

Post Insertion

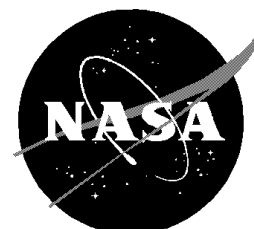
STS-109

**Mission Operations Directorate
Operations Division**

**Final, Rev A
December 6, 2001**

National Aeronautics and
Space Administration

Lyndon B. Johnson Space Center
Houston, Texas



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MISSION OPERATIONS DIRECTORATE

**POST INSERTION
STS-109**

FINAL, REVISION A
December 6, 2001

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POST INSERTION
STS-109

LIST OF EFFECTIVE PAGES

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REV A	12/06/01

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* – Omit from flight book

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NOTE

The STS-109 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-109 flight phases are conducted using the Ascent Checklist, Flight Plan, Deorbit Prep Book and Entry Checklist.

POST INSERTION PROCEDURES

CONFIG GPCS FOR OPS 2 1

* For single PASS GPC failure, build PASS set as follows: *

* FAILED GPC *

		1	2	3	4
		1	2	3	4
	1	X	G2	FD	SM
	2	G2	X	FD	SM
	3	G2	FD	X	SM
	4	G2	SM	FD	X

* In step 1:

* Assign strings 1 & 3 to one GPC and
* strings 2 & 4 to other GPC *

NOTE

Do not perform any keyboard item entries or switch
throws 10 sec before and after moding PASS GPCs
to RUN or making OPS transition requests

C,P 1. **REASSIGN G2FD STRING TO ANOTHER GPC IN MC1**

GNC 0 GPC MEMORY

CONFIG – ITEM 1 +1 EXEC

Modify MC 1 per table →

BFC CRT DISP – OFF

GNC, OPS 106 PRO

GNC 0 GPC MEMORY

CONFIG	1
GPC	12340
STR	1
	2
	3
	4
PL	1/2
CRT	1
	2
	3
	4
L	1
	2
MM	1
	2

CAUTION

If BFS is standalone(BFC lt flash):

BFC CRT DISP – ON

BFS, GNC I/O RESET

BFC CRT DISP – OFF

O6 2. **MODE G2FD GPC TO OPS 0**

GPC MODE G2FD – STBY (tb-bp)
– RUN (tb-RUN)

CRTX 3. **LOAD MC 2 INTO G2FD GPC**
PL, GPC/CRT G2FD GPC/X EXEC

X: PL GPC MEMORY

CONFIG – ITEM 45 +2 EXEC

GPC – ITEM 46 +(G2FD) EXEC

STORE – ITEM 47 EXEC

Store complete when MC = 02 (~16 sec)

- * If no MC = 02 after 2 min: *
- * a. Cycle pwr on MMU 1,2; wait 34 sec *
- * *
- * b. Retry GPC FREEZE DRY(step 3) *
- * *
- * c. If FD successful, continue with step 4 *
- * If not successful: select MMU alternate area for *
- * GNC MF, ITEM 53 +2 EXEC, retry GPC FREEZE *
- * DRY (step 3); then go to step d *
- * *
- * d. If FD successful, continue with step 4 *
- * If not successful and: *
- * NO GPCs FAILED: go to step 1, delete GPC3 *
- * from TGT SET, restrng 1,3 to GPC 1, and *
- * restrng 2,4 to GPC 4, try to FD GPC 2 with steps *
- * 2,3; then go to step e *
- * *
- * ONE GPC FAILED: go to step 1, delete attempted *
- * FD GPC from TGT SET, restrng all strings to *
- * lowest ID GPC, try to FD other GPC with steps *
- * 2,3; then go to step e *
- * *
- * e. If FD successful, continue with step 4 *
- * If not successful: select MMU alternate area for *
- * GNC MF, ITEM 53 +3 EXEC, retry GPC FREEZE *
- * DRY(step 3); then go to step f *
- * *
- * f. If FD successful, continue with step 4 *
- * If not successful: consider both MMUs failed; on *
- * MCC GO, perform transition to OPS 3 *

4. **TRANSITION TO GNC OPS 2**

GNC 0 GPC MEMORY

CONFIG – ITEM 1 +2 EXEC

Modify MC 2 per table →

GNC, OPS 201 PRO

GNC UNIV PTG

5. **TURN OFF BFC LT**

BFC CRT DISP – ON

BFS, MSG RESET

√BFC lt – off

CRT DISP – OFF

CONFIG	GPC	DUAL	SINGLE
		G2	G2
		2	2
		12000	10000
STR	1	1	1
	2	2	1
	3	1	1
	4	2	1
PL	1/2	0	0
CRT	1	1	1
	2	2	1
	3	0	0
	4	2	1
L	1	0	0
	2	0	0
MM	1	1	1
	2	2	1

C3
C2
F2,F4
C3

MET

DAY 000

00:30

TRANS

DAP

AUTO

RT 0.5

DB 3.5

00:35

00:40

00:45

00:50

00:55

A1(B1)

AUTO

PRI

RT 0.2

DB 5.0

01:00

Ref ASC for activities from 00:00-00:50 MET

MEMORY CONFIGURATION TABLE				
CONFIG	1	2	3	4 (5)
OPS	G1, G6	G2	G3	SM
GPC SEL	1,2,3,4	1,2	1,2,3,4	4
STR	1	1	1	0
	2	2	2	0
	3	3	1	0
	4	4	2	0
P/L	1/2	1	0	4
CRT	1	1	1	4
	2	2	2	4
	3	3	0	0
	4	0	2	4
L	1	1	0	4
	2	2	0	0
MM	1	1	1	4
	2	2	2	4

1: GNC OMS 2 MNVR COAST 2: GNC OMS 2 MNVR COAST

3: BFS, SYS SUMM 2

- C L4:B,Q,R All cbs closed
:J cb AC3 φA SIG CONDR HUM SEP - cl
φB SIG CONDR IMU FAN - cl
- MS **SPECIALIST SEAT EGRESS**
- C,P **CONFIG GPCs FOR OPS 2** [1], 1-2
(USE DUAL G2 CONFIG)
If two PASS GPCs FAILED, √MCC
If BFS engaged: Go to MAL, DPS, GPC FRP-4
- MS **PRELIM MIDDECK CONFIG** (MID Cue Card) [2], 1-15
- MS **AFT STATION CONFIG** (AFT Cue Card) [3], 1-13

CRTX

6. TRANSITION TO SM OPS 201 (401)

SM, GPC/CRT SM GPC/X EXEC

X: SM GPC MEMORY

CONFIG - ITEM 1 +4(5) EXEC

Modify MC 4(5) per table

SM, OPS 201(401) PRO

SM ANTENNA

C3

√UPLK - ENA

SM 1 DPS UTILITY

UL CNTL AUTO - ITEM 35 EXEC

C3

7. SECURE BFS

CRT3

BFC CRT DISP - ON

BFS, GNC, OPS 000 PRO

3: BFS, BFS MEMORY

C3

BFC CRT DISP - OFF

√All IDPs deassigned from BFS

O6

GPC MODE 5 - STBY (tb-RUN)

8. RECONFIG IDPs

C2

GPC/CRT 0/3 EXEC

R11L

IDP/CRT 3 PWR - OFF

√4 PWR - ON

F6,F7,F8

GPC/CRT SM GPC/4 EXEC

Power OFF MDUs as desired

9. LOAD ORBIT TFLs

C3

√OI PCMMU FORMAT - GPC

SM 62 PCMMU/PL COMM

CRT

FORMAT:

FXD - ITEM 1 EXEC (*)

SEL ID - ITEM 3 +1 6 1 EXEC

LOAD - ITEM 4 EXEC

- √RUN, CPLT

SEL ID - ITEM 3 +1 0 3 EXEC

LOAD - ITEM 4 EXEC

- √RUN, CPLT

PGM - ITEM 2 EXEC

SM ANTENNA

	CONFIG GPC	4(5) 00040
STR	1	0
	2	0
	3	0
	4	0
PL	1/2	4
CRT	1	4
	2	4
	3	0
	4	4
L	1	4
	2	0
MM	1	4
	2	4

10. RECONFIG GPCs

O6 GPC MODE 5 - HALT (tb-bp)
 OUTPUT 5 - NORM (tb-bp)
 OUTPUT (SM GPC) - TERM (tb-bp)

If no failed GPC:

√All CRTs deassigned from FD GPC
 GPC MODE (FD GPC) - STBY (tb-bp)
 - HALT (tb-bp)
 - STBY (tb-RUN)
 - HALT (tb-bp)

If single G2 reqd:

IDP/CRTX MAJ FUNC - PL
 GPC/CRT 2/X EXEC

X: PL GPC MEMORY

CONFIG - ITEM 45 +2 EXEC
 GPC - ITEM 46 +2 EXEC
 STORE - ITEM 47 EXEC

Store complete when MC = 2 (~30 sec)

√All CRTs deassigned from FD GPC

GPC MODE 2 - STBY (tb-bp)
 - HALT (tb-bp)
 - STBY (tb-RUN)
 - HALT (tb-bp)

Perform ERR LOG RESET

GNC 0 GPC MEMORY

ITEM 48 EXEC

SM 0 GPC MEMORY

ITEM 48 EXEC

If PASS GPC failed from ASCENT and dual G2 reqd, use G2FD to form G2 RS:

GNC 0 GPC MEMORY

CONFIG - ITEM 1 +2 EXEC

Modify MC 2 per table →

GNC, OPS 201 PRO

GNC UNIV PTG

If PASS GPC failed from ASCENT and single G2 reqd:

√All CRTs deassigned from FD GPC

GPC MODE (FD GPC) - STBY (tb-bp)
 - HALT (tb-bp)
 - STBY (tb-RUN)
 - HALT (tb-bp)

If GPC failed for ASCENT:

Perform MAL, DPS, GPC FRP-1 as time permits

PI LOCKER When all GPC switch configuration complete, unstow, install GPC MODE switch guard

	CONFIG GPC	2 XY
STR	1	X
	2	Y
	3	X
	4	Y
PL	1/2	0
CRT	1	X
	2	Y
	3	0
	4	Y
L	1	0
	2	0
MM	1	X
	2	Y

MET
DAY 000
01:00
A1(B1)
AUTO
PRI
RT 0.2
DB 5.0
01:05
01:10
A5(B1)
AUTO
ALT
01:15
01:20
01:25
UPLINK
VAR
PARAM
TMBU
(IF
REQD)
01:30

1: GNC UNIV PTG 2: SM ANTENNA

MS **PGSC UNSTOW/SETUP/ACTIVATION**
PGSC ACTIVATION (ORB OPS, PGSC)

MS **CONFIG FOR PLBD OPERATIONS** (AFT Cue Card) **4**, 1-14

P **PL BUS ACTIVATION**
R1 PL PRI MNC - ON (tb-ON)
 √MNB tb - OFF
 √FC3 tb - OFF
 CAB - MNA(MNB)
 √AUX - OFF

C,P **DON/CONFIG COMM**
XX AUD A/G 2 - RCV, tw - 2
XMIT/ICOM MODE - PTT/VOX (recommended)

P **LOAD DAP A5**
MNVR TO PLBD OPENING ATT (-ZLV, +YVV)
CRT1 √TGT ID +2
 BODY VECT +3
 √P +90
 √Y +0.0
 OM +270

DAP: A/AUTO/ALT
(01:12) Initiate TRK

C **RAD ACT** **5**

RAD/PLBD OPS NO-GO FOR FOLOWING FAILURES			
OMS/RCS	GNC	ECLS/EPS	MECH
2 OMS Engs	2 IMUs	1 H2O or Freon Lp	2 LG DPY METHODS
1 OMS Eng & 1 +X RCS jet	3 RGAs	Both RFCAs	PRES or REDNT
1 OMS Inlet line	3 AAs	Both Cab Fans	WINDOW PANE FAILURE
OMS Prop Tk Leak	3 ADTAs	3 of 6 Av Bay Fans	
Aft RCS He or Prop Leak	3 Elevon or BF Pos Fdbks (same surface)	2 FCs	DPS
COMM	2 FCS Ch (same surface)	Any MN or 3Φ AC Bus	3 GPCs
No Voice and No CMD		Any CNTL or MPC Bus	2 PL MDMs
		3 IMU Fans	2 FF or FA MDMs
			APU/HYD
			2 APU/HYD/WSB

If NO-GO for RAD/PLBD OPS, go to **ORB 3 DEORBIT** **6**

MS **OPEN PLBDs**, AUTO MODE, 1-11

RAD ACT **5**

NOTE

If RAD flow has been initiated manually, delay RAD ACT until MCC call or until RAD OUT T low

L1 RAD BYP VLV MODE (two) - AUTO
 CNTLR LOOP (two) - AUTO A
 Wait 90 sec
 √RAD BYP VLV tb (two) - RAD

* If RAD BYP VLV 1(2) tb - BYP: *

* RAD CNTLR LOOP 1(2) - AUTO B *

* Wait 90 sec *

* √RAD BYP VLV 1(2) tb - RAD *

* *

* If RAD BYP VLV 1(2) tb still BYP or bp: *

* RAD BYP VLV MODE 1(2) - MAN *

* MAN SEL 1(2) - RAD FLOW *

* Hold 3 sec or until tb - RAD *

* If RAD BYP VLV 1(2) tb - bp: *

* RAD BYP VLV MODE 1(2) - MAN *

* MAN SEL 1(2) - RAD FLOW *

* Hold 3 sec or until tb - RAD *

* If RAD BYP VLV 1(2) tb still bp: *

* Do not select alternate RAD CNTLR *

L2 FREON ISOL MODE - AUTO

ORB 3 DEORBIT **6**

If NO-GO for RAD/PLB OPS due to 2 FCs failed:
Go to CONT DEORB, LOSS OF 2 FC ORB 2 OR 3,
at TIG-1:30

If NO-GO due to any other failure:
Go to CONT DEORB, LAUNCH DAY ORBIT 3,
at TIG-2:00

STAR TRKR ACTIVATION/DOOR OPEN 10

C O6 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

SUPPLY WATER CONFIG 14

NOTE

Do not perform until blocks 11 and 12 are performed

R11L SPLY H2O DUMP ISOL VLV – OP (tb–OP)
XOVR VLV – OP (tb–OP)

MET DAY 000		1: GNC UNIV PTG	2: SM PL BAY DOORS
01:30			4: SM PL BAY DOORS
A5(B1) AUTO ALT RT 0.2 DB 5.0	MCC & CREW: O6	GO FOR ORBIT OPS UHF MODE Sel - OFF	
01:35	MS	KU-BD ANT DEPLOY (ORB OPS, COMM/INST) KU-BD ANT ACTIVATION (ORB OPS, COMM/INST) SEAT EGRESS	
	C,P		
	C,P	CLOTHING CONFIG 7	
01:40	MS	CLOTHING CONFIG (MID, AFT Cue Cards) 8, 1-14, 1-15	
	MS	QUICKDON MASKS SETUP Unstow, install, verify operation	
01:45		If time permits: OCAC SETUP (ORB OPS, CREW SYS)	
	C	POST PLBD OPS RAD CONFIG 9	
01:50	MS	SPECIALIST SEAT REMOVAL/STOWAGE	
	C	STAR TRKR ACTIVATION/DOOR OPEN 10, 1-6	
01:55	MS	WCS CONFIG/ACT (MID Cue Card) 11, 1-16	
	MS	SWITCH CONFIG/GALLEY ACT (MID Cue Card) 12, 1-16	
	MS	ESCAPE POLE STOWAGE (MID Cue Card) 13, 1-16	
	P	SUPPLY WATER CONFIG 14, 1-6	
02:00			

CLOTHING CONFIG 7

DoFF, stow:
 Harness, Boots, LES
 Stow Gloves in Helmet
 Remove radiation dosimeter from LES and insert in inflight garments

DoFF, stow in Wet Trash:
 UCD (clamp if used)
 Emesis Bag, if used (unstow new bag)

POST PLBD OPS RAD CONFIG 9

C 1: SM 88 APU/ENVIRON THERM

NOTE
 FREON LOOP RAD OUT temps will not drop to their normal operating range (< 60 deg) until ~15 min after doors are opened

L1 NH3 CNTLR A(B) - OFF
 ✓RAD BYP VLV tb (two) - RAD
 H2O LOOP 2 BYP MODE - AUTO

CRT1 When FREON LOOP RAD OUT T < 60 deg:
 L1 HI LOAD EVAP - OFF

1: GNC UNIV PTG

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1: GNC UNIV PTG 2: SM ANTENNA
 4: SM ANTENNA

02:00	A5(B1) AUTO ALT RT 0.2 DB 5.0	MS	<u>AIRLOCK SETUP FOR INGRESS</u> 15 , 1-16
02:05	A5(B1) AUTO VERN RT 0.2 DB 1.0	P C	<u>APU STEAM VENT HTR ACT</u> R2 √BLR CNTLR/HTR (three) – A PWR (three) – ON <u>CONFIG VERNIER CONTROL</u> O16:F √MCC, GO for vernier control RJD MANF L5/F5/R5 DRIVER – ON, wait 5 sec DAP: A/AUTO/VERN
02:10		C,MS	<u>CONFIG CONTROLS FOR ON-ORBIT</u> Perform steps on 1–17 thru 1–26 Unstow,install HUD covers (two)
02:15		L2	Remove, stow (on PNL L2/FDF FD locker) NWS sw flex extension
02:20		P	<u>HYD THERMAL CONDITIONING-ENABLE</u> R2 HYD CIRC PUMP (three) – GPC
02:25		MS	<u>RESET CW</u> (AFT Cue Card) 16 , 1–14
02:30		MS	<u>FUEL CELL VI PERFORMANCE PLOT</u> (ORB OPS, <u>EPS</u>)
			Stow POST INSERTION, go to FLIGHT PLAN, <u>FLT DAY 1</u>

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MANUAL PLBD OPENING/FIT TEST PROCEDURES

- * If no motion determined visually or 'OP/CL' not blank within 10 sec after cmd, *
- * PL BAY DR – STOP, perform MAL, MECH, 9.1a *
- R13L * If latch not 'OP' in single mtr time, *
- * PL BAY DR – STOP, perform MAL, MECH, 9.1d *
- * If door motion stops and not 'OP', *
- * PL BAY DR – STOP, perform MAL, MECH, 9.1f *
- * If SM GPC fails during this operation: *
- * PL BAY DR SYS 1,2 (two) – DSBL *
- * – STOP *
- * Perform PASS SM GPC FAIL (ORB PKT, DPS) *
- * If BFS AUTO sequence has been interrupted by reversing latch/door drive *
- * direction, or if MANUAL has been used at any time during the mission, *
- * use MANUAL mode for all subsequent BFS PLBD OPS *

NOTE

Note any single mtr operations (continue ops)
(single mtr times = 2X listed dual motor times).

If one mtr in each of two separate latch gangs fails,
PL BAY DOOR - STOP
√MCC

- | | | | |
|----|------|----|--|
| MS | CRT4 | 1. | SM, OPS X02 PRO or <u>BFS, SM 63 PL BAY DOORS</u>
<u>4: SM PL BAY DOORS</u> |
| | R13L | | √PL BAY DR – STOP |
| | CRT4 | | √PBD sw – STOP (*) |
| | | | √MAN SEL (ten) – (no *) |
| | | | √PBD SW BYPASS – (no *) |
| | | 2. | AC POWER ON – ITEM 1 EXEC (*) |
| | | | √AUTO MODE SEL – (no *) |
| | R13L | 3. | PL BAY DR SYS 1,2 (two) – ENA |
| | CRT4 | | √OP/CL STATUS (ten) – CL |

OPEN CENTER LATCHES

- | | | | |
|--|------|-----|--|
| | | 4. | Select CENTER LATCHES 5–8,9–12 – ITEM 4,5 EXEC (*) |
| | R13L | 5. | PL BAY DR – OP |
| | CRT4 | | √CENTER LATCHES 5–8,9–12 (two) – blank, OP (~20 sec) |
| | R13L | 6. | PL BAY DR – STOP |
| | CRT4 | 7. | Deselect CENTER LATCHES 5–8,9–12 – ITEM 4,5 EXEC (no *) |
| | | 8. | Select CENTER LATCHES 1–4,13–16 – ITEM 6,7 EXEC (*) |
| | R13L | 9. | PL BAY DR – OP |
| | CRT4 | | √CENTER LATCHES 1–4,13–16 (two) – blank, OP (~20 sec) |
| | R13L | 10. | PL BAY DR – STOP |
| | CRT4 | 11. | Deselect CENTER LATCHES 1–4,13–16 – ITEM 6,7 EXEC (no *) |

OPEN STBD FWD, AFT LATCHES & DOOR

- | | | | |
|--|------|-----|--|
| | | 12. | Select STBD FWD,AFT LATCHES – ITEM 8,9 EXEC (*) |
| | R13L | 13. | PL BAY DR – STOP |
| | CRT4 | | √STBD FWD,AFT LATCHES (two) – blank, OP (~30 sec) |
| | R13L | 14. | PL BAY DR – STOP |
| | CRT4 | 15. | Deselect STBD FWD,AFT LATCHES – ITEM 8,9 EXEC (no *) |

- | | | | |
|--|------|-----|-------------------------------------|
| | | 16. | Select STBD DOOR – ITEM 10 EXEC (*) |
| | R13L | 17. | PL BAY DR – OP |
| | CRT4 | | √STBD DOOR – RDY,blank |
| | | | After 15 sec: |
| | R13L | 18. | PL BAY DR – STOP |

CLOSE STBD DOOR

- | | | | |
|--|------|-----|--|
| | | 19. | PL BAY DR – CL |
| | | | When STBD DOOR is as close as possible to PORT DOOR before contacting it: |
| | | 20. | PL BAY DR – STOP |
| | | | Determine C/L Latch clearance on C/L LATCH NO-GO diagram, 1–12, and report status to MCC |
| | | | Continue STBD DOOR close |
| | | 21. | PL BAY DR – CL |
| | CRT4 | | √STBD DOOR – RDY,CL |
| | R13L | 22. | PL BAY DR – STOP |

REOPEN STBD DOOR

- | | | | |
|--|------|-----|--|
| | | 23. | PL BAY DR – OP |
| | CRT4 | | √STBD DOOR – RDY,blank,OP (~63 sec) |
| | R13L | 24. | PL BAY DR – STOP |
| | CRT4 | 25. | Deselect STBD DOOR – ITEM 10 EXEC (no *) |

OPEN PORT FWD, AFT LATCHES & DOOR

- | | | | |
|--|------|-----|--|
| | | 26. | Select PORT FWD,AFT LATCHES – ITEM 11,12 EXEC (*) |
| | R13L | 27. | PL BAY DR – OP |
| | CRT4 | | √PORT FWD,AFT LATCHES (two) – blank, OP (~30 sec) |
| | R13L | 28. | PL BAY DR – STOP |
| | CRT4 | 29. | Deselect PORT FWD,AFT LATCHES – ITEM 11,12 EXEC (no *) |
| | | 30. | Select PORT DOOR – ITEM 13 EXEC (*) |
| | R13L | 31. | PL BAY DR – OP |
| | CRT4 | | √PORT DOOR – RDY, blank |
| | | | After 15 sec: |
| | R13L | 32. | PL BAY DR – STOP |

CLOSE PORT DOOR

- | | | | |
|--|------|-----|----------------------|
| | | 33. | PL BAY DR – CL |
| | CRT4 | | √PORT DOOR – RDY, CL |
| | R13L | 34. | PL BAY DR – STOP |

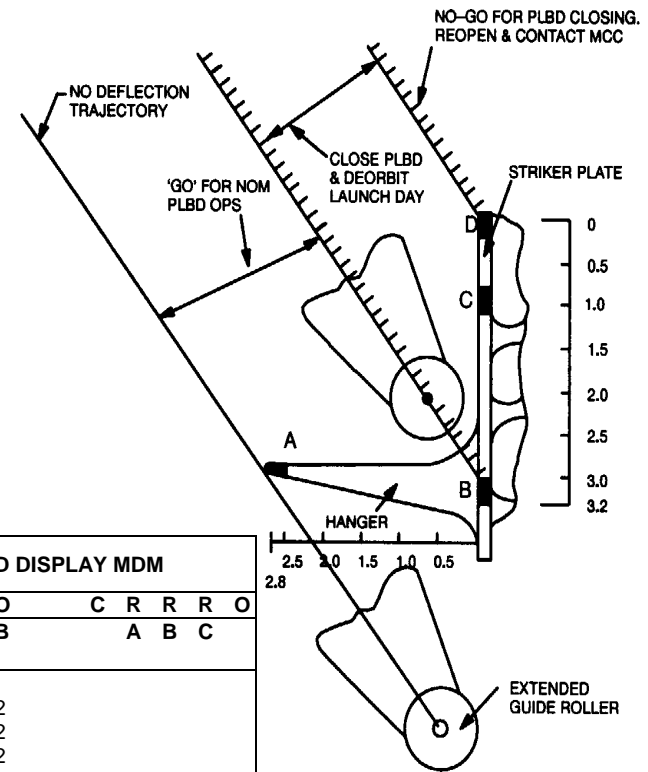
REOPEN PORT DOOR

- | | | | |
|--|------|-----|--|
| | R13L | 35. | PL BAY DR – OP |
| | CRT4 | | √PORT DOOR – RDY, blank, OP (~63 sec) |
| | R13L | 36. | PL BAY DR – STOP |
| | CRT4 | 37. | Deselect PORT DOOR – ITEM 13 EXEC (no *) |

POST-PLBD OPENING CLEANUP

- | | | | |
|--|-----|-----|--|
| | | 38. | PL BAY DR SYS 1,2 (two) – DSBL |
| | | 39. | AC POWER OFF – ITEM 2 EXEC (*) |
| | | 40. | SM, OPS X01 PRO (if PASS SM) |
| | | | <u>4: SM ANTENNA</u> |
| | A7U | 41. | After floodlights ON > 25 min:
PL BAY FLOOD (all) – OFF |

**LAUNCH DAY NO-GO DIAGRAM
C/L LATCH EXTENDED GUIDE ROLLER TRAJECTORY**



FUNCTION	PLBD CONTROL								PLBD DISPLAY MDM								
	Ref: MA73C:C&D for MCA cbs																
	MTR 1				MTR 2				C C O O				C R R R O				
	AC/ MCA	CNTL	MDM	SYS	AC/ MCA	CNTL	MDM	SYS	A	B	A	B	A	B	C	O	
LATCH																	
5-8	1/MID3	AB3/AB2	PL1	2	3/MID2	CA3/CA1	PL2	1	1	2	1	2					
9-12	1/MID1	AB3/AB1	PL1	1	3/MID4	CA3/CA2	PL2	2	1	2	1	2					
1-4	1/MID3	AB3/AB2	PL1	2	3/MID2	CA3/CA1	PL2	1	1	2	1	2					
13-16	3/MID4	CA3/CA2	PL2	2	2/MID2	BC3/BC1	PL1	1	2	1	2	1					
S FWD	1/MID1	AB3/AB1	PL1	1	2/MID4	BC3/BC2	PL2	2	1	2	1	2					
S AFT	3/MID4	CA3/CA2	PL2	2	2/MID2	BC3/BC1	PL1	1	2	1	2	1					
S DOOR	1/MID1	AB3/AB1	PL1	1	2/MID4	BC3/BC2	PL2	2					1	1	2	2	1
													2	1	2	2	2
P FWD	1/MID1	AB3/AB1	PL1	1	2/MID4	BC3/BC2	PL2	2	1	2	1	2					
P AFT	1/MID3	AB3/AB2	PL1	2	3/MID2	CA3/CA1	PL2	1	1	2	1	2					
P DOOR	3/MID4	CA3/CA2	PL2	2	2/MID2	BC3/BC1	PL1	1					2	1	1	2	2
													1	1	1	2	1

CONFIG FOR PLBD OPERATIONS 4

A6U SET UP LIGHTS
ANNUN BUS SEL – MNC

NOTE

Minimum operating time for PLB Floodlights is 25 min.
Light must be OFF for minimum of 10 min UNBLOCKED,
16 min BLOCKED prior to reuse. ~3 min to full bright

A7U PL BAY FLOOD AFT (two) – ON
MID (two) – ON
FWD (two) – OFF

Record MET: ____/____:____:____

- * If PLB Floodlight not ON to full bright within 5 min: *
- * (Aff) PL BAY FLOOD – OFF *

SET UP P/TV
Go to ACTIVATION, OPERATION (Cue Card, TV)

RESET C/W 16

R13U		
PARAMETER NAME	C/W CH	UPPERLIMIT
FREON LOOP EVAP OUT T1	107	1.90V/64.8 deg
T2	117	1.90V/64.8 deg
CABIN PRESS	4	3.85V/15.36 psia

R13		
PARAMETER NAME	C/W CH	ENA/INH
MPS He TK P C	9	INH
L	19	INH
R	29	INH
MPS He REG P C	39	INH
L	49	INH
R	59	INH
HYD P 1	99	INH
2	109	INH
3	119	INH

CLOTHING CONFIG 8

Doff, stow:

Harness, Boots, LES

Stow Gloves in Helmet

Remove radiation dosimeter from LES and insert in
inflight garments

Doff, stow in Wet Trash:

UCD (clamp if used)

Emesis Bag, if used (unstow new bag)

MIDDECK RECONFIGURATION

PRELIM MIDDECK CONFIG 2

INSTALL FILTERS

Unstow, install: Side Hatch UV Filter and Locking Device Pyro
Box Safing Pin

PRESS H2O TKA

ML26C SPLY H2O GN2 TK VENT vlv – PRESS
A SPLY vlv – OP

NOTE

Disregard possible 'S66 WASTE H2O PRES' fault msg

COMM CONFIG

Unstow: Headsets, Handheld Microphone, and/or wireless comm
(see WCCS Cue Card), if flown

If WCCS, perform STD WCCS CONFIG (ORB OPS, COMM/INST)

If middeck handheld microphone/speaker ops:

MO42F	MIDDECK SPKR AUD A/G 1	– T/R, tw-2	
	A/G 2	– RCV, tw-2	
	A/A	– RCV, tw-2	
	ICOM A	– T/R, tw-2	
	B	– RCV, tw-2	
	XMIT/ICOM MODE	– PTT/PTT	
	SPKR PWR	– SPKR	
	MSTR SPKR VOL	– 8	
MO39M	MIDDECK COMM CCU PWR	– OFF	
	Connect HHMIC to CCU		
	MIDDECK COMM CCU PWR	– ON	

FDF CONFIG

Stow in Helmet Bag: ASCENT Cue Cards, ASC, ASC PKT, SYS AOA

Unstow Jettison Stowage Bag, mark "Return to Houston"

Place Helmet Bag in Return to Houston Bag

ML86B:F	All cbs closed, except: MNA FLOODS EXT A/L 1/4 – op		
	unlabeled cb – op		
	MNB FLOODS EXT A/L 2/3 – op		
	MNC unlabeled cb – op		
:G	All cbs closed, except: FLOOD TNL ADAPT – op		
	ESS 2CA unlabeled cb (two) – op		

Unstow VW Bags

MET	MS MIDDECK ACTIONS
00:53	<u>SPECIALIST SEAT EGRESS</u>
00:57	<u>PRELIM MIDDECK CONFIG</u> 2
01:41	<u>CLOTHING CONFIG</u> 8
01:52	<u>SPECIALIST SEAT REMOVAL/STOWAGE</u>
01:56	<u>WCS CONFIG/ACT</u> 11
01:57	<u>SWITCH CONFIG/GALLEY ACT</u> 12
01:58	<u>ESCAPE POLE STOWAGE</u> 13

CLOTHING CONFIG 8

DoFF, stow:

Harness, Boots, LES

Stow Gloves in Helmet

Remove radiation dosimeter from LES and insert in
inflight garments

DoFF, stow in Wet Trash:

UCD (clamp if used)

Emesis Bag, if used (unstow new bag)

ON-ORBIT SWITCH LIST

LEFT SEAT

L11-20
L21-20

O61-21
O71-22
O81-22

O141-23
O151-24

RIGHT SEAT

O8.....1-22
O16.....1-24

R11-18
R11L.....1-19

AFT

C5 1-24
C6 1-24
C7 1-24

A11 1-25






MIDDECK-FWD

ML86B 1-26

MIDDECK-AFT

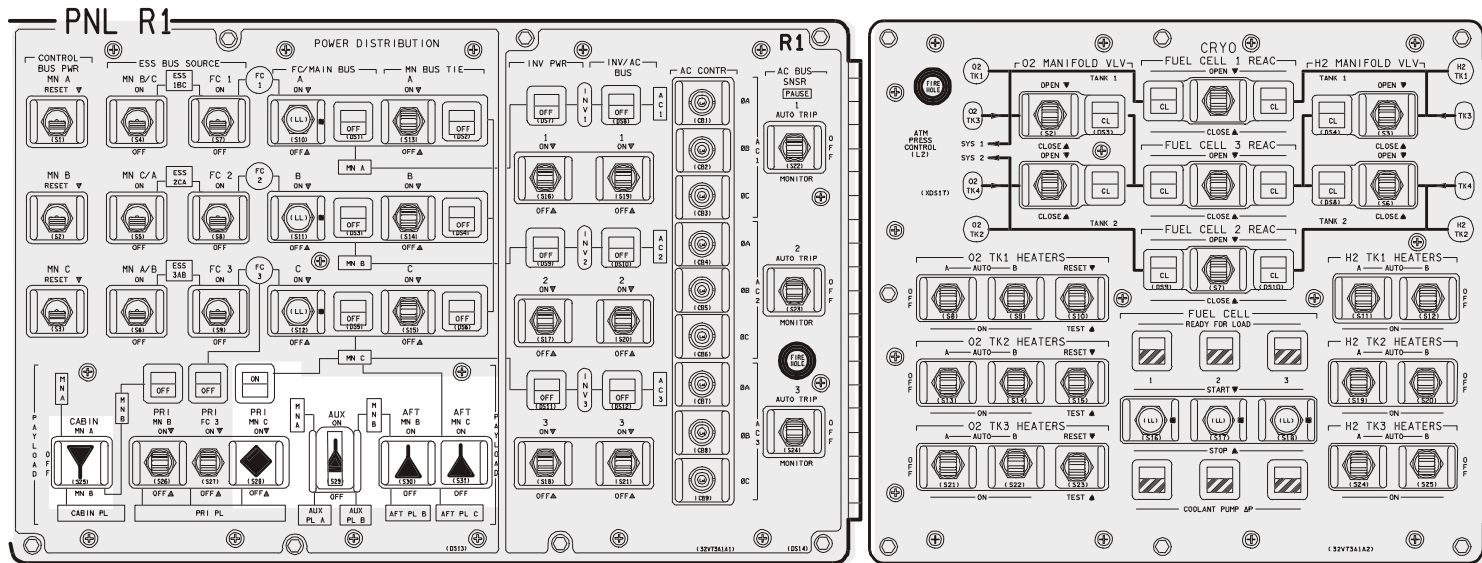
MA73C 1-26
MO32M 1-25
MO69M 1-25

Legend

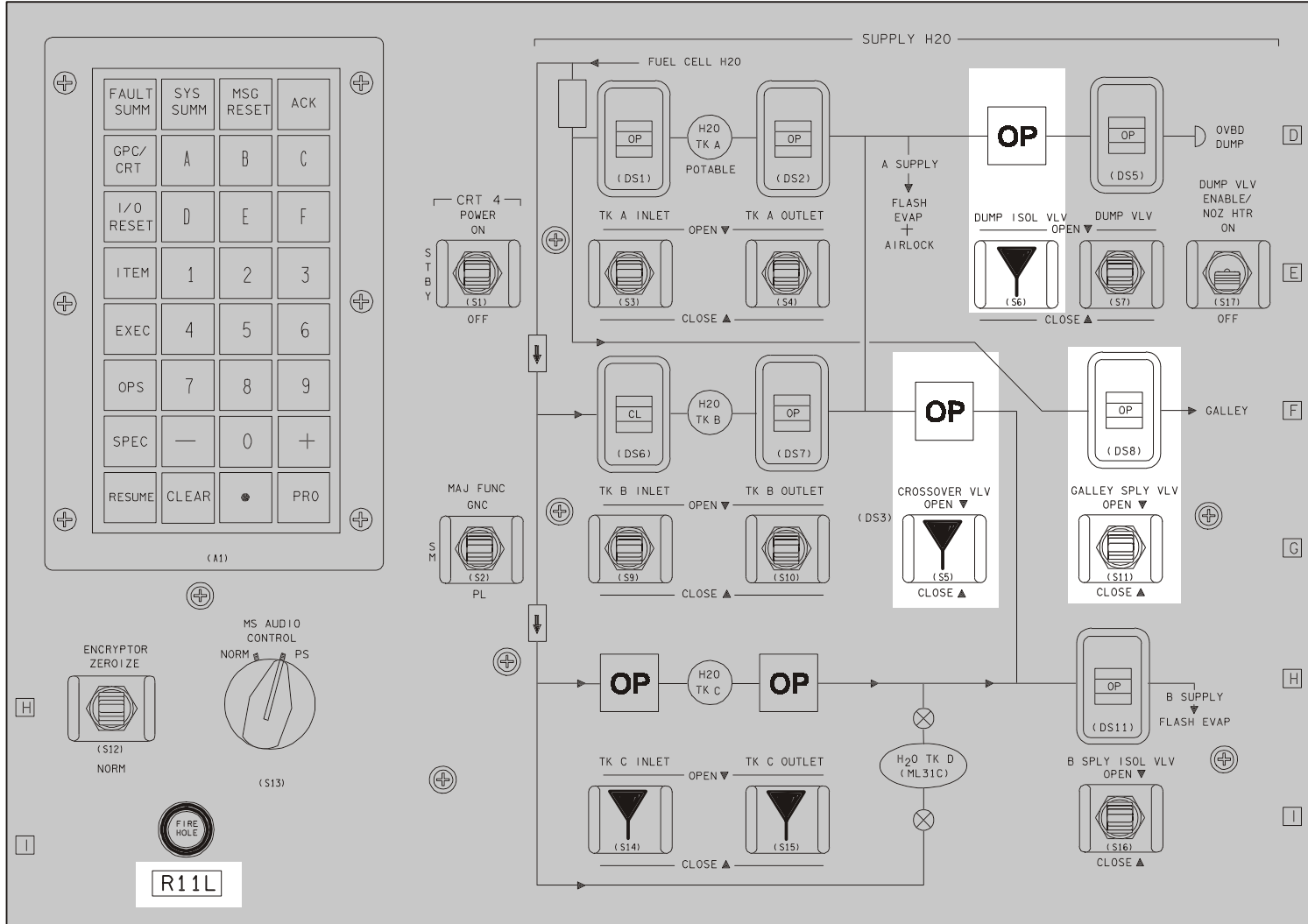
 - up  - center  - down <div style="border: 1px solid black; width: 30px; height: 15px; display: inline-block;"></div> - Boxed items indicate switch configured during On-ORBIT SWITCH CONFIGURATION	<p>R - as reqd</p>  - cb close  - cb open	<div style="background-color: #cccccc; width: 30px; height: 15px; display: inline-block;"></div> - Indicates switch/display not checked during ON-ORBIT SWITCH/VERIF Switch/display pictorals are generic representations, and are not intended to depict actual switch position. Check MCC if clarification reqd <div style="border: 1px solid black; width: 30px; height: 15px; display: inline-block;"></div> - White area indicates switch verified during ON-ORBIT SWITCH CONFIGURATION
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<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

ALL VEH



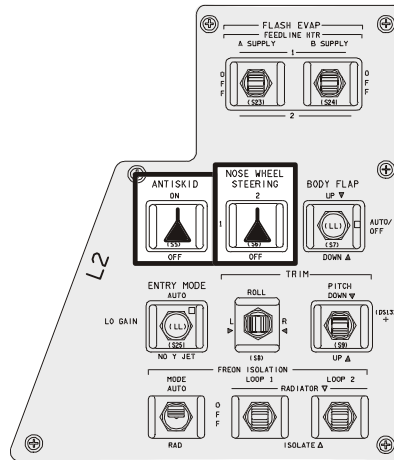
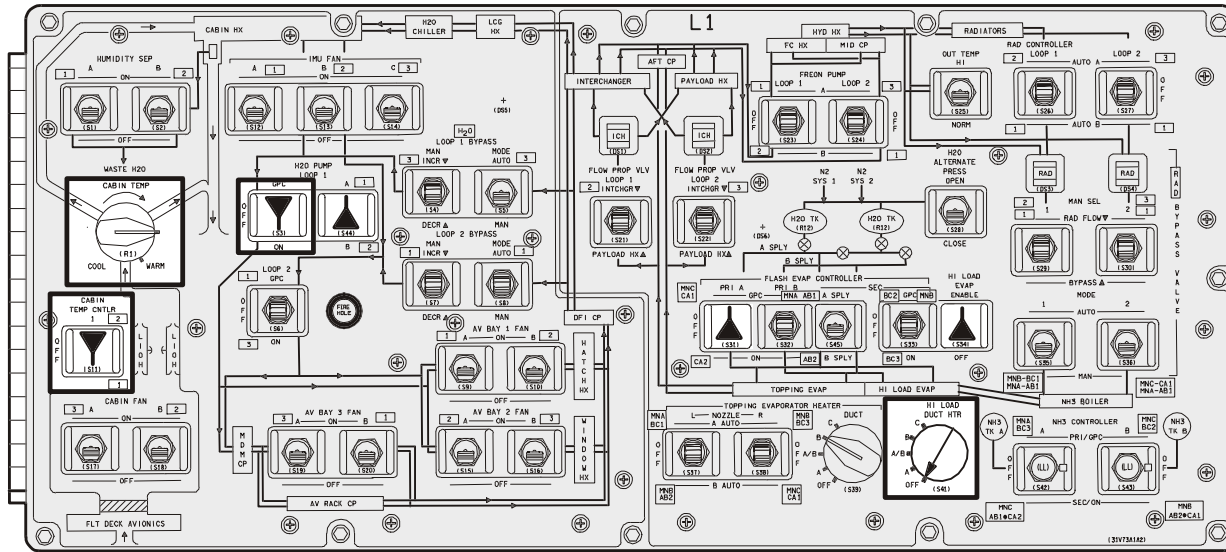
ALL VEH



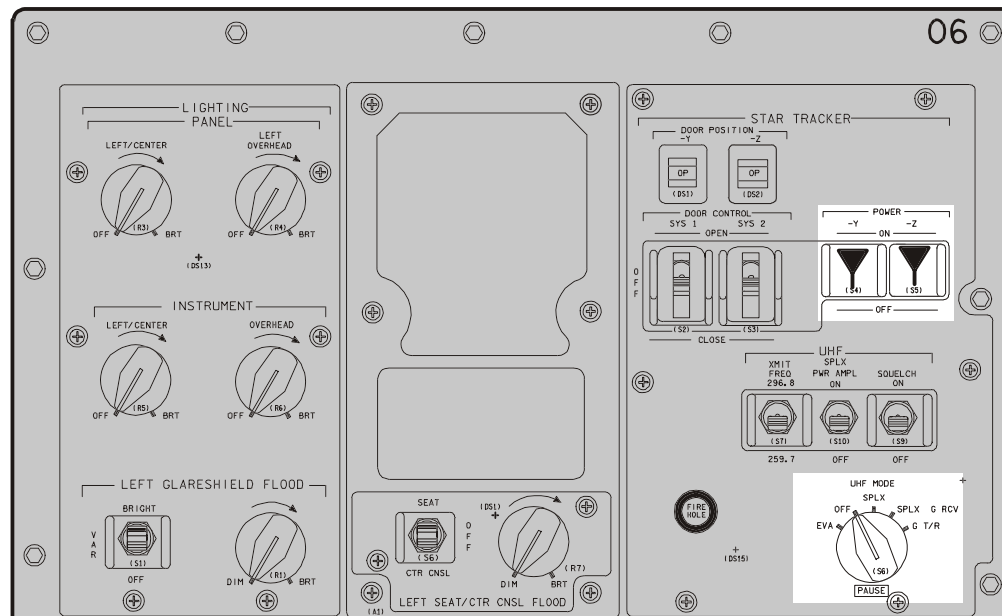
4806719_109. PNL 1

ALL VEH/DATE 06/27/01

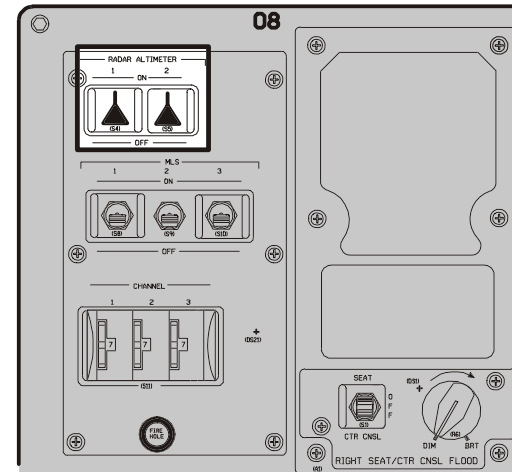
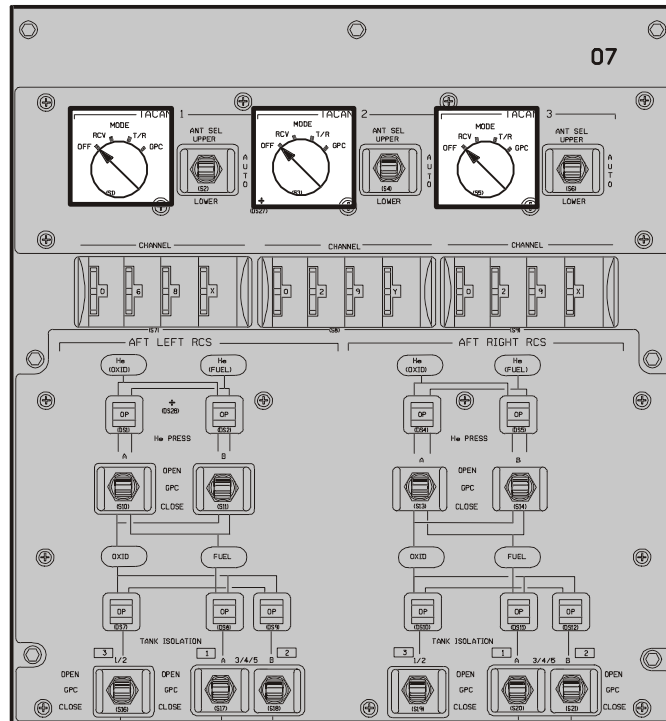
ALL VEH



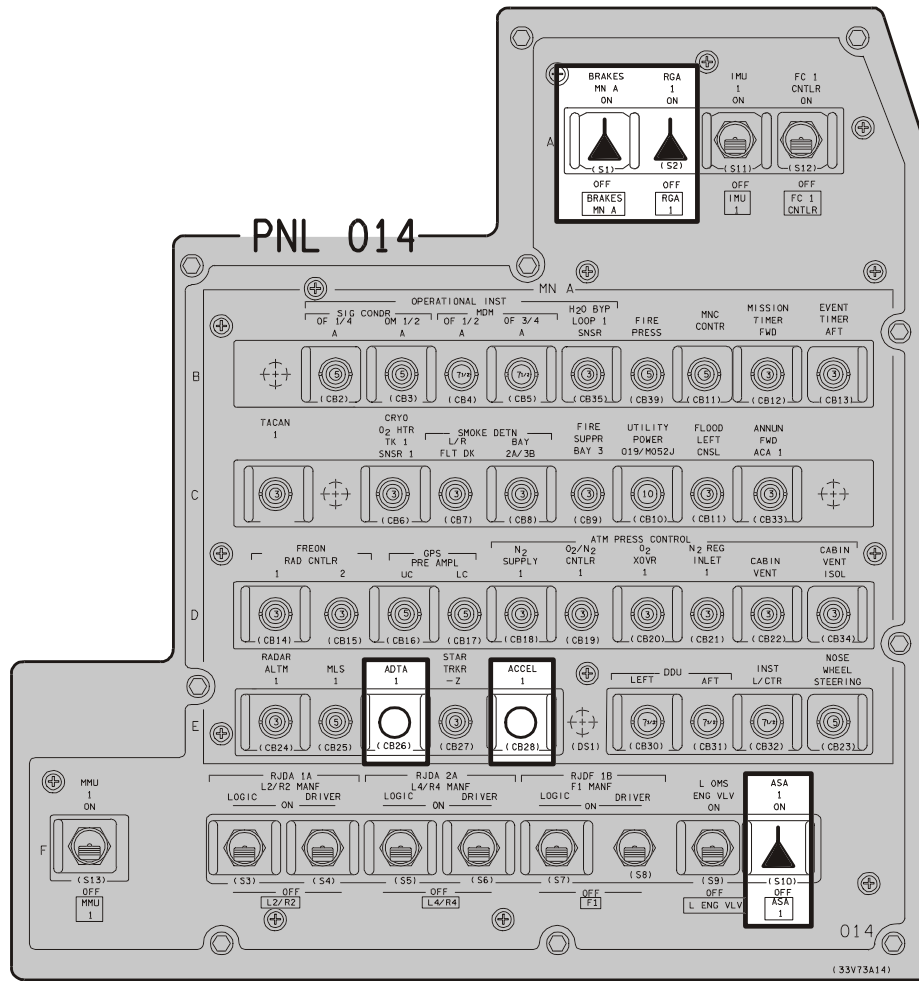
ALL VEH



ALL VEH



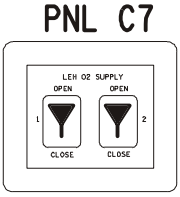
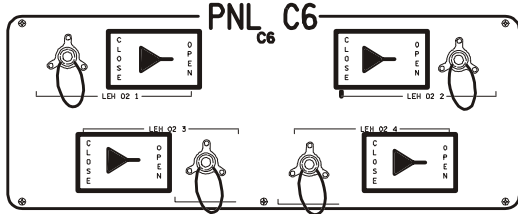
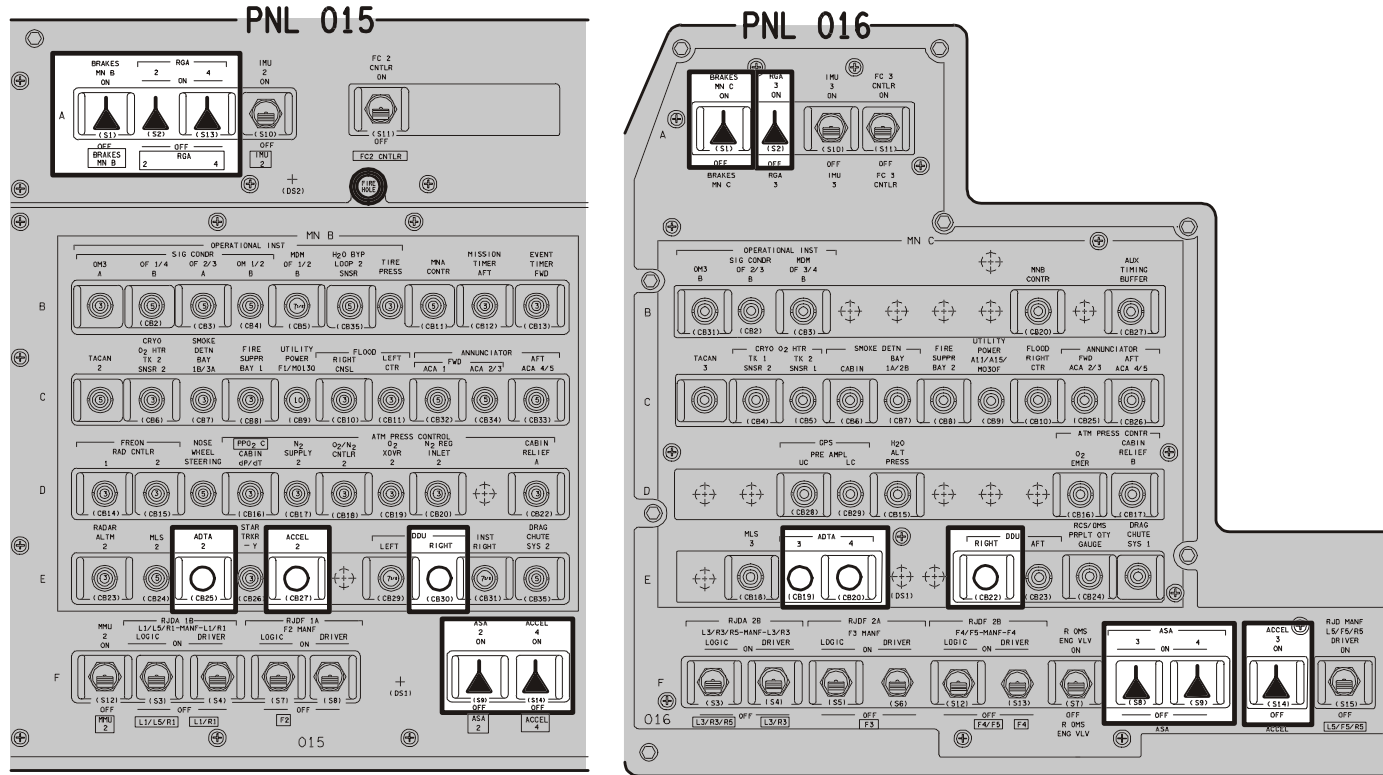
OV102

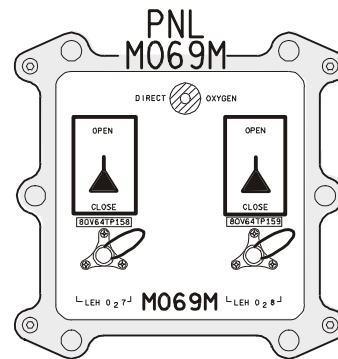
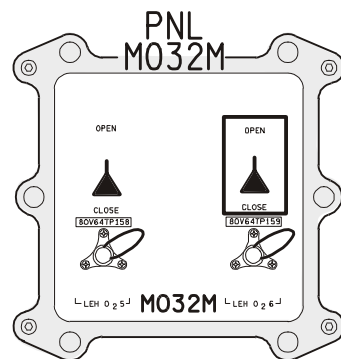
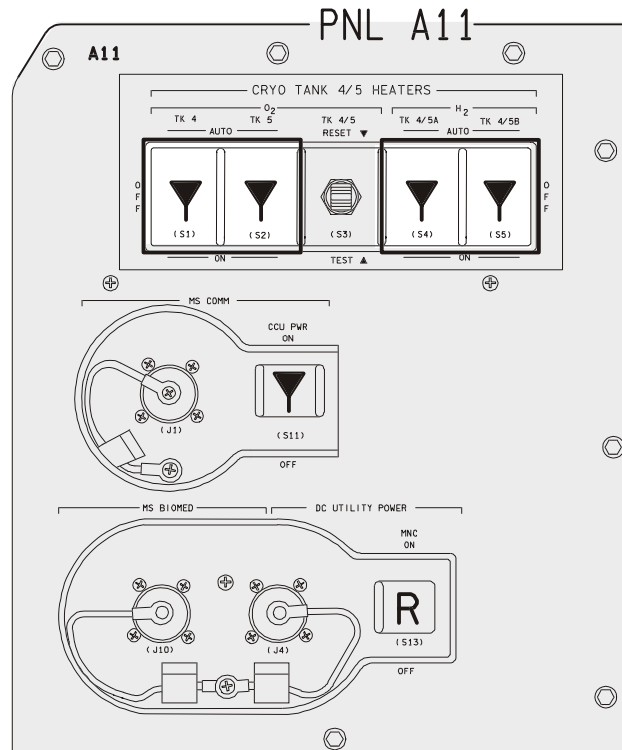


4806723_109, PNL 1

OV102/DATE 06/27/01

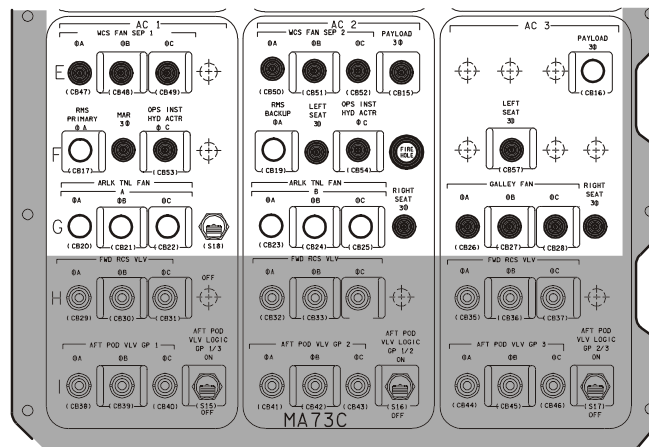
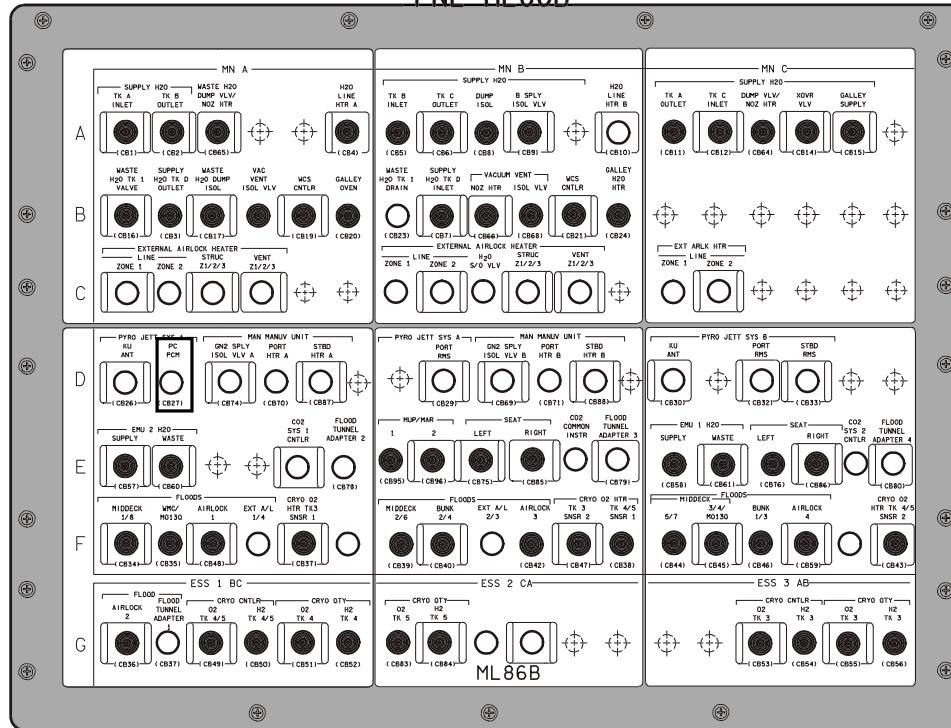
OV102





OV102

PNL ML86B





POST INSERTION **STS**
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