

Post Insertion

STS-122

**Mission Operations Directorate
Operations Division**

**Basic
May 23, 2007**

National Aeronautics and
Space Administration

Lyndon B. Johnson Space Center
Houston, Texas



STS-122 POST INSERTION

BASIC (May 23, 2007)

PCN-2 (Nov 8, 2007) Sheet 1 of 1

List of Implemented Change Requests (482s):

PI-814 MULTI-1810
PI-816
PI-817

Incorporate the following:

1. Replace iii & iv
2. Replace 1-5 thru 1-10, 1-13 & 1-14
3. Replace CC 3-3 & CC 3-4

Prepared by:



Publication Manager

Approved by:



Manager, Shuttle Procedures Management

Accepted by:



FDF Manager

Encl: 12 pages

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STS-122 POST INSERTION

BASIC (May 23, 2007)

PCN-1 (Aug 3, 2007) Sheet 1 of 1

List of Implemented Change Requests (482s):

PI-798
PI-803
PI-804
PI-805

Incorporate the following:

1. Replace iii & iv
2. Replace 1-5 & 1-6, 1-13 thru 1-16
3. Replace CC 3-3 thru CC 3-6

Prepared by:



Publication Manager

Approved by:



Manager, Shuttle Procedures Management

Accepted by:



FDF Manager

Encl: 12 pages

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MISSION OPERATIONS DIRECTORATE

**POST INSERTION
STS-122**

BASIC
May 23, 2007

PREPARED BY:

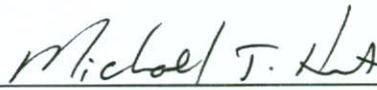


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Incorporates the following:
482#: NONE – Establishes baseline

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Publication Manager	DO3/A. Jones	281-483-1861
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NOTE

The STS-122 Post Insertion contains the nominal procedures from:

MET (DAY/HR:MIN)
000/00:51 TO 000/02:30 – POST INSERTION (Section 1)

The remaining STS-122 flight phases are conducted using the Ascent Checklist, Flight Plan, Deorbit Prep Book, Entry Checklist, EVA Checklist, and Rendezvous Book.

POST INSERTION PROCEDURES

STAR TRKR ACTIVATION/DOOR OPEN 12

C 06 S TRK PWR (two) – ON
GNC I/O RESET

S TRK DR CNTL SYS (two) – OP (start timer)
√POS tb (two) – bp

When both tb – OP (8-24 sec), or either tb – bp for > 24 sec,
CNTL SYS (two) – OFF

* If tb – bp > 8 sec, notify MCC *

1: GNC 22 S TRK/COAS CNTL
STAR TRK – ITEM 3,4 EXEC
1: GNC 21 IMU ALIGN
RESUME

ELBOW CAMR PICTURE 20

Document Elbow Camr position via DSC760 photo from W10 per the following:
Lens, 28-70 mm set at 70 mm (stowed in Vol 3B)
Exp Mode – P
√Meter – Matrix
Sun(Earth)shine reqd

SUPPLY WATER CONFIG 14

NOTE

Do not perform until blocks 5 and 6 are performed

R11L SPLY H2O DUMP ISOL VLV – OP (tb-OP)
√XOVR VLV – CL (tb-CL)
TKB INLET – CL (tb-CL)
TKA OUTLET – OP (tb-OP)

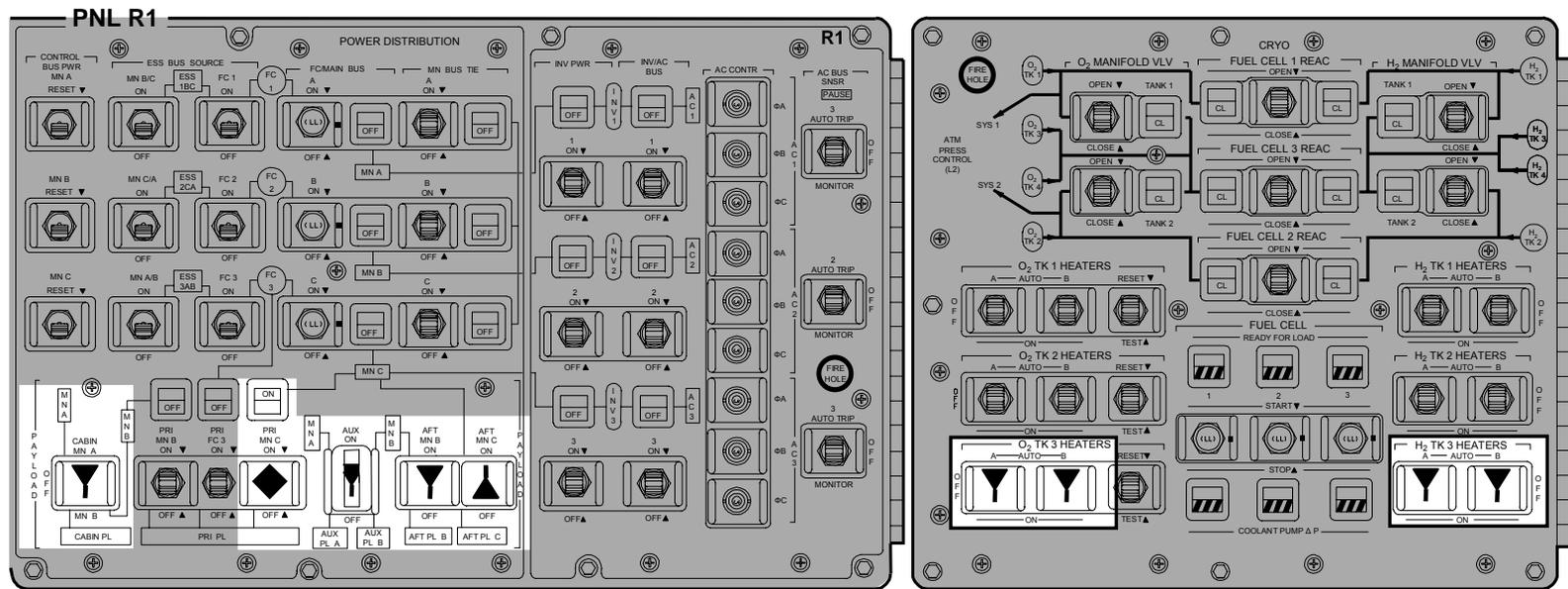
ML86B:A cb MNB SPLY H2O TKB INLET – op
MNC SPLY H2O XOVR VLV – op

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MET		1: GNC UNIV PTG	2: SM ANTENNA
DAY 000			
		4: SM ANTENNA	
02:00	MS	<u>AIRLOCK SETUP FOR INGRESS</u> [15], 1-16	
A6 (B2)			
AUTO	P	<u>W/B STEAM VENT HTR ACT</u>	
ALT	R2	√BLR CNTLR/HTR (three) – A	
RT 0.2		PWR (three) – ON	
DB 5.0			
02:05	C	<u>CONFIG VERNIER CONTROL</u>	
A6 (B2)		√MCC GO for vernier control	
AUTO	O16:F	RJD MANF L5/F5/R5 DRIVER – ON, wait 5 sec	
VERN		DAP: A/AUTO/VERN	
RT 0.05			
DB 1.0			
02:10			
	ALL	<u>CONFIG CONTROLS FOR ON-ORBIT</u>	
		Perform actions on 1-17 thru 1-25	
		Unstow, install HUD covers (two)	
02:15	L2	Remove, stow (on PNL L2/FDF FD locker)	
		NWS sw flex extension	
	P	<u>HYD THERMAL CONDITIONING-ENABLE</u>	
	R2	HYD CIRC PUMP (three) – GPC	
02:20			
02:25	MS	<u>RESET C/W</u> (AFT Cue Card) [16], 1–14	
	C	<u>DAP: A/AUTO/ALT</u>	
	MS	<u>FUEL CELL VI PERFORMANCE PLOT</u> (ORB OPS, <u>EPS</u>)	
02:30		Stow POST INSERTION, go to FLIGHT PLAN, <u>FLT DAY 1</u>	

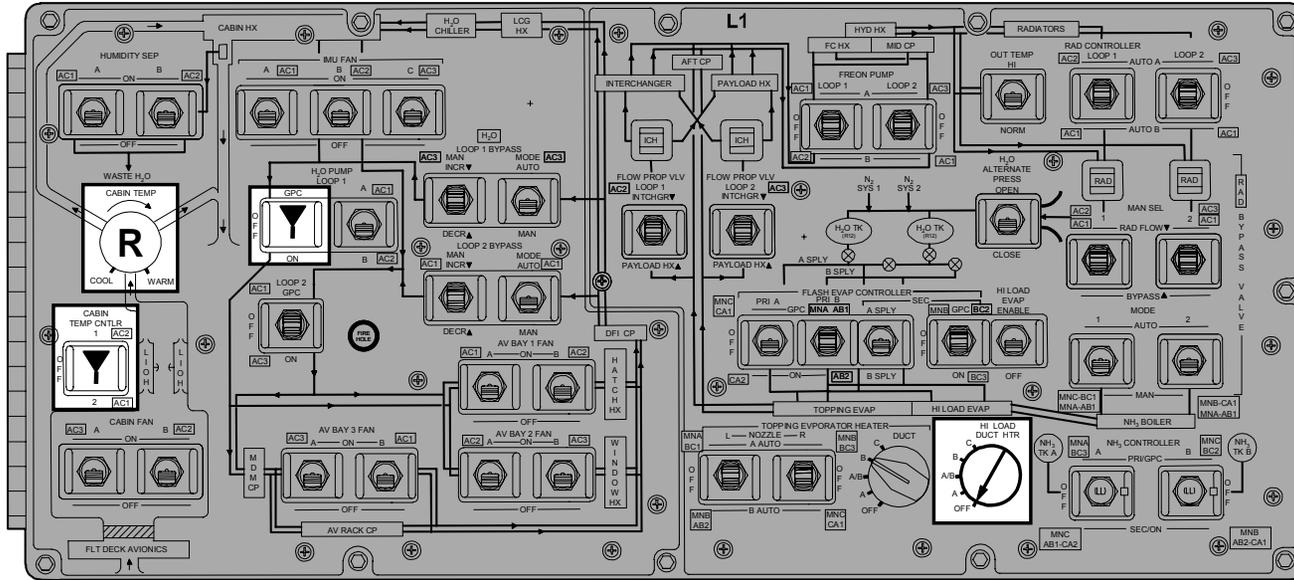
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ALL VEH

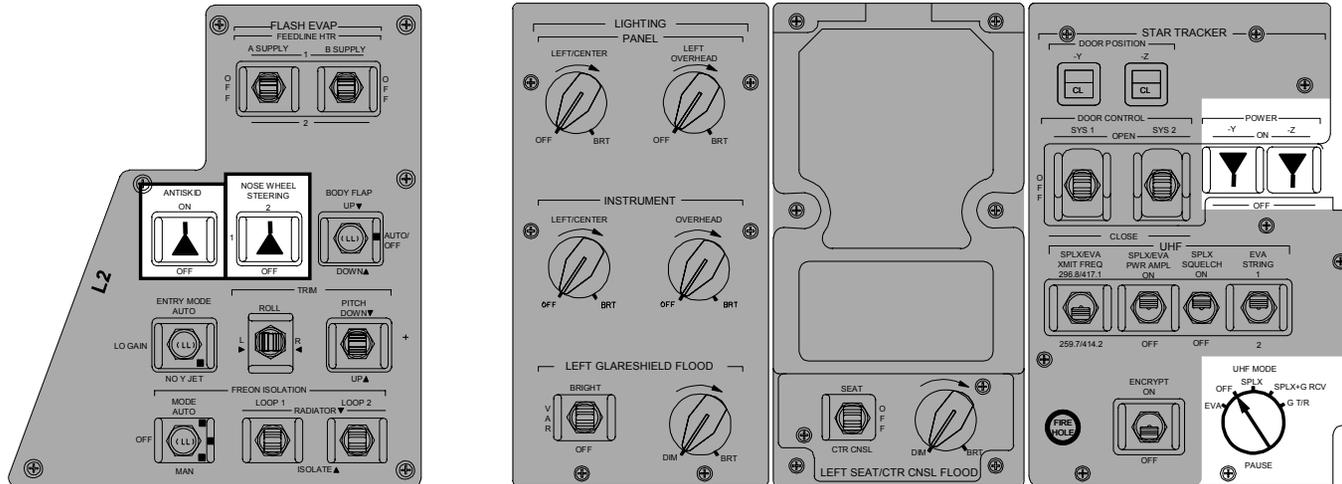


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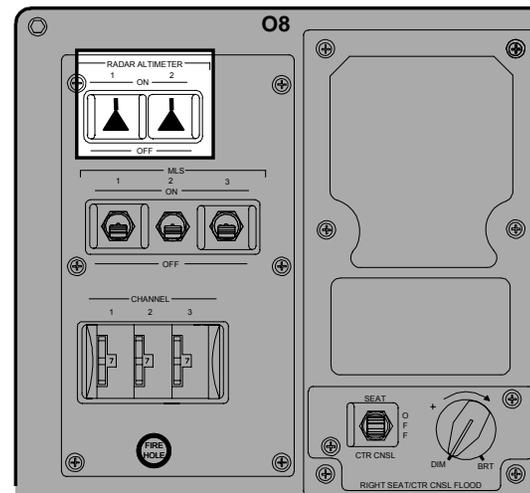
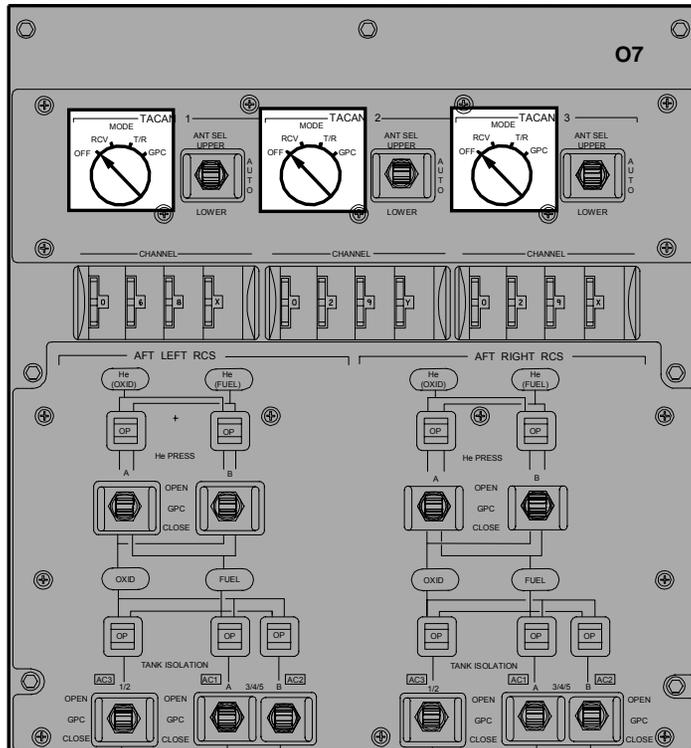


PNL O6

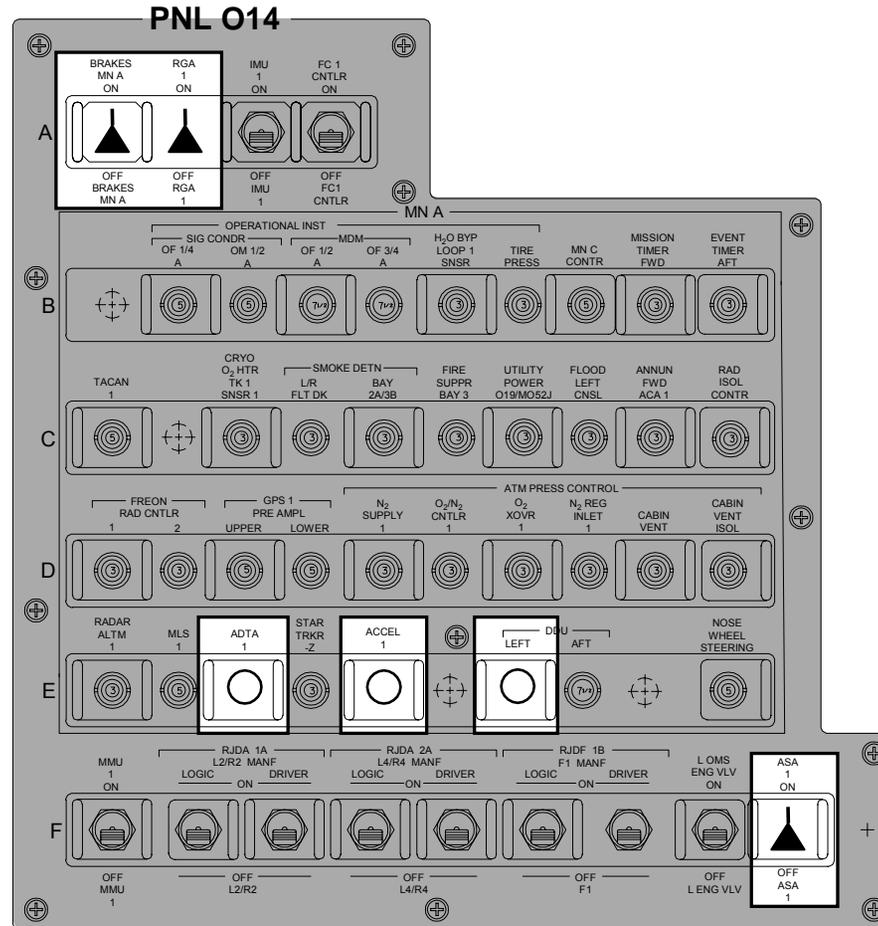


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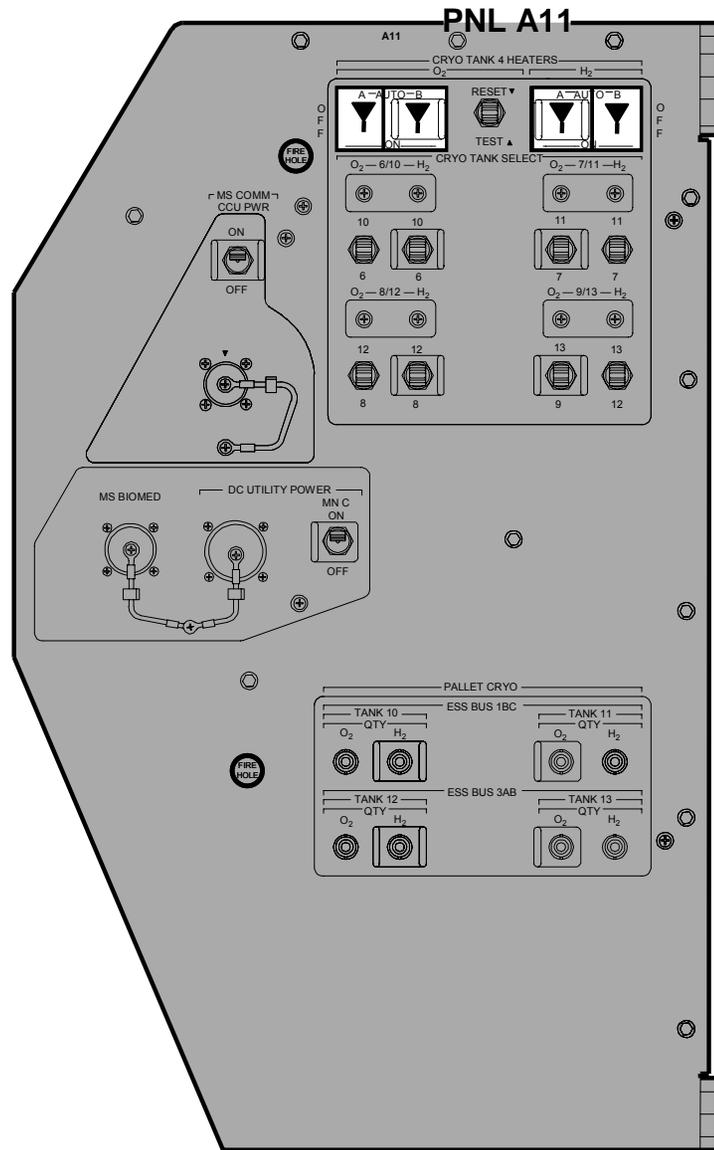
OV103, OV104



OV104

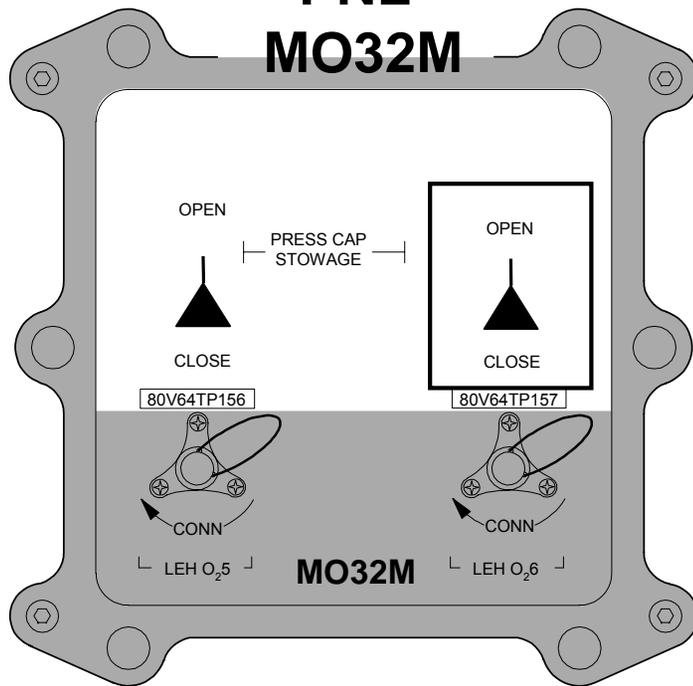


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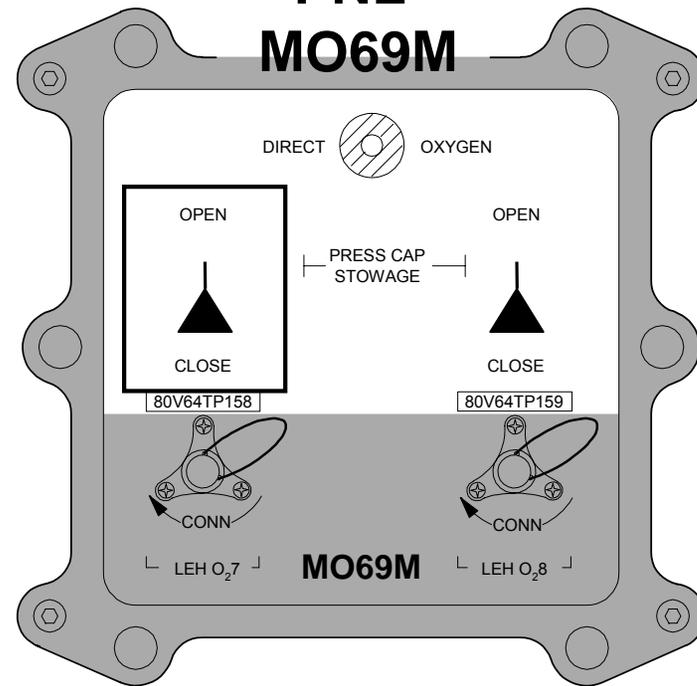


OV104

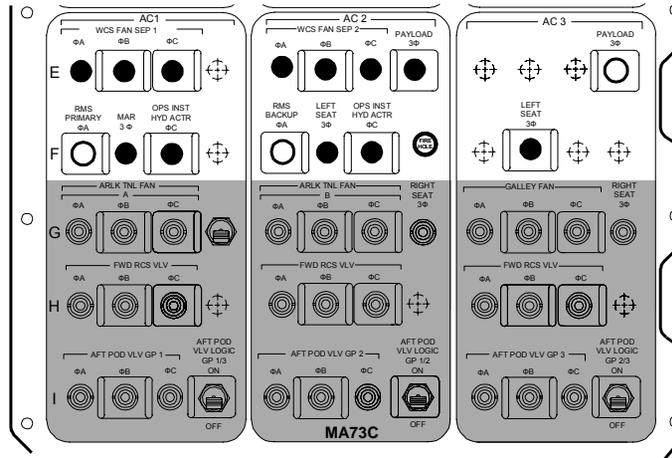
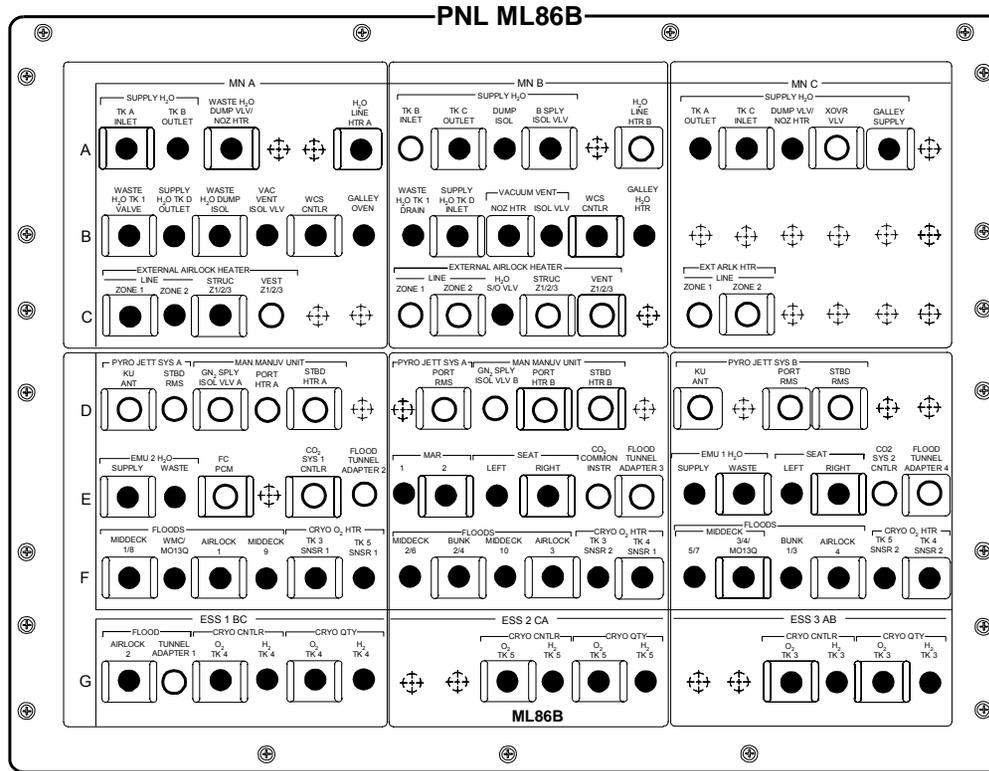
PNL MO32M



PNL MO69M



OV104



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ORBIT 5/6 DEORBIT

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PEN AND INKS TO NOMINAL POST INSERTION FOR ORBIT 5/6 DEORBIT

WARNING

If AV BAY FIRE (ASC PKT, PWRDN or ORBIT PKT, PWRDN) has been completed and the associated AC BUS, FF MDM, or FMCA is not recovered, $\sqrt{\text{MCC}}$ for Vent Door config. Certain failure combinations will cause multiple vent doors to remain open during entry

MET	ACTIVITY
ASAP	<p>Perform PRIORITY PWRDN GROUPS A & B (ORB PKT, <u>PRIOR PWRDN</u>) with following deltas:</p> <p style="margin-left: 40px;">DELETE: HI LOAD DUCT HTR OFF in Group A Pwrdn PRI RJDs DRIVER & LOGIC OFF in Group B Pwrdn</p> <p>When PRIORITY PWRDN is complete, return to Nominal Post Insertion, 1-5, completing all activities except the following:</p> <p style="margin-left: 40px;">MET 1:28 OPEN PLBDs MET 1:36 KU-BD ANT DEPLOY KU-BD ANT ACTIVATION MET 1:52 POST PLBD OPS RAD CONFIG MET 1:54 SPECIALIST SEAT REMOVAL/STOWAGE MET 1:57 ESCAPE POLE STOWAGE MET 2:01 AIRLOCK SETUP FOR INGRESS MET 2:05 CONFIG VERNIER DRIVERS</p>
1:00	<p><u>If Both Voice and Command Unavailable:</u> Perform GPS INCORPORATION (ORB OPS, <u>GNC</u>)</p>
2:12	<p><u>CONFIG CONTROLS FOR ON-ORBIT</u>, 1-17 thru 1-26 (SWITCH PICTORIALS) <u>NOTE:</u> Some of these switch throws will have been done during PRIORITY POWERDOWNS</p> <p>DELETE: HI LOAD DUCT HTR – OFF, on 1-19</p>
2:30	<p>Add following MNVR: <u>MNVR (TRK) –ZLV, +YVV</u> TG = 2 BV = 3 OM = 270</p>

**PEN AND INKS TO NOMINAL D/O
PREP FOR ORBIT 5/6 DEORBIT**

TIG-	ACTION	PROCEDURES
3:57	Delete	<u>COLDSOAK INITIATE</u> 2
3:35	Delete	<u>SPECIALIST SEAT INSTALLATION</u>
3:30	Move to TIG-2:30	<u>DPS CONFIG FOR D/O PREP</u> 4a
3:15	Move to TIG-2:20	<u>DED DISP ENT CONFIG</u> 6
3:00	Add	<u>GNC FRP-3</u> (MAL, <u>GNC FRPs</u>) to recover IMU 2
2:56	Delete	<u>RAD BYPASS/FES C/O</u> (ORB OPS, <u>ECLS</u>)
2:55	Delete	CONFIG FOR PLBD CLOSING 7
2:40	Delete	<u>PLBD CLOSING</u> 9
2:40	Add	<u>PWRDN BACKOUT</u> (Group A & B) (ORB PKT, <u>PRIOR PWRDN</u>) (Delete IMU 2 recovery step)
2:26	Delete	<u>POST CLOSING CONFIG</u> 10

CUE CARD CONFIG

**CUE CARD
CONFIG**

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