### **TECHNICAL MANUAL**

# JOB GUIDE ORGANIZATIONAL MAINTENANCE

## **SERVICING FUEL**

(12-28-00 THROUGH 12-28-01)

300i
AIRCRAFT

MCDONNELL DOUGLAS CORPORATION
MILITARY TRANSPORT AIRCRAFT
F33657-81-C-2108
FA8526-21-D-0001

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**1 FEBRUARY 2025** 

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Dates of issue for original and changed pages are:

Original . . . . . 0 . . . . . 1 Feb 25

TOTAL NUMBER OF PAGES IN THIS PUBLICATION IS 212 CONSISTING OF THE FOLLOWING:

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### INTRODUCTION

### SCOPE.

This manual contains maintenance procedures for single point refueling of the aircraft.

## MODEL(S) COVERED.

A11

### ABBREVIATIONS.

The following is a list of non-standard abbreviations used throughout this manual:

AIM Aircraft Interior Monitor

EPC Electrical Power Center

ETOOLS Electronic Tools

FSSZ Fuel Servicing Safety Zone
GRC Ground Refueling Control

LS Line Select

PLCS Places

REO Refueling Equipment Operator

RPO Refueling Panel Operator

SDS Safety Data Sheet

SPR Single Point Refueling

WAP Warning and caution Annunciator Panel

### CHANGE REQUEST.

Recommended changes to this manual shall be submitted in accordance with TO 00-5-1300i **TO INFORMATION.** 

General 300i TO/eTO, TO Manager, Supplement and finalized Recommended Change (RC) information can be found in the Enhanced Technical Information Management System (ETIMS), System of Record.

## **LIST OF TIME COMPLIANCE TECHNICAL ORDERS (TCTO).**

This list of TCTO's contains all current TCTO's that affect the technical content of text or illustrations found in this manual.

TCTO NUMBER	TITLE	TCTO DATE	APPLICABILITY
1300i-1616	Installation of Extended Range Fuel Containment System, (System 28), and Modification of On-Board Inert Gas Generation System - OBIGGS II (System 47), 300i Aircraft	25 APR 13	$\langle AA \rangle \rightarrow \langle CX \rangle$

## **SECTION 1**

# GENERAL INFORMATION (12-28-00)

### 1-1. GENERAL INFORMATION.

- 1-2. This section provides general information that is essential for ensuring complete and safe maintenance procedures contained throughout this job guide manual.
- 1-3. When operating an auxiliary motor pump below 15 degrees Fahrenheit a 30 seconds on/30 seconds off duty cycle for a maximum 10 cycles may be required to reach full hydraulic pressure of 3800 to 4200 psi. Allow ten minutes for cooling and repeat cycles.
- 1-4. Hydraulic system No. 2 may require 45 seconds before reaching full hydraulic pressure of 3800 to 4200 psi.

### 1-5. FUEL TEAM BRIEFING.

- 1-6. Establish a meeting point and take a head count of the people involved in case of emergency. When practical, meeting point should be upwind to eliminate possibility of smoke inhalation.
- 1-7. The fuel team supervisor will brief team members on their position and responsibility.
- 1-8. The fuel team supervisor will brief fuel team on type of fueling or defueling task to be performed.
- 1-9. The fuel team supervisor will brief fuel team on type of equipment used according to the task to be performed.
- 1-10. The fuel team supervisor will brief fuel team on use of authorized hand signals.
- 1-11. The fuel team supervisor will brief fuel team on critical phases of fueling or defueling operation.
- 1-12. The fuel team supervisor will brief fuel team on ground intercommunication procedures.
- 1-13. Position vehicles and equipment only when signaled to do so.
- 1-14. Do not drive or operate any vehicles or powered equipment within 25 feet of wingtip fuel vent outlets. Vehicles and equipment authorized for operations inside the Fuel Servicing Safety Zone (FSSZ)

shall maintain at least a 25-foot separation distance from pressurized fuel servicing system components. This does not apply to fuel servicing trucks or vehicles driven on the cargo ramp.

- 1-15. Only intrinsically safe radios or electronic tools (**ETOOLS**) may be used within 10 feet of aircraft wingtip fuel vent outlets and any fuel spills.
- 1-16. Dissipate static electricity before entering servicing area by grasping approved ground point. Personnel shall not carry spark producing items, such as cigarette lighters or matches into any area around aircraft.
- 1-17. When positioning fuel servicing equipment, the vehicle may be within 10 feet and as far under the wing as necessary for the fuel hose to reach the aircraft, but no closer than four feet from the aircraft in any direction. The fuel truck will not be positioned directly under the fuel vents.
- 1-18. Refueling Panel Operator (RPO) is to follow these emergency procedures when directed by Refuel Supervisor:
  - Direct Refueling Equipment Operator (REO) shutdown fuel source.
  - Turn off Single Point Refueling (SPR) panel switch.
  - Close and disconnect SPR nozzle.
  - Notify all personnel in vicinity to evacuate to a safe distance.
  - Shut down Auxiliary Power Unit (APU).
  - When fire is present, attempt to extinguish.
  - Assist REO in evacuation of pit cart/truck.
  - Confirm all other personnel have safely evacuated and report to Refuel Supervisor in front of aircraft.

- 1-19. Brief REO to follow these procedures:
  - Confirm servicing equipment has been checked for serviceability.
  - Position equipment when directed by Refuel Supervisor or RPO. Remain in vicinity of equipment at all times and monitor for any malfunctions.
- 1-20. When passengers are debarking, boarding or passengers are on onboard brief Aircraft Interior Monitor (AIM) to follow these procedures:
  - Ensure loading team is aware of safety precautions required during concurrent servicing.
  - Confirm all phases of loading operations with Refuel Supervisor.
  - When passengers are to remain on board, ensure that an aircrew member remains on board to brief passengers and assist in evacuation when required. Voice contact must be established and maintained at all times during the fuel servicing portion.
  - In the event of emergency, evacuate personnel and report to Refuel Supervisor in front of aircraft.

# 1-21. <u>GENERAL WARNINGS, CAUTIONS, AND</u> NOTES.

## WARNING

- The refuel/defuel team shall be constantly alert during refueling/defueling operations for fuel spills, fuel servicing equipment failure, and sparks emitted from electrical systems or exhausts. When any of the above malfunctions or fuel spills occur, immediately cease operation and clear the aircraft of personnel. No electrical or aircraft support equipment in the area shall be operated until it is determined that safe conditions again exist. Small amounts of spillage may be absorbed with rags or oil absorbents. Large spillage shall be disposed of by the fire department. Failure to comply may cause injury to personnel and damage to aircraft.
- All possible sources of ignition, including matches, lighters, and spark producing devices shall not be taken into the FSSZ restricted area. Failure to comply may cause injury to personnel and damage to aircraft.
- Shoes with exposed steel nails or metal plates on the walking surfaces shall not be worn in the FSSZ.
   Failure to comply may cause injury to personnel and damage to aircraft.
- Do not put on or take off outer garments in FSSZ. Failure to comply may cause injury to personnel and damage to aircraft.
- Do not connect or disconnect any connections of auxiliary equipment (i.e. power unit, interphone, etc.) within the FSSZ during fuel servicing. Failure to comply may cause injury to personnel and damage to aircraft.

## WARNING - Continued

- All flight control surfaces and thrust reversers shall be clear of personnel and equipment prior to applying or removing hydraulic power. Failure to comply may cause injury to personnel and damage to equipment.
- Aircraft jacking, towing, and taxiing is not allowed with a lateral fuel imbalance between wings that exceeds 8,000 lbs of fuel. Lateral fuel imbalance is not limited for maintenance provided aircraft is static and nose and main landing gear are on the ground (not jacked). Failure to comply may cause injury to personnel and damage to aircraft.
- Maintenance stands used in area must be positioned so that aircraft is not damaged as it settles during refuel. Failure to comply may cause injury to personnel and damage to aircraft.
- When a power fluctuation or power cycle occurs the radar altimeters may become inadvertently activated. Refueling operations shall be shutdown immediately and cause must be corrected before continuing.
   Failure to comply may cause injury or death to personnel and damage to aircraft.
- During refueling, troop door shall be closed on the side of aircraft where fuel servicing equipment is located. Failure to comply may cause injury to personnel and damage to aircraft.

# WARNING - Continued

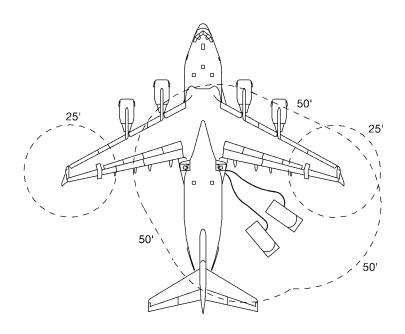
- When personnel are on board, all refueling equipment shall be located on right side of the aircraft. Ensure adequate exits are available for evacuation. When refueling equipment cannot be located on the right side of aircraft and must be placed on the left side then the crew entry door and emergency exit door shall be open and a maintenance stand shall be placed at emergency exit to assist in emergency egress. Failure to comply may cause injury to personnel and damage to aircraft.
- When patients are on board or are being taken on or off aircraft, multiple source refueling is prohibited.
   Failure to comply may cause injury to personnel and damage to aircraft.
- For multi-source fuel servicing, two flightline fire extinguishers shall be located within 100 feet of the aircraft being fueled. Failure to comply may cause injury to personnel and damage to aircraft.
- Fire evacuation distance shall be a minimum of 600 FT, with flares on board. Failure to comply may cause injury to personnel and damage to aircraft.
- For aircraft loaded with explosive cargo during refuel/defuel operations, the evacuation distance shall be the minimum safe clearance distance of the class of material on the aircraft. Refer to AFMAN 91-201, Table V1.E10.T10 for the minimum safe clearance distances. Failure to comply may cause injury to personnel and damage to aircraft.

#### NOTE

• SPECIFIED FUEL and ALTERNATE FUELS are listed in aircraft cross servicing guide manual (Refer to TO 1300i-2-1).

#### **NOTE - Continued**

- Personnel performing fuel servicing shall be familiar with TO 00-25-172 and AFMAN 91-203, Chapter 18.5.
- When during ground refueling at ambient temperatures below zero degrees Fahrenheit, the fill valves do not operate, the override button can be held down during refuel operations. When fill valves still do not operate, valves may be operated manually IAW TO 1300i-2-00GV-00-1, Chapter 13.
- Power-on maintenance of electrical equipment is allowed on aircraft exterior outside FSSZ.



C-17A FUEL SERVICING SAFETY ZONE

ICN-88277-G1228440-001-01

## 1-22. FUEL TANK CAPACITIES.

1-23. The following is a list of individual fuel tank capacities relative to total aircraft fuel capacity. Tank quantity reflects weight rather than volume so fuel density is not a factor. Select total fuel quantity to be serviced and read across to select amount required for each tank.

# 1-24. FUEL TANK CAPACITIES (JP-4, JET B WIDE CUT). $\langle AA \rangle \rightarrow \langle CX \rangle$ BEFORE 1616.



Maximum allowed fuel load is 175,400 lbs. Failure to comply may cause structural damage to aircraft.

#### NOTE

Values listed below for filling tank 1 and 4 are nominal values, based on nominal fuel density (6.5 lbs/gal). Tank 1 and 4 may not achieve an indicated 36,600 lbs of fuel due to ambient temperature changes. Adjust inboard tank 2 and 3 fill quantities to achieve the total quantity (lbs) requirement. Failure to comply may cause failure to achieve required fuel load.

FUEL TANK CAPACITIES (JP-4, JET B WIDE CUT)		
TOTAL QUANTITY (LBS)	FUEL QUANTITY PER TANK	
0 TO 146,000	DIVIDE TOTAL QUANTITY	
0 10 110,000	EQUALLY BETWEEN ALL 4 TANKS	
FILL 1 AND 4 TANKS FU		
147,000 TO 175,400	(36,600), FILL 2 AND 3 TANKS AS	
	FOLLOWS:	
147,000	36,900	
148,000	37,400	
149,000	37,900	
150,000	38,400	
151,000	38,900	
152,000	39,400	

FUEL TANK CAPACITIES (JP-4, JET B WIDE CUT)		
TOTAL QUANTITY (LBS)	FUEL QUANTITY PER TANK	
0 TO 146,000	DIVIDE TOTAL QUANTITY EQUALLY BETWEEN ALL 4 TANKS	
147,000 TO 175,400	FILL 1 AND 4 TANKS FULL (36,600), FILL 2 AND 3 TANKS AS FOLLOWS:	
153,000	39,900	
154,000	40,400	
155,000	40,900	
156,000	41,400	
157,000	41,900	
158,000	42,400	
159,000	42,900	
160,000	43,400	
161,000	43,900	
162,000	44,400	
163,000	44,900	
164,000	45,400	
165,000	45,900	
166,000	46,400	
167,000	46,900	
168,000	47,400	
169,000	47,900	
170,000	48,400	
171,000	48,900	
172,000	49,400	
173,000	49,900	
174,000	50,400	
175,000	50,900	
175,400	51,100	

# 1-24. FUEL TANK CAPACITIES (JP-4, JET B WIDE CUT). $\langle AA \rangle \rightarrow \langle CX \rangle$ AFTER 1616 $\langle CY \rangle \rightarrow$ .

# CAUTION

Maximum allowed fuel load is 237,200 lbs. Failure to comply may cause structural damage to aircraft.

### **NOTE**

Values listed below for filling tank 1 and 4 are nominal values, based on nominal fuel density (6.5 lbs/gal). Tank 1 and 4 may not achieve an indicated 36,600 lbs of fuel due to ambient temperature changes. Adjust inboard tank 2 and 3 fill quantities to achieve the total quantity (lbs) requirement. Failure to comply may result in failure to achieve required fuel load.

FUEL TANK CAPACITIES (JP-4, JET B WIDE CUT)		
TOTAL QUANTITY (LBS)	FUEL QUANTITY PER TANK	
147,000 TO 237,200	FILL 1 AND 4 TANKS TO (36,600), FILL 2 AND 3 TANKS AS FOLLOWS:	
0 TO 146,000	DIVIDE TOTAL QUANTITY EQUALLY BETWEEN ALL 4 TANKS	
147,000	36,900	
150,000	38,400	
153,000	39,900	
156,000	41,400	
159,000	42,900	
162,000	44,400	
165,000	45,900	
168,000	47,400	
171,000	48,900	
174,000	50,400	
177,000	51,900	
180,000	53,400	

FUEL TANK CAPACITIES (JP-4, JET B WIDE CUT)		
TOTAL QUANTITY (LBS)	FUEL QUANTITY PER TANK	
147,000 TO 237,200	FILL 1 AND 4 TANKS TO (36,600), FILL 2 AND 3 TANKS AS FOLLOWS:	
0 TO 146,000	DIVIDE TOTAL QUANTITY EQUALLY BETWEEN ALL 4 TANKS	
183,000	54,900	
186,000	56,400	
189,000	57,900	
192,000	59,400	
195,000	60,900	
198,000	62,400	
201,000	63,900	
204,000	65,400	
207,000	66,900	
210,000	68,400	
213,000	69,900	
216,000	71,400	
219,000	72,900	
222,000	74,400	
225,000	75,900	
228,000	77,400	
231,000	78,900	
234,000	80,400	
237,000	81,900	
237,200	82,000	

# 1-25. FUEL TANK CAPACITIES (JP-8, JET A, JET A-1). $(AA) \rightarrow (CX)$ BEFORE 1616.

# CAUTION

Maximum allowed fuel load is 180,800 lbs. Failure to comply may cause structural damage to aircraft.

### **NOTE**

Values listed below for filling tank 1 and 4 are nominal values, based on nominal fuel density (6.7 lbs/gal). Tank 1 and 4 may not achieve an indicated 37,800 lbs of fuel due to ambient temperature changes. Adjust inboard tank 2 and 3 fill quantities to achieve the total quantity (lbs) requirement. Failure to comply may result in failure to achieve required fuel load.

FUEL TANK CAPACITIES (JP-8, JET A, JET A-1)		
TOTAL QUANTITY (LBS)	FUEL QUANTITY PER TANK	
0 TO 151,000	DIVIDE TOTAL QUANTITY EQUALLY BETWEEN ALL 4 TANKS	
152,000 TO 180,800	FILL 1 AND 4 TANKS TO (37,800), FILL 2 AND 3 TANKS AS FOLLOWS:	
152,000	38,200	
153,000	38,700	
154,000	39,200	
155,000	39,700	
156,000	40,200	
157,000	40,700	
158,000	41,200	
159,000	41,700	
160,000	42,200	
161,000	42,700	
162,000	43,200	
163,000	43,700	

FUEL TANK CAP	ACITIES (JP-8, JET A, JET A-1)
TOTAL QUANTITY (LBS)	FUEL QUANTITY PER TANK
0 TO 151,000	DIVIDE TOTAL QUANTITY EQUALLY BETWEEN ALL 4 TANKS
152,000 TO 180,800	FILL 1 AND 4 TANKS TO (37,800), FILL 2 AND 3 TANKS AS FOLLOWS:
164,000	44,200
165,000	44,700
166,000	45,200
167,000	45,700
168,000	46,200
169,000	46,700
170,000	47,200
171,000	47,700
172,000	48,200
173,000	48,700
174,000	49,200
175,000	49,700
176,000	50,200
177,000	50,700
178,000	51,200
179,000	51,700
180,000	52,200
180,800	52,600

# 1-25. FUEL TANK CAPACITIES (JP-8, JET A, JET A-1). $(AA) \rightarrow (CX)$ AFTER (B16) $(CY) \rightarrow$ .

# CAUTION

Maximum allowed fuel load is 244,600 lbs. Failure to comply may cause structural damage to aircraft.

### NOTE

Values listed below for filling tank 1 and 4 are nominal values, based on nominal fuel density (6.7 lbs/gal). Tank 1 and 4 may not achieve an indicated 37,800 lbs of fuel due to ambient temperature changes. Adjust inboard tank 2 and 3 fill quantities to achieve the total quantity (lbs) requirement. Failure to comply may result in failure to achieve required fuel load.

FUEL TANK CAPACITIES (JP-8, JET A, JET A-1)		
TOTAL QUANTITY (LBS) FUEL QUANTITY PER TANK		
0 TO 151,000	DIVIDE TOTAL QUANTITY EQUALLY BETWEEN ALL 4 TANKS	
152,000 TO 244,600	FILL 1 AND 4 TANKS TO (37,800), FILL 2 AND 3 TANKS AS FOLLOWS:	
152,000	38,200	
155,000	39,700	
158,000	41,200	
161,000	42,700	
164,000	44,200	
167,000	45,700	
170,000	47,200	
173,000	48,700	
176,000	50,200	
179,000	51,700	
182,000	53,200	
185,000	54,700	

FUEL TANK CAPA	ACITIES (JP-8, JET A, JET A-1)
TOTAL QUANTITY (LBS)	FUEL QUANTITY PER TANK
0 TO 151,000	DIVIDE TOTAL QUANTITY EQUALLY BETWEEN ALL 4 TANKS
152,000 TO 244,600	FILL 1 AND 4 TANKS TO (37,800), FILL 2 AND 3 TANKS AS FOLLOWS:
188,000	56,200
191,000	57,700
194,000	59,200
197,000	60,700
200,000	62,200
203,000	63,700
206,000	65,200
209,000	66,700
212,000	68,200
215,000	69,700
218,000	71,200
221,000	72,700
224,000	74,200
227,000	75,700
230,000	77,200
233,000	78,700
236,000	80,200
239,000	81,700
242,000	83,200
244,600	84,500

# 1-26. FUEL TANK CAPACITIES (JP-5). $\langle AA \rangle \rightarrow \langle CX \rangle$ BEFORE 1616.

# CAUTION

Maximum allowed fuel load is 183,400 lbs. Failure to comply may cause structural damage to aircraft.

### NOTE

Values listed below for filling tank 1 and 4 are nominal values, based on nominal fuel density (6.8 lbs/gal). Tank 1 and 4 may not achieve an indicated 38,300 lbs of fuel due to ambient temperature changes. Adjust inboard tank 2 and 3 fill quantities to achieve the total quantity (lbs) requirement. Failure to comply may result in failure to achieve required fuel load.

FUEL TANK CAPACITIES (JP-5)			
TOTAL QUANTITY (LBS)	FUEL QUANTITY PER TANK		
0 TO 153,000	DIVIDE TOTAL QUANTITY EQUALLY BETWEEN ALL 4 TANKS		
154,000 TO 183,400	FILL 1 AND 4 TANKS TO (38,300), FILL 2 AND 3 TANKS AS FOLLOWS:		
154,000	38,700		
155,000	39,200		
156,000	39,700		
157,000	40,200		
158,000	40,700		
159,000	41,200		
160,000	41,700		
161,000	42,200		
162,000	42,700		
163,000	43,200		
164,000	43,700		
165,000	44,200		

FUEL TANK CAPACITIES (JP-5)			
TOTAL QUANTITY (LBS)	FUEL QUANTITY PER TANK		
0 TO 153,000	DIVIDE TOTAL QUANTITY EQUALLY BETWEEN ALL 4 TANKS		
154,000 TO 183,400	FILL 1 AND 4 TANKS TO (38,300), FILL 2 AND 3 TANKS AS FOLLOWS:		
166,000	44,700		
167,000	45,200		
168,000	45,700		
169,000	46,200		
170,000	46,700		
171,000	47,200		
172,000	47,700		
173,000	48,200		
174,000	48,700		
175,000	49,200		
176,000	49,700		
177,000	50,200		
178,000	50,700		
179,000	51,200		
180,000	51,700		
181,000	52,200		
182,000	52,700		
183,000	53,200		
183,400	53,400		

# 1-26. FUEL TANK CAPACITIES (JP-5). $\langle AA \rangle \rightarrow \langle CX \rangle$ AFTER 1616 $\langle CY \rangle \rightarrow$ .

# CAUTION

Maximum allowed fuel load is 248,200 lbs. Failure to comply may cause structural damage to aircraft.

### NOTE

Values listed below for filling tank 1 and 4 are nominal values, based on nominal fuel density (6.8 lbs/gal). Tank 1 and 4 may not achieve an indicated 38,300 lbs of fuel due to ambient temperature changes. Adjust inboard tank 2 and 3 fill quantities to achieve the total quantity (lbs) requirement. Failure to comply may result in failure to achieve required fuel load.

FUEL TANK CAPACITIES (JP-5)		
TOTAL QUANTITY (LBS)	FUEL QUANTITY PER TANK	
154,000 TO 248,200	FILL 1 AND 4 TANKS TO (38,300), FILL 2 AND 3 TANKS AS FOLLOWS:	
0 TO 153,000	DIVIDE TOTAL QUANTITY EQUALLY BETWEEN ALL 4 TANKS	
154,000	38,700	
157,000	40,200	
160,000	41,700	
163,000	43,200	
166,000	44,700	
169,000	46,200	
172,000	47,700	
175,000	49,200	
178,000	50,700	
181,000	52,200	
184,000	53,700	
187,000	55,200	

FUEL TANK CAPACITIES (JP-5)			
TOTAL QUANTITY (LBS)	FUEL QUANTITY PER TANK		
154,000 TO 248,200	FILL 1 AND 4 TANKS TO (38,300), FILL 2 AND 3 TANKS AS FOLLOWS:		
0 TO 153,000	DIVIDE TOTAL QUANTITY EQUALLY BETWEEN ALL 4 TANKS		
190,000	56,700		
193,000	58,200		
196,000	59,700		
199,000	61,200		
202,000	62,700		
205,000	64,200		
208,000	65,700		
211,000	67,200		
214,000	68,700		
217,000	70,200		
220,000	71,700		
223,000	73,200		
226,000	74,700		
229,000	76,200		
232,000	77,700		
235,000	79,200		
238,000	80,700		
241,000	82,200		
244,000	83,700		
247,000	85,200		
248,200	85,800		

# 1-27. FUEL TANK CAPACITIES (EMERGENCY FUELS ONLY). $(AA) \rightarrow (CX)$ BEFORE 1616.

# CAUTION

Emergency fuel containing aviation gasoline per MIL-G-5572 shall not be used unless all other sources of kerosene turbine fuel are exhausted. Fuel tanks shall be filled with less than or equal to 10% by volume of gasoline. Do not use JP-4, Jet B or other wide cut fuels blended with aviation gasoline. Failure to comply may cause engine flameout.

#### **NOTE**

- Maximum allowed fuel load is 164,000 lbs of JP-8 and 16,000 lbs aviation gasoline, total 180,000 lbs.
- Values listed below for filling tank 1 and 4 are nominal values, based on nominal fuel densities of JP-8 (6.7 lbs/gal) and Aviation Gasoline (5.9 lbs/gal). Fill Tank 1 and Tank 4 to a maximum of 34,000 lbs with JP-8 plus a maximum of 3,300 lbs of aviation gasoline. Adjust inboard Tank 2 and 3 fill quantities to achieve total amount required. Failure to comply may result in failure to achieve required fuel load.

FUEL TANK CAPACITIES (EMERGENCY FUELS ONLY)				
TOTAL	TOTAL QUANTITY JP-8 (LBS)		TOTAL QUANTITY AVIATION GASOLINE	
FUEL				
QUANTITY				BS)
(LBS)			(L.	33)
0 TO	TANKS 1	TANKS 2	TANKS 1	TANKS 2
149,000	AND 4	AND 3	AND 4	AND 3
5,000	1,200	1,200	100	100
10,000	2,300	2,300	200	200
15,000	3,400	3,400	300	300

FUEL TANK CAPACITIES (EMERGENCY FUELS ONLY)				
TOTAL FUEL QUANTITY (LBS)	TOTAL QUANTITY JP-8 (LBS)		AVIATION	UANTITY GASOLINE BS)
0 TO	TANKS 1	TANKS 2	TANKS 1	TANKS 2
149,000	AND 4	AND 3	AND 4	AND 3
20,000	4,600	4,600	500	500
25,000	5,700	5,700	600	600
30,000	6,800	6,800	700	700
35,000	8,000	8,000	800	800
40,000	9,100	9,100	900	900
45,000	10,300	10,300	1,000	1,000
50,000	11,400	11,400	1,100	1,100
55,000	12,500	12,500	1,200	1,200
60,000	13,700	13,700	1,300	1,300
65,000	14,800	14,800	1,500	1,500
70,000	16,000	16,000	1,600	1,600
75,000	17,100	17,100	1,700	1,700
80,000	18,200	18,200	1,800	1,800
85,000	19,400	19,400	1,900	1,900
90,000	20,500	20,500	2,000	2,000
95,000	21,600	21,600	2,100	2,100
100,000	22,800	22,800	2,200	2,200
105,000	23,900	23,900	2,400	2,400
110,000	25,100	25,100	2,500	2,500
115,000	26,200	26,200	2,600	2,600
120,000	27,300	27,300	2,700	2,700
125,000	28,500	28,500	2,800	2,800
130,000	29,600	29,600	2,900	2,900
135,000	30,800	30,800	3,000	3,000
140,000	31,900	31,900	3,100	3,100
145,000	33,000	33,000	3,200	3,200
149,000	33,900	33,900	3,300	3,300

FUEL TANK CAPACITIES (EMERGENCY FUELS ONLY)				
TOTAL FUEL QUANTITY (LBS)	TOTAL QUANTITY JP-8 (LBS)		TOTAL Q AVIATION (LE	GASOLINE
150,000 TO 180,000	FILL 1 AND 4 TANKS TO (34,000) THEN FILL 2 AND 3 TANKS AS FOLLOWS:		TO (3,300) T AND 3 T/	O 4 TANKS THEN FILL 2 ANKS AS OWS:
150,000		34,300		3,400
155,000		36,600		3,600
160,000		38,900		3,900
165,000		41,200		4,100
170,000		43,400		4,300
175,000		45,700		4,500
180,000		48,000		4,700

# 1-27. FUEL TANK CAPACITIES (EMERGENCY FUELS ONLY). $\langle AA \rangle \rightarrow \langle CX \rangle$ AFTER 1616 $\langle CY \rangle \rightarrow$ .



Emergency fuel containing aviation gasoline per MIL-G-5572 shall not be used unless all other sources of kerosene turbine fuel are exhausted. Fuel tanks shall be filled with less than or equal to 10% by volume of gasoline. Do not use JP-4, Jet B or other wide cut fuels blended with aviation gasoline. Failure to comply may cause engine flameout.

#### NOTE

 Maximum allowed fuel load is 220,200 lbs of JP-8 and 21,500 lbs aviation gasoline, total 241,800 lbs.

#### **NOTE - Continued**

• Values listed below for filling tank 1 and 4 are nominal values, based on nominal fuel densities of JP-8 (6.7 lbs/gal) and Aviation Gasoline (5.9 lbs/gal). Fill Tank 1 and Tank 4 to a maximum of 34,000 lbs with JP-8 plus a maximum of 3,300 lbs of aviation gasoline. Adjust inboard Tank 2 and 3 fill quantities to achieve total amount required. Failure to comply may result in failure to achieve required fuel load.

FUEL TANK CAPACITIES (EMERGENCY FUELS ONLY)				
TOTAL FUEL QUANTITY (LBS)	TOTAL QUANTITY JP-8 (LBS)		AVIATION	UANTITY GASOLINE 3S)
0 TO	TANKS 1	TANKS 2	TANKS 1	TANKS 2
149,000	AND 4	AND 3	AND 4	AND 3
5,000	1,200	1,200	100	100
10,000	2,300	2,300	200	200
15,000	3,400	3,400	300	300
20,000	4,600	4,600	500	500
25,000	5,700	5,700	600	600
30,000	6,800	6,800	700	700
35,000	8,000	8,000	800	800
40,000	9,100	9,100	900	900
45,000	10,300	10,300	1,000	1,000
50,000	11,400	11,400	1,100	1,100
55,000	12,500	12,500	1,200	1,200
60,000	13,700	13,700	1,300	1,300
65,000	14,800	14,800	1,500	1,500
70,000	16,000	16,000	1,600	1,600
75,000	17,100	17,100	1,700	1,700
80,000	18,200	18,200	1,800	1,800
85,000	19,400	19,400	1,900	1,900
90,000	20,500	20,500	2,000	2,000
95,000	21,600	21,600	2,100	2,100

FUEL TANK CAPACITIES (EMERGENCY FUELS ONLY)				
TOTAL FUEL QUANTITY (LBS)	TOTAL QUANTITY JP-8 (LBS)			UANTITY GASOLINE BS)
0 TO	TANKS 1	TANKS 2	TANKS 1	TANKS 2
149,000	AND 4	AND 3	AND 4	AND 3
100,000	22,800	22,800	2,200	2,200
105,000	23,900	23,900	2,400	2,400
110,000	25,100	25,100	2,500	2,500
115,000	26,200	26,200	2,600	2,600
120,000	27,300	27,300	2,700	2,700
125,000	28,500	28,500	2,800	2,800
130,000	29,600	29,600	2,900	2,900
135,000	30,800	30,800	3,000	3,000
140,000	31,900	31,900	3,100	3,100
145,000	33,000	33,000	3,200	3,200
149,000	33,900	33,900	3,300	3,300

FUEL TANK CAPACITIES (EMERGENCY FUELS ONLY)				
	NK CAPACI	TIES (EMERC	SENCY FUEL	S ONLY)
TOTAL			TOTAL Q	UANTITY
FUEL	1	NTITY JP-8		GASOLINE
QUANTITY	(LE	3S)	(LE	3S)
(LBS)			,	
450 000 TO	l	0 4 TANKS		0 4 TANKS
150,000 TO 241,700		THEN FILL TANKS AS		HEN FILL 2 ANKS AS
241,700	l	OWS:	_	OWS:
150,000	FOLL		FOLL	
150,000		34,300		3,400
155,000		36,600		3,600
160,000		38,900		3,900
165,000		41,200		4,100
170,000		43,400		4,300
175,000		45,700		4,500
180,000		48,000		4,700
184,000		49,800		4,900
188,000		51,600		5,100
192,000		53,500		5,300
196,000		55,300		5,500
200,000		57,100		5,600
204,000		58,900		5,800
208,000		60,800		6,000
212,000		62,600		6,200
216,000		64,400		6,400
220,000		66,200		6,500
224,000		68,000		6,700
228,000		69,900		6,900
232,000		71,700		7,100
236,000		73,500		7,200
240,000		75,300		7,400
241,700		76,100		7,500

## 1-28. <u>FUEL QUANTITY COMPENSATOR FUEL</u> <u>DENSITY AND WET CAPACITANCE VALUES.</u>

## WARNING

The values listed below are not valid for JP-4 fuel usage. Failure to comply may cause injury to personnel and damage to aircraft.

1-29. This section provides fuel density and fuel quantity compensator capacitance values.

Fuel Density VS Fuel Quantity Compensator Capacitance Values		
FUEL DENSITY (LBS/	MAXIMUM FUEL QUANTITY	
GAL)	COMPENSATOR CAPACITANCE (pF)	
7.137 - 7.124	121.95	
7.123 - 7.111	121.76	
7.110 - 7.097	121.58	
7.096 - 7.084	121.39	
7.083 - 7.071	121.21	
7.070 - 7.057	121.03	
7.056 - 7.044	120.84	
7.043 - 7.031	120.66	
7.030 - 7.017	120.48	
7.016 - 7.004	120.29	
7.003 - 6.991	120.11	
6.990 - 6.978	119.93	
6.977 - 6.964	119.75	
6.963 - 6.951	119.57	
6.950 - 6.938	119.39	
6.937 - 6.924	119.21	
6.923 - 6.911	119.03	
6.910 - 6.898	118.85	
6.897 - 6.884	118.67	
6.883 - 6.871	118.49	
6.870 - 6.858	118.31	
6.857 - 6.844	118.13	

Fuel Density VS Fuel Quantity Compensator Capacitance Values	
FUEL DENSITY (LBS/	MAXIMUM FUEL QUANTITY
GAL)	COMPENSATOR CAPACITANCE (pF)
6.843 - 6.831	117.95
6.830 - 6.818	117.78
6.817 - 6.805	117.60
6.804 - 6.791	117.42
6.790 - 6.778	117.24
6.777 - 6.765	117.07
6.764 - 6.751	116.89
6.750 - 6.738	116.72
6.737 - 6.725	116.54
6.724 - 6.711	116.36
6.710 - 6.698	116.19
6.697 - 6.685	116.01
6.684 - 6.672	115.84
6.671 - 6.658	115.66
6.657 - 6.645	115.49
6.644 - 6.632	115.32
6.631 - 6.618	115.14
6.617 - 6.605	114.97
6.604 - 6.592	114.80
6.591 - 6.578	114.62
6.577 - 6.565	114.45
6.564 - 6.552	114.28
6.551 - 6.539	114.11
6.538 - 6.525	113.94
6.524 - 6.512	113.77
6.511 - 6.499	113.59
6.498 - 6.485	113.42
6.484 - 6.472	113.25
6.471 - 6.459	113.08
6.458 - 6.445	112.91
6.444 - 6.432	112.74
6.431 - 6.419	112.57
6.418 - 6.406	112.41

Fuel Density VS Fuel Quantity Compensator Capacitance Values		
FUEL DENSITY (LBS/ MAXIMUM FUEL QUANTITY GAL) COMPENSATOR CAPACITANCE (		
UAL)	COMI ENGATOR CALACITATIOE (PL)	
6.405 - 6.392	112.24	
6.391 - 6.379	112.07	

# 1-30. <u>FUEL CONVERSION TABLE (LBS TO GALLONS).</u>

1-31. This section provides tabular fuel conversion from pounds to gallons.

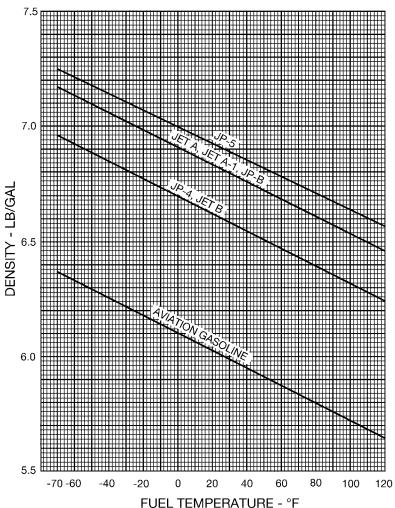
FUEL WEIGHT	FUEL DENSITY (LBS TO GALLONS)			
(LBS)	6.4	6.5	6.6	6.7
1	.2	.2	.2	.1
2	.3	.3	.3	.3
3	.5	.5	.5	.5
4	.6	.6	.6	.6
5	.8	.8	.8	.7
6	.9	.9	.9	.9
7	1.1	1.1	1.1	1.0
8	1.2	1.2	1.2	1.2
9	1.4	1.4	1.4	1.3
10	1.6	1.5	1.5	1.5
20	3.1	3.1	3.0	3.0
30	4.7	4.6	4.5	4.5
40	6.2	6.2	6.1	6.0
50	7.8	7.7	7.6	7.5
60	9.4	9.2	9.1	9.0
70	10.9	10.8	10.6	10.4
80	12.5	12.3	12.1	11.9
90	14.1	13.8	13.6	13.4
100	15.6	15.4	15.2	14.9
200	31.2	30.8	30.3	29.9
300	46.9	46.2	45.5	44.8
400	62.5	61.5	60.6	59.7
500	78.1	76.9	75.8	74.6

FUEL WEIGHT	FUEL DENSITY (LBS TO GALLONS)			
(LBS)	6.4	6.5	6.6	6.7
600	93.7	92.3	90.9	89.6
700	109.4	107.7	106.1	104.5
800	125.0	123.1	121.2	119.4
900	140.6	138.5	136.4	134.3
1000	156.2	153.8	151.5	149.3
2000	312.5	307.7	303.0	298.5
3000	468.7	461.5	454.5	447.8
4000	625.0	615.4	606.1	597.0
5000	781.2	769.2	757.6	746.3
6000	937.5	923.1	909.1	895.5
7000	1093.7	1076.9	1060.6	1044.7
8000	1250.0	1230.8	1212.1	1194.0
9000	1406.2	1384.6	1363.6	1343.3
10,000	1562.5	1538.5	1515.2	1492.5
20,000	3125.0	3076.9	3030.3	2985.1
30,000	4687.5	4615.4	4545.5	4477.6
40,000	6250.0	6153.8	6060.6	5970.1
50,000	7812.5	7692.3	7575.8	7462.7
60,000	9375.0	9230.8	9090.9	8955.2
70,000	10,937.5	10,769.2	10,606.1	10,447.8
80,000	12,500.0	12,307.7	12,121.2	11,940.3
90,000	14,062.5	13,846.1	13,636.4	13,432.8
100,000	15,625.0	15,384.6	15,151.5	14,925.4
200,000	31,250.0	30,769.2	30,303.0	29,850.7

EXAMPI	E:	TO CONVERT 106,634 POUNDS OF		
		FUEL A	AT A DENSITY OF 6.4	TO GALLONS:
100,000	LBS	=	15,625.0	GALLONS
6,000	LBS	=	937.5	GALLONS
600	LBS	=	93.7	GALLONS
30	LBS	=	4.7	GALLONS
4	LBS	=	.6	GALLONS
106,634	LBS	=	16,661.5	GALLONS

# 1-32. AVERAGE FUEL DENSITY VARIATIONS.





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**12-28-00** 1-31/(1-32 blank)

# **SECTION 2**

# SINGLE POINT REFUELING - CHECKLIST (12-28-01)

# **GENERAL MAINTENANCE INPUT CONDITIONS:**

Applicability:	Task
A11	All

#### Additional information:

	Task
Accomplishment of this procedure shall be followed in exact	01-3,
step-by-step CHECKLIST sequence to prevent damage to	01-4,
equipment or injury to personnel.	01-5
Exception: When refueling with refuel trucks (R-9, R-11 or	01-3,
international equivalents) this checklist is not required to be	01-4
completed until required fuel level is reached.	

This procedure consists of the following tasks:

- 01-1. Preparation for single point refueling using external or auxiliary power unit power.
- 01-2. Preparation for single point refueling using aircraft battery.
- 01-3. Single point refueling quantity select method.
- 01-4. Single point refueling high level method.
- 01-5. Single point refueling alternate method using overhead fuel panel.
- 01-6. Follow-on maintenance for single point refueling using external or auxiliary power unit power.
- 01-7. Follow-on maintenance for single point refueling using aircraft battery.

# Task

#### NOTE

• This procedure can be accomplished for one tank or multiple tanks simultaneously.

NOTE - Continued	Task
<ul> <li>Night vision goggles are approved for use when refueling procedures require them. These procedures shall be used in conjunction with local directives and approved checklists.</li> </ul>	All
<ul> <li>When Nose Landing Gear (NLG) or Main Landing Gear (MLG) wheel and tire change is to be accomplished during fuel servicing, the aircraft must be jacked prior to fuel servicing and down jacked after servicing is complete.</li> </ul>	All
Additional data:	Task
AFMAN 91-203	01-6, 01-7
TO 00-25-172	01-6, 01-7
TO 1300i-2-10JG-60-1	01-1, 01-6
TO 1300i-2-12JG-29-1	01-1
Personnel recommended:	Task
Two	01-1, 01-2, 01-3, 01-4, 01-6, 01-7
Three	01-5
Person (A) supervisor.	
Person (B) panel operator.	
Person (C) assist person (A).	

# Safety conditions:

Task

# WARNING

• Refueling operations shall be shutdown immediately A11 when vent box overfill light comes on during refueling. Cause must be corrected before continuing. Failure to comply may cause injury or death to personnel and damage to aircraft. • The use of personal protective equipment is 01-1,01-2,mandatory to perform this procedure. The applicable 01-6.Safety Data Sheet (SDS) will identify special 01 - 7protection information. Failure to comply may cause injury to personnel. • The use of personal protective equipment is 01-3, 01-4. mandatory when unable to scavenge manifold (i.e. 01-5GRP) or scavenge pump is inoperative. The applicable SDS will identify special protection information. Failure to comply may cause injury to personnel. • Underfloor, inside tail, or outside tail maintenance A11 shall not be performed during fuel servicing. Failure to comply may cause injury to personnel and damage to aircraft. A11 • Do not transmit on high frequency radio or weather radar during fuel servicing. Failure to comply may cause injury to personnel and damage to aircraft. • During fuel servicing refueling and main landing A11 gear jacking, maintain symmetrical fuel load of 8,000 lbs. between wings throughout process. Failure to comply may cause injury to personnel and

damage to aircraft.

**Task** 

All

# WARNING - Continued

- Maintenance shall not be performed on the Countermeasures Dispense System (CMDS) while servicing refueling is in progress. Failure to comply may cause injury to personnel and damage to aircraft.
- (FOR IRCM AIRCRAFT ONLY) Maintenance shall not be performed on Infrared Countermeasures (IRCM) system while refueling service is in progress. IRCM aircraft can be identified by the components listed in 05-10-06, task 06-1. Failure to

comply may cause injury to personnel and damage

to equipment.

# **Support equipment:**

<u>Nomenclature</u>	<u>PN</u>	<b>Specification</b>	<u>Qty</u>	<u>Task</u>
Container, Fuel		TO 00-25-172	AR	01-6, 01-7
Pin Ground Safety, Landing Gear	17G130002-1		1	01-1, 01-2
Pin Ground Safety, Landing Gear	17G130002-501		1	01-1, 01-2

# Supplies:

<u>Nomenclature</u>	<u>PN</u>	<u>Specification</u>	<u>Qty</u>	<u>Task</u>
Fluid, Hydraulic		MIL-H-83282	AR	01-1, 01-2
Rag, Wiping	A-A-2522		AR	01-1, 01-2

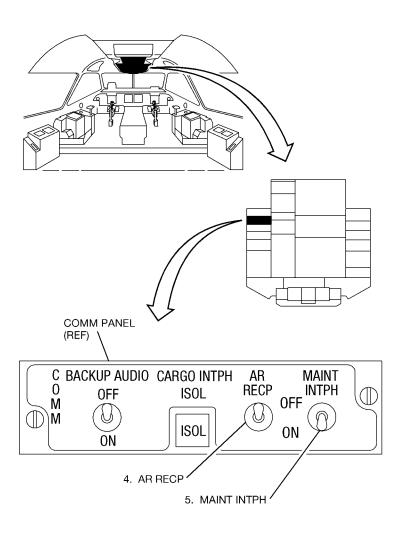
# 01-1. PREPARATION FOR SINGLE POINT REFUELING USING EXTERNAL OR AUXILIARY POWER UNIT POWER.

- 1. Review "Section 1 (General Information)" of this TO for system general warnings, cautions, and notes.
- 2. Review task "General Maintenance Input Conditions" page for task specific safety conditions.

#### NOTE

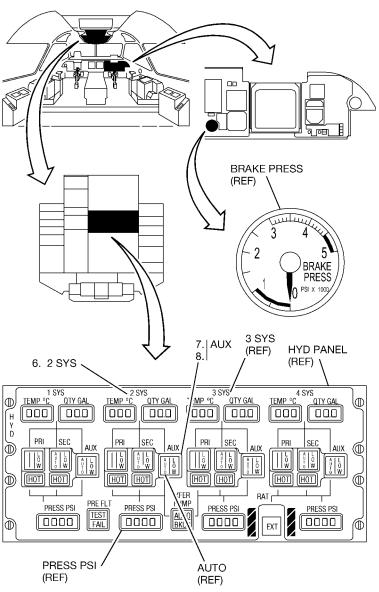
Aircraft refueling procedures are identical when using Auxiliary Power Unit (APU) or external electrical power.

- 3. Connect external electrical power (10-61-01, task 01-1).
- 4. (B) Set AR RECP switch on COMM panel to OFF.
- 5. (B) Set MAINT INTPH switch to ON.



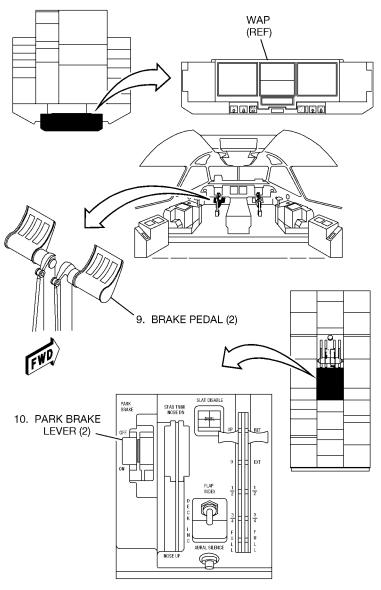
ICN-88277-G1228451-001-01

- 6. (B) Check hydraulic system reservoir **2 SYS** and **3 SYS** quantity for sufficient hydraulic systems levels in gallons on **HYD** panel.
  - Minimum reservoir quantities are 4 gallons for system 2 and 3 gallons for system 3.
  - Systems within specified limits or service (12-29-01 or 12-29-02).
- 7. (B) Press 2 SYS AUX switchlight, on HYD panel.
  - AUTO light comes on.
  - PRESS PSI indicator reads 3800-4200.
  - BRAKE PRESS indicator on instrument panel reads 3800-4200.
- 8. (B) Press 2 SYS AUX switchlight, on HYD panel.
  - AUTO light goes off.



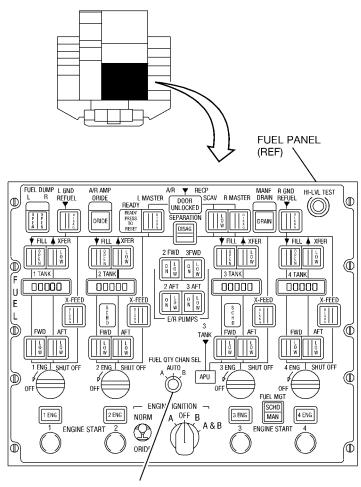
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- 9. (A) Press and hold brake pedals.
- 10. (A) Set PARK BRAKE levers to ON and release brake pedals.
  - PARK BRAKE ON L R is displayed on the Warning and caution Annunciator Panel (WAP).



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11. (A) Ensure **FUEL QTY CHAN SEL** switch on **FUEL** panel is set to **AUTO**.



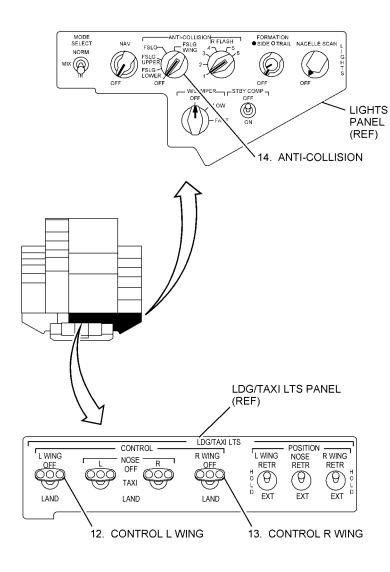
11. FUEL QTY CHAN SEL

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#### **NOTE**

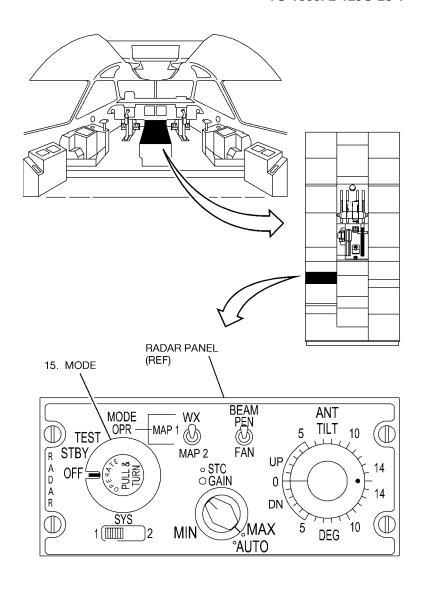
Non-essential lights shall not be activated or deactivated on the aircraft during fuel servicing operations, unless absolutely required for fuel servicing.

- 12. (A) Ensure **CONTROL L WING** switch on **LDG/TAXI LTS** panel is set to **OFF**.
- 13. (A) Ensure **CONTROL R WING** switch is set to **OFF**.
- 14. (A) Ensure ANTI-COLLISION knob is rotated to OFF.



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15. (B) Ensure MODE switch on RADAR panel is set to OFF.



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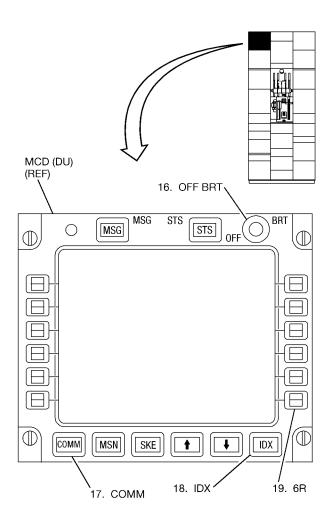
#### **NOTE**

A MCD (DU) with an illuminated MSG and/or STS annunciator key(s) will result in unresponsive line select keys on the affected MCD (DU) until all of the MSG and/or STS annunciations are acknowledged/cleared. Pressing the affected MSG and/or STS annunciator key(s) until they are no longer illuminated will clear the notifications and allow the selected MCD (DU) line select keys to become responsive.

- 16. (B) Rotate **OFF BRT** knob on **MCD** (**DU**) clockwise.
  - Characters on MCD (DU) come on.
- 17. (B) Press COMM key.
  - COMM/NAV SUMMARY is displayed.
- 18. (B) Press IDX key.
  - **COMM INDEX 1** is displayed.

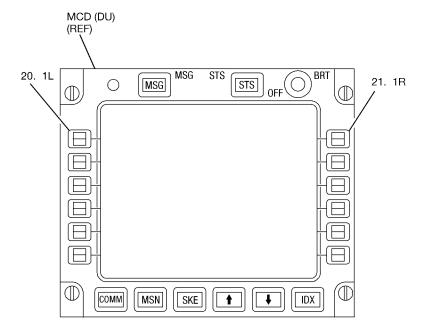
#### NOTE

- When radar altimeter circuit breakers on Electrical Power Center (EPC) are open proceed to step 23.
- Radar altimeter system turns on automatically when power is applied to the avionics buses. Allow a warm up time of approximately 3 minutes after power is applied to the radar altimeters before proceeding with the following steps.
- 19. (B) Press 6R Line Select (LS) key.
  - NAV EMITTER CONTROL PG1 is displayed.



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- 20. (B) Press 1L LS key.
  - STANDBY is displayed.
- 21. (B) Press 1R LS key.
  - STANDBY is displayed.



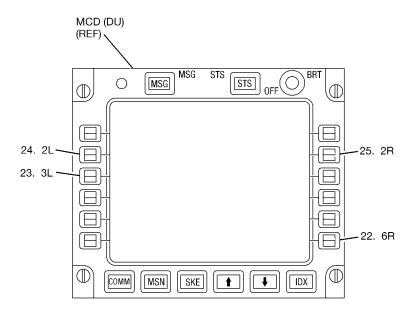
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- 22. (B) Press 6R LS key.
  - **COMM INDEX 1** is displayed.
- 23. (B) Press 3L LS key.
  - HF radios selected.

#### NOTE

Pressing the LS key will cycle through the operational modes of the HF radio.

- 24. (B) Press 2L LS key until OFF is displayed.
  - $\rightarrow$ **OFF** is displayed.
- 25. (B) Press 2R LS key until OFF is displayed.
  - →**OFF** is displayed.



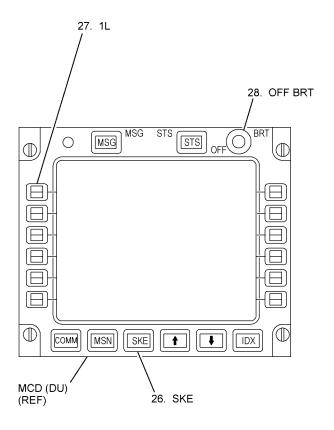
ICN-88277-G1228273-004-01

- 26. (B) Press SKE key.
  - SKE SET UP 1/2 is displayed.

# **NOTE**

Pressing LS key toggles between **STANDBY**, **NORMAL**, **MAX**, and **SILENT** modes.

- 27. (B) Press 1L LS key until STANDBY is displayed.
  - STANDBY is displayed.
- 28. (B) Rotate **OFF BRT** knob to **OFF**.
  - Characters on MCD (DU) go off.

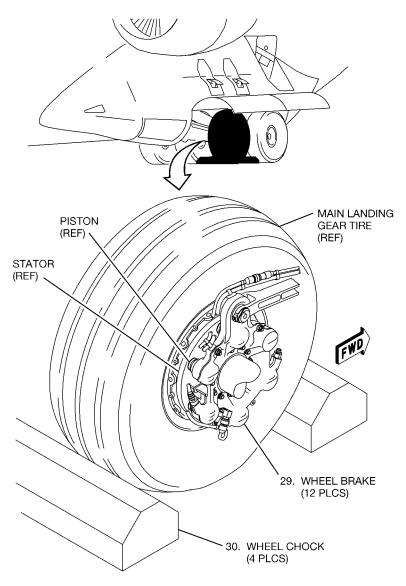


ICN-88277-G1228274-007-01

#### **NOTE**

Wheel brakes are set when pistons are pressed against the stator.

- 29. (A) Visually inspect wheel brakes to ensure they are set.
- 30. (A) Position Main Landing Gear (MLG) wheel chocks approximately 2 inches forward and aft of tires.

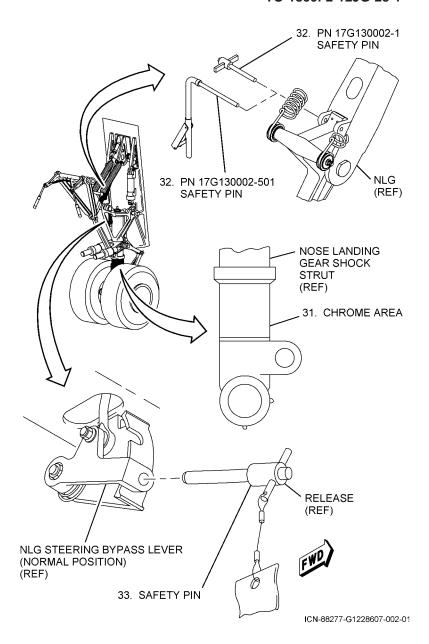


ICN-88277-G1228433-003-01

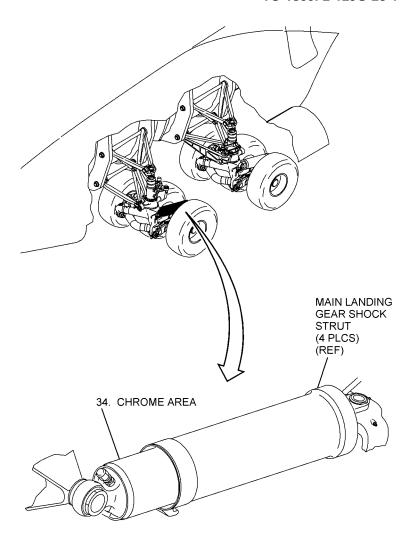
#### **NOTE**

In desert climate, wipe exposed chrome surface of nose/main landing gear shock strut with clean/dry lint free cloth to remove debris.

- 31. (B) Clean exposed chrome area on Nose Landing Gear (NLG) shock strut with hydraulic fluid.
- 32. (B) Ensure the NLG downlock safety pin is installed.
- 33. (B) Ensure the NLG steering bypass lever is positioned to bypass and safety pin is inserted.



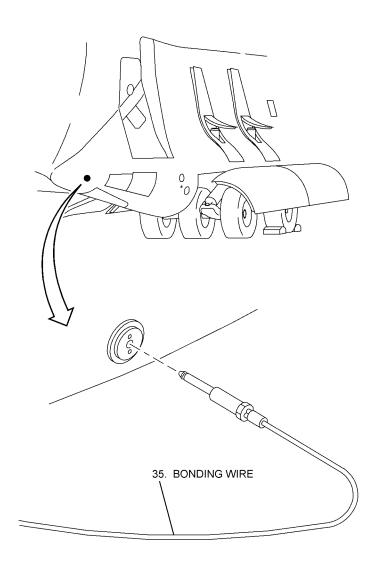
34. (B) Clean exposed chrome area on main landing gear shock struts with hydraulic fluid.



(TYPICAL)

ICN-88277-G1228004-008-01

35. (A) Position fuel servicing equipment and connect bonding wire to aircraft.

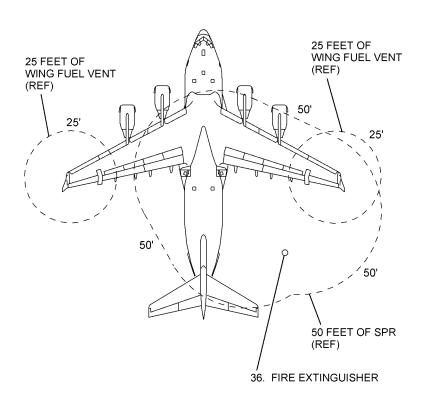


ICN-88277-G1228003-010-01

# WARNING

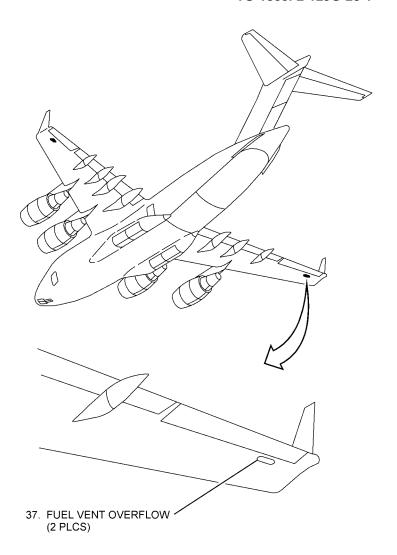
For multi-source fuel servicing, ensure a second fire bottle is located within 100 feet of the aircraft. Failure to comply may cause injury to personnel and damage to aircraft.

36. (A) Place fire extinguisher within 50 feet of Single Point Refueling (SPR), but outside 25 feet wing fuel vent Fuel Servicing Safety Zone (FSSZ).



ICN-88277-G1228487-002-01

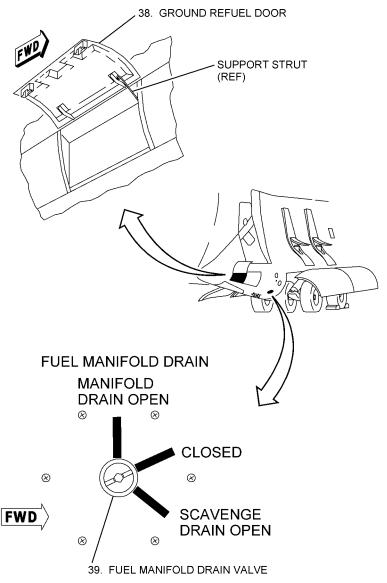
37. (B) Ensure fuel vent overflow is free of obstructions.



(TYPICAL)

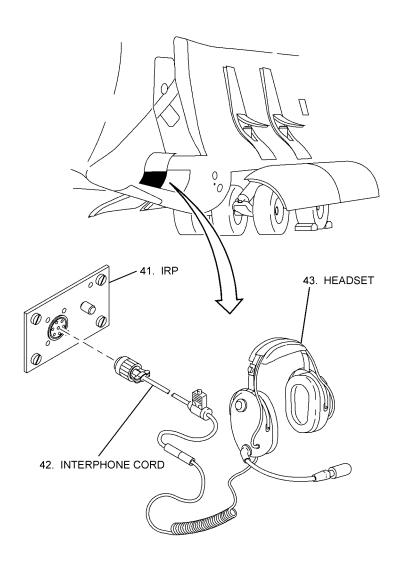
ICN-88277-G1228040-006-01

- 38. (B) Unlatch and open ground refuel door (183JRD); install support strut.
- 39. (B) Ensure **FUEL MANIFOLD DRAIN** valve is in **CLOSED** position.
- 40. Perform fuel team briefing (TO 1300i-2-12JG-28-1, 12-28-00, para 1-5).



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- 41. (B) Locate desired IRP.
- 42. (B) Connect interphone cord to IRP.
- 43. (B) Connect headset to interphone cord.



ICN-88277-G1228452-002-01

# 01-2. PREPARATION FOR SINGLE POINT REFUELING USING AIRCRAFT BATTERY.

- 1. Review "Section 1 (General Information)" of this TO for system general warnings, cautions, and notes.
- 2. Review task "General Maintenance Input Conditions" page for task specific safety conditions.

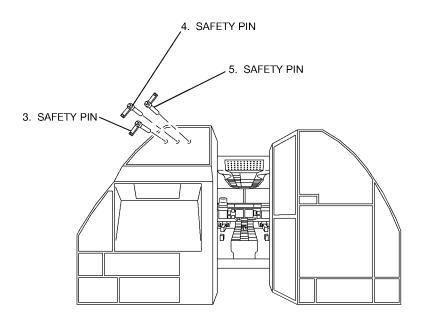
# WARNING

Fuel boost pumps will not operate when refueling with battery power. Only refuel with battery power under abnormal/adverse conditions. Failure to comply may cause injury or death to personnel and damage to aircraft.

#### NOTE

Safety pin shall be inserted completely into safety pin switch.

- (A) Ensure safety pin is installed in CMDS SAFETY SWITCH GP1.
- (A) Ensure safety pin is installed in CMDS SAFETY SWITCH GP2.
- (A) Ensure safety pin is installed in CMDS SAFETY SWITCH GP3.



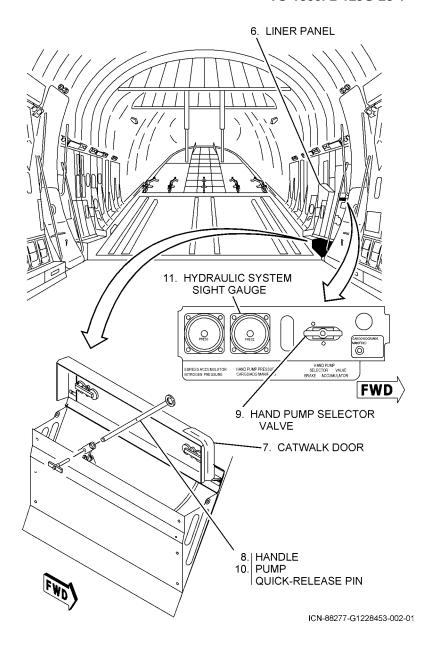
ICN-88277-G1228414-003-01

- 6. (C) Open liner panel (277GZP) and remove pump handle.
- 7. (C) Unlatch and open catwalk door (265NZD(AN)).
- 8. (C) Insert handle in pump; install quick-release pin.
- 9. (C) Rotate hand pump selector valve to vertical position.

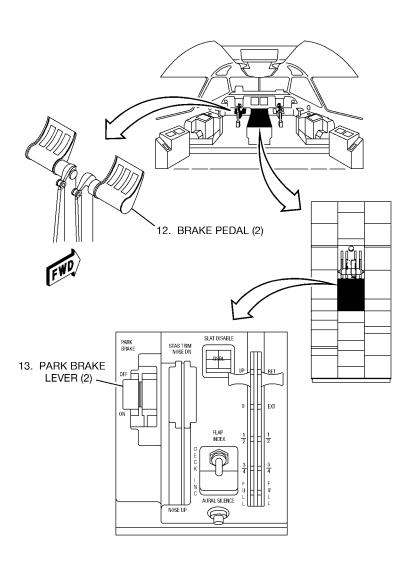
#### **NOTE**

One thousand hand pump strokes are required to fully charge brake accumulators from a depleted condition. A minimum accumulator pressure of 1500 psi (approximately 400 strokes on the hand pump) will provide 10 emergency brake applications.

- 10. (C) Operate hydraulic hand pump to obtain minimum required pressure.
- 11. (C) Observe hydraulic system sight gauge for hydraulic operation pressure.

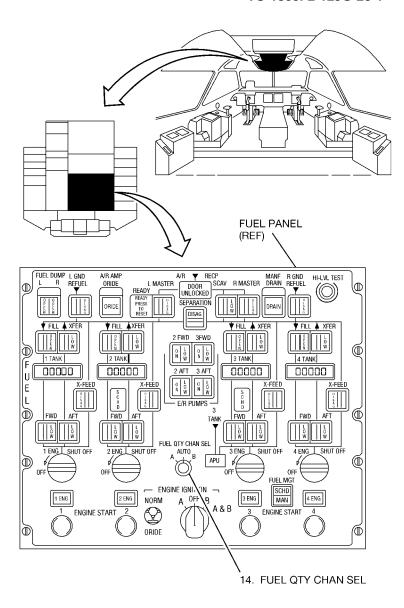


- 12. (A) Press and hold brake pedals.
- 13. (A) Set **PARK BRAKE** levers to **ON** and release brake pedals.
  - Ensure park brake levers remain at the full aft position when set.



ICN-88277-G1228416-004-01

14. (B) Ensure **FUEL QTY CHAN SEL** switch on **FUEL** panel is set to **AUTO**.

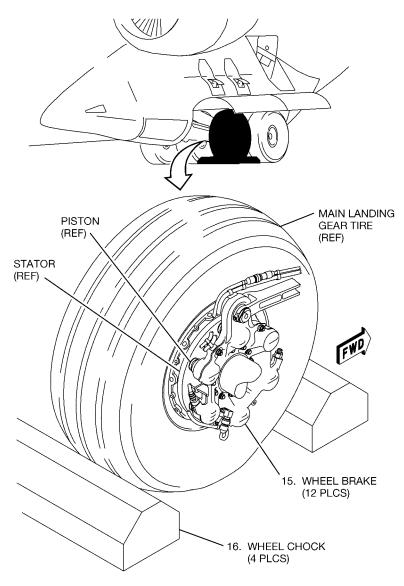


ICN-88277-G1228417-004-01

#### **NOTE**

Wheel brakes are set when pistons are pressed against the stator.

- 15. (A) Visually inspect wheel brakes to ensure they are set.
- 16. (A) Position Main Landing Gear (MLG) wheel chocks approximately 2 inches forward and aft of tires.

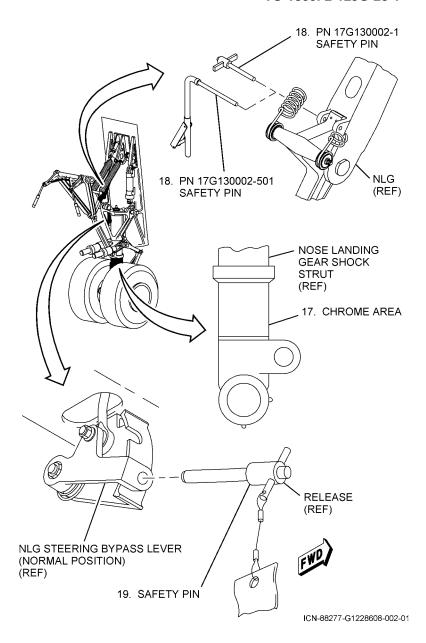


ICN-88277-G1228434-002-01

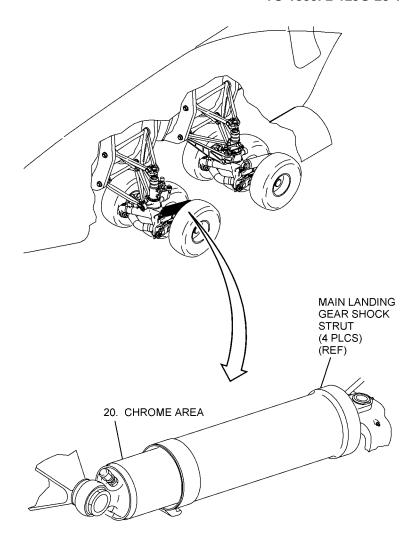
#### **NOTE**

In desert climate wipe exposed chrome surface of nose/main landing gear shock strut with clean/dry lint free cloth to remove debris.

- 17. (A) Clean exposed chrome area on Nose Landing Gear (NLG) shock strut with hydraulic fluid.
- 18. (A) Ensure the NLG downlock safety pin is installed.
- 19. (A) Ensure the NLG steering bypass lever is positioned to bypass and safety pin is inserted.



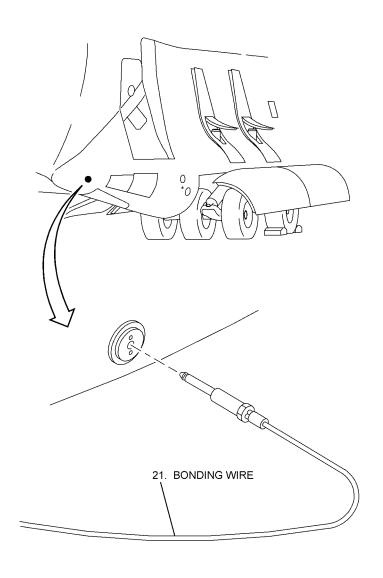
20. (A) Clean exposed chrome area on main landing gear shock struts with hydraulic fluid.



(TYPICAL)

ICN-88277-G1228421-005-01

21. (A) Position fuel servicing equipment and connect bonding wire to aircraft.

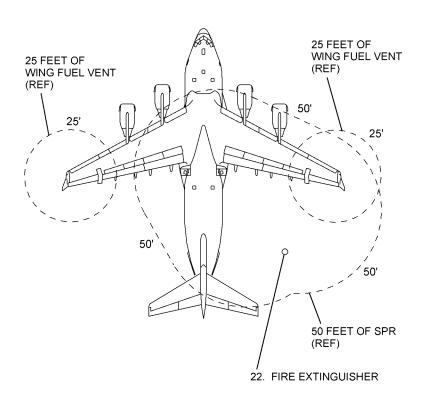


ICN-88277-G1228418-004-01

# WARNING

For multi-source fuel servicing, ensure a second fire bottle is located within 100 feet of the aircraft. Failure to comply may cause injury to personnel and damage to aircraft.

22. (A) Place fire extinguisher within 50 feet of Single Point Refueling (SPR), but outside 25 feet wing fuel vent Fuel Servicing Safety Zone (FSSZ).



ICN-88277-G1228488-002-01

23. (A) Ensure fuel vent overflow is free of obstructions.