# MANDATORY SERVICE

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PACSB / XL / 105 ISSUE 2

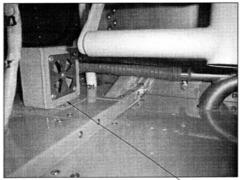
# **INSPECTION – NLG / MLG – PALNUTS**

### 1. PLANNING INFORMATION

Α.	EFFECTIVITY	Part A - ALL 750XL aircraft up to and including S/N 220 (excluding S/N`s 214, 216, 217, 218, 219). Part B - ALL 750XL aircraft up to and including S/N 185 (excluding S/N 177).	
B.	<u>REASON</u>	To inspect the Nose Landing Gear and Main Landing Gear attachment bolts and install the Palnuts, as applicable, accomplishing the requirement for dual retaining devices of FAR 23.607 (a).	
C.	DESCRIPTION	Part A –	Procedures for inspection and installation of Palnuts in the Nose Landing Gear.
		Part B –	•
		<u>NOTE:</u>	<u>Part B</u> is not applicable for Extended Range Wing aircraft.
D.	COMPLIANCE	Within the next 165 flight hours.	
E.	APPROVAL	By delegated authority.	
F.	TOOLING	N/A.	
G.	WEIGHT AND BALANCE	No change.	
Н.	REFERENCE	AMM Supplements PAC/XL/0389, 0451, 0509, 0663 and 750XL Maintenance Manual.	
I.	HOURS REQUIRED	Part A – 1 Hour Part B – 2 Hours	
J.	WARRANTY COVER	Normal wa	rranty conditions apply.

#### 2. PART A - ACCOMPLISHMENT INSTRUCTIONS (NOSE LANDING GEAR)

- 1) Remove LH or RH Cockpit Seat (Ref. 750 XL MM, Section 25-10-00 <u>or</u> AMM Supplement PAC/XL/0389 MCI Model 2023 Crew Seats).
- 2) Remove the Hose Clip from the Diffuser Cockpit Footwell in the Cover Panel Assembly Centre, if PAC/XL/0182 Bleed Air Cabin Heater is installed (See Figure 1).



DIFFUSER COCKPIT FOOTWELL (REF)

#### FIGURE 1 COCKPIT FLOOR – DIFFUSER COCKPIT FOOTWELL (IF INSTALLED)

3) Remove the Cover Panel Fwd of the Cover Panel Assembly - Centre P/N 11-16365-1 (See Figure 2).

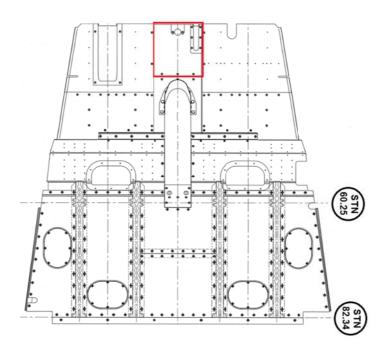


FIGURE 2 COCKPIT FLOOR (ONLY FOR REFERENCE)

- 4) Inspect the Nose Landing Gear attachment bolts (See Figure 3):
  - If the Palnuts are installed in four bolt locations (lower attachment point in the cockpit floor and upper attachment point), no further action is required. Go to Step 11) and record compliance with this Service Bulletin Part A.
  - If the Palnuts are not installed in four bolt locations, go to Step 5).

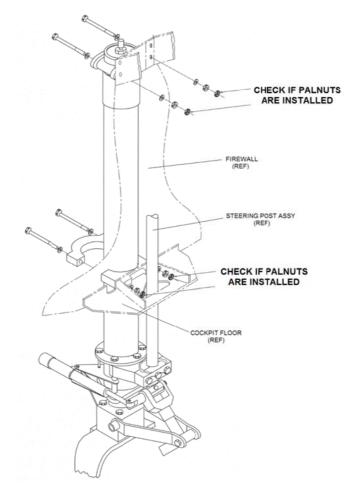
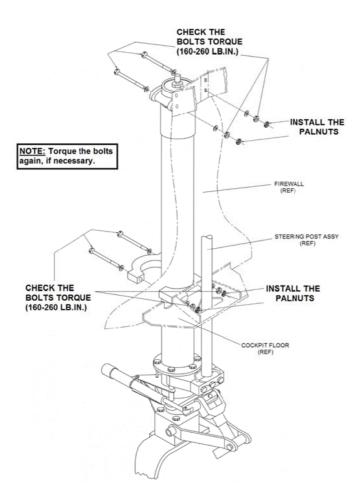


FIGURE 3 NOSE LANDING GEAR - INSPECTION

- 5) Remove the Upper Engine Cowl to get access to the upper attachment area of the Nose Landing Gear (Ref 750XL MM, Chapter 71).
- 6) Inspect the Nose Landing Gear attachment bolts (See Figure 3):
  - If P/N NAS1804-6 nuts are installed in four bolt locations (lower attachment point in the cockpit floor and upper attachment point), go to Step 7).
  - If P/N AN365-624 or P/N MS21044N6 nuts (identified by presence of the nylon insert) are installed in four bolt locations, (lower attachment point in the cockpit floor and upper attachment point), replace them with P/N NAS1804-6 nuts and go to Step 7).
- 7) Hold the upper attachment bolts of the Nose Landing Gear and check the torque (from inside cockpit through the nuts) (See Figure 4).
  - <u>NOTE</u>: The torque value should be between 160 and 260 lb.in. Torque the bolts again, if necessary.
- 8) Install the Palnuts P/N MS27151-19 to the upper attachment bolts of the Nose Landing Gear.
  - <u>NOTE</u>: Palnuts should be tightened securely but not excessively. Finger-tight plus ¼ turn or two flats.

- 9) In the Lower Engine Cowl area, access the lower attachment bolts of the Nose landing gear and check the torque (from inside cockpit through the nuts) (See Figure 4).
  - <u>NOTE:</u> The torque value should be between 160 and 260 lb.in. Torque the bolts again, if necessary.
- 10) Install the Palnuts P/N MS27151-19 to the lower attachment bolts of the Nose Landing Gear.
  - <u>NOTE</u>: Palnuts should be tightened securely but not excessively. Finger-tight plus <sup>1</sup>/<sub>4</sub> turn or two flats.



#### FIGURE 4 NOSE LANDING GEAR – TORQUE CHECK AND PALNUTS INSTALLATION

- 11) Reinstall the Upper Engine Cowl (Ref. 750XL Maintenance Manual, Chapter 71).
- 12) Reinstall the Hose Clip to the Diffuser Cockpit Footwell in the Cover Panel Assembly -Centre, if PAC/XL/0182 – Bleed Air Cabin Heater is installed (See Figure 1).
- 13) Reinstall LH or RH Cockpit (Ref. 750 XL MM, Section 25-10-00 or AMM Supplement PAC/XL/0389 MCI Model 2023 Crew Seats).

#### 3. PART B - ACCOMPLISHMENT INSTRUCTIONS (MAIN LANDING GEAR)

- 1) Remove the Leading Edge Protection Panels (LH / RH).
- 2) Remove the Lower Inner Protection Panels (LH / RH).



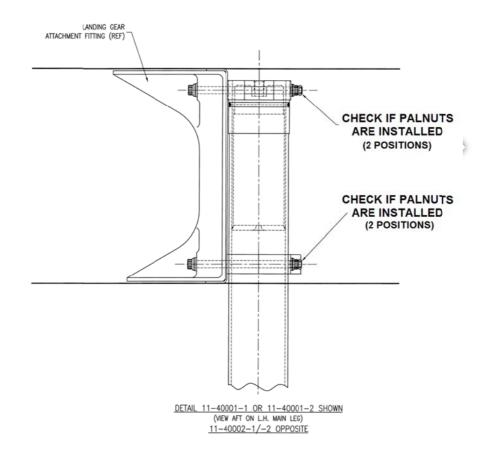
FIGURE 5 LOWER WING SURFACE (SHORT RANGE WING)

3) Remove the Inboard and Outboard Cover Panels (LH / RH) (See Figure 6).



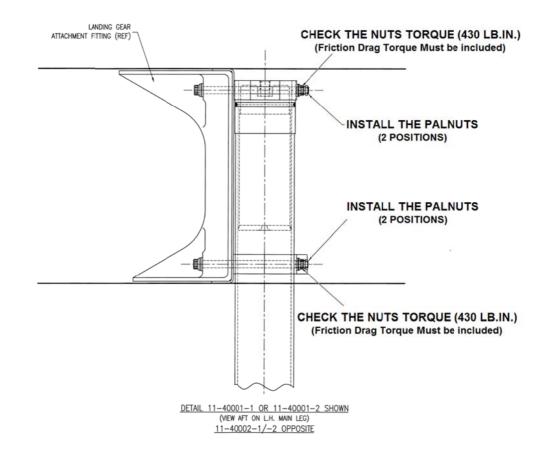
FIGURE 6 LOWER WING SURFACE – COVER PANELS

- 4) Inspect the Main Landing Gear attachment bolts (See Figure 7):
  - If the Palnuts are installed in eight bolts locations (four on each MLG), no further action is required. Go to Step 8) and record compliance with this Service Bulletin Part B.
  - If the Palnuts are not installed in eight bolts locations (four on each MLG), go to Step 5).

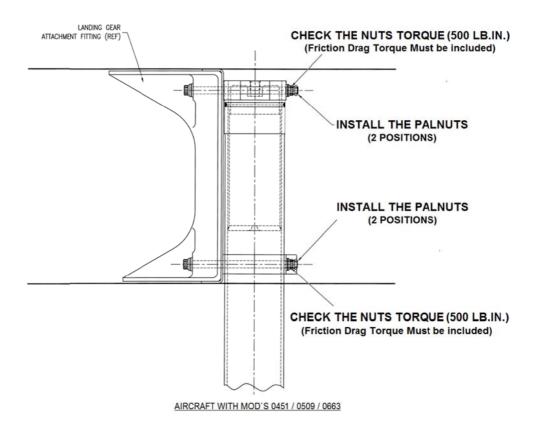


#### FIGURE 7 MAIN LANDING GEAR (SHORT RANGE WING AND AIRCRAFT WITH MODS 0451 / 0509 / 0663) - INSPECTION

- 5) Hold the upper attachment bolts of the Main Landing Gear and check the torque (See Figures 8 and 9).
  - NOTE 1: For Short Range Wing Aircraft (3/8 bolt), the torque value should be 430 lb.in. (friction drag torque must be included). Torque the bolts again, if necessary.
  - <u>NOTE 2</u>: For MODs PAC/XL/0451, 0509 and 0663 (7/16 bolt), the torque value should be 500 lb.in. (friction drag torque must be included). Torque the bolts again, if necessary.
- 6) Install the Palnuts P/N MS27151-19 (for Short Range Wing Aircraft) or P/N MS27151-21 (for MOD's 0451, 0509 and 0663) to the upper attachment bolts of the Main Landing Gear.
  - <u>NOTE</u>: Palnuts should be tightened securely but not excessively. Finger-tight plus ¼ turn or two flats.
- 7) Repeat the Steps 5 and 6 to the lower attachment bolts of Main Landing Gear, checking the torque and installing the Palnuts, as applicable.
- 8) Reinstall the Inboard and Outboard Cover Panels (LH / RH) (See Figure 6).
- 9) Reinstall the Lower Inner Protection Panels (LH / RH).
- 10) Reinstall the Leading Edge Protection Panels (LH / RH).







#### FIGURE 9 MAIN LANDING GEAR (AIRCRAFT WITH MODS 0451 / 0509 / 0663) – TORQUE CHECK AND PALNUTS INSTALLATION

#### 4. CERTIFICATION

Record compliance with Part A and/or Part B of this bulletin in the Aircraft Log Book.

### 5. MATERIAL REQUIRED:

#### PART A - NOSE LANDING GEAR

Description	Part Number	Qty Required
PALNUT	MS27151-19	A/R (MAX. 4)
NUT (ONLY IF NECESSARY)	NAS1804-6	A/R (MAX. 4)

### PART B - MAIN LANDING GEAR

Description	Part Number	Qty Required
PALNUT (SHORT RANGE WING AIRCRAFT)	MS27151-19	A/R (MAX. 8)
<u>OR</u>		
PALNUT (MODS 0451, 0509 AND 0663)	MS27151-21	A/R (MAX. 8)