

Attachment 7

Major Repair and Alteration Documents

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ABX AIR INC.
EO Major Alterations Report
From: 01/01/1986 To: 07/09/2008

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Type	Series	Number	EO Code	Task	Description	Date Completed
B767	281S	799AX	EA 5 0 0015 \$	EA 49263	RECORD - CARGO MOD COMPLETION, 767SF	11/29/2004
			EA 23 10 0015 \$	EA 47797	INSTL-DUAL HF COMM SYSTEM, HONEYWELL, B767	02/07/2006
			EA 25 62 0004 \$	EA 52548	INSTL-EMER LOCATOR TRANSMITTER (ELT), B767	03/17/2008
			EA 27 60 0029 \$	EA 44124	INSTL - SENSOR, MLG TRUCK TILT, ASB SYS, B767	11/24/2004
			EA 28 20 0023 \$	EA 47125	REACTIVATION - AUX FUEL TANK, B767	07/21/2007
			EA 29 10 0003 \$	EA 31922	MOD-ELEC WIRING SUPPORT, HYDR, SIP, L&R, B767	11/24/2004
			EA 31 30 0044 \$	EA 26106	INSTL - DFDAU, B767	11/24/2004
			EA 32 13 0001 \$	EA 13544	REPL-PIN, MLG MTOGW INCREASE, B767	11/24/2004
			EA 34 17 0001 \$	EA 38084	MOD/INSP - RVSM, INITIAL APPROVAL, B767	11/24/2004
			EA 34 45 0001 A	EA 41831	INST - COLLINS TCAS, B767	11/24/2004
			EA 54 0 0081 \$	EA 31547	MOD-PYLON STRUTS & WINGS, SIP, CF6, L&R, B767	11/24/2004
			EA 54 0 0082 \$	EA 31597	MOD-L&R MIDSPAR, SIDE LOAD FTG, FUSE PIN, B767	11/24/2004
			EA 54 0 0083 \$	EA 31613	REPL-L&R STRUT ATTACH UPPER LINK, PYLON, B767	11/24/2004
			EA 54 0 0084 \$	EA 31614	REPL-L&R STRUT ATTACH UPR LINK/FUSE PIN, B767	11/24/2004
			EA 54 0 0086 \$	EA 31620	RWK-AFT UPPER SPAR WEB, L/R STRUT, CF6, B767	11/24/2004
			EA 54 0 0087 \$	EA 31621	INSP/MOD - FWD UPR SPAR WEB RWK, L/R, CF6, B767	11/24/2004
			EA 54 20 0014 \$	EA 31923	REPL - DIAG BRACE, STRUT-WING, SIP, L&R, B767	11/24/2004
			EA 57 11 0105 \$	EA 31612	INSP/MOD-FRT SPAR PITCH LOAD FTGS, LW, B767	11/24/2004
			EA 57 11 0106 \$	EA 33126	INSP/MOD-FRT SPAR PITCH LOAD FTGS, RW, B767	11/24/2004
			EA 76 3 0015 \$	EA 29480	INSP-LH THROTTLE SYSTEM CABLES/PULLEYS, B767.	05/19/2004
			EA 76 3 0016 \$	EA 30111	INSP-RH THROTTLE SYSTEM CABLES/PULLEYS, B767.	04/16/2004

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REA Major Repairs Report for Aircraft N799AX

7/9/2008

10:29:24 AM

DATE	REA NUMBER	REA TITLE	COMMENTS
06/09/2004	B655-49223-MR	Repair - Vertical Stabilizer, Auxiliary Spar Installation, 175T1000-144, Access, FSS 92.250 to 295.915, And Repair - of L/H Aluminum Honeycomb Panel P/N 175T2001-3: B767	Vertical stabilizer auxiliary box panel 175T2001-3 (LH side) was found to have a large delaminated area; 16" x 25"; between FSS 103 and FSS 128. This REA gives instructions for gaining access to the inner surface of the 175T2001-3 panel to facilitate installation of the panel attachment fasteners; and to repair the panel per Boeing instructions. The auxiliary spar is opened and returned to the drawing configuration upon completion of installation of the panel.
06/27/2004	B654-49227-MR	REPAIR-ENGINE #2 STRUT-RH SKIN PANEL-GOUGE ON OUTER SURFACE, STA 237, WL 135, B767	DURING THE SUBJECT AIRPLANE INSPECTION, TWO GOUGES WERE FOUND ON ENGINE #2 STRUT RH SKIN PANEL NEAR AN ACCESS DOOR CUTOUT. MAXIMUM DEPTH OF BLENDOUT REQUIRED TO COMPLETELY REMOVE DAMAGE IS .045 INCHES. SEE FIG. 1. THIS REA DETAILS INSTRUCTIONS AS TO REPAIR DAMAGED SKIN USING REPAIR DOUBLER.
06/27/2004	B654-49228-MR	REPAIR-ENGINE #1 STRUT-RH SKIN PANEL-GOUGE ON OUTER SURFACE, STA 237, WL 135, B767	DURING THE SUBJECT AIRPLANE INSPECTION, TWO GOUGES WERE FOUND ON ENGINE #1 STRUT RH SKIN PANEL NEAR AN ACCESS DOOR CUTOUT. MAXIMUM DEPTH OF BLENDOUT REQUIRED TO COMPLETELY REMOVE DAMAGE IS .020 INCHES. SEE FIG. 1. THIS REA DETAILS INSTRUCTIONS AS TO REPAIR DAMAGED SKIN USING REPAIR DOUBLER.
06/27/2004	B654-49229-MR	REPAIR-ENGINE #2 STRUT-LH SKIN PANEL-GOUGE ON OUTER SURFACE, STA 237, WL 135, B767	DURING THE SUBJECT AIRPLANE INSPECTION, TWO GOUGES WERE FOUND ON ENGINE #2 STRUT LH SKIN PANEL NEAR AN ACCESS DOOR CUTOUT. MAXIMUM DEPTH OF BLENDOUT REQUIRED TO COMPLETELY REMOVE DAMAGE IS .020 INCHES. SEE FIG. 1. THIS REA DETAILS INSTRUCTIONS AS TO REPAIR DAMAGED SKIN USING REPAIR DOUBLER.
06/29/2004	B654-49230-MR	REPAIR-ENGINE #1, RT SIDE (INBD) STRUT SKIN, CF6-80A, CHAFING DAMAGE AT NAC STA 240 TO 247M NAC WL 137, B767	DURING MAINTENANCE ON THE SUBJECT AIRPLANE, CHAFING DAMAGE WAS DISCOVERED ON ENGINE #1 RT SIDE (INBD) STRUT SKIN BETWEEN NAC STA 240 AND 247, AT APPROXIMATE NAC WL 137. THE DAMAGE IS TO THE 311T1450-4 SKIN AND RUNS IN THE FORE/AFT DIRECTION JUST BELOW THE 311T1682-34 FIRESEAL ANGLE. THE LENGTH OF THE SCORE MARKS IS 6.5 INCH, WITH A MAXIMUM DEPTH OF 0.094 INCH. SEE FIGURE 1.
06/29/2004	B654-49231-MR	REPAIR-ENGINE #1, LT SIDE (OUTBD) STRUT SKIN, CF6-80A, CHAFING DAMAGE AT NAC STA 240 TO 247, NAC WL 137, B767	DURING MAINTENANCE ON THE SUBJECT AIRPLANE, CHAFING DAMAGE WAS DISCOVERED ON ENGINE #1 LEFT SIDE (OUTBD) STRUT SKIN BETWEEN NAC STA 240 AND 247, AT APPROXIMATE NAC WL 137. THE DAMAGE IS TO THE 311T1450-3 SKIN AND RUNS IN THE FORE/AFT DIRECTION JUST BELOW THE 311T1682-33 FIRESEAL ANGLE. THE LENGTH OF THE SCORE MARKS IS 3.5 INCH, WITH A MAXIMUM DEPT OF 0.060 INCH. SEE FIGURE 1.

DATE	REA NUMBER	REA TITLE	COMMENTS
06/29/2004	B654-49232-MR	REPAIR-ENGINE #2, LEFT SIDE (INBD) STRUT SKIN, CF6-80A, CHAFING DAMAGE AT NAC STA 240 TO 247, NAC WL 137, B767	DURING MAINTENANCE ON THE SUBJECT AIRPLANE, CHAFING DAMAGE WAS DISCOVERED ON ENGINE #2 LEFT SIDE (INBD) STRUT SKIN BETWEEN NAC STA 240 AND 247, AT APPROXIMATE NAC WL 137. THE DAMAGE IS TO THE 311T1450-3 SKIN AND RUNS IN THE FORE/AFT DIRECTION JUST BELOW THE 311T1682-33 FIRESEAL, ANGLE. THE LENGTH OF THE SCORE MARKS IS 6.5 INCH, WITH A MAXIMUM DEPTH OF 0.075 INCH. IN ADDITION, THE DAMAGE TURNS UPWARD AT NAC STA 247 FOR 0.5 INCH JUST FORWARD OF THE EDGE OF THE 311T1400-21 SKIN PLATE. SEE FIGURE 1.
06/29/2004	B654-49233-MR	REPAIR-ENGINE #2, RT SIDE (OTBD) STRUT SKIN, CF6-80A, CHAFING DAMAGE AT NAC STA 240 TO 247, NAC WL 137, B767	DURING MAINTENANCE ON THE SUBJECT AIRPLANE, CHAFING DAMAGE WAS DISCOVERED ON ENGINE #2 RIGHT SIDE (OUTBD) STRUT SKIN BETWEEN NAC STA 240 AND 247, AT APPROXIMATE NAC WL 137. THE DAMAGE IS TO THE 311T1450-4 SKIN AND RUNS IN THE FORE/AFT DIRECTION JUST BELOW THE 311T1682-34 FIRESEAL ANGLE. THE LENGTH OF THE SCORE MARKS IS 7.0 INCH, WITH A MAXIMUM DEPTH OF 0.088 INCH. IN ADDITION, THE DAMAGE TURNS UPWARD AT NAC STA 247 FOR 1.25 INCH JUST FORWARD OF THE EDGE OF THE 311T1400-22 SKIN PLATE. SEE FIGURE 1.
03/01/2004	B653-49235-MR	Repair - Skin Panel, Deep Corrosion At STA 1087, BL 0, S-39L To S-39R, 146T3421, B767	During heavy maintenance, deep corrosion was found on the inner surface of the P/N 145T3220-2, belly skin assy at BS 1087, and between stringer 39L & 39R. The corrosion extends between P/N 145T3220-2, belly skin, and P/N 140T0834-4, shear tie. This REA provided only instructions to make access the skin corrosion removal.
07/08/2004	B652-49237-MR	REPAIR-GOUGE IN 146T6334-1 BULK CARGO DOOR INNER SKIN, STA 1439, WL 131 B767	GOUGE WAS FOUND IN THE 146T6334-1 INNER SKIN AT STA 1439, WL 131. SEE FIGURE 1. THIS REA PROVIDES INSTRUCTIONS TO TRIM AND REPAIR THE DAMAGED AREA WITH EXTERNAL STRAP.
07/18/2004	B653-49240-MR	REPAIR - FRAME SEGMENT (P/N 146T1323-5), STA 1562, CRACK ON MAIN DECK FRAME WEB BETWEEN S-8L AND S-9L, B767	DURING INSPECTION WAS FOUND CRACK ON MAIN DECK FRAME WEB, AT STA 1562, BETWEEN S-8L AND S-9L. THIS REA PROVIDES INSTRUCTIONS TO REPAIR THE STR PER B767-200 SRM 53-00-07, FIGURE 201.
07/26/2004	B653-49241-MR	REPAIR - FRAME SEGMENT (P/N 146T1133-3), DOOR STA 923.7, ENLARGED HOLE AND DRILL START ON FRAME WEB BETWEEN S-7L AND S-8L, B767	DURING REMOVAL OF THE STR-8L PORTION (P/N 146T3002-15) FOR REPAIR THE DRILL START WAS DETECTED AND ONE MORE FASTENER HOLE WAS ELONGATED (TO MAX 0.230) ON FRAME WEB AT DOOR STA 923.7 (P/N 146T1133-3), BETWEEN S-7L AND S-8L, UNDER EXISTING SPLICE (SEE FIGURE 1). THIS REA PROVIDES INSTRUCTIONS TO REPAIR THE DAMAGE ON THE FRAME WEB BY ENLARGING OF FASTENER HOLES TO 1ST OVERSIZE.
07/22/2004	B653-49242-MR	REPAIR - TEAR STRAP P/N 146T3332-9, STA 1540 BETWEEN S-7L-S8L, DRILL START ON INNER SIDE, B767	DURING REPAIR OF STR 8L, DRILL START WAS MADE ON TEAR STRAP, STA 1540 BETWEEN STR 7L AND STR 8L. (SEE ATTACHED FIGURE 1). THIS REA PROVIDES INSTRUCTIONS TO REPAIR THE SUBJECT TEAR STRAP.

DATE	REA NUMBER	REA TITLE	COMMENTS
08/31/2004	B625-49247-MR	DEVIATION-FWD LOWER CARGO,FLOOR PANEL MODIFICATION,STA 544 TO 742, LBL 20.5 TO RBL 20.5, WL 124.73. B767	ABX DRAWING N07966 INSTALLS NEW FLOOR PANELS AND ASSOCIATED SUPPORT BRACKETS IN THE FORWARD LOWER CARGO. BETWEEN STA 544 AND STA 742, THE NEW FLOOR PANELS INTERFERE WITH THE CARGO HANDLING SYSTEM BALL PANELS AND LATERAL GUIDES. ALSO, THE NEW SUPPORT BRACKETS DO NOT INTERFACE WITH THE EXISITING STRUCTURE. THIS REA WAS WRITTEN AT CUSTOMER REQUEST TO REVISE THE PARTS AND INSTALLATION GIVEN IN THE REF 2,3, AND 4 DRAWINGS.
10/08/2004	B653-49249-MR	REPAIR-314T1010-1, LH ENGINE INLET COWL-ENGINE INLET LIP SKIN EROSION DAMAGE, B767	EROSION/CORROSION WAS FOUND ON 314T1020-3 LIP SKIN LOCATED ON PN 314T1010-1, SN 00105 ENGINE INLET COWL.
10/04/2004	B653-49252-MR	REPAIR-CORROSION ON FLOOR PLATE (PN 146T8211-7) SURROUND STRUCTURE OF BULK CARGO DOOR, BETWEEN STA 1417 AND STA 1427, STR-32L, B767	DURING INSPECTION WAS FOUND CORROSION ON FLOOR PLATE (PN 146T8211-7), LOCATED ON BULK CARGO, BETWEEN STA 1417 AND STA 1427. AS REPORTED IN RFTA 3755-02856, AFTER COMPLETE CORROSION REMOVAL, NDT INSPECTION WAS PERFORMED ON REWORKED AREA WITH NO CRACKS. ULTRASONIC INSPECTION WAS DEEPEST AREAS OF CORROSION REMOVAL HAVE A REMAINING THICKNESS OF 0.031", FROM A MEASURED NOMINAL THICKNESS OF 0.042" (SEE FIGURE 1). THIS REA PROVIDES INSTRUCTIONS TO REPAIR THE FLOOR PLATE PER REF/5/. THE REPAIR IS ACCEPTABLE AS A CATEGORY A PERMANENT REPAIR.
10/20/2004	B653-49256-MR	REPAIR-STRINGER-12R, DENT ON FREE FLANGE, STA 422, B767	FREE FLANGE OF STR-12R WAS DAMAGED ON STA 422 (SEE FIGURE 1). DENT IS LOCATED BEFORE (10 INCH) ORIGINAL INTEGRAL SECTION 41-43 SPLICE. THIS REA PROVIDES INSTRUCTIONS TO REPAIR THE STR PER B767-200 SRM 51-70-11, FIGURE1.
10/24/2004	B657-49257-MR	REPAIR-CORROSION ON VERTICAL FLANGE OF LOWER CHORD (PN 113T1623-9), UPPER PANEL SUPPORT BEAM, FIXED TRAILING EDGE, LEFT WING, WSTA 281.615, B767	DURING INSPECTION WAS FOUND CORROSION ON VERTICAL FLANGE OF LOWER CHORD (PN 113T1623-9), UPPER PANEL SUPPORT BEAM, FIXED TRAILING EDGE, WSTA 2851.615. AFTER COMPLETE CORROSION REMOVAL, NDT INSPECTION WAS PERFORMED ON REWORKED AREAS WITH NO CRACKS OR CORROSION. DEEPEST AREA OF CORROSION REMOVAL (3/4"X1/2") HAS A REMAINING THICKNESS OF 0.107", FROM A MEASURED NOMINAL THICKNESS OF 0.130" (SEE FIGURE 1). RESTS OF THE AREAS (4 AREAS) ARE WITHIN ALLOWABLE DAMAGE. THIS REA PROVIDES INSTRUCTIONS TO REPAIR THE LOWER CHORD. THE REPAIR IS ACCEPTABLE AS A CATEGORY A PERMANENT REPAIR.
12/01/2004	B611-51118-MR	Repair- Fabricate, Flight Deck Placard, P/N D06043-51, B767	During line maintenance at ILN, P/N D06043-51 Placard was found missing in two locations. Fabricate two replacement part and install in place.
12/13/2004	B611-51167-MR	INSTALLATION - DEACTIVATION PLACARD ON THE CABIN PRESSURE STATIC PORT (VIEW AE OF N08056 DRAWING) AND ACTIVATION PLACARDS ON THE RELOCATED CABIN PRESSURE STATIC PORT IN THE AFT SECTION OF THE FUSELAGE.	SINCE THE CABIN PRESSURE STATIC PORT (VIEW AE IN DRAWING N08056) HAS BEEN PLUGGED AND RELOCATED TO THE AFT SECTION OF THE FUSELAGE, THERE SHOULD BE A DEACTIVATION PLACARD ON THE PLUGGED PORT AND RELEVANT ACTIVE PLACARDS ON THE NEW PORT
01/20/2006	B657-53136-MR	INSTALL - NEW DRAIN TUBE FOR NUMBER 5 AND 8 SLAT TRACK HOUSING, B767	AN INVESTIGATION BY BOING FOUND THAT THE NUMBER 5 AND 8 SLAT TRACK TUBE WITH A FLEXIBLE PART MAY CRACK AS A RESULT OF HIGH INTENSITY ENGINE VIBRATION. IF CRACKED A FUEL LEAK ON THE ENGINE EXHAUST NOZZLE OR ON MLG BRAKES AND POSSIBLY RESULT IN A FIRE.

DATE	REA NUMBER	REA TITLE	COMMENTS
01/25/2006	B627-53147-MR	INSP - Flight Control Cable Grommets, B767	IAI has identified that some sub-assemblies containing NAS1368 grommets may have been improperly installed by leaving the grommet end not flipped over. This REA will provide work instructions to accomplish IAI SB 368-27-017, which performs an inspection of the control cable grommets in the overhead areas of the fuselage. The REA will also provide instructions for replacement of any grommets found in an incorrect condition. Completion of this REA will provide compliance with IAI SB 368-27-017
01/25/2006	B627-53148-MR	Inspection - E2A Elevator Pulley Bracket, P/N 368-27-30-91882-101, B767	After the conversion of the aircraft to the SF configuration, IAI suspects that the Elevator Control Cable E2A may not be aligned with the plane of the pulley bracket, P/N 368-27-30-91882-101, within the allowed tolerance per IAI Drawing 368-27-30-91840, Note 8. To address the problem, IAI has issued Service Bulletin 368-27-016, which affects ABX aircraft N752AX, N792AX, N797AX, and N799AX. Engineering Order EA 27300035 is being created to accomplish compliance with the service bulletin. This REA is to comply with the service bulletin for N799AX.
06/26/2007	B653-56021-MR	Repair - Fuselage Skin, R1 Door Cutout, LWR AFT Corner, P/N 141T3330, B767	During aircraft C-Check at Wilmington, OH (ILN), Maintenance accomplished NEA53624 which inspects the R1 door corners for cracks. During this inspection Maintenance noted a crack measuring 2.20" in length emanating from the AFT LWR corner cutout of the R1 door. The damage was removed by trimming resulting in a final max trimout depth of 2.25". No damage was noted to the bearstrap. Maintenance contacted Engineering for repair disposition.
06/26/2007	B653-56023-MR	Repair - Fuselage Skin, L1 Door Cutout, LWR AFT Corner, P/N 141T3330, B767	During aircraft C-Check at Wilmington, OH (ILN) Maintenance accomplished NEA53574 which inspects the L1 door corners for cracks. During this inspection Maintenance noted a crack measuring 0.25" in length emanating from the AFT LWR corner of the L1 door. The damage was removed by trimming resulting in a max trimout depth of 1.5" with a 1.0" minimum radius on the trimout. Maintenance contacted Engineering for repair disposition.
07/09/2007	B655-56063-MR	Remove/Replace - Pivot Pin, Right Horizontal Stabilizer, P/N 180T0009-2, B767	During C-Check at Wilmington, OH (ILN), Maintenance discovered crack indications in the right horizontal stabilizer pivot pin during accomplishment of job card 7325004. Due to ALI requirements, damage must be recorded, documented, and submitted to the proper regulatory office. This REA will record damage and verify proper installation of new pivot pin.