MAINT	RII/INSP

Execution / Start Date:	
End Date:	

DFW B707–24–003 rev 0 **WIRNG ON R5 EXT. PWR CONTACTOR CORRECTION**

Nr.	Hardtime	Task	Spec.	Related Documents	MAINT	RII/INSP
1.			REI	DFW B707–24–003 rev 0		

Check:

Zones:

Access:

NRC YES ❍ NO ❍ IF YES, NUMBER(S): . . . . . .

NOTE: FOR LX–N19997 JUST RE–CRIMPING ON THE EXTERNAL POWER CONTACTOR & IN THE AUX J6 APU POWER CONTACTOR IS TO BE CARRIED OUT ALLOWING THE TERMINAL STUDS TO SECURRED IAW SWPM.

1. GENERAL INFORMATION:

CAUTION: Keep work area, wires & electrical bundles clean of metal particles or contamination when you use tools. Unwanted material metal particles or contamination caught in wire bundles can cause damage to the bundles. Damaged wire bundles can cause sparks or other electrical damage.

NOTE: Obey all warnings & cautions given in the specific manual sections.

2. WORK INSTRUCTIONS

1. Remove electrical power from airplane. Use independent power source for worklight.

2. Gain access to the J6 main AC power shield & AUX J6 APU power shield.
   Remove cover of right half of the main AC power shield. The warning lamps in the middle of the main AC power shield should be OFF as a sign that no voltage is applied in aircraft.

3. Identify wires iaw SPM 20–10–11, paragraph 11, using iem 4.

4. Perform wiring modification as shown in figure 1, using item 1(High temp wire, BMS13–60), 2 (Terminal, MS20659–120) & 3 (Heat shrinkable sleeve, MS23053–5).

5. Crimp together the 2 x 06 gauge & 1 x 02 gauge wires (on the external power contactor R5 & on the aux J6 APU power contactor RR9025). Crimp according to Boeing SWPM 20–30–11.
   Terminal lug: P/N MS20659–120 (opt P/N BACT12AC36, opt P/N MS25036–136, opt P/N BACT12M26–3).

6. Install torque nut iaw AMM 24–3–81.
   10 mm Ø bolts of ECP, BTB, GB must be tightened with a torque of **60 to 70** pounds–inches.
   6 mm Ø bolts of ECP, BTB, GB must be tightened with a torque of **10 to 12** pounds–inches.

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7. Perform functional test (AMM 24–4–61).		
A. Generator Breaker test (manual operation).		
GENERATOR 1		
GENERATOR 2		
GENERATOR 3		
GENERATOR 4		

1. Disconnect airplane battery.

2. Connect an equivalent battery instead of airplane battery at terminals of battery receptacle.

3. Check that the following circuit breakers on external power shield J9 are closed:
   a) BATTERY POWER
   b) BATTERY CONTROL

4. Check that the following circuit breakers on circuit braeker panel P6 are closed:
   a) BATTERY SUPPLY
   b) VOLTMETER
   c) GENERATOR CONTROL – NR. 1, NR. 2, NR. 3 & NR. 4.

5. Position AMMETER & VOLTMETER SELECTOR switch o, engineer's instrument panel (P11) to ESSENTIAL TR bus.

6. Position BATTERY switch to ON.
   NOTE: Voltmeter will read equivalent battery voltage.

7. Check that the breaker indicating lights GEN CONTROL – OFF,
   GEN BREAKER – CIRCUIT OPEN & BUS–TIE BREAKER – CIRCUIT OPEN associated with each generator on engineer's instrument panel P11 come ON.

8. Disconnect Nr. 1 generator underspeed switch electrical connector located on CSD.

9. Position GEN CONTROL switch for Nr. 1 generator momentarily to CLOSE.
   a) Check that GEN CONTROL – OFF light goes OFF, indicating that generator control relay generator control panel has operated.

10. Immediately position GEN BREAKER switch for Nr.1 generator momentarily to CLOSE.
   a) Check that GEN BREAKER – CIRCUIT OPEN light goes OFF, indicating generator breaker has operated.
   b) Check that GEN BREAKER – CIRCUIT OPEN light comes ON within 5 to 10 seconds, indicating generator brekaer has automatically tripped.
   NOTE: Generator breaker is automatically tripped by generator control relay because the AC undervoltage protection circuit is no longer disable by the generator underspeed switch.

11. Position GEN CONTROL switch for Nr. 1 generator to CLOSE.

12. Position GEN BREAKER switch for Nr. 1 generator to CLOSE & then immediately to TRIP.
   a) Check that GEN BREAKER – CIRCUIT OPEN light goes OFF & then comes ON with switch actuation.
   NOTE: The above step must be performed within 5 seconds or generator breaker will automatically trip.

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13. Connect Nr. 1 generator underspeed switch electrical connector to CSD.
    a) Check that generator breaker will not actuate to closed position using GEN CONTROL switch

14. Repeat steps 8 to 13 for generator Nr.2, Nr.3 & Nr.4.

15. Position BATTERY switch to OFF.

16. Disconnect equivalent battery & connect airplane battery to terminals of battery receptacle.

B. Generator Bus– Tie breaker test (manual operation).

GENERATOR 1		
GENERATOR 2		
GENERATOR 3		
GENERATOR 4		

1. Close GEN CONTROL switch for Nr.1 generator.

2. Position BUS–TIE BREAKER switch for Nr.1 generator momentarily to CLOSE.
    a) Check that BUS–TIE BREAKER – CIRCUIT OPEN light goes OFF & remains OFF until switch is positioned to TRIP, indicating bus–tie breaker has operated.

3. Disconnect Nr.1 generator underspeed switch electrical connector located on CSD.

4. Position BUS–TIE BREAKER switch for Nr. 1 generator momentarily to CLOSE.
    a) Check that BUS–TIE BREAKER – CIRCUIT OPEN light goes OFF & then comes ON within 2 to 4 seconds, indicating bus–tie breaker has automatically tripped.
    NOTE: Bus–tie breaker is automatically tripped by bus–tie breaker lockout relay because the AC under voltage protection circuit is no longer disable by the generator underspeed switch.

5. Connect Nr.1 generator underspeed switch electrical connect to CSD.

6. Repeat steps 1 to 5 for generator Nr. 2, Nr. 3 & Nr.4.

7. Position BATTERY switch to OFF.

8. Disconnect equivalent battery & connect airplane battery to terminals of battery receptacle.

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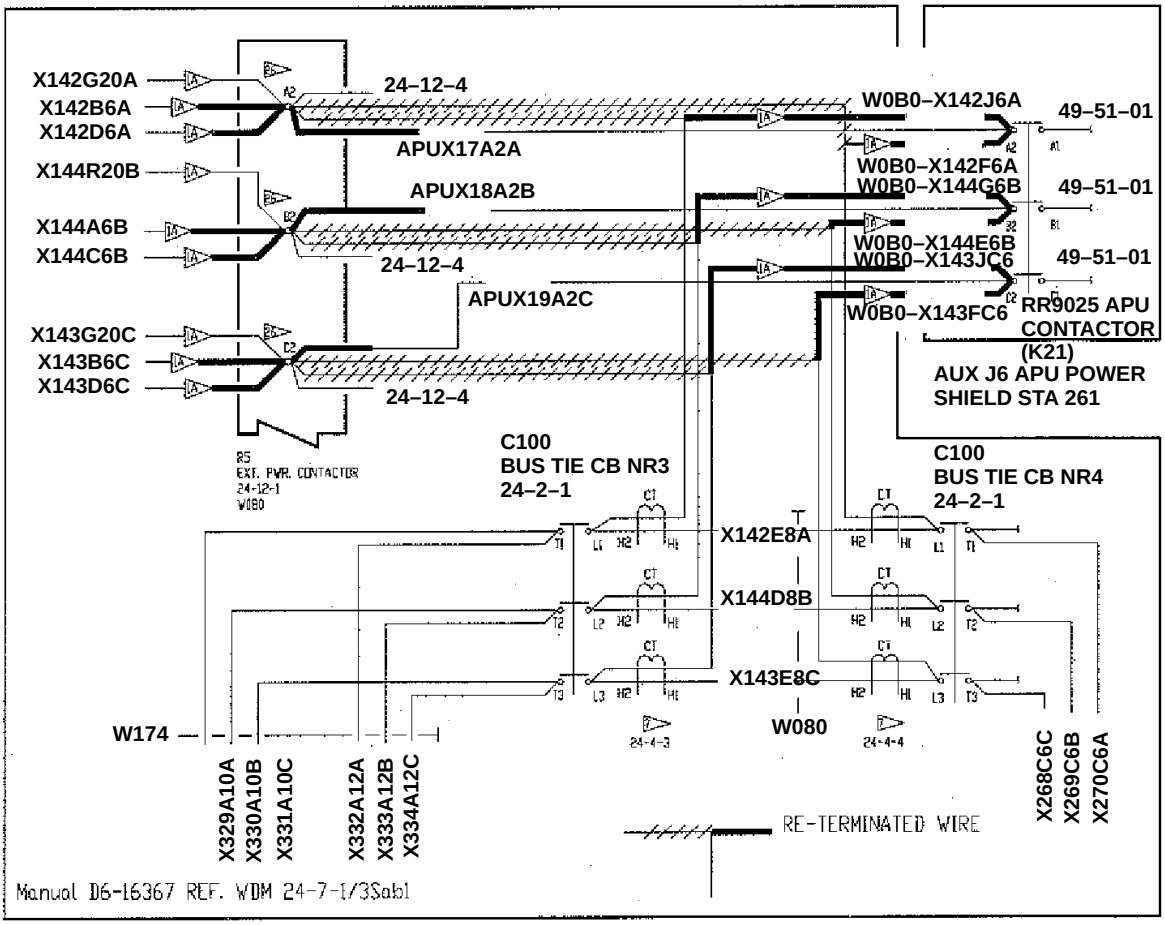
FIGURE 1 _ WIRE MODIFICATION LX-N19997 and LX-N20000



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ENGINEERING INSTRUCTION

EI-Number:	DFW B707-24-003	Rev.: 1	Date: 20 - Nov - 2007
Component / Equipment Type: Electrical Power			

Accomplishment Report

Please send this Accomplishment Report to ESEC and attach it to the CDRL30 (DLM Report) if applicable.

Subject:
Model:
Accomplished at (Tailnumber):
Date of Accomplishment:
Description of Deviations:
Findings:
Carry Overs:
SOR Statements:

Executed/performed by:	SOR Engineering Representative:	SOR Quality Assurance:
Name:	Name:	Name:
Date:	Date:	Date:
SOR:		
Signature:	Signature:	Signature: