

Post Insertion Checklist

Mission Operations Directorate
Flight Design and Dynamics Division
Final
August 08, 2024

National Aeronautics and
Space Administration

Lyndon B. Johnson Space Center
Houston, Texas



NOTES

1. This Checklists is made by Johan Meza Bracamontes (Johan2011 on Orbiter Forum).
2. The Design of the Checklists Will be the same of the Original NASA Checklists as possible.
3. This Checklists is made for the Space Shuttle Vessel (SSV) Addon by GLS.
4. Post Insertion contains the nominal procedures from:
MET(DAY/HR:MIN) 000/00:51 TO 000/02:30

POST INSERTION PROCEDURES.....	1-1
OPS 2 CONFIG.....	1-2
PLDB BUS ACTIVATION.....	1-2
CONFIG FOR PLDB OPENING ATT.....	1-3
MANUAL PLBD OPENING PROCEDURE.....	1-3
CONFIG FOR PLBD OPERATIONS.....	1-3
 KU OPS.....	 1-4
KU-BD ANT DEPLOY.....	1-4
KU-BD ANT ACTIVATION.....	1-4
KU-BD ANT STOW.....	1-5
 RAD OPS.....	 1-6
RAD DEPLOY.....	1-6
RAD STOW.....	1-7
 STAR TRACKER ACTIVATION.....	 1-8
 ON ORBIT SWITCH LIST.....	 1-9

POST INSERTION PROCEDURES

OPS 2 CONFIG

CRT DISPLAYS SETUP

CRT1: GNC OPS 106 PRO (OMS2 MNVR COAST)
CRT2: GNC OPS 106 PRO (OMS2 MNVR COAST)
CRT3: BFS, GNC SYS SUMM 2

TRANSITION TO GNC OPS 2

CRT1 GNC OPS201 PRO (UNIV PTG)

RECONFIG MEDs

C2 IDP/CRT 3 PWR – OFF
R11L √IDP/CRT 4 PWR – ON
F6,F7,F8 Power off MDUs as desired

RECONFIG GPCs

O6 GPC MODE 5 – HALT
OUTPUT 5 – NORM

00:55

PLDB BUS ACTIVATION

R1 PL CAB – MNA
PRI MNC – ON
AUX – ON
AFT MNB – ON
O6 GPC MODE 5 – SBY

TURN OFF BFC LT

C3 BFC CRT DISP – ON
CRT3 BFS, MSG – RESET
C3 BFC CRT DISP – OFF

CONFIG FOR PLDB OPENING ATT (-ZLV -XVV)

CRT1	√TGT ID	+2
	BODY VECT	+3
	√P	+90
	√Y	+0
	OM	+0
CRT1	DAP: A5/AUTO/ALT	
	GNC SPEC 20 PRO (DAP CONFIG)	
	ROT RATE	– 0.2 (ITEM 10)
	ATT DB	– 5.0 (ITEM 11)
	GNC OPS 201 PRO (UNIV PTG)	
	Initiate TRK	
	ITEM 19 – EXEC (*)	

MANUAL PLBD OPENING PROCEDURE

CRT4	SM OPS 202 PRO (PL BAY DOORS)	
	AC PWR ON	– ITEM 1 EXEC
	AUTO MODE ON	– ITEM 3 EXEC
R13L	√PL BAY DR	– STOP
	PL BAY DR SYS (two)	– ENA
	PL BAY DR	– OP
	When PL BAY DR tb	– OP
	PL BAY DR	– STOP
	PL BAY DR SYS (two)	– DSBL
CRT4	AC PWR OFF	– ITEM 2 EXEC

CONFIG FOR PLBD OPERATIONS

	Set up lights	
A6U	√ANNUN BUS SEL	– MNC
A7U	PL BAY FLOOD AFT (two)	– OFF
	PL BAY FLOOD MID (two)	– ON
	PL BAY FLOOD FWD (two)	– ON
	PL BAY FLOOD FWD BHD	– N/A

KU OPS

01:35

KU-BD ANT DEPLOY

A1U	√KU BD PWR CNTL	– OFF – PNL
R13L	√KU ANT DIRECT STO PL BAY MECH PWR SYS 1,2 (two) KU ANT When KU ANT tb	– OFF – ON – DPY – DPY (~23 to 46
sec)	KU ANT PL BAY MECH PWR SYS 1,2 (two)	– GND – OFF

KU-BD ACTIVATION

A1U	√SLEW RATE √KU BD SCAN WARN tb √KU BD TRACK tb √KU BD SEARCH tb √KU BD Sel √RDR OUTPUT √KU BD MODE KU BD PWR √CNTL	– SLOW – bp – bp – bp – MAN SLEW – HI – RDR PASSIVE – ON – PNL
A2	DIGI DIS SEL √R/EL ind: √RR/AZM ind: DIGI DIS SEL	– EL/AZ +000.0 +000.0 – R/R
A1U	KU BD MODE KUBD sel CNTL	– COMM – GPC DESIG – CMD

KU-BD ANT STOW

R13L	√PL BAY MECH PWR SYS 1,2 (two)	– OFF
A1U	√CNTL	– CMD
	√RADAR OUTPUT	– LOW
	KU BD PWR	– ON
	KUBD MODE	– RDR PASSIVE
	CNTL	– PNL
	KU BD sel	– MAN SLEW
A2	√DIGI DIS SEL	– EL/AZ
A1U	SLEW RATE	– as reqd
A2	R/EL ind:	-27.0 ($\pm 1^\circ$)
A1U	SLEW AZM	– as reqd
A2	RR/AZM ind:	-123.0 ($\pm 1^\circ$)

LOCK GIMBALS

R13L	DAP: VERN(FREE)	
A2	KU ANT	– STO
	√R/EL ind:	-29.0 ($\pm 1^\circ$)
	√RR/AZM ind:	-125.0 ($\pm 1^\circ$)
	00:00 Start Event Timer	
A2	Monitor KU ANT gimbal angles for 50 sec (gimbal lock test), then:	
	DAP: as reqd	

STOW DEPLOYED ASSEMBLY

R13L PL BAY MECH PWR SYS 1,2 (two) – ON
 √KU ANT tb – STO (~23 to 46
sec)

A1U KU BD PWR – OFF (Expect
'BCE BYP KU' msg)

R13L PL BAY MECH PWR SYS1,2 – OFF
 KU ANT – GND

RAD OPS

RAD DEPLOY

1.UNLATCH PANELS

R13L √RAD LAT CNTL SYS A,B (two) – OFF
 √RAD CNTL SYS A,B (two) – OFF
 √RAD,LAT PORT,STBD tb (four)
 match current RAD config
 PL BAY MECH PWR SYS 1,2 (two) – ON
 RAD LAT CNTL SYS A,B (two) – REL
 (√Deploying RAD LAT tb(s)-bp, ~30 sec REL)
 RAD LAT CNTL SYS A,B (two) – OFF
 If deploying RAD LAT tb not REL in 30 sec:

 RAD LAT CNTL SYS A,B (two) – OFF *

2. DEPLOY PANELS

RAD CNTL SYS A,B (two)	– DPY
(√Deploying RAD tb(s)-bp, ~50 sec DPY)	
RAD CNTL SYS A,B (two)	– OFF

If deploying RAD tb(s) not bp after 10 sec and no motion,
or
If RAD panel(s) in transit and no motion,
or
If deploying RAD tb not DPY within 50 sec:

RAD CNTL SYS A,B (two)	– OFF
PL BAY MECH PWR SYS 1,2 (two)	– OFF

RAD STOW

1.STOW PANELS

R13L	√RAD LAT CNTL SYS A,B (two)	– OFF
	√CNTL SYS A,B (two)	– OFF
	√RAD,LAT PORT,STBD tb (four) match current RAD config	
	PL BAY MECH PWR SYS 1,2 (two)	– ON
	RAD CNTL SYS A,B (two)	– STO
	√Stowing RAD tb-bp, ~50 sec STO	
	RAD CNTL SYS A,B (two)	– OFF

If stowing RAD tb(s) not bp after 10 sec and no motion,
or
If RAD panel(s) in transit and no motion,
or
If stowing RAD tb(s) not STO within 100 sec and no
motion:

RAD CNTL SYS A,B (two) – OFF

2. LATCH PANELS

R13L RAD LAT CNTL SYS A,B (two) – LAT

√Stowing RAD LAT tb-bp, ~30 sec, LAT

RAD LAT CNTL SYS A,B (two) – OFF

If stowing RAD LAT tb not LAT in 60 sec:

RAD LAT CNTL SYS A,B (two) – OFF

PL BAY MECH PWR SYS 1,2 (two) – OFF

01:55 STAR TRKR ACTIVATION/DOOR OPEN

O6 S TRK DR CNTL SYS (two) – OP

S TRK PWR (two) – ON

ON ORBIT SWITCH LIST

LEFT SEAT

L1.....1-11
L2.....1-11

O6.....1-11
O7.....1-12
O8.....1-13

O14.....1-14
O15.....1-15

RIGHT SEAT









O16.....1-15
O8.....1-13

R1.....1-10

AFT

C5.....1-15
C6.....1-15
C7.....1-15

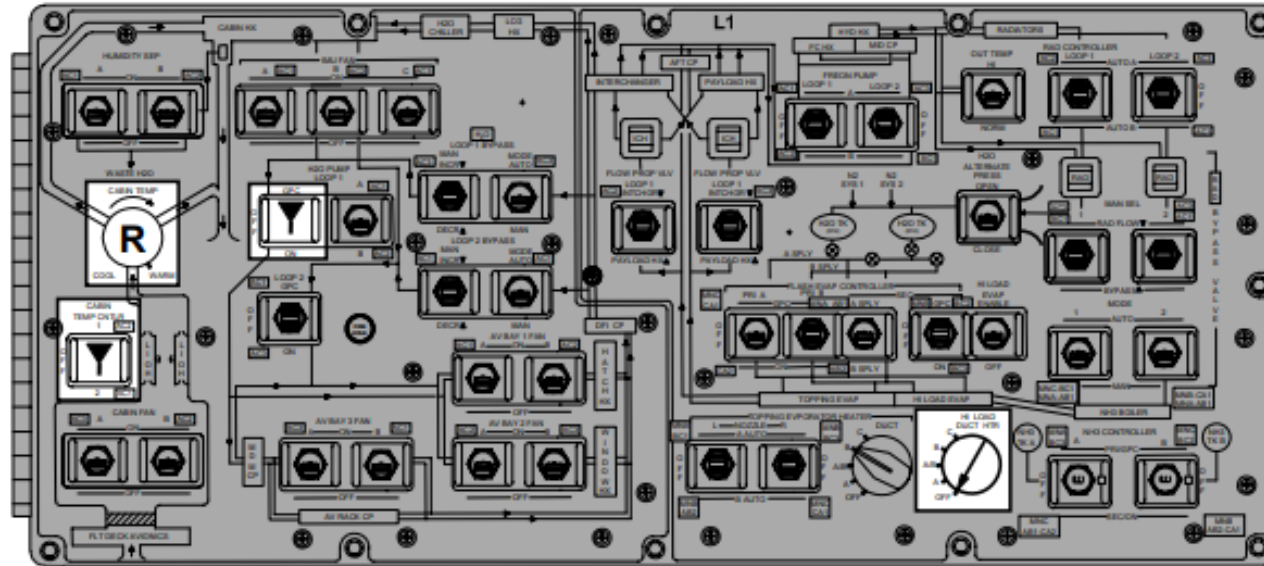
A11.....1-16

	– Up	R	– As reqd		– Indicates switch/display not checked during ON-ORBIT SWITCH/VERIF
	– Center		– cb close	Switch/display pictorials are generic representations and are not intended to depict actual switch position. Check MCC if clarification reqd	
	– Down		– cb open		
	– Boxed items indicate switch configured during ON-ORBIT CONFIGURATION			– White area indicates switch verified during ON-ORBIT SWITCH CONFIGURATION	

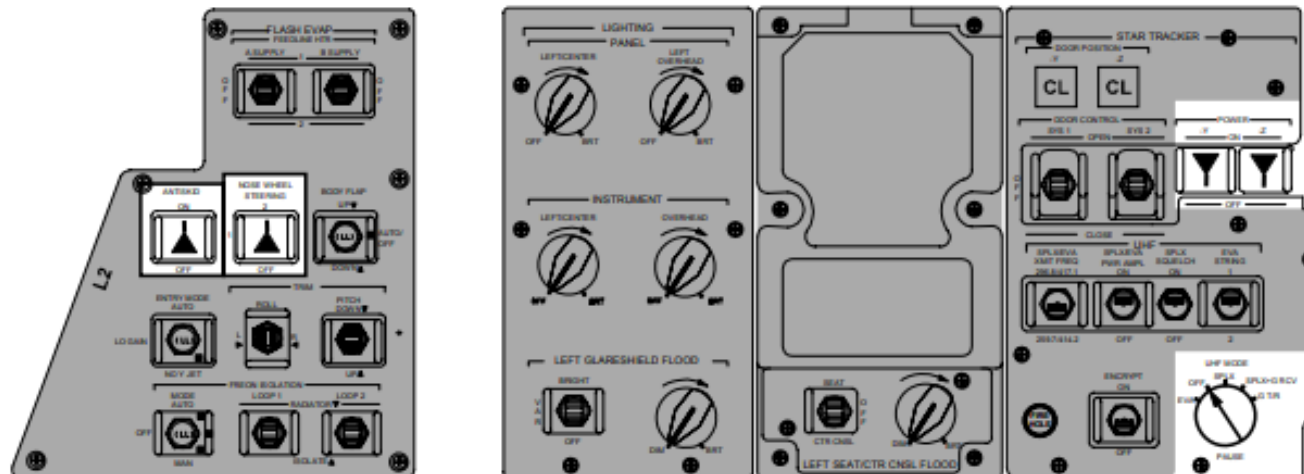
<u>CIRCUIT BREAKER SNAP RING COLOR CODES</u>	
<u>COLOR</u>	<u>CONFIGURATION</u>
Red	Open at all times
Green	Open on-orbit only
Yellow	Open ascent, close per procedure
Orange	Open orbit through entry
Blank (no ring)	Always closed or as required

[illegible]

ALL VEH



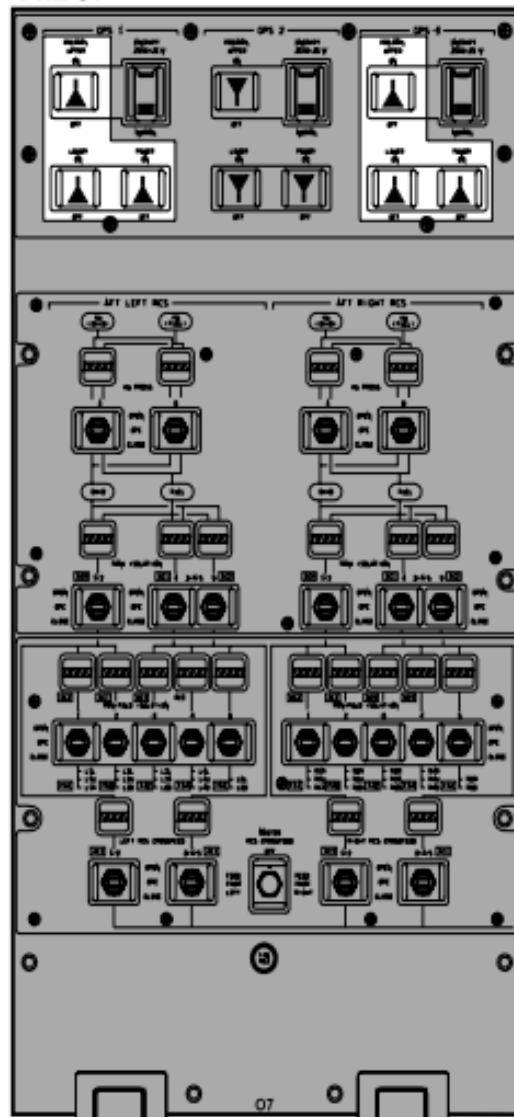
PNL O6



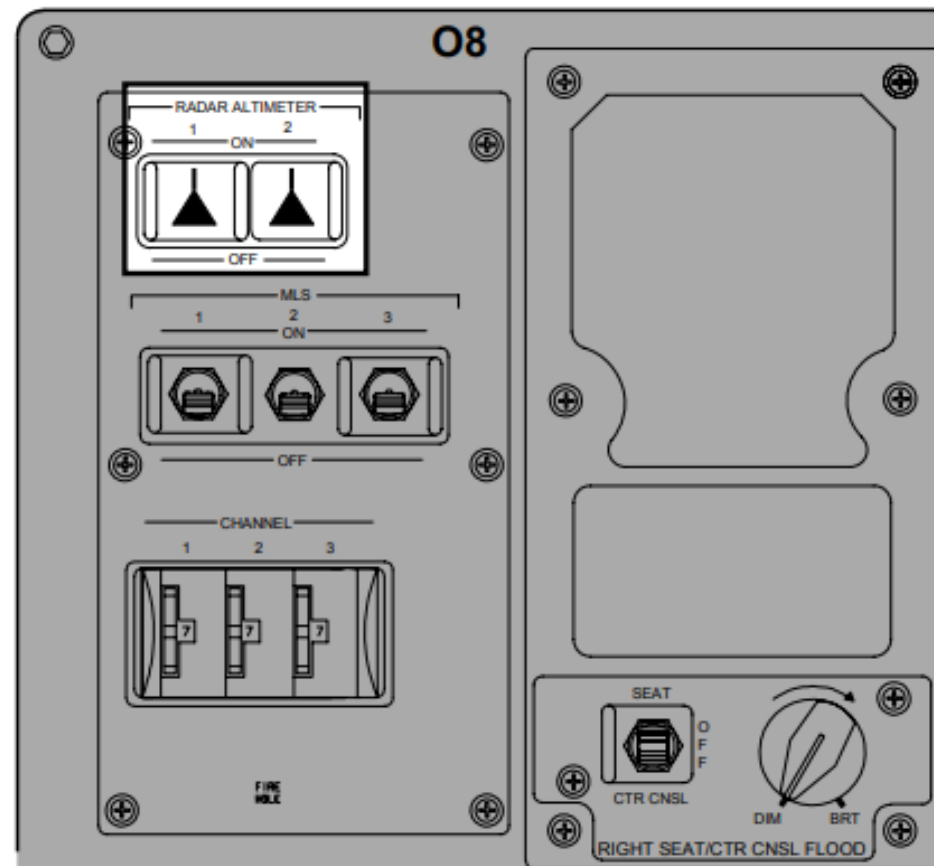
4806720_123 PNL.1

OV105

PNL 07

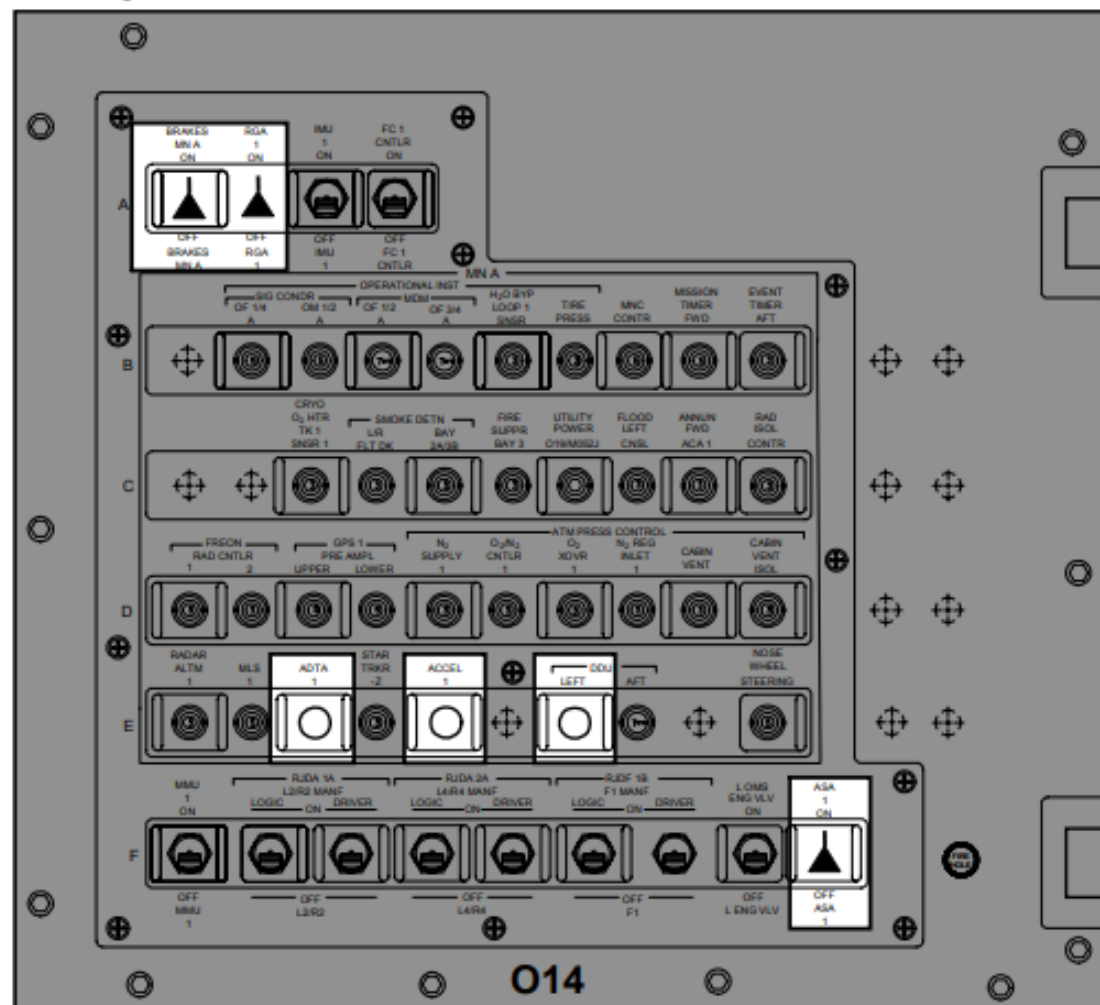


OV105



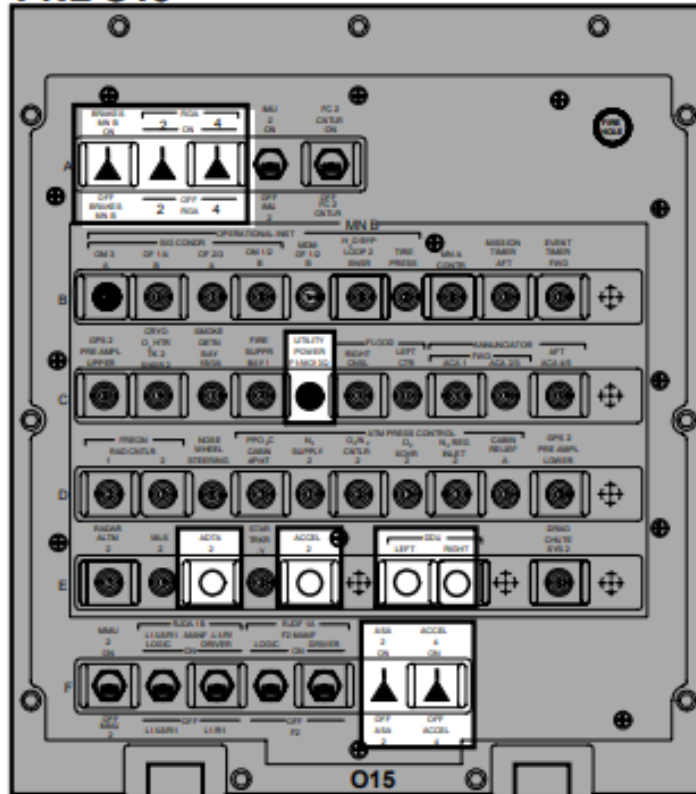
OV105

PNL O14

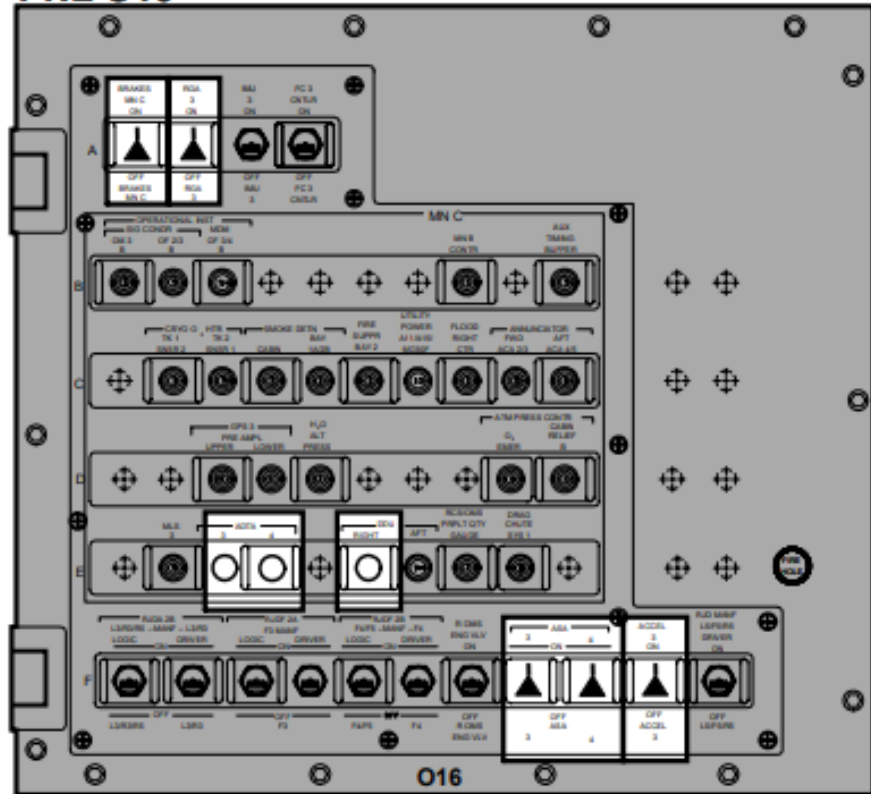


OV105

PNL O15



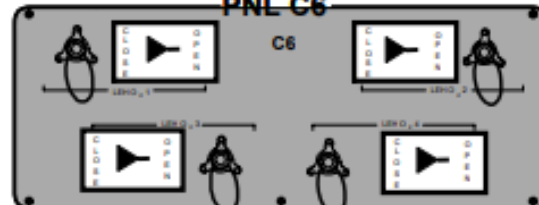
PNL O16



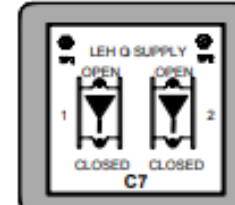
PNL C5



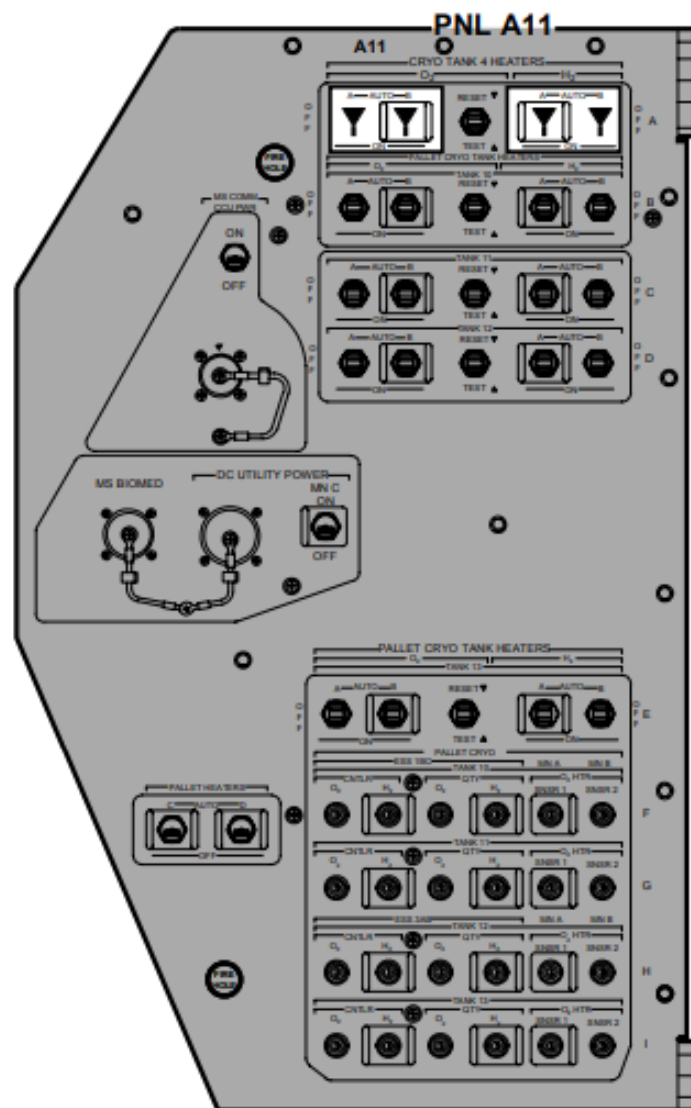
PNL C6



PNL C7



OV105



4806724_123.PNL.1



**POST INS
CHECKLIST**

**STS
ALL**

Flight Cover (trim bottom to expose tabs)