



UNITED AIRLINES (2025) 747-400 FUEL TANK S.I.M. ENTRY PROCEDURES

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1	ATTACH GROUND WIRE TO FUEL TANK S.I.M.	
2	AREA SECURE AND WARNING SIGNS POSTED	VERBAL
3	PARKING BRAKE SET AND VERIFY NGS SYSTEM OPERATING (BLUE LIGHT ON)	VERBAL
	PROCEED TO DEFUELING PROCEDURES (SEE PAGE 3)	
4	DEACTIVATE NGS SYSTEM: (A) TURN NGS SWITCH TO OFF (B) PULL NGS CIRCUIT BREAKER (C) ATTACH LOTO TAG	
5	TURN EXTERNAL POWER SWITCH TO OFF	
6	TURN BATTERY SWITCH TO OFF	
7	DISCONNECT BATTERY AND COMPLETE CONFINED SPACE ENTRY PERMIT	VERBAL
8	OPEN FUEL ACCESS PLATE	
9	VERIFY METER READING .02 PPM, LEL - CONFIRM "SAFE FOR ENTRY"	VERBAL
10	AT THE TRANSFER PIPE LOCATION(S), REPLACE THE PACKINGS (2EA)	
	(A) REMOVE THE CLAMSHELL COUPLING	
	(B) MOVE THE SLEEVE AWAY FROM THE FLANGES	
	(C) REMOVE AND DISCARD THE PACKINGS (2EA)	
	(D) OBTAIN NEW PACKINGS (2EA) P/N MS29513-226, VERIFICATION REQUIRED	VERBAL
	(E) LUBRICATE WITH PROVIDED PETROLATUM AND INSTALL NEW PACKINGS (2EA)	
	(F) INSTALL SLEEVE	
	(G) INSTALL CLAMSHELL COUPLING, VERIFY WITH JUDGE FOR CORRECT INSTALL	
11	EXAMINE TANK FOR UNWANTED OBJECTS - F.O.D. - REMOVE AS REQUIRED	
	(A) INSPECT O-RING AND PANEL FOR DAMAGE	
	(B) CLEAN MATING SURFACE OF PANEL AND O-RING WITH TOWELETTE	
12	"OK" TO CLOSE TANK ACCESS PLATE	VERBAL
13	USING RETAINED HARDWARE, REINSTALL ACCESS PANEL AND RETAINING RING "NOTE" HOLES ARE NOT SYMMETRICAL	
14	OBTAIN CALIBRATED TORQUE WRENCH	
	(A) VERIFY TORQUE TO 15IN LBS, VERIFICATION REQUIRED	VERBAL
	(B) TORQUE FASTENERS IN SEQUENCE (REF. FIG 403)	
15	RECONNECT AIRCRAFT BATTERY	VERBAL
16	RECONNECT EXTERNAL POWER	VERBAL
17	TURN BATTERY SWITCH ON	
18	TURN EXTERNAL POWER SWITCH ON	
19	REACTIVATE THE NGS SYSTEM	
	(A) REMOVE LOTO TAG	
	(B) RESET NGS CIRCUIT BREAKER	



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	(C) TURN NGS SWITCH ON	
20	VERIFY NGS IS ON AND THE BLUE LIGHT IS ILLUMINATED	
	PROCEED TO REFUELING PROCEDURES (SEE PAGE 3)	
21	REMOVE GROUND WIRE FROM S.I.M.	
22	ENSURE ALL TOOLING IS RETURNED "NOTE" TORQUE WRENCH SET TO 0,	
	THEN TELL JUDGE "WE ARE FINISHED"	



DEFUEL PROCEDURES

PAGE 3

1	OPEN FUELING VALVE ACCESS PANEL	
2	TURN ON RESPECTIVE PUMP SWITCH TO CORRESPONDING TANK CURRENTLY IN WORK	
3	TURN ON MAIN POWER AND VALVE OPEN SWITCHES INSIDE THE ACCESS PANEL (A) ENSURE BLUE TRANSFER LIGHT ILLUMINATES AND AMBER LIGHT EXTINGUISHES (B) TRANSFER IS COMPLETE WHEN AMBER LIGHT ILLUMINATES	
4	TURN OFF VALVE OPEN AND MAIN POWER SWITCHES	
5	TURN OFF RESPECTIVE PUMP SWITCH TO CORRESPONDING TANK CURRENTLY IN WORK	
	PROCEED TO FUEL TANK ENTRY PROCEDURES STEP 4	

REFUEL PROCEDURES

1	TURN ON RESPECTIVE PUMP SWITCH TO CORRESPONDING TANK CURRENTLY IN WORK	
2	TURN ON THE MAIN POWER AND VALVE OPEN SWITCHES INSIDE THE ACCESS PANEL (A) ENSURE BLUE TRANSFER LIGHT ILLUMINATES AND AMBER LIGHT EXTINGUISHES (B) TRANSFER IS COMPLETE WHEN AMBER LIGHT ILLUMINATES	
3	TURN OFF VALVE OPEN AND MAIN POWER SWITCHES	
4	TURN OFF RESPECTIVE PUMP SWITCH TO CORRESPONDING TANK CURRENTLY IN WORK	
5	CLOSE FUELING VALVE ACCESS PANEL	
	RETURN TO TANK ENTRY PROCEDURES	