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Technical Bulletin


Public Address (PA) System Installation


Bell 212

TB-E212-725-2

Revision C

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Revision Record

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A	September 16, 2021	Initial Release.
B	December 15, 2022	Updated Sections 2, 3, and 4. Added Figures 4 and 5.
C	See Cover Page	Added -015 and -017 Installations with the externally mounted loudspeaker bracket

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1. Introduction

1.1. Approval

This Technical Bulletin is approved data in accordance with the following STC:

TCCA STC: SH07-28

FAA STC: SR02831NY

1.2. Purpose

To provide instructions for the Installation of a Public Address (PA) System.

1.3. Effectivity

MSN
ALL

1.4. Compliance

Optional

1.5. Description

This Technical Bulletin (TB) provides the information required for the installation of a Public Address (PA) System.

2. Installation Data

2.1. Required Drawings

Installation Number	Qty -011	Qty -013	Qty -015	Qty -017	Description
E212-725-9-01-1-1	1	1			PA LOUDSPEAKER INSTL (INTERNAL MOUNT)
E212-725-9-01-1-3			1	1	PA LOUDSPEAKER INSTL (EXTERNAL MOUNT)
E212-725-9-01-2-1	1	1	1	1	PA AMPLIFIER INSTL
E212-725-9-01-2-3		1		1	CABIN PA AMPLIFIER INSTL
E212-725-11-1-011	1		1		PUBLIC ADDRESS SYSTEM WIRING DIAGRAM
E212-725-11-1-013		1		1	PUBLIC ADDRESS SYSTEM WIRING DIAGRAM
E212-5005-011		1		1	FWD SPEAKER MOUNT INSTL LH
E212-5005-012		1		1	FWD SPEAKER MOUNT INSTL RH
E212-5005-013		1		1	MID SPEAKER MOUNT INSTL LH
E212-5005-014		1		1	MID SPEAKER MOUNT INSTL RH
E212-5005-015		1		1	AFT SPEAKER MOUNT INSTL LH
E212-5005-016		1		1	AFT SPEAKER MOUNT INSTL RH

Table 1 – Required Drawings

2.2. Weight and Balance

Item	Qty -011 / -015	Qty -013 / -017	Weight	Lateral		Longitudinal	
				Arm	Moment	Arm	Moment
TS300	1	1	10.40 lbs	19.50 in	202.80 in-lbs	80.30 in	835.10 in-lbs
LSC22-001 / LSC22-003N	1	1	1.30 lbs	0.00 in	0.00 in-lbs	42.00 in	54.60 in-lbs
LSA300-001	1	1	3.70 lbs	21.00 in	77.70 in-lbs	10.80 in	39.96 in-lbs
LSA100-100		1	2.00 lbs	19.50 in	39.00 in-lbs	80.30 in	160.60 in-lbs
CABIN PA SPEAKER 1		1	2.04 lbs	36.00 in	73.44 in-lbs	84.00 in	171.36 in-lbs
CABIN PA SPEAKER 2		1	2.04 lbs	36.00 in	73.44 in-lbs	110.00 in	224.40 in-lbs
CABIN PA SPEAKER 3		1	2.04 lbs	36.00 in	73.44 in-lbs	139.00 in	283.56 in-lbs
CABIN PA SPEAKER 4		1	2.04 lbs	-36.00 in	-73.44 in-lbs	84.00 in	171.36 in-lbs
CABIN PA SPEAKER 5		1	2.04 lbs	-36.00 in	-73.44 in-lbs	110.00 in	224.40 in-lbs
CABIN PA SPEAKER 6		1	2.04 lbs	-36.00 in	-73.44 in-lbs	139.00 in	283.56 in-lbs

Table 2 – Weight and Balance

2.3. Electrical Loads

System	Start & Warm-up 15 Min.		Take-off 15 Min.		Cruise 15 Min.		Land 15 Min.	
	Qty -011 / -015	Qty -013 / -017	Qty -011 / -015	Qty -013 / -017	Qty -011 / -015	Qty -013 / -017	Qty -011 / -015	Qty -013 / -017
Total for all DC Busses	50.90 Amps		109.70 Amps		114.00 Amps		110.20 Amps	
TB-E212-725-2 (Max)	22.00 Amps	28.20 Amps	22.00 Amps	28.20 Amps	22.00 Amps	28.20 Amps	22.00 Amps	28.20 Amps
Total	72.90 Amps	79.1 Amps	131.70 Amps	137.90 Amps	136.00 Amps	142.20 Amps	132.20 Amps	138.40 Amps

Table 3 – Electrical Loads

3. Installation Procedure

3.1. Public Address (PA) System (-011)

1. Disconnect the battery and external power in accordance with ICA-D212-725.

WARNING:

OBEY ALL THE SAFETY PRECAUTIONS WHEN PERFORMING MAINTENANCE ON OR NEAR ELECTRICAL/ELECTRONIC EQUIPMENT

2. Install Loudspeaker (PN TS300), Speaker Bracket Assy (PN E212-725-9-02-1-041) and Plate (PN E212-725-9-03-1-001) in accordance with E212-725-9-01-1-1 PA Loudspeaker Instl. See Figure 1.
3. Install Loudspeaker Amplifier (PN LSA300-001) in accordance with E212-725-9-01-2-1 PA Amplifier Instl. See Figure 3.
4. Install Loudspeaker Siren Controller (PN LSC22-001) on the centre console in accordance with AEM ASM-LSC22 Installation and Operation manual Rev 1.00 or later approved revision. Holes that are drilled in the console for attaching rail or avionics equipment should be de-burred and touched up with Alodine per MIL-C-5541 prior to installing the rivets or installing fasteners.
5. Install 3 amps (PA CONT PWR) and 15 amps (PA AMP PWR) circuit breakers in accordance with Figure 4. The CBs can be installed in any location inside the box noted in Figure 4.
6. Label the CBs "PA CONT PWR" and "PA AMP PWR" in accordance with E212-725-9-11-1-011.
7. Install the applicable wiring and configure the Loudspeaker Siren Controller (PN LSC22-001) in accordance with E212-725-9-11-1-011 Public Address Wiring Diagram.

3.2. Public Address (PA) System (-013)

1. Disconnect the battery and external power in accordance with ICA-D212-725.

WARNING:

OBEY ALL THE SAFETY PRECAUTIONS WHEN PERFORMING MAINTENANCE ON OR NEAR ELECTRICAL/ELECTRONIC EQUIPMENT

2. Install Loudspeaker (PN TS300), Speaker Bracket Assy (PN E212-725-9-02-1-041) and Plate (PN E212-725-9-03-1-001) in accordance with E212-725-9-01-1-1 PA Loudspeaker Instl. See Figure 1.
3. Install Loudspeaker Amplifier (PN LSA300-001) in accordance with E212-725-9-01-2-1 PA Amplifier Instl. See Figure 3.
4. Install Cabin Amplifier (PN LSA100-100) in accordance with E212-725-9-01-2-3 PA Amplifier Instl. See Figure 5.
5. Install Cabin PA Speakers (PN FC6S-4FR-I), Speaker Mount (PN E212-5005-101) in accordance with E212-5005-011, -012, -013, -014, -015, and -016 Cabin PA Speaker Installation. See Figure 6.
6. Install Loudspeaker Siren Controller (PN LSC22-003N) on the centre console in accordance with AEM ASM-LSC22 Installation and Operation manual Rev 1.00 or later approved revision. Holes that are drilled in the console for attaching rail or avionics equipment should be de-burred and touched up with Alodine per MIL-C-5541 prior to installing the rivets or installing fasteners.
7. Install 3 amps (PA CONT PWR), 15 amps (PA AMP PWR), and 7.5 amps (PA CABIN AMP PWR) circuit breakers in accordance with Figure 4. The CBs can be installed in any location inside the box noted in Figure 4.
8. Label the CBs "PA CONT PWR", "PA AMP PWR", and "PA CABIN AMP PWR" in accordance with E212-725-9-11-1-013.
9. Install the applicable wiring and configure the Loudspeaker Siren Controller (PN LSC22-003N) in accordance with E212-725-9-11-1-013 Public Address Wiring Diagram.

3.3. Public Address (PA) System (-015)

10. Disconnect the battery and external power in accordance with ICA-D212-725.

WARNING:

OBEY ALL THE SAFETY PRECAUTIONS WHEN PERFORMING MAINTENANCE ON OR
NEAR ELECTRICAL/ELECTRONIC EQUIPMENT

11. Install Loudspeaker (PN TS300), Speaker Bracket Assy (PN E212-725-9-02-1-043) and Plate (PN E212-725-9-03-1-003) in accordance with E212-725-9-01-1-3 PA Loudspeaker Instl. See Figure 2.
12. Install Loudspeaker Amplifier (PN LSA300-001) in accordance with E212-725-9-01-2-1 PA Amplifier Instl. See Figure 3.
13. Install Loudspeaker Siren Controller (PN LSC22-001) in the centre console in accordance with AEM ASM-LSC22 Installation and Operation manual Rev 1.00 or later approved revision. Holes that are drilled in the console for attaching rail or avionics equipment should be de-burred and touched up with Alodine per MIL-C-5541 prior to installing the rivets or installing fasteners.
14. Install 3 amp (PA CONT PWR) and 15 amp (PA AMP PWR) circuit breakers in accordance with Figure 4. The CBs can be installed in any location inside the box noted in Figure 4.
15. Label the CBs "PA CONT PWR" and "PA AMP PWR" in accordance with E212-725-9-11-1-011.

16. Install the applicable wiring and configure the Loudspeaker Siren Controller (PN LSC22-001) in accordance with E212-725-9-11-1-011 Public Address Wiring Diagram.

3.4. Public Address (PA) System (-017)

17. Disconnect the battery and external power in accordance with ICA-D212-725.

WARNING:

OBEY ALL THE SAFETY PRECAUTIONS WHEN PERFORMING MAINTENANCE ON OR NEAR ELECTRICAL/ELECTRONIC EQUIPMENT

18. Install Loudspeaker (PN TS300), Speaker Bracket Assy (PN E212-725-9-02-1-043) and Plate (PN E212-725-9-03-1-003) in accordance with E212-725-9-01-1-3 PA Loudspeaker Instl. See Figure 2.
19. Install Loudspeaker Amplifier (PN LSA300-001) in accordance with E212-725-9-01-2-1 PA Amplifier Instl. See Figure 3.
20. Install Cabin Amplifier (PN LSA100-100) in accordance with E212-725-9-01-2-3 PA Amplifier Instl. See Figure 5.
21. Install Cabin PA Speakers (PN FC6S-4FR-I) with Speaker Mounts (PN E212-5005-101) in accordance with E212-5005-011, -012, -013, -014, -015, and -016 Cabin PA Speaker Installation. See Figure 6.
22. Install Loudspeaker Siren Controller (PN LSC22-003N) in the centre console in accordance with AEM ASM-LSC22 Installation and Operation manual Rev 1.00 or later approved revision. Holes that are drilled in the console for attaching rail or avionics equipment should be de-burred and touched up with Alodine per MIL-C-5541 prior to installing the rivets or installing fasteners.
23. Install 3 amp (PA CONT PWR), 15 amp (PA AMP PWR), and 7.5 amp (PA CABIN AMP PWR) circuit breakers in accordance with Figure 4. The CBs can be installed in any location inside the box noted in Figure 4.
24. Label the CBs "PA CONT PWR", "PA AMP PWR", and "PA CABIN AMP PWR" in accordance with E212-725-9-11-1-013.
25. Install the applicable wiring and configure the Loudspeaker Siren Controller (PN LSC22-003N) in accordance with E212-725-9-11-1-013 Public Address Wiring Diagram.

4. Test Procedure

4.1. Post Installation Test (-011 and -015)

1. Connect ground power and turn on aircraft power in accordance with ICA-D212-725.

WARNING:

OBEY ALL THE SAFETY PRECAUTIONS WHEN PERFORMING MAINTENANCE ON OR NEAR ELECTRICAL/ELECTRONIC EQUIPMENT

2. Remove collars and push in the following circuit breakers:
 - PA CONT PWR
 - PA AMP PWR

3. On the 1P101 check the following pins:

PIN	MEASUREMENT	PASS /FAIL
1	+28 Vdc relative to ground	Pass: <input type="checkbox"/> Fail: <input type="checkbox"/> Initial: _____
2	+28 Vdc relative to ground	Pass: <input type="checkbox"/> Fail: <input type="checkbox"/> Initial: _____
4	continuity to ground (less than 0.5 Ω)	Pass: <input type="checkbox"/> Fail: <input type="checkbox"/> Initial: _____
14	continuity to ground (less than 0.5 Ω)	Pass: <input type="checkbox"/> Fail: <input type="checkbox"/> Initial: _____
15	continuity to ground (less than 0.5 Ω)	Pass: <input type="checkbox"/> Fail: <input type="checkbox"/> Initial: _____
16	continuity to ground (less than 0.5 Ω)	Pass: <input type="checkbox"/> Fail: <input type="checkbox"/> Initial: _____

4. On the 2P101 check the following pins:

PIN	MEASUREMENT	PASS /FAIL
A1	+28 Vdc relative to ground	Pass: <input type="checkbox"/> Fail: <input type="checkbox"/> Initial: _____
A4	continuity to ground (less than 0.5 Ω)	Pass: <input type="checkbox"/> Fail: <input type="checkbox"/> Initial: _____
9	continuity to ground (less than 0.5 Ω)	Pass: <input type="checkbox"/> Fail: <input type="checkbox"/> Initial: _____

5. Pull and collar the following circuit breaker:

- PA CONT PWR
- PA AMP PWR

6. Check all pins for shorts to ground or adjacent pins.
7. Ensure that all cables are properly secured, and shields are connected IAW E212-725-9-11-1-011.
8. Ensure that all LRUs are grounded, and all connectors are disconnected. Record the measurement to airframe ground per the table below.

LRU POINT	GROUND POINT	MEASUREMENT	PASS /FAIL
Suitable ground location on TS300 Loudspeaker chassis	Airframe ground near down post attachment.	3 Milliohms ($< 0.003\Omega$)	Resistance: _____ Ω Pass: <input type="checkbox"/> Fail: <input type="checkbox"/> Initial: _____
Suitable ground location on LSA300-001 PA Amplifier chassis	Airframe ground near the hand controller ground point.	3 Milliohms ($< 0.003\Omega$)	Resistance: _____ Ω Pass: <input type="checkbox"/> Fail: <input type="checkbox"/> Initial: _____
Suitable ground location on LSC22-001 PA Controller chassis	Airframe ground near the antenna attachment.	3 Milliohms ($< 0.003\Omega$)	Resistance: _____ Ω Pass: <input type="checkbox"/> Fail: <input type="checkbox"/> Initial: _____

9. Connect the Loudspeaker Controller and the Loudspeaker Amplifier connectors.
10. Connect ground power and turn on aircraft power IAW ICA-D212-725.

WARNING:

OBEY ALL THE SAFETY PRECAUTIONS WHEN PERFORMING MAINTENANCE ON OR NEAR ELECTRICAL/ELECTRONIC EQUIPMENT

11. Remove collars and push in the following circuit breakers:

- PA CONT PWR
- PA AMP PWR

12. Ensure the audio system is powered on.

CAUTION: Ensure Siren WAIL/YELP switch is in the center "OFF" position.

13. Turn the 'VOL/PWR' knob, on the face of the LSC22-001 speaker control panel, to the 'ON' position and lowest volume setting.
14. Select 'EXT PA' on the LSC22-001 'EXT PA/INT PA' switch.
15. Select 'MIC' on the 'MIC/RADIO' switch.
16. Select 'PA' on the Audio Panel Control.
17. Press pilot cyclic transmit switch and speak into the headset microphone.
18. Verify microphone audio from the speakers. LSC22-001 volume control may need to be adjusted to hear audio.
19. Repeat above step from co-pilot's position.

WARNING: LSC22-001 control panel VOL control does not control the Siren Wail/Yelp volume.

20. Move LSC22-001 'MIC/RADIO' switch to center position.
21. On the LSC22-001/LSC22-003N speaker control panel select the Siren "YELP" position and verify loudspeaker audio.
22. On the LSC22-001/LSC22-003N speaker control panel select the Siren "WAIL" position and verify loudspeaker audio.
23. Perform EMI/EMC testing following the below steps. Refer to Table 4. For tests that include a frequency, test at the listed frequencies and at approximately one MHz intervals between the listed frequencies. For other radio systems with controllable frequencies, test in a similar manner for low, middle, and high frequency bands.
 - a. Ensure all systems are installed and functioning correctly. All previous steps in this section must be successfully completed before beginning EMI / EMC checks.
 - b. Ensure the aircraft is in a normal flight configuration. For example: all doors and windows are closed.
 - c. Using ground power, test each system outlined in Table 4 and record any aircraft abnormality that would indicate whether each system is a source or victim of EMI. Evaluate all possible scenarios and ensure that as many possible system settings are tested. Repeatedly perform tasks to ensure EMC (e.g., turn equipment on and off and adjust any user interfaces).
 - d. Using engine driven generators as the power source, complete testing of any systems that could not be tested on ground power (e.g., engine indications) and verify the evaluation performed in step c. Ensure that all systems are tested and any potential EMI that was noted is investigated further.
24. Turn LSC22-001 control panel 'VOL/PWR' knob to 'OFF'.
25. Turn off aircraft power and disconnect ground power IAW ICA-D212-725.

4.2. Post Installation Test (-013 and -017)

1. Connect ground power and turn on aircraft power in accordance with ICA-D212-725.

WARNING:

OBEY ALL THE SAFETY PRECAUTIONS WHEN PERFORMING MAINTENANCE ON OR NEAR ELECTRICAL/ELECTRONIC EQUIPMENT

2. Remove collars and push in the following circuit breakers:

- PA CONT PWR
- PA AMP PWR
- PA CABIN AMP PWR

3. On the 1P101 check the following pins:

PIN	MEASUREMENT	PASS /FAIL
1	+28 Vdc relative to ground	Pass: <input type="checkbox"/> Fail: <input type="checkbox"/> Initial: _____
2	+28 Vdc relative to ground	Pass: <input type="checkbox"/> Fail: <input type="checkbox"/> Initial: _____
4	continuity to ground (less than 0.5 Ω)	Pass: <input type="checkbox"/> Fail: <input type="checkbox"/> Initial: _____
14	continuity to ground (less than 0.5 Ω)	Pass: <input type="checkbox"/> Fail: <input type="checkbox"/> Initial: _____
15	continuity to ground (less than 0.5 Ω)	Pass: <input type="checkbox"/> Fail: <input type="checkbox"/> Initial: _____
16	continuity to ground (less than 0.5 Ω)	Pass: <input type="checkbox"/> Fail: <input type="checkbox"/> Initial: _____

4. On the 2P101 check the following pins:

PIN	MEASUREMENT	PASS /FAIL
A1	+28 Vdc relative to ground	Pass: <input type="checkbox"/> Fail: <input type="checkbox"/> Initial: _____
A4	continuity to ground (less than 0.5 Ω)	Pass: <input type="checkbox"/> Fail: <input type="checkbox"/> Initial: _____
9	continuity to ground (less than 0.5 Ω)	Pass: <input type="checkbox"/> Fail: <input type="checkbox"/> Initial: _____

5. On the 3P201 check the following pins:

PIN	MEASUREMENT	PASS /FAIL
1	+28 Vdc relative to ground	Pass: <input type="checkbox"/> Fail: <input type="checkbox"/> Initial: _____
9	+28 Vdc relative to ground	Pass: <input type="checkbox"/> Fail: <input type="checkbox"/> Initial: _____
8	continuity to ground (less than 0.5 Ω)	Pass: <input type="checkbox"/> Fail: <input type="checkbox"/> Initial: _____
12	continuity to ground (less than 0.5 Ω)	Pass: <input type="checkbox"/> Fail: <input type="checkbox"/> Initial: _____
15	continuity to ground (less than 0.5 Ω)	Pass: <input type="checkbox"/> Fail: <input type="checkbox"/> Initial: _____

6. Pull and collar the following circuit breaker:

- PA CONT PWR
- PA AMP PWR
- PA CABIN AMP PWR

7. Check all pins for shorts to ground or adjacent pins.
8. Ensure that all cables are properly secured, and shields are connected IAW E212-725-9-11-1-013.
9. Ensure that all LRUs are grounded, and all connectors are disconnected. Record the measurement to airframe ground per the table below.

LRU POINT	GROUND POINT	MEASUREMENT	PASS /FAIL
Suitable ground location on TS300 Loudspeaker chassis	Airframe ground near down post attachment.	3 Milliohms ($< 0.003\Omega$)	Resistance: _____ Ω Pass: <input type="checkbox"/> Fail: <input type="checkbox"/> Initial: _____
Suitable ground location on all Cabin PA Speaker chassis	Airframe ground near down post attachment.	3 Milliohms ($< 0.003\Omega$)	Resistance: _____ Ω Pass: <input type="checkbox"/> Fail: <input type="checkbox"/> Initial: _____
Suitable ground location on LSA300-001 PA Amplifier chassis	Airframe ground near the hand controller ground point.	3 Milliohms ($< 0.003\Omega$)	Resistance: _____ Ω Pass: <input type="checkbox"/> Fail: <input type="checkbox"/> Initial: _____
Suitable ground location on LSA100-100 PA Amplifier chassis	Airframe ground near the hand controller ground point.	3 Milliohms ($< 0.003\Omega$)	Resistance: _____ Ω Pass: <input type="checkbox"/> Fail: <input type="checkbox"/> Initial: _____
Suitable ground location on LSC22-001/LSC22-003N PA Controller chassis	Airframe ground near the antenna attachment.	3 Milliohms ($< 0.003\Omega$)	Resistance: _____ Ω Pass: <input type="checkbox"/> Fail: <input type="checkbox"/> Initial: _____

10. Connect the Loudspeaker Controller and the Loudspeaker Amplifier connectors.
11. Connect ground power and turn on aircraft power IAW ICA-D212-725.

WARNING:

OBEY ALL THE SAFETY PRECAUTIONS WHEN PERFORMING MAINTENANCE ON OR NEAR ELECTRICAL/ELECTRONIC EQUIPMENT

12. Remove collars and push in the following circuit breakers:

- PA CONT PWR
- PA AMP PWR
- PA CABIN AMP PWR

13. Ensure the audio system is powered on.

CAUTION: Ensure Siren WAIL/YELP switch is in the center "OFF" position.

NOTE: On the LSC22-003N the power function on the front panel is removed. When power is applied to the LSC22-003N, the unit is powered on without any other action.

14. Select 'EXT PA' on the LSC22-003N 'EXT PA/INT PA' switch.
15. Select 'MIC' on the 'MIC/RADIO' switch.
16. Select 'PA' on the Audio Panel Control.
17. Press pilot cyclic transmit switch and speak into the headset microphone.
18. Verify microphone audio from the speakers. LSC22-003N volume control may need to be adjusted to hear audio.
19. Repeat above step from co-pilot's position.

WARNING: LSC22-003N control panel VOL control does not control the Siren Wail/Yelp volume.

20. Select 'INT PA' on the LSC22-003N 'EXT PA/INT PA' switch.
21. If applicable, Perform steps 11 to 15.
22. Move LSC22-003N 'MIC/RADIO' switch to center position.
23. On the LSC22-003N speaker control panel select the Siren "YELP" position and verify loudspeaker audio.

24. On the LSC22-003N speaker control panel select the Siren "WAIL" position and verify loudspeaker audio.
25. Perform EMI/EMC testing following the below steps. Refer to Table 4. For tests that include a frequency, test at the listed frequencies and at approximately one MHz intervals between the listed frequencies. For other radio systems with controllable frequencies, test in a similar manner for low, middle, and high frequency bands.
 - a. Ensure all systems are installed and functioning correctly. All previous steps in this section must be successfully completed before beginning EMI / EMC checks.
 - b. Ensure the aircraft is in a normal flight configuration. For example: all doors and windows are closed.
 - c. Using ground power, test each system outlined in Table 4 and record any aircraft abnormality that would indicate whether each system is a source or victim of EMI. Evaluate all possible scenarios and ensure that as many possible system settings are tested. Repeatedly perform tasks to ensure EMC (e.g., turn equipment on and off and adjust any user interfaces).
 - d. Using engine driven generators as the power source, complete testing of any systems that could not be tested on ground power (e.g., engine indications) and verify the evaluation performed in step c. Ensure that all systems are tested and any potential EMI that was noted is investigated further.
26. Turn off aircraft power and disconnect ground power IAW ICA-D212-725.

Aircraft Systems	EMI Source PA System		EMI Victim PA System		Notes
	YES	NO	YES	NO	
VHF COMM 1, 118.000 MHZ					
VHF COMM 1, 127.500 MHZ					
VHF COMM 1, 135.975 MHZ					
VHF COMM 2, 118.000 MHZ					
VHF COMM 2, 127.500 MHZ					
VHF COMM 2, 135.975 MHZ					
NAV (VOR/ILS) NO. 1, 108.000 MHZ					
NAV (VOR/ILS) NO. 1, 108.100 MHZ					
NAV (VOR/ILS) NO. 1, 113.500 MHZ					
NAV (VOR/ILS) NO. 1, 117.975 MHZ					
NAV (VOR/ILS) NO. 2, 108.000 MHZ					
NAV (VOR/ILS) NO. 2, 108.100 MHZ					
NAV (VOR/ILS) NO. 2, 113.500 MHZ					
NAV (VOR/ILS) NO. 2, 117.975 MHZ					
GPS1					
GPS2					
PILOT AUDIO					
CO-PILOT AUDIO					
PUBLIC ADDRESS SYSTEM	N/A	N/A	N/A	N/A	
PILOT PFD / MFD					
CO-PILOT PFD / MFD					
ADAHRS 1					
ADAHRS 2					
HSV1					
STANDBY INSTRUMENT					
STANDBY COMPASS					
TRAFFIC ADVISORY SYSTEM (TCAS I)					
HTAWS					
RADIO ALTIMETER					
TRANSPONDER					
DME					
ELT					
GENERATOR / INVERTER					
EXTERIOR LIGHTS					
INTERIOR LIGHTS					
PUMPS / MOTORS					
PILOT TORQUE					
PILOT DUAL TACH					
CO-PILOT TORQUE					
CO-PILOT DUAL TACH					
NG					
MGT					
FUEL QUANTITY					
FUEL PRESSURE					
ENGINE OIL TEMP. AND PRESSURE					
TRANSMISSION OIL TEMP. AND PRESSURE					
HYDRAULIC OIL 1 TEMP. AND PRESSURE					

Aircraft Systems	EMI Source PA System		EMI Victim PA System		Notes
	YES	NO	YES	NO	
HYDRAULIC OIL 2 TEMP. AND PRESSURE					
GENERATOR VOLTMETER AND AMMETER					
MASTER CAUTION PANEL					
FIRE DETECTION AND WARNING					
OTHER:					

Table 4 - EMI/EMC Check Sheet (-011, -013, -015 or -017)

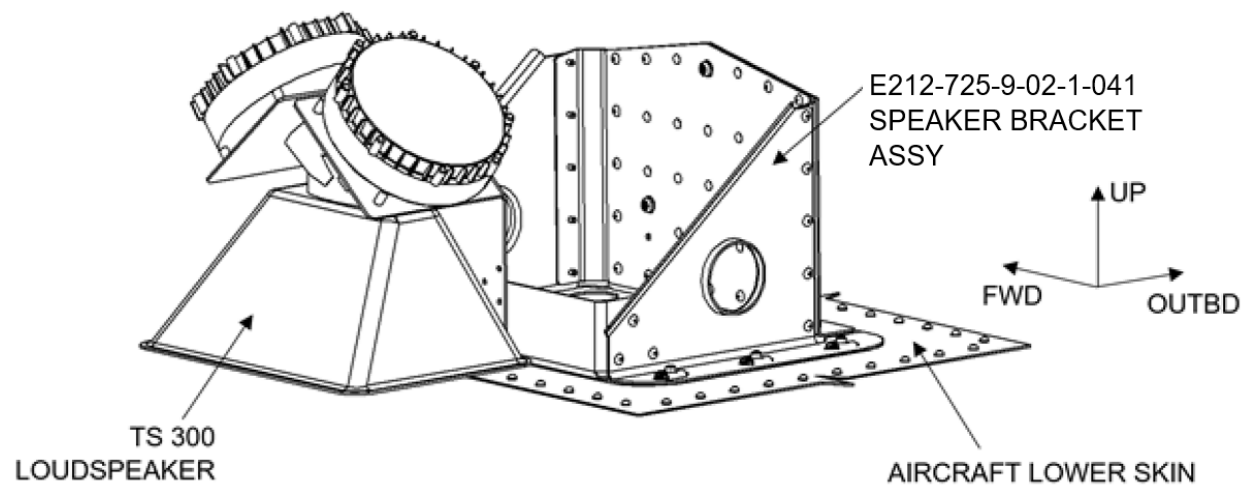


Figure 1 – Loudspeaker Installation (Internal Mount)
(REF E212-725-9-01-1-1)

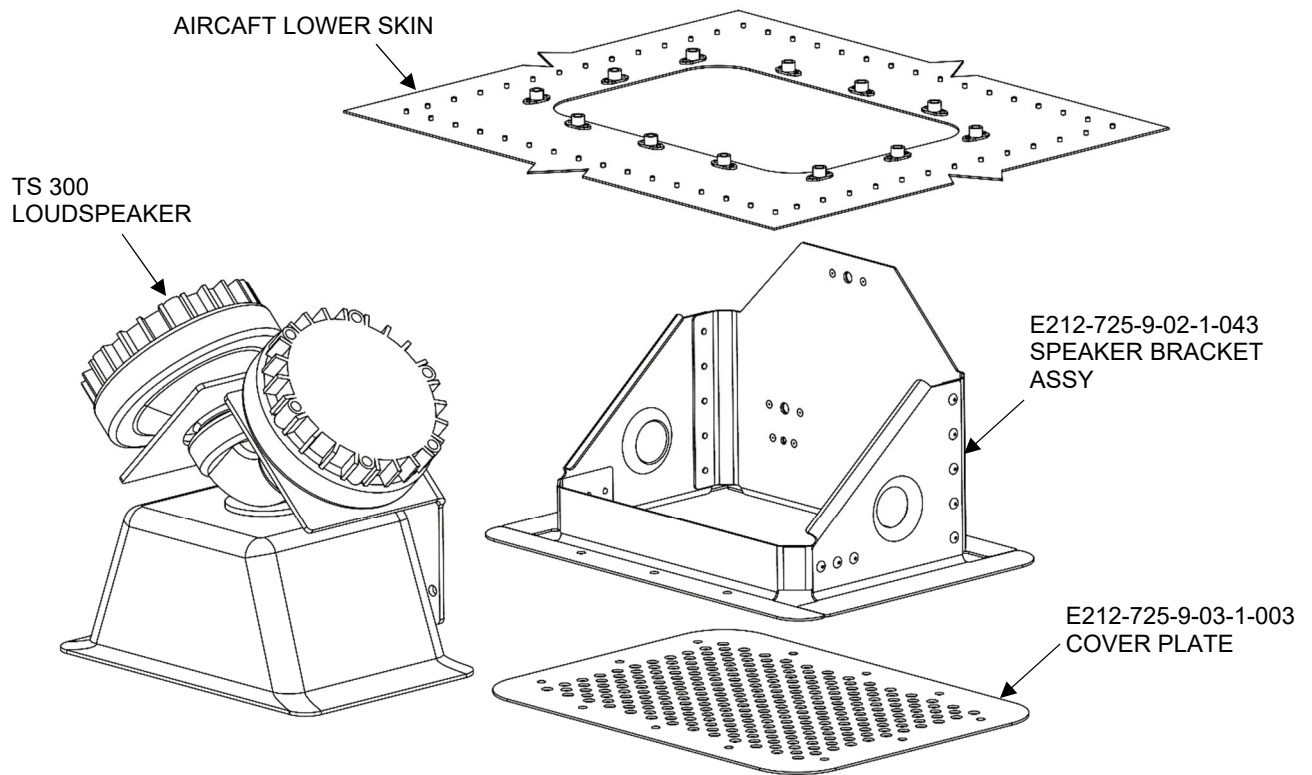


Figure 2 – Loudspeaker Installation (External Mount)
(REF E212-725-9-01-1-3)

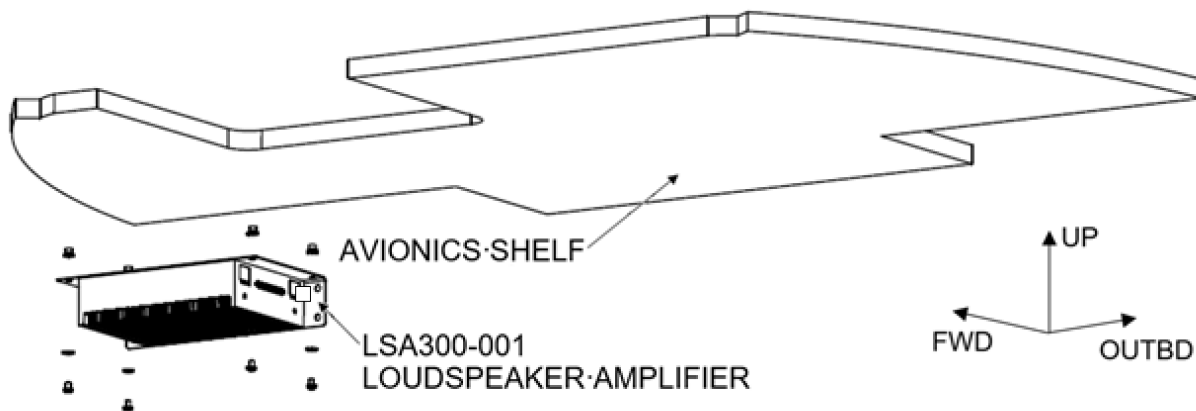


Figure 3 – Loudspeaker Amplifier Installation
(REF E212-725-9-01-2)

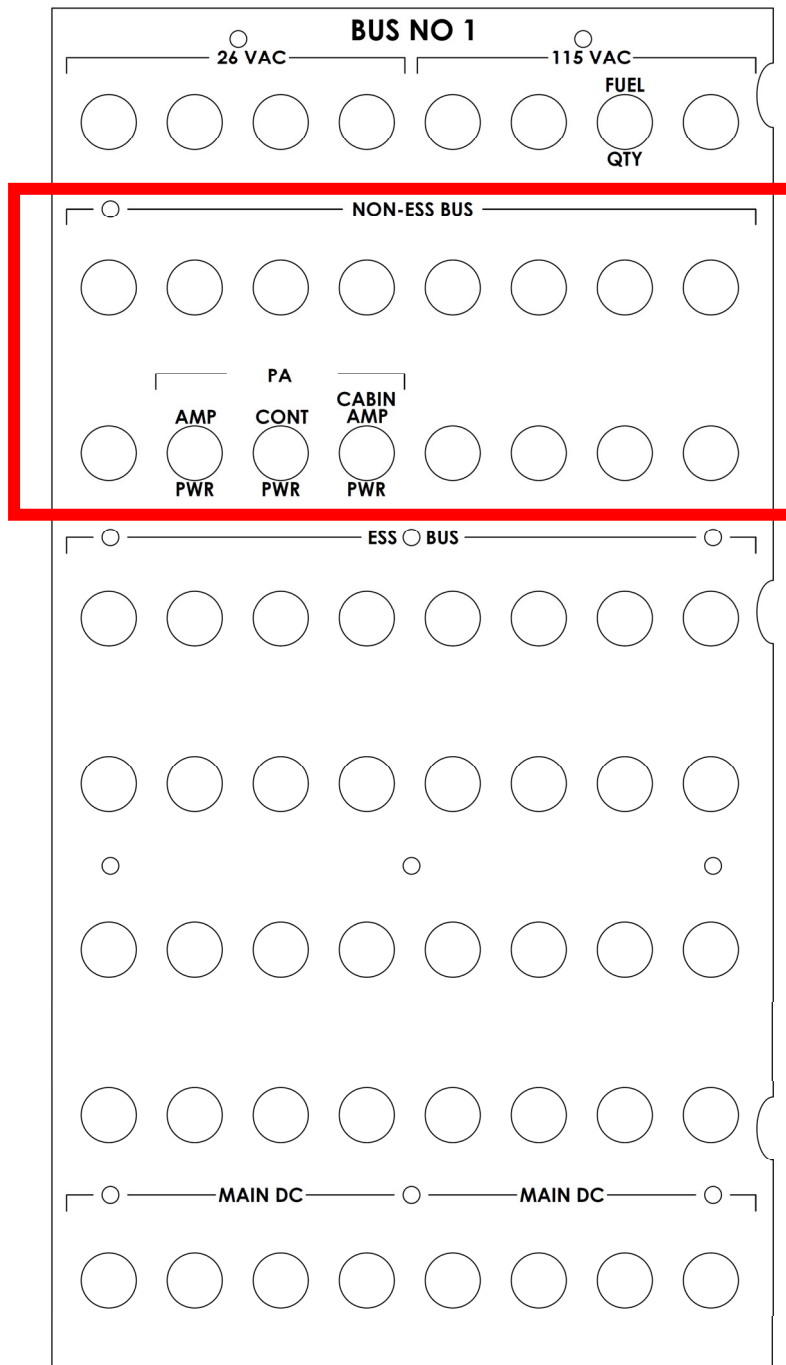


Figure 4 - Circuit Breaker Installation, Overhead Panel

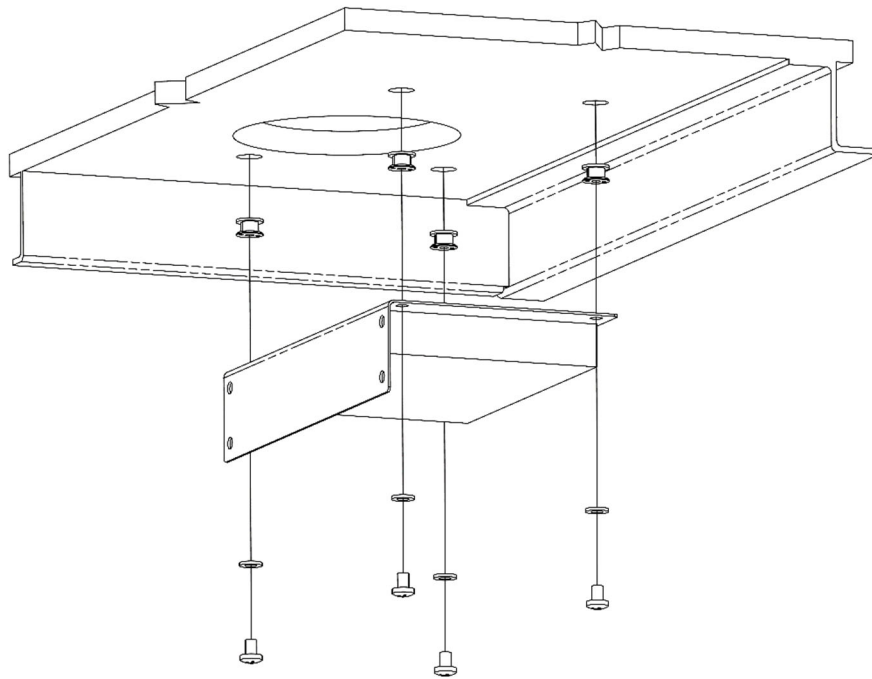
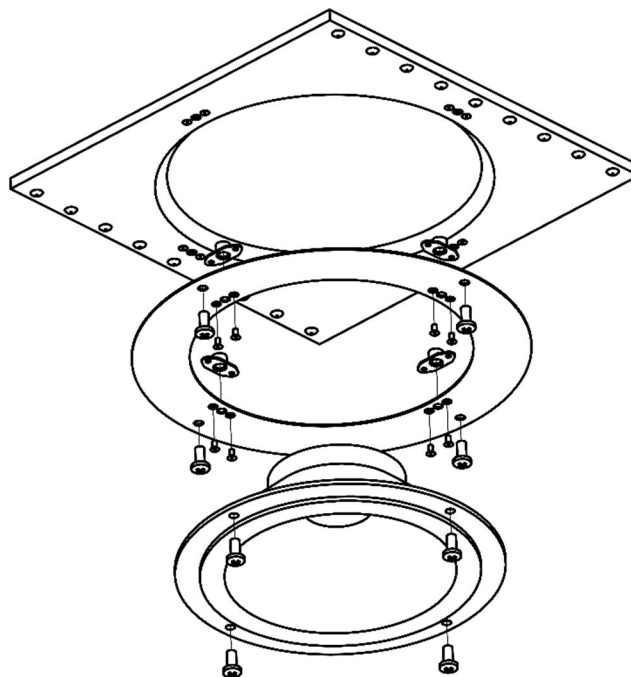


Figure 5 - Cabin Amplifier Installation



TYP LH & RH Cabin Speaker Mount

Figure 6 – Cabin PA Speaker Installation
(REF E212-5005)

5. Aircraft Record Set Update and Eagle Notification

1. Make an entry in the aircraft record set that TB-E212-725-2-011, TB-E212-725-2-013, TB-E212-725-2-015 or TB-E212-725-2-017 has been incorporated.
2. Update the aircraft's Weight and Balance and Electrical Loads records with the values in Section 2 as required.
3. Notify Eagle Copters that TB-E212-725-2 has been incorporated by emailing the below information to customersupport@eaglecopters.com:

Aircraft Serial Number

Aircraft Owner

Date Incorporated

Configuration Incorporated