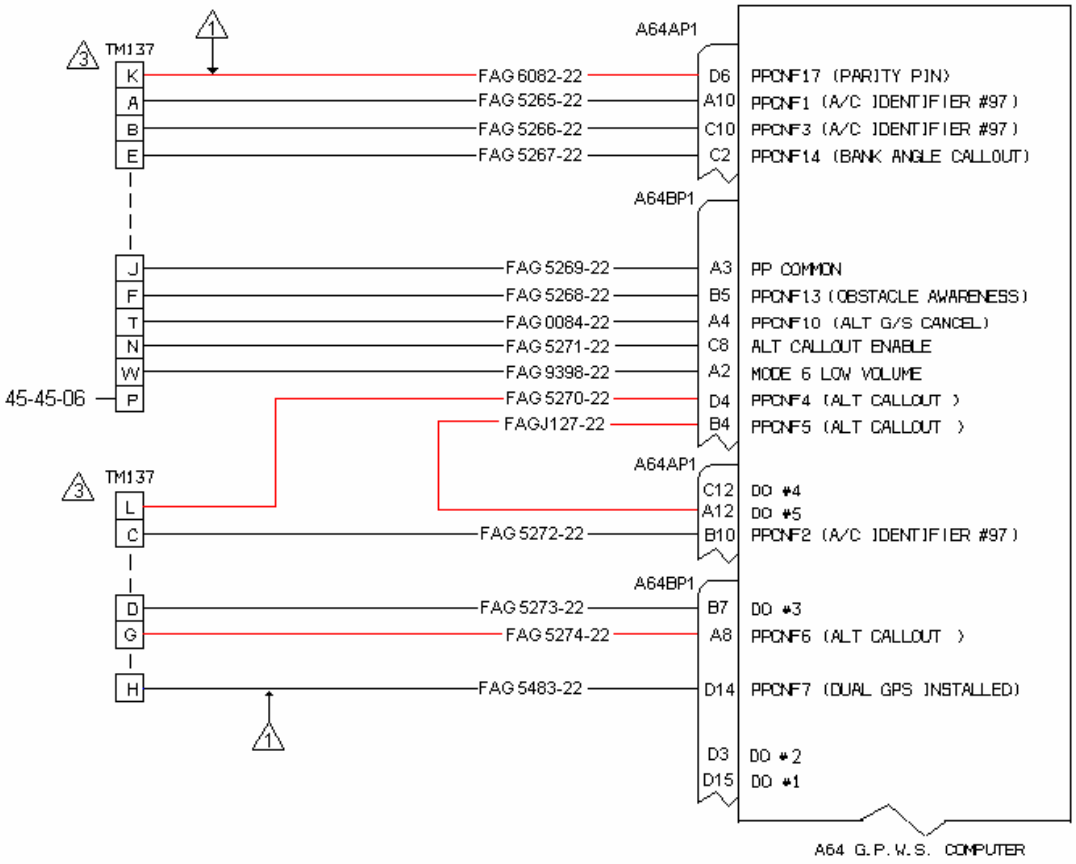


Bussing Configuration
Contact P/N M39029/22-191

FIGURE - 9

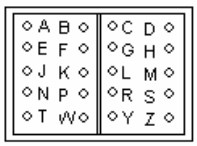
STRAPPING CONFIGURATION EGPWS CALLOUT MODE 6
MENU 52 (50, 30, 20, 10)

REFERENCE - WIRING DIAGRAM GC568-0020 (34-42-01)



NOTES:

1. The PARITY PIN should be connected to A64AP1, PROGRAM PIN COMMON if an even number of configuration pins, PPCNF1-PPCNF16, are connected to PROGRAM PIN COMMON or DO#1-6.
2. Cap and Stow Wire per A/C Wiring Manual Chapter 20.
3. TM137

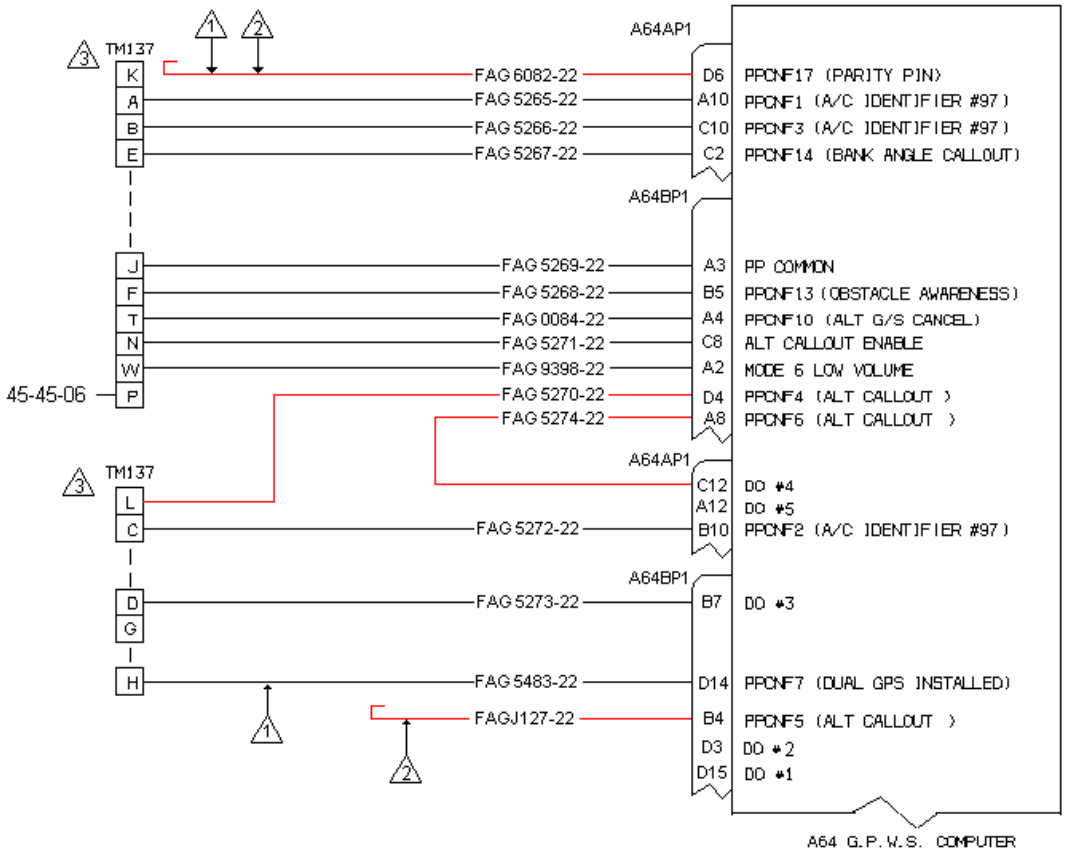


Bussing Configuration
Contact P/N M39029/22-191

FIGURE - 10

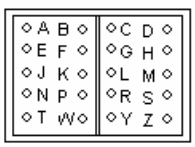
STRAPPING CONFIGURATION EGPWS CALLOUT MODE 6
MENU 52+ SMART CALLOUT (50, 30 20, 10 + 500 Smart Callout)

REFERENCE - WIRING DIAGRAM GC568-0020 (34-42-01)



NOTES:

1. The PARITY PIN should be connected to A64AP1, PROGRAM PIN COMMON if an even number of configuration pins, PPCNF1-PPCNF16, are connected to PROGRAM PIN COMMON or DO#1-6.
2. Cap and Stow Wire per A/C Wiring Manual Chapter 20.
3. TM137



Bussing Configuration
Contact P/N M39029/22-191

FIGURE - 11

STRAPPING CONFIGURATION EGPWS CALLOUT MODE 6

MENU 68+ SMART CALLOUT (2500, 500, 50, 40, 30 20, 10 + 500 Smart Callout)

REFERENCE - WIRING DIAGRAM GC568-0020 (34-42-01)

C. TESTING

(1) Set the circuit breaker that follows to IN (refer to TASK 24-00-00-863-802):

SYSTEM NAME	CIRCUIT BREAKER NAME	BUS NAME
NAV	GPWS	DC 1

(2) Connect electrical power to the aircraft. Refer to TASK 24-00-00-861-801.

(3) Do the operational test of the EGPWS. Refer to TASK 34-42-00-710-801 except that do not remove the PMAT and do not perform the close up before completion of item 4.

Note:
During the aural messages sequence of the Long Level 1 Self-Test, make sure that you hear altitude awareness call out messages as per the Callout selected from Table 1 instead of the pre-modification messages “ONE HUNDRED”’, “FIFTY” and “THIRTY” (Pre SB700-31-024 or 700-1A11-31-005) or “FIFTY”, “THIRTY” and "TEN" (Post SB700-31-024 or 700-1A11-31-005).

(4) Select LEVEL 3 SELF TEST - EGPWS Configuration and start the self test.

Note:
In the following list, items in quotation marks (e.g. "Audio Menu") must be exactly repeated in the resulting aural messages. Items not in quotation marks (e.g. "Serial Number") need only be heard in the correct sequence.

(a) Make sure that the following aural messages are heard during the self test:

- "**SYSTEM CONFIGURATION**"
- PART NUMBER
- MOD STATUS
- SERIAL NUMBER
- APPLICATION SOFTWARE VERSION
- CONFIGURATION SOFTWARE VERSION
- TERRAIN DATABASE VERSION
- ENVELOP MOD DATABASE VERSION
- BOOT CODE VERSION
- "AIRCRAFT TYPE NINE SEVEN"
- "AUDIO MENU ZERO"
- ALTITUDE CALLOUT MENU (SELECTED FROM TABLE 1)
- SMART CALLOUT SELECTED (IF SELECTED)
- "ALTERNATE GLIDESLOPE CANCEL SELECTED"
- "DUAL GPS SELECTED" (IF GPS 2 IS INSTALLED).
- "BANK ANGLE SELECTED"
- "MODE 6 LOW VOLUME SELECTED"
- "OBSTACLE AWARENESS ENABLED"

(5) Double click on TEST CMPLT to exit Self Test mode.
(6) Return to Main Menu page.
(7) Properly shutdown PMAT. Refer to Task 45-45-01-840-801
(8) Remove electrical power from the aircraft. Refer to TASK 24-00-00-861-802.

D. CLOSE UP

(1) Install external avionics-compartment access-panel 140BB. Refer to TASK 52-45-11-400-801. For Global 5000 install avionics-rack closing skin panel 232JRF and 232KRF. Refer to TASK 25-72-01-400-801.
(2) Remove all tools, equipment and unwanted materials from the work area.

E. RECORDING

When this In Service ModSum is completed, make an entry in the aircraft logbook. Also record the figure and altitude callout menu selected (for ex. 'Altitude Callout Menu 21 – Figure 1 selected.').

General Notes:

1. The Information, Technical Data and Designs disclosed are the exclusive property of Bombardier Inc. or contain proprietary rights of others and are not to be used or disclosed to others without the written consent of Bombardier Inc. the recipient of this document, by its retention and use agrees to hold in confidence the technical data and designs contained herein. The forgoing shall not apply to persons having proprietary rights to such information, technical data or such designs to the extend that such rights exit.
2. All work must be accomplished and signed of by qualified personnel as required by local regulatory authorities.
3. This rework is limited to the components as specified in this mod.
4. Weight & Balance: Negligible.
5. Electrical Load Analysis: No Change.
6. Interchangeability: Not affected.
7. Flight Crew shall be advised of the new selected callout and therefore be aware of its impact on the flight crew operating manual.