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A Study Program on the Development of a Mathematical Model(s) for Microbial Burden Prediction

Final Report
Addendum

Volume V
Appendices

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A STUDY PROGRAM ON THE DEVELOPMENT OF MATHEMATICAL
MODEL(S) FOR MICROBIAL BURDEN PREDICTION

JPL Contract 952028

Final Report

Addendum

Volume V, Appendices

By

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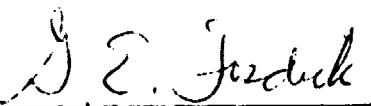
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Volume V of this report contains Appendices 1 and 2. Appendix 1 lists input data prepared for the Phase V simulation of the Mariner Venus 67-2 spacecraft assembly and test. Appendix 2 lists input data prepared for the Phase VI simulation. Each listing represents a complete description of all spacecraft assembly and test activities required to build the spacecraft. The data describes activity at each of four levels, the stage, task, subtask and operation. In addition, for each operation performed, the hardware being manipulated is identified.

APPENDIX 1. INPUT DATA LISTING FOR THE PLANNED ASSEMBLY AND TEST SEQUENCE 2

1 MARINER-VENUS 67-2 ASSY/TEST EMULATION

1 ASSY/TEST, PASADENA OPERATIONS

1 1 POSITION LAMINAR FLOW TENT

1 1.1 MANEUVER LF TENT

15 MANEUVER EQUIPMENT

2 2 PLACE OCTAGON ON LOW-LEVEL POSITIONER

1 2.3 TRANSPORT OCTAGON

3 MOVE W/CRANE

61 OCTAGON

2 2.1 MANEUVER OCTAGON

1 MANIPULATE BY HAND

61 OCTAGON

3 2.2 ATT OCT TO L-L POS

1 MANIPULATE BY HAND

47 ZONE 47, OCTAGON BOTTOM

2 MANIPULATE WITH TOOLS

47 ZONE 47, OCTAGON BOTTOM

4 2.5 INSPECT OCTAGON

9 VISUAL INSPECTION

3 4 PREPARE OCTAGON

1 4.8 INST SHEAR PLATE

1 MANIPULATE BY HAND

48 ZONE 48, OCTAGON SIDES

2 MANIPULATE WITH TOOLS

48 ZONE 48, OCTAGON SIDES

2 4.8 INST SHEAR PLATE

1 MANIPULATE BY HAND

48 ZONE 48, OCTAGON SIDES

2 MANIPULATE WITH TOOLS

48 ZONE 48, OCTAGON SIDES

4 1 MOVE TENT OVER OCTAGON

1 1.1 MANEUVER LF TENT

15 MANEUVER EQUIPMENT

5 4 PREPARE OCTAGON (CONTINUED)

1 4.11 VAC CLEAN OCTAGON

7 VACUUM CLEAN

48 ZONE 48, OCTAGON SIDES

6 2 MOVE OCTAGON TO ASSY AREA

1 2.3 TRANSPORT OCTAGON

16 MANEUVER SPACECRAFT

3 2.5 INSPECT OCTAGON

9 VISUAL INSPECTION

7 4 ACGS PREPARATION

1 4.9 REM PLASH PROBE BRT

2 MANIPULATE WITH TOOLS

64 PLASMA PROBE BRACKET

1 MANIPULATE BY HAND

64 PLASMA PROBE BRACKET

8 2 POSITION SC-BAY VIII HORIZ

1 2.1 ROTATE SC

16 MANEUVER SPACECRAFT

9 4 ACGS PREPARATION (CONTINUED)

2 4.9 RELEASE J VALVE ASSY

2 MANIPULATE WITH TOOLS

65 JET VALVE ASSY

1 MANIPULATE BY HAND

65 JET VALVE ASSY

3 4.9 REL GAS TUBE LINES

2 MANIPULATE WITH TOOLS

66 GAS TUBING LINES

1 MANIPULATE BY HAND

APPENDIX 1 (Continued)

3

- 66 GAS TUBING LINES
- 4 4.9 REL NITRO BOTT SUPP
 - 2 MANIPULATE WITH TOOLS
 - 67 NITROGEN BOTTLE SUPPORT
 - 1 MANIPULATE BY HAND
 - 67 NITROGEN BOTTLE SUPPORT
- 5 4.9 REL ACGS FROM FRAME
 - 2 MANIPULATE WITH TOOLS
 - 65 JET VALVE ASSY
 - 1 MANIPULATE BY HAND
 - 65 JET VALVE ASSY
- 6 4.13 REM ACGS FROM FRAME
 - 1 MANIPULATE BY HAND
 - 65 JET VALVE ASSY
- 10 5 INSTALL ACGS IN BAY VIII
 - 1 5.4 INSERT JVALVE/TUBIG
 - 1 MANIPULATE BY HAND
 - 16 ZONE 16, BAY 8 INWARD
 - 1 MANIPULATE BY HAND
 - 16 ZONE 16, BAY 8 INWARD
 - 2 MANIPULATE WITH TOOLS
 - 16 ZONE 16, BAY 8 INWARD
 - 2 5.7 ROUTE GAS SYST LINE
 - 1 MANIPULATE BY HAND
 - 16 ZONE 16, BAY 8 INWARD
 - 3 5.8 MOUNT BOTTLE BRACKT
 - 1 MANIPULATE BY HAND
 - 16 ZONE 16, BAY 8 INWARD
 - 2 MANIPULATE WITH TOOLS
 - 16 ZONE 16, BAY 8 INWARD
 - 9 5.8 INST NITRO BOTT SUP
 - 1 MANIPULATE BY HAND
 - 16 ZONE 16, BAY 8 INWARD
 - 2 MANIPULATE WITH TOOLS
 - 16 ZONE 16, BAY 8 INWARD
- 11 2 POSITION SC-BAY IV DOWN
 - 1 2.1 ROTATE SC
 - 16 MANEUVER SPACECRAFT
 - 17 SECURED IN TENT
- 12 4 ACGS PREPARATION (CONTINUED)
 - 1 4.9 REL NITRO BOTT SUP
 - 2 MANIPULATE WITH TOOLS
 - 70 NITROGEN BOTTLE SUPPORT
 - 1 MANIPULATE BY HAND
 - 70 NITROGEN BOTTLE SUPPORT
 - 2 4.9 REL ACGS FROM FRAM
 - 2 MANIPULATE WITH TOOLS
 - 72 JET VALVE ASSY
 - 1 MANIPULATE BY HAND
 - 72 JET VALVE ASSY
 - 3 4.13 REM ACGS FROM FRAM
 - 1 MANIPULATE BY HAND
 - 72 JET VALVE ASSY
- 13 5 INSTALL ACGS IN BAY IV
 - 1 5.4 INSERT JVALVE/TUBIG
 - 1 MANIPULATE BY HAND
 - 12 ZONE 12, BAY 4 INWARD
 - 2 5.7 ROUTE GAS SYST LIN
 - 1 MANIPULATE BY HAND
 - 12 ZONE 12, BAY 4 INWARD
 - 3 5.8 MOUNT BOTTLE BRACKT
 - 1 MANIPULATE BY HAND

APPENDIX 1 (Continued)

- 12 ZONE 12, BAY 4 INWARD
- 2 MANIPULATE WITH TOOLS
- 12 ZONE 12, BAY 4 INWARD
- 9 5.8 INST NITRO BOTT SUP
- 1 MANIPULATE BY HAND
- 12 ZONE 12, BAY 4 INWARD
- 2 MANIPULATE WITH TOOLS
- 12 ZONE 12, BAY 4 INWARD
- 11 5.17 ADJ BELLE SPRINGS
- 1 MANIPULATE BY HAND
- 16 ZONE 16, BAY 8 INWARD
- 2 MANIPULATE WITH TOOLS
- 16 ZONE 16, BAY 8 INWARD
- 17 SECURED IN TENT
- 12 5.17 ADJ BELLE SPRINGS
- 1 MANIPULATE BY HAND
- 12 ZONE 12, BAY 4 INWARD
- 2 MANIPULATE WITH TOOLS
- 12 ZONE 12, BAY 4 INWARD
- 14 5 INSTALL UPPER RING/PYROTECH HARNESSSES
- 1 5.18 INSTALL EA I
- 1 MANIPULATE BY HAND
- 1 ZONE 1, BAY I
- 2 MANIPULATE WITH TOOLS
- 1 ZONE 1, BAY I
- 2 5.7 ROUTE PYRO HARNESS
- 1 MANIPULATE BY HAND
- 27 ZONE 27, TOP RING TRAY
- 3 5.22 CONN PYRO HARNESS
- 1 MANIPULATE BY HAND
- 27 ZONE 27, TOP RING TRAY
- 4 5.8 CLAMP PYRO HARNESS
- 1 MANIPULATE BY HAND
- 27 ZONE 27, TOP RING TRAY
- 17 SECURED IN TENT
- 2 MANIPULATE WITH TOOLS
- 27 ZONE 27, TOP RING TRAY
- 6 5.7 ROUTE CABLE(9W38P3)
- 1 MANIPULATE BY HAND
- 27 ZONE 27, TOP RING TRAY
- 7 5.7 ROUTE CABLE(9W38P3)
- 1 MANIPULATE BY HAND
- 27 ZONE 27, TOP RING TRAY
- 8 5.7 ROUTE CABLE(9W38P3)
- 1 MANIPULATE BY HAND
- 27 ZONE 27, TOP RING TRAY
- 9 5.7 ROUTE APAC PYRO CAL
- 1 MANIPULATE BY HAND
- 27 ZONE 27, TOP RING TRAY
- 10 5.8 INST CENTER CLAMPS
- 1 MANIPULATE BY HAND
- 27 ZONE 27, TOP RING TRAY
- 17 SECURED IN TENT
- 2 MANIPULATE WITH TOOLS
- 27 ZONE 27, TOP RING TRAY
- 15 5.7 ROUTE CABLE(4A1P1)
- 1 MANIPULATE BY HAND
- 27 ZONE 27, TOP RING TRAY
- 16 5.7 ROUTE CABLE(4A3P1)
- 1 MANIPULATE BY HAND
- 27 ZONE 27, TOP RING TRAY
- 17 5.7 ROUTE CABLE(4A5P1)

APPENDIX 1(Continued)

5

- 1 MANIPULATE BY HAND
 - 27 ZONE 27, TOP RING TRAY
- 18 5.7 ROUTE CABLE(4A7P1)
 - 1 MANIPULATE BY HAND
 - 27 ZONE 27, TOP RING TRAY
- 19 5.8 STRING TIE CABLES
 - 1 MANIPULATE BY HAND
 - 27 ZONE 27, TOP RING TRAY
- 15 5 INSTALL UPPER RING/PYRO TECH HARN(CONT)
 - 1 5.4 POS DFR FILTER(2)
 - 1 MANIPULATE BY HAND
 - 21 ZONE 21, PANEL 1 SPAR
 - 1 MANIPULATE BY HAND
 - 21 ZONE 21, PANEL 1 SPAR
 - 5 5.8 INSTALL DFR FILTER
 - 1 MANIPULATE BY HAND
 - 21 ZONE 21, PANEL 1 SPAR
 - 2 MANIPULATE WITH TOOLS
 - 21 ZONE 21, PANEL 1 SPAR
 - 1 MANIPULATE BY HAND
 - 21 ZONE 21, PANEL 1 SPAR
 - 2 MANIPULATE WITH TOOLS
 - 21 ZONE 21, PANEL 1 SPAR
 - 6 5.22 CONNECT COAX CABLE
 - 1 MANIPULATE BY HAND
 - 21 ZONE 21, PANEL 1 SPAR
 - 7 5.22 CONNECT COAX CABLE
 - 1 MANIPULATE BY HAND
 - 21 ZONE 21, PANEL 1 SPAR
 - 17 SECURED IN TENT
 - 17 SECURED IN TENT
- 16 5 INSTALL LOWER RING HARNESS
 - 1 5.8 INSTALL SCREWS-LEGB
 - 1 MANIPULATE BY HAND
 - 40 ZONE 40, LEG B
 - 2 MANIPULATE WITH TOOLS
 - 40 ZONE 40, LEG B
 - 2 5.8 INSTALL SCREWS-LEGC
 - 1 MANIPULATE BY HAND
 - 41 ZONE 41, LEG C
 - 2 MANIPULATE WITH TOOLS
 - 41 ZONE 41, LEG C
 - 3 5.8 INSTALL SCREWS-LEGG
 - 1 MANIPULATE BY HAND
 - 45 ZONE 45, LEG G
 - 2 MANIPULATE WITH TOOLS
 - 45 ZONE 45, LEG G
- 17 2 POSITION SC-AFT PLANE VERTICAL
 - 1 2.1 ROTATE SC
 - 16 MANEUVER SPACECRAFT
- 18 5 INSTALL LOWER RING HARNESS(CONT)
 - 2 5.8 INSTALL DISCONN CON
 - 1 MANIPULATE BY HAND
 - 13 ZONE 13, BAY 5 INWARD
 - 2 MANIPULATE WITH TOOLS
 - 13 ZONE 13, BAY 5 INWARD
 - 5 5.1 REPOS HARN ASSY
 - 1 MANIPULATE BY HAND
 - 28 ZONE 28, BUTT RING TRAY
 - 8 5.7 ROUTE ACCEL CABLE
 - 1 MANIPULATE BY HAND
 - 28 ZONE 28, BUTT RING TRAY

APPENDIX 1 (Continued)

6

- 9 5.7 ROUTE SEC SUN SENSR
 - 1 MANIPULATE BY HAND
 - 28 ZONE 28, BUTT RING TRAY
- 10 5.7 ROUTE HOT SENS CABLE
 - 17 SECURED IN TENT
 - 1 MANIPULATE BY HAND
 - 28 ZONE 28, BUTT RING TRAY
- 11 5.7 ROUTE COAX CABLE
 - 1 MANIPULATE BY HAND
 - 28 ZONE 28, BUTT RING TRAY
- 12 5.7 ROUTE SEC SUN SENSR
 - 1 MANIPULATE BY HAND
 - 28 ZONE 28, BUTT RING TRAY
- 13 5.7 ROUTE SUN GATE CABLE
 - 1 MANIPULATE BY HAND
 - 28 ZONE 28, BUTT RING TRAY
- 14 5.7 ROUTE RADIO COAX CB
 - 1 MANIPULATE BY HAND
 - 28 ZONE 28, BUTT RING TRAY
- 19 5 INSTALL PYROTECH ARMING SWITCH
 - 1 5.2 TRANSPORT PAS
 - 1 MANIPULATE BY HAND
 - 100 PYRO ARMING SWITCH
 - 2 5.4 POSITION PAS
 - 1 MANIPULATE BY HAND
 - 9 ZONE 9, BAY 1 INWARD
 - 3 5.8 INSTALL PAS
 - 1 MANIPULATE BY HAND
 - 9 ZONE 9, BAY 1 INWARD
 - 17 SECURED IN TENT
 - 2 MANIPULATE WITH TOOLS
 - 9 ZONE 9, BAY 1 INWARD
- 20 5 INSTALL SUN-INITIATED TIMER
 - 1 5.2 TRANSPORT TIMER
 - 1 MANIPULATE BY HAND
 - 101 SEP-INIT TIMER
 - 2 5.4 POSITION TIMER
 - 1 MANIPULATE BY HAND
 - 16 ZONE 16, BAY 8 INWARD
 - 3 5.8 INSTALL TIMER
 - 1 MANIPULATE BY HAND
 - 16 ZONE 16, BAY 8 INWARD
 - 2 MANIPULATE WITH TOOLS
 - 16 ZONE 16, BAY 8 INWARD
- 21 5 INSTALL SUN SENSORS
 - 1 5.4 POS PEDESTAL COVER
 - 1 MANIPULATE BY HAND
 - 14 ZONE 14, BAY 6 INWARD
 - 2 5.8 INSTALL COVER
 - 1 MANIPULATE BY HAND
 - 14 ZONE 14, BAY 6 INWARD
 - 2 MANIPULATE WITH TOOLS
 - 14 ZONE 14, BAY 6 INWARD
 - 6 5.2 TRANSPORT SUN GATE
 - 1 MANIPULATE BY HAND
 - 103 SUN GATE ASSY
 - 7 5.4 POSITION SUN GATE
 - 1 MANIPULATE BY HAND
 - 14 ZONE 14, BAY 6 INWARD
 - 8 5.8 INSTALL SUN GATE
 - 1 MANIPULATE BY HAND
 - 14 ZONE 14, BAY 6 INWARD

APPENDIX 1 (Continued)

7

- 2 MANIPULATE WITH TOOLS
 - 14 ZONE 14, BAY 6 INWARD
- 10 5.2 XPORT SUN SENSORS(1)
 - 1 MANIPULATE BY HAND
 - 104 PRIMARY SUN SENSOR
- 11 5.4 POS SUN SENS(BAY V)
 - 1 MANIPULATE BY HAND
 - 14 ZONE 14, BAY 6 INWARD
- 12 5.8 INSTALL SUNSOR
 - 1 MANIPULATE BY HAND
 - 14 ZONE 14, BAY 6 INWARD
 - 2 MANIPULATE WITH TOOLS
 - 14 ZONE 14, BAY 6 INWARD
- 13 5.4 POSITION SUN SENSO
 - 1 MANIPULATE BY HAND
 - 10 ZONE 10, BAY 2 INWARD
- 14 5.8 INSTALL SEN SONSOR
 - 1 MANIPULATE BY HAND
 - 10 ZONE 10, BAY 2 INWARD
 - 2 MANIPULATE WITH TOOLS
 - 10 ZONE 10, BAY 2 INWARD
- 22 5 INSTALL PLASMA PROBE
 - 1 5.2 XPORT PLASMA PROBE
 - 1 MANIPULATE BY HAND
 - 106 PLASMA PROBE
 - 2 5.4 POS PLASMA PROBE
 - 1 MANIPULATE BY HAND
 - 11 ZONE 11, BAY 3 INWARD
 - 3 5.8 INSTALL PLASMA PROE
 - 1 MANIPULATE BY HAND
 - 11 ZONE 11, BAY 3 INWARD
 - 2 MANIPULATE WITH TOOLS
 - 11 ZONE 11, BAY 3 INWARD
 - 4 5.25 PROBE CONTIN CHECK
 - 10 INSPECTION WITH GAUGES
 - 11 ZONE 11, BAY 3 INWARD
 - 5 5.7 ROUTE CONN TO PAS
 - 17 SECURED IN TENT
 - 1 MANIPULATE BY HAND
 - 9 ZONE 9, BAY 1 INWARD
 - 6 5.7 ROUTE CONN TO SIT
 - 1 MANIPULATE BY HAND
 - 16 ZONE 16, BAY 8 INWARD
 - 9 5.7 ROUTE COAX CABLE
 - 1 MANIPULATE BY HAND
 - 9 ZONE 9, BAY 1 INWARD
 - 13 5.22 CONN COAX CABLE(2)
 - 1 MANIPULATE BY HAND
 - 9 ZONE 9, BAY 1 INWARD
 - 1 MANIPULATE BY HAND
 - 9 ZONE 9, BAY 1 INWARD
 - 15 5.22 CONN SUN GATE/HARN
 - 1 MANIPULATE BY HAND
 - 14 ZONE 14, BAY 6 INWARD
 - 2 MANIPULATE WITH TOOLS
 - 14 ZONE 14, BAY 6 INWARD
 - 16 5.22 CONN SUN SENS/HARN
 - 1 MANIPULATE BY HAND
 - 14 ZONE 14, BAY 6 INWARD
 - 2 MANIPULATE WITH TOOLS
 - 14 ZONE 14, BAY 6 INWARD
 - 17 5.22 CONN SUN SENS/HARN

APPENDIX 1 (Continued)

8

- 1 MANIPULATE BY HAND
 - 10 ZONE 10, BAY 2 INWARD
- 2 MANIPULATE WITH TOOLS
 - 10 ZONE 10, BAY 2 INWARD
- 23 4 PIPS PREPARATION
 - 1 4.9 REM SHEAR PLATE
 - 2 MANIPULATE WITH TOOLS
 - 110 MIDCOURSE SHEAR PLATE
 - 1 MANIPULATE BY HAND
 - 110 MIDCOURSE SHEAR PLATE
- 24 2 POSITION SC-BAY II VERTICAL
 - 1 2.1 ROTATE S/C
 - 16 MANEUVER SPACECRAFT
- 25 3 POSITION PIPS MOTOR
 - 2 3.2 ATT HOOKS
 - 1 MANIPULATE BY HAND
 - 111 MIDCOURSE MOTOR
 - 3 3.2 INST SNAP RINGS
 - 1 MANIPULATE BY HAND
 - 111 MIDCOURSE MOTOR
 - 4 3.1 LIFT PIPS
 - 3 MOVE W/CRANE
 - 111 MIDCOURSE MOTOR
- 26 5 INSTALL PIPS IN BAY II
 - 1 5.1 POS CRANE
 - 15 MANEUVER EQUIPMENT
 - 2 5.18 MOUNT PIPS
 - 16 MANEUVER SPACECRAFT
 - 10 ZONE 10, BAY 2 INWARD
 - 3 5.8 INSTALL PIPS
 - 1 MANIPULATE BY HAND
 - 10 ZONE 10, BAY 2 INWARD
 - 2 MANIPULATE WITH TOOLS
 - 10 ZONE 10, BAY 2 INWARD
 - 4 5.9 REM LIFT LUGS
 - 2 MANIPULATE WITH TOOLS
 - 10 ZONE 10, BAY 2 INWARD
 - 1 MANIPULATE BY HAND
 - 10 ZONE 10, BAY 2 INWARD
- 27 2 POSITION SC-VERTICAL
 - 1 2.1 ROTATE S/C
 - 16 MANEUVER SPACECRAFT
- 28 5 INSTALL PIPS (CONTINUED)
 - 4 5.22 CONN TEMP XDUCE
 - 1 MANIPULATE BY HAND
 - 10 ZONE 10, BAY 2 INWARD
 - 17 SECURED IN TENT
 - 2 MANIPULATE WITH TOOLS
 - 10 ZONE 10, BAY 2 INWARD
 - 6 5.17 ADJ BELL SPRINGS (8)
 - 1 MANIPULATE BY HAND
 - 10 ZONE 10, BAY 2 INWARD
 - 2 MANIPULATE WITH TOOLS
 - 10 ZONE 10, BAY 2 INWARD
- 29 4 LO-GAIN ANTENNA PREPARATION
 - 2 4.9 LOOS ANT RET BOLTS
 - 2 MANIPULATE WITH TOOLS
 - 113 LOW-GAIN ANTENNA
 - 1 MANIPULATE BY HAND
 - 113 LOW-GAIN ANTENNA
- 30 2 POSITION SC-Z PLANE HORIZ
 - 1 2.1 ROTATE S/C

APPENDIX 1 (Continued)

9

- 16 MANEUVER SPACECRAFT
- 31 4 LO-GAIN ANTENNA PREPARATION (CONTINUED)
 - 1 4.9 REM ANT SUPP BRKT
 - 2 MANIPULATE WITH TOOLS
 - 114 ANT SUPP BRACKET
 - 1 MANIPULATE BY HAND
 - 114 ANT SUPP BRACKET
- 32 5 INSTALL LO-GAIN ANTENNA
 - 1 5.14 REM ANT
 - 2 MANIPULATE WITH TOOLS
 - 113 LOW-GAIN ANTENNA
 - 1 MANIPULATE BY HAND
 - 113 LOW-GAIN ANTENNA
 - 1 MANIPULATE BY HAND
 - 113 LOW-GAIN ANTENNA
 - 2 5.18 MOUNT ANT (BAY VI)
 - 1 MANIPULATE BY HAND
 - 26 ZONE 26, LO-GAIN ANTENNA
 - 3 5.8 INST ANT
 - 1 MANIPULATE BY HAND
 - 26 ZONE 26, LO-GAIN ANTENNA
 - 2 MANIPULATE WITH TOOLS
 - 26 ZONE 26, LO-GAIN ANTENNA
 - 4 5.8 ATT ANT LONG DAMPER
 - 1 MANIPULATE BY HAND
 - 14 ZONE 14, BAY 6 INWARD
 - 1 MANIPULATE BY HAND
 - 14 ZONE 14, BAY 6 INWARD
 - 2 MANIPULATE WITH TOOLS
 - 14 ZONE 14, BAY 6 INWARD
 - 5 5.8 ATT ANT DAMPER
 - 1 MANIPULATE BY HAND
 - 14 ZONE 14, BAY 6 INWARD
 - 17 SECURED IN TENT
 - 17 SECURED IN TENT
 - 1 MANIPULATE BY HAND
 - 14 ZONE 14, BAY 6 INWARD
 - 2 MANIPULATE WITH TOOLS
 - 14 ZONE 14, BAY 6 INWARD
 - 6 5.26 ALIGN LO-GAIN ANT
 - 9 VISUAL INSPECTION
 - 7 5.27 ADJ LO-GAIN ANT
 - 9 VISUAL INSPECTION
 - 8 5.7 ROUTE CABLE
 - 1 MANIPULATE BY HAND
 - 14 ZONE 14, BAY 6 INWARD
- 33 4 HI-GAIN ANTENNA PREPARATION
 - 1 4.8 INSTALL HINGE BKTS
 - 1 MANIPULATE BY HAND
 - 10 ZONE 10, BAY 2 INWARD
 - 2 MANIPULATE WITH TOOLS
 - 10 ZONE 10, BAY 2 INWARD
 - 3 4.8 INST MTING MKT
 - 1 MANIPULATE BY HAND
 - 10 ZONE 10, BAY 2 INWARD
 - 2 MANIPULATE WITH TOOLS
 - 10 ZONE 10, BAY 2 INWARD
 - 5 4.8 INST LATCH BKT
 - 1 MANIPULATE BY HAND
 - 10 ZONE 10, BAY 2 INWARD
 - 2 MANIPULATE WITH TOOLS
 - 10 ZONE 10, BAY 2 INWARD

- 7 4.14 REM ANT/FRAME
 - 2 MANIPULATE WITH TOOLS
 - 4 ZONE 4, BAY 4
 - 1 MANIPULATE BY HAND
 - 4 ZONE 4, BAY 4
 - 1 MANIPULATE BY HAND
 - 4 ZONE 4, BAY 4
- 34 5 INSTALL HI-GAIN ANTENNA
 - 1 5.18 MOUNT ANT
 - 1 MANIPULATE BY HAND
 - 10 ZONE 10, BAY 2 INWARD
 - 2 5.8 INST ANT
 - 1 MANIPULATE BY HAND
 - 10 ZONE 10, BAY 2 INWARD
 - 2 MANIPULATE WITH TOOLS
 - 10 ZONE 10, BAY 2 INWARD
 - 3 5.27 ADJ HI-GAIN ANT
 - 1 MANIPULATE BY HAND
 - 25 ZONE 25, HI-GAIN ANTENNA
 - 6 5.4 POS STOP ARM
 - 1 MANIPULATE BY HAND
 - 25 ZONE 25, HI-GAIN ANTENNA
 - 7 5.8 INST STOP ARM
 - 1 MANIPULATE BY HAND
 - 25 ZONE 25, HI-GAIN ANTENNA
 - 2 MANIPULATE WITH TOOLS
 - 25 ZONE 25, HI-GAIN ANTENNA
 - 13 5.28 VER ANY DEPLOY
 - 9 VISUAL INSPECTION
 - 17 SECURED IN TENT
- 35 5 INSTALL MAGNETOMETER
 - 1 5.4 POS TH SHLD
 - 1 MANIPULATE BY HAND
 - 24 ZONE 24, PANEL 7 SPAR
 - 2 5.8 ATT TH SHLD
 - 1 MANIPULATE BY HAND
 - 24 ZONE 24, PANEL 7 SPAR
 - 2 MANIPULATE WITH TOOLS
 - 24 ZONE 24, PANEL 7 SPAR
 - 3 5.2 XPORT MAG
 - 1 MANIPULATE BY HAND
 - 67 MAGNETOMETER SENSOR
 - 4 5.4 POS MAG
 - 1 MANIPULATE BY HAND
 - 24 ZONE 24, PANEL 7 SPAR
 - 5 5.8 INST MAG
 - 1 MANIPULATE BY HAND
 - 24 ZONE 24, PANEL 7 SPAR
 - 2 MANIPULATE WITH TOOLS
 - 24 ZONE 24, PANEL 7 SPAR
 - 6 5.25 PERFORM CONT CHEC
 - 10 INSPECTION WITH GAUGES
 - 24 ZONE 24, PANEL 7 SPAR
 - 7 5.29 WRAP SIG HARN
 - 1 MANIPULATE BY HAND
 - 24 ZONE 24, PANEL 7 SPAR
 - 8 5.29 WRAP COAX, CELLI
 - 1 MANIPULATE BY HAND
 - 24 ZONE 24, PANEL 7 SPAR
 - 9 5.29 WRAP COAX LAMP
 - 1 MANIPULATE BY HAND
 - 24 ZONE 24, PANEL 7 SPAR

APPENDIX 1 (Continued)

11

- 10 5.7 ROUTE HARN ASSY
 - 1 MANIPULATE BY HAND
 - 24 ZONE 24, PANEL 7 SPAR
- 11 5.7 ROUTE HARN ASSY
 - 1 MANIPULATE BY HAND
 - 24 ZONE 24, PANEL 7 SPAR
- 12 5.7 ROUTE HARN ASSY
 - 17 SECURED IN TENT
 - 1 MANIPULATE BY HAND
 - 24 ZONE 24, PANEL 7 SPAR
- 36 5 INSTALL MAGNETOMETER (CONTINUED)
 - 5 5.8 ST-TIE HARN
 - 14 TIE HARNESSSES
 - 24 ZONE 24, PANEL 7 SPAR
 - 6 5.7 ROUTE CABLE LOOP
 - 1 MANIPULATE BY HAND
 - 24 ZONE 24, PANEL 7 SPAR
- 37 5 INSTALL SENSORS
 - 1 5.2 XPORT SUN SENS (2)
 - 1 MANIPULATE BY HAND
 - 75 SECONDARY SUN SENSOR
 - 2 5.4 POS SUN SENS
 - 1 MANIPULATE BY HAND
 - 10 ZONE 10, BAY 2 INWARD
 - 3 5.8 INST SENS
 - 1 MANIPULATE BY HAND
 - 10 ZONE 10, BAY 2 INWARD
 - 2 MANIPULATE WITH TOOLS
 - 10 ZONE 10, BAY 2 INWARD
 - 4 5.4 POS SUN SENS
 - 1 MANIPULATE BY HAND
 - 14 ZONE 14, BAY 6 INWARD
 - 5 5.8 INST SENS
 - 1 MANIPULATE BY HAND
 - 14 ZONE 14, BAY 6 INWARD
 - 2 MANIPULATE WITH TOOLS
 - 14 ZONE 14, BAY 6 INWARD
 - 6 5.2 XPORT EARTH SENS
 - 1 MANIPULATE BY HAND
 - 77 EARTH SENSOR
 - 7 5.4 POS EARTH SENS
 - 1 MANIPULATE BY HAND
 - 14 ZONE 14, BAY 6 INWARD
 - 8 5.8 INST EARTH SENS
 - 1 MANIPULATE BY HAND
 - 14 ZONE 14, BAY 6 INWARD
 - 2 MANIPULATE WITH TOOLS
 - 14 ZONE 14, BAY 6 INWARD
 - 11 5.7 ROUTE CABLE
 - 1 MANIPULATE BY HAND
 - 14 ZONE 14, BAY 6 INWARD
 - 12 5.9 REMOVE MAGNETOMETER
 - 2 MANIPULATE WITH TOOLS
 - 24 ZONE 24, PANEL 7 SPAR
 - 1 MANIPULATE BY HAND
 - 24 ZONE 24, PANEL 7 SPAR
 - 17 SECURED IN TENT
 - 1 MANIPULATE BY HAND
 - 57 MAGNETOMETER
 - 13 5.9 REMOVE SIT
 - 2 MANIPULATE WITH TOOLS
 - 16 ZONE 16, BAY 8 INWARD

- 1 MANIPULATE BY HAND
16 ZONE 16, HAY 8 INWARD
- 1 MANIPULATE BY HAND
58 SEP-INIT TIMER
- 38 4 EA 1 (POWER SUBSYSTEM) PREPARATION
 - 2 4.8 INST CHASSIS ASSY
 - 1 MANIPULATE BY HAND
79 CHASSIS ASSY (EA 1)
 - 1 MANIPULATE BY HAND
79 CHASSIS ASSY (EA 1)
 - 2 MANIPULATE WITH TOOLS
79 CHASSIS ASSY (EA 1)
 - 3 4.20 INST DUM INV
 - 1 MANIPULATE BY HAND
49 ZONE 49, EA 1 CASE
 - 1 MANIPULATE BY HAND
49 ZONE 49, EA 1 CASE
 - 2 MANIPULATE WITH TOOLS
49 ZONE 49, EA 1 CASE
 - 4 4.20 INST POWER SYNC
 - 1 MANIPULATE BY HAND
49 ZONE 49, EA 1 CASE
 - 1 MANIPULATE BY HAND
49 ZONE 49, EA 1 CASE
 - 2 MANIPULATE WITH TOOLS
49 ZONE 49, EA 1 CASE
 - 5 4.20 INST POWER DIST
 - 1 MANIPULATE BY HAND
49 ZONE 49, EA 1 CASE
 - 1 MANIPULATE BY HAND
49 ZONE 49, EA 1 CASE
 - 2 MANIPULATE WITH TOOLS
49 ZONE 49, EA 1 CASE
 - 6 4.20 INST MAN INVERT
 - 1 MANIPULATE BY HAND
49 ZONE 49, EA 1 CASE
 - 1 MANIPULATE BY HAND
49 ZONE 49, EA 1 CASE
 - 2 MANIPULATE WITH TOOLS
49 ZONE 49, EA 1 CASE
 - 7 4.20 INST PYRO CONT
 - 1 MANIPULATE BY HAND
49 ZONE 49, EA 1 CASE
 - 1 MANIPULATE BY HAND
49 ZONE 49, EA 1 CASE
 - 2 MANIPULATE WITH TOOLS
49 ZONE 49, EA 1 CASE
 - 8 4.20 INST MAIN INVERTER
 - 1 MANIPULATE BY HAND
49 ZONE 49, EA 1 CASE
 - 1 MANIPULATE BY HAND
49 ZONE 49, EA 1 CASE
 - 2 MANIPULATE WITH TOOLS
49 ZONE 49, EA 1 CASE
 - 9 4.20 INST BATT CHARG
 - 1 MANIPULATE BY HAND
49 ZONE 49, EA 1 CASE
 - 1 MANIPULATE BY HAND
49 ZONE 49, EA 1 CASE
 - 2 MANIPULATE WITH TOOLS
49 ZONE 49, EA 1 CASE
 - 10 4.20 INST 3-PHASE INV

APPENDIX 1 (Continued)

13

- 1 MANIPULATE BY HAND
 - 49 ZONE 49, EA I CASE
- 1 MANIPULATE BY HAND
 - 49 ZONE 49, EA I CASE
- 2 MANIPULATE WITH TOOLS
 - 49 ZONE 49, EA I CASE
- 11 4.7 ROUTE HARN
 - 1 MANIPULATE BY HAND
 - 49 ZONE 49, EA I CASE
- 12 4.22 CONN XDUCER
 - 1 MANIPULATE BY HAND
 - 49 ZONE 49, EA I CASE
 - 2 MANIPULATE WITH TOOLS
 - 49 ZONE 49, EA I CASE
- 13 4.8 INST MINGE BOX
 - 1 MANIPULATE BY HAND
 - 1 ZONE 1, BAY I
 - 2 MANIPULATE WITH TOOLS
 - 1 ZONE 1, BAY I
- 14 4.9 REL EA
 - 2 MANIPULATE WITH TOOLS
 - 79 CHASSIS ASSY(EA I)
 - 1 MANIPULATE BY HAND
 - 79 CHASSIS ASSY(EA I)
- 15 4.13 REM EA
 - 1 MANIPULATE BY HAND
 - 79 CHASSIS ASSY(EA I)
- 39 5 INSTALL EA I
 - 1 5.1 POS EA I
 - 1 MANIPULATE BY HAND
 - 1 ZONE 1, BAY I
 - 2 5.8 INST EA I
 - 1 MANIPULATE BY HAND
 - 1 ZONE 1, BAY I
 - 2 MANIPULATE WITH TOOLS
 - 1 ZONE 1, BAY I
 - 3 5.31 LR HARN FIT CHEC
 - 10 INSPECTION WITH GAUGES
 - 1 ZONE 1, BAY I
 - 4 5.31 LR HARN FIT CHEC
 - 10 INSPECTION WITH GAUGES
 - 1 ZONE 1, BAY I
- 40 4 EA III(SCIENCE SUBSYSTEM)PREPARATION
 - 2 4.8 INST CHASSIS ASSY
 - 1 MANIPULATE BY HAND
 - 90 CHASSIS ASSY(EA III)
 - 1 MANIPULATE BY HAND
 - 90 CHASSIS ASSY(EA III)
 - 2 MANIPULATE WITH TOOLS
 - 90 CHASSIS ASSY(EA III)
 - 3 4.20 INST PLAS ELEC
 - 1 MANIPULATE BY HAND
 - 50 ZONE 50, EA III CASE
 - 1 MANIPULATE BY HAND
 - 50 ZONE 50, EA III CASE
 - 2 MANIPULATE WITH TOOLS
 - 50 ZONE 50, EA III CASE
 - 4 4.20 INST PLAS ELEC
 - 1 MANIPULATE BY HAND
 - 50 ZONE 50, EA III CASE
 - 1 MANIPULATE BY HAND
 - 50 ZONE 50, EA III CASE

- 2 MANIPULATE WITH TOOLS
50 ZONE 50, EA III CASE
- 5 4.20 INST PLAS ELEC
 - 1 MANIPULATE BY HAND
50 ZONE 50, EA III CASE
 - 1 MANIPULATE BY HAND
50 ZONE 50, EA III CASE
 - 2 MANIPULATE WITH TOOLS
50 ZONE 50, EA III CASE
- 6 4.20 INST D F ELEC
 - 1 MANIPULATE BY HAND
50 ZONE 50, EA III CASE
 - 1 MANIPULATE BY HAND
50 ZONE 50, EA III CASE
 - 2 MANIPULATE WITH TOOLS
50 ZONE 50, EA III CASE
- 7 4.20 INST D F ELEC
 - 1 MANIPULATE BY HAND
50 ZONE 50, EA III CASE
 - 1 MANIPULATE BY HAND
50 ZONE 50, EA III CASE
 - 2 MANIPULATE WITH TOOLS
50 ZONE 50, EA III CASE
- 8 4.20 INST MAG ELEC
 - 1 MANIPULATE BY HAND
50 ZONE 50, EA III CASE
 - 1 MANIPULATE BY HAND
50 ZONE 50, EA III CASE
 - 2 MANIPULATE WITH TOOLS
50 ZONE 50, EA III CASE
- 9 4.20 INST MAG ELEC
 - 1 MANIPULATE BY HAND
50 ZONE 50, EA III CASE
 - 1 MANIPULATE BY HAND
50 ZONE 50, EA III CASE
 - 2 MANIPULATE WITH TOOLS
50 ZONE 50, EA III CASE
- 10 4.20 INST DAS POW CONV
 - 1 MANIPULATE BY HAND
50 ZONE 50, EA III CASE
 - 1 MANIPULATE BY HAND
50 ZONE 50, EA III CASE
 - 2 MANIPULATE WITH TOOLS
50 ZONE 50, EA III CASE
- 11 4.20 INST DAS LOG ELEC
 - 1 MANIPULATE BY HAND
50 ZONE 50, EA III CASE
 - 1 MANIPULATE BY HAND
50 ZONE 50, EA III CASE
 - 2 MANIPULATE WITH TOOLS
50 ZONE 50, EA III CASE
- 12 4.20 INST DAS LOG ELEC
 - 1 MANIPULATE BY HAND
50 ZONE 50, EA III CASE
 - 1 MANIPULATE BY HAND
50 ZONE 50, EA III CASE
 - 2 MANIPULATE WITH TOOLS
50 ZONE 50, EA III CASE
- 13 4.20 INST DAS LOG ELEC
 - 1 MANIPULATE BY HAND
50 ZONE 50, EA III CASE
 - 1 MANIPULATE BY HAND

50 ZONE 50, EA III CASE
2 MANIPULATE WITH TOOLS
50 ZONE 50, EA III CASE
14 4.20 INST DAS LOG ELEC
1 MANIPULATE BY HAND
50 ZONE 50, EA III CASE
1 MANIPULATE BY HAND
50 ZONE 50, EA III CASE
2 MANIPULATE WITH TOOLS
50 ZONE 50, EA III CASE
15 4.20 INST DAS LOG ELEC
1 MANIPULATE BY HAND
50 ZONE 50, EA III CASE
1 MANIPULATE BY HAND
50 ZONE 50, EA III CASE
2 MANIPULATE WITH TOOLS
50 ZONE 50, EA III CASE
16 4.20 INST DAS LOG ELEC
1 MANIPULATE BY HAND
50 ZONE 50, EA III CASE
1 MANIPULATE BY HAND
50 ZONE 50, EA III CASE
2 MANIPULATE WITH TOOLS
50 ZONE 50, EA III CASE
17 4.20 INST DAS LOG ELEC
1 MANIPULATE BY HAND
50 ZONE 50, EA III CASE
1 MANIPULATE BY HAND
50 ZONE 50, EA III CASE
2 MANIPULATE WITH TOOLS
50 ZONE 50, EA III CASE
18 4.20 INST DAS LOG ELEC
1 MANIPULATE BY HAND
50 ZONE 50, EA III CASE
1 MANIPULATE BY HAND
50 ZONE 50, EA III CASE
2 MANIPULATE WITH TOOLS
50 ZONE 50, EA III CASE
19 4.20 INST UV PHO ELEC
1 MANIPULATE BY HAND
50 ZONE 50, EA III CASE
1 MANIPULATE BY HAND
50 ZONE 50, EA III CASE
2 MANIPULATE WITH TOOLS
50 ZONE 50, EA III CASE
20 4.25 CONT CHEC
10 INSPECTION WITH GAUGES
50 ZONE 50, EA III CASE
17 SECURED IN TENT
42 4 EA III PREPARATION (CONTINUED)
1 4.25 CONT CHEC
10 INSPECTION WITH GAUGES
50 ZONE 50, EA III CASE
2 4.25 CONT CHEC
10 INSPECTION WITH GAUGES
50 ZONE 50, EA III CASE
3 4.25 CONT CHEC
10 INSPECTION WITH GAUGES
50 ZONE 50, EA III CASE
4 4.25 CONT CHEC
10 INSPECTION WITH GAUGES
50 ZONE 50, EA III CASE

- 5 4.7 ROUTE EA III HARN
 - 1 MANIPULATE BY HAND
 - 50 ZONE 50, EA III CASE
- 6 4.22 CON XDUCER
 - 1 MANIPULATE BY HAND
 - 50 ZONE 50, EA III CASE
 - 2 MANIPULATE WITH TOOLS
 - 50 ZONE 50, EA III CASE
- 7 4.7 ROUTE HARN (9W27)
 - 1 MANIPULATE BY HAND
 - 3 ZONE 3, BAY 3
- 8 4.7 ROUTE HARN
 - 1 MANIPULATE BY HAND
 - 3 ZONE 3, BAY 3
- 9 4.8 INST HARN
 - 1 MANIPULATE BY HAND
 - 3 ZONE 3, BAY 3
 - 2 MANIPULATE WITH TOOLS
 - 3 ZONE 3, BAY 3
- 11 4.8 INST MINGE BOX
 - 1 MANIPULATE BY HAND
 - 3 ZONE 3, BAY 3
 - 2 MANIPULATE WITH TOOLS
 - 3 ZONE 3, BAY 3
- 13 4.9 REL EA
 - 2 MANIPULATE WITH TOOLS
 - 90 CHASSIS ASSY(EA III)
 - 1 MANIPULATE BY HAND
 - 90 CHASSIS ASSY(EA III)
- 14 4.13 REM EA
 - 1 MANIPULATE BY HAND
 - 90 CHASSIS ASSY(EA III)
- 43 5 INSTALL EA III
 - 1 5.1 POS EA III
 - 1 MANIPULATE BY HAND
 - 3 ZONE 3, BAY 3
 - 1 MANIPULATE BY HAND
 - 3 ZONE 3, BAY 3
 - 2 MANIPULATE WITH TOOLS
 - 3 ZONE 3, BAY 3
- 3 5.31 L/R HARN FIT CHEC
 - 9 VISUAL INSPECTION
- 4 5.31 L/R HARN FIT CHEC
 - 9 VISUAL INSPECTION
- 44 4 EA IV(ENCO/COMM SUBSYSTEM)PREPARATION
 - 2 4.8 INST CHASSIS ASSY
 - 1 MANIPULATE BY HAND
 - 61 CHASSIS ASSY(EA IV)
 - 1 MANIPULATE BY HAND
 - 61 CHASSIS ASSY(EA IV)
 - 2 MANIPULATE WITH TOOLS
 - 61 CHASSIS ASSY(EA IV)
- 3 4.20 INST GEN
 - 1 MANIPULATE BY HAND
 - 51 ZONE 51, EA IV CASE
 - 1 MANIPULATE BY HAND
 - 51 ZONE 51, EA IV CASE
 - 2 MANIPULATE WITH TOOLS
 - 51 ZONE 51, EA IV CASE
- 4 4.20 INST ENC SUBASS
 - 1 MANIPULATE BY HAND
 - 51 ZONE 51, EA IV CASE

APPENDIX I (Continued)

17

- 1 MANIPULATE BY HAND
51 ZONE 51, EA IV CASE
- 2 MANIPULATE WITH TOOLS
51 ZONE 51, EA IV CASE
- 5 4.20 INST A/D CONV
 - 1 MANIPULATE BY HAND
51 ZONE 51, EA IV CASE
 - 1 MANIPULATE BY HAND
51 ZONE 51, EA IV CASE
 - 1 MANIPULATE BY HAND
51 ZONE 51, EA IV CASE
- 6 4.20 INST EVENT CNTRS
 - 1 MANIPULATE BY HAND
51 ZONE 51, EA IV CASE
 - 1 MANIPULATE BY HAND
51 ZONE 51, EA IV CASE
- 7 4.20 INST FUNC! SW
 - 1 MANIPULATE BY HAND
51 ZONE 51, EA IV CASE
 - 1 MANIPULATE BY HAND
51 ZONE 51, EA IV CASE
 - 2 MANIPULATE WITH TOOLS
51 ZONE 51, EA IV CASE
- 8 4.20 INST DECK 100/110
 - 1 MANIPULATE BY HAND
51 ZONE 51, EA IV CASE
 - 1 MANIPULATE BY HAND
51 ZONE 51, EA IV CASE
 - 2 MANIPULATE WITH TOOLS
51 ZONE 51, EA IV CASE
- 10 4.20 INST DECK 210/220
 - 1 MANIPULATE BY HAND
51 ZONE 51, EA IV CASE
 - 1 MANIPULATE BY HAND
51 ZONE 51, EA IV CASE
 - 2 MANIPULATE WITH TOOLS
51 ZONE 51, EA IV CASE
- 12 4.20 INST DECK 200/300
 - 1 MANIPULATE BY HAND
51 ZONE 51, EA IV CASE
 - 1 MANIPULATE BY HAND
51 ZONE 51, EA IV CASE
 - 2 MANIPULATE WITH TOOLS
51 ZONE 51, EA IV CASE
- 14 4.20 INST DECK 400/410
 - 1 MANIPULATE BY HAND
51 ZONE 51, EA IV CASE
 - 1 MANIPULATE BY HAND
51 ZONE 51, EA IV CASE
 - 2 MANIPULATE WITH TOOLS
51 ZONE 51, EA IV CASE
- 16 4.20 INST DECK 420/430
 - 1 MANIPULATE BY HAND
51 ZONE 51, EA IV CASE
 - 1 MANIPULATE BY HAND
51 ZONE 51, EA IV CASE
 - 2 MANIPULATE WITH TOOLS
51 ZONE 51, EA IV CASE
- 18 4.20 INST AMP
 - 1 MANIPULATE BY HAND
51 ZONE 51, EA IV CASE
 - 1 MANIPULATE BY HAND

51 ZONE 51, EA IV CASE
2 MANIPULATE WITH TOOLS
51 ZONE 51, EA IV CASE
19 4.20 INST POWER SUPP
1 MANIPULATE BY HAND
51 ZONE 51, EA IV CASE
1 MANIPULATE BY HAND
51 ZONE 51, EA IV CASE
2 MANIPULATE WITH TOOLS
51 ZONE 51, EA IV CASE
45 4 EA IV PREPARATION(CONTINUED)
1 4.20 INST COMM DETECT
1 MANIPULATE BY HAND
51 ZONE 51, EA IV CASE
1 MANIPULATE BY HAND
51 ZONE 51, EA IV CASE
2 MANIPULATE WITH TOOLS
51 ZONE 51, EA IV CASE
2 4.20 INST COMM DETECT
1 MANIPULATE BY HAND
51 ZONE 51, EA IV CASE
1 MANIPULATE BY HAND
51 ZONE 51, EA IV CASE
2 MANIPULATE WITH TOOLS
51 ZONE 51, EA IV CASE
3 4.20 INST COMM DETECT
1 MANIPULATE BY HAND
51 ZONE 51, EA IV CASE
1 MANIPULATE BY HAND
51 ZONE 51, EA IV CASE
2 MANIPULATE WITH TOOLS
51 ZONE 51, EA IV CASE
4 4.20 INST PROG CONT
1 MANIPULATE BY HAND
51 ZONE 51, EA IV CASE
1 MANIPULATE BY HAND
51 ZONE 51, EA IV CASE
2 MANIPULATE WITH TOOLS
51 ZONE 51, EA IV CASE
5 4.20 INST COMM DECOD
1 MANIPULATE BY HAND
51 ZONE 51, EA IV CASE
1 MANIPULATE BY HAND
51 ZONE 51, EA IV CASE
2 MANIPULATE WITH TOOLS
51 ZONE 51, EA IV CASE
6 4.20 INST COMM DECOD
1 MANIPULATE BY HAND
51 ZONE 51, EA IV CASE
1 MANIPULATE BY HAND
51 ZONE 51, EA IV CASE
2 MANIPULATE WITH TOOLS
51 ZONE 51, EA IV CASE
7 4.20 INST POWER SUPP
1 MANIPULATE BY HAND
51 ZONE 51, EA IV CASE
1 MANIPULATE BY HAND
51 ZONE 51, EA IV CASE
2 MANIPULATE WITH TOOLS
51 ZONE 51, EA IV CASE
8 4.7 ROUTE EA IV HARN
1 MANIPULATE BY HAND

- 4 ZONE 4, BAY 4
- 9 4.22 CON XDUCE
 - 1 MANIPULATE BY HAND
 - 51 ZONE 51, EA IV CASE
 - 2 MANIPULATE WITH TOOLS
 - 51 ZONE 51, EA IV CASE
- 10 4.22 CONN COMM HARN
 - 14 TIE HARNESSSES
 - 4 ZONE 4, BAY 4
- 11 4.22 CONN ENCODER HARN
 - 14 TIE HARNESSSES
 - 4 ZONE 4, BAY 4
- 12 4.8 INST HINGE BOX
 - 1 MANIPULATE BY HAND
 - 4 ZONE 4, BAY 4
 - 1 MANIPULATE BY HAND
 - 4 ZONE 4, BAY 4
 - 2 MANIPULATE WITH TOOLS
 - 4 ZONE 4, BAY 4
- 14 4.9 REL EA
 - 2 MANIPULATE WITH TOOLS
 - 61 CHASSIS ASSY(EA IV)
 - 1 MANIPULATE BY HAND
 - 61 CHASSIS ASSY(EA IV)
- 15 4.13 REM EA
 - 1 MANIPULATE BY HAND
 - 61 CHASSIS ASSY(EA IV)
 - 17 SECURED IN TENT
 - 17 SECURED IN TENT
- 46 5 INSTALL EA IV
 - 1 5.1 POS EA IV IN BAY
 - 1 MANIPULATE BY HAND
 - 4 ZONE 4, BAY 4
 - 2 5.8 INST EA IV
 - 1 MANIPULATE BY HAND
 - 4 ZONE 4, BAY 4
 - 2 MANIPULATE WITH TOOLS
 - 4 ZONE 4, BAY 4
 - 3 5.31 L/R HARN FIT CHEC
 - 9 VISUAL INSPECTION
 - 4 5.31 U/R HARN FIT CHEC
 - 9 VISUAL INSPECTION
- 47 4 EA VIRADIO-RECORDER SUBSYS) PREPARATION
 - 2 4.8 INST CHASSIS ASSY
 - 1 MANIPULATE BY HAND
 - 84 CHASSIS ASSY(EA V)
 - 1 MANIPULATE BY HAND
 - 84 CHASSIS ASSY(EA V)
 - 2 MANIPULATE WITH TOOLS
 - 84 CHASSIS ASSY(EA V)
 - 3 4.20 INST REC SUBASS
 - 1 MANIPULATE BY HAND
 - 52 ZONE 52, EA V CASE
 - 1 MANIPULATE BY HAND
 - 52 ZONE 52, EA V CASE
 - 2 MANIPULATE WITH TOOLS
 - 52 ZONE 52, EA V CASE
 - 4 4.20 INST REC SUBASS
 - 1 MANIPULATE BY HAND
 - 52 ZONE 52, EA V CASE
 - 1 MANIPULATE BY HAND
 - 52 ZONE 52, EA V CASE

- 2 MANIPULATE WITH TOOLS
52 ZONE 52, EA V CASE
- 5 4.20 INST TAPE REC
 - 1 MANIPULATE BY HAND
52 ZONE 52, EA V CASE
 - 1 MANIPULATE BY HAND
52 ZONE 52, EA V CASE
 - 2 MANIPULATE WITH TOOLS
52 ZONE 52, EA V CASE
- 6 4.20 INST TAPE ELEC
 - 1 MANIPULATE BY HAND
52 ZONE 52, EA V CASE
 - 1 MANIPULATE BY HAND
52 ZONE 52, EA V CASE
 - 2 MANIPULATE WITH TOOLS
52 ZONE 52, EA V CASE
- 7 4.20 INST TAPE ELEC
 - 1 MANIPULATE BY HAND
52 ZONE 52, EA V CASE
 - 1 MANIPULATE BY HAND
52 ZONE 52, EA V CASE
 - 2 MANIPULATE WITH TOOLS
52 ZONE 52, EA V CASE
- 8 4.20 INST TAPE ELEC
 - 1 MANIPULATE BY HAND
52 ZONE 52, EA V CASE
 - 1 MANIPULATE BY HAND
52 ZONE 52, EA V CASE
 - 2 MANIPULATE WITH TOOLS
52 ZONE 52, EA V CASE
- 9 4.20 INST TAPE ELEC
 - 1 MANIPULATE BY HAND
52 ZONE 52, EA V CASE
 - 1 MANIPULATE BY HAND
52 ZONE 52, EA V CASE
 - 2 MANIPULATE WITH TOOLS
52 ZONE 52, EA V CASE
- 10 4.20 INST XFORM-RECT
 - 1 MANIPULATE BY HAND
52 ZONE 52, EA V CASE
 - 1 MANIPULATE BY HAND
52 ZONE 52, EA V CASE
 - 2 MANIPULATE WITH TOOLS
52 ZONE 52, EA V CASE
- 11 4.7 ROUTE EA V HARN
 - 1 MANIPULATE BY HAND
5 ZONE 5, BAY 5
- 12 4.22 CON XDUCER
 - 1 MANIPULATE BY HAND
52 ZONE 52, EA V CASE
 - 2 MANIPULATE WITH TOOLS
52 ZONE 52, EA V CASE
- 13 4.22 CON REC HARN
 - 14 TIE HARNESSSES
52 ZONE 52, EA V CASE
- 14 4.22 CON RECO HARN
 - 14 TIE HARNESSSES
52 ZONE 52, EA V CASE
- 15 4.8 INST HINGE BOX
 - 1 MANIPULATE BY HAND
5 ZONE 5, BAY 5
 - 1 MANIPULATE BY HAND

APPENDIX I (Continued)

21

- 5 ZONE 5, BAY 5
- 2 MANIPULATE WITH TOOLS
- 5 ZONE 5, BAY 5
- 17 4.9 REL EA
- 2 MANIPULATE WITH TOOLS
- 84 CHASSIS ASSY(EA V)
- 1 MANIPULATE BY HAND
- 84 CHASSIS ASSY(EA V)
- 18 4.13 REM EA
- 1 MANIPULATE BY HAND
- 84 CHASSIS ASSY(EA V)
- 48 5 INSTALL EA V
- 1 5.1 POS EA V
- 1 MANIPULATE BY HAND
- 5 ZONE 5, BAY 5
- 2 5.8 INST EA V
- 1 MANIPULATE BY HAND
- 5 ZONE 5, BAY 5
- 2 MANIPULATE WITH TOOLS
- 5 ZONE 5, BAY 5
- 3 5.31 L/R HARN FIT CHEC
- 9 VISUAL INSPECTION
- 4 5.31 U/R HARN FIT CHEC
- 9 VISUAL INSPECTION
- 49 4 EA VI(RADIO SUBSYSTEM)PREPARATION
- 2 4.8 INST CHASSIS ASSY
- 1 MANIPULATE BY HAND
- 95 CHASSIS ASSY(EA VI)
- 1 MANIPULATE BY HAND
- 95 CHASSIS ASSY(EA VI)
- 2 MANIPULATE WITH TOOLS
- 95 CHASSIS ASSY(EA VI)
- 3 4.3 INSP EA VI
- 9 VISUAL INSPECTION
- 4 4.22 CON COMM HARN
- 14 TIE HARNESSSES
- 6 ZONE 6, BAY 6
- 5 4.8 INST HINGE BOX
- 1 MANIPULATE BY HAND
- 6 ZONE 6, BAY 6
- 1 MANIPULATE BY HAND
- 6 ZONE 6, BAY 6
- 2 MANIPULATE WITH TOOLS
- 6 ZONE 6, BAY 6
- 50 5 INSTALL EA VI
- 1 5.1 POS EA VI
- 1 MANIPULATE BY HAND
- 6 ZONE 6, BAY 6
- 2 5.8 INST EA VI
- 1 MANIPULATE BY HAND
- 6 ZONE 6, BAY 6
- 2 MANIPULATE WITH TOOLS
- 6 ZONE 6, BAY 6
- 3 5.31 L/R HARN FIT CHEC
- 10 INSPECTION WITH GAUGES
- 6 ZONE 6, BAY 6
- 4 5.31 U/R HARN FIT CHEC
- 10 INSPECTION WITH GAUGES
- 6 ZONE 6, BAY 6
- 51 4 EA VII(ACGS/CCS SUBSYSTEMS)PREPARATION
- 2 4.8 INST CHASSIS ASSY
- 1 MANIPULATE BY HAND

- 97 CHASSIS ASSY(EA VII)
- 1 MANIPULATE BY HAND
- 97 CHASSIS ASSY(EA VII)
- 2 MANIPULATE WITH TOOLS
- 97 CHASSIS ASSY(EA VII)
- 3 4.20 INST CONT ELECT
 - 1 MANIPULATE BY HAND
 - 54 ZONE 54, EA VII CASE
 - 1 MANIPULATE BY HAND
 - 54 ZONE 54, EA VII CASE
 - 2 MANIPULATE WITH TOOLS
 - 54 ZONE 54, EA VII CASE
- 4 4.20 INST CENT CLOCK
 - 1 MANIPULATE BY HAND
 - 54 ZONE 54, EA VII CASE
 - 1 MANIPULATE BY HAND
 - 54 ZONE 54, EA VII CASE
 - 2 MANIPULATE WITH TOOLS
 - 54 ZONE 54, EA VII CASE
- 5 4.20 INST LNCH CNTR
 - 1 MANIPULATE BY HAND
 - 54 ZONE 54, EA VII CASE
 - 1 MANIPULATE BY HAND
 - 54 ZONE 54, EA VII CASE
 - 2 MANIPULATE WITH TOOLS
 - 54 ZONE 54, EA VII CASE
- 6 4.20 INST END CNTR
 - 1 MANIPULATE BY HAND
 - 54 ZONE 54, EA VII CASE
 - 1 MANIPULATE BY HAND
 - 54 ZONE 54, EA VII CASE
 - 2 MANIPULATE WITH TOOLS
 - 54 ZONE 54, EA VII CASE
- 7 4.20 INST MAN CLOC
 - 1 MANIPULATE BY HAND
 - 54 ZONE 54, EA VII CASE
 - 1 MANIPULATE BY HAND
 - 54 ZONE 54, EA VII CASE
 - 2 MANIPULATE WITH TOOLS
 - 54 ZONE 54, EA VII CASE
- 8 4.20 INST MAN DURA
 - 1 MANIPULATE BY HAND
 - 54 ZONE 54, EA VII CASE
 - 1 MANIPULATE BY HAND
 - 54 ZONE 54, EA VII CASE
 - 2 MANIPULATE WITH TOOLS
 - 54 ZONE 54, EA VII CASE
- 9 4.20 INST REG
 - 1 MANIPULATE BY HAND
 - 54 ZONE 54, EA VII CASE
 - 1 MANIPULATE BY HAND
 - 54 ZONE 54, EA VII CASE
 - 2 MANIPULATE WITH TOOLS
 - 54 ZONE 54, EA VII CASE
- 10 4.20 INST INPUT DECOD
 - 1 MANIPULATE BY HAND
 - 54 ZONE 54, EA VII CASE
 - 1 MANIPULATE BY HAND
 - 54 ZONE 54, EA VII CASE
 - 2 MANIPULATE WITH TOOLS
 - 54 ZONE 54, EA VII CASE
- 11 4.20 INST XFORMER

- 1 MANIPULATE BY HAND
54 ZONE 54, EA VII CASE
- 1 MANIPULATE BY HAND
54 ZONE 54, EA VII CASE
- 2 MANIPULATE WITH TOOLS
54 ZONE 54, EA VII CASE
- 12 4.20 INST RELAY HOLD
 - 1 MANIPULATE BY HAND
54 ZONE 54, EA VII CASE
 - 1 MANIPULATE BY HAND
54 ZONE 54, EA VII CASE
 - 2 MANIPULATE WITH TOOLS
54 ZONE 54, EA VII CASE
- 13 4.7 ROUTE EA VII HARN
 - 1 MANIPULATE BY HAND
7 ZONE 7, BAY 7
- 14 4.22 CON XDUCE
 - 1 MANIPULATE BY HAND
54 ZONE 54, EA VII CASE
 - 2 MANIPULATE WITH TOOLS
54 ZONE 54, EA VII CASE
- 15 4.22 CON CCS HARN
 - 14 TIE HARNESSSES
54 ZONE 54, EA VII CASE
 - 17 SECURED IN TENT
- 16 4.22 CON ACES HARN
 - 14 TIE HARNESSSES
54 ZONE 54, EA VII CASE
- 17 4.8 INST HINGE BOX
 - 1 MANIPULATE BY HAND
7 ZONE 7, BAY 7
 - 1 MANIPULATE BY HAND
7 ZONE 7, BAY 7
 - 2 MANIPULATE WITH TOOLS
7 ZONE 7, BAY 7
- 19 4.9 REL EA
 - 2 MANIPULATE WITH TOOLS
97 CHASSIS ASSY(EA VII)
 - 1 MANIPULATE BY HAND
97 CHASSIS ASSY(EA VII)
- 52 5 INSTALL EA VII
 - 1 5.1 POS EA VII IN BAY
 - 1 MANIPULATE BY HAND
7 ZONE 7, BAY 7
 - 2 5.8 INST EA VII
 - 1 MANIPULATE BY HAND
7 ZONE 7, BAY 7
 - 2 MANIPULATE WITH TOOLS
7 ZONE 7, BAY 7
 - 3 5.31 L/R HARN FIT CHEC
 - 10 INSPECTION WITH GAUGES
54 ZONE 54, EA VII CASE
 - 4 5.31 U/R HARN FIT CHEC
 - 10 INSPECTION WITH GAUGES
54 ZONE 54, EA VII CASE
 - 5 5.2 XPORT GYRO
 - 1 MANIPULATE BY HAND
110 CONTROL GYRO
 - 6 5.4 POS GYRO
 - 1 MANIPULATE BY HAND
7 ZONE 7, BAY 7
 - 7 5.8 INST GYRO

- 1 MANIPULATE BY HAND
7 ZONE 7, BAY 7
- 2 MANIPULATE WITH TOOLS
7 ZONE 7, BAY 7
- 53 4 EA VIII (POWER SUBSYSTEM) PREPARATION
 - 1 4.9 REL BATT
 - 2 MANIPULATE WITH TOOLS
111 BATTERY-4A14 (EA VIII)
 - 1 MANIPULATE BY HAND
111 BATTERY-4A14 (EA VIII)
 - 3 4.13 REM BATT
 - 1 MANIPULATE BY HAND
111 BATTERY-4A14 (EA VIII)
 - 4 4.8 REM DUST CAPS
 - 1 MANIPULATE BY HAND
111 BATTERY-4A14 (EA VIII)
 - 7 4.8 INST HINGE BOX
 - 1 MANIPULATE BY HAND
8 ZONE 8, BAY 8
 - 1 MANIPULATE BY HAND
8 ZONE 8, BAY 8
 - 2 MANIPULATE WITH TOOLS
8 ZONE 8, BAY 8
 - 9 4.9 REL EA
 - 2 MANIPULATE WITH TOOLS
111 BATTERY-4A14 (EA VIII)
 - 1 MANIPULATE BY HAND
111 BATTERY-4A14 (EA VIII)
 - 10 4.13 REM EA
 - 1 MANIPULATE BY HAND
111 BATTERY-4A14 (EA VIII)
- 54 5 INSTALL EA VIII
 - 1 5.1 POS EA VIII
 - 1 MANIPULATE BY HAND
8 ZONE 8, BAY 8
 - 2 5.8 INST EA VIII
 - 1 MANIPULATE BY HAND
8 ZONE 8, BAY 8
 - 2 MANIPULATE WITH TOOLS
8 ZONE 8, BAY 8
- 55 5 INSTALL CANOPUS SENSOR IN BAY VIII
 - 1 5.2 XPORT CAN SENS
 - 1 MANIPULATE BY HAND
62 CANOPUS SENSOR
 - 2 5.4 POS CAN SEN
 - 1 MANIPULATE BY HAND
8 ZONE 8, BAY 8
 - 3 5.8 INST CAN SENS
 - 1 MANIPULATE BY HAND
8 ZONE 8, BAY 8
 - 2 MANIPULATE WITH TOOLS
8 ZONE 8, BAY 8
 - 4 5.4 POS HOOD
 - 1 MANIPULATE BY HAND
63 CANOPUS SENS BAFFLE HOOD
 - 5 5.8 INST HOOD
 - 1 MANIPULATE BY HAND
8 ZONE 8, BAY 8
 - 2 MANIPULATE WITH TOOLS
8 ZONE 8, BAY 8
- 57 5 INSTALL PLANET SENSOR IN BAY VIII
 - 1 5.2 XPORT PLAN SENS

- 1 MANIPULATE BY HAND
- 64 PLANET SENSOR
- 2 5.4 POS PLAN SENS
 - 1 MANIPULATE BY HAND
 - 8 ZONE 8, BAY 8
- 3 5.8 INST PLAN SENS
 - 1 MANIPULATE BY HAND
 - 8 ZONE 8, BAY 8
 - 2 MANIPULATE WITH TOOLS
 - 8 ZONE 8, BAY 8
- 58 5 INSTALL TERMINATOR SENSOR IN BAY II
 - 1 5.2 XPORT TERM SENS
 - 1 MANIPULATE BY HAND
 - 65 TERMINATOR SENSOR
 - 17 SECURED IN TENT
 - 2 5.4 POS TERM SENS
 - 1 MANIPULATE BY HAND
 - 2 ZONE 2, BAY 2
 - 3 5.8 INST TERM SENS
 - 1 MANIPULATE BY HAND
 - 2 ZONE 2, BAY 2
 - 2 MANIPULATE WITH TOOLS
 - 2 ZONE 2, BAY 2
 - 4 9.1 REM BATTERY
 - 2 MANIPULATE WITH TOOLS
 - BATTERY(+A VIII)
 - 1 MANIPULATE BY HAND
 - 29 BATTERY(+A VIII)
- 59 5 INSTALL TRD IN BAY IV
 - 1 5.2 XPORT TRD
 - 1 MANIPULATE BY HAND
 - 66 TRAPPED RAD DETECTOR
 - 2 5.4 POS TRD
 - 1 MANIPULATE BY HAND
 - 4 ZONE 4, BAY 4
 - 3 5.8 INST TRD
 - 1 MANIPULATE BY HAND
 - 4 ZONE 4, BAY 4
 - 2 MANIPULATE WITH TOOLS
 - 4 ZONE 4, BAY 4
 - 4 5.25 TRD CONT CHEC
 - 10 INSPECTION WITH GAUGES
 - 4 ZONE 4, BAY 4
- 60 5 INSTALL UV PHOTOMETER IN BAY II
 - 1 5.2 XPORT UV PHOT
 - 1 MANIPULATE BY HAND
 - 67 UV PHOTOMETER
 - 2 5.4 POS UV PHOT
 - 1 MANIPULATE BY HAND
 - 2 ZONE 2, BAY 2
 - 3 5.8 INST UV PHOT
 - 1 MANIPULATE BY HAND
 - 2 ZONE 2, BAY 2
 - 2 MANIPULATE WITH TOOLS
 - 2 ZONE 2, BAY 2
 - 4 5.25 PHO CONT CHEC
 - 10 INSPECTION WITH GAUGES
 - 2 ZONE 2, BAY 2
 - 5 5.7 ROUTE SCI SIG HARN
 - 1 MANIPULATE BY HAND
 - 27 ZONE 27, TOP RING TRAY
- 61 5 INSTALL UV PHOTOMETER (CONTINUED)

APPENDIX 1 (Continued)

26

- 1 5.22 INST CON
11 MATE (DEMA)E CONNECTORS
27 ZONE 27, TOP RING TRAY
- 2 5.22 INST CON
11 MATE (DEMA)E CONNECTORS
27 ZONE 27, TOP RING TRAY
- 3 5.7 ROUTE L/O WIRES
1 MANIPULATE BY HAND
27 ZONE 27, TOP RING TRAY
- 4 5.22 INST CON
11 MATE (DEMA)E CONNECTORS
27 ZONE 27, TOP RING TRAY
17 SECURED IN TENT
- 62 5 INSTALL TEMP CONTROL LOUVERS IN BAY I
 - 1 5.2 XPORT LOUV CASE
1 MANIPULATE BY HAND
69 LOUVER CASE (BAY I)
 - 2 5.4 POS LOUV CASE
1 MANIPULATE BY HAND
1 ZONE 1, BAY I
 - 3 5.8 INST LOUV CASE
1 MANIPULATE BY HAND
1 ZONE 1, BAY I
2 MANIPULATE WITH TOOLS
1 ZONE 1, BAY I
 - 4 5.2 XPORT LOUV (22)
1 MANIPULATE BY HAND
76 LOUVERS
 - 5 5.4 POS LOUV (22)
1 MANIPULATE BY HAND
1 ZONE 1, BAY I
 - 6 5.8 INST LOUV (22)
1 MANIPULATE BY HAND
1 ZONE 1, BAY I
2 MANIPULATE WITH TOOLS
1 ZONE 1, BAY I
- 63 5 INSTALL TEMP CONTROL LOUVERS IN BAY III
 - 1 5.2 XPORT LOUV CASE
1 MANIPULATE BY HAND
70 LOUVER CASE (BAY III)
 - 2 5.4 POS LOUV CASE
1 MANIPULATE BY HAND
3 ZONE 3, BAY 3
 - 3 5.8 INST LOUV CASE
1 MANIPULATE BY HAND
3 ZONE 3, BAY 3
2 MANIPULATE WITH TOOLS
3 ZONE 3, BAY 3
 - 4 5.2 XPORT LOUV (22)
1 MANIPULATE BY HAND
76 LOUVERS
 - 5 5.4 POS LOUV (22)
1 MANIPULATE BY HAND
3 ZONE 3, BAY 3
 - 6 5.8 INST LOUV (22)
1 MANIPULATE BY HAND
3 ZONE 3, BAY 3
2 MANIPULATE WITH TOOLS
3 ZONE 3, BAY 3
- 64 5 INSTALL TEMP CONTROL LOUVERS IN BAY IV
 - 1 5.2 XPORT LOUV CASE
1 MANIPULATE BY HAND

- 71 LOUVER CASE (BAY IV)
- 2 5.4 POS LOUV CASE
 - 1 MANIPULATE BY HAND
 - 4 ZONE 4, BAY 4
- 3 5.8 INST LOUV CASE
 - 1 MANIPULATE BY HAND
 - 4 ZONE 4, BAY 4
 - 2 MANIPULATE WITH TOOLS
 - 4 ZONE 4, BAY 4
- 4 5.2 XPORT LOUV (22)
 - 1 MANIPULATE BY HAND
 - 76 LOUVERS
 - 17 SECURED IN TENT
- 5 5.4 POS LOUV (22)
 - 1 MANIPULATE BY HAND
 - 4 ZONE 4, BAY 4
- 6 5.8 INST LOUV (22)
 - 1 MANIPULATE BY HAND
 - 4 ZONE 4, BAY 4
 - 2 MANIPULATE WITH TOOLS
 - 4 ZONE 4, BAY 4
- 65 5 INSTALL TEMP CONTROL LOUVERS IN BAY V
 - 1 5.2 XPORT LOUV CASE
 - 1 MANIPULATE BY HAND
 - 72 LOUVER CASE (BAY V)
 - 2 5.4 POS LOUV CASE
 - 1 MANIPULATE BY HAND
 - 5 ZONE 5, BAY 5
 - 3 5.8 INST LOUV CASE
 - 1 MANIPULATE BY HAND
 - 5 ZONE 5, BAY 5
 - 2 MANIPULATE WITH TOOLS
 - 5 ZONE 5, BAY 5
 - 4 5.2 XPORT LOUV (18)
 - 1 MANIPULATE BY HAND
 - 76 LOUVERS
 - 5 5.4 POS LOUV (18)
 - 1 MANIPULATE BY HAND
 - 5 ZONE 5, BAY 5
 - 6 5.8 INST LOUV (18)
 - 1 MANIPULATE BY HAND
 - 5 ZONE 5, BAY 5
 - 2 MANIPULATE WITH TOOLS
 - 5 ZONE 5, BAY 5
- 65 5 INSTALL TEMP CONTROL LOUVERS IN BAY VI
 - 1 5.2 XPORT LOUV CASE
 - 1 MANIPULATE BY HAND
 - 73 LOUVER CASE (BAY VI)
 - 2 5.4 POS LOUV CASE
 - 1 MANIPULATE BY HAND
 - 6 ZONE 6, BAY 6
 - 3 5.8 INST LOUV CASE
 - 1 MANIPULATE BY HAND
 - 6 ZONE 6, BAY 6
 - 2 MANIPULATE WITH TOOLS
 - 6 ZONE 6, BAY 6
 - 4 5.2 XPORT LOUV (18)
 - 1 MANIPULATE BY HAND
 - 76 LOUVERS
 - 5 5.4 POS LOUV (18)
 - 1 MANIPULATE BY HAND
 - 6 ZONE 6, BAY 6

APPENDIX 1 (Continued)

28

- 6 5.8 INST LOUV(18)
 - 1 MANIPULATE BY HAND
 - 6 ZONE 6, BAY 6
 - 2 MANIPULATE WITH TOOLS
 - 6 ZONE 6, BAY 6
- 66 5 INSTALL TEMP CONTROL LOUVERS IN BAY VII
 - 1 5.2 XPORT LOUV CASE
 - 1 MANIPULATE BY HAND
 - 74 LOUVER CASE(BAY VII)
 - 2 5.4 POS LOUV CASE
 - 1 MANIPULATE BY HAND
 - 7 ZONE 7, BAY 7
 - 3 5.8 INST LOUV CASE
 - 1 MANIPULATE BY HAND
 - 7 ZONE 7, BAY 7
 - 2 MANIPULATE WITH TOOLS
 - 7 ZONE 7, BAY 7
 - 4 5.2 XPORT LOUV(22)
 - 1 MANIPULATE BY HAND
 - 76 LOUVERS
 - 5 5.4 POS LOUV(22)
 - 1 MANIPULATE BY HAND
 - 7 ZONE 7, BAY 7
 - 6 5.8 INST LOUV(22)
 - 1 MANIPULATE BY HAND
 - 7 ZONE 7, BAY 7
 - 2 MANIPULATE WITH TOOLS
 - 7 ZONE 7, BAY 7
- 67 5 INSTALL TEMP CONTROL LOUVERS IN BAY VIII
 - 1 5.2 XPORT LOUV CASE
 - 1 MANIPULATE BY HAND
 - 75 LOUVER CASE(BAY VIII)
 - 2 5.4 POS LOUV CASE
 - 1 MANIPULATE BY HAND
 - 8 ZONE 8, BAY 8
 - 3 5.8 INST LOUV CASE
 - 1 MANIPULATE BY HAND
 - 8 ZONE 8, BAY 8
 - 2 MANIPULATE WITH TOOLS
 - 8 ZONE 8, BAY 8
 - 4 5.2 XPORT LOUV(22)
 - 1 MANIPULATE BY HAND
 - 76 LOUVERS
 - 5 5.4 POS LOUV(22)
 - 1 MANIPULATE BY HAND
 - 8 ZONE 8, BAY 8
 - 6 5.8 INST LOUV(22)
 - 1 MANIPULATE BY HAND
 - 8 ZONE 8, BAY 8
 - 17 SECURED IN TENT
 - 17 SECURED IN TENT
 - 2 MANIPULATE WITH TOOLS
 - 8 ZONE 8, BAY 8
- 68 5 INSTALL CABLE TROUGH BLANKET
 - 1 5.4 POS TROUGH BLANKET
 - 1 MANIPULATE BY HAND
 - 27 ZONE 27, TOP RING TRAY
 - 2 5.8 INST TROUGH BLANKE
 - 1 MANIPULATE BY HAND
 - 27 ZONE 27, TOP RING TRAY
 - 2 MANIPULATE WITH TOOLS
 - 27 ZONE 27, TOP RING TRAY

APPENDIX 1 (Continued)

29

- 3 5.29 TAPE TROUGH BLANK
1 MANIPULATE BY HAND
27 ZONE 27, TOP RING TRAY
- 69 5 INSTALL THERMAL SHIELDS
1 5.9 REM SCREWS-EA I
2 MANIPULATE WITH TOOLS
1 ZONE 1, BAY I
1 MANIPULATE BY HAND
1 ZONE 1, BAY I
2 5.8 INSTALL ATTACH ANG
1 MANIPULATE BY HAND
1 ZONE 1, BAY I
2 MANIPULATE WITH TOOLS
1 ZONE 1, BAY I
3 5.9 REM SCREWS-EA II
2 MANIPULATE WITH TOOLS
2 ZONE 2, BAY 2
2 MANIPULATE WITH TOOLS
2 ZONE 5, BAY 2
4 5.8 INSTALL ATTACH ANG
1 MANIPULATE BY HAND
2 ZONE 2, BAY 2
2 MANIPULATE WITH TOOLS
2 ZONE 2, BAY 2
5 5.9 REM SCREWS-EA III
2 MANIPULATE WITH TOOLS
3 ZONE 3, BAY 3
1 MANIPULATE BY HAND
3 ZONE 3, BAY 3
6 5.8 INSTALL ATTACH ANG
1 MANIPULATE BY HAND
3 ZONE 3, BAY 3
2 MANIPULATE WITH TOOLS
3 ZONE 3, BAY 3
7 5.9 REM SCREWS-EA IV
2 MANIPULATE WITH TOOLS
4 ZONE 4, BAY 4
1 MANIPULATE BY HAND
4 ZONE 4, BAY 4
8 5.8 INSTALL ATTACH ANG
1 MANIPULATE BY HAND
4 ZONE 4, BAY 4
2 MANIPULATE WITH TOOLS
4 ZONE 4, BAY 4
9 5.9 REM SCREWS-EA V
2 MANIPULATE WITH TOOLS
5 ZONE 5, BAY 5
1 MANIPULATE BY HAND
5 ZONE 5, BAY 5
10 5.8 INSTALL ATTACH ANG
1 MANIPULATE BY HAND
5 ZONE 5, BAY 5
2 MANIPULATE WITH TOOLS
5 ZONE 5, BAY 5
11 5.9 REM SCREWS-EA VI
2 MANIPULATE WITH TOOLS
6 ZONE 6, BAY 6
1 MANIPULATE BY HAND
6 ZONE 6, BAY 6
12 5.8 INSTALL ATTACH ANG
1 MANIPULATE BY HAND
6 ZONE 6, BAY 6

APPENDIX 1 (Continued)

30

- 2 MANIPULATE WITH TOOLS
6 ZONE 6, BAY 6
- 13 5.9 REM SCREWS-EA VII
2 MANIPULATE WITH TOOLS
7 ZONE 7, BAY 7
1 MANIPULATE BY HAND
7 ZONE 7, BAY 7
- 14 5.8 INSTALL ATTACH ANG
1 MANIPULATE BY HAND
7 ZONE 7, BAY 7
2 MANIPULATE WITH TOOLS
7 ZONE 7, BAY 7
- 15 5.9 REM SCREWS-EA VIII
2 MANIPULATE WITH TOOLS
8 ZONE 8, BAY 8
1 MANIPULATE BY HAND
8 ZONE 8, BAY 8
- 16 5.8 INSTALL ATTACH ANG
1 MANIPULATE BY HAND
8 ZONE 8, BAY 8
2 MANIPULATE WITH TOOLS
8 ZONE 8, BAY 8
- 17 5.22 CONN WR-LOCK CONN
11 MATE (DEMATE) CONNECTORS
8 ZONE 8, BAY 8
- 18 5.2 XPORT CHAN SHIELDS
1 MANIPULATE BY HAND
78 UPPER CHAN SHLD-BAY I
80 UPPER CHAN SHLD-BAY IV
81 UPPER CHAN SHLD-BAY V
82 UPPER CHAN SHLD-BAY VI
83 UPPER CHAN SHLD-BAY VII
84 UPPER CHAN SHLD-BAY VIII
- 19 5.9 REM SCREWS-EA I
2 MANIPULATE WITH TOOLS
1 ZONE 1, BAY I
1 MANIPULATE BY HAND
1 ZONE 1, BAY I
- 20 5.4 POS CHAN SHIELD
1 MANIPULATE BY HAND
1 ZONE 1, BAY I
- 17 SECURED IN TENT
- 70 5 INSTALL THERMAL SHIELDS (CONTINUED)
- 1 5.8 INSTALL CHAN SHIELD
1 MANIPULATE BY HAND
1 ZONE 1, BAY I
2 MANIPULATE WITH TOOLS
1 ZONE 1, BAY I
- 2 5.9 REM SCREWS-EA IV
2 MANIPULATE WITH TOOLS
4 ZONE 4, BAY 4
1 MANIPULATE BY HAND
4 ZONE 4, BAY 4
- 3 5.4 POS CHAN SHIELD
1 MANIPULATE BY HAND
4 ZONE 4, BAY 4
- 4 5.8 INSTALL CHAN SHIELD
1 MANIPULATE BY HAND
4 ZONE 4, BAY 4
2 MANIPULATE WITH TOOLS
4 ZONE 4, BAY 4
- 5 5.9 REM SCREWS-EA V

- 2 MANIPULATE WITH TOOLS
5 ZONE 5, BAY 5
- 1 MANIPULATE BY HAND
5 ZONE 5, BAY 5
- 6 5.4 POS CHAN SHIELD
1 MANIPULATE BY HAND
5 ZONE 5, BAY 5
- 7 5.8 INSTALL CHAN SHIELD
1 MANIPULATE BY HAND
5 ZONE 5, BAY 5
2 MANIPULATE WITH TOOLS
5 ZONE 5, BAY 5
- 8 5.9 REM SCREWS-EA VI
2 MANIPULATE WITH TOOLS
6 ZONE 6, BAY 6
1 MANIPULATE BY HAND
6 ZONE 6, BAY 6
- 9 5.4 POS CHAN SHIELD
1 MANIPULATE BY HAND
6 ZONE 6, BAY 6
- 10 5.8 INSTALL CHAN SHIELD
1 MANIPULATE BY HAND
6 ZONE 6, BAY 6
2 MANIPULATE WITH TOOLS
6 ZONE 6, BAY 6
- 11 5.9 REM SCREWS-EA VII
2 MANIPULATE WITH TOOLS
7 ZONE 7, BAY 7
1 MANIPULATE BY HAND
7 ZONE 7, BAY 7
- 12 5.4 POS CHAN SHIELD
1 MANIPULATE BY HAND
7 ZONE 7, BAY 7
- 13 5.8 INSTALL CHAN SHIELD
1 MANIPULATE BY HAND
7 ZONE 7, BAY 7
2 MANIPULATE WITH TOOLS
7 ZONE 7, BAY 7
- 14 5.9 REM SCREWS-EA VIII
2 MANIPULATE WITH TOOLS
8 ZONE 8, BAY 8
1 MANIPULATE BY HAND
8 ZONE 8, BAY 8
- 15 5.4 POS CHAN SHIELD
1 MANIPULATE BY HAND
8 ZONE 8, BAY 8
- 16 5.8 INSTALL CHAN SHIELD
1 MANIPULATE BY HAND
8 ZONE 8, BAY 8
2 MANIPULATE WITH TOOLS
8 ZONE 8, BAY 8
- 71 5 INSTALL THERMAL BLANKETS
1 5.2 XPORT SHADE BLANKET
1 MANIPULATE BY HAND
85 UPPER THERM BLANKET
- 2 5.4 POS SHADE BLANKET
1 MANIPULATE BY HAND
46 ZONE 46, OCTAGON TOP
- 3 5.8 INSTALL BLANKET
1 MANIPULATE BY HAND
46 ZONE 46, OCTAGON TOP
2 MANIPULATE WITH TOOLS

APPENDIX 1 (Continued)

32

- 46 ZONE 46, OCTAGON TOP
- 4 5.5 ATTACH FLAPS
 - 1 MANIPULATE BY HAND
- 46 ZONE 46, OCTAGON TOP
- 17 SECURED IN TENT
- 5 5.2 XPORT PEDES BLANKET
 - 1 MANIPULATE BY HAND
- 86 PEDESTAL BLANKET
- 6 5.4 POS PEDES BLANKET
 - 1 MANIPULATE BY HAND
- 2 ZONE 2, BAY 2
- 7 5.8 INSTALL BLANKET
 - 1 MANIPULATE BY HAND
- 2 ZONE 2, BAY 2
- 2 MANIPULATE WITH TOOLS
- 2 ZONE 2, BAY 2
- 8 5.5 ATTACH FLAPS
 - 1 MANIPULATE BY HAND
- 2 ZONE 2, BAY 2
- 9 5.2 XPORT THERM BLANKET
 - 1 MANIPULATE BY HAND
- 88 THERMAL SHIELD BLANKET
- 10 5.4 POS THERM BLANKET
 - 1 MANIPULATE BY HAND
- 4 ZONE 4, BAY 4
- 11 5.8 INSTALL BLANKET
 - 1 MANIPULATE BY HAND
- 4 ZONE 4, BAY 4
- 2 MANIPULATE WITH TOOLS
- 4 ZONE 4, BAY 4
- 12 5.5 ATTACH FLAPS
 - 1 MANIPULATE BY HAND
- 4 ZONE 4, BAY 4
- 13 5.5 ATTACH CORDS(8)
 - 1 MANIPULATE BY HAND
- 4 ZONE 4, BAY 4
- 14 5.24 REMOVE PROBE COVER
 - 1 MANIPULATE BY HAND
- 11 ZONE 11, BAY 3 INWARD
- 15 5.9 REMOVE EA SCREWS
 - 2 MANIPULATE WITH TOOLS
- 11 ZONE 11, BAY 3 INWARD
- 1 MANIPULATE BY HAND
- 11 ZONE 11, BAY 3 INWARD
- 16 5.7 THREAD LACING CORD
 - 1 MANIPULATE BY HAND
- 46 ZONE 46, OCTAGON TOP
- 17 5.2 XPORT THERM BLANKET
 - 1 MANIPULATE BY HAND
- 87 LOWER THERM BLANKET
- 18 5.4 POS THERM BLANKET
 - 1 MANIPULATE BY HAND
- 47 ZONE 47, OCTAGON BOTTOM
- 19 5.8 INSTALL BLANKET
 - 1 MANIPULATE BY HAND
- 47 ZONE 47, OCTAGON BOTTOM
- 2 MANIPULATE WITH TOOLS
- 47 ZONE 47, OCTAGON BOTTOM
- 20 5.5 FIT BLANKET
 - 1 MANIPULATE BY HAND
- 47 ZONE 47, OCTAGON BOTTOM
- 72 5 INSTALL THERMAL BLANKETS(CONTINUED)

APPENDIX I (Continued)

33

- 1 5.9 REMOVE EA SCREWS
 - 2 MANIPULATE WITH TOOLS
 - 47 ZONE 47, OCTAGON BOTTOM
 - 1 MANIPULATE BY HAND
 - 47 ZONE 47, OCTAGON BOTTOM
- 2 5.8 INSTALL RETAINERS
 - 1 MANIPULATE BY HAND
 - 47 ZONE 47, OCTAGON BOTTOM
 - 2 MANIPULATE WITH TOOLS
 - 47 ZONE 47, OCTAGON BOTTOM
- 3 5.8 INSTALL CLIPS
 - 1 MANIPULATE BY HAND
 - 47 ZONE 47, OCTAGON BOTTOM
 - 2 MANIPULATE WITH TOOLS
 - 47 ZONE 47, OCTAGON BOTTOM
- 17 SECURED IN TENT
- 73 4 BAY III SOLAR PANEL PREPARATION
 - 1 4.13 REL PANEL/TRAILER
 - 2 MANIPULATE WITH TOOLS
 - 97 SOLAR PANEL (BAY III)
 - 1 MANIPULATE BY HAND
 - 97 SOLAR PANEL (BAY III)
 - 2 4.14 REM PANEL/TRAILER
 - 1 MANIPULATE BY HAND
 - 97 SOLAR PANEL (BAY III)
 - 3 4.12 INSTALL FRAME/DOLLY
 - 1 MANIPULATE BY HAND
 - 97 SOLAR PANEL (BAY III)
 - 2 MANIPULATE WITH TOOLS
 - 97 SOLAR PANEL (BAY III)
 - 4 4.1 ROTATE PANEL DOWN
 - 1 MANIPULATE BY HAND
 - 97 SOLAR PANEL (BAY III)
 - 5 4.3 INSPECT PANEL
 - 9 VISUAL INSPECTION
 - 97 SOLAR PANEL (BAY III)
 - 6 4.7 ROUTE PANEL HARN
 - 1 MANIPULATE BY HAND
 - 104 SOL PAN SQUIB HARNESS
 - 7 4.8 INSTALL PANEL HARN
 - 1 MANIPULATE BY HAND
 - 97 SOLAR PANEL (BAY III)
 - 1 MANIPULATE BY HAND
 - 97 SOLAR PANEL (BAY III)
 - 2 MANIPULATE WITH TOOLS
 - 97 SOLAR PANEL (BAY III)
 - 8 4.2 XPORT BOOST DAMPERS
 - 1 MANIPULATE BY HAND
 - 109 BOOST DAMPER
 - 110 BOOST DAMPER
 - 9 4.4 POS BOOST DAMPER
 - 1 MANIPULATE BY HAND
 - 97 SOLAR PANEL (BAY III)
 - 10 4.8 INSTALL DAMPER
 - 1 MANIPULATE BY HAND
 - 97 SOLAR PANEL (BAY III)
 - 2 MANIPULATE WITH TOOLS
 - 97 SOLAR PANEL (BAY III)
 - 11 4.4 POS BOOST DAMPER
 - 1 MANIPULATE BY HAND
 - 97 SOLAR PANEL (BAY III)
 - 12 4.8 INSTALL DAMPER

APPENDIX 1 (Continued)

34

- 1 MANIPULATE BY HAND
97 SOLAR PANEL (BAY III)
- 2 MANIPULATE WITH TOOLS
97 SOLAR PANEL (BAY III)
- 13 4.8 INSTALL LATCH BRKT
1 MANIPULATE BY HAND
97 SOLAR PANEL (BAY III)
- 2 MANIPULATE WITH TOOLS
97 SOLAR PANEL (BAY III)
- 14 4.2 XPORT SPAR SHIELDS
1 MANIPULATE BY HAND
66 SPAR THERM SHIELD
- 15 4.4 POS SPAR SHIELDS
1 MANIPULATE BY HAND
97 SOLAR PANEL (BAY III)
- 16 4.8 INST SPAR SHIELDS
1 MANIPULATE BY HAND
97 SOLAR PANEL (BAY III)
- 2 MANIPULATE WITH TOOLS
97 SOLAR PANEL (BAY III)
- 19 4.7 ROUTE COAX CABLE
1 MANIPULATE BY HAND
69 ANT COAX CABLE
- 20 4.8 INSTALL CABLE
1 MANIPULATE BY HAND
97 SOLAR PANEL (BAY III)
- 74 2 POSITION SC-BAY 1 DOWN
1 2.1 TILT SC
16 MANEUVER SPACECRAFT
- 75 4 SOLAR PANEL PREPARATION (CONTINUED)
1 4.24 REM DUMMY PANEL/SC
1 MANIPULATE BY HAND
- 76 5 INSTALL BAY III SOLAR PANEL
1 5.9 REL PANEL/HAND FIXT
2 MANIPULATE WITH TOOLS
97 SOLAR PANEL (BAY III)
- 1 MANIPULATE BY HAND
97 SOLAR PANEL (BAY III)
- 2 5.13 REM PANEL/HAND FIXT
1 MANIPULATE BY HAND
97 SOLAR PANEL (BAY III)
- 4 5.2 XPORT SOLAR PANEL
1 MANIPULATE BY HAND
97 SOLAR PANEL (BAY III)
- 5 5.4 POS SOLAR PANEL/SC
1 MANIPULATE BY HAND
18 ZONE 18, SOLAR PANEL 3
- 6 5.8 INSTALL SOLAR PANEL
1 MANIPULATE BY HAND
18 ZONE 18, SOLAR PANEL 3
- 2 MANIPULATE WITH TOOLS
18 ZONE 18, SOLAR PANEL 3
- 7 5.2 XPORT GAS LINE/JVAL
1 MANIPULATE BY HAND
87 GAS TUBING LINES
88 GAS TUBING LINES
- 8 5.4 POS GAS LINES
1 MANIPULATE BY HAND
22 ZONE 22, PANEL 3 SPAR
- 9 5.8 INSTALL GAS LINES
1 MANIPULATE BY HAND
22 ZONE 22, PANEL 3 SPAR

- 2 MANIPULATE WITH TOOLS
- 22 ZONE 22, PANEL 3 SPAR
- 17 SECURED IN TENT
- 10 5.4 POS GAS LINES
- 1 MANIPULATE BY HAND
- 22 ZONE 22, PANEL 3 SPAR
- 11 5.8 INSTALL GAS LINES
- 1 MANIPULATE BY HAND
- 22 ZONE 22, PANEL 3 SPAR
- 2 MANIPULATE WITH TOOLS
- 22 ZONE 22, PANEL 3 SPAR
- 13 5.28 DEPLOY PANEL
- 1 MANIPULATE BY HAND
- 22 ZONE 22, PANEL 3 SPAR
- 14 5.2 XPORT DFR ANTENNA
- 1 MANIPULATE BY HAND
- 89 DFR ANTENNA
- 15 5.4 POS DFR ANTENNA
- 1 MANIPULATE BY HAND
- 22 ZONE 22, PANEL 3 SPAR
- 16 5.8 INSTALL DFR ANTENNA
- 1 MANIPULATE BY HAND
- 22 ZONE 22, PANEL 3 SPAR
- 2 MANIPULATE WITH TOOLS
- 22 ZONE 22, PANEL 3 SPAR
- 17 5.7 ROUTE COAX CABLE
- 1 MANIPULATE BY HAND
- 22 ZONE 22, PANEL 3 SPAR
- 18 5.8 INSTALL TA CLAMP
- 1 MANIPULATE BY HAND
- 22 ZONE 22, PANEL 3 SPAR
- 2 MANIPULATE WITH TOOLS
- 22 ZONE 22, PANEL 3 SPAR
- 19 5.2 XPORT CG STRUTS
- 1 MANIPULATE BY HAND
- 80 PANEL SUPPORT STRUT
- 20 5.4 POS CG STRUTS
- 1 MANIPULATE BY HAND
- 22 ZONE 22, PANEL 3 SPAR
- 77 5 INSTALL RAY 1:1 SOLAR PANEL (CONTINUED)
- 1 5.8 INSTALL CG STRUT
- 1 MANIPULATE BY HAND
- 22 ZONE 22, PANEL 3 SPAR
- 2 MANIPULATE WITH TOOLS
- 22 ZONE 22, PANEL 3 SPAR
- 4 5.4 POS SPRING ASSY
- 1 MANIPULATE BY HAND
- 22 ZONE 22, PANEL 3 SPAR
- 5 5.8 INSTALL SPRING ASSY
- 1 MANIPULATE BY HAND
- 22 ZONE 22, PANEL 3 SPAR
- 2 MANIPULATE WITH TOOLS
- 22 ZONE 22, PANEL 3 SPAR
- 6 5.4 POS MICROSWIT ASSY
- 1 MANIPULATE BY HAND
- 22 ZONE 22, PANEL 3 SPAR
- 7 5.8 INSTALL ASSEMBLY
- 1 MANIPULATE BY HAND
- 22 ZONE 22, PANEL 3 SPAR
- 2 MANIPULATE WITH TOOLS
- 22 ZONE 22, PANEL 3 SPAR
- 8 5.1 FOS PANEL

- 1 MANIPULATE BY HAND
22 ZONE 22, PANEL 3 SPAR
- 9 5.8 ADJUST STRUTS
1 MANIPULATE BY HAND
22 ZONE 22, PANEL 3 SPAR
- 17 SECURED IN TENT
17 SECURED IN TENT
- 10 5.8 LOCK STRUTS
1 MANIPULATE BY HAND
22 ZONE 22, PANEL 3 SPAR
- 11 5.8 INST COLLET SCREW
1 MANIPULATE BY HAND
22 ZONE 22, PANEL 3 SPAR
- 2 MANIPULATE WITH TOOLS
22 ZONE 22, PANEL 3 SPAR
- 12 5.8 BOLT GAGE BRACKET
1 MANIPULATE BY HAND
22 ZONE 22, PANEL 3 SPAR
- 2 MANIPULATE WITH TOOLS
22 ZONE 22, PANEL 3 SPAR
- 13 5.8 INSERT GUIDE PIN
1 MANIPULATE BY HAND
22 ZONE 22, PANEL 3 SPAR
- 14 5.8 INST LATCH BRACKET
1 MANIPULATE BY HAND
22 ZONE 22, PANEL 3 SPAR
- 2 MANIPULATE WITH TOOLS
22 ZONE 22, PANEL 3 SPAR
- 15 5.8 INSTALL GAGE PIN
1 MANIPULATE BY HAND
22 ZONE 22, PANEL 3 SPAR
- 16 5.8 INSTALL GAGE COLLAR
1 MANIPULATE BY HAND
22 ZONE 22, PANEL 3 SPAR
- 2 MANIPULATE WITH TOOLS
22 ZONE 22, PANEL 3 SPAR
- 17 5.9 REMOVE BRACKET
2 MANIPULATE WITH TOOLS
22 ZONE 22, PANEL 3 SPAR
- 1 MANIPULATE BY HAND
22 ZONE 22, PANEL 3 SPAR
- 18 5.9 REMOVE PIN ASSY
1 MANIPULATE BY HAND
22 ZONE 22, PANEL 3 SPAR
- 19 5.4 POS PIN COLLAR ASSY
1 MANIPULATE BY HAND
22 ZONE 22, PANEL 3 SPAR
- 20 5.8 INSTALL LATCH ASSY
1 MANIPULATE BY HAND
22 ZONE 22, PANEL 3 SPAR
- 2 MANIPULATE WITH TOOLS
22 ZONE 22, PANEL 3 SPAR
- 78 5 INSTALL RAY III SOLAR PANEL (CONTINUED)
- 1 5.4 POS LATCH ASSY/JIG
1 MANIPULATE BY HAND
22 ZONE 22, PANEL 3 SPAR
- 2 5.8 INST LATCH ASSY/JIG
1 MANIPULATE BY HAND
22 ZONE 22, PANEL 3 SPAR
- 2 MANIPULATE WITH TOOLS
22 ZONE 22, PANEL 3 SPAR
- 3 5.8 ADJUST LATCH ASSY

- 1 MANIPULATE BY HAND
22 ZONE 22, PANEL 3 SPAR
- 4 5.9 REL DAMPER/JIG
 - 2 MANIPULATE WITH TOOLS
22 ZONE 22, PANEL 3 SPAR
 - 1 MANIPULATE BY HAND
22 ZONE 22, PANEL 3 SPAR
- 5 5.13 REMOVE DAMPER/JIG
 - 1 MANIPULATE BY HAND
22 ZONE 22, PANEL 3 SPAR
- 6 5.8 REL PANEL STRUTS
 - 2 MANIPULATE WITH TOOLS
22 ZONE 22, PANEL 3 SPAR
 - 1 MANIPULATE BY HAND
22 ZONE 22, PANEL 3 SPAR
- 7 5.1 ROTATE SOLAR PANEL
 - 1 MANIPULATE BY HAND
22 ZONE 22, PANEL 3 SPAR
- 79 5 INSTALL DAMPERS
 - 1 5.2 XPORT DAMPER
 - 1 MANIPULATE BY HAND
76 CRUISE DAMPER
 - 2 5.4 POSITION DAMPER
 - 1 MANIPULATE BY HAND
22 ZONE 22, PANEL 3 SPAR
 - 3 5.8 INSTALL DAMPER
 - 1 MANIPULATE BY HAND
22 ZONE 22, PANEL 3 SPAR
 - 2 MANIPULATE WITH TOOLS
22 ZONE 22, PANEL 3 SPAR
 - 6 5.2 XPORT 423MHZ ANT
 - 1 MANIPULATE BY HAND
70 DFR ANTENNA
 - 7 5.4 POS DFR ANTENNA
 - 1 MANIPULATE BY HAND
22 ZONE 22, PANEL 3 SPAR
 - 8 5.8 INSTALL DFR ANTENNA
 - 1 MANIPULATE BY HAND
22 ZONE 22, PANEL 3 SPAR
 - 17 SECURED IN TENT
 - 2 MANIPULATE WITH TOOLS
22 ZONE 22, PANEL 3 SPAR
 - 9 5.8 INSTALL TCT
 - 1 MANIPULATE BY HAND
22 ZONE 22, PANEL 3 SPAR
 - 2 MANIPULATE WITH TOOLS
22 ZONE 22, PANEL 3 SPAR
 - 10 5.7 ROUTE COAX CABLE
 - 1 MANIPULATE BY HAND
22 ZONE 22, PANEL 3 SPAR
 - 11 5.8 INSTALL COAX CABLE
 - 1 MANIPULATE BY HAND
22 ZONE 22, PANEL 3 SPAR
 - 2 MANIPULATE WITH TOOLS
22 ZONE 22, PANEL 3 SPAR
- 80 2 POSITION SC-PANEL HINGE VERTICAL
 - 1 2.1 ROTATE SC
16 MANEUVER SPACECRAFT
- 81 2 POSITION SC-PANEL HORIZ
 - 1 2.1 ROTATE SC
16 MANEUVER SPACECRAFT
- 82 4 BAY V SOLAR PANEL PREPARATION

APPENDIX 1 (Continued)

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- 1 4.13 REL PANEL/TRAILER
 - 2 MANIPULATE WITH TOOLS
 - 99 SOLAR PANEL (BAY V)
 - 1 MANIPULATE BY HAND
 - 99 SOLAR PANEL (BAY V)
- 2 4.14 REM PANEL/TRAILER
 - 1 MANIPULATE BY HAND
 - 99 SOLAR PANEL (BAY V)
- 3 4.12 INSTALL FRAME/DOLLY
 - 1 MANIPULATE BY HAND
 - 99 SOLAR PANEL (BAY V)
 - 2 MANIPULATE WITH TOOLS
 - 99 SOLAR PANEL (BAY V)
- 4 4.1 ROTATE PANEL DOWN
 - 1 MANIPULATE BY HAND
 - 99 SOLAR PANEL (BAY V)
- 5 4.3 INSPECT PANEL
 - 9 VISUAL INSPECTION
 - 99 SOLAR PANEL (BAY V)
- 6 4.7 ROUTE PANEL HARN
 - 1 MANIPULATE BY HAND
 - 105 SOL PAN SQUIB HARNESS
- 7 4.8 INSTALL PANEL HARN
 - 1 MANIPULATE BY HAND
 - 99 SOLAR PANEL (BAY V)
 - 1 MANIPULATE BY HAND
 - 99 SOLAR PANEL (BAY V)
 - 2 MANIPULATE WITH TOOLS
 - 99 SOLAR PANEL (BAY V)
- 8 4.2 XPORT BOOST DAMPERS
 - 1 MANIPULATE BY HAND
 - 61 BOOST DAMPER
 - 62 BOOST DAMPER
- 9 4.4 POS BOOST DAMPER
 - 1 MANIPULATE BY HAND
 - 99 SOLAR PANEL (BAY V)
- 10 4.8 INSTALL DAMPER
 - 1 MANIPULATE BY HAND
 - 99 SOLAR PANEL (BAY V)
 - 2 MANIPULATE WITH TOOLS
 - 99 SOLAR PANEL (BAY V)
- 11 4.4 POS BOOST DAMPER
 - 1 MANIPULATE BY HAND
 - 99 SOLAR PANEL (BAY V)
- 12 4.8 INSTALL DAMPER
 - 1 MANIPULATE BY HAND
 - 99 SOLAR PANEL (BAY V)
 - 2 MANIPULATE WITH TOOLS
 - 99 SOLAR PANEL (BAY V)
- 13 4.8 INSTALL LATCH BRKT
 - 1 MANIPULATE BY HAND
 - 99 SOLAR PANEL (BAY V)
 - 2 MANIPULATE WITH TOOLS
 - 99 SOLAR PANEL (BAY V)
- 83 2 POSITION SC-BAY 1 DOWN
 - 1 2.1 TILT SC
 - 16 MANEUVER SPACECRAFT
- 84 4 SOLAR PANEL PREPARATION (CONTINUED)
 - 1 4.24 REM DUMMY PANEL/SC
 - 1 MANIPULATE BY HAND
- 85 5 INSTALL BAY V SOLAR PANEL
 - 1 5.9 REL PANEL/HAND FIXT

- 2 MANIPULATE WITH TOOLS
 - 99 SOLAR PANEL (BAY V)
- 1 MANIPULATE BY HAND
 - 99 SOLAR PANEL (BAY V)
- 2 5.13 REM PANEL/HAND FIXT
 - 1 MANIPULATE BY HAND
 - 99 SOLAR PANEL (BAY V)
- 3 5.2 XPORT SOLAR PANEL
 - 1 MANIPULATE BY HAND
 - 99 SOLAR PANEL (BAY V)
- 4 5.4 POS SOLAR PANEL/SC
 - 1 MANIPULATE BY HAND
 - 19 ZONE 19, SOLAR PANEL 5
- 5 5.8 INSTALL SOLAR PANEL
 - 1 MANIPULATE BY HAND
 - 19 ZONE 19, SOLAR PANEL 5
 - 2 MANIPULATE WITH TOOLS
 - 19 ZONE 19, SOLAR PANEL 5
- 6 5.28 DEPLOY PANEL
 - 1 MANIPULATE BY HAND
 - 19 ZONE 19, SOLAR PANEL 5
- 12 5.2 XPORT CG STRUTS
 - 1 MANIPULATE BY HAND
 - 23 ZONE 23, PANEL 5 SPAR
- 13 5.4 POS CG STRUT
 - 1 MANIPULATE BY HAND
 - 23 ZONE 23, PANEL 5 SPAR
- 14 5.8 INSTALL CG STRUT
 - 1 MANIPULATE BY HAND
 - 23 ZONE 23, PANEL 5 SPAR
- 17 SECURED IN TENT
 - 2 MANIPULATE WITH TOOLS
 - 23 ZONE 23, PANEL 5 SPAR
- 17 5.4 POS SPRING ASSY
 - 1 MANIPULATE BY HAND
 - 23 ZONE 23, PANEL 5 SPAR
- 18 5.8 INSTALL SPRING ASSY
 - 1 MANIPULATE BY HAND
 - 23 ZONE 23, PANEL 5 SPAR
 - 2 MANIPULATE WITH TOOLS
 - 23 ZONE 23, PANEL 5 SPAR
- 19 5.4 POS MICROSWIT ASSY
 - 1 MANIPULATE BY HAND
 - 23 ZONE 23, PANEL 5 SPAR
- 20 5.8 INST MICROSWIT ASSY
 - 1 MANIPULATE BY HAND
 - 23 ZONE 23, PANEL 5 SPAR
 - 2 MANIPULATE WITH TOOLS
 - 23 ZONE 23, PANEL 5 SPAR
- 86 5 INSTALL RAY V SOLAR PANEL (CONTINUED)
 - 1 5.1 POSITION PANEL
 - 1 MANIPULATE BY HAND
 - 23 ZONE 23, PANEL 5 SPAR
 - 2 5.8 ADJUST STRUTS
 - 1 MANIPULATE BY HAND
 - 23 ZONE 23, PANEL 5 SPAR
 - 3 5.8 LOCK STRUTS
 - 1 MANIPULATE BY HAND
 - 23 ZONE 23, PANEL 5 SPAR
 - 4 5.8 INST COLLET SCREW
 - 1 MANIPULATE BY HAND
 - 23 ZONE 23, PANEL 5 SPAR

- 2 MANIPULATE WITH TOOLS
23 ZONE 23, PANEL 5 SPAR
- 5 5.8 BOLT GAGE BRACKET
1 MANIPULATE BY HAND
23 ZONE 23, PANEL 5 SPAR
- 2 MANIPULATE WITH TOOLS
23 ZONE 23, PANEL 5 SPAR
- 6 5.8 INSERT GUIDE PIN
1 MANIPULATE BY HAND
23 ZONE 23, PANEL 5 SPAR
- 7 5.8 INST LATCH BRACKET
1 MANIPULATE BY HAND
23 ZONE 23, PANEL 5 SPAR
- 2 MANIPULATE WITH TOOLS
23 ZONE 23, PANEL 5 SPAR
- 8 5.8 INSTALL GAGE PIN
1 MANIPULATE BY HAND
23 ZONE 23, PANEL 5 SPAR
- 9 5.8 INSTALL GAGE COLLAR
1 MANIPULATE BY HAND
23 ZONE 23, PANEL 5 SPAR
- 2 MANIPULATE WITH TOOLS
23 ZONE 23, PANEL 5 SPAR
- 10 5.9 REMOVE BRACKET
2 MANIPULATE WITH TOOLS
23 ZONE 23, PANEL 5 SPAR
- 1 MANIPULATE BY HAND
23 ZONE 23, PANEL 5 SPAR
- 11 5.9 REMOVE PIN ASSY
1 MANIPULATE BY HAND
23 ZONE 23, PANEL 5 SPAR
- 12 5.4 INSERT PIN ASSY
1 MANIPULATE BY HAND
23 ZONE 23, PANEL 5 SPAR
- 13 5.8 INSTALL LATCH ASSY
1 MANIPULATE BY HAND
23 ZONE 23, PANEL 5 SPAR
- 2 MANIPULATE WITH TOOLS
23 ZONE 23, PANEL 5 SPAR
- 14 5.4 POS LATCH ASSY/JIG
1 MANIPULATE BY HAND
23 ZONE 23, PANEL 5 SPAR
- 15 5.8 INST LATCH ASSY/JIG
1 MANIPULATE BY HAND
23 ZONE 23, PANEL 5 SPAR
- 17 SECURED IN TENT
1 MANIPULATE BY HAND
23 ZONE 23, PANEL 5 SPAR
- 16 5.6 ADJUST LATCH ASSY
1 MANIPULATE BY HAND
23 ZONE 23, PANEL 5 SPAR
- 17 5.9 REL DAMPER/JIG
2 MANIPULATE WITH TOOLS
23 ZONE 23, PANEL 5 SPAR
- 1 MANIPULATE BY HAND
23 ZONE 23, PANEL 5 SPAR
- 18 5.13 REM DAMPER/JIG
1 MANIPULATE BY HAND
23 ZONE 23, PANEL 5 SPAR
- 19 5.8 REL PANEL STRUTS
2 MANIPULATE WITH TOOLS
23 ZONE 23, PANEL 5 SPAR

APPENDIX 1 (Continued)

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- 4 1 MANIPULATE BY HAND
23 ZONE 23, PANEL 5 SPAR
- 20 5.1 ROTATE SOLAR PANEL
1 MANIPULATE BY HAND
23 ZONE 23, PANEL 5 SPAR
- 87 5 INSTALL DAMPERS
 - 1 5.2 XPORT DAMPER
1 MANIPULATE BY HAND
77 CHUISE DAMPER
 - 2 5.4 POSITION DAMPER
1 MANIPULATE BY HAND
23 ZONE 23, PANEL 5 SPAR
 - 3 5.8 INSTALL DAMPER
1 MANIPULATE BY HAND
23 ZONE 23, PANEL 5 SPAR
2 MANIPULATE WITH TOOLS
23 ZONE 23, PANEL 5 SPAR
 - 4 5.9 REL CG SUPP STRUT
2 MANIPULATE WITH TOOLS
23 ZONE 23, PANEL 5 SPAR
1 MANIPULATE BY HAND
23 ZONE 23, PANEL 5 SPAR
 - 5 5.9 REL CG SUPP STRUT
2 MANIPULATE WITH TOOLS
23 ZONE 23, PANEL 5 SPAR
1 MANIPULATE BY HAND
23 ZONE 23, PANEL 5 SPAR
 - 6 5.24 REM CG SUPP STRUTS
1 MANIPULATE BY HAND
23 ZONE 23, PANEL 5 SPAR
- 88 2 POSITION SC-Z AXIS HORIZ
 - 1 2.1 ROTATE SC
16 MANEUVER SPACECRAFT
- 89 5 INSTALL BAY V SOLAR PANEL (CONTINUED)
 - 1 5.9 REL PANEL STRUTS
2 MANIPULATE WITH TOOLS
23 ZONE 23, PANEL 5 SPAR
1 MANIPULATE BY HAND
23 ZONE 23, PANEL 5 SPAR
 - 2 5.1 ROTATE SC TO BOOST
16 MANEUVER SPACECRAFT
 - 3 5.8 MATE DAMPER ASSY
1 MANIPULATE BY HAND
23 ZONE 23, PANEL 5 SPAR
2 MANIPULATE WITH TOOLS
23 ZONE 23, PANEL 5 SPAR
 - 4 5.3 VERIFY LANYARD INST
10 INSPECTION WITH GAUGES
23 ZONE 23, PANEL 5 SPAR
- 90 2 POSITION SC-BAY V HORIZ
 - 1 2.1 ROTATE SC
16 MANEUVER SPACECRAFT
- 91 4 BAY VII SOLAR PANEL PREPARATION
 - 1 4.13 REL PANEL/TRAILER
2 MANIPULATE WITH TOOLS
101 SOLAR PANEL (BAY VII)
1 MANIPULATE BY HAND
101 SOLAR PANEL (BAY VII)
 - 2 4.14 REM PANEL/TRAILER
1 MANIPULATE BY HAND
101 SOLAR PANEL (BAY VII)
 - 3 4.12 INSTALL FRAME/DOLLY

APPENDIX 1 (Continued)

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- 1 MANIPULATE BY HAND
101 SOLAR PANEL (BAY VII)
- 2 MANIPULATE WITH TOOLS
101 SOLAR PANEL (BAY VII)
- 4 4.1 ROTATE PANEL DOWN
1 MANIPULATE BY HAND
101 SOLAR PANEL (BAY VII)
- 5 4.3 INSPECT PANEL
9 VISUAL INSPECTION
101 SOLAR PANEL (BAY VII)
- 6 4.7 ROUTE PANEL HARN
1 MANIPULATE BY HAND
106 SOL PAN SQUIB HARNESS
- 7 4.8 INSTALL PANEL HARN
1 MANIPULATE BY HAND
101 SOLAR PANEL (BAY VII)
1 MANIPULATE BY HAND
101 SOLAR PANEL (BAY VII)
2 MANIPULATE WITH TOOLS
101 SOLAR PANEL (BAY VII)
- 8 4.2 XPORT BOOST DAMPERS
1 MANIPULATE BY HAND
63 BOOST DAMPER
64 BOOST DAMPER
- 9 4.4 POS BOOST DAMPER
1 MANIPULATE BY HAND
101 SOLAR PANEL (BAY VII)
- 10 4.8 INSTALL DAMPER
1 MANIPULATE BY HAND
101 SOLAR PANEL (BAY VII)
17 SECURED IN TENT
2 MANIPULATE WITH TOOLS
101 SOLAR PANEL (BAY VII)
- 11 4.4 POS BOOST DAMPER
1 MANIPULATE BY HAND
101 SOLAR PANEL (BAY VII)
- 12 4.8 INSTALL DAMPER
1 MANIPULATE BY HAND
101 SOLAR PANEL (BAY VII)
2 MANIPULATE WITH TOOLS
101 SOLAR PANEL (BAY VII)
- 13 4.8 INSTALL LATCH BRKT
1 MANIPULATE BY HAND
101 SOLAR PANEL (BAY VII)
2 MANIPULATE WITH TOOLS
101 SOLAR PANEL (BAY VII)
- 92 2 POSITION SC-BAY 1 DOWN
1 2.1 TILT SC
16 MANEUVER SPACECRAFT
- 93 4 SOLAR PANEL PREPARATION (CONTINUED)
1 4.24 REM DUMMY PANEL/SC
1 MANIPULATE BY HAND
- 94 5 INSTALL BAY VII SOLAR PANEL
1 5.9 REL PANEL/HAND FIXT
2 MANIPULATE WITH TOOLS
101 SOLAR PANEL (BAY VII)
1 MANIPULATE BY HAND
101 SOLAR PANEL (BAY VII)
2 5.13 REM PANEL/HAND FIXT
1 MANIPULATE BY HAND
101 SOLAR PANEL (BAY VII)
3 5.2 XPORT SOLAR PANEL

- 1 MANIPULATE BY HAND
101 SOLAR PANEL (BAY VII)
- 4 5.4 POS SOLAR PANEL/SC
1 MANIPULATE BY HAND
20 ZONE 20, SOLAR PANEL 7
- 5 5.8 INSTALL SOLAR PANEL
1 MANIPULATE BY HAND
20 ZONE 20, SOLAR PANEL 7
2 MANIPULATE WITH TOOLS
20 ZONE 20, SOLAR PANEL 7
- 6 5.28 DEPLOY PANEL
1 MANIPULATE BY HAND
20 ZONE 20, SOLAR PANEL 7
- 12 5.2 XPORT CG STRUTS
1 MANIPULATE BY HAND
82 PANEL SUPPORT STRUT
- 13 5.4 POS CG STRUT
1 MANIPULATE BY HAND
24 ZONE 24, PANEL 7 SPAR
- 14 5.8 INSTALL CG STRUT
1 MANIPULATE BY HAND
24 ZONE 24, PANEL 7 SPAR
2 MANIPULATE WITH TOOLS
24 ZONE 24, PANEL 7 SPAR
- 17 5.4 POS SPRING ASSY
1 MANIPULATE BY HAND
24 ZONE 24, PANEL 7 SPAR
- 18 5.8 INSTALL SPRING ASSY
1 MANIPULATE BY HAND
24 ZONE 24, PANEL 7 SPAR
2 MANIPULATE WITH TOOLS
24 ZONE 24, PANEL 7 SPAR
- 19 5.4 POS MICROSWIT ASSY
1 MANIPULATE BY HAND
24 ZONE 24, PANEL 7 SPAR
- 20 5.8 INST MICROSWIT ASSY
1 MANIPULATE BY HAND
24 ZONE 24, PANEL 7 SPAR
2 MANIPULATE WITH TOOLS
24 ZONE 24, PANEL 7 SPAR
- 95 5 INSTALL BAY VII SOLAR PANEL (CONTINUED)
- 1 5.1 POSITION PANEL
1 MANIPULATE BY HAND
24 ZONE 24, PANEL 7 SPAR
- 2 5.8 ADJUST STRUTS
1 MANIPULATE BY HAND
24 ZONE 24, PANEL 7 SPAR
- 3 5.8 LOCK STRUTS
1 MANIPULATE BY HAND
24 ZONE 24, PANEL 7 SPAR
17 SECURED IN TENT
17 SECURED IN TENT
- 4 5.8 INST COLLET SCREW
1 MANIPULATE BY HAND
24 ZONE 24, PANEL 7 SPAR
2 MANIPULATE WITH TOOLS
24 ZONE 24, PANEL 7 SPAR
- 5 5.8 BOLT GAGE BRACKET
1 MANIPULATE BY HAND
24 ZONE 24, PANEL 7 SPAR
2 MANIPULATE WITH TOOLS
24 ZONE 24, PANEL 7 SPAR

APPENDIX 1 (Continued)

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- 6 5.6 INSERT GUIDE PIN
1 MANIPULATE BY HAND
24 ZONE 24, PANEL 7 SPAR
- 7 5.6 INST LATCH BRACKET
1 MANIPULATE BY HAND
24 ZONE 24, PANEL 7 SPAR
2 MANIPULATE WITH TOOLS
24 ZONE 24, PANEL 7 SPAR
- 8 5.8 INSTALL GAGE PIN
1 MANIPULATE BY HAND
24 ZONE 24, PANEL 7 SPAR
- 9 5.8 INSTALL GAGE COLLAR
1 MANIPULATE BY HAND
24 ZONE 24, PANEL 7 SPAR
2 MANIPULATE WITH TOOLS
24 ZONE 24, PANEL 7 SPAR
- 10 5.9 REMOVE BRACKET
2 MANIPULATE WITH TOOLS
24 ZONE 24, PANEL 7 SPAR
1 MANIPULATE BY HAND
24 ZONE 24, PANEL 7 SPAR
- 11 5.9 REMOVE PIN ASSY
1 MANIPULATE BY HAND
24 ZONE 24, PANEL 7 SPAR
- 12 5.4 INSERT PIN ASSY
1 MANIPULATE BY HAND
24 ZONE 24, PANEL 7 SPAR
- 13 5.8 INSTALL LATCH ASSY
1 MANIPULATE BY HAND
24 ZONE 24, PANEL 7 SPAR
2 MANIPULATE WITH TOOLS
24 ZONE 24, PANEL 7 SPAR
- 14 5.4 POS LATCH ASSY/JIG
1 MANIPULATE BY HAND
24 ZONE 24, PANEL 7 SPAR
- 15 5.3 INST LATCH ASSY/JIG
1 MANIPULATE BY HAND
24 ZONE 24, PANEL 7 SPAR
2 MANIPULATE WITH TOOLS
24 ZONE 24, PANEL 7 SPAR
- 16 5.8 ADJUST LATCH ASSY
1 MANIPULATE BY HAND
24 ZONE 24, PANEL 7 SPAR
- 17 5.9 REL DAMPER/JIG
2 MANIPULATE WITH TOOLS
24 ZONE 24, PANEL 7 SPAR
1 MANIPULATE BY HAND
24 ZONE 24, PANEL 7 SPAR
- 18 5.13 REM DAMPER/JIG
1 MANIPULATE BY HAND
24 ZONE 24, PANEL 7 SPAR
- 19 5.8 REL PANEL STRUTS
2 MANIPULATE WITH TOOLS
24 ZONE 24, PANEL 7 SPAR
1 MANIPULATE BY HAND
24 ZONE 24, PANEL 7 SPAR
- 20 5.1 ROTATE SOLAR PANEL
1 MANIPULATE BY HAND
24 ZONE 24, PANEL 7 SPAR
- 97 5 INSTALL DAMPERS
1 5.2 XPORT DAMPER
1 MANIPULATE BY HAND

APPENDIX 1 (Continued)

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- 78 CRUISE DAMPER
- 2 5.4 POSITION DAMPER
 - 1 MANIPULATE BY HAND
 - 24 ZONE 24, PANEL 7 SPAR
- 3 5.8 INSTALL DAMPER
 - 1 MANIPULATE BY HAND
 - 24 ZONE 24, PANEL 7 SPAR
 - 2 MANIPULATE WITH TOOLS
 - 24 ZONE 24, PANEL 7 SPAR
- 4 5.9 REL CG SUPP STRUT
 - 2 MANIPULATE WITH TOOLS
 - 24 ZONE 24, PANEL 7 SPAR
 - 1 MANIPULATE BY HAND
 - 24 ZONE 24, PANEL 7 SPAR
- 5 5.9 REL CG SUPP STRUT
 - 2 MANIPULATE WITH TOOLS
 - 24 ZONE 24, PANEL 7 SPAR
- 17 SECURED IN TENT
 - 1 MANIPULATE BY HAND
 - 24 ZONE 24, PANEL 7 SPAR
- 6 5.24 REM CG SUPP STRUTS
 - 1 MANIPULATE BY HAND
 - 24 ZONE 24, PANEL 7 SPAR
- 98 2 POSITION SC-Z AXIS HORIZ
 - 1 2.1 ROTATE SC
 - 16 MANEUVER SPACECRAFT
- 99 5 INSTALL BAY VII SOLAR PANEL (CONTINUED)
 - 1 5.9 REL PANEL STRUTS
 - 2 MANIPULATE WITH TOOLS
 - 24 ZONE 24, PANEL 7 SPAR
 - 1 MANIPULATE BY HAND
 - 24 ZONE 24, PANEL 7 SPAR
 - 2 5.1 ROTATE SC TO BOOST
 - 16 MANEUVER SPACECRAFT
 - 3 5.8 MATE DAMPER ASSY
 - 1 MANIPULATE BY HAND
 - 24 ZONE 24, PANEL 7 SPAR
 - 2 MANIPULATE WITH TOOLS
 - 24 ZONE 24, PANEL 7 SPAR
 - 4 5.3 VERIFY LANYARD INST
 - 10 INSPECTION WITH GAUGES
 - 24 ZONE 24, PANEL 7 SPAR
 - 5 5.8 LATCH BAY DAMPERS
 - 1 MANIPULATE BY HAND
 - 24 ZONE 24, PANEL 7 SPAR
- 100 2 POSITION SC-BAY VII HORIZ
 - 1 2.1 ROTATE SC
 - 16 MANEUVER SPACECRAFT
- 2 ASSY/TEST, PASADENA OPERATIONS (CONTINUED)
 - 1 4 BAY I SOLAR PANEL PREPARATION
 - 1 4.13 REL PANEL/TRAILER
 - 2 MANIPULATE WITH TOOLS
 - 96 SOLAR PANEL (BAY I)
 - 1 MANIPULATE BY HAND
 - 96 SOLAR PANEL (BAY I)
 - 2 4.14 REM PANEL/TRAILER
 - 1 MANIPULATE BY HAND
 - 96 SOLAR PANEL (BAY I)
 - 3 4.12 INSTALL FRAME/DOLLY
 - 1 MANIPULATE BY HAND
 - 96 SOLAR PANEL (BAY I)
 - 2 MANIPULATE WITH TOOLS

- 96 SOLAR PANEL (BAY I)
- 4 4.1 ROTATE PANEL DOWN
 - 1 MANIPULATE BY HAND
- 96 SOLAR PANEL (BAY I)
- 5 4.3 INSPECT PANEL
 - 9 VISUAL INSPECTION
- 6 4.7 ROUTE PANEL HARN
 - 1 MANIPULATE BY HAND
- 103 SOL PAN SQUIB HARNESS
- 7 4.8 INSTALL PANEL HARN
 - 1 MANIPULATE BY HAND
- 96 SOLAR PANEL (BAY I)
- 1 MANIPULATE BY HAND
- 96 SOLAR PANEL (BAY I)
- 2 MANIPULATE WITH TOOLS
- 96 SOLAR PANEL (BAY I)
- 8 4.2 XPORT BOOST DAMPERS
 - 1 MANIPULATE BY HAND
- 107 BOOST DAMPER
- 108 BOOST DAMPER
- 9 4.4 POS BOOST DAMPER
 - 1 MANIPULATE BY HAND
- 96 SOLAR PANEL (BAY I)
- 10 4.8 INSTALL DAMPER
 - 1 MANIPULATE BY HAND
- 96 SOLAR PANEL (BAY I)
- 2 MANIPULATE WITH TOOLS
- 96 SOLAR PANEL (BAY I)
- 11 4.4 POS BOOST DAMPER
 - 1 MANIPULATE BY HAND
- 96 SOLAR PANEL (BAY I)
- 12 4.8 INSTALL DAMPER
 - 1 MANIPULATE BY HAND
- 96 SOLAR PANEL (BAY I)
- 2 MANIPULATE WITH TOOLS
- 96 SOLAR PANEL (BAY I)
- 13 4.8 INSTALL LATCH BRKT
 - 1 MANIPULATE BY HAND
- 96 SOLAR PANEL (BAY I)
- 2 MANIPULATE WITH TOOLS
- 96 SOLAR PANEL (BAY I)
- 2 2 POSITION SC-BAY VII DOWN
 - 1 2.1 ROTATE SC
- 16 MANEUVER SPACECRAFT
- 3 4 BAY I SOLAR PANEL PREPARATION (CONTINUED)
- 1 4.24 REM DUMMY PANEL/SC
 - 1 MANIPULATE BY HAND
- 4 5 INSTALL BAY I SOLAR PANEL
 - 1 5.9 REL PANEL/HAND FIXT
- 2 MANIPULATE WITH TOOLS
- 96 SOLAR PANEL (BAY I)
- 1 MANIPULATE BY HAND
- 96 SOLAR PANEL (BAY I)
- 2 5.13 REM PANEL/HAND FIXT
 - 1 MANIPULATE BY HAND
- 96 SOLAR PANEL (BAY I)
- 3 5.2 XPORT SOLAR PANEL
 - 1 MANIPULATE BY HAND
- 96 SOLAR PANEL (BAY I)
- 4 5.4 POS SOLAR PANEL/SC
 - 1 MANIPULATE BY HAND
- 17 ZONE 17, SOLAR PANEL I

- 5 5.8 INSTALL SOLAR PANEL
 - 1 MANIPULATE BY HAND
 - 17 ZONE 17, SOLAR PANEL 1
 - 2 MANIPULATE WITH TOOLS
 - 17 ZONE 17, SOLAR PANEL 1
 - 17 SECURED IN TENT
- 6 5.28 DEPLOY PANEL
 - 1 MANIPULATE BY HAND
 - 17 ZONE 17, SOLAR PANEL 1
- 7 5.2 XPORT DFR ANTENNA
 - 1 MANIPULATE BY HAND
 - 90 DFR ANTENNA
- 6 5.4 POS DFR ANTENNA
 - 1 MANIPULATE BY HAND
 - 21 ZONE 21, PANEL 1 SPAR
- 9 5.8 INSTALL DFR ANTENNA
 - 1 MANIPULATE BY HAND
 - 21 ZONE 21, PANEL 1 SPAR
 - 2 MANIPULATE WITH TOOLS
 - 21 ZONE 21, PANEL 1 SPAR
- 10 5.7 ROUTE COAX CABLE
 - 1 MANIPULATE BY HAND
 - 21 ZONE 21, PANEL 1 SPAR
- 11 5.8 INSTALL TA CLAMP
 - 1 MANIPULATE BY HAND
 - 21 ZONE 21, PANEL 1 SPAR
 - 2 MANIPULATE WITH TOOLS
 - 21 ZONE 21, PANEL 1 SPAR
- 12 5.2 XPORT CG STRUTS
 - 1 MANIPULATE BY HAND
 - 79 PANEL SUPPORT STRUT
- 13 5.4 POS CG STRUT
 - 1 MANIPULATE BY HAND
 - 21 ZONE 21, PANEL 1 SPAR
- 14 5.8 INSTALL CG STRUT
 - 1 MANIPULATE BY HAND
 - 21 ZONE 21, PANEL 1 SPAR
 - 2 MANIPULATE WITH TOOLS
 - 21 ZONE 21, PANEL 1 SPAR
- 17 5.4 POS SPRING ASSY
 - 1 MANIPULATE BY HAND
 - 21 ZONE 21, PANEL 1 SPAR
- 18 5.8 INSTALL SPRING ASSY
 - 1 MANIPULATE BY HAND
 - 21 ZONE 21, PANEL 1 SPAR
 - 2 MANIPULATE WITH TOOLS
 - 21 ZONE 21, PANEL 1 SPAR
- 19 5.4 POS MICROSWIT ASSY
 - 1 MANIPULATE BY HAND
 - 21 ZONE 21, PANEL 1 SPAR
- 20 5.8 INST MICROSWIT ASSY
 - 1 MANIPULATE BY HAND
 - 21 ZONE 21, PANEL 1 SPAR
 - 2 MANIPULATE WITH TOOLS
 - 21 ZONE 21, PANEL 1 SPAR
- 5 5 INSTALL RAY 1 SOLAR PANEL (CONTINUED)
 - 1 5.1 POSITION PANEL
 - 1 MANIPULATE BY HAND
 - 21 ZONE 21, PANEL 1 SPAR
 - 2 5.6 ADJUST STRUTS
 - 1 MANIPULATE BY HAND
 - 21 ZONE 21, PANEL 1 SPAR

- 3 5.8 LOCK STRUTS
 - 1 MANIPULATE BY HAND
 - 21 ZONE 21, PANEL 1 SPAR
 - 17 SECURED IN TENT
- 4 5.8 INST COLLET SCREW
 - 1 MANIPULATE BY HAND
 - 21 ZONE 21, PANEL 1 SPAR
 - 2 MANIPULATE WITH TOOLS
 - 21 ZONE 21, PANEL 1 SPAR
- 5 5.8 BOLT GAGE BRACKET
 - 1 MANIPULATE BY HAND
 - 21 ZONE 21, PANEL 1 SPAR
 - 2 MANIPULATE WITH TOOLS
 - 21 ZONE 21, PANEL 1 SPAR
- 6 5.8 INSERT GUIDE PIN
 - 1 MANIPULATE BY HAND
 - 21 ZONE 21, PANEL 1 SPAR
- 7 5.8 INST LATCH BRACKET
 - 1 MANIPULATE BY HAND
 - 21 ZONE 21, PANEL 1 SPAR
 - 2 MANIPULATE WITH TOOLS
 - 21 ZONE 21, PANEL 1 SPAR
- 8 5.8 INSTALL GAGE PIN
 - 1 MANIPULATE BY HAND
 - 21 ZONE 21, PANEL 1 SPAR
- 9 5.8 INSTALL GAGE COLLAR
 - 1 MANIPULATE BY HAND
 - 21 ZONE 21, PANEL 1 SPAR
 - 2 MANIPULATE WITH TOOLS
 - 21 ZONE 21, PANEL 1 SPAR
- 10 5.9 REMOVE BRACKET
 - 2 MANIPULATE WITH TOOLS
 - 21 ZONE 21, PANEL 1 SPAR
 - 1 MANIPULATE BY HAND
 - 21 ZONE 21, PANEL 1 SPAR
- 11 5.9 REMOVE PIN ASSY
 - 1 MANIPULATE BY HAND
 - 21 ZONE 21, PANEL 1 SPAR
- 12 5.4 INSERT PIN ASSY
 - 1 MANIPULATE BY HAND
 - 21 ZONE 21, PANEL 1 SPAR
- 13 5.8 INSTALL LATCH ASSY
 - 1 MANIPULATE BY HAND
 - 21 ZONE 21, PANEL 1 SPAR
 - 2 MANIPULATE WITH TOOLS
 - 21 ZONE 21, PANEL 1 SPAR
- 14 5.4 POS LATCH ASSY/JIG
 - 1 MANIPULATE BY HAND
 - 21 ZONE 21, PANEL 1 SPAR
- 15 5.8 INST LATCH ASSY/JIG
 - 1 MANIPULATE BY HAND
 - 21 ZONE 21, PANEL 1 SPAR
 - 2 MANIPULATE WITH TOOLS
 - 21 ZONE 21, PANEL 1 SPAR
- 16 5.8 ADJUST LATCH ASSY
 - 1 MANIPULATE BY HAND
 - 21 ZONE 21, PANEL 1 SPAR
- 17 5.9 REL DAMPER/JIG
 - 2 MANIPULATE WITH TOOLS
 - 21 ZONE 21, PANEL 1 SPAR
 - 1 MANIPULATE BY HAND
 - 21 ZONE 21, PANEL 1 SPAR

APPENDIX 1 (Continued)

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- 18 5.13 REM DAMPER/JIG
 - 1 MANIPULATE BY HAND
 - 21 ZONE 21, PANEL 1 SPAR
- 19 5.8 REL PANEL STRUTS
 - 2 MANIPULATE WITH TOOLS
 - 21 ZONE 21, PANEL 1 SPAR
 - 1 MANIPULATE BY HAND
 - 21 ZONE 21, PANEL 1 SPAR
- 20 5.1 ROTATE SOLAR PANEL
 - 1 MANIPULATE BY HAND
 - 21 ZONE 21, PANEL 1 SPAR
- 7 5 INSTALL DAMPERS
 - 1 5.2 XPORT DAMPER
 - 1 MANIPULATE BY HAND
 - 75 CRUISE DAMPER
 - 2 5.4 POSITION DAMPER
 - 1 MANIPULATE BY HAND
 - 21 ZONE 21, PANEL 1 SPAR
 - 3 5.8 INSTALL DAMPER
 - 1 MANIPULATE BY HAND
 - 21 ZONE 21, PANEL 1 SPAR
 - 2 MANIPULATE WITH TOOLS
 - 21 ZONE 21, PANEL 1 SPAR
 - 4 5.9 REL CG SUPP STRUT
 - 2 MANIPULATE WITH TOOLS
 - 21 ZONE 21, PANEL 1 SPAR
 - 1 MANIPULATE BY HAND
 - 21 ZONE 21, PANEL 1 SPAR
 - 5 5.9 REL CG SUPP STRUT
 - 2 MANIPULATE WITH TOOLS
 - 21 ZONE 21, PANEL 1 SPAR
 - 1 MANIPULATE BY HAND
 - 21 ZONE 21, PANEL 1 SPAR
 - 6 5.24 REM CG SUPP STRUTS
 - 1 MANIPULATE BY HAND
 - 21 ZONE 21, PANEL 1 SPAR
 - 17 SECURED IN TENT
- 8 2 POSITION SC-2 AXIS HORIZ
 - 1 2.1 ROTATE SC
 - 16 MANEUVER SPACECRAFT
- 9 5 INSTALL BAY I SOLAR PANEL (CONTINUED)
 - 1 5.9 REL PANEL STRUTS
 - 2 MANIPULATE WITH TOOLS
 - 21 ZONE 21, PANEL 1 SPAR
 - 1 MANIPULATE BY HAND
 - 21 ZONE 21, PANEL 1 SPAR
 - 2 5.1 ROTATE SC TO BOOST
 - 16 MANEUVER SPACECRAFT
 - 3 5.8 MATE DAMPER ASSY
 - 1 MANIPULATE BY HAND
 - 21 ZONE 21, PANEL 1 SPAR
 - 2 MANIPULATE WITH TOOLS
 - 21 ZONE 21, PANEL 1 SPAR
 - 4 5.3 VERIFY LANYARD INST
 - 10 INSPECTION WITH GAUGES
 - 21 ZONE 21, PANEL 1 SPAR
 - 5 5.8 LATCH BAY DAMPERS
 - 1 MANIPULATE BY HAND
 - 21 ZONE 21, PANEL 1 SPAR
- 10 2 POSITION SC-HORIZ
 - 1 2.1 ROTATE SC
 - 16 MANEUVER SPACECRAFT

APPENDIX 1 (Continued)

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- 11 5 INSTALL RAY I ACS NOZZLE
 - 1 5.23 REM LOCKWIRE/NOZZLE
 - 10 INSPECTION WITH GAUGES
 - 83 FLIGHT NOZZLE
 - 2 5.24 REMOVE NOZZLE
 - 1 MANIPULATE BY HAND
 - 17 SECURED IN TENT
 - 17 SECURED IN TENT
 - 3 5.15 PLACE NOZZ IN CONT
 - 1 MANIPULATE BY HAND
 - 4 5.4 POS FLT NOZZLE
 - 1 MANIPULATE BY HAND
 - 21 ZONE 21, PANEL 1 SPAR
 - 5 5.8 INSTALL FLT NOZZLE
 - 1 MANIPULATE BY HAND
 - 21 ZONE 21, PANEL 1 SPAR
 - 2 MANIPULATE WITH TOOLS
 - 21 ZONE 21, PANEL 1 SPAR
- 12 7 SET UP FOR FLOW RATE MEASUREMENTS
 - 1 7.1 CONN FLOW METER
 - 1 MANIPULATE BY HAND
 - 21 ZONE 21, PANEL 1 SPAR
- 13 8 PERFORM FLOW RATE MEASUREMENTS
 - 1 8.1 RECORD FLOW RATE
 - 9 VISUAL INSPECTION
- 14 9 POST-TEST OPERATIONS
 - 1 9.1 DISCONN FLOW METER
 - 1 MANIPULATE BY HAND
 - 21 ZONE 21, PANEL 1 SPAR
 - 2 9.2 INSTALL NOZZ COVER
 - 1 MANIPULATE BY HAND
 - 21 ZONE 21, PANEL 1 SPAR
- 15 5 INSTALL RAY III ACS NOZZLES
 - 1 5.23 REM LOCKWIRE/NOZZLE
 - 1 MANIPULATE BY HAND
 - 84 FLIGHT NOZZLE
 - 2 5.24 REMOVE NOZZLE
 - 1 MANIPULATE BY HAND
 - 2 MANIPULATE WITH TOOLS
 - 1 MANIPULATE BY HAND
 - 3 5.15 PLACE NOZZ IN CONT
 - 1 MANIPULATE BY HAND
 - 4 5.4 POS FLT NOZZLE
 - 1 MANIPULATE BY HAND
 - 22 ZONE 22, PANEL 3 SPAR
 - 5 5.8 INSTALL FLT NOZZLE
 - 1 MANIPULATE BY HAND
 - 22 ZONE 22, PANEL 3 SPAR
 - 2 MANIPULATE WITH TOOLS
 - 22 ZONE 22, PANEL 3 SPAR
- 16 7 SET UP FOR FLOW RATE MEASUREMENT
 - 1 7.1 CONN FLOW METER
 - 1 MANIPULATE BY HAND
 - 22 ZONE 22, PANEL 3 SPAR
- 17 8 PERFORM FLOW RATE MEASUREMENT
 - 1 8.1 RECORD FLOW RATE
 - 1 MANIPULATE BY HAND
- 18 9 POST-TEST OPERATIONS
 - 1 9.1 DISCONN FLOW METER
 - 1 MANIPULATE BY HAND
 - 22 ZONE 22, PANEL 3 SPAR
 - 2 9.2 INSTALL NOZZ COVER

- 1 MANIPULATE BY HAND
22 ZONE 22, PANEL 3 SPAR
- 11 5 INSTALL RAY V ACS NOZZLE
 - 1 5.23 REM LOCKWIRE/NOZZLE
 - 1 MANIPULATE BY HAND
 - 85 FLIGHT NOZZLE
 - 2 5.24 REMOVE NOZZLE
 - 1 MANIPULATE BY HAND
 - 3 5.15 PLACE NOZZ IN CONT
 - 1 MANIPULATE BY HAND
 - 4 5.4 POS FLT NOZZLE
 - 1 MANIPULATE BY HAND
 - 23 ZONE 23, PANEL 5 SPAR
 - 5 5.8 INSTALL FLT NOZZLE
 - 1 MANIPULATE BY HAND
 - 23 ZONE 23, PANEL 5 SPAR
 - 2 MANIPULATE WITH TOOLS
 - 23 ZONE 23, PANEL 5 SPAR
- 12 7 SET UP FOR FLOW RATE MEASUREMENTS
 - 1 7.1 CONN FLOW METER
 - 1 MANIPULATE BY HAND
 - 23 ZONE 23, PANEL 5 SPAR
- 13 8 PERFORM FLOW RATE MEASUREMENTS
 - 1 8.1 RECORD FLOW RATE
 - 9 VISUAL INSPECTION
- 14 9 POST-TEST OPERATIONS
 - 1 9.1 DISCONN FLOW METER
 - 1 MANIPULATE BY HAND
 - 23 ZONE 23, PANEL 5 SPAR
 - 2 9.2 INSTALL NOZZ COVER
 - 1 MANIPULATE BY HAND
 - 23 ZONE 23, PANEL 5 SPAR
- 15 5 INSTALL RAY VII ACS NOZZLES
 - 1 5.23 REM LOCKWIRE/NOZZLE
 - 1 MANIPULATE BY HAND
 - 86 FLIGHT NOZZLE
 - 2 5.24 REMOVE NOZZLE
 - 1 MANIPULATE BY HAND
 - 2 MANIPULATE WITH TOOLS
 - 1 MANIPULATE BY HAND
 - 3 5.15 PLACE NOZZ IN CONT
 - 1 MANIPULATE BY HAND
 - 4 5.4 POS FLT NOZZLE
 - 1 MANIPULATE BY HAND
 - 24 ZONE 24, PANEL 7 SPAR
 - 5 5.8 INSTALL FLT NOZZLE
 - 1 MANIPULATE BY HAND
 - 24 ZONE 24, PANEL 7 SPAR
 - 1 MANIPULATE BY HAND
 - 24 ZONE 24, PANEL 7 SPAR
- 16 7 SET UP FOR FLOW RATE MEASUREMENT
 - 1 7.1 CONN FLOW METER
 - 1 MANIPULATE BY HAND
 - 24 ZONE 24, PANEL 7 SPAR
- 17 8 PERFORM FLOW RATE MEASUREMENT
 - 1 8.1 RECORD FLOW RATE
 - 9 VISUAL INSPECTION
- 18 9 POST-TEST OPERATIONS
 - 1 9.1 DISCONN FLOW METER
 - 1 MANIPULATE BY HAND
 - 24 ZONE 24, PANEL 7 SPAR
 - 2 9.2 INSTALL NOZZ COVER

APPENDIX 1 (Continued)

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- 1 MANIPULATE BY HAND
 - 24 ZONE 24, PANEL 7 SPAR
- 19 2 POSITION SC
 - 1 2.1 REM SC FROM URING
 - 2 MANIPULATE WITH TOOLS
 - 1 MANIPULATE BY HAND
 - 1 MANIPULATE BY HAND
 - 2 2.1 ELEVATE SC
 - 16 MANEUVER SPACECRAFT
- 20 5 INSTALL THERMAL SHIELDS
 - 1 5.2 XPORT SPRING ASSYS
 - 1 MANIPULATE BY HAND
 - 1 ZONE 1, BAY 1
 - 3 ZONE 3, BAY 3
 - 5 ZONE 5, BAY 5
 - 7 ZONE 7, BAY 7
 - 2 5.9 REMOVE EA SCREWS
 - 2 MANIPULATE WITH TOOLS
 - 1 ZONE 1, BAY 1
 - 3 ZONE 3, BAY 3
 - 5 ZONE 5, BAY 5
 - 7 ZONE 7, BAY 7
 - 1 MANIPULATE BY HAND
 - 1 ZONE 1, BAY 1
 - 3 ZONE 3, BAY 3
 - 5 ZONE 5, BAY 5
 - 7 ZONE 7, BAY 7
 - 3 5.4 POS SPRING ASSY(8)
 - 1 MANIPULATE BY HAND
 - 1 ZONE 1, BAY 1
 - 3 ZONE 3, BAY 3
 - 5 ZONE 5, BAY 5
 - 7 ZONE 7, BAY 7
 - 4 5.8 INST SPRING ASSY(8)
 - 1 MANIPULATE BY HAND
 - 1 ZONE 1, BAY 1
 - 3 ZONE 3, BAY 3
 - 5 ZONE 5, BAY 5
 - 7 ZONE 7, BAY 7
 - 2 MANIPULATE WITH TOOLS
 - 1 ZONE 1, BAY 1
 - 3 ZONE 3, BAY 3
 - 5 ZONE 5, BAY 5
 - 7 ZONE 7, BAY 7
 - 5 5.9 REMOVE EA SCREWS
 - 2 MANIPULATE WITH TOOLS
 - 8 ZONE 8, BAY 8
 - 1 MANIPULATE BY HAND
 - 8 ZONE 8, BAY 8
 - 6 5.4 POS THERM SHIELD
 - 1 MANIPULATE BY HAND
 - 8 ZONE 8, BAY 8
 - 7 5.8 INST THERM SHIELD
 - 1 MANIPULATE BY HAND
 - 8 ZONE 8, BAY 8
 - 2 MANIPULATE WITH TOOLS
 - 8 ZONE 8, BAY 8
 - 8 5.2 XPORT SUN SHADE
 - 1 MANIPULATE BY HAND
 - 68 SUN SHADE
 - 17 SECURED IN TENT
 - 9 5.4 POS SUN SHADE

- 1 MANIPULATE BY HAND
47 ZONE 47, OCTAGON BOTTOM
- 10 5.8 INSTALL SUN SHADE
 - 1 MANIPULATE BY HAND
47 ZONE 47, OCTAGON BOTTOM
 - 1 MANIPULATE BY HAND
47 ZONE 47, OCTAGON BOTTOM
- 11 5.5 TIE SUN SHADE RING
 - 1 MANIPULATE BY HAND
47 ZONE 47, OCTAGON BOTTOM
- 12 5.7 THREAD LANYARDS
 - 1 MANIPULATE BY HAND
47 ZONE 47, OCTAGON BOTTOM
- 13 5.1 FOLD SUN SHADES(4)
 - 1 MANIPULATE BY HAND
47 ZONE 47, OCTAGON BOTTOM
- 14 5.5 TIE LANYARDS
 - 1 MANIPULATE BY HAND
47 ZONE 47, OCTAGON BOTTOM
- 15 5.1 FOLD SUN SHADES(4)
 - 1 MANIPULATE BY HAND
47 ZONE 47, OCTAGON BOTTOM
- 21 2 POSITION SC
 - 1 2.1 LOWER SC
 - 3 MOVE W/CRANE
 - 2 2.1 POS SC ON ADAPTER
 - 1 MANIPULATE BY HAND
 - 3 2.2 SECURE SC
 - 1 MANIPULATE BY HAND
 - 1 MANIPULATE BY HAND
- 22 5 INSTALL THERMAL SHIELDS(CONTINUED)
 - 1 5.13 REM LIFT FIXTURES
 - 2 MANIPULATE WITH TOOLS
1 MANIPULATE BY HAND
 - 2 5.2 XPORT EAGLE SHIELD
 - 1 MANIPULATE BY HAND
61 EAGLE SHIELD-BAY IV
 - 3 5.9 REMOVE EA SCREWS
 - 2 MANIPULATE WITH TOOLS
4 ZONE 4, BAY 4
1 MANIPULATE BY HAND
4 ZONE 4, BAY 4
 - 4 5.4 POS EAGLE SHIELD
 - 1 MANIPULATE BY HAND
4 ZONE 4, BAY 4
 - 5 5.8 INST EAGLE SHIELD
 - 1 MANIPULATE BY HAND
4 ZONE 4, BAY 4
2 MANIPULATE WITH TOOLS
4 ZONE 4, BAY 4
 - 6 5.2 XPORT TRD BLANKET
 - 1 MANIPULATE BY HAND
62 TRD SHADE BLANKET
 - 7 5.4 POS TRD BLANKET
 - 1 MANIPULATE BY HAND
4 ZONE 4, BAY 4
 - 8 5.8 INSTALL TRD BLANKET
 - 1 MANIPULATE BY HAND
4 ZONE 4, BAY 4
2 MANIPULATE WITH TOOLS
4 ZONE 4, BAY 4
 - 9 5.2 XPORT UMB SHIELD

APPENDIX 1 (Continued)

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- 1 MANIPULATE BY HAND
- 63 UMB THERMAL SHIELD
- 10 5.4 POS UMB SHIELD
- 1 MANIPULATE BY HAND
- 2 ZONE 2, BAY 2
- 11 5.8 INSTALL UMB SHIELD
- 1 MANIPULATE BY HAND
- 2 ZONE 2, BAY 2
- 2 MANIPULATE WITH TOOLS
- 2 ZONE 2, BAY 2
- 12 5.2 XPORT CORN SHIELDS
- 1 MANIPULATE BY HAND
- 64 CORNER SHIELD
- 65 CORNER SHIELD
- 66 CORNER SHIELD
- 67 CORNER SHIELD
- 69 CORNER SHIELD
- 70 CORNER SHIELD
- 71 CORNER SHIELD
- 72 CORNER SHIELD
- 13 5.4 POS CORN SHIELD
- 1 MANIPULATE BY HAND
- 1 ZONE 1, BAY 1
- 14 5.8 INSTALL CORN SHIELD
- 1 MANIPULATE BY HAND
- 1 ZONE 1, BAY 1
- 2 MANIPULATE WITH TOOLS
- 1 ZONE 1, BAY 1
- 17 SECURED IN TENT
- 15 5.4 POS CORN SHIELD
- 1 MANIPULATE BY HAND
- 3 ZONE 3, BAY 3
- 16 5.8 INSTALL CORN SHIELD
- 1 MANIPULATE BY HAND
- 3 ZONE 3, BAY 3
- 2 MANIPULATE WITH TOOLS
- 3 ZONE 3, BAY 3
- 17 5.4 POS CORN SHIELD
- 1 MANIPULATE BY HAND
- 5 ZONE 5, BAY 5
- 18 5.8 INSTALL CORN SHIELD
- 1 MANIPULATE BY HAND
- 5 ZONE 5, BAY 5
- 2 MANIPULATE WITH TOOLS
- 5 ZONE 5, BAY 5
- 19 5.4 POS CORN SHIELD
- 1 MANIPULATE BY HAND
- 7 ZONE 7, BAY 7
- 20 5.8 INSTALL CORN SHIELD
- 1 MANIPULATE BY HAND
- 7 ZONE 7, BAY 7
- 2 MANIPULATE WITH TOOLS
- 7 ZONE 7, BAY 7
- 23 5 INSTALL THERMAL SHIELDS (CONTINUED)
- 1 5.2 XPORT AC JET SHADES
- 1 MANIPULATE BY HAND
- 21 ZONE 21, PANEL 1 SPAR
- 23 ZONE 23, PANEL 5 SPAR
- 2 5.4 POS JET SHADE
- 1 MANIPULATE BY HAND
- 21 ZONE 21, PANEL 1 SPAR
- 3 5.8 INSTALL JET SHADE

- 1 MANIPULATE BY HAND
 - 21 ZONE 21, PANEL 1 SPAR
- 2 MANIPULATE WITH TOOLS
 - 21 ZONE 21, PANEL 1 SPAR
- 4 5.4 POS JET SHADE
 - 1 MANIPULATE BY HAND
 - 23 ZONE 23, PANEL 5 SPAR
- 5 5.8 INSTALL JET SHADE
 - 1 MANIPULATE BY HAND
 - 23 ZONE 23, PANEL 5 SPAR
 - 2 MANIPULATE WITH TOOLS
 - 23 ZONE 23, PANEL 5 SPAR
- 6 5.4 POS CORNER SHIELD
 - 1 MANIPULATE BY HAND
 - 1 ZONE 1, BAY 1
- 7 5.8 INSTALL CORN SHIELD
 - 1 MANIPULATE BY HAND
 - 1 ZONE 1, BAY 1
 - 2 MANIPULATE WITH TOOLS
 - 1 ZONE 1, BAY 1
- 8 5.4 POS CORNER SHIELD
 - 1 MANIPULATE BY HAND
 - 3 ZONE 3, BAY 3
- 9 5.8 INSTALL CORN SHIELD
 - 1 MANIPULATE BY HAND
 - 3 ZONE 3, BAY 3
 - 2 MANIPULATE WITH TOOLS
 - 3 ZONE 3, BAY 3
- 10 5.4 POS CORNER SHIELD
 - 1 MANIPULATE BY HAND
 - 5 ZONE 5, BAY 5
- 11 5.8 INSTALL CORN SHIELD
 - 1 MANIPULATE BY HAND
 - 5 ZONE 5, BAY 5
 - 2 MANIPULATE WITH TOOLS
 - 5 ZONE 5, BAY 5
- 17 SECURED IN TENT
- 12 5.4 POS CORNER SHIELD
 - 1 MANIPULATE BY HAND
 - 7 ZONE 7, BAY 7
- 13 5.8 INSTALL CORN SHIELD
 - 1 MANIPULATE BY HAND
 - 7 ZONE 7, BAY 7
 - 2 MANIPULATE WITH TOOLS
 - 7 ZONE 7, BAY 7
- 24 8 SC/STC INTERFACE TEST
 - 1 8.3 DEMATE CONN(205)
 - 11 MATE (DEMATE) CONNECTORS
 - 1 ZONE 1, BAY 1
 - 3 ZONE 3, BAY 3
 - 4 ZONE 4, BAY 4
 - 5 ZONE 5, BAY 5
 - 6 ZONE 6, BAY 6
 - 7 ZONE 7, BAY 7
 - 8 ZONE 8, BAY 8
 - 9 ZONE 9, BAY 1 INWARD
 - 10 ZONE 10, BAY 2 INWARD
 - 11 ZONE 11, BAY 3 INWARD
 - 12 ZONE 12, BAY 4 INWARD
 - 13 ZONE 13, BAY 5 INWARD
 - 14 ZONE 14, BAY 6 INWARD
 - 15 ZONE 15, BAY 7 INWARD

16 ZONE 16, BAY 8 INWARD
 25 ZONE 25, HI-GAIN ANTENNA
 26 ZONE 26, LO-GAIN ANTENNA
 27 ZONE 27, TOP RING TRAY
 28 ZONE 28, BOTT RING TRAY

2 8.4 PERF CONTIN CK(205)

10 INSPECTION WITH GAUGES

1 ZONE 1, BAY 1
 3 ZONE 3, BAY 3
 4 ZONE 4, BAY 4
 5 ZONE 5, BAY 5
 6 ZONE 6, BAY 6
 7 ZONE 7, BAY 7
 8 ZONE 8, BAY 8
 9 ZONE 9, BAY 1 INWARD
 10 ZONE 10, BAY 2 INWARD
 11 ZONE 11, BAY 3 INWARD
 12 ZONE 12, BAY 4 INWARD
 13 ZONE 13, BAY 5 INWARD
 14 ZONE 14, BAY 6 INWARD
 15 ZONE 15, BAY 7 INWARD
 16 ZONE 16, BAY 8 INWARD
 25 ZONE 25, HI-GAIN ANTENNA
 26 ZONE 26, LO-GAIN ANTENNA
 27 ZONE 27, TOP RING TRAY
 28 ZONE 28, BOTT RING TRAY

3 8.5 MATE CONNECTOR(205)

11 MATE (DEMATE) CONNECTORS

1 ZONE 1, BAY 1
 3 ZONE 3, BAY 3
 4 ZONE 4, BAY 4
 5 ZONE 5, BAY 5
 6 ZONE 6, BAY 6
 7 ZONE 7, BAY 7
 8 ZONE 8, BAY 8
 9 ZONE 9, BAY 1 INWARD
 10 ZONE 10, BAY 2 INWARD
 11 ZONE 11, BAY 3 INWARD
 12 ZONE 12, BAY 4 INWARD
 13 ZONE 13, BAY 5 INWARD
 14 ZONE 14, BAY 6 INWARD
 15 ZONE 15, BAY 7 INWARD
 16 ZONE 16, BAY 8 INWARD
 25 ZONE 25, HI-GAIN ANTENNA
 26 ZONE 26, LO-GAIN ANTENNA
 27 ZONE 27, TOP RING TRAY
 28 ZONE 28, BOTT RING TRAY

25 8 INITIAL POWER APPLICATION

1 8.6 VOLT TEST-205 CONN

10 INSPECTION WITH GAUGES

26 7 SUBSYSTEM INTERFACE TEST PREPARATION

1 7.3 CONN ACGS/0SE

1 MANIPULATE BY HAND

12 ZONE 12, BAY 4 INWARD

2 7.3 CONN PIPS/0SE

1 MANIPULATE BY HAND

10 ZONE 10, BAY 2 INWARD

3 7.3 CONN SCI SUBSYS/0SE

1 MANIPULATE BY HAND

3 ZONE 3, BAY 3

4 7.3 CONN ENCOD/0SE

1 MANIPULATE BY HAND

APPENDIX 1 (Continued)

57

- 4 ZONE 4, BAY 4
- 5 7.3 CONN FLT COMM/OSE
1 MANIPULATE BY HAND
4 ZONE 4, BAY 4
- 6 7.3 CONN RADIO/OSE
1 MANIPULATE BY HAND
5 ZONE 5, BAY 5
- 7 7.3 CONN CCS/OSE
1 MANIPULATE BY HAND
7 ZONE 7, BAY 7
- 8 7.3 CONN TAPE REC/OSE
1 MANIPULATE BY HAND
5 ZONE 5, BAY 5
- 9 7.3 CONN PYRO/OSE
1 MANIPULATE BY HAND
27 ZONE 27, TOP RING TRAY
- 10 7.3 CONN DFR/OSE
1 MANIPULATE BY HAND
21 ZONE 21, PANEL 1 SPAR
- 27 8 SUBSYSTEM INTERFACE TESTS
1 8.7 OPEN CIRC MEAS(205)
10 INSPECTION WITH GAUGES
- 28 7 ACGS SUBSYSTEM TEST PREPARATION
1 7.1 CONN OXYGEN REGUL
1 MANIPULATE BY HAND
7 ZONE 7, BAY 7
- 2 7.1 CONN HI-PRESS HOSE
1 MANIPULATE BY HAND
7 ZONE 7, BAY 7
- 29 8 PERFORM ACGS SUBSYSTEM TEST
1 8.1 PERFORM TEST
9 VISUAL INSPECTION
- 30 9 POST-TEST OPERATIONS
1 9.1 DISCONN OXYGEN REG
1 MANIPULATE BY HAND
7 ZONE 7, BAY 7
- 17 SECURED IN TENT
- 2 9.1 DISCONN HOSE
1 MANIPULATE BY HAND
7 ZONE 7, BAY 7
- 3 9.3 DISCONN ACGS/OSE
1 MANIPULATE BY HAND
7 ZONE 7, BAY 7
- 31 7 RADIO SUBSYSTEM TEST PREPARATION
1 7.1 CONN OSCILLOSCOPE
1 MANIPULATE BY HAND
5 ZONE 5, BAY 5
- 2 7.1 CONN 30-DB COUPLER
1 MANIPULATE BY HAND
5 ZONE 5, BAY 5
- 3 7.1 CONN 20-DB COUPLER
1 MANIPULATE BY HAND
5 ZONE 5, BAY 5
- 4 7.1 CONN 10-DB COUPLER
1 MANIPULATE BY HAND
5 ZONE 5, BAY 5
- 5 7.1 CONN MILLIAMETER
1 MANIPULATE BY HAND
5 ZONE 5, BAY 5
- 6 7.1 CONN VOLT METER
1 MANIPULATE BY HAND
5 ZONE 5, BAY 5

APPENDIX 1 (Continued)

58

- 32 8 PERFORM RADIO SUBSYSTEM TEST
 - 1 8.1 PERFORM TEST
 - 9 VISUAL INSPECTION
- 33 9 POST-TEST OPERATIONS
 - 1 9.1 DISCONN OSCILL
 - 1 MANIPULATE BY HAND
 - 5 ZONE 5, BAY 5
 - 17 SECURED IN TENT
 - 17 SECURED IN TENT
 - 2 9.1 DISCONN 30-DB COUPL
 - 1 MANIPULATE BY HAND
 - 5 ZONE 5, BAY 5
 - 3 9.1 DISCONN 20 DB COUPL
 - 11 MATE (DEMATE) CONNECTORS
 - 5 ZONE 5, BAY 5
 - 4 9.1 DISCONN 10 DB COUPL
 - 11 MATE (DEMATE) CONNECTORS
 - 5 ZONE 5, BAY 5
 - 5 9.1 DISCONN MILLIAMETER
 - 11 MATE (DEMATE) CONNECTORS
 - 5 ZONE 5, BAY 5
 - 6 9.1 DISCONN DIFF VM
 - 11 MATE (DEMATE) CONNECTORS
 - 5 ZONE 5, BAY 5
 - 7 9.3 DISCONN RADIO/USE
 - 11 MATE (DEMATE) CONNECTORS
 - 5 ZONE 5, BAY 5
- 34 7 FLT COMMAND SUBSYSTEM TEST PREPARATION
 - 1 7.1 CONN FLT CMD/OSCILL
 - 11 MATE (DEMATE) CONNECTORS
 - 4 ZONE 4, BAY 4
 - 2 7.1 CONN RMS METER
 - 11 MATE (DEMATE) CONNECTORS
 - 4 ZONE 4, BAY 4
 - 3 7.1 CONN DC VOLTMETER
 - 11 MATE (DEMATE) CONNECTORS
 - 4 ZONE 4, BAY 4
- 35 8 FLT COMMAND SUBSYSTEM TEST
 - 1 8.5 CONN DETECTOR CABLES
 - 11 MATE (DEMATE) CONNECTORS
 - 4 ZONE 4, BAY 4
 - 2 8.1 PERFORM TEST
 - 9 VISUAL INSPECTION
 - 3 8.5 CONN RECORDER
 - 11 MATE (DEMATE) CONNECTORS
 - 4 ZONE 4, BAY 4
 - 4 8.1 PERFORM TEST
 - 9 VISUAL INSPECTION
- 36 9 POST-TEST OPERATIONS
 - 1 9.1 DISCONN CABLES
 - 11 MATE (DEMATE) CONNECTORS
 - 4 ZONE 4, BAY 4
 - 2 9.1 DISCONN RECORDER
 - 11 MATE (DEMATE) CONNECTORS
 - 4 ZONE 4, BAY 4
- 37 7 POWER SUBSYSTEM TEST PREPARATION
 - 1 7.1 CONN CABLE(28)
 - 11 MATE (DEMATE) CONNECTORS
 - 1 ZONE 1, BAY 1
- 38 8 POWER SUBSYSTEM TEST
 - 1 8.3 REMOVE CABLES
 - 11 MATE (DEMATE) CONNECTORS

- 1 ZONE 1, BAY I
- 2 8.5 CONN CABLE (9)
 - 11 MATE (DEMATE) CONNECTORS
 - 1 ZONE 1, BAY I
- 3 8.3 DEMATE CONN (26)
 - 11 MATE (DEMATE) CONNECTORS
 - 1 ZONE 1, BAY I
- 4 8.4 PERFORM CONTIN CHEC
 - 10 INSPECTION WITH GAUGES
 - 1 ZONE 1, BAY I
- 5 8.9 CONN 500- OHM RSTR
 - 1 MANIPULATE BY HAND
 - 1 ZONE 1, BAY I
 - 11 MATE (DEMATE) CONNECTORS
 - 1 ZONE 1, BAY I
 - 17 SECURED IN TENT
- 6 8.5 CONN CABLE
 - 11 MATE (DEMATE) CONNECTORS
 - 1 ZONE 1, BAY I
- 7 8.10 REMOVE 500-OHM RSTR
 - 1 MANIPULATE BY HAND
 - 1 ZONE 1, BAY I
- 8 8.5 CONN CABLE
 - 11 MATE (DEMATE) CONNECTORS
 - 1 ZONE 1, BAY I
- 9 8.10 CONN CONTROL LINES
 - 11 MATE (DEMATE) CONNECTORS
 - 1 ZONE 1, BAY I
- 10 8.4 PRFORM CONT CHECK
 - 10 INSPECTION WITH GAUGES
 - 1 ZONE 1, BAY I
- 12 8.5 CONN PINS(3)
 - 11 MATE (DEMATE) CONNECTORS
 - 1 ZONE 1, BAY I
- 14 8.9 INSERT B-OUT BOX
 - 1 MANIPULATE BY HAND
 - 1 ZONE 1, BAY I
 - 2 MANIPULATE WITH TOOLS
 - 1 ZONE 1, BAY I
- 15 8.9 CONN 10 OHM RESIST
 - 1 MANIPULATE BY HAND
 - 1 ZONE 1, BAY I
- 16 8.10 REM 10 OHM RESISTOR
 - 1 MANIPULATE BY HAND
 - 1 ZONE 1, BAY I
- 17 8.5 CONN PINS(3)
 - 1 MANIPULATE BY HAND
 - 1 ZONE 1, BAY I
- 18 8.9 INSERT B-OUT BOX
 - 1 MANIPULATE BY HAND
 - 1 ZONE 1, BAY I
 - 2 MANIPULATE WITH TOOLS
 - 1 ZONE 1, BAY I
- 19 8.5 CONN CABLES(3)
 - 11 MATE (DEMATE) CONNECTORS
 - 1 ZONE 1, BAY I
- 39 8 POWER SUBSYSTEM TEST (CONTINUED)
 - 1 8.5 CONNECT CABLES(27)
 - 11 MATE (DEMATE) CONNECTORS
 - 1 ZONE 1, BAY I
 - 2 8.5 CONN CCS LOAD BOX
 - 1 MANIPULATE BY HAND

- 1 ZONE 1, BAY 1
- 2 MANIPULATE WITH TOOLS
- 1 ZONE 1, BAY 1
- 3 8.5 DISCONN SYNCRON
- 11 MATE (DEMATE) CONNECTORS
- 1 ZONE 1, BAY 1
- 40 7 CCS SUBSYSTEM PREPARATION
- 1 7.1 CONN OSCILLOSCOPE
- 11 MATE (DEMATE) CONNECTORS
- 7 ZONE 7, BAY 7
- 2 7.1 CONN LOGIC CONNECT
- 11 MATE (DEMATE) CONNECTORS
- 7 ZONE 7, BAY 7
- 41 8 CCS SUBSYSTEM TEST
- 1 8.1 PERFORM TESTS
- 9 VISUAL INSPECTION
- 42 7 TAPE RECORDER SUBSYSTEM TEST PREPARATION
- 1 7.1 CONN DATA ENCODER
- 11 MATE (DEMATE) CONNECTORS
- 5 ZONE 5, BAY 5
- 2 7.1 CONN UMB JBOX
- 11 MATE (DEMATE) CONNECTORS
- 5 ZONE 5, BAY 5
- 3 7.1 CONN RECORDER/USE
- 11 MATE (DEMATE) CONNECTORS
- 5 ZONE 5, BAY 5
- 4 7.1 CONN DATA AUTOMAT
- 11 MATE (DEMATE) CONNECTORS
- 5 ZONE 5, BAY 5
- 17 SECURED IN TENT
- 43 8 TAPE RECORDER SUBSYSTEM TEST
- 1 8.1 PERFORM TEST
- 9 VISUAL INSPECTION
- 44 9 POST-TEST OPERATIONS
- 1 9.1 DISCONN EQUIPMENT
- 11 MATE (DEMATE) CONNECTORS
- 5 ZONE 5, BAY 5
- 45 7 DATA ENCODER SUBSYSTEM TEST PREPARATION
- 1 7.1 CONN VOLTMETER
- 11 MATE (DEMATE) CONNECTORS
- 4 ZONE 4, BAY 4
- 2 7.1 CONN OSCILLOSCOPE
- 11 MATE (DEMATE) CONNECTORS
- 4 ZONE 4, BAY 4
- 3 7.1 CONN ENCOD/POWER
- 11 MATE (DEMATE) CONNECTORS
- 4 ZONE 4, BAY 4
- 46 8 DATA ENCODER SUBSYSTEM TEST
- 1 8.5 CONN CABLING
- 11 MATE (DEMATE) CONNECTORS
- 4 ZONE 4, BAY 4
- 2 8.5 CONN ENCOD/USE
- 11 MATE (DEMATE) CONNECTORS
- 4 ZONE 4, BAY 4
- 17 SECURED IN TENT
- 3 8.1 PERFORM TEST
- 9 VISUAL INSPECTION
- 47 9 POST-TEST OPERATIONS
- 1 9.3 DISCONN CABLES
- 11 MATE (DEMATE) CONNECTORS
- 4 ZONE 4, BAY 4
- 48 7 SCIENCE SUBSYSTEM TEST PREPARATION

APPENDIX 1 (Continued)

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- 1 7.1 CONN CABLING
11 MATE (DEMATE) CONNECTORS
3 ZONE 3, BAY 3
- 2 7.9 POS PHOTOM LAMPS
1 MANIPULATE BY HAND
3 ZONE 3, BAY 3
- 3 7.1 CONN PHOTOM LAMPS
11 MATE (DEMATE) CONNECTORS
3 ZONE 3, BAY 3
- 4 7.7 POS DFR CABLES
1 MANIPULATE BY HAND
3 ZONE 3, BAY 3
- 5 7.1 CONN DFR CABLES
11 MATE (DEMATE) CONNECTORS
3 ZONE 3, BAY 3
- 49 5 INSTALL MAGNETOMETER
1 5.2 XPORT MAGNETOMETER
1 MANIPULATE BY HAND
57 MAGNETOMETER
2 5.4 POS MAGNETOMETER
1 MANIPULATE BY HAND
24 ZONE 24, PANEL 7 SPAR
3 5.8 INST MAGNETOMETER
1 MANIPULATE BY HAND
24 ZONE 24, PANEL 7 SPAR
2 MANIPULATE WITH TOOLS
24 ZONE 24, PANEL 7 SPAR
- 50 8 SCIENCE SUBSYSTEM TEST
1 8.5 ATT HANDLING CABLES
11 MATE (DEMATE) CONNECTORS
3 ZONE 3, BAY 3
2 8.9 INST ATTENUATORS
1 MANIPULATE BY HAND
3 ZONE 3, BAY 3
1 MANIPULATE BY HAND
3 ZONE 3, BAY 3
2 MANIPULATE WITH TOOLS
3 ZONE 3, BAY 3
3 8.5 CONN ANT CABLES(2)
11 MATE (DEMATE) CONNECTORS
3 ZONE 3, BAY 3
17 SECURED IN TENT
4 8.1 PERFORM TEST
9 VISUAL INSPECTION
- 51 9 POST-TEST OPERATIONS
1 9.1 DISCONN CABLING
11 MATE (DEMATE) CONNECTORS
3 ZONE 3, BAY 3
2 9.1 DISCONN LAMPS
2 MANIPULATE WITH TOOLS
3 ZONE 3, BAY 3
1 MANIPULATE BY HAND
3 ZONE 3, BAY 3
3 9.9 REMOVE LAMPS
1 MANIPULATE BY HAND
3 ZONE 3, BAY 3
4 9.1 DISCONN DFR CABLES
11 MATE (DEMATE) CONNECTORS
3 ZONE 3, BAY 3
5 9.9 REM DFR CABLES
1 MANIPULATE BY HAND
3 ZONE 3, BAY 3

APPENDIX 1 (Continued)

62

- 6 9.1 DISCONN CABLES
 - 11 MATE (DEMATE) CONNECTORS
 - 3 ZONE 3, BAY 3
- 7 9.10 REMOVE ATTENUATORS
 - 2 MANIPULATE WITH TOOLS
 - 61 ATTENUATORS
 - 1 MANIPULATE BY HAND
 - 61 ATTENUATORS
 - 1 MANIPULATE BY HAND
 - 61 ATTENUATORS
- 52 6 REMOVE MAGNETOMETER
 - 1 6.9 REL MAGNETOMETER
 - 2 MANIPULATE WITH TOOLS
 - 24 ZONE 24, PANEL 7 SPAR
 - 1 MANIPULATE BY HAND
 - 24 ZONE 24, PANEL 7 SPAR
 - 2 6.4 REMOVE MAGNETOMETER
 - 1 MANIPULATE BY HAND
 - 57 MAGNETOMETER
 - 3 6.2 XPORT MAGNETOMETER
 - 1 MANIPULATE BY HAND
 - 57 MAGNETOMETER
- 53 7 SYSTEM TEST PREPARATION
 - 2 7.9 INSTALL BATTERY
 - 1 MANIPULATE BY HAND
 - 8 ZONE 8, BAY 8
 - 1 MANIPULATE BY HAND
 - 8 ZONE 8, BAY 8
 - 2 MANIPULATE WITH TOOLS
 - 8 ZONE 8, BAY 8
 - 3 7.5 INSTALL SIT
 - 1 MANIPULATE BY HAND
 - 16 ZONE 16, BAY 8 INWARD
 - 1 MANIPULATE BY HAND
 - 16 ZONE 16, BAY 8 INWARD
 - 2 MANIPULATE WITH TOOLS
 - 16 ZONE 16, BAY 8 INWARD
 - 4 7.5 INST LIGHT SOURCES
 - 1 MANIPULATE BY HAND
 - 12 ZONE 12, BAY 4 INWARD
 - 1 MANIPULATE BY HAND
 - 12 ZONE 12, BAY 4 INWARD
 - 2 MANIPULATE WITH TOOLS
 - 12 ZONE 12, BAY 4 INWARD
 - 5 7.10 PRESSUR ACGS TANK
 - 9 VISUAL INSPECTION
 - 6 7.5 INST XDUCER ASSY
 - 1 MANIPULATE BY HAND
 - 12 ZONE 12, BAY 4 INWARD
 - 1 MANIPULATE BY HAND
 - 12 ZONE 12, BAY 4 INWARD
 - 2 MANIPULATE WITH TOOLS
 - 12 ZONE 12, BAY 4 INWARD
 - 17 SECURED IN TENT
 - 17 SECURED IN TENT
 - 7 7.10 PRESSUR PIPS TANK
 - 9 VISUAL INSPECTION
 - 8 7.5 INST DISICC COVER
 - 1 MANIPULATE BY HAND
 - 12 ZONE 12, BAY 4 INWARD
 - 1 MANIPULATE BY HAND
 - 12 ZONE 12, BAY 4 INWARD

- 2 MANIPULATE WITH TOOLS
 - 12 ZONE 12, BAY 4 INWARD
- 9 7.5 INST BRACKETS
 - 1 MANIPULATE BY HAND
 - 12 ZONE 12, BAY 4 INWARD
 - 2 MANIPULATE WITH TOOLS
 - 12 ZONE 12, BAY 4 INWARD
- 10 7.5 INSTALL LATCH BRKT
 - 1 MANIPULATE BY HAND
 - 12 ZONE 12, BAY 4 INWARD
 - 2 MANIPULATE WITH TOOLS
 - 12 ZONE 12, BAY 4 INWARD
- 11 7.5 INST PLATE RING
 - 1 MANIPULATE BY HAND
 - 12 ZONE 12, BAY 4 INWARD
 - 2 MANIPULATE WITH TOOLS
 - 12 ZONE 12, BAY 4 INWARD
- 12 7.11 ALIGN PLATE RING
 - 1 MANIPULATE BY HAND
 - 12 ZONE 12, BAY 4 INWARD
- 13 7.5 INST TANK PLATE
 - 1 MANIPULATE BY HAND
 - 12 ZONE 12, BAY 4 INWARD
 - 2 MANIPULATE WITH TOOLS
 - 12 ZONE 12, BAY 4 INWARD
- 14 7.11 ALIGN TANK PLATE
 - 1 MANIPULATE BY HAND
 - 12 ZONE 12, BAY 4 INWARD
- 15 7.11 ALIGN FLUX TANK
 - 1 MANIPULATE BY HAND
 - 12 ZONE 12, BAY 4 INWARD
- 16 7.5 INST TANK MAIN PLAT
 - 1 MANIPULATE BY HAND
 - 12 ZONE 12, BAY 4 INWARD
 - 2 MANIPULATE WITH TOOLS
 - 12 ZONE 12, BAY 4 INWARD
- 17 7.5 INST ANGLE
 - 1 MANIPULATE BY HAND
 - 12 ZONE 12, BAY 4 INWARD
 - 2 MANIPULATE WITH TOOLS
 - 12 ZONE 12, BAY 4 INWARD
- 18 7.1 CONNECT CABLES
 - 11 MATE (DEMATE) CONNECTORS
 - 12 ZONE 12, BAY 4 INWARD
 - 17 SECURED IN TENT
- 54 8 SYSTEM TEST
 - 1 8.1 PERF MOTION TESTS
 - 9 VISUAL INSPECTION
 - 2 8.13 INSPECT CABLING
 - 9 VISUAL INSPECTION
 - 3 8.1 PERF MOTION TESTS
 - 9 VISUAL INSPECTION
 - 17 SECURED IN TENT
 - 4 8.14 ROTATE SC
 - 16 MANEUVER SPACECRAFT
 - 5 8.15 INST TRD SOURCES
 - 1 MANIPULATE BY HAND
 - 4 ZONE 4, BAY 4
 - 2 MANIPULATE WITH TOOLS
 - 4 ZONE 4, BAY 4
 - 6 8.1 PERF TRD TESTS
 - 9 VISUAL INSPECTION

- 7 8.16 REM TRD SOURCES
 - 2 MANIPULATE WITH TOOLS
 - 4 ZONE 4, BAY 4
 - 1 MANIPULATE BY HAND
 - 4 ZONE 4, BAY 4
- 8 8.1 PERF MOTION TESTS
 - 9 VISUAL INSPECTION
- 55 9 POST-TEST OPERATIONS
 - 1 9.1 DISCONNECT CABLES
 - 11 MATE (DEMATE) CONNECTORS
 - 12 ZONE 12, BAY 4 INWARD
 - 2 9.1 REM MAIN TANK PLATE
 - 2 MANIPULATE WITH TOOLS
 - 12 ZONE 12, BAY 4 INWARD
 - 1 MANIPULATE BY HAND
 - 12 ZONE 12, BAY 4 INWARD
 - 3 9.1 REM PLATE RING
 - 2 MANIPULATE WITH TOOLS
 - 12 ZONE 12, BAY 4 INWARD
 - 1 MANIPULATE BY HAND
 - 12 ZONE 12, BAY 4 INWARD
 - 4 9.1 REM LATCH BRACKET
 - 2 MANIPULATE WITH TOOLS
 - 12 ZONE 12, BAY 4 INWARD
 - 1 MANIPULATE BY HAND
 - 12 ZONE 12, BAY 4 INWARD
 - 5 9.1 REM DISICC COVER
 - 1 MANIPULATE BY HAND
 - 12 ZONE 12, BAY 4 INWARD
 - 6 9.1 REM XDUCE ASSY
 - 2 MANIPULATE WITH TOOLS
 - 12 ZONE 12, BAY 4 INWARD
 - 1 MANIPULATE BY HAND
 - 12 ZONE 12, BAY 4 INWARD
 - 7 9.1 REM LIGHT SOURCES
 - 2 MANIPULATE WITH TOOLS
 - 12 ZONE 12, BAY 4 INWARD
 - 1 MANIPULATE BY HAND
 - 12 ZONE 12, BAY 4 INWARD
 - 8 9.1 REM SIT
 - 2 MANIPULATE WITH TOOLS
 - 58 SEP-INIT TIMER
 - 1 MANIPULATE BY HAND
 - 58 SEP-INIT TIMER
 - 9 9.1 REM BATTERY
 - 2 MANIPULATE WITH TOOLS
 - 59 BATTERY(+A VIII)
 - 1 MANIPULATE BY HAND
 - 59 BATTERY(+A VIII)
- 17 SECURED IN TENT
- 56 7 FREE MODE TEST PREPARATION(PART I)
 - 1 7.1 CONN SPEC CABLING
 - 11 MATE (DEMATE) CONNECTORS
 - 27 ZONE 27, TOP RING TRAY
 - 2 7.3 CONNECT OSE
 - 11 MATE (DEMATE) CONNECTORS
 - 27 ZONE 27, TOP RING TRAY
- 57 8 FREE MODE TEST(PART I)
 - 1 8.1 PERFORM TEST
 - 9 VISUAL INSPECTION
- 58 9 POST-TEST OPERATIONS
 - 1 9.1 DISCONN SPEC CABLES

- 11 MATE (DEMATE) CONNECTORS
27 ZONE 27, TOP RING TRAY
- 2 9.3 DISCONNECT OSE
11 MATE (DEMATE) CONNECTORS
27 ZONE 27, TOP RING TRAY
- 59 7 FREE MODE TEST PREPARATION(PART II)
 - 1 7.1 CONN SPEC CABLING
11 MATE (DEMATE) CONNECTORS
27 ZONE 27, TOP RING TRAY
 - 2 7.3 CONNECT OSE
11 MATE (DEMATE) CONNECTORS
27 ZONE 27, TOP RING TRAY
- 60 8 FREE MODE TEST(PART II)
 - 1 8.1 PERFORM TEST
9 VISUAL INSPECTION
- 61 9 POST-TEST OPERATIONS
 - 1 9.1 DISCONN SPEC CABLES
11 MATE (DEMATE) CONNECTORS
27 ZONE 27, TOP RING TRAY
 - 2 9.3 DISCONNECT OSE
11 MATE (DEMATE) CONNECTORS
27 ZONE 27, TOP RING TRAY
- 62 2 INSTALL SC ON XY PLANE CG FIXTURE
 - 1 2.3 XPORT SC
16 MANEUVER SPACECRAFT
17 SECURED IN TENT
 - 2 2.1 POS SC
1 MANIPULATE BY HAND
48 ZONE 48, OCTAGON SIDES
 - 3 2.2 SECURE SC
1 MANIPULATE BY HAND
48 ZONE 48, OCTAGON SIDES
2 MANIPULATE WITH TOOLS
48 ZONE 48, OCTAGON SIDES
- 63 0 SC WEIGHT MEASUREMENT
 - 1 8.1 RECORD LOAD CELLS
9 VISUAL INSPECTION
- 64 2 REPOSITION SC
 - 1 2.1 ROTATE SC
16 MANEUVER SPACECRAFT
- 65 8 WEIGHT MEASUREMENT
 - 1 8.1 RECORD LOAD CELLS
9 VISUAL INSPECTION
- 67 8 XY PLANE CG CALCULATION
 - 1 8.11 CALCULATE CG
9 VISUAL INSPECTION
- 68 2 REMOVE SC FROM XY PLANE CG FIXTURE
 - 1 2.4 REMOVE SC
2 MANIPULATE WITH TOOLS
48 ZONE 48, OCTAGON SIDES
1 MANIPULATE BY HAND
48 ZONE 48, OCTAGON SIDES
3 MOVE W/CRANE
48 ZONE 48, OCTAGON SIDES
 - 2 2.3 XPORT SC
16 MANEUVER SPACECRAFT
- 69 2 INSTALL SC ON Z PLANE CG FIXTURE
 - 1 2.1 POS SC
16 MANEUVER SPACECRAFT
 - 2 2.2 SECURE SC
1 MANIPULATE BY HAND
48 ZONE 48, OCTAGON SIDES

- 2 MANIPULATE WITH TOOLS
48 ZONE 48, OCTAGON SIDES
- 70 8 WEIGHT MEASUREMENT
 - 1 8.1 RECORD LOAD CELLS
 - 9 VISUAL INSPECTION
- 71 2 REPOSITION SC
 - 1 2.1 ROTATE SC
 - 16 MANEUVER SPACECRAFT
- 72 8 WEIGHT MEASUREMENT
 - 1 8.1 RECORD LOAD CELLS
 - 9 VISUAL INSPECTION
- 73 8 Z PLANE CG CALCULATION
 - 2 8.11 CALCULATE CG
 - 9 VISUAL INSPECTION
- 74 2 REMOVE SC FROM Z PLANE CG FIXTURE
 - 1 2.4 REMOVE SC
 - 2 MANIPULATE WITH TOOLS
48 ZONE 48, OCTAGON SIDES
 - 1 MANIPULATE BY HAND
48 ZONE 48, OCTAGON SIDES
 - 3 MOVE W/CRANE
48 ZONE 48, OCTAGON SIDES
 - 2 2.3 XPORT SC
 - 16 MANEUVER SPACECRAFT
- 75 2 POSITION SC ON AGENA ADAPTER
 - 1 2.3 XPORT SC
 - 3 MOVE W/CRANE
48 ZONE 48, OCTAGON SIDES
 - 2 2.1 POS SC ON ADAPTER
 - 16 MANEUVER SPACECRAFT
 - 3 2.2 SEC SC TO ADAPTER
 - 1 MANIPULATE BY HAND
48 ZONE 48, OCTAGON SIDES
 - 2 MANIPULATE WITH TOOLS
48 ZONE 48, OCTAGON SIDES
 - 17 SECURED IN TENT
 - 17 SECURED IN TENT
- 76 5 INSTALL SHROUD
 - 1 5.2 XPORT SHROUD
 - 1 MANIPULATE BY HAND
 - 62 SHROUD
 - 2 5.4 POS SHROUD
 - 1 MANIPULATE BY HAND
 - 46 ZONE 46, OCTAGON TOP
 - 3 5.8 INSTALL SHROUD
 - 1 MANIPULATE BY HAND
 - 46 ZONE 46, OCTAGON TOP
 - 2 MANIPULATE WITH TOOLS
 - 46 ZONE 46, OCTAGON TOP
- 77 8 SIMULATED COUNTDOWN TEST
 - 1 8.1 PERFORM TEST
 - 9 VISUAL INSPECTION
- 78 6 REMOVE SHROUD
 - 1 6.9 RELEASE SHROUD
 - 2 MANIPULATE WITH TOOLS
 - 46 ZONE 46, OCTAGON TOP
 - 1 MANIPULATE BY HAND
 - 46 ZONE 46, OCTAGON TOP
 - 17 SECURED IN TENT
 - 2 6.4 REMOVE SHROUD
 - 1 MANIPULATE BY HAND
 - 46 ZONE 46, OCTAGON TOP

APPENDIX 1 (Continued)

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- 3 6.2 XPORT SHROUD
 - 1 MANIPULATE BY HAND
 - 46 ZONE 46, OCTAGON TOP
- 79 2 REMOVE SC FROM AGENA ADAPTER
 - 1 2.4 REMOVE SC
 - 3 MOVE W/CRANE
 - 48 ZONE 48, OCTAGON SIDES
 - 2 2.3 XPORT SPACECRAFT
 - 16 MANEUVER SPACECRAFT
- 80 7 SC/AGENA INTERFACE TEST PREPARATION
 - 1 7.4 INSP MATING SURFACE
 - 9 VISUAL INSPECTION
- 81 2 POSITION SC ON AGENA ADAPTER
 - 1 2.3 XPORT SC
 - 3 MOVE W/CRANE
 - 48 ZONE 48, OCTAGON SIDES
 - 2 2.1 POS SC ON ADAPTER
 - 1 MANIPULATE BY HAND
 - 48 ZONE 48, OCTAGON SIDES
 - 3 2.2 SECURE SC/ADAPTER
 - 1 MANIPULATE BY HAND
 - 48 ZONE 48, OCTAGON SIDES
 - 2 MANIPULATE WITH TOOLS
 - 48 ZONE 48, OCTAGON SIDES
- 82 5 INSTALL SHROUD
 - 1 5.2 XPORT SHROUD
 - 1 MANIPULATE BY HAND
 - 46 ZONE 46, OCTAGON TOP
 - 2 5.4 POS SHROUD
 - 1 MANIPULATE BY HAND
 - 46 ZONE 46, OCTAGON TOP
 - 3 5.8 INSTALL SHROUD
 - 1 MANIPULATE BY HAND
 - 46 ZONE 46, OCTAGON TOP
 - 2 MANIPULATE WITH TOOLS
 - 46 ZONE 46, OCTAGON TOP
- 83 8 SC/AGENA INTERFACE TEST
 - 1 8.1 PERFORM TEST
 - 9 VISUAL INSPECTION
- 84 6 REMOVE SHROUD
 - 1 6.9 RELEASE SHROUD
 - 2 MANIPULATE WITH TOOLS
 - 46 ZONE 46, OCTAGON TOP
 - 1 MANIPULATE BY HAND
 - 46 ZONE 46, OCTAGON TOP
 - 2 6.4 REMOVE SHROUD
 - 1 MANIPULATE BY HAND
 - 46 ZONE 46, OCTAGON TOP
 - 3 6.2 XPORT SHROUD
 - 1 MANIPULATE BY HAND
 - 46 ZONE 46, OCTAGON TOP
- 85 2 REMOVE SC FROM AGENA ADAPTER
 - 1 2.4 REMOVE SC
 - 2 MANIPULATE WITH TOOLS
 - 48 ZONE 48, OCTAGON SIDES
 - 1 MANIPULATE BY HAND
 - 48 ZONE 48, OCTAGON SIDES
 - 3 MOVE W/CRANE
 - 48 ZONE 48, OCTAGON SIDES
 - 2 2.3 XPORT SPACECRAFT
 - 16 MANEUVER SPACECRAFT
 - 17 SECURED IN TENT

APPENDIX 1 (Continued)

68

- 86 2 XPORT SC
 - 1 2.3 XPORT SC
 - 16 MANEUVER SPACECRAFT
 - 2 2.1 POSITION SC
 - 1 MANIPULATE BY HAND
 - 48 ZONE 48, OCTAGON SIDES
- 87 7 PYRO AND SHOCK TEST PREPARATION
 - 1 7.5 INST ACCELEROMETER
 - 1 MANIPULATE BY HAND
 - 1 ZONE 1, BAY 1
 - 2 7.1 CONN ACCELEROMETER
 - 1 MANIPULATE BY HAND
 - 1 ZONE 1, BAY 1
 - 2 MANIPULATE WITH TOOLS
 - 1 ZONE 1, BAY 1
 - 3 7.5 INST ACCELEROMETER
 - 1 MANIPULATE BY HAND
 - 2 ZONE 2, BAY 2
 - 4 7.1 CONN ACCELEROMETER
 - 1 MANIPULATE BY HAND
 - 2 ZONE 2, BAY 2
 - 2 MANIPULATE WITH TOOLS
 - 2 ZONE 2, BAY 2
 - 5 7.5 INST ACCELEROMETER
 - 1 MANIPULATE BY HAND
 - 3 ZONE 3, BAY 3
 - 6 7.1 CONN ACCELEROMETER
 - 1 MANIPULATE BY HAND
 - 3 ZONE 3, BAY 3
 - 2 MANIPULATE WITH TOOLS
 - 3 ZONE 3, BAY 3
 - 7 7.5 INST ACCELEROMETER
 - 1 MANIPULATE BY HAND
 - 4 ZONE 4, BAY 4
 - 8 7.1 CONN ACCELEROMETER
 - 1 MANIPULATE BY HAND
 - 4 ZONE 4, BAY 4
 - 17 SECURED IN TENT
 - 2 MANIPULATE WITH TOOLS
 - 4 ZONE 4, BAY 4
 - 9 7.5 INST ACCELEROMETER
 - 1 MANIPULATE BY HAND
 - 5 ZONE 5, BAY 5
 - 10 7.1 CONN ACCELEROMETER
 - 1 MANIPULATE BY HAND
 - 5 ZONE 5, BAY 5
 - 2 MANIPULATE WITH TOOLS
 - 5 ZONE 5, BAY 5
 - 11 7.5 INST ACCELEROMETER
 - 1 MANIPULATE BY HAND
 - 6 ZONE 6, BAY 6
 - 12 7.1 CONN ACCELEROMETER
 - 1 MANIPULATE BY HAND
 - 6 ZONE 6, BAY 6
 - 2 MANIPULATE WITH TOOLS
 - 6 ZONE 6, BAY 6
 - 13 7.5 INST ACCELEROMETER
 - 1 MANIPULATE BY HAND
 - 7 ZONE 7, BAY 7
 - 14 7.1 CONN ACCELEROMETER
 - 1 MANIPULATE BY HAND
 - 7 ZONE 7, BAY 7

- 2 MANIPULATE WITH TOOLS
7 ZONE 7, BAY 7
- 15 7.5 INST ACCELEROMETER
1 MANIPULATE BY HAND
8 ZONE 8, BAY 8
- 16 7.1 CONN ACCELEROMETER
1 MANIPULATE BY HAND
8 ZONE 8, BAY 8
2 MANIPULATE WITH TOOLS
8 ZONE 8, BAY 8
- 17 7.5 INST ACCELEROMETER
1 MANIPULATE BY HAND
9 ZONE 9, BAY 1 INWARD
- 18 7.1 CONN ACCELEROMETER
1 MANIPULATE BY HAND
9 ZONE 9, BAY 1 INWARD
2 MANIPULATE WITH TOOLS
9 ZONE 9, BAY 1 INWARD
- 19 7.5 INST ACCELEROMETER
1 MANIPULATE BY HAND
10 ZONE 10, BAY 2 INWARD
- 20 7.1 CONN ACCELEROMETER
1 MANIPULATE BY HAND
10 ZONE 10, BAY 2 INWARD
2 MANIPULATE WITH TOOLS
10 ZONE 10, BAY 2 INWARD
- 88 7 PYRO AND SHOCK TEST PREPARATION (CONTIN)
- 1 7.5 INST ACCELEROMETER
1 MANIPULATE BY HAND
11 ZONE 11, BAY 3 INWARD
- 2 7.1 CONN ACCELEROMETER
1 MANIPULATE BY HAND
11 ZONE 11, BAY 3 INWARD
2 MANIPULATE WITH TOOLS
11 ZONE 11, BAY 3 INWARD
- 3 7.5 INST ACCELEROMETER
1 MANIPULATE BY HAND
12 ZONE 12, BAY 4 INWARD
- 4 7.1 CONN ACCELEROMETER
1 MANIPULATE BY HAND
12 ZONE 12, BAY 4 INWARD
2 MANIPULATE WITH TOOLS
12 ZONE 12, BAY 4 INWARD
- 5 7.5 INST ACCELEROMETER
1 MANIPULATE BY HAND
13 ZONE 13, BAY 5 INWARD
- 6 7.1 CONN ACCELEROMETER
1 MANIPULATE BY HAND
13 ZONE 13, BAY 5 INWARD
2 MANIPULATE WITH TOOLS
13 ZONE 13, BAY 5 INWARD
- 7 7.5 INST ACCELEROMETER
1 MANIPULATE BY HAND
14 ZONE 14, BAY 6 INWARD
- 8 7.1 CONN ACCELEROMETER
1 MANIPULATE BY HAND
14 ZONE 14, BAY 6 INWARD
2 MANIPULATE WITH TOOLS
14 ZONE 14, BAY 6 INWARD
- 9 7.5 INST ACCELEROMETER
1 MANIPULATE BY HAND
15 ZONE 15, BAY 7 INWARD

- 10 7.1 CONN ACCELEROMETER
 - 1 MANIPULATE BY HAND
 - 15 ZONE 15, BAY 7 INWARD
 - 2 MANIPULATE WITH TOOLS
 - 15 ZONE 15, BAY 7 INWARD
- 11 7.5 INST ACCELEROMETER
 - 1 MANIPULATE BY HAND
 - 16 ZONE 16, BAY 8 INWARD
- 12 7.1 CONN ACCELEROMETER
 - 1 MANIPULATE BY HAND
 - 16 ZONE 16, BAY 8 INWARD
 - 2 MANIPULATE WITH TOOLS
 - 16 ZONE 16, BAY 8 INWARD
- 13 7.5 INST ACCELEROMETER
 - 1 MANIPULATE BY HAND
 - 17 ZONE 17, SOLAR PANEL 1
- 14 7.1 CONN ACCELEROMETER
 - 1 MANIPULATE BY HAND
 - 17 ZONE 17, SOLAR PANEL 1
 - 2 MANIPULATE WITH TOOLS
 - 17 ZONE 17, SOLAR PANEL 1
- 15 7.5 INST ACCELEROMETER
 - 1 MANIPULATE BY HAND
 - 18 ZONE 18, SOLAR PANEL 3
- 16 7.1 CONN ACCELEROMETER
 - 1 MANIPULATE BY HAND
 - 18 ZONE 18, SOLAR PANEL 3
 - 2 MANIPULATE WITH TOOLS
 - 18 ZONE 18, SOLAR PANEL 3
- 17 7.5 INST ACCELEROMETER
 - 1 MANIPULATE BY HAND
 - 19 ZONE 19, SOLAR PANEL 5
- 18 7.1 CONN ACCELEROMETER
 - 1 MANIPULATE BY HAND
 - 19 ZONE 19, SOLAR PANEL 5
 - 2 MANIPULATE WITH TOOLS
 - 19 ZONE 19, SOLAR PANEL 5
- 19 7.5 INST ACCELEROMETER
 - 1 MANIPULATE BY HAND
 - 20 ZONE 20, SOLAR PANEL 7
- 20 7.1 CONN ACCELEROMETER
 - 1 MANIPULATE BY HAND
 - 20 ZONE 20, SOLAR PANEL 7
 - 2 MANIPULATE WITH TOOLS
 - 20 ZONE 20, SOLAR PANEL 7
- 89 7 PYRO AND SHOCK TEST PREPARATION (CONTIN)
 - 1 7.5 INST ACCELEROMETER
 - 1 MANIPULATE BY HAND
 - 21 ZONE 21, PANEL 1 SPAR
 - 2 7.1 CONN ACCELEROMETER
 - 1 MANIPULATE BY HAND
 - 21 ZONE 21, PANEL 1 SPAR
 - 2 MANIPULATE WITH TOOLS
 - 21 ZONE 21, PANEL 1 SPAR
 - 3 7.5 INST ACCELEROMETER
 - 1 MANIPULATE BY HAND
 - 22 ZONE 22, PANEL 3 SPAR
 - 4 7.1 CONN ACCELEROMETER
 - 1 MANIPULATE BY HAND
 - 22 ZONE 22, PANEL 3 SPAR
 - 2 MANIPULATE WITH TOOLS
 - 22 ZONE 22, PANEL 3 SPAR

- 5 7.5 INST ACCELEROMETER
 - 1 MANIPULATE BY HAND
 - 23 ZONE 23, PANEL 5 SPAR
- 6 7.1 CONN ACCELEROMETER
 - 1 MANIPULATE BY HAND
 - 23 ZONE 23, PANEL 5 SPAR
 - 2 MANIPULATE WITH TOOLS
 - 23 ZONE 23, PANEL 5 SPAR
- 7 7.5 INST ACCELEROMETER
 - 1 MANIPULATE BY HAND
 - 24 ZONE 24, PANEL 7 SPAR
- 8 7.1 CONN ACCELEROMETER
 - 1 MANIPULATE BY HAND
 - 24 ZONE 24, PANEL 7 SPAR
 - 2 MANIPULATE WITH TOOLS
 - 24 ZONE 24, PANEL 7 SPAR
 - 17 SECURED IN TENT
- 3 ASSY/TEST, PASADENA OPERATIONS (CONTINUED)
 - 90 8 PYRO AND SHOCK TEST
 - 1 8.1 PERFORM TEST
 - 9 VISUAL INSPECTION
 - 91 9 POST-TEST OPERATIONS
 - 1 9.1 DISCONN ACCELRM
 - 2 MANIPULATE WITH TOOLS
 - 24 ZONE 24, PANEL 7 SPAR
 - 1 MANIPULATE BY HAND
 - 24 ZONE 24, PANEL 7 SPAR
 - 2 9.5 REM ACCELEROMETER
 - 1 MANIPULATE BY HAND
 - 86 ACCELEROMETER
 - 3 9.1 DISCONN ACCELRM
 - 2 MANIPULATE WITH TOOLS
 - 23 ZONE 23, PANEL 5 SPAR
 - 1 MANIPULATE BY HAND
 - 23 ZONE 23, PANEL 5 SPAR
 - 4 9.5 REM ACCELEROMETER
 - 1 MANIPULATE BY HAND
 - 85 ACCELEROMETER
 - 5 9.1 DISCONN ACCELRM
 - 2 MANIPULATE WITH TOOLS
 - 22 ZONE 22, PANEL 3 SPAR
 - 1 MANIPULATE BY HAND
 - 22 ZONE 22, PANEL 3 SPAR
 - 6 9.5 REM ACCELEROMETER
 - 1 MANIPULATE BY HAND
 - 84 ACCELEROMETER
 - 7 9.1 DISCONN ACCELRM
 - 2 MANIPULATE WITH TOOLS
 - 21 ZONE 21, PANEL 1 SPAR
 - 1 MANIPULATE BY HAND
 - 21 ZONE 21, PANEL 1 SPAR
 - 8 9.5 REM ACCELEROMETER
 - 1 MANIPULATE BY HAND
 - 83 ACCELEROMETER
 - 9 9.1 DISCONN ACCELRM
 - 2 MANIPULATE WITH TOOLS
 - 20 ZONE 20, SOLAR PANEL 7
 - 1 MANIPULATE BY HAND
 - 20 ZONE 20, SOLAR PANEL 7
 - 10 9.5 REM ACCELEROMETER
 - 1 MANIPULATE BY HAND
 - 82 ACCELEROMETER

- 11 9.1 DISCONN ACCELRM
2 MANIPULATE WITH TOOLS
19 ZONE 19, SOLAR PANEL 5
1 MANIPULATE BY HAND
19 ZONE 19, SOLAR PANEL 5
- 12 9.5 REM ACCELEROMETER
1 MANIPULATE BY HAND
81 ACCELEROMETER
- 13 9.1 DISCONN ACCELRM
2 MANIPULATE WITH TOOLS
18 ZONE 18, SOLAR PANEL 3
1 MANIPULATE BY HAND
18 ZONE 18, SOLAR PANEL 3
- 14 9.5 REM ACCELEROMETER
1 MANIPULATE BY HAND
80 ACCELEROMETER
- 15 9.1 DISCONN ACCELRM
2 MANIPULATE WITH TOOLS
17 ZONE 17, SOLAR PANEL 1
1 MANIPULATE BY HAND
17 ZONE 17, SOLAR PANEL 1
- 16 9.5 REM ACCELEROMETER
1 MANIPULATE BY HAND
79 ACCELEROMETER
- 17 9.1 DISCONN ACCELRM
2 MANIPULATE WITH TOOLS
16 ZONE 16, BAY 8 INWARD
1 MANIPULATE BY HAND
16 ZONE 16, BAY 8 INWARD
- 18 9.5 REM ACCELEROMETER
1 MANIPULATE BY HAND
78 ACCELEROMETER
- 19 9.1 DISCONN ACCELRM
2 MANIPULATE WITH TOOLS
15 ZONE 15, BAY 7 INWARD
1 MANIPULATE BY HAND
15 ZONE 15, BAY 7 INWARD
- 20 9.5 REM ACCELEROMETER
1 MANIPULATE BY HAND
77 ACCELEROMETER
- 56 9 POST-TEST OPERATIONS (CONTINUED)
 - 1 9.1 DISCONN ACCELRM
2 MANIPULATE WITH TOOLS
14 ZONE 14, BAY 6 INWARD
1 MANIPULATE BY HAND
14 ZONE 14, BAY 6 INWARD
 - 2 9.5 REM ACCELEROMETER
1 MANIPULATE BY HAND
76 ACCELEROMETER
 - 3 9.1 DISCONN ACCELRM
2 MANIPULATE WITH TOOLS
13 ZONE 13, BAY 5 INWARD
1 MANIPULATE BY HAND
13 ZONE 13, BAY 5 INWARD
 - 4 9.5 REM ACCELEROMETER
1 MANIPULATE BY HAND
75 ACCELEROMETER
 - 5 9.1 DISCONN ACCELRM
2 MANIPULATE WITH TOOLS
12 ZONE 12, BAY 4 INWARD
1 MANIPULATE BY HAND
12 ZONE 12, BAY 4 INWARD

APPENDIX I (Continued)

73

- 6 9.5 REM ACCELEROMETER
1 MANIPULATE BY HAND
74 ACCELEROMETER
- 7 9.1 DISCONN ACCELM
2 MANIPULATE WITH TOOLS
11 ZONE 11, BAY 3 INWARD
1 MANIPULATE BY HAND
11 ZONE 11, BAY 3 INWARD
- 8 9.5 REM ACCELEROMETER
1 MANIPULATE BY HAND
73 ACCELEROMETER
- 9 9.1 DISCONN ACCELM
2 MANIPULATE WITH TOOLS
10 ZONE 10, BAY 2 INWARD
1 MANIPULATE BY HAND
10 ZONE 10, BAY 2 INWARD
- 10 9.5 REM ACCELEROMETER
1 MANIPULATE BY HAND
72 ACCELEROMETER
- 11 9.1 DISCONN ACCELM
2 MANIPULATE WITH TOOLS
9 ZONE 9, BAY 1 INWARD
1 MANIPULATE BY HAND
9 ZONE 9, BAY 1 INWARD
- 12 9.5 REM ACCELEROMETER
1 MANIPULATE BY HAND
71 ACCELEROMETER
- 13 9.1 DISCONN ACCELM
2 MANIPULATE WITH TOOLS
8 ZONE 8, BAY 8
1 MANIPULATE BY HAND
8 ZONE 8, BAY 8
- 14 9.5 REM ACCELEROMETER
1 MANIPULATE BY HAND
70 ACCELEROMETER
- 15 9.1 DISCONN ACCELM
2 MANIPULATE WITH TOOLS
7 ZONE 7, BAY 7
1 MANIPULATE BY HAND
7 ZONE 7, BAY 7
- 16 9.5 REM ACCELEROMETER
1 MANIPULATE BY HAND
69 ACCELEROMETER
- 17 9.1 DISCONN ACCELM
2 MANIPULATE WITH TOOLS
6 ZONE 6, BAY 6
1 MANIPULATE BY HAND
6 ZONE 6, BAY 6
- 18 9.5 REM ACCELEROMETER
1 MANIPULATE BY HAND
68 ACCELEROMETER
- 19 9.1 DISCONN ACCELM
2 MANIPULATE WITH TOOLS
5 ZONE 5, BAY 5
1 MANIPULATE BY HAND
5 ZONE 5, BAY 5
17 SECURED IN TENT
17 SECURED IN TENT
- 20 9.5 REM ACCELEROMETER
1 MANIPULATE BY HAND
67 ACCELEROMETER

57 9 POST-TEST OPERATIONS(CONTINUED)

APPENDIX I (Continued)

74

- 1 9.1 DISCONN ACCELERM
2 MANIPULATE WITH TOOLS
4 ZONE 4, BAY 4
1 MANIPULATE BY HAND
4 ZONE 4, BAY 4
- 2 9.5 REM ACCELEROMETER
1 MANIPULATE BY HAND
66 ACCELEROMETER
- 3 9.1 DISCONN ACCELERM
2 MANIPULATE WITH TOOLS
3 ZONE 3, BAY 3
1 MANIPULATE BY HAND
3 ZONE 3, BAY 3
- 4 9.5 REM ACCELEROMETER
1 MANIPULATE BY HAND
65 ACCELEROMETER
- 5 9.1 DISCONN ACCELERM
2 MANIPULATE WITH TOOLS
2 ZONE 2, BAY 2
1 MANIPULATE BY HAND
2 ZONE 2, BAY 2
- 6 9.5 REM ACCELEROMETER
1 MANIPULATE BY HAND
64 ACCELEROMETER
- 7 9.1 DISCONN ACCELERM
2 MANIPULATE WITH TOOLS
1 ZONE 1, BAY 1
1 MANIPULATE BY HAND
1 ZONE 1, BAY 1
- 8 9.5 REM ACCELEROMETER
1 MANIPULATE BY HAND
63 ACCELEROMETER
- 92 7 MOS OPERATIONAL TEST PREPARATION
1 7.1 CONN SPEC CABLING
11 MATE (DEMATE) CONNECTORS
27 ZONE 27, TOP RING TRAY
2 7.3 CONNECT OSE
11 MATE (DEMATE) CONNECTORS
27 ZONE 27, TOP RING TRAY
- 93 8 MOS OPERATIONAL TEST
1 8.1 PERFORM TEST
9 VISUAL INSPECTION
17 SECURED IN TENT
- 94 9 POST-TEST OPERATIONS
1 9.1 DISCONN SPEC CABLES
11 MATE (DEMATE) CONNECTORS
27 ZONE 27, TOP RING TRAY
2 9.3 DISCONNECT OSE
11 MATE (DEMATE) CONNECTORS
27 ZONE 27, TOP RING TRAY
- 95 7 SYSTEM TEST PREPARATION
2 7.9 INSTALL BATTERY
1 MANIPULATE BY HAND
8 ZONE 8, BAY 8
1 MANIPULATE BY HAND
8 ZONE 8, BAY 8
2 MANIPULATE WITH TOOLS
8 ZONE 8, BAY 8
3 7.5 INSTALL SIT
1 MANIPULATE BY HAND
16 ZONE 16, BAY 8 INWARD
1 MANIPULATE BY HAND

- 16 ZONE 16, BAY 8 INWARD
- 2 MANIPULATE WITH TOOLS
- 16 ZONE 16, BAY 8 INWARD
- 4 7.5 INST LIGHT SOURCES
- 1 MANIPULATE BY HAND
- 12 ZONE 12, BAY 4 INWARD
- 1 MANIPULATE BY HAND
- 12 ZONE 12, BAY 4 INWARD
- 2 MANIPULATE WITH TOOLS
- 12 ZONE 12, BAY 4 INWARD
- 5 7.10 PRESSUR ACGS TANK
- 9 VISUAL INSPECTION
- 6 7.5 INST XDUCE ASSY
- 1 MANIPULATE BY HAND
- 12 ZONE 12, BAY 4 INWARD
- 1 MANIPULATE BY HAND
- 12 ZONE 12, BAY 4 INWARD
- 2 MANIPULATE WITH TOOLS
- 12 ZONE 12, BAY 4 INWARD
- 7 7.10 PRESSUR PIPS TANK
- 9 VISUAL INSPECTION
- 8 7.5 INST DISICC COVER
- 1 MANIPULATE BY HAND
- 12 ZONE 12, BAY 4 INWARD
- 1 MANIPULATE BY HAND
- 12 ZONE 12, BAY 4 INWARD
- 2 MANIPULATE WITH TOOLS
- 12 ZONE 12, BAY 4 INWARD
- 9 7.5 INST BRACKETS
- 1 MANIPULATE BY HAND
- 12 ZONE 12, BAY 4 INWARD
- 2 MANIPULATE WITH TOOLS
- 12 ZONE 12, BAY 4 INWARD
- 10 7.5 INSTALL LATCH BRKT
- 1 MANIPULATE BY HAND
- 12 ZONE 12, BAY 4 INWARD
- 2 MANIPULATE WITH TOOLS
- 12 ZONE 12, BAY 4 INWARD
- 11 7.5 INSTALL PLATE RING
- 1 MANIPULATE BY HAND
- 12 ZONE 12, BAY 4 INWARD
- 2 MANIPULATE WITH TOOLS
- 12 ZONE 12, BAY 4 INWARD
- 12 7.11 ALIGN PLATE RING
- 1 MANIPULATE BY HAND
- 12 ZONE 12, BAY 4 INWARD
- 13 7.5 INST TANK PLATE
- 1 MANIPULATE BY HAND
- 12 ZONE 12, BAY 4 INWARD
- 2 MANIPULATE WITH TOOLS
- 12 ZONE 12, BAY 4 INWARD
- 14 7.11 ALIGN TANK PLATE
- 1 MANIPULATE BY HAND
- 12 ZONE 12, BAY 4 INWARD
- 15 7.11 ALIGN FLUX TANK
- 1 MANIPULATE BY HAND
- 12 ZONE 12, BAY 4 INWARD
- 16 7.5 INST TANK MAIN PLAT
- 1 MANIPULATE BY HAND
- 12 ZONE 12, BAY 4 INWARD
- 17 SECURED IN TENT
- 2 MANIPULATE WITH TOOLS

- 12 ZONE 12, BAY 4 INWARD
- 17 7.5 INST ANGLE
 - 1 MANIPULATE BY HAND
 - 12 ZONE 12, BAY 4 INWARD
 - 2 MANIPULATE WITH TOOLS
 - 12 ZONE 12, BAY 4 INWARD
- 18 7.1 CONNECT CABLES
 - 11 MATE (DEMATE) CONNECTORS
 - 12 ZONE 12, BAY 4 INWARD
- 96 8 SYSTEM TEST
 - 1 8.1 PERF MOTION TESTS
 - 9 VISUAL INSPECTION
 - 2 8.13 INSPECT CABLING
 - 9 VISUAL INSPECTION
 - 17 SECURED IN TENT
 - 3 8.1 PERF MOTION TESTS
 - 9 VISUAL INSPECTION
 - 4 8.14 ROTATE SC
 - 16 MANEUVER SPACECRAFT
 - 5 8.15 INST TRD SOURCES
 - 1 MANIPULATE BY HAND
 - 4 ZONE 4, BAY 4
 - 2 MANIPULATE WITH TOOLS
 - 4 ZONE 4, BAY 4
 - 6 8.1 PERF TRD TESTS
 - 9 VISUAL INSPECTION
 - 7 8.16 REM TRD SOURCES
 - 2 MANIPULATE WITH TOOLS
 - 4 ZONE 4, BAY 4
 - 17 SECURED IN TENT
 - 1 MANIPULATE BY HAND
 - 4 ZONE 4, BAY 4
 - 8 8.1 PERF MOTION TESTS
 - 9 VISUAL INSPECTION
- 97 9 POST-TEST OPERATIONS
 - 1 9.1 DISCONNECT CABLES
 - 11 MATE (DEMATE) CONNECTORS
 - 12 ZONE 12, BAY 4 INWARD
 - 2 9.1 REM MAIN TANK PLATE
 - 2 MANIPULATE WITH TOOLS
 - 12 ZONE 12, BAY 4 INWARD
 - 1 MANIPULATE BY HAND
 - 12 ZONE 12, BAY 4 INWARD
 - 3 9.1 REM PLATE RING
 - 2 MANIPULATE WITH TOOLS
 - 12 ZONE 12, BAY 4 INWARD
 - 1 MANIPULATE BY HAND
 - 12 ZONE 12, BAY 4 INWARD
 - 4 9.1 REM LATCH BRACKET
 - 2 MANIPULATE WITH TOOLS
 - 12 ZONE 12, BAY 4 INWARD
 - 1 MANIPULATE BY HAND
 - 12 ZONE 12, BAY 4 INWARD
 - 5 9.1 REM DISICC COVER
 - 1 MANIPULATE BY HAND
 - 12 ZONE 12, BAY 4 INWARD
 - 6 9.1 REM XDUCER ASSY
 - 2 MANIPULATE WITH TOOLS
 - 12 ZONE 12, BAY 4 INWARD
 - 1 MANIPULATE BY HAND
 - 12 ZONE 12, BAY 4 INWARD
 - 7 9.1 REM LIGHT SOURCES

- 2 MANIPULATE WITH TOOLS
 - 12 ZONE 12, BAY 4 INWARD
- 1 MANIPULATE BY HAND
 - 12 ZONE 12, BAY 4 INWARD
- 8 9.3 REM SIT
 - 2 MANIPULATE WITH TOOLS
 - 58 SEP-INIT TIMER
 - 1 MANIPULATE BY HAND
 - 58 SEP-INIT TIMER
- 9 9.1 REM BATTERY
 - 2 MANIPULATE WITH TOOLS
 - 59 BATTERY (+A VIII)
 - 1 MANIPULATE BY HAND
 - 59 BATTERY (+A VIII)
- 98 2 POSITION SC
 - 1 2.1 ROTATE SC
 - 16 MANEUVER SPACECRAFT
- 99 6 REMOVE PIPS
 - 1 6.22 DISCONN XDUCER
 - 2 MANIPULATE WITH TOOLS
 - 10 ZONE 10, BAY 2 INWARD
 - 1 MANIPULATE BY HAND
 - 10 ZONE 10, BAY 2 INWARD
 - 5 6.9 RELEASE PIPS
 - 2 MANIPULATE WITH TOOLS
 - 10 ZONE 10, BAY 2 INWARD
 - 1 MANIPULATE BY HAND
 - 10 ZONE 10, BAY 2 INWARD
 - 7 6.12 ATT CRANE HOOKS
 - 1 MANIPULATE BY HAND
 - 10 ZONE 10, BAY 2 INWARD
 - 8 6.12 INST SNAP RINGS
 - 1 MANIPULATE BY HAND
 - 10 ZONE 10, BAY 2 INWARD
 - 9 6.1 LIFT PIPS
 - 15 MANEUVER EQUIPMENT
- 10 6.15 INST PIPS/CONTAINER
 - 1 MANIPULATE BY HAND
 - 120 MIDCOURSE MOTOR
 - 1 MANIPULATE BY HAND
 - 120 MIDCOURSE MOTOR
 - 2 MANIPULATE WITH TOOLS
 - 120 MIDCOURSE MOTOR
- 100 3 POSITION DUMMY PIPS MOTOR
 - 1 3.1 REL MOTOR/CONTAINER
 - 2 MANIPULATE WITH TOOLS
 - 87 SOLAR PANEL 1 SUPP STRUT
 - 1 MANIPULATE BY HAND
 - 87 SOLAR PANEL 1 SUPP STRUT
 - 2 3.2 ATT CRANE HOOKS
 - 1 MANIPULATE BY HAND
 - 87 SOLAR PANEL 1 SUPP STRUT
 - 3 3.2 INST SNAP RINGS
 - 1 MANIPULATE BY HAND
 - 87 SOLAR PANEL 1 SUPP STRUT
 - 4 3.1 LIFT PIPS/CRANE
 - 3 MOVE W/CRANE
 - 87 SOLAR PANEL 1 SUPP STRUT
- 1 5 INSTALL PIPS IN BAY II
 - 1 5.1 POSITION CRANE
 - 3 MOVE W/CRANE
 - 87 SOLAR PANEL 1 SUPP STRUT

- 17 SECURED IN TENT
- 17 SECURED IN TENT
- 2 5.18 MOUNT PIPS IN BAYII
 - 1 MANIPULATE BY HAND
 - 10 ZONE 10, BAY 2 INWARD
- 3 5.8 INSTALL PIPS
 - 1 MANIPULATE BY HAND
 - 10 ZONE 10, BAY 2 INWARD
 - 2 MANIPULATE WITH TOOLS
 - 10 ZONE 10, BAY 2 INWARD
- 4 5.9 REM LIFT FIXT LUGS
 - 2 MANIPULATE WITH TOOLS
 - 10 ZONE 10, BAY 2 INWARD
 - 1 MANIPULATE BY HAND
 - 10 ZONE 10, BAY 2 INWARD
- 8 5.22 CONN XDUCER
 - 1 MANIPULATE BY HAND
 - 10 ZONE 10, BAY 2 INWARD
 - 2 MANIPULATE WITH TOOLS
 - 10 ZONE 10, BAY 2 INWARD
- 2 8 VIBRATION TEST
 - 1 8.1 PERFORM TEST
 - 9 VISUAL INSPECTION
- 3 2 POSITION SC
 - 1 2.1 ROTATE SC
 - 16 MANEUVER SPACECRAFT
- 4 6 REMOVE DUMMY PIPS
 - 1 6.22 DISCONN XDUCER
 - 2 MANIPULATE WITH TOOLS
 - 10 ZONE 10, BAY 2 INWARD
 - 1 MANIPULATE BY HAND
 - 10 ZONE 10, BAY 2 INWARD
- 5 6.9 RELEASE PIPS
 - 2 MANIPULATE WITH TOOLS
 - 10 ZONE 10, BAY 2 INWARD
 - 1 MANIPULATE BY HAND
 - 10 ZONE 10, BAY 2 INWARD
- 6 6.12 ATTACH CRANE HOOKS
 - 1 MANIPULATE BY HAND
 - 10 ZONE 10, BAY 2 INWARD
- 7 6.12 INSTALL SNAP RINGS
 - 1 MANIPULATE BY HAND
 - 10 ZONE 10, BAY 2 INWARD
- 8 6.1 LIFT PIPS/CRANE
 - 3 MOVE W/CRANE
 - 10 ZONE 10, BAY 2 INWARD
- 17 SECURED IN TENT
- 9 6.15 INST PIPS/CONTAINER
 - 1 MANIPULATE BY HAND
 - 87 SOLAR PANEL 1 SUPP STRUT
 - 1 MANIPULATE BY HAND
 - 87 SOLAR PANEL 1 SUPP STRUT
 - 2 MANIPULATE WITH TOOLS
 - 87 SOLAR PANEL 1 SUPP STRUT
- 5 3 POSITION PIPS MOTOR
 - 1 3.1 REL MOTOR/CONTAINER
 - 2 MANIPULATE WITH TOOLS
 - 120 MIDCOURSE MOTOR
 - 1 MANIPULATE BY HAND
 - 120 MIDCOURSE MOTOR
 - 2 3.2 ATT CRANE HOOKS
 - 1 MANIPULATE BY HAND

- 120 MIDCOURSE MOTOR
- 3 3.2 INSTALL SNAP RINGS
 - 1 MANIPULATE BY HAND
 - 120 MIDCOURSE MOTOR
- 4 3.1 LIFT PIPS/CRANE
 - 3 MOVE W/CRANE
 - 120 MIDCOURSE MOTOR
- 6 5 INSTALL PIPS IN BAY II
 - 1 5.1 POSITION CRANE
 - 3 MOVE W/CRANE
 - 2 5.18 MOUNT PIPS IN BAY II
 - 1 MANIPULATE BY HAND
 - 10 ZONE 10, BAY 2 INWARD
 - 3 5.8 INSTALL PIPS
 - 1 MANIPULATE BY HAND
 - 10 ZONE 10, BAY 2 INWARD
 - 2 MANIPULATE WITH TOOLS
 - 10 ZONE 10, BAY 2 INWARD
 - 4 5.9 REM LIFT FIXT LUGS
 - 2 MANIPULATE WITH TOOLS
 - 10 ZONE 10, BAY 2 INWARD
 - 1 MANIPULATE BY HAND
 - 10 ZONE 10, BAY 2 INWARD
 - 8 5.22 CONN XDUCER
 - 1 MANIPULATE BY HAND
 - 10 ZONE 10, BAY 2 INWARD
 - 2 MANIPULATE WITH TOOLS
 - 10 ZONE 10, BAY 2 INWARD
 - 10 5.17 ADJ BELLE SPRINGS
 - 10 INSPECTION WITH GAUGES
 - 10 ZONE 10, BAY 2 INWARD
- 7 7 SYSTEM VERIFICATION TEST PREPARATION
 - 1 7.1 CONN SPEC CABLING
 - 11 MATE (DEMATE) CONNECTORS
 - 28 ZONE 28, BOTT RING TRAY
 - 2 7.3 CONNECT OSE
 - 11 MATE (DEMATE) CONNECTORS
 - 28 ZONE 28, BOTT RING TRAY
 - 17 SECURED IN TENT
- 8 8 SYSTEM VERIFICATION TEST
 - 1 8.1 PERFORM TEST
 - 9 VISUAL INSPECTION
- 9 9 POST-TEST OPERATIONS
 - 1 9.1 DISCONN SPEC CABLES
 - 11 MATE (DEMATE) CONNECTORS
 - 28 ZONE 28, BOTT RING TRAY
 - 2 9.3 DISCONNECT OSE
 - 11 MATE (DEMATE) CONNECTORS
 - 28 ZONE 28, BOTT RING TRAY
- 10 2 INSTALL SC ON SPACE SIMULATOR
 - 1 2.3 XPORT S/C
 - 3 MOVE W/CRANE
 - 48 ZONE 48, OCTAGON SIDES
 - 2 2.1 POS S/C ON SIMULAT
 - 1 MANIPULATE BY HAND
 - 48 ZONE 48, OCTAGON SIDES
 - 3 2.2 SECURE S/C IN POS
 - 1 MANIPULATE BY HAND
 - 48 ZONE 48, OCTAGON SIDES
 - 2 MANIPULATE WITH TOOLS
 - 48 ZONE 48, OCTAGON SIDES
 - 17 SECURED IN TENT

- 11 7 SPACE SIMULATOR TEST PREPARATION
 - 1 7.5 INSTALL THERMOCOUPPL
 - 1 MANIPULATE BY HAND
 - 48 ZONE 48, OCTAGON SIDES
 - 2 7.7 ROUTE CABLE
 - 1 MANIPULATE BY HAND
 - 27 ZONE 27, TOP RING TRAY
 - 3 7.5 INSTALL SP SIMULAT
 - 1 MANIPULATE BY HAND
 - 1 ZONE 1, BAY 1
 - 2 MANIPULATE WITH TOOLS
 - 1 ZONE 1, BAY 1
 - 4 7.5 INSTALL SP SIMULAT
 - 1 MANIPULATE BY HAND
 - 5 ZONE 5, BAY 5
 - 2 MANIPULATE WITH TOOLS
 - 5 ZONE 5, BAY 5
 - 17 SECURED IN TENT
 - 17 SECURED IN TENT
- 12 8 SPACE SIMULATOR TEST
 - 1 8.1 PERFORM TEST, PART 1
 - 9 VISUAL INSPECTION
 - 17 SECURED IN TENT
 - 2 8.1 PERFORM TEST, PART 2
 - 9 VISUAL INSPECTION
 - 17 SECURED IN TENT
- 13 9 POST-TEST OPERATIONS
 - 1 9.5 REMOVE SP SIMULATOR
 - 2 MANIPULATE WITH TOOLS
 - 1 ZONE 1, BAY 1
 - 1 MANIPULATE BY HAND
 - 1 ZONE 1, BAY 1
 - 2 9.5 REMOVE SP SIMULATOR
 - 2 MANIPULATE WITH TOOLS
 - 5 ZONE 5, BAY 5
 - 1 MANIPULATE BY HAND
 - 5 ZONE 5, BAY 5
 - 3 9.7 PULL CABLE
 - 1 MANIPULATE BY HAND
 - 27 ZONE 27, TOP RING TRAY
 - 4 9.5 REMOVE THERMOCOUPLE
 - 1 MANIPULATE BY HAND
 - 48 ZONE 48, OCTAGON SIDES
- 14 2 REMOVE SC FROM SPACE SIMULATOR
 - 1 2.4 REMOVE S/C
 - 3 MOVE W/CRANE
 - 48 ZONE 48, OCTAGON SIDES
 - 2 2.3 XPORT S/C
 - 16 MANEUVER SPACECRAFT
- 15 7 SYSTEM VERIFICATION TEST PREPARATION
 - 1 7.1 CONN SPEC CABLING
 - 11 MATE (DEMATE) CONNECTORS
 - 28 ZONE 28, BOTT RING TRAY
 - 2 7.3 CONNECT OSE
 - 11 MATE (DEMATE) CONNECTORS
 - 28 ZONE 28, BOTT RING TRAY
- 16 8 SYSTEM VERIFICATION TEST
 - 1 8.1 PERFORM TEST
 - 9 VISUAL INSPECTION
 - 17 SECURED IN TENT
- 17 9 POST-TEST OPERATIONS
 - 1 9.1 DISCONN SPEC CABLES

- 11 MATE (DEMATE) CONNECTORS
 - 28 ZONE 28, BUTT RING TRAY
- 2 9.3 DISCONNECT OSE
 - 11 MATE (DEMATE) CONNECTORS
 - 28 ZONE 28, BUTT RING TRAY
- 4 SPACECRAFT DISASSEMBLY/REASSEMBLY
 - 18 6 REMOVE EA VIII
 - 1 6.9 REMOVE ALIGN SCREWS
 - 2 MANIPULATE WITH TOOLS
 - 8 ZONE 8, BAY 8
 - 1 MANIPULATE BY HAND
 - 8 ZONE 8, BAY 8
 - 2 6.19 REMOVE EA VIII
 - 1 MANIPULATE BY HAND
 - 59 BATTERY(+A VIII)
 - 3 6.1 POS EA IN FIXTURE
 - 1 MANIPULATE BY HAND
 - 59 BATTERY(+A VIII)
 - 4 6.8 INST EA IN FIXTURE
 - 1 MANIPULATE BY HAND
 - 59 BATTERY(+A VIII)
 - 2 MANIPULATE WITH TOOLS
 - 59 BATTERY(+A VIII)
 - 5 6.2 XPORT EA
 - 1 MANIPULATE BY HAND
 - 59 BATTERY(+A VIII)
 - 19 6 REMOVE EA I
 - 1 6.9 REMOVE ALIGN SCREWS
 - 2 MANIPULATE WITH TOOLS
 - 1 ZONE 1, BAY I
 - 1 MANIPULATE BY HAND
 - 1 ZONE 1, BAY I
 - 2 6.19 REMOVE EA I
 - 1 MANIPULATE BY HAND
 - 119 CHASSIS ASSY(EA I)
 - 3 6.1 POS EA IN FIXTURE
 - 1 MANIPULATE BY HAND
 - 119 CHASSIS ASSY(EA I)
 - 4 6.8 INST EA IN FIXTURE
 - 1 MANIPULATE BY HAND
 - 119 CHASSIS ASSY(EA I)
 - 2 MANIPULATE WITH TOOLS
 - 119 CHASSIS ASSY(EA I)
 - 5 6.2 XPORT EA
 - 1 MANIPULATE BY HAND
 - 119 CHASSIS ASSY(EA I)
 - 20 6 REMOVE EA III
 - 1 6.9 REMOVE ALIGN SCREWS
 - 2 MANIPULATE WITH TOOLS
 - 3 ZONE 3, BAY 3
 - 1 MANIPULATE BY HAND
 - 3 ZONE 3, BAY 3
 - 2 6.19 REMOVE EA III
 - 1 MANIPULATE BY HAND
 - 118 CHASSIS ASSY(EA III)
 - 3 6.1 POS EA IN FIXTURE
 - 1 MANIPULATE BY HAND
 - 118 CHASSIS ASSY(EA III)
 - 4 6.8 INST EA IN FIXTURE
 - 1 MANIPULATE BY HAND
 - 118 CHASSIS ASSY(EA III)
 - 2 MANIPULATE WITH TOOLS

- 118 CHASSIS ASSY(EA III)
 - 5 6.2 XPORT EA
 - 1 MANIPULATE BY HAND
 - 118 CHASSIS ASSY(EA III)
- 21 6 REMOVE EA IV
 - 1 6.9 REMOVE ALIGN SCREWS
 - 2 MANIPULATE WITH TOOLS
 - 4 ZONE 4, BAY 4
 - 1 MANIPULATE BY HAND
 - 4 ZONE 4, BAY 4
 - 2 6.19 REMOVE EA IV
 - 1 MANIPULATE BY HAND
 - 117 CHASSIS ASSY(EA IV)
 - 3 6.1 POS EA IN FIXTURE
 - 1 MANIPULATE BY HAND
 - 117 CHASSIS ASSY(EA IV)
 - 4 6.8 INST EA IN FIXTURE
 - 1 MANIPULATE BY HAND
 - 117 CHASSIS ASSY(EA IV)
 - 2 MANIPULATE WITH TOOLS
 - 117 CHASSIS ASSY(EA IV)
 - 5 6.2 XPORT EA
 - 1 MANIPULATE BY HAND
 - 117 CHASSIS ASSY(EA IV)
- 58 6 REMOVE EA V
 - 1 6.9 REMOVE ALIGN SCREWS
 - 2 MANIPULATE WITH TOOLS
 - 5 ZONE 5, BAY 5
 - 1 MANIPULATE BY HAND
 - 5 ZONE 5, BAY 5
 - 2 6.19 REMOVE EA V
 - 1 MANIPULATE BY HAND
 - 116 CHASSIS ASSY(EA V)
 - 3 6.1 POS EA IN FIXTURE
 - 1 MANIPULATE BY HAND
 - 116 CHASSIS ASSY(EA V)
 - 4 6.8 INST EA IN FIXTURE
 - 1 MANIPULATE BY HAND
 - 116 CHASSIS ASSY(EA V)
 - 2 MANIPULATE WITH TOOLS
 - 116 CHASSIS ASSY(EA V)
 - 5 6.2 XPORT EA
 - 1 MANIPULATE BY HAND
 - 116 CHASSIS ASSY(EA V)
- 22 6 REMOVE EA VI
 - 1 6.9 REMOVE ALIGN SCREWS
 - 2 MANIPULATE WITH TOOLS
 - 6 ZONE 6, BAY 6
 - 1 MANIPULATE BY HAND
 - 6 ZONE 6, BAY 6
 - 2 6.19 REMOVE EA VI
 - 1 MANIPULATE BY HAND
 - 115 CHASSIS ASSY(EA VI)
 - 3 6.1 POS EA IN FIXTURE
 - 1 MANIPULATE BY HAND
 - 115 CHASSIS ASSY(EA VI)
 - 17 SECURED IN TENT
 - 4 6.8 INST EA IN FIXTURE
 - 1 MANIPULATE BY HAND
 - 115 CHASSIS ASSY(EA VI)
 - 2 MANIPULATE WITH TOOLS
 - 115 CHASSIS ASSY(EA VI)

- 5 6.2 XPORT EA
 - 1 MANIPULATE BY HAND
 - 115 CHASSIS ASSY(EA VI)
- 23 6 REMOVE EA VII
 - 1 6.9 REMOVE ALIGN SCREWS
 - 2 MANIPULATE WITH TOOLS
 - 7 ZONE 7, BAY 7
 - 1 MANIPULATE BY HAND
 - 7 VACUUM CLEAN
 - 2 6.19 REMOVE EA VII
 - 1 MANIPULATE BY HAND
 - 114 CHASSIS ASSY(EA VII)
 - 3 6.1 POS EA IN FIXTURE
 - 1 MANIPULATE BY HAND
 - 114 CHASSIS ASSY(EA VII)
 - 4 6.8 INST EA IN FIXTURE
 - 1 MANIPULATE BY HAND
 - 114 CHASSIS ASSY(EA VII)
 - 2 MANIPULATE WITH TOOLS
 - 114 CHASSIS ASSY(EA VII)
 - 5 6.2 XPORT EA
 - 1 MANIPULATE BY HAND
 - 114 CHASSIS ASSY(EA VII)
- 24 6 REMOVE DFR ANTENNA
 - 1 6.9 RELEASE ANTENNA
 - 2 MANIPULATE WITH TOOLS
 - 22 ZONE 22, PANEL 3 SPAR
 - 1 MANIPULATE BY HAND
 - 22 ZONE 22, PANEL 3 SPAR
 - 2 6.4 REMOVE ANTENNA
 - 1 MANIPULATE BY HAND
 - 113 DFR ANTENNA
 - 3 6.2 XPORT ANTENNA
 - 1 MANIPULATE BY HAND
 - 113 DFR ANTENNA
 - 4 6.15 MOUNT ANT IN CONT
 - 1 MANIPULATE BY HAND
 - 113 DFR ANTENNA
 - 5 6.8 INSTALL ANT IN CONT
 - 1 MANIPULATE BY HAND
 - 113 DFR ANTENNA
 - 2 MANIPULATE WITH TOOLS
 - 113 DFR ANTENNA
- 25 6 REMOVE THERMAL SHIELDS
 - 1 6.9 REL CORNR SHLOS(8)
 - 2 MANIPULATE WITH TOOLS
 - 112 CORNER SHIELD 1
 - 111 CORNER SHIELD 1
 - 110 CORNER SHIELD 3
 - 109 CORNER SHIELD 3
 - 108 CORNER SHIELD 5
 - 107 CORNER SHIELD 5
 - 106 CORNER SHIELD 7
 - 105 CORNER SHIELD 7
 - 1 MANIPULATE BY HAND
 - 112 CORNER SHIELD 1
 - 111 CORNER SHIELD 1
 - 110 CORNER SHIELD 3
 - 109 CORNER SHIELD 3
 - 108 CORNER SHIELD 5
 - 107 CORNER SHIELD 5
 - 106 CORNER SHIELD 7

- 105 CORNER SHIELD 7
- 3 6.2 XPORT CORNR SHLDS
 - 1 MANIPULATE BY HAND
 - 112 CORNER SHIELD 1
 - 111 CORNER SHIELD 1
 - 110 CORNER SHIELD 3
 - 109 CORNER SHIELD 3
 - 108 CORNER SHIELD 5
 - 107 CORNER SHIELD 5
 - 106 CORNER SHIELD 7
 - 105 CORNER SHIELD 7
- 4 6.9 REL UMB THERM SHLD
 - 2 MANIPULATE WITH TOOLS
 - 2 ZONE 2, BAY 2
 - 1 MANIPULATE BY HAND
 - 2 ZONE 2, BAY 2
- 5 6.4 REMOVE THERM SHLD
 - 1 MANIPULATE BY HAND
 - 104 UMBILICAL THRM SHIELD
- 6 6.2 XPORT THERM SHLD
 - 1 MANIPULATE BY HAND
 - 104 UMBILICAL THRM SHIELD
- 7 6.1 UNFOLD SUN SHADE (4)
 - 1 MANIPULATE BY HAND
 - 47 ZONE 47, OCTAGON BOTTOM
- 8 6.5 UNTIE SHADE RING
 - 1 MANIPULATE BY HAND
 - 47 ZONE 47, OCTAGON BOTTOM
- 9 6.9 RELEASE SUN SHADE
 - 2 MANIPULATE WITH TOOLS
 - 47 ZONE 47, OCTAGON BOTTOM
 - 1 MANIPULATE BY HAND
 - 47 ZONE 47, OCTAGON BOTTOM
- 10 6.4 REMOVE SUN SHADE
 - 1 MANIPULATE BY HAND
 - 103 SUN SHADE
- 11 6.2 XPORT SUN SHADE
 - 1 MANIPULATE BY HAND
 - 103 SUN SHADE
 - 17 SECURED IN TENT
 - 17 SECURED IN TENT
- 12 6.9 REM EA ALIGN SCREWS
 - 1 MANIPULATE BY HAND
 - 1 ZONE 1, BAY 1
 - 3 ZONE 3, BAY 3
 - 4 ZONE 4, BAY 4
 - 5 ZONE 5, BAY 5
 - 6 ZONE 6, BAY 6
 - 7 ZONE 7, BAY 7
 - 8 ZONE 8, BAY 8
 - 1 MANIPULATE BY HAND
 - 1 ZONE 1, BAY 1
 - 3 ZONE 3, BAY 3
 - 4 ZONE 4, BAY 4
 - 5 ZONE 5, BAY 5
 - 6 ZONE 6, BAY 6
 - 7 ZONE 7, BAY 7
 - 8 ZONE 8, BAY 8
- 13 6.4 REMOVE THERM SHLD
 - 1 MANIPULATE BY HAND
 - 102 SPAR SHIELD 1
 - 101 SPAR SHIELD 3

- 100 SPAR SHIELD 5
- 99 SPAR SHIELD 7
- 14 6.2 XPORT THERM SHLD
 - 1 MANIPULATE BY HAND
 - 102 SPAR SHIELD 1
 - 101 SPAR SHIELD 3
 - 100 SPAR SHIELD 5
 - 99 SPAR SHIELD 7
- 26 6 REMOVE BATTERY
 - 1 6.9 REMOVE EA ALIGN SCR
 - 2 MANIPULATE WITH TOOLS
 - 8 ZONE 8, BAY 8
 - 1 MANIPULATE BY HAND
 - 8 ZONE 8, BAY 8
 - 2 6.4 REMOVE EA VIII BATT
 - 1 MANIPULATE BY HAND
 - 59 BATTERY(+A VIII)
 - 3 6.12 INSTALL BATT/FIXT
 - 1 MANIPULATE BY HAND
 - 59 BATTERY(+A VIII)
 - 4 6.8 INST EA ALIGN SCREW
 - 1 MANIPULATE BY HAND
 - 8 ZONE 8, BAY 8
 - 2 MANIPULATE WITH TOOLS
 - 8 ZONE 8, BAY 8
 - 5 6.2 XPORT BATTERY
 - 1 MANIPULATE BY HAND
 - 59 BATTERY(+A VIII)
- 27 6 REMOVE LO-GAIN ANTENNA
 - 1 6.22 DISC COAX CABLE
 - 11 MATE (DEMATE) CONNECTORS
 - 14 ZONE 14, BAY 6 INWARD
 - 2 6.9 RELEASE ANT DAMPER
 - 2 MANIPULATE WITH TOOLS
 - 14 ZONE 14, BAY 6 INWARD
 - 1 MANIPULATE BY HAND
 - 14 ZONE 14, BAY 6 INWARD
 - 3 6.4 REMOVE DAMPER
 - 1 MANIPULATE BY HAND
 - 97 LONG DAMPER
 - 98 SHORT DAMPER
 - 4 6.2 XPORT DAMPER
 - 1 MANIPULATE BY HAND
 - 97 LONG DAMPER
 - 98 SHORT DAMPER
 - 5 6.9 RELEASE ANT
 - 2 MANIPULATE WITH TOOLS
 - 26 ZONE 26, LO-GAIN ANTENNA
 - 1 MANIPULATE BY HAND
 - 26 ZONE 26, LO-GAIN ANTENNA
 - 6 6.19 REMOVE ANT/SC
 - 1 MANIPULATE BY HAND
 - 96 LO-GAIN ANTENNA
 - 7 6.12 MOUNT ANT IN BRKT
 - 1 MANIPULATE BY HAND
 - 96 LO-GAIN ANTENNA
 - 8 6.8 INSTALL ANT
 - 1 MANIPULATE BY HAND
 - 96 LO-GAIN ANTENNA
 - 2 MANIPULATE WITH TOOLS
 - 96 LO-GAIN ANTENNA
 - 9 6.8 INSTALL SUPP BRKT

- 1 MANIPULATE BY HAND
- 96 LO-GAIN ANTENNA
- 2 MANIPULATE WITH TOOLS
- 96 LO-GAIN ANTENNA
- 28 2 POSITION SC-BAY VII HORIZ
- 1 2.1 ROTATE S/C
- 16 MANEUVER SPACECRAFT
- 29 6 REMOVE BAY I SOLAR PANEL
- 1 6.9 UNLATCH DAMPERS
- 1 MANIPULATE BY HAND
- 21 ZONE 21, PANEL 1 SPAR
- 2 6.9 DEMATE DAMPER ASSY
- 2 MANIPULATE WITH TOOLS
- 21 ZONE 21, PANEL 1 SPAR
- 1 MANIPULATE BY HAND
- 21 ZONE 21, PANEL 1 SPAR
- 3 6.4 REMOVE DAMPER
- 1 MANIPULATE BY HAND
- 94 SOLAR PANEL 1 BOOST DMPR
- 95 SOLAR PANEL 1 BOOST DMPR
- 4 6.2 XPORT DAMPER
- 1 MANIPULATE BY HAND
- 94 SOLAR PANEL 1 BOOST DMPR
- 95 SOLAR PANEL 1 BOOST DMPR
- 5 6.11 REL CG SUPP STRUTS
- 1 MANIPULATE BY HAND
- 21 ZONE 21, PANEL 1 SPAR
- 6 6.8 REM SUPP STRUTS
- 1 MANIPULATE BY HAND
- 87 SOLAR PANEL 1 SUPP STRUT
- 2 MANIPULATE WITH TOOLS
- 87 SOLAR PANEL 1 SUPP STRUT
- 7 6.9 RELEASE SOLAR PANEL
- 2 MANIPULATE WITH TOOLS
- 17 ZONE 17, SOLAR PANEL 1
- 1 MANIPULATE BY HAND
- 17 ZONE 17, SOLAR PANEL 1
- 17 SECURED IN TENT
- 8 6.19 REMOVE SOLAR PANEL
- 1 MANIPULATE BY HAND
- 83 SOLAR PANEL 1 SUPP STRUT
- 9 6.12 POS IN HAND FRAME
- 1 MANIPULATE BY HAND
- 83 SOLAR PANEL 1 SUPP STRUT
- 10 6.8 INSTALL IN FRAME
- 1 MANIPULATE BY HAND
- 83 SOLAR PANEL 1 SUPP STRUT
- 2 MANIPULATE WITH TOOLS
- 83 SOLAR PANEL 1 SUPP STRUT
- 11 6.18 POS DUMMY PANEL
- 1 MANIPULATE BY HAND
- 12 6.8 INSTALL DUMMY PANEL
- 1 MANIPULATE BY HAND
- 2 MANIPULATE WITH TOOLS
- 13 6.2 XPORT SOLAR PANEL
- 1 MANIPULATE BY HAND
- 83 SOLAR PANEL 1 SUPP STRUT
- 30 2 POSITION SC-BAY V HORIZ
- 1 2.1 ROTATE S/C
- 16 MANEUVER SPACECRAFT
- 31 6 REMOVE BAY VII SOLAR PANEL
- 1 6.9 UNLATCH DAMPERS

- 1 MANIPULATE BY HAND
24 ZONE 24, PANEL 7 SPAR
- 2 6.9 DEMATE DAMPER ASSY
2 MANIPULATE WITH TOOLS
24 ZONE 24, PANEL 7 SPAR
1 MANIPULATE BY HAND
24 ZONE 24, PANEL 7 SPAR
- 3 6.4 REMOVE DAMPER
1 MANIPULATE BY HAND
88 SOLAR PANEL 7 BOOST DMPR
89 SOLAR PANEL 7 BOOST DMPR
- 4 6.2 XPORT DAMPER
1 MANIPULATE BY HAND
88 SOLAR PANEL 7 BOOST DMPR
89 SOLAR PANEL 7 BOOST DMPR
- 5 6.11 REL CG SUPP STRUTS
1 MANIPULATE BY HAND
24 ZONE 24, PANEL 7 SPAR
- 6 6.8 REMOVE SUPP STRUT
1 MANIPULATE BY HAND
84 SOLAR PANEL 7 SUPP STRUT
2 MANIPULATE WITH TOOLS
84 SOLAR PANEL 7 SUPP STRUT
- 7 6.9 REL SOLAR PANEL
2 MANIPULATE WITH TOOLS
20 ZONE 20, SOLAR PANEL 7
1 MANIPULATE BY HAND
20 ZONE 20, SOLAR PANEL 7
- 8 6.19 REMOVE SOLAR PANEL
1 MANIPULATE BY HAND
80 SOLAR PANEL 7 SUPP STRUT
- 9 6.12 POS IN HAND FRAME
1 MANIPULATE BY HAND
80 SOLAR PANEL 7 SUPP STRUT
- 10 6.8 INSTALL IN FRAME
1 MANIPULATE BY HAND
80 SOLAR PANEL 7 SUPP STRUT
2 MANIPULATE WITH TOOLS
80 SOLAR PANEL 7 SUPP STRUT
- 11 6.18 POS DUMMY PANEL
1 MANIPULATE BY HAND
- 12 6.8 INSTALL DUMMY PANEL
1 MANIPULATE BY HAND
2 MANIPULATE WITH TOOLS
- 13 6.2 XPORT SOLAR PANEL
1 MANIPULATE BY HAND
80 SOLAR PANEL 7 SUPP STRUT
- 32 2 POSITION SC-BAY I DOWN
1 2.1 ROTATE S/C
16 MANEUVER SPACECRAFT
17 SECURED IN TENT
- 33 6 REMOVE BAY V SOLAR PANEL
1 6.9 UNLATCH DAMPERS
1 MANIPULATE BY HAND
23 ZONE 23, PANEL 5 SPAR
2 6.9 DEMATE DAMPER ASSY
2 MANIPULATE WITH TOOLS
23 ZONE 23, PANEL 5 SPAR
1 MANIPULATE BY HAND
23 ZONE 23, PANEL 5 SPAR
3 6.4 REMOVE DAMPER
1 MANIPULATE BY HAND

- 90 SOLAR PANEL 5 BOOST DMPR
- 91 SOLAR PANEL 5 BOOST DMPR
- 4 6.2 XPORT DAMPER
 - 1 MANIPULATE BY HAND
 - 90 SOLAR PANEL 5 BOOST DMPR
 - 91 SOLAR PANEL 5 BOOST DMPR
- 5 6.11 REL CG SUPP STRUTS
 - 1 MANIPULATE BY HAND
 - 23 ZONE 23, PANEL 5 SPAR
- 6 6.8 REMOVE SUPP STRUT
 - 1 MANIPULATE BY HAND
 - 85 SOLAR PANEL 5 SUPP STRUT
 - 2 MANIPULATE WITH TOOLS
 - 85 SOLAR PANEL 5 SUPP STRUT
- 7 6.9 REL SOLAR PANEL
 - 2 MANIPULATE WITH TOOLS
 - 23 ZONE 23, PANEL 5 SPAR
 - 1 MANIPULATE BY HAND
 - 23 ZONE 23, PANEL 5 SPAR
- 8 6.19 REMOVE SOLAR PANEL
 - 1 MANIPULATE BY HAND
 - 81 SOLAR PANEL 5 SUPP STRUT
- 9 6.12 POS IN HAND FRAME
 - 1 MANIPULATE BY HAND
 - 81 SOLAR PANEL 5 SUPP STRUT
- 10 6.8 INSTALL IN FRAME
 - 1 MANIPULATE BY HAND
 - 81 SOLAR PANEL 5 SUPP STRUT
 - 2 MANIPULATE WITH TOOLS
 - 81 SOLAR PANEL 5 SUPP STRUT
- 11 6.18 POS DUMMY PANEL
 - 1 MANIPULATE BY HAND
- 12 6.8 INSTALL DUMMY PANEL
 - 1 MANIPULATE BY HAND
 - 2 MANIPULATE WITH TOOLS
- 13 6.2 XPORT SOLAR PANEL
 - 1 MANIPULATE BY HAND
 - 81 SOLAR PANEL 5 SUPP STRUT
- 34 6 REMOVE BAY III SOLAR PANEL
 - 1 6.9 UNLATCH DAMPERS
 - 1 MANIPULATE BY HAND
 - 22 ZONE 22, PANEL 3 SPAR
 - 2 6.9 DEMATE DAMPER ASSY
 - 2 MANIPULATE WITH TOOLS
 - 22 ZONE 22, PANEL 3 SPAR
 - 1 MANIPULATE BY HAND
 - 22 ZONE 22, PANEL 3 SPAR
 - 3 6.4 REMOVE DAMPER
 - 1 MANIPULATE BY HAND
 - 92 SOLAR PANEL 3 BOOST DMPR
 - 93 SOLAR PANEL 3 BOOST DMPR
 - 4 6.2 XPORT DAMPER
 - 1 MANIPULATE BY HAND
 - 92 SOLAR PANEL 3 BOOST DMPR
 - 93 SOLAR PANEL 3 BOOST DMPR
 - 5 6.11 REL CG SUPP STRUTS
 - 1 MANIPULATE BY HAND
 - 22 ZONE 22, PANEL 3 SPAR
 - 6 6.8 REMOVE SUPP STRUT
 - 1 MANIPULATE BY HAND
 - 86 SOLAR PANEL 3 SUPP STRUT
 - 2 MANIPULATE WITH TOOLS

- 86 SOLAR PANEL 3 SUPP STRUT
- 7 6.9 REL SOLAR PANEL
 - 2 MANIPULATE WITH TOOLS
 - 22 ZONE 22, PANEL 3 SPAR
 - 1 MANIPULATE BY HAND
 - 22 ZONE 22, PANEL 3 SPAR
- 8 6.19 REMOVE SOLAR PANEL
 - 1 MANIPULATE BY HAND
 - 82 SOLAR PANEL 3 SUPP STRUT
- 9 6.12 POS IN HAND FRAME
 - 1 MANIPULATE BY HAND
 - 82 SOLAR PANEL 3 SUPP STRUT
- 10 6.8 INSTALL IN FRAME
 - 1 MANIPULATE BY HAND
 - 82 SOLAR PANEL 3 SUPP STRUT
 - 2 MANIPULATE WITH TOOLS
 - 82 SOLAR PANEL 3 SUPP STRUT
- 11 6.18 POS DUMMY PANEL
 - 1 MANIPULATE BY HAND
- 12 6.8 INSTALL DUMMY PANEL
 - 1 MANIPULATE BY HAND
 - 2 MANIPULATE WITH TOOLS
- 13 6.2 XPORT SOLAR PANEL
 - 1 MANIPULATE BY HAND
 - 82 SOLAR PANEL 3 SUPP STRUT
 - 17 SECURED IN TENT
- 35 7 EA DEGAUSSING PREPARATION
 - 1 7.8 PLACE EA IN CHAMB
 - 1 MANIPULATE BY HAND
 - 119 CHASSIS ASSY(EA I)
- 36 8 DEGAUSS EA I
 - 1 8.12 DEGAUSS CASE I
 - 9 VISUAL INSPECTION
- 37 9 POST-DEGAUSSING OPERATIONS
 - 1 9.8 REMOVE EA FROM CHAM
 - 1 MANIPULATE BY HAND
 - 119 CHASSIS ASSY(EA I)
 - 2 9.9 XPORT EA
 - 1 MANIPULATE BY HAND
 - 119 CHASSIS ASSY(EA I)
- 38 7 EA DEGAUSSING PREPARATION
 - 1 7.8 PLACE EA IN CHAMB
 - 1 MANIPULATE BY HAND
 - 118 CHASSIS ASSY(EA III)
- 39 8 DEGAUSS EA III
 - 1 8.12 DEGAUSS CASE III
 - 9 VISUAL INSPECTION
- 40 9 POST-DEGAUSSING OPERATIONS
 - 1 9.8 REMOVE EA FROM CHAM
 - 1 MANIPULATE BY HAND
 - 118 CHASSIS ASSY(EA III)
 - 2 9.9 XPORT EA
 - 1 MANIPULATE BY HAND
 - 118 CHASSIS ASSY(EA III)
- 41 7 EA DEGAUSSING PREPARATION
 - 1 7.8 PLACE EA IN CHAMB
 - 1 MANIPULATE BY HAND
 - 117 CHASSIS ASSY(EA IV)
- 42 8 DEGAUSS EA IV
 - 1 8.12 DEGAUSS CASE IV
 - 9 VISUAL INSPECTION
- 43 9 POST-DEGAUSSING OPERATIONS

- 1 9.8 REMOVE EA FROM CHAM
 - 1 MANIPULATE BY HAND
 - 117 CHASSIS ASSY(EA IV)
- 2 9.9 XPORT EA
 - 1 MANIPULATE BY HAND
 - 117 CHASSIS ASSY(EA IV)
- 44 7 EA DEGAUSSING PREPARATION
 - 1 7.8 PLACE EA IN CHAMB
 - 1 MANIPULATE BY HAND
 - 116 CHASSIS ASSY(EA V)
 - 17 SECURED IN TENT
- 45 8 DEGAUSS EA V
 - 1 8.12 DEGAUSS CASE V
 - 9 VISUAL INSPECTION
- 46 9 POST-DEGAUSSING OPERATIONS
 - 1 9.8 REMOVE EA FROM CHAM
 - 1 MANIPULATE BY HAND
 - 116 CHASSIS ASSY(EA V)
 - 2 9.9 XPORT EA
 - 1 MANIPULATE BY HAND
 - 116 CHASSIS ASSY(EA V)
- 47 7 EA DEGAUSSING PREPARATION
 - 1 7.8 PLACE EA IN CHAMB
 - 1 MANIPULATE BY HAND
 - 115 CHASSIS ASSY(EA VI)
- 48 8 DEGAUSS EA VI
 - 1 8.12 DEGAUSS CASE VI
 - 9 VISUAL INSPECTION
- 49 9 POST-DEGAUSSING OPERATIONS
 - 1 9.8 REMOVE EA FROM CHAM
 - 1 MANIPULATE BY HAND
 - 115 CHASSIS ASSY(EA VI)
 - 2 9.9 XPORT EA
 - 1 MANIPULATE BY HAND
 - 115 CHASSIS ASSY(EA VI)
- 50 7 EA DEGAUSSING PREPARATION
 - 1 7.8 PLACE EA IN CHAMB
 - 1 MANIPULATE BY HAND
 - 114 CHASSIS ASSY(EA VII)
- 51 8 DEGAUSS EA VII
 - 1 8.12 DEGAUSS CASE VII
 - 9 VISUAL INSPECTION
- 52 9 POST-DEGAUSSING OPERATIONS
 - 1 9.8 REMOVE EA FROM CHAM
 - 1 MANIPULATE BY HAND
 - 114 CHASSIS ASSY(EA VII)
 - 2 9.9 XPORT EA
 - 1 MANIPULATE BY HAND
 - 114 CHASSIS ASSY(EA VII)
- 53 7 EA DEGAUSSING PREPARATION
 - 1 7.8 PLACE EA IN CHAMB
 - 1 MANIPULATE BY HAND
 - 59 BATTERY(+A VIII)
- 54 8 DEGAUSS EA VIII
 - 1 8.12 DEGAUSS CASE VIII
 - 9 VISUAL INSPECTION
 - 17 SECURED IN TENT
 - 17 SECURED IN TENT
- 55 9 POST-DEGAUSSING OPERATIONS
 - 1 9.8 REMOVE EA FROM CHAM
 - 1 MANIPULATE BY HAND
 - 59 BATTERY(+A VIII)

2 9.9 XPORT EA
 1 MANIPULATE BY HAND
 59 BATTERY(+A VIII)
 59 7 FINAL INSPECTION
 1 INSPECT HARDWARE
 9 VISUAL INSPECTION
 80 SOLAR PANEL 7 SUPP STRUT
 81 SOLAR PANEL 5 SUPP STRUT
 82 SOLAR PANEL 3 SUPP STRUT
 83 SOLAR PANEL 1 SUPP STRUT
 84 SOLAR PANEL 7 SUPP STRUT
 85 SOLAR PANEL 5 SUPP STRUT
 86 SOLAR PANEL 3 SUPP STRUT
 87 SOLAR PANEL 1 SUPP STRUT
 88 SOLAR PANEL 7 BOOST DMPR
 89 SOLAR PANEL 7 BOOST DMPR
 90 SOLAR PANEL 5 BOOST DMPR
 91 SOLAR PANEL 5 BOOST DMPR
 92 SOLAR PANEL 3 BOOST DMPR
 93 SOLAR PANEL 3 BOOST DMPR
 94 SOLAR PANEL 1 BOOST DMPR
 95 SOLAR PANEL 1 BOOST DMPR
 96 LO-GAIN ANTENNA
 97 LONG DAMPER
 98 SHORT DAMPER
 99 SPAR SHIELD 7
 100 SPAR SHIELD 5
 101 SPAR SHIELD 3
 102 SPAR SHIELD 1
 103 SUN SHADE
 104 UMBILICAL THRM SHIELD
 105 CORNER SHIELD 7
 106 CORNER SHIELD 7
 107 CORNER SHIELD 5
 108 CORNER SHIELD 5
 109 CORNER SHIELD 3
 110 CORNER SHIELD 3
 111 CORNER SHIELD 1
 112 CORNER SHIELD 1
 113 DFR ANTENNA
 114 CHASSIS ASSY(EA VII)
 115 CHASSIS ASSY(EA VI)
 116 CHASSIS ASSY(EA V)
 117 CHASSIS ASSY(EA IV)
 118 CHASSIS ASSY(EA III)
 119 CHASSIS ASSY(EA I)
 120 MIDCOURSE MOTOR
 62 5 INSTALL DFR ANTENNA
 1 5.9 REL ANT /SHIP CONT
 2 MANIPULATE WITH TOOLS
 113 DFR ANTENNA
 1 MANIPULATE BY HAND
 113 DFR ANTENNA
 2 5.14 REMOVE ANT/CONT
 1 MANIPULATE BY HAND
 113 DFR ANTENNA
 3 5.3 XPORT ANT
 1 MANIPULATE BY HAND
 113 DFR ANTENNA
 4 5.1 POS ANT IN S/C
 1 MANIPULATE BY HAND
 22 ZGNE 22, PANEL 3 SPAR

- 5 5.8 INSTALL ANT
 - 1 MANIPULATE BY HAND
 - 22 ZONE 22, PANEL 3 SPAR
 - 2 MANIPULATE WITH TOOLS
- 63 5 INSTALL THERMAL SHIELDS
 - 1 5.2 XPORT THERM SHIELD
 - 1 MANIPULATE BY HAND
 - 99 SPAR SHIELD 7
 - 100 SPAR SHIELD 5
 - 101 SPAR SHIELD 3
 - 102 SPAR SHIELD 1
 - 2 5.9 REMOVE EA ALIGN SC
 - 2 MANIPULATE WITH TOOLS
 - 1 ZONE 1, BAY 1
 - 3 ZONE 3, BAY 3
 - 5 ZONE 5, BAY 5
 - 7 ZONE 7, BAY 7
 - 1 MANIPULATE BY HAND
 - 1 ZONE 1, BAY 1
 - 3 ZONE 3, BAY 3
 - 5 ZONE 5, BAY 5
 - 7 ZONE 7, BAY 7
 - 3 5.1 POS SHIELD IN S/C
 - 1 MANIPULATE BY HAND
 - 1 ZONE 1, BAY 1
 - 3 ZONE 3, BAY 3
 - 5 ZONE 5, BAY 5
 - 7 ZONE 7, BAY 7
 - 4 5.8 INSTALL SHIELD
 - 1 MANIPULATE BY HAND
 - 1 ZONE 1, BAY 1
 - 3 ZONE 3, BAY 3
 - 5 ZONE 5, BAY 5
 - 7 ZONE 7, BAY 7
 - 2 MANIPULATE WITH TOOLS
 - 1 ZONE 1, BAY 1
 - 3 ZONE 3, BAY 3
 - 5 ZONE 5, BAY 5
 - 7 ZONE 7, BAY 7
- 5 5.2 XPORT SUN SHADE
 - 1 MANIPULATE BY HAND
 - 103 SUN SHADE
- 6 5.4 POS SUN SHDE IN S/C
 - 1 MANIPULATE BY HAND
 - 47 ZONE 47, OCTAGON BOTTOM
- 7 5.8 INSTALL SUN SHADE
 - 1 MANIPULATE BY HAND
 - 47 ZONE 47, OCTAGON BOTTOM
 - 2 MANIPULATE WITH TOOLS
 - 47 ZONE 47, OCTAGON BOTTOM
- 8 5.5 TIE SHADE RING
 - 1 MANIPULATE BY HAND
 - 47 ZONE 47, OCTAGON BOTTOM
- 9 5.1 FOLD SUN SHADE(4)
 - 1 MANIPULATE BY HAND
 - 47 ZONE 47, OCTAGON BOTTOM
- 10 5.2 XPORT UMB THRM SHLD
 - 1 MANIPULATE BY HAND
 - 104 UMBILICAL THRM SHIELD
- 11 5.1 POS UMB THERM SHLD
 - 1 MANIPULATE BY HAND
 - 2 ZONE 2, BAY 2

- 12 5.8 INSTALL SHIELD
 - 1 MANIPULATE BY HAND
 - 2 ZONE 2, BAY 2
 - 2 MANIPULATE WITH TOOLS
 - 2 ZONE 2, BAY 2
- 13 5.2 XPORT CORNER SHLDS
 - 1 MANIPULATE BY HAND
 - 105 CORNER SHIELD 7
 - 106 CORNER SHIELD 7
 - 107 CORNER SHIELD 5
 - 108 CORNER SHIELD 5
 - 109 CORNER SHIELD 3
 - 110 CORNER SHIELD 3
 - 111 CORNER SHIELD 1
 - 112 CORNER SHIELD 1
- 14 5.1 POS CORNER SHLDS(4)
 - 1 MANIPULATE BY HAND
 - 1 ZONE 1, BAY 1
 - 1 ZONE 1, BAY 1
 - 3 ZONE 3, BAY 3
 - 3 ZONE 3, BAY 3
 - 5 ZONE 5, BAY 5
 - 5 ZONE 5, BAY 5
 - 7 ZONE 7, BAY 7
 - 7 ZONE 7, BAY 7
- 15 5.8 INSTALL SHIELDS
 - 1 MANIPULATE BY HAND
 - 1 ZONE 1, BAY 1
 - 1 ZONE 1, BAY 1
 - 3 ZONE 3, BAY 3
 - 3 ZONE 3, BAY 3
 - 5 ZONE 5, BAY 5
 - 5 ZONE 5, BAY 5
 - 7 ZONE 7, BAY 7
 - 7 ZONE 7, BAY 7
 - 2 MANIPULATE WITH TOOLS
 - 1 ZONE 1, BAY 1
 - 1 ZONE 1, BAY 1
 - 3 ZONE 3, BAY 3
 - 3 ZONE 3, BAY 3
 - 5 ZONE 5, BAY 5
 - 5 ZONE 5, BAY 5
 - 7 ZONE 7, BAY 7
 - 7 ZONE 7, BAY 7
- 64 5 INSTALL BATTERY
 - 1 5.2 XPORT BATTERY
 - 1 MANIPULATE BY HAND
 - 59 BATTERY(+A VIII)
 - 2 5.9 REMOVE ALIGN SCREWS
 - 2 MANIPULATE WITH TOOLS
 - 8 ZONE 8, BAY 8
 - 1 MANIPULATE BY HAND
 - 8 ZONE 8, BAY 8
 - 3 5.13 REMOVE BATT/FIXT
 - 1 MANIPULATE BY HAND
 - 59 BATTERY(+A VIII)
 - 4 5.4 POS BATT IN S/C
 - 1 MANIPULATE BY HAND
 - 8 ZONE 8, BAY 8
 - 5 5.8 INSTALL ALIGN SCREW
 - 1 MANIPULATE BY HAND
 - 8 ZONE 8, BAY 8

- 2 MANIPULATE WITH TOOLS
- 8 ZONE 8, BAY 8
- 65 5 INSTALL LO-GAIN ANTENNA
- 1 5.9 REMOVE SUPP BRKT
- 2 MANIPULATE WITH TOOLS
- 96 LO-GAIN ANTENNA
- 1 MANIPULATE BY HAND
- 96 LO-GAIN ANTENNA
- 2 5.9 REMOVE MOUNT SCREWS
- 2 MANIPULATE WITH TOOLS
- 96 LO-GAIN ANTENNA
- 1 MANIPULATE BY HAND
- 96 LO-GAIN ANTENNA
- 17 SECURED IN TENT
- 3 5.13 REMOVE ANT BRKT
- 2 MANIPULATE WITH TOOLS
- 96 LO-GAIN ANTENNA
- 1 MANIPULATE BY HAND
- 96 LO-GAIN ANTENNA
- 4 5.18 MOUNT ANT IN S/C
- 1 MANIPULATE BY HAND
- 26 ZONE 26, LO-GAIN ANTENNA
- 5 5.8 INSTALL ANTENNA
- 1 MANIPULATE BY HAND
- 26 ZONE 26, LO-GAIN ANTENNA
- 2 MANIPULATE WITH TOOLS
- 26 ZONE 26, LO-GAIN ANTENNA
- 6 5.2 XPORT DAMPER
- 1 MANIPULATE BY HAND
- 97 LONG DAMPER
- 98 SHORT DAMPER
- 7 5.4 POS DAMPER
- 1 MANIPULATE BY HAND
- 14 ZONE 14, BAY 6 INWARD
- 8 5.8 INSTALL DAMPER
- 1 MANIPULATE BY HAND
- 14 ZONE 14, BAY 6 INWARD
- 2 MANIPULATE WITH TOOLS
- 14 ZONE 14, BAY 6 INWARD
- 9 5.22 CONN COAX CABLE
- 14 TIE HARNESSSES
- 11 ZONE 11, BAY 3 INWARD
- 66 2 POSITION SC-BAY 1 DOWN
- 1 2.1 ROTATE S/C
- 16 MANEUVER SPACECRAFT
- 67 5 INSTALL BAY III SOLAR PANEL
- 1 5.2 XPORT SOLAR PANEL
- 1 MANIPULATE BY HAND
- 82 SOLAR PANEL 3 SUPP STRUT
- 2 5.9 RELEASE DUMMY PANEL
- 2 MANIPULATE WITH TOOLS
- 1 MANIPULATE BY HAND
- 3 5.19 REMOVE DUMMY/SC
- 1 MANIPULATE BY HAND
- 4 5.12 POS DUMMY/FAME
- 1 MANIPULATE BY HAND
- 5 5.8 INSTALL DUMMY
- 1 MANIPULATE BY HAND
- 6 5.18 POS SOLAR PANEL
- 1 MANIPULATE BY HAND
- 18 ZONE 18, SOLAR PANEL 3
- 7 5.8 INSTALL SOLAR PANEL

- 1 MANIPULATE BY HAND
18 ZONE 18, SOLAR PANEL 3
- 2 MANIPULATE WITH TOOLS
18 ZONE 18, SOLAR PANEL 3
- 8 5.4 POS CG SUPP STRUTS
1 MANIPULATE BY HAND
22 ZONE 22, PANEL 3 SPAR
- 9 5.8 INSTALL SUP STRUTS
1 MANIPULATE BY HAND
22 ZONE 22, PANEL 3 SPAR
2 MANIPULATE WITH TOOLS
22 ZONE 22, PANEL 3 SPAR
- 10 5.2 XPORT DAMPER
1 MANIPULATE BY HAND
92 SOLAR PANEL 3 BOOST DMPR
93 SOLAR PANEL 3 BOOST DMPR
- 11 5.4 POS DAMPER IN SC
1 MANIPULATE BY HAND
22 ZONE 22, PANEL 3 SPAR
- 12 5.8 INSTALL DAMPER
1 MANIPULATE BY HAND
22 ZONE 22, PANEL 3 SPAR
2 MANIPULATE WITH TOOLS
22 ZONE 22, PANEL 3 SPAR
17 SECURED IN TENT
- 13 5.8 LATCH DAMPER
1 MANIPULATE BY HAND
22 ZONE 22, PANEL 3 SPAR
- 68 5 INSTALL BAY V SOLAR PANEL
1 5.2 XPORT SOLAR PANEL
1 MANIPULATE BY HAND
81 SOLAR PANEL 5 SUPP STRUT
- 2 5.9 RELEASE DUMMY PANEL
2 MANIPULATE WITH TOOLS
1 MANIPULATE BY HAND
- 3 5.19 REMOVE DUMMY/SC
1 MANIPULATE BY HAND
- 4 5.12 POS DUMMY/FRAME
1 MANIPULATE BY HAND
- 5 5.8 INSTALL DUMMY
1 MANIPULATE BY HAND
2 MANIPULATE WITH TOOLS
- 6 5.18 POS SOLAR PANEL
1 MANIPULATE BY HAND
19 ZONE 19, SOLAR PANEL 5
- 7 5.8 INSTALL SOLAR PANEL
1 MANIPULATE BY HAND
19 ZONE 19, SOLAR PANEL 5
2 MANIPULATE WITH TOOLS
19 ZONE 19, SOLAR PANEL 5
- 8 5.4 POS CG SUPP STRUTS
1 MANIPULATE BY HAND
23 ZONE 23, PANEL 5 SPAR
- 9 5.8 INSTALL SUPP STRUTS
1 MANIPULATE BY HAND
23 ZONE 23, PANEL 5 SPAR
2 MANIPULATE WITH TOOLS
23 ZONE 23, PANEL 5 SPAR
- 10 5.2 XPORT DAMPER
1 MANIPULATE BY HAND
90 SOLAR PANEL 5 BOOST DMPR
91 SOLAR PANEL 5 BOOST DMPR

- 11 5.4 POS DAMPER IN SC
 - 1 MANIPULATE BY HAND
 - 23 ZONE 23, PANEL 5 SPAR
- 12 5.8 INSTALL DAMPER
 - 1 MANIPULATE BY HAND
 - 23 ZONE 23, PANEL 5 SPAR
 - 2 MANIPULATE WITH TOOLS
 - 23 ZONE 23, PANEL 5 SPAR
- 13 5.8 LATCH DAMPER
 - 1 MANIPULATE BY HAND
 - 23 ZONE 23, PANEL 5 SPAR
- 69 2 POSITION SC-BAY VII DOWN
 - 1 2.1 ROTATE S/C
 - 16 MANEUVER SPACECRAFT
- 70 5 INSTALL BAY VII SOLAR PANEL
 - 1 5.2 XPORT SOLAR PANEL
 - 1 MANIPULATE BY HAND
 - 80 SOLAR PANEL 7 SUPP STRUT
 - 2 5.9 RELEASE DUMMY PANEL
 - 2 MANIPULATE WITH TOOLS
 - 1 MANIPULATE BY HAND
 - 3 5.19 REMOVE DUMMY/SC
 - 1 MANIPULATE BY HAND
 - 4 5.12 POS DUMMY/FRAME
 - 1 MANIPULATE BY HAND
 - 17 SECURED IN TENT
 - 5 5.8 INSTALL DUMMY
 - 1 MANIPULATE BY HAND
 - 2 MANIPULATE WITH TOOLS
 - 6 5.18 POS SOLAR PANEL
 - 1 MANIPULATE BY HAND
 - 20 ZONE 20, SOLAR PANEL 7
 - 7 5.8 INSTALL SOLAR PANEL
 - 1 MANIPULATE BY HAND
 - 20 ZONE 20, SOLAR PANEL 7
 - 2 MANIPULATE WITH TOOLS
 - 20 ZONE 20, SOLAR PANEL 7
 - 8 5.4 POS CG SUPP STRUTS
 - 1 MANIPULATE BY HAND
 - 24 ZONE 24, PANEL 7 SPAR
 - 9 5.8 INSTALL SUPP STRUTS
 - 1 MANIPULATE BY HAND
 - 24 ZONE 24, PANEL 7 SPAR
 - 2 MANIPULATE WITH TOOLS
 - 24 ZONE 24, PANEL 7 SPAR
 - 10 5.2 XPORT DAMPER
 - 1 MANIPULATE BY HAND
 - 88 SOLAR PANEL 7 BOOST DMPR
 - 89 SOLAR PANEL 7 BOOST DMPR
 - 11 5.4 POS DAMPER IN SC
 - 1 MANIPULATE BY HAND
 - 24 ZONE 24, PANEL 7 SPAR
 - 12 5.8 INSTALL DAMPER
 - 1 MANIPULATE BY HAND
 - 24 ZONE 24, PANEL 7 SPAR
 - 2 MANIPULATE WITH TOOLS
 - 24 ZONE 24, PANEL 7 SPAR
 - 13 5.8 LATCH DAMPER
 - 1 MANIPULATE BY HAND
 - 24 ZONE 24, PANEL 7 SPAR
- 71 2 POSITION SC-BAY VII HORIZ
 - 1 2.1 ROTATE S/C

- 16 MANEUVER SPACECRAFT
- 72 5 INSTALL BAY 1 SOLAR PANEL
- 1 5.2 XPORT SOLAR PANEL
- 1 MANIPULATE BY HAND
- 83 SOLAR PANEL 1 SUPP STRUT
- 2 5.9 RELEASE DUMMY PANEL
- 2 MANIPULATE WITH TOOLS
- 1 MANIPULATE BY HAND
- 3 5.19 REMOVE DUMMY/SC
- 1 MANIPULATE BY HAND
- 4 5.12 POS DUMMY/FAME
- 1 MANIPULATE BY HAND
- 5 5.8 INSTALL DUMMY
- 1 MANIPULATE BY HAND
- 2 MANIPULATE WITH TOOLS
- 6 5.18 POS SOLAR PANEL
- 1 MANIPULATE BY HAND
- 17 ZONE 17, SOLAR PANEL 1
- 7 5.8 INSTALL SOLAR PANEL
- 1 MANIPULATE BY HAND
- 17 ZONE 17, SOLAR PANEL 1
- 2 MANIPULATE WITH TOOLS
- 17 ZONE 17, SOLAR PANEL 1
- 8 5.4 POS CG SUPP STRUTS
- 1 MANIPULATE BY HAND
- 21 ZONE 21, PANEL 1 SPAR
- 17 SECURED IN TENT
- 9 5.8 INSTALL SUPP STRUTS
- 1 MANIPULATE BY HAND
- 21 ZONE 21, PANEL 1 SPAR
- 2 MANIPULATE WITH TOOLS
- 21 ZONE 21, PANEL 1 SPAR
- 10 5.2 XPORT DAMPER
- 1 MANIPULATE BY HAND
- 94 SOLAR PANEL 1 BOOST DMPR
- 95 SOLAR PANEL 1 BOOST DMPR
- 11 5.4 POS DAMPER IN SC
- 1 MANIPULATE BY HAND
- 21 ZONE 21, PANEL 1 SPAR
- 12 5.8 INSTALL DAMPER
- 1 MANIPULATE BY HAND
- 21 ZONE 21, PANEL 1 SPAR
- 2 MANIPULATE WITH TOOLS
- 21 ZONE 21, PANEL 1 SPAR
- 13 5.8 LATCH DAMPER
- 1 MANIPULATE BY HAND
- 21 ZONE 21, PANEL 1 SPAR
- 73 7 ACGS LEAK TEST PREPARATION
- 1 7.1 CONN SPEC CABLING
- 11 MATE (DEMATE) CONNECTORS
- 61 TEST CABLING
- 2 7.3 CONNECT OSE
- 11 MATE (DEMATE) CONNECTORS
- 61 TEST CABLING
- 17 SECURED IN TENT
- 17 SECURED IN TENT
- 74 8 ACGS LEAK TEST
- 1 8.1 PERFORM TEST
- 9 VISUAL INSPECTION
- 17 SECURED IN TENT
- 75 9 POST-TEST OPERATIONS
- 1 9.1 DISCONN SPEC CABLES

- 11 MATE (DEMATE) CONNECTORS
 - 61 TEST CABLING
- 2 9.3 DISCONNECT USE
 - 11 MATE (DEMATE) CONNECTORS
 - 61 TEST CABLING
- 76 2 INSTALL SC ON MAPPING CART
 - 1 2.3 XPORT S/C
 - 3 MOVE W/CRANE
 - 2 2.1 POS S/C ON CART
 - 1 MANIPULATE BY HAND
 - 47 ZONE 47, OCTAGON BOTTOM
 - 3 2.2 SECURE S/C
 - 1 MANIPULATE BY HAND
 - 47 ZONE 47, OCTAGON BOTTOM
 - 2 MANIPULATE WITH TOOLS
 - 47 ZONE 47, OCTAGON BOTTOM
- 77 7 MAGNETIC MAPPING PREPARATION
 - 1 7.1 CONN MAGNET TO REC
 - 11 MATE (DEMATE) CONNECTORS
 - 61 TEST CABLING
- 78 8 MAGNETIC MAPPING
 - 1 8.1 MAP SOC
 - 9 VISUAL INSPECTION
- 79 9 POST-TEST OPERATIONS
 - 1 9.1 DISCONN REC
 - 11 MATE (DEMATE) CONNECTORS
 - 61 TEST CABLING
- 80 2 REMOVE SC FROM MAPPING CART
 - 1 2.4 REL SPACECRAFT
 - 2 MANIPULATE WITH TOOLS
 - 47 ZONE 47, OCTAGON BOTTOM
 - 1 MANIPULATE BY HAND
 - 47 ZONE 47, OCTAGON BOTTOM
 - 2 2.1 REMOVE S/C FROM CART
 - 3 MOVE W/CRANE
 - 3 2.3 XPORT S/C
 - 3 MOVE W/CRANE
- 81 7 CURRENT LOOP TEST PREPARATION
 - 1 7.1 CONN SPEC CABLING
 - 11 MATE (DEMATE) CONNECTORS
 - 61 TEST CABLING
 - 2 7.3 CONNECT USE
 - 11 MATE (DEMATE) CONNECTORS
 - 61 TEST CABLING
 - 17 SECURED IN TENT
- 82 8 CURRENT LOOP TEST
 - 1 8.1 PERFORM TEST
 - 9 VISUAL INSPECTION
- 83 9 POST-TEST OPERATIONS
 - 1 9.1 DISCONN SPEC CABLES
 - 11 MATE (DEMATE) CONNECTORS
 - 61 TEST CABLING
 - 2 9.3 DISCONNECT USE
 - 11 MATE (DEMATE) CONNECTORS
 - 61 TEST CABLING
- 84 7 SYSTEM TEST PREPARATION
 - 1 7.9 POS SC/CRANE
 - 3 MOVE W/CRANE
 - 2 7.9 INSTALL BATTERY
 - 1 MANIPULATE BY HAND
 - 8 ZONE 8, BAY 8
 - 1 MANIPULATE BY HAND

- 8 ZONE 8, BAY 8
- 2 MANIPULATE WITH TOOLS
- 8 ZONE 8, BAY 8
- 3 7.5 INSTALL SIT
 - 1 MANIPULATE BY HAND
 - 16 ZONE 16, BAY 8 INWARD
 - 1 MANIPULATE BY HAND
 - 16 ZONE 16, BAY 8 INWARD
 - 2 MANIPULATE WITH TOOLS
 - 16 ZONE 16, BAY 8 INWARD
 - 17 SECURED IN TENT
- 4 7.5 INST LIGHT SOURCES
 - 1 MANIPULATE BY HAND
 - 62 TRD LIGHT SOURCES
 - 1 MANIPULATE BY HAND
 - 62 TRD LIGHT SOURCES
 - 2 MANIPULATE WITH TOOLS
 - 62 TRD LIGHT SOURCES
- 5 7.10 PRESSUR ACGS TANK
 - 9 VISUAL INSPECTION
 - 63 TRANSDUCER
- 6 7.5 INST XDUCER ASSY
 - 1 MANIPULATE BY HAND
 - 63 TRANSDUCER
 - 1 MANIPULATE BY HAND
 - 63 TRANSDUCER
- 7 7.10 PRESSUR PIPS TANK
 - 9 VISUAL INSPECTION
- 8 7.5 INST DISICC COVER
 - 1 MANIPULATE BY HAND
 - 64 DISC COVER
 - 1 MANIPULATE BY HAND
 - 64 DISC COVER
 - 2 MANIPULATE WITH TOOLS
 - 64 DISC COVER
- 9 7.5 INST BRACKETS
 - 1 MANIPULATE BY HAND
 - 65 BRACKETS
 - 2 MANIPULATE WITH TOOLS
 - 65 BRACKETS
- 10 7.5 INSTALL LATCH BRKT
 - 1 MANIPULATE BY HAND
 - 65 BRACKETS
 - 2 MANIPULATE WITH TOOLS
 - 65 BRACKETS
- 11 7.5 INSTALL PLATE RING
 - 1 MANIPULATE BY HAND
 - 66 PLATE RING
 - 2 MANIPULATE WITH TOOLS
 - 66 PLATE RING
- 12 7.11 ALIGN PLATE RING
 - 1 MANIPULATE BY HAND
 - 66 PLATE RING
- 13 7.5 INST TANK PLATE
 - 1 MANIPULATE BY HAND
 - 67 TANK PLATE
 - 2 MANIPULATE WITH TOOLS
 - 67 TANK PLATE
- 14 7.11 ALIGN TANK PLATE
 - 1 MANIPULATE BY HAND
 - 67 TANK PLATE
- 15 7.11 ALIGN FLUX TANK

- 1 MANIPULATE BY HAND
- 68 FLUX TANK
- 16 7.5 INST TANK MAIN PLAT
 - 1 MANIPULATE BY HAND
 - 68 FLUX TANK
 - 2 MANIPULATE WITH TOOLS
 - 68 FLUX TANK
- 17 7.5 INST ANGLE
 - 1 MANIPULATE BY HAND
 - 68 FLUX TANK
 - 2 MANIPULATE WITH TOOLS
 - 68 FLUX TANK
- 17 SECURED IN TENT
- 18 7.1 CONNECT CABLES
 - 11 MATE (DEMATE) CONNECTORS
 - 61 TEST CABLING
- 85 8 SYSTEM TEST
 - 1 8.1 PERF MOTION TESTS
 - 9 VISUAL INSPECTION
 - 2 8.13 INSPECT CABLING
 - 9 VISUAL INSPECTION
 - 3 8.1 PERF MOTION TESTS
 - 9 VISUAL INSPECTION
 - 4 8.14 ROTATE SC
 - 16 MANEUVER SPACECRAFT
 - 5 8.15 INST TRD SOURCES
 - 1 MANIPULATE BY HAND
 - 62 TRD LIGHT SOURCES
 - 2 MANIPULATE WITH TOOLS
 - 62 TRD LIGHT SOURCES
 - 17 SECURED IN TENT
 - 17 SECURED IN TENT
 - 6 8.1 PERF TRD TESTS
 - 9 VISUAL INSPECTION
 - 7 8.16 REM TRD SOURCES
 - 2 MANIPULATE WITH TOOLS
 - 62 TRD LIGHT SOURCES
 - 1 MANIPULATE BY HAND
 - 62 TRD LIGHT SOURCES
 - 8 8.1 PERF MOTION TESTS
 - 9 VISUAL INSPECTION
 - 17 15.75
- 86 9 POST-TEST OPERATIONS
 - 1 9.1 DISCONNECT CABLES
 - 11 MATE (DEMATE) CONNECTORS
 - 61 TEST CABLING
 - 2 9.1 REM MAIN TANK PLATE
 - 2 MANIPULATE WITH TOOLS
 - 68 FLUX TANK
 - 1 MANIPULATE BY HAND
 - 68 FLUX TANK
 - 3 9.1 REM PLATE RING
 - 2 MANIPULATE WITH TOOLS
 - 68 FLUX TANK
 - 1 MANIPULATE BY HAND
 - 68 FLUX TANK
 - 4 9.1 REM LATCH BRACKET
 - 2 MANIPULATE WITH TOOLS
 - 65 BRACKETS
 - 1 MANIPULATE BY HAND
 - 65 BRACKETS
 - 5 9.1 REM DISICC COVER

- 1 MANIPULATE BY HAND
 - 64 DISC COVER
- 6 9.1 REM XDUCER ASSY
 - 2 MANIPULATE WITH TOOLS
 - 63 TRANSDUCER
 - 1 MANIPULATE BY HAND
 - 63 TRANSDUCER
- 7 9.1 REM LIGHT SOURCES
 - 2 MANIPULATE WITH TOOLS
 - 62 TRD LIGHT SOURCES
 - 1 MANIPULATE BY HAND
 - 62 TRU LIGHT SOURCES
- 8 9.1 REM SIT
 - 2 MANIPULATE WITH TOOLS
 - 58 SEP-INIT TIMER
 - 1 MANIPULATE BY HAND
 - 58 SEP-INIT TIMER
- 9 9.1 REM BATTERY
 - 2 MANIPULATE WITH TOOLS
 - 59 BATTERY(+A VIII)
 - 1 MANIPULATE BY HAND
 - 59 BATTERY(+A VIII)
- 5 PREPARATION AND SHIPMENT TO ETR
 - 2 6 REMOVE DFR ANTENNA
 - 1 6.9 RELEASE ANTENNA
 - 2 MANIPULATE WITH TOOLS
 - 22 ZONE 22, PANEL 3 SPAR
 - 1 MANIPULATE BY HAND
 - 22 ZONE 22, PANEL 3 SPAR
 - 2 6.4 REMOVE ANTENNA
 - 1 MANIPULATE BY HAND
 - 113 DFR ANTENNA
 - 3 6.2 XPORT ANTENNA
 - 1 MANIPULATE BY HAND
 - 113 DFR ANTENNA
 - 4 6.15 MOUNT ANT IN CONT
 - 1 MANIPULATE BY HAND
 - 113 DFR ANTENNA
 - 5 6.8 INSTALL ANT IN CONT
 - 1 MANIPULATE BY HAND
 - 113 DFR ANTENNA
 - 2 MANIPULATE WITH TOOLS
 - 113 DFR ANTENNA
 - 3 6 REMOVE THERMAL SHIELDS
 - 1 6.9 REL CORNR SHLDS(4)
 - 1 MANIPULATE BY HAND
 - 112 CORNER SHIELD 1
 - 111 CORNER SHIELD 1
 - 110 CORNER SHIELD 3
 - 109 CORNER SHIELD 3
 - 108 CORNER SHIELD 5
 - 107 CORNER SHIELD 5
 - 106 CORNER SHIELD 7
 - 105 CORNER SHIELD 7
 - 2 MANIPULATE WITH TOOLS
 - 112 CORNER SHIELD 1
 - 111 CORNER SHIELD 1
 - 110 CORNER SHIELD 3
 - 109 CORNER SHIELD 3
 - 108 CORNER SHIELD 5
 - 107 CORNER SHIELD 5
 - 106 CORNER SHIELD 7

- 105 CORNER SHIELD 7
- 3 6.2 XPORT CORNR SHLDS
 - 1 MANIPULATE BY HAND
 - 112 CORNER SHIELD 1
 - 111 CORNER SHIELD 1
 - 110 CORNER SHIELD 3
 - 109 CORNER SHIELD 3
 - 108 CORNER SHIELD 5
 - 107 CORNER SHIELD 5
 - 106 CORNER SHIELD 7
 - 105 CORNER SHIELD 7
- 4 6.9 REL UMB THERM SHLD
 - 2 MANIPULATE WITH TOOLS
 - 2 ZONE 2, BAY 2
 - 1 MANIPULATE BY HAND
 - 2 ZONE 2, BAY 2
- 5 6.4 REMOVE THERM SHLD
 - 1 MANIPULATE BY HAND
 - 104 UMBILICAL THRM SHIELD
- 6 6.2 XPORT THERM SHLD
 - 1 MANIPULATE BY HAND
 - 104 UMBILICAL THRM SHIELD
- 7 6.1 UNFOLD SUN SHADE (4)
 - 1 MANIPULATE BY HAND
 - 47 ZONE 47, OCTAGON BOTTOM
- 8 6.5 UNTIE SHADE RING
 - 1 MANIPULATE BY HAND
 - 47 ZONE 47, OCTAGON BOTTOM
- 9 6.9 RELEASE SUN SHADE
 - 2 MANIPULATE WITH TOOLS
 - 47 ZONE 47, OCTAGON BOTTOM
 - 1 MANIPULATE BY HAND
 - 47 ZONE 47, OCTAGON BOTTOM
- 10 6.4 REMOVE SUN SHADE
 - 1 MANIPULATE BY HAND
 - 103 SUN SHADE
 - 17 SECURED IN TENT
- 11 6.2 XPORT SUN SHADE
 - 1 MANIPULATE BY HAND
 - 103 SUN SHADE
- 12 6.9 REM EA ALIGN SCREWS
 - 2 MANIPULATE WITH TOOLS
 - 1 ZONE 1, BAY 1
 - 3 ZONE 3, BAY 3
 - 4 ZONE 4, BAY 4
 - 5 ZONE 5, BAY 5
 - 6 ZONE 6, BAY 6
 - 7 ZONE 7, BAY 7
 - 8 ZONE 8, BAY 8
 - 1 MANIPULATE BY HAND
 - 1 ZONE 1, BAY 1
 - 3 ZONE 3, BAY 3
 - 4 ZONE 4, BAY 4
 - 5 ZONE 5, BAY 5
 - 6 ZONE 6, BAY 6
 - 7 ZONE 7, BAY 7
 - 8 ZONE 8, BAY 8
- 13 6.4 REMOVE THERM SHLD
 - 1 MANIPULATE BY HAND
 - 102 SPAR SHIELD 1
 - 101 SPAR SHIELD 3
 - 100 SPAR SHIELD 5

- 99 SPAR SHIELD 7
- 14 6.2 XPORT THERM SHLD
 - 1 MANIPULATE BY HAND
 - 102 SPAR SHIELD 1
 - 101 SPAR SHIELD 3
 - 100 SPAR SHIELD 5
 - 99 SPAR SHIELD 7
- 4 6 REMOVE BATTERY
 - 1 6.9 REMOVE EA ALIGN SCR
 - 2 MANIPULATE WITH TOOLS
 - 8 ZONE 8, BAY 8
 - 1 MANIPULATE BY HAND
 - 8 ZONE 8, BAY 8
 - 2 6.4 REMOVE EA VIII BATT
 - 1 MANIPULATE BY HAND
 - 59 BATTERY(+A VIII)
 - 3 6.12 INSTALL BATT/FIXT
 - 1 MANIPULATE BY HAND
 - 59 BATTERY(+A VIII)
 - 4 6.8 INST EA ALIGN SCREW
 - 1 MANIPULATE BY HAND
 - 8 ZONE 8, BAY 8
 - 2 MANIPULATE WITH TOOLS
 - 8 ZONE 8, BAY 8
 - 5 6.2 XPORT BATTERY
 - 1 MANIPULATE BY HAND
 - 59 BATTERY(+A VIII)
- 5 6 REMOVE LO-GAIN ANTENNA
 - 1 6.22 DISC COAX CABLE
 - 11 MATE (DEMATE) CONNECTORS
 - 14 ZONE 14, BAY 6 INWARD
 - 2 6.9 RELEASE ANT DAMPER
 - 2 MANIPULATE WITH TOOLS
 - 14 ZONE 14, BAY 6 INWARD
 - 1 MANIPULATE BY HAND
 - 14 ZONE 14, BAY 6 INWARD
 - 3 6.4 REMOVE DAMPER
 - 1 MANIPULATE BY HAND
 - 97 LONG DAMPER
 - 98 SHORT DAMPER
 - 4 6.2 XPORT DAMPER
 - 1 MANIPULATE BY HAND
 - 97 LONG DAMPER
 - 98 SHORT DAMPER
 - 5 6.9 RELEASE ANT
 - 2 MANIPULATE WITH TOOLS
 - 26 ZONE 26, LO-GAIN ANTENNA
 - 1 MANIPULATE BY HAND
 - 26 ZONE 26, LO-GAIN ANTENNA
 - 6 6.19 REMOVE ANT/SC
 - 1 MANIPULATE BY HAND
 - 96 LO-GAIN ANTENNA
 - 7 6.12 MOUNT ANT IN BRKT
 - 1 MANIPULATE BY HAND
 - 96 LO-GAIN ANTENNA
 - 8 6.8 INSTALL ANT
 - 1 MANIPULATE BY HAND
 - 96 LO-GAIN ANTENNA
 - 2 MANIPULATE WITH TOOLS
 - 96 LO-GAIN ANTENNA
 - 9 6.8 INSTALL SUPP BRKT
 - 1 MANIPULATE BY HAND

- 96 LO-GAIN ANTENNA
- 2 MANIPULATE WITH TOOLS
- 96 LO-GAIN ANTENNA
- 6 2 POSITION SC-BAY VII HORIZ
- 1 2.1 ROTATE S/C
- 16 MANEUVER SPACECRAFT
- 7 6 REMOVE BAY I SOLAR PANEL
- 1 6.9 UNLATCH DAMPERS
- 1 MANIPULATE BY HAND
- 21 ZONE 21, PANEL 1 SPAR
- 2 6.9 DEMATE DAMPER ASSY
- 2 MANIPULATE WITH TOOLS
- 21 ZONE 21, PANEL 1 SPAR
- 1 MANIPULATE BY HAND
- 21 ZONE 21, PANEL 1 SPAR
- 3 6.4 REMOVE DAMPER
- 1 MANIPULATE BY HAND
- 94 SOLAR PANEL 1 BOOST DMPR
- 95 SOLAR PANEL 1 BOOST DMPR
- 4 6.2 XPORT DAMPER
- 1 MANIPULATE BY HAND
- 94 SOLAR PANEL 1 BOOST DMPR
- 95 SOLAR PANEL 1 BOOST DMPR
- 5 6.11 REL CG SUPP STRUTS
- 1 MANIPULATE BY HAND
- 21 ZONE 21, PANEL 1 SPAR
- 6 6.8 REMOVE SUPP STRUT
- 1 MANIPULATE BY HAND
- 87 SOLAR PANEL 1 SUPP STRUT
- 2 MANIPULATE WITH TOOLS
- 87 SOLAR PANEL 1 SUPP STRUT
- 7 6.9 RELEASE SOLAR PANEL
- 2 MANIPULATE WITH TOOLS
- 17 ZONE 17, SOLAR PANEL 1
- 1 MANIPULATE BY HAND
- 17 ZONE 17, SOLAR PANEL 1
- 8 6.19 REMOVE SOLAR PANEL
- 1 MANIPULATE BY HAND
- 83 SOLAR PANEL 1 SUPP STRUT
- 17 SECURED IN TENT
- 9 6.12 POS IN HAND FRAME
- 1 MANIPULATE BY HAND
- 83 SOLAR PANEL 1 SUPP STRUT
- 10 6.8 INSTALL IN FRAME
- 1 MANIPULATE BY HAND
- 83 SOLAR PANEL 1 SUPP STRUT
- 2 MANIPULATE WITH TOOLS
- 83 SOLAR PANEL 1 SUPP STRUT
- 11 6.18 POS DUMMY PANEL
- 1 MANIPULATE BY HAND
- 12 6.6 INSTALL DUMMY PANEL
- 1 MANIPULATE BY HAND
- 2 MANIPULATE WITH TOOLS
- 13 6.2 XPORT SOLAR PANEL
- 1 MANIPULATE BY HAND
- 83 SOLAR PANEL 1 SUPP STRUT
- 8 2 POSITION SC-BAY V DOWN
- 1 2.1 ROTATE S/C
- 16 MANEUVER SPACECRAFT
- 9 6 REMOVE BAY VII SOLAR PANEL
- 1 6.9 UNLATCH DAMPERS
- 1 MANIPULATE BY HAND

- 24 ZONE 24, PANEL 7 SPAR
- 2 6.9 DEMATE DAMPER ASSY
 - 2 MANIPULATE WITH TOOLS
 - 24 ZONE 24, PANEL 7 SPAR
 - 1 MANIPULATE BY HAND
 - 24 ZONE 24, PANEL 7 SPAR
- 3 6.4 REMOVE DAMPER
 - 1 MANIPULATE BY HAND
 - 88 SOLAR PANEL 7 BOOST DMPR
 - 89 SOLAR PANEL 7 BOOST DMPR
- 4 6.2 XPORT DAMPER
 - 1 MANIPULATE BY HAND
 - 88 SOLAR PANEL 7 BOOST DMPR
 - 89 SOLAR PANEL 7 BOOST DMPR
- 5 6.11 REL CG SUPP STRUTS
 - 1 MANIPULATE BY HAND
 - 24 ZONE 24, PANEL 7 SPAR
- 6 6.8 REMOVE SUPP STRUT
 - 1 MANIPULATE BY HAND
 - 84 SOLAR PANEL 7 SUPP STRUT
 - 2 MANIPULATE WITH TOOLS
 - 84 SOLAR PANEL 7 SUPP STRUT
- 7 6.9 REL SOLAR PANEL
 - 2 MANIPULATE WITH TOOLS
 - 20 ZONE 20, SOLAR PANEL 7
 - 1 MANIPULATE BY HAND
 - 20 ZONE 20, SOLAR PANEL 7
- 8 6.19 REMOVE SOLAR PANEL
 - 1 MANIPULATE BY HAND
 - 80 SOLAR PANEL 7 SUPP STRUT
- 9 6.12 PCS IN HAND FRAME
 - 1 MANIPULATE BY HAND
 - 80 SOLAR PANEL 7 SUPP STRUT
- 10 6.8 INSTALL IN FRAME
 - 1 MANIPULATE BY HAND
 - 80 SOLAR PANEL 7 SUPP STRUT
 - 2 MANIPULATE WITH TOOLS
 - 80 SOLAR PANEL 7 SUPP STRUT
- 11 6.18 POS DUMMY PANEL
 - 1 MANIPULATE BY HAND
- 12 6.8 INSTALL DUMMY PANEL
 - 1 MANIPULATE BY HAND
 - 2 MANIPULATE WITH TOOLS
- 13 6.2 XPORT SOLAR PANEL
 - 1 MANIPULATE BY HAND
 - 80 SOLAR PANEL 7 SUPP STRUT
- 10 2 POSITION SC-BAY 1 DOWN
 - 1 2.1 ROTATE S/C
 - 16 MANEUVER SPACECRAFT
- 11 6 REMOVE BAY V SOLAR PANEL
 - 1 6.9 UNLATCH DAMPERS
 - 1 MANIPULATE BY HAND
 - 23 ZONE 23, PANEL 5 SPAR
 - 2 6.9 DEMATE DAMPER ASSY
 - 2 MANIPULATE WITH TOOLS
 - 23 ZONE 23, PANEL 5 SPAR
 - 1 MANIPULATE BY HAND
 - 23 ZONE 23, PANEL 5 SPAR
 - 3 6.4 REMOVE DAMPER
 - 1 MANIPULATE BY HAND
 - 90 SOLAR PANEL 5 BOOST DMPR
 - 91 SOLAR PANEL 5 BOOST DMPR

- 4 6.2 XPORT DAMPER
 - 1 MANIPULATE BY HAND
 - 90 SOLAR PANEL 5 BOOST DMPR
 - 91 SOLAR PANEL 5 BOOST DMPR
- 5 6.11 REL CG SUPP STRUTS
 - 1 MANIPULATE BY HAND
 - 23 ZONE 23, PANEL 5 SPAR
- 6 6.8 REMOVE SUPP STRUT
 - 1 MANIPULATE BY HAND
 - 85 SOLAR PANEL 5 SUPP STRUT
 - 2 MANIPULATE WITH TOOLS
 - 85 SOLAR PANEL 5 SUPP STRUT
- 7 6.9 REL SOLAR PANEL
 - 2 MANIPULATE WITH TOOLS
 - 23 ZONE 23, PANEL 5 SPAR
 - 1 MANIPULATE BY HAND
 - 23 ZONE 23, PANEL 5 SPAR
- 8 6.19 REMOVE SOLAR PANEL
 - 1 MANIPULATE BY HAND
 - 81 SOLAR PANEL 5 SUPP STRUT
 - 17 SECURED IN TENT
- 9 6.12 POS IN HAND FRAME
 - 1 MANIPULATE BY HAND
 - 81 SOLAR PANEL 5 SUPP STRUT
- 10 6.8 INSTALL IN FRAME
 - 1 MANIPULATE BY HAND
 - 81 SOLAR PANEL 5 SUPP STRUT
 - 2 MANIPULATE WITH TOOLS
 - 81 SOLAR PANEL 5 SUPP STRUT
- 11 6.18 POS DUMMY PANEL
 - 1 MANIPULATE BY HAND
- 12 6.8 INSTALL DUMMY PANEL
 - 1 MANIPULATE BY HAND
 - 2 MANIPULATE WITH TOOLS
- 13 6.2 XPORT SOLAR PANEL
 - 1 MANIPULATE BY HAND
 - 81 SOLAR PANEL 5 SUPP STRUT
- 12 6 REMOVE BAY III SOLAR PANEL
 - 1 6.9 UNLATCH DAMPERS
 - 1 MANIPULATE BY HAND
 - 22 ZONE 22, PANEL 3 SPAR
 - 2 6.9 DEMATE DAMPER ASSY
 - 2 MANIPULATE WITH TOOLS
 - 22 ZONE 22, PANEL 3 SPAR
 - 1 MANIPULATE BY HAND
 - 22 ZONE 22, PANEL 3 SPAR
 - 3 6.4 REMOVE DAMPER
 - 1 MANIPULATE BY HAND
 - 92 SOLAR PANEL 3 BOOST DMPR
 - 93 SOLAR PANEL 3 BOOST DMPR
 - 4 6.2 XPORT DAMPER
 - 1 MANIPULATE BY HAND
 - 92 SOLAR PANEL 3 BOOST DMPR
 - 93 SOLAR PANEL 3 BOOST DMPR
 - 5 6.11 REL CG SUPP STRUTS
 - 1 MANIPULATE BY HAND
 - 22 ZONE 22, PANEL 3 SPAR
 - 6 6.8 REMOVE SUPP STRUT
 - 1 MANIPULATE BY HAND
 - 86 SOLAR PANEL 3 SUPP STRUT
 - 2 MANIPULATE WITH TOOLS
 - 86 SOLAR PANEL 3 SUPP STRUT

- 7 6.9 REL SOLAR PANEL
 - 2 MANIPULATE WITH TOOLS
 - 22 ZONE 22, PANEL 3 SPAR
 - 1 MANIPULATE BY HAND
 - 22 ZONE 22, PANEL 3 SPAR
- 8 6.19 REMOVE SOLAR PANEL
 - 1 MANIPULATE BY HAND
 - 82 SOLAR PANEL 3 SUPP STRUT
- 9 6.12 POS IN HAND FRAME
 - 1 MANIPULATE BY HAND
 - 82 SOLAR PANEL 3 SUPP STRUT
- 10 6.8 INSTALL IN FRAME
 - 1 MANIPULATE BY HAND
 - 82 SOLAR PANEL 3 SUPP STRUT
 - 2 MANIPULATE WITH TOOLS
 - 82 SOLAR PANEL 3 SUPP STRUT
- 11 6.18 POS DUMMY PANEL
 - 1 MANIPULATE BY HAND
- 12 6.8 INSTALL DUMMY PANEL
 - 1 MANIPULATE BY HAND
 - 2 MANIPULATE WITH TOOLS
- 13 6.2 XPORT SOLAR PANEL
 - 1 MANIPULATE BY HAND
 - 82 SOLAR PANEL 3 SUPP STRUT
- 13 5 INSTALL PROTECTIVE COVERS
 - 1 5.2 XPORT COVERS
 - 1 MANIPULATE BY HAND
 - 69 S/C TOP COVER
 - 70 S/C BOTTOM COVER
 - 2 5.7 POSITION COVERS
 - 1 MANIPULATE BY HAND
 - 46 ZONE 46, OCTAGON TOP
 - 47 ZONE 47, OCTAGON BOTTOM
 - 3 5.8 INSTALL COVERS
 - 1 MANIPULATE BY HAND
 - 46 ZONE 46, OCTAGON TOP
 - 47 ZONE 47, OCTAGON BOTTOM
 - 2 MANIPULATE WITH TOOLS
 - 46 ZONE 46, OCTAGON TOP
 - 47 ZONE 47, OCTAGON BOTTOM
- 14 2 MOUNT SC ON TRANSPORTER
 - 1 2.1 MANEUV HOIST ASSY
 - 3 MOVE W/CRANE
 - 47 ZONE 47, OCTAGON BOTTOM
 - 2 2.2 ATTACH HOIST ASSY
 - 1 MANIPULATE BY HAND
 - 46 ZONE 46, OCTAGON TOP
 - 3 2.1 ELEVATE S/C
 - 16 MANEUVER SPACECRAFT
 - 4 2.1 POS S/C ON EXPORTER
 - 1 MANIPULATE BY HAND
 - 71 S/C TRANSPORTER
 - 5 2.2 ATT S/C / XPORTER
 - 1 MANIPULATE BY HAND
 - 71 S/C TRANSPORTER
 - 2 MANIPULATE WITH TOOLS
 - 71 S/C TRANSPORTER
- 15 2 INSTALL SC IN SHIPPING CONTAINER
 - 1 2.1 ELEVATE XPORTER
 - 3 MOVE W/CRANE
 - 2 2.1 POS XPORTER IN CONT
 - 1 MANIPULATE BY HAND

- 3 2.2 SECURE CONTAINER
 - 1 MANIPULATE BY HAND
72 SHIPPING CONTAINER
 - 2 MANIPULATE WITH TOOLS
72 SHIPPING CONTAINER
- 4 2.4 DETACH HOIST ASSY
 - 1 MANIPULATE BY HAND
72 SHIPPING CONTAINER
 - 17 SECURED IN TENT
 - 17 SECURED IN TENT
- 16 2 INSTALL SHIPPING CONTAINER IN VAN
 - 1 2.1 POSITION CRANE
15 MANEUVER EQUIPMENT
 - 2 2.2 ATTACH CRANE HOOKS
 - 1 MANIPULATE BY HAND
72 SHIPPING CONTAINER
 - 3 2.1 ELEVATE S/C
16 MANEUVER SPACECRAFT
 - 4 2.1 POS S/C IN VAN
 - 1 MANIPULATE BY HAND
72 SHIPPING CONTAINER
 - 5 2.4 DETACH CRANE HOOKS
 - 1 MANIPULATE BY HAND
72 SHIPPING CONTAINER
 - 6 2.2 SECURE S/C
 - 1 MANIPULATE BY HAND
72 SHIPPING CONTAINER
 - 2 MANIPULATE WITH TOOLS
72 SHIPPING CONTAINER
- 17 2 SHIP SC TO ETR
 - 1 SHIPMENT TO ETR
9 VISUAL INSPECTION
- 6 BUILDING AO OPERATIONS
 - 1 5 SC BUILDUP VERIFICATION
 - 1 5.3 VERIFY OCTAGON
 - 10 INSPECTION WITH GAUGES
12 ZONE 12, BAY 4 INWARD
 - 2 5.3 VERIFY ACGS
 - 9 VISUAL INSPECTION
 - 3 5.16 VERIFY TORQUE VALUS
 - 2 MANIPULATE WITH TOOLS
12 ZONE 12, BAY 4 INWARD
16 ZONE 16, BAY 8 INWARD
 - 4 5.3 VERIFY U RING HARN
 - 9 VISUAL INSPECTION
 - 5 5.16 VERIFY TORQUE VALUS
 - 2 MANIPULATE WITH TOOLS
46 ZONE 46, OCTAGON TOP
 - 6 5.3 VERIFY PYRO HARN
 - 10 INSPECTION WITH GAUGES
27 ZONE 27, TOP RING TRAY
 - 7 5.16 VERIFY TORQUE VALUS
 - 2 MANIPULATE WITH TOOLS
27 ZONE 27, TOP RING TRAY
 - 8 5.3 VERIFY L RING HARN
 - 10 INSPECTION WITH GAUGES
28 ZONE 28, BUTT RING TRAY
 - 9 5.16 VERIFY TORQUE VALUS
 - 2 MANIPULATE WITH TOOLS
28 ZONE 28, BUTT RING TRAY
 - 10 5.3 VERIFY SCI SENSORS
10 INSPECTION WITH GAUGES

- 51 ZONE 51, EA IV CASE
- 52 ZONE 52, EA V CASE
- 53 ZONE 53, EA VI CASE
- 54 ZONE 54, EA VII CASE
- 55 ZONE 55, EA VIII CASE
- 11 5.16 VERIFY TORQUE VALUS
 - 2 MANIPULATE WITH TOOLS
 - 51 ZONE 51, EA IV CASE
 - 52 ZONE 52, EA V CASE
 - 53 ZONE 53, EA VI CASE
 - 54 ZONE 54, EA VII CASE
 - 55 ZONE 55, EA VIII CASE
- 12 5.3 VERIFY LO-GAIN ANT
 - 10 INSPECTION WITH GAUGES
 - 26 ZONE 26, LO-GAIN ANTENNA
- 13 5.16 VERIFY TORQUE VALUS
 - 2 MANIPULATE WITH TOOLS
 - 26 ZONE 26, LO-GAIN ANTENNA
- 14 5.3 VERIFY HI-GAIN ANT
 - 10 INSPECTION WITH GAUGES
 - 25 ZONE 25, HI-GAIN ANTENNA
- 15 5.16 VERIFY TORQUE VALUS
 - 2 MANIPULATE WITH TOOLS
 - 25 ZONE 25, HI-GAIN ANTENNA
- 16 5.3 VERIFY EA I
 - 10 INSPECTION WITH GAUGES
 - 49 ZONE 49, EA I CASE
 - 17 SECURED IN TENT
- 17 5.16 VERIFY TORQUE VALUS
 - 2 MANIPULATE WITH TOOLS
 - 49 ZONE 49, EA I CASE
- 18 5.3 VERIFY TC LOUVERS
 - 10 INSPECTION WITH GAUGES
 - 1 ZONE 1, BAY 1
 - 3 ZONE 3, BAY 3
 - 4 ZONE 4, BAY 4
 - 5 ZONE 5, BAY 5
 - 6 ZONE 6, BAY 6
 - 7 ZONE 7, BAY 7
 - 8 ZONE 8, BAY 8
- 19 5.16 VERIFY TORQUE VALUS
 - 2 MANIPULATE WITH TOOLS
 - 1 ZONE 1, BAY 1
 - 3 ZONE 3, BAY 3
 - 4 ZONE 4, BAY 4
 - 5 ZONE 5, BAY 5
 - 6 ZONE 6, BAY 6
 - 7 ZONE 7, BAY 7
 - 8 ZONE 8, BAY 8
- 2 5 INSTALL DFR ANTENNA
 - 1 5.9 REL ANT /SHIP CONT
 - 2 MANIPULATE WITH TOOLS
 - 113 DFR ANTENNA
 - 1 MANIPULATE BY HAND
 - 113 DFR ANTENNA
 - 2 5.14 REMOVE ANT/CONT
 - 1 MANIPULATE BY HAND
 - 113 DFR ANTENNA
 - 3 5.3 XPORT ANT
 - 1 MANIPULATE BY HAND
 - 113 DFR ANTENNA
 - 4 5.1 POS ANT IN S/C

- 1 MANIPULATE BY HAND
22 ZONE 22, PANEL 3 SPAR
- 5 5.8 INSTALL ANT
 - 1 MANIPULATE BY HAND
22 ZONE 22, PANEL 3 SPAR
 - 2 MANIPULATE WITH TOOLS
22 ZONE 22, PANEL 3 SPAR
- 3 5 INSTALL BATTERY
 - 1 5.2 XPORT BATTERY
 - 1 MANIPULATE BY HAND
59 BATTERY (+A VIII)
 - 2 5.9 REMOVE ALIGN SCREWS
 - 2 MANIPULATE WITH TOOLS
8 ZONE 8, BAY 8
 - 1 MANIPULATE BY HAND
8 ZONE 8, BAY 8
 - 3 5.13 REMOVE BATT/FIXT
 - 1 MANIPULATE BY HAND
59 BATTERY (+A VIII)
 - 4 5.4 POS BATT IN S/C
 - 1 MANIPULATE BY HAND
8 ZONE 8, BAY 8
 - 5 5.8 INSTALL ALIGN SCREW
 - 1 MANIPULATE BY HAND
8 ZONE 8, BAY 8
 - 2 MANIPULATE WITH TOOLS
8 ZONE 8, BAY 8
- 4 5 INSTALL LO-GAIN ANTENNA
 - 1 5.9 REMOVE SUPP BRKT
 - 2 MANIPULATE WITH TOOLS
96 LO-GAIN ANTENNA
 - 1 MANIPULATE BY HAND
96 LO-GAIN ANTENNA
 - 2 5.9 REMOVE MOUNT SCREWS
 - 2 MANIPULATE WITH TOOLS
96 LO-GAIN ANTENNA
 - 1 MANIPULATE BY HAND
96 LO-GAIN ANTENNA
 - 3 5.13 REMOVE ANT/BRKT
 - 2 MANIPULATE WITH TOOLS
96 LO-GAIN ANTENNA
 - 1 MANIPULATE BY HAND
96 LO-GAIN ANTENNA
 - 4 5.18 MOUNT ANT IN S/C
 - 1 MANIPULATE BY HAND
26 ZONE 26, LO-GAIN ANTENNA
 - 5 5.8 INSTALL ANTENNA
 - 1 MANIPULATE BY HAND
26 ZONE 26, LO-GAIN ANTENNA
 - 2 MANIPULATE WITH TOOLS
26 ZONE 26, LO-GAIN ANTENNA
 - 6 5.2 XPORT DAMPER
 - 1 MANIPULATE BY HAND
97 LONG DAMPER
98 SHORT DAMPER
 - 7 5.4 POS DAMPER
 - 1 MANIPULATE BY HAND
14 ZONE 14, BAY 6 INWARD
 - 8 5.8 INSTALL DAMPER
 - 1 MANIPULATE BY HAND
14 ZONE 14, BAY 6 INWARD
 - 2 MANIPULATE WITH TOOLS

- 14 ZONE 14, BAY 6 INWARD.
- 9 5.22 CONN COAX CABLE
 - 11 MATE (DEMATE) CONNECTORS
 - 14 ZONE 14, BAY 6 INWARD
- 5 2 POSITION SC-RAY 1 DOWN
 - 1 2.1 ROTATE S/C
 - 16 MANEUVER SPACECRAFT
- 6 5 INSTALL BAY III SOLAR PANEL
 - 1 5.2 XPORT SOLAR PANEL
 - 1 MANIPULATE BY HAND
 - 82 SOLAR PANEL 3 SUPP STRUT
 - 2 5.9 RELEASE DUMMY PANEL
 - 2 MANIPULATE WITH TOOLS
 - 1 MANIPULATE BY HAND
 - 3 5.19 REMOVE DUMMY/SC
 - 1 MANIPULATE BY HAND
 - 17 SECURED IN TENT
 - 4 5.12 POS DUMMY/FRAME
 - 1 MANIPULATE BY HAND
 - 5 5.8 INSTALL DUMMY
 - 1 MANIPULATE BY HAND
 - 6 5.18 POS SOLAR PANEL
 - 1 MANIPULATE BY HAND
 - 18 ZONE 18, SOLAR PANEL 3
 - 7 5.8 INSTALL SOLAR PANEL
 - 1 MANIPULATE BY HAND
 - 18 ZONE 18, SOLAR PANEL 3
 - 2 MANIPULATE WITH TOOLS
 - 18 ZONE 18, SOLAR PANEL 3
 - 8 5.4 POS CG SUPP STRUTS
 - 1 MANIPULATE BY HAND
 - 22 ZONE 22, PANEL 3 SPAR
 - 9 5.8 INSTALL SUP STRUTS
 - 1 MANIPULATE BY HAND
 - 22 ZONE 22, PANEL 3 SPAR
 - 2 MANIPULATE WITH TOOLS
 - 22 ZONE 22, PANEL 3 SPAR
 - 10 5.2 XPORT DAMPER
 - 1 MANIPULATE BY HAND
 - 92 SOLAR PANEL 3 BOOST DMPR
 - 93 SOLAR PANEL 3 BOOST DMPR
 - 11 5.4 POS DAMPER IN SC
 - 1 MANIPULATE BY HAND
 - 22 ZONE 22, PANEL 3 SPAR
 - 12 5.8 INSTALL DAMPER
 - 1 MANIPULATE BY HAND
 - 22 ZONE 22, PANEL 3 SPAR
 - 2 MANIPULATE WITH TOOLS
 - 22 ZONE 22, PANEL 3 SPAR
 - 13 5.8 LATCH DAMPER
 - 1 MANIPULATE BY HAND
 - 22 ZONE 22, PANEL 3 SPAR
- 7 5 INSTALL BAY V SOLAR PANEL
 - 1 5.2 XPORT SOLAR PANEL
 - 1 MANIPULATE BY HAND
 - 81 SOLAR PANEL 5 SUPP STRUT
 - 2 5.9 RELEASE DUMMY PANEL
 - 2 MANIPULATE WITH TOOLS
 - 1 MANIPULATE BY HAND
 - 3 5.19 REMOVE DUMMY/SC
 - 1 MANIPULATE BY HAND
 - 4 5.12 POS DUMMY/FRAME

- 1 MANIPULATE BY HAND
- 5 5.8 INSTALL DUMMY
 - 1 MANIPULATE BY HAND
 - 2 MANIPULATE WITH TOOLS
- 6 5.18 POS SOLAR PANEL
 - 1 MANIPULATE BY HAND
 - 19 ZONE 19, SOLAR PANEL 5
- 7 5.8 INSTALL SOLAR PANEL
 - 1 MANIPULATE BY HAND
 - 19 ZONE 19, SOLAR PANEL 5
 - 2 MANIPULATE WITH TOOLS
 - 19 ZONE 19, SOLAR PANEL 5
- 8 5.4 POS CG SUPP STRUTS
 - 1 MANIPULATE BY HAND
 - 23 ZONE 23, PANEL 5 SPAR
 - 17 SECURED IN TENT
- 9 5.8 INSTALL SUPP STRUTS
 - 1 MANIPULATE BY HAND
 - 23 ZONE 23, PANEL 5 SPAR
 - 2 MANIPULATE WITH TOOLS
 - 23 ZONE 23, PANEL 5 SPAR
- 10 5.2 XPORT DAMPER
 - 1 MANIPULATE BY HAND
 - 90 SOLAR PANEL 5 BOOST DMPR
 - 91 SOLAR PANEL 5 BOOST DMPR
- 11 5.4 POS DAMPER IN SC
 - 1 MANIPULATE BY HAND
 - 23 ZONE 23, PANEL 5 SPAR
- 12 5.8 INSTALL DAMPER
 - 1 MANIPULATE BY HAND
 - 23 ZONE 23, PANEL 5 SPAR
 - 2 MANIPULATE WITH TOOLS
 - 23 ZONE 23, PANEL 5 SPAR
- 13 5.8 LATCH DAMPER
 - 1 MANIPULATE BY HAND
 - 23 ZONE 23, PANEL 5 SPAR
- 8 2 POSITION SC-BAY V HORIZ
 - 1 2.1 ROTATE S/C
 - 16 MANEUVER SPACECRAFT
- 9 5 INSTALL BAY VII SOLAR PANEL
 - 1 5.2 XPORT SOLAR PANEL
 - 1 MANIPULATE BY HAND
 - 80 SOLAR PANEL 7 SUPP STRUT
 - 2 5.9 RELEASE DUMMY PANEL
 - 2 MANIPULATE WITH TOOLS
 - 1 MANIPULATE BY HAND
 - 3 5.19 REMOVE DUMMY/SC
 - 1 MANIPULATE BY HAND
 - 4 5.12 POS DUMMY/FAME
 - 1 MANIPULATE BY HAND
 - 5 5.8 INSTALL DUMMY
 - 1 MANIPULATE BY HAND
 - 2 MANIPULATE WITH TOOLS
 - 6 5.18 POS SOLAR PANEL
 - 1 MANIPULATE BY HAND
 - 20 ZONE 20, SOLAR PANEL 7
 - 7 5.8 INSTALL SOLAR PANEL
 - 1 MANIPULATE BY HAND
 - 20 ZONE 20, SOLAR PANEL 7
 - 2 MANIPULATE WITH TOOLS
 - 20 ZONE 20, SOLAR PANEL 7
 - 8 5.4 POS CG SUPP STRUTS

APPENDIX 1 (Continued)

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- 1 MANIPULATE BY HAND
24 ZONE 24, PANEL 7 SPAR
- 9 5.8 INSTALL SUPP STRUTS
 - 1 MANIPULATE BY HAND
24 ZONE 24, PANEL 7 SPAR
 - 2 MANIPULATE WITH TOOLS
24 ZONE 24, PANEL 7 SPAR
- 10 5.2 XPORT DAMPER
 - 1 MANIPULATE BY HAND
88 SOLAR PANEL 7 BOOST DMPR
89 SOLAR PANEL 7 BOOST DMPR
- 11 5.4 POS DAMPER IN SC
 - 1 MANIPULATE BY HAND
24 ZONE 24, PANEL 7 SPAR
- 12 5.8 INSTALL DAMPER
 - 1 MANIPULATE BY HAND
24 ZONE 24, PANEL 7 SPAR
 - 2 MANIPULATE WITH TOOLS
24 ZONE 24, PANEL 7 SPAR
- 13 5.8 LATCH DAMPER
 - 1 MANIPULATE BY HAND
24 ZONE 24, PANEL 7 SPAR
- 10 2 POSITION SC-BAY VII HORIZ
 - 1 2.1 ROTATE S/C
16 MANEUVER SPACECRAFT
- 11 5 INSTALL BAY I SOLAR PANEL
 - 1 5.2 XPORT SOLAR PANEL
 - 1 MANIPULATE BY HAND
83 SOLAR PANEL 1 SUPP STRUT
 - 2 5.9 RELEASE DUMMY PANEL
 - 2 MANIPULATE WITH TOOLS
1 MANIPULATE BY HAND
17 SECURED IN TENT
 - 3 5.19 REMOVE DUMMY/SC
 - 1 MANIPULATE BY HAND
 - 4 5.12 POS DUMMY/FRAME
 - 1 MANIPULATE BY HAND
 - 5 5.8 INSTALL DUMMY
 - 1 MANIPULATE BY HAND
2 MANIPULATE WITH TOOLS
 - 6 5.18 POS SOLAR PANEL
 - 1 MANIPULATE BY HAND
17 ZONE 17, SOLAR PANEL I
 - 7 5.8 INSTALL SOLAR PANEL
 - 1 MANIPULATE BY HAND
17 ZONE 17, SOLAR PANEL I
 - 2 MANIPULATE WITH TOOLS
17 ZONE 17, SOLAR PANEL I
 - 8 5.4 POS CG SUPP STRUTS
 - 1 MANIPULATE BY HAND
21 ZONE 21, PANEL 1 SPAR
 - 9 5.8 INSTALL SUPP STRUTS
 - 1 MANIPULATE BY HAND
21 ZONE 21, PANEL 1 SPAR
 - 2 MANIPULATE WITH TOOLS
21 ZONE 21, PANEL 1 SPAR
 - 10 5.2 XPORT DAMPER
 - 1 MANIPULATE BY HAND
94 SOLAR PANEL 1 BOOST DMPR
95 SOLAR PANEL 1 BOOST DMPR
 - 11 5.4 POS DAMPER IN SC
 - 1 MANIPULATE BY HAND

- 21 ZONE 21, PANEL 1 SPAR
- 12 5.8 INSTALL DAMPER
 - 1 MANIPULATE BY HAND
 - 21 ZONE 21, PANEL 1 SPAR
 - 2 MANIPULATE WITH TOOLS
 - 21 ZONE 21, PANEL 1 SPAR
- 13 5.8 LATCH DAMPER
 - 1 MANIPULATE BY HAND
 - 21 ZONE 21, PANEL 1 SPAR
- 12 7 SYSTEM VERIFICATION TEST PREPARATION
 - 1 7.1 CONN SPEC CABLING
 - 11 MATE (DEMATE) CONNECTORS
 - 28 ZONE 28, BOTT RING TRAY
 - 2 7.3 CONNECT OSE
 - 11 MATE (DEMATE) CONNECTORS
 - 28 ZONE 28, BOTT RING TRAY
 - 17 SECURED IN TENT
- 13 8 SYSTEM VERIFICATION TEST
 - 1 8.1 PERFORM TEST
 - 9 VISUAL INSPECTION
- 14 9 POST-TEST OPERATIONS
 - 1 9.1 DISCONN SPEC CABLES
 - 11 MATE (DEMATE) CONNECTORS
 - 28 ZONE 28, BOTT RING TRAY
 - 2 9.3 DISCONNECT OSE
 - 11 MATE (DEMATE) CONNECTORS
 - 28 ZONE 28, BOTT RING TRAY
- 15 7 PRE-LAUNCH SYSTEM TEST PREPARATION
 - 1 7.9 POS SC/CRANE
 - 3 MOVE W/CRANE
 - 2 7.9 INSTALL BATTERY
 - 1 MANIPULATE BY HAND
 - 8 ZONE 8, BAY 8
 - 1 MANIPULATE BY HAND
 - 8 ZONE 8, BAY 8
 - 2 MANIPULATE WITH TOOLS
 - 8 ZONE 8, BAY 8
 - 3 7.5 INSTALL SIT
 - 1 MANIPULATE BY HAND
 - 16 ZONE 16, BAY 8 INWARD
 - 1 MANIPULATE BY HAND
 - 16 ZONE 16, BAY 8 INWARD
 - 2 MANIPULATE WITH TOOLS
 - 16 ZONE 16, BAY 8 INWARD
 - 4 7.5 INST LIGHT SOURCES
 - 1 MANIPULATE BY HAND
 - 62 TRD LIGHT SOURCES
 - 1 MANIPULATE BY HAND
 - 62 TRD LIGHT SOURCES
 - 2 MANIPULATE WITH TOOLS
 - 62 TRD LIGHT SOURCES
 - 17 SECURED IN TENT
 - 17 SECURED IN TENT
 - 5 7.10 PRESSUR ACGS TANK
 - 9 VISUAL INSPECTION
 - 6 7.5 INST XDUCER ASSY
 - 1 MANIPULATE BY HAND
 - 63 TRANSDUCER
 - 1 MANIPULATE BY HAND
 - 63 TRANSDUCER
 - 2 MANIPULATE WITH TOOLS
 - 63 TRANSDUCER

- 7 7.10 PRESSUR PIPS TANK
 - 9 VISUAL INSPECTION
- 8 7.5 INST DISICC COVER
 - 1 MANIPULATE BY HAND
 - 64 DISC COVER
 - 1 MANIPULATE BY HAND
 - 64 DISC COVER
 - 2 MANIPULATE WITH TOOLS
 - 64 DISC COVER
- 9 7.5 INST BRACKETS
 - 1 MANIPULATE BY HAND
 - 65 BRACKETS
 - 2 MANIPULATE WITH TOOLS
 - 65 BRACKETS
- 10 7.5 INSTALL LATCH BRKT
 - 1 MANIPULATE BY HAND
 - 65 BRACKETS
 - 2 MANIPULATE WITH TOOLS
 - 65 BRACKETS
- 11 7.5 INSTALL PLATE RING
 - 1 MANIPULATE BY HAND
 - 66 PLATE RING
 - 2 MANIPULATE WITH TOOLS
 - 66 PLATE RING
- 12 7.11 ALIGN PLATE RING
 - 1 MANIPULATE BY HAND
 - 66 PLATE RING
- 13 7.5 INST TANK PLATE
 - 1 MANIPULATE BY HAND
 - 67 TANK PLATE
 - 2 MANIPULATE WITH TOOLS
 - 67 TANK PLATE
- 14 7.11 ALIGN TANK PLATE
 - 1 MANIPULATE BY HAND
 - 67 TANK PLATE
- 15 7.11 ALIGN FLUX TANK
 - 1 MANIPULATE BY HAND
 - 68 FLUX TANK
- 16 7.5 INST TANK MAIN PLAT
 - 1 MANIPULATE BY HAND
 - 68 FLUX TANK
 - 2 MANIPULATE WITH TOOLS
 - 68 FLUX TANK
- 17 7.5 INST ANGLE
 - 1 MANIPULATE BY HAND
 - 68 FLUX TANK
 - 2 MANIPULATE WITH TOOLS
 - 68 FLUX TANK
- 18 7.1 CONNECT CABLES
 - 11 MATE (DEMATE) CONNECTORS
 - 61 TEST CABLING
- 16 8 PRE-LAUNCH SYSTEM TEST
 - 1 8.1 PERF MOTION TESTS
 - 9 VISUAL INSPECTION
 - 17 SECURED IN TENT
 - 2 8.13 INSPECT CABLING
 - 9 VISUAL INSPECTION
 - 3 8.1 PERF MOTION TESTS
 - 9 VISUAL INSPECTION
 - 4 8.14 ROTATE SC
 - 16 MANEUVER SPACECRAFT
 - 5 8.15 INST TRD SOURCES

- 1 MANIPULATE BY HAND
- 62 TRD LIGHT SOURCES
- 2 MANIPULATE WITH TOOLS
- 62 TRD LIGHT SOURCES
- 6 8.1 PERF TRD TESTS
- 9 VISUAL INSPECTION
- 7 8.16 REM TRD SOURCES
- 2 MANIPULATE WITH TOOLS
- 62 TRD LIGHT SOURCES
- 1 MANIPULATE BY HAND
- 62 TRD LIGHT SOURCES
- 8 8.1 PERF MOTION TESTS
- 9 VISUAL INSPECTION
- 17 9 POST-TEST OPERATIONS
- 1 9.1 DISCONNECT CABLES
- 11 MATE (DEMATE) CONNECTORS
- 61 TEST CABLING
- 2 9.1 REM MAIN TANK PLATE
- 2 MANIPULATE WITH TOOLS
- 68 FLUX TANK
- 1 MANIPULATE BY HAND
- 68 FLUX TANK
- 3 9.1 REM PLATE RING
- 2 MANIPULATE WITH TOOLS
- 68 FLUX TANK
- 1 MANIPULATE BY HAND
- 68 FLUX TANK
- 4 9.1 REM LATCH BRACKET
- 2 MANIPULATE WITH TOOLS
- 65 BRACKETS
- 1 MANIPULATE BY HAND
- 65 BRACKETS
- 5 9.1 REM DISC COVER
- 1 MANIPULATE BY HAND
- 64 DISC COVER
- 6 9.1 REM XUUCER ASSY
- 2 MANIPULATE WITH TOOLS
- 63 TRANSDUCER
- 1 MANIPULATE BY HAND
- 63 TRANSDUCER
- 7 9.1 REM LIGHT SOURCES
- 2 MANIPULATE WITH TOOLS
- 62 TRD LIGHT SOURCES
- 1 MANIPULATE BY HAND
- 62 TRD LIGHT SOURCES
- 8 9.1 REM SIT
- 2 MANIPULATE WITH TOOLS
- 58 SEP-INIT TIMER
- 1 MANIPULATE BY HAND
- 58 SEP-INIT TIMER
- 9 9.1 REM BATTERY
- 2 MANIPULATE WITH TOOLS
- 59 BATTERY (+A VIII)
- 1 MANIPULATE BY HAND
- 59 BATTERY (+A VIII)
- 17 SECURED IN TENT
- 18 1 POSITION XPORTER TRAILER IN BLDG 20
- 1 1.3 XPORT TRAILER
- 15 MANEUVER EQUIPMENT
- 2 1.1 POS TRAILER
- 15 MANEUVER EQUIPMENT
- 19 2 POSITION SC

- 1 2.1 POSITION S/C
16 MANEUVER SPACECRAFT
- 20 1 REMOVE U-RING (WITH SC)
 - 1 1.2 ATTACH SLING
 - 1 MANIPULATE BY HAND
 - 61 U-RING
- 21 1 INSTALL U-RING ON TRAILER
 - 1 1.1 POS U-RING ON TRILER
 - 3 MOVE W/CRANE
 - 61 U-RING
 - 2 1.2 ATTACH TO TRILER
 - 1 MANIPULATE BY HAND
 - 61 U-RING
 - 2 MANIPULATE WITH TOOLS
 - 61 U-RING
 - 3 1.4 DETACH SLING
 - 1 MANIPULATE BY HAND
 - 61 U-RING
- 22 1 INSTALL SC METAL COVERS
 - 1 1.1 POSITION COVER
 - 1 MANIPULATE BY HAND
 - 62 S/C TOP COVER
 - 63 S/C BOTTOM COVER
 - 2 1.2 INSTALL COVER
 - 1 MANIPULATE BY HAND
 - 62 S/C TOP COVER
 - 63 S/C BOTTOM COVER
 - 2 MANIPULATE WITH TOOLS
 - 62 S/C TOP COVER
 - 63 S/C BOTTOM COVER
- 23 1 POSITION SC WITH HOIST ASSY
 - 1 1.1 POSITION HOIST ASSY
 - 15 MANEUVER EQUIPMENT
 - 2 1.2 ATT LIFT CABLE(4)
 - 1 MANIPULATE BY HAND
 - 62 S/C TOP COVER
 - 3 1.1 ELEVATE S/C
 - 3 MOVE W/CRANE
- 24 1 REMOVE HOIST ASSY FROM SC
 - 1 1.1 LOWER S/C
 - 16 MANEUVER SPACECRAFT
 - 2 1.4 DET LIFT CABLE(4)
 - 1 MANIPULATE BY HAND
 - 62 S/C TOP COVER
- 25 1 BAG SC
 - 1 1.1 POSITION TOP BAG
 - 1 MANIPULATE BY HAND
 - 46 ZONE 46, OCTAGON TOP
 - 2 1.1 POS RING CLAMP
 - 1 MANIPULATE BY HAND
 - 3 1.2 ATTACH RING CLAMP
 - 1 MANIPULATE BY HAND
 - 46 ZONE 46, OCTAGON TOP
 - 2 MANIPULATE WITH TOOLS
 - 46 ZONE 46, OCTAGON TOP
- 26 1 ATTACH NITROGEN PURGE HOSE
 - 1 1.1 POSITION HOSE
 - 1 MANIPULATE BY HAND
 - 66 NITROGEN PURGE HOSE
 - 2 1.2 ATTACH HOSE
 - 1 MANIPULATE BY HAND
 - 66 NITROGEN PURGE HOSE

- 2 MANIPULATE WITH TOOLS
 - 66 NITROGEN PURGE HOSE
- 17 SECURED IN TENT
- 7 ESF OPERATIONS
 - 1 2 TRANSPORT SC TO ESF
 - 1 2.3 XPORT S/C
 - 16 MANEUVER SPACECRAFT
 - 2 1 POSITION TRAILER UNDER ESF CRANE
 - 1 1.1 MANEUVER TRAILER
 - 15 MANEUVER EQUIPMENT
 - 3 1 DISCONNECT NITROGEN PURGE HOSE
 - 1 1.4 DETACH HOSE
 - 2 MANIPULATE WITH TOOLS
 - 66 NITROGEN PURGE HOSE
 - 1 MANIPULATE BY HAND
 - 66 NITROGEN PURGE HOSE
 - 2 1.1 REMOVE HOSE
 - 1 MANIPULATE BY HAND
 - 66 NITROGEN PURGE HOSE
 - 4 1 ATTACH CRANE TO SC COVER
 - 1 1.2 ATTACH CRANE HOOKS
 - 1 MANIPULATE BY HAND
 - 62 S/C TOP COVER
 - 5 1 REMOVE COVER
 - 1 1.4 DETACH COVER
 - 2 MANIPULATE WITH TOOLS
 - 62 S/C TOP COVER
 - 1 MANIPULATE BY HAND
 - 62 S/C TOP COVER
 - 2 1.1 REMOV COVER W/CRANE
 - 15 MANEUVER EQUIPMENT
 - 3 1.4 DETACH CRANE HOOKD
 - 1 MANIPULATE BY HAND
 - 62 S/C TOP COVER
 - 6 2 REMOVE U-RING(WITH SC)FROM TRAILER
 - 1 2.2 ATTACH CRANE HOOKS
 - 1 MANIPULATE BY HAND
 - 61 U-RING
 - 2 2.1 LIFT S/C FROM TRLR
 - 3 MOVE W/CRANE
 - 61 U-RING
 - 3 2.3 XPORT S/C
 - 16 MANEUVER SPACECRAFT
 - 4 2.1 POS S/C ON L-L POS
 - 1 MANIPULATE BY HAND
 - 61 U-RING
 - 5 2.2 INSTALL S/C
 - 1 MANIPULATE BY HAND
 - 61 U-RING
 - 2 MANIPULATE WITH TOOLS
 - 61 U-RING
 - 6 1.2 DETACH RING CLAMP
 - 2 MANIPULATE WITH TOOLS
 - 65 RING CLAMP
 - 1 MANIPULATE BY HAND
 - 65 RING CLAMP
 - 7 1.1 REMOVE RING CLAMP
 - 1 MANIPULATE BY HAND
 - 65 RING CLAMP
 - 7 7 ACGS LEAK TEST PREPARATION
 - 1 7.1 CONN SPEC CABLING
 - 11 MATE (DEMAIE) CONNECTORS

- 67 TEST CABLING
- 2 7.3 CONNECT OSE
 - 11 MATE (DEMATE) CONNECTORS
 - 67 TEST CABLING
 - 17 SECURED IN TENT
 - 17 SECURED IN TENT
- 8 8 ACGS LEAK TEST
 - 1 8.1 PERFORM TEST
 - 9 VISUAL INSPECTION
- 9 9 POST-TEST OPERATIONS
 - 1 9.1 DISCONN SPEC CABLES
 - 11 MATE (DEMATE) CONNECTORS
 - 67 TEST CABLING
 - 2 9.3 DISCONNECT OSE
 - 11 MATE (DEMATE) CONNECTORS
 - 67 TEST CABLING
- 10 10 ACGS PRESSURIZATION
 - 1 10.1 POS ESF/SC GND STRP
 - 1 MANIPULATE BY HAND
 - 12 ZONE 12, BAY 4 INWARD
 - 2 10.2 INSTALL GND STRAP
 - 1 MANIPULATE BY HAND
 - 12 ZONE 12, BAY 4 INWARD
 - 2 MANIPULATE WITH TOOLS
 - 12 ZONE 12, BAY 4 INWARD
- 11 2 POSITION SC-LO-GAIN ANTENNA HORIZ
 - 1 2.1 TILT SC
 - 16 MANEUVER SPACECRAFT
 - 2 2.2 SECURE SC
 - 1 MANIPULATE BY HAND
 - 46 ZONE 46, OCTAGON TOP
 - 2 MANIPULATE WITH TOOLS
 - 46 ZONE 46, OCTAGON TOP
- 12 10 ACGS PRESSURIZATION (CONTINUED)
 - 1 10.3 UNTAPE PRESS XDUCE
 - 1 MANIPULATE BY HAND
 - 12 ZONE 12, BAY 4 INWARD
 - 2 10.4 ROUTE FILL LINES
 - 1 MANIPULATE BY HAND
 - 12 ZONE 12, BAY 4 INWARD
 - 3 10.5 CONN FILL LINES
 - 11 MATE (DEMATE) CONNECTORS
 - 12 ZONE 12, BAY 4 INWARD
 - 4 10.6 PURGEURIZE SYSTEM
 - 9 VISUAL INSPECTION
 - 5 10.3 RELEASE MANIF ASSY
 - 1 MANIPULATE BY HAND
 - 12 ZONE 12, BAY 4 INWARD
 - 2 MANIPULATE WITH TOOLS
 - 12 ZONE 12, BAY 4 INWARD
 - 6 10.7 REMOVE MANIFOLD ASSY
 - 1 MANIPULATE BY HAND
 - 12 ZONE 12, BAY 4 INWARD
 - 7 10.3 RELEASE MANIF ASSY
 - 1 MANIPULATE BY HAND
 - 12 ZONE 12, BAY 4 INWARD
 - 2 MANIPULATE WITH TOOLS
 - 12 ZONE 12, BAY 4 INWARD
 - 8 10.7 REMOVE MANIF ASSY
 - 1 MANIPULATE BY HAND
 - 12 ZONE 12, BAY 4 INWARD
 - 9 10.6 XPORT MANIF ASSY

- 1 MANIPULATE BY HAND
12 ZONE 12, BAY 4 INWARD
- 13 5 INSTALL LIVE PYROTECHNICS
 - 1 5.9 REM DUMMY APAC PIN
2 MANIPULATE WITH TOOLS
 - 2 5.8 INST LIVE APAC PIN
1 MANIPULATE BY HAND
68 APAC PYRO PIN
2 MANIPULATE WITH TOOLS
68 APAC PYRO PIN
 - 3 5.9 REM DUMMY SPANL PIN
2 MANIPULATE WITH TOOLS
 - 4 5.8 INST LIVE SPANL PIN
1 MANIPULATE BY HAND
69 LIVE SOLAR PANEL PIN
2 MANIPULATE WITH TOOLS
69 LIVE SOLAR PANEL PIN
- 14 4 PIPS PREPARATION
 - 1 4.9 REM MOTOR SH PLATE
2 MANIPULATE WITH TOOLS
10 ZONE 10, BAY 2 INWARD
1 MANIPULATE BY HAND
10 ZONE 10, BAY 2 INWARD
- 15 2 POSITION SC-BAY II VERTICAL
 - 1 2.1 ROTATE S/C
16 MANEUVER SPACECRAFT
- 16 3 POSITION PIPS MOTOR
 - 1 3.1 REM MOTOR FROM CONT
1 MANIPULATE BY HAND
120 MIDCOURSE MOTOR
 - 2 3.2 ATT CRANE HOOKS FIX
1 MANIPULATE BY HAND
120 MIDCOURSE MOTOR
 - 3 3.2 INSTALL SNAP RINGS
1 MANIPULATE BY HAND
120 MIDCOURSE MOTOR
 - 4 3.1 LIFT PIPS H/C CRANE
3 MOVE W/CRANE
120 MIDCOURSE MOTOR
- 17 5 INSTALL PIPS IN BAY II
 - 1 5.18 MOUNT PIPS IN BAY
1 MANIPULATE BY HAND
10 ZONE 10, BAY 2 INWARD
 - 2 5.8 INSTALL PIPS
1 MANIPULATE BY HAND
10 ZONE 10, BAY 2 INWARD
2 MANIPULATE WITH TOOLS
10 ZONE 10, BAY 2 INWARD
 - 3 5.9 REM LIFT FIXT LUG
2 MANIPULATE WITH TOOLS
10 ZONE 10, BAY 2 INWARD
1 MANIPULATE BY HAND
10 ZONE 10, BAY 2 INWARD
- 18 2 POSITION SC-VERTICAL
 - 1 2.1 ROTATE S/C
16 MANEUVER SPACECRAFT
- 19 5 INSTALL PIPS
 - 1 5.8 INST CLAMP ON PIPS
1 MANIPULATE BY HAND
10 ZONE 10, BAY 2 INWARD
2 MANIPULATE WITH TOOLS
10 ZONE 10, BAY 2 INWARD

- 2 5.8 INSTALL UMB BRACKET
 - 1 MANIPULATE BY HAND
 - 10 ZONE 10, BAY 2 INWARD
 - 2 MANIPULATE WITH TOOLS
 - 10 ZONE 10, BAY 2 INWARD
- 3 5.8 INSTALL TA CLAMP
 - 1 MANIPULATE BY HAND
 - 10 ZONE 10, BAY 2 INWARD
 - 2 MANIPULATE WITH TOOLS
 - 10 ZONE 10, BAY 2 INWARD
 - 17 SECURED IN TENT
- 4 5.22 CONN TEMP XDUCEUR
 - 1 MANIPULATE BY HAND
 - 10 ZONE 10, BAY 2 INWARD
 - 2 MANIPULATE WITH TOOLS
 - 10 ZONE 10, BAY 2 INWARD
- 5 5.7 INST SHEAR PLTE WEB
 - 1 MANIPULATE BY HAND
 - 10 ZONE 10, BAY 2 INWARD
 - 2 MANIPULATE WITH TOOLS
 - 10 ZONE 10, BAY 2 INWARD
- 6 5.17 ADJ BELLEVILLE SPGS
 - 10 INSPECTION WITH GAUGES
 - 10 ZONE 10, BAY 2 INWARD
 - 17 SECURED IN TENT
- 7 5.17 ADJ BELLEVILLE SPGS
 - 9 VISUAL INSPECTION
- 20 7 PIPS ACTUATOR ELECT TEST PREPARATION
 - 1 7.1 CONNECT EQUIPMENT
 - 11 MATE (DEMATE) CONNECTORS
 - 10 ZONE 10, BAY 2 INWARD
 - 2 7.3 CONN PIPS/OSE
 - 11 MATE (DEMATE) CONNECTORS
 - 10 ZONE 10, BAY 2 INWARD
 - 17 SECURED IN TENT
- 21 8 PIPS ACTUATOR ELECT TEST
 - 1 8.1 PERFORM TEST
 - 9 VISUAL INSPECTION
- 22 9 POST-TEST OPERATIONS
 - 1 9.1 DISCONN EQUIPMENT
 - 11 MATE (DEMATE) CONNECTORS
 - 10 ZONE 10, BAY 2 INWARD
 - 2 9.3 DISCONN PIPS/OSE
 - 11 MATE (DEMATE) CONNECTORS
 - 10 ZONE 10, BAY 2 INWARD
- 23 2 POSITION SC-BAY 1 DOWN
 - 1 2.1 ROTATE S/C
 - 16 MANEUVER SPACECRAFT
- 24 6 REMOVE SOLAR PANEL DAMPER CABLE
 - 1 6.6 DISCONNECT CABLE
 - 11 MATE (DEMATE) CONNECTORS
 - 12 ZONE 12, BAY 4 INWARD
 - 16 ZONE 16, BAY 8 INWARD
 - 2 6.7 PULL CABLE
 - 1 MANIPULATE BY HAND
 - 12 ZONE 12, BAY 4 INWARD
 - 16 ZONE 16, BAY 8 INWARD
- 25 2 POSITION SC-VERTICAL
 - 1 2.1 ROTATE S/C
 - 16 MANEUVER SPACECRAFT
- 26 6 REMOVE SOLAR PANEL DAMPER CABLE
 - 1 6.6 DISCONNECT CABLE

- 11 MATE (DEMATE) CONNECTORS
 - 12 ZONE 12, BAY 4 INWARD
 - 16 ZONE 16, BAY 8 INWARD
- 2 6.7 PULL CABLE
 - 1 MANIPULATE BY HAND
 - 12 ZONE 12, BAY 4 INWARD
 - 16 ZONE 16, BAY 8 INWARD
- 27 6 REMOVE CANOPUS SENSOR HOOD
 - 1 6.5 DETACH HOOD
 - 1 MANIPULATE BY HAND
 - 8 ZONE 8, BAY 8
 - 2 6.4 REMOVE HOOD
 - 1 MANIPULATE BY HAND
 - 8 ZONE 8, BAY 8
- 28 5 INSTALL BAFFLE BOX
 - 1 5.2 XPORT BAFFLE BOX
 - 1 MANIPULATE BY HAND
 - 70 BAFFLE BOX
 - 2 5.1 POS BAFFLE BOX
 - 1 MANIPULATE BY HAND
 - 8 ZONE 8, BAY 8
 - 3 5.8 INSTALL BAFFLE BOX
 - 1 MANIPULATE BY HAND
 - 8 ZONE 8, BAY 8
 - 2 MANIPULATE WITH TOOLS
 - 8 ZONE 8, BAY 8
- 29 5 INSTALL THERMAL SHIELDS
 - 1 5.2 XPORT THERM SHIELD
 - 1 MANIPULATE BY HAND
 - 99 SPAR SHIELD 7
 - 100 SPAR SHIELD 5
 - 101 SPAR SHIELD 3
 - 102 SPAR SHIELD 1
 - 2 5.9 REMOVE EA ALIGN SC
 - 2 MANIPULATE WITH TOOLS
 - 1 ZONE 1, BAY 1
 - 3 ZONE 3, BAY 3
 - 5 ZONE 5, BAY 5
 - 7 ZONE 7, BAY 7
 - 1 MANIPULATE BY HAND
 - 1 ZONE 1, BAY 1
 - 3 ZONE 3, BAY 3
 - 5 ZONE 5, BAY 5
 - 7 ZONE 7, BAY 7
 - 17 SECURED IN TENT
 - 17 SECURED IN TENT
- 3 5.1 POS SHIELD IN S/C
 - 1 MANIPULATE BY HAND
 - 1 ZONE 1, BAY 1
 - 3 ZONE 3, BAY 3
 - 5 ZONE 5, BAY 5
 - 7 ZONE 7, BAY 7
- 4 5.6 INSTALL SHIELD
 - 1 MANIPULATE BY HAND
 - 1 ZONE 1, BAY 1
 - 3 ZONE 3, BAY 3
 - 5 ZONE 5, BAY 5
 - 7 ZONE 7, BAY 7
 - 2 MANIPULATE WITH TOOLS
 - 1 ZONE 1, BAY 1
 - 3 ZONE 3, BAY 3
 - 5 ZONE 5, BAY 5

- 7 ZONE 7, BAY 7
- 5 5.2 XPORT SUN SHADE
 - 1 MANIPULATE BY HAND
 - 103 SUN SHADE
- 6 5.4 POS SUN SHDE IN S/C
 - 1 MANIPULATE BY HAND
 - 47 ZONE 47, OCTAGON BOTTOM
- 7 5.8 INSTALL SUN SHADE
 - 1 MANIPULATE BY HAND
 - 47 ZONE 47, OCTAGON BOTTOM
 - 2 MANIPULATE WITH TOOLS
 - 47 ZONE 47, OCTAGON BOTTOM
- 8 5.5 TIE SHADE RING
 - 1 MANIPULATE BY HAND
 - 47 ZONE 47, OCTAGON BOTTOM
- 9 5.1 FOLD SUN SHADE (4)
 - 1 MANIPULATE BY HAND
 - 47 ZONE 47, OCTAGON BOTTOM
- 10 5.2 XPORT UMB THRM SHLD
 - 1 MANIPULATE BY HAND
 - 104 UMBILICAL THRM SHIELD
- 11 5.1 POS UMB THERM SHLD
 - 1 MANIPULATE BY HAND
 - 2 ZONE 2, BAY 2
- 12 5.8 INSTALL SHIELD
 - 1 MANIPULATE BY HAND
 - 2 ZONE 2, BAY 2
 - 2 MANIPULATE WITH TOOLS
 - 2 ZONE 2, BAY 2
- 30 5 MATE SC-AGENA PREPARATION
 - 1 5.2 XPORT GND STRAP
 - 1 MANIPULATE BY HAND
 - 2 5.1 POSITION ON TRAILER
 - 1 MANIPULATE BY HAND
 - 3 5.8 INSTALL GND STRP
 - 1 MANIPULATE BY HAND
 - 2 MANIPULATE WITH TOOLS
- 31 2 POSITION SC ON ADAPTER
 - 1 2.2 ATTACH CRANE HOOKS
 - 1 MANIPULATE BY HAND
 - 46 ZONE 46, OCTAGON TOP
 - 2 2.4 DETACH SC/TRAILER
 - 2 MANIPULATE WITH TOOLS
 - 46 ZONE 46, OCTAGON TOP
 - 1 MANIPULATE BY HAND
 - 46 ZONE 46, OCTAGON TOP
 - 3 2.1 ELEVATE S/C
 - 3 MOVE W/CRANE
 - 4 2.1 POS S/C ON ADAPTER
 - 1 MANIPULATE BY HAND
 - 46 ZONE 46, OCTAGON TOP
 - 5 2.2 ATTACH V-BAND
 - 1 MANIPULATE BY HAND
 - 46 ZONE 46, OCTAGON TOP
 - 1 MANIPULATE BY HAND
 - 46 ZONE 46, OCTAGON TOP
 - 2 MANIPULATE WITH TOOLS
 - 46 ZONE 46, OCTAGON TOP
 - 6 2.4 DETACH CRANE HOOKS
 - 1 MANIPULATE BY HAND
 - 46 ZONE 46, OCTAGON TOP
- 32 5 VERIFY HARDWARE INSTALLATION

- 1 5.3 INSPECT HARDWARE
 - 9 VISUAL INSPECTION
- 33 5 INSTALL CORNER SHIELDS
 - 13 5.2 XPORT CORNER SHIELDS
 - 1 MANIPULATE BY HAND
 - 105 CORNER SHIELD 7
 - 106 CORNER SHIELD 7
 - 107 CORNER SHIELD 5
 - 108 CORNER SHIELD 5
 - 109 CORNER SHIELD 3
 - 110 CORNER SHIELD 3
 - 111 CORNER SHIELD 1
 - 112 CORNER SHIELD 1
 - 14 5.1 POS CORNER SHIELDS(4)
 - 1 MANIPULATE BY HAND
 - 1 ZONE 1, BAY 1
 - 1 ZONE 1, BAY 1
 - 3 ZONE 3, BAY 3
 - 3 ZONE 3, BAY 3
 - 5 ZONE 5, BAY 5
 - 5 ZONE 5, BAY 5
 - 7 ZONE 7, BAY 7
 - 7 ZONE 7, BAY 7
 - 15 5.8 INSTALL SHIELDS
 - 1 MANIPULATE BY HAND
 - 1 ZONE 1, BAY 1
 - 1 ZONE 1, BAY 1
 - 3 ZONE 3, BAY 3
 - 3 ZONE 3, BAY 3
 - 5 ZONE 5, BAY 5
 - 5 ZONE 5, BAY 5
 - 7 ZONE 7, BAY 7
 - 7 ZONE 7, BAY 7
 - 2 MANIPULATE WITH TOOLS
 - 1 ZONE 1, BAY 1
 - 1 ZONE 1, BAY 1
 - 3 ZONE 3, BAY 3
 - 3 ZONE 3, BAY 3
 - 5 ZONE 5, BAY 5
 - 5 ZONE 5, BAY 5
 - 7 ZONE 7, BAY 7
 - 7 ZONE 7, BAY 7
- 34 7 SHROUD ELECT TEST PREPARATION
 - 1 7.1 CONN EQUIP
 - 11 MATE (DEMATE) CONNECTORS
 - 67 TEST CABLING
 - 2 7.3 CONNECT USE
 - 11 MATE (DEMATE) CONNECTORS
 - 67 TEST CABLING
- 35 8 SHROUD ELECT TEST
 - 1 8.1 PERFORM TEST
 - 9 VISUAL INSPECTION
- 36 9 POST-TEST OPERATIONS
 - 1 9.1 DISCONN EQUIP
 - 11 MATE (DEMATE) CONNECTORS
 - 67 TEST CABLING
 - 17 SECURED IN TENT
 - 2 9.3 DISCONN USE
 - 11 MATE (DEMATE) CONNECTORS
 - 67 TEST CABLING
- 37 7 SOLAR PANEL ELECT TEST PREPARATION
 - 1 7.1 CONN SPEC CABLING

- 11 MATE (DEMATE) CONNECTORS
- 67 TEST CABLING
- 2 7.3 CONNECT OSE
- 11 MATE (DEMATE) CONNECTORS
- 67 TEST CABLING
- 38 8 SOLAR PANEL ELECT TEST
- 1 8.1 PERFORM TEST
- 9 VISUAL INSPECTION
- 39 9 POST-TEST OPERATIONS
- 1 9.1 DISCONN SPEC CABLES
- 11 MATE (DEMATE) CONNECTORS
- 67 TEST CABLING
- 2 9.3 DISCONNECT OSE
- 11 MATE (DEMATE) CONNECTORS
- 67 TEST CABLING
- 40 5 INSTALL SHROUD
- 1 5.2 XPORT SHROUD
- 1 MANIPULATE BY HAND
- 60 SHROUD
- 2 5.1 POS SHROUD
- 1 MANIPULATE BY HAND
- 46 ZONE 46, OCTAGON TOP
- 3 5.8 INSTALL SHROUD
- 1 MANIPULATE BY HAND
- 46 ZONE 46, OCTAGON TOP
- 2 MANIPULATE WITH TOOLS
- 46 ZONE 46, OCTAGON TOP
- 41 7 FINAL ESF ELECT TEST PREPARATION
- 1 7.1 CONN EQUIP
- 11 MATE (DEMATE) CONNECTORS
- 67 TEST CABLING
- 2 7.3 CONNECT OSE
- 11 MATE (DEMATE) CONNECTORS
- 67 TEST CABLING
- 42 8 FINAL ESF ELECT TEST
- 1 8.1 PERFORM TEST
- 9 VISUAL INSPECTION
- 43 9 POST-TEST OPERATIONS
- 1 9.1 DISCONN EQUIP
- 11 MATE (DEMATE) CONNECTORS
- 67 TEST CABLING
- 2 9.3 DISCONNECT OSE
- 11 MATE (DEMATE) CONNECTORS
- 67 TEST CABLING
- 44 5 PREPARE SC FOR SHIPMENT FROM ESF
- 1 5.2 XPORT PURG CONT SYS
- 1 MANIPULATE BY HAND
- 67 TEST CABLING
- 2 5.1 POS PURGE CONT SYS
- 1 MANIPULATE BY HAND
- 67 TEST CABLING
- 3 5.8 INST PURGE CONT SYS
- 1 MANIPULATE BY HAND
- 67 TEST CABLING
- 2 MANIPULATE WITH TOOLS
- 67 TEST CABLING
- 4 5.6 CONN NITRO BOTTLES
- 1 MANIPULATE BY HAND
- 12 ZONE 12, BAY 4 INWARD

11.42.09. D044033. READ.
11.42.14. D044033. PP 005 SEC.
12.17.18. D044033. D044,0,300,70000.
12.17.18. D044033. CHARGE. 03 W2000 2043540980000001 0497
12.17.18. D044033. 38774 R. MEUSER
12.17.18. D044033. COPYCR(INPUT,OUTPUT)
12.17.19. D044033. ASGN51, TAPE9. READ MOUNT T2714
12.17.19. D044033. S1 ASSIGNED
12.17.19. D044033. REWIND(TAPE9)
12.17.20. D044033. RUN(P,,,,,377777,,77)
12.17.22. D044033. 034200 OCTAL REQUIRED TO COMPILE
12.17.23. D044033. L60.
12.17.24. D044033. 051500 OCTAL REQUIRED FOR EXECUTION
12.25.11. D044033. EXIT
12.25.11. D044033. UNLOAD(TAPE9)
12.25.12. D044033. CP 53.926 SEC.
12.25.12. D044033. CT 19527
12.25.12. D044033. PP 458.317 SEC.
12.25.26. D044033. PUNCH- PP 013 SEC.
12.39.26. D044033. RINT-PP 129 SEC.
09/25/68. A6400 SCOPE 2.0.35

APPENDIX 2

INPUT DATA LISTING FOR THE ACTUAL ASSEMBLY AND TEST SEQUENCE

127

- 1 MARINER-VENUS 67-2 ASSY/TEST EMULATION
 - 1 ASSY/TEST, PASADENA OPERATIONS
 - 1 MECHANICAL ASSBLY/TEST
 - 1 INSTALL PRESSURE NUTS(2)
 - 4 DRILL, FILE, ETC.
 - 61 OCTAGON
 - 7 DECONTAMINATION
 - 4 DRILL, FILE, ETC.
 - 61 OCTAGON
 - 2 MANIPULATE WITH TOOLS
 - 61 OCTAGON
 - 2 INSTALL 2 FILTERS
 - 1 MANIPULATE BY HAND
 - 61 OCTAGON
 - 2 MANIPULATE WITH TOOLS
 - 61 OCTAGON
 - 1 MANIPULATE BY HAND
 - 61 OCTAGON
 - 2 MANIPULATE WITH TOOLS
 - 61 OCTAGON
 - 3 S/C SECURED DEC 12-13
 - 17 SECURED IN TENT
 - 4 REM PLAS COVER FROM S/C
 - 1 MANIPULATE BY HAND
 - 5 REM N2 PURGE LINE
 - 1 MANIPULATE BY HAND
 - 6 INST SHEAR PLATE
 - 1 MANIPULATE BY HAND
 - 2 ZONE 2, BAY 2
 - 2 MANIPULATE WITH TOOLS
 - 2 ZONE 2, BAY 2
 - 7 ROUTE SP SQUIB HARN
 - 1 MANIPULATE BY HAND
 - 30 ZONE 30, UPPER RING HARN
 - 8 INST HARN ASSY
 - 1 MANIPULATE BY HAND
 - 30 ZONE 30, UPPER RING HARN
 - 9 INST UPPER RING HARN
 - 1 MANIPULATE BY HAND
 - 30 ZONE 30, UPPER RING HARN
 - 2 MANIPULATE WITH TOOLS
 - 30 ZONE 30, UPPER RING HARN
 - 10 INST UPPER RING TRAY
 - 1 MANIPULATE BY HAND
 - 27 ZONE 27, TOP RING TRAY
 - 2 MANIPULATE WITH TOOLS
 - 27 ZONE 27, TOP RING TRAY
 - 11 S/C SECURED DEC 14
 - 17 SECURED IN TENT
 - 12 INST UR/PYRO HARN(CONT)
 - 1 MANIPULATE BY HAND
 - 30 ZONE 30, UPPER RING HARN
 - 2 MANIPULATE WITH TOOLS
 - 30 ZONE 30, UPPER RING HARN
 - 13 INST LR HARN/UMB
 - 1 MANIPULATE BY HAND
 - 31 ZONE 31, LOWER RING HARN
 - 2 MANIPULATE WITH TOOLS
 - 31 ZONE 31, LOWER RING HARN
 - 14 S/C SECURED DEC 15-18
 - 17 SECURED IN TENT

APPENDIX 2 (Continued)

128

- 15 INST CABLE LAMPS
 - 1 MANIPULATE BY HAND
 - 31 ZONE 31, LOWER RING HARN
 - 2 MANIPULATE WITH TOOLS
 - 31 ZONE 31, LOWER RING HARN
- 16 INSP PRIM SUN SENSORS
 - 9 VISUAL INSPECTION
 - 71 PRIMARY SUN SENSOR
 - 72 PRIMARY SUN SENSOR
- 17 INSP SEC SUN SENSORS
 - 9 VISUAL INSPECTION
 - 73 SECONDARY SUN SENSOR
 - 74 SECONDARY SUN SENSOR
- 18 INSP TEMINATOR SENSOR
 - 9 VISUAL INSPECTION
 - 75 TERMINATOR SENSOR
- 19 INSP EARTH SENSOR
 - 9 VISUAL INSPECTION
 - 76 EARTH SENSOR
- 20 INSP SUN GATE
 - 9 VISUAL INSPECTION
 - 77 SUN GATE
- 2 MECHANICAL ASSBLY/TEST
 - 1 INST PEDESTAL COVERS
 - 1 MANIPULATE BY HAND
 - 2 ZONE 2, BAY 2
 - 2 MANIPULATE WITH TOOLS
 - 2 ZONE 2, BAY 2
 - 2 INST PRIM SUN SENSOR
 - 1 MANIPULATE BY HAND
 - 2 ZONE 2, BAY 2
 - 2 MANIPULATE WITH TOOLS
 - 2 ZONE 2, BAY 2
 - 3 INST SEC SUN SENSOR
 - 1 MANIPULATE BY HAND
 - 2 ZONE 2, BAY 2
 - 2 MANIPULATE WITH TOOLS
 - 2 ZONE 2, BAY 2
 - 4 INST SEC SUN SENSOR
 - 1 MANIPULATE BY HAND
 - 6 ZONE 6, BAY 6
 - 2 MANIPULATE WITH TOOLS
 - 6 ZONE 6, BAY 6
 - 5 INST TERMINATOR SENSOR
 - 1 MANIPULATE BY HAND
 - 2 ZONE 2, BAY 2
 - 2 MANIPULATE WITH TOOLS
 - 2 ZONE 2, BAY 2
 - 6 INST PRIM SUN SENSOR
 - 1 MANIPULATE BY HAND
 - 6 ZONE 6, BAY 6
 - 2 MANIPULATE WITH TOOLS
 - 6 ZONE 6, BAY 6
 - 7 SOLDER 4 LEADS
 - 8 SOLDER (UNSOLDER)
 - 2 ZONE 2, BAY 2
 - 8 S/C SECURED DEC 18-20
 - 17 SECURED IN TENT
 - 9 INSP ACGS SYS(-X+Y)
 - 9 VISUAL INSPECTION
 - 79 ACGS SYST (-X+Y)
 - 10 INST ACGS SYS(-X+Y)

- 1 MANIPULATE BY HAND
 - 12 ZONE 12, BAY 4 INWARD
- 2 MANIPULATE WITH TOOLS
 - 12 ZONE 12, BAY 4 INWARD
- 11 INSP ACGS SYS(+X-Y)
 - 9 VISUAL INSPECTION
 - 80 ACGS SYST (+X-Y)
- 12 INST ACGS SYS(+X-Y)
 - 1 MANIPULATE BY HAND
 - 10 ZONE 10, BAY 2 INWARD
 - 2 MANIPULATE WITH TOOLS
 - 10 ZONE 10, BAY 2 INWARD
- 13 TORQUE BOLTS
 - 2 MANIPULATE WITH TOOLS
 - 10 ZONE 10, BAY 2 INWARD
- 3 MECHANICAL ASSBLY/TEST
 - 1 S/C SECURED DEC 20-JAN 4
 - 17 SECURED IN TENT
 - 2 REM MODULE/EA 7
 - 2 MANIPULATE WITH TOOLS
 - 81 EA7 MODULE
 - 1 MANIPULATE BY HAND
 - 81 EA7 MODULE
 - 3 INSP EA 7 MODULE
 - 9 VISUAL INSPECTION
 - 81 EA7 MODULE
 - 5 INSP EA 7 HARN(9W5)
 - 9 VISUAL INSPECTION
 - 82 EA7 HARNESS
 - 6 INSTALL EA7 HARNESS(9W5)
 - 1 MANIPULATE BY HAND
 - 36 CZ KSH(H PSGH 0,3=ISQOS(5 FL(HSCS.)
 - 7 MATE EA 7 HARN CONN(15)
 - 1 MANIPULATE BY HAND
 - 36 CZ KSH(H PSGH 0,3=ISQOS(5 FL(HSCS.)
 - 8 INSP EA 7 HARN(9W7)
 - 9 VISUAL INSPECTION
 - 83 EA7 HARNESS
 - 9 INSTALL EA 7 HARN(9W7)
 - 1 MANIPULATE BY HAND
 - 36 CZ KSH(H PSGH 0,3=ISQOS(5 FL(HSCS.)
 - 10 MATE EA 7 HARN CONN(4)
 - 2 MANIPULATE WITH TOOLS
 - 36 CZ KSH(H PSGH 0,3=ISQOS(5 FL(HSCS.)
 - 11 INST MOD 5A1 IN EA 7
 - 1 MANIPULATE BY HAND
 - 54 ZONE 54, EA VII CASE
 - 2 MANIPULATE WITH TOOLS
 - 54 ZONE 54, EA VII CASE
 - 12 REM 6 MODULES/EA 1
 - 2 MANIPULATE WITH TOOLS
 - 85 EA1 MODULE (4A11)
 - 86 EA1 MODULE (4A12)
 - 87 EA1 MODULE (4A13)
 - 88 EA1 MODULE (4A15)
 - 89 EA1 MODULE (4A16)
 - 90 EA1 MODULE (4A18)
 - 1 MANIPULATE BY HAND
 - 85 EA1 MODULE (4A11)
 - 86 EA1 MODULE (4A12)
 - 87 EA1 MODULE (4A13)
 - 88 EA1 MODULE (4A15)

89 EA1 MODULE (4A16)
 90 EA1 MODULE (4A18)
 13 MOVE S/C TO OSE POSITION
 1 MANIPULATE BY HAND
 14 INST HARNESS CLAMPS
 1 MANIPULATE BY HAND
 36 CZ KSH(H PSGH 0.3=ISQ0S(5 FL(HSCS.(
 2 MANIPULATE WITH TOOLS
 36 CZ KSH(H PSGH 0.3=ISQ0S(5 FL(HSCS.(
 15 XPORT 6 EA 1 MODULES
 1 MANIPULATE BY HAND
 85 EA1 MODULE (4A11)
 86 EA1 MODULE (4A12)
 87 EA1 MODULE (4A13)
 88 EA1 MODULE (4A15)
 89 EA1 MODULE (4A16)
 90 EA1 MODULE (4A18)
 16 PREPARE CASE 7 CHASSIS
 9 VISUAL INSPECTION
 54 ZONE 54, EA VII CASE
 17 INST PLASMA PROBE BRKT
 1 MANIPULATE BY HAND
 11 ZONE 11, BAY 3 INWARD
 2 MANIPULATE WITH TOOLS
 11 ZONE 11, BAY 3 INWARD
 18 INST 8 MODULES IN EA 1
 1 MANIPULATE BY HAND
 49 ZONE 49, EA I CASE
 2 MANIPULATE WITH TOOLS
 49 ZONE 49, EA I CASE
 19 INSTALL END PLATE
 1 MANIPULATE BY HAND
 49 ZONE 49, EA I CASE
 2 MANIPULATE WITH TOOLS
 49 ZONE 49, EA I CASE
 20 MATE EA 1 CONN
 11 MATE (DEMATE) CONNECTORS
 31 ZONE 31, LOWER RING HARN
 4 MECHANICAL ASSBLY/TEST
 1 INSTALL EA 7 ON S/C
 1 MANIPULATE BY HAND
 54 ZONE 54, EA VII CASE
 2 MANIPULATE WITH TOOLS
 54 ZONE 54, EA VII CASE
 2 INSTALL EA 1 ON S/C
 1 MANIPULATE BY HAND
 49 ZONE 49, EA I CASE
 2 MANIPULATE WITH TOOLS
 49 ZONE 49, EA I CASE
 3 INSTALL EA 8 ON S/C
 1 MANIPULATE BY HAND
 55 ZONE 55, EA VIII CASE
 2 MANIPULATE WITH TOOLS
 55 ZONE 55, EA VIII CASE
 4 INSTALL BATTERY
 1 MANIPULATE BY HAND
 64 BATTERY
 2 MANIPULATE WITH TOOLS
 64 BATTERY
 5 INSP CANOPUS SENSOR
 9 VISUAL INSPECTION
 65 CANOPUS SENSOR

APPENDIX 2 (Continued)

- 6 INSP PLANET SENSOR
 - 9 VISUAL INSPECTION
 - 66 PLANET SENSOR
- 7 DRILL IN GAS FRAMES
 - 4 DRILL, FILE, ETC.
- 8 INST LO-GAIN ANT ON S/C
 - 1 MANIPULATE BY HAND
 - 26 ZONE 26, LO-GAIN ANTENNA
 - 2 MANIPULATE WITH TOOLS
 - 26 ZONE 26, LO-GAIN ANTENNA
- 9 ALIGN L/-GAIN ANT
 - 2 MANIPULATE WITH TOOLS
 - 26 ZONE 26, LO-GAIN ANTENNA
 - 10 INSPECTION WITH GAUGES
 - 26 ZONE 26, LO-GAIN ANTENNA
- 10 INST CANOPUS SENSOR
 - 1 MANIPULATE BY HAND
 - 8 ZONE 8, BAY 8
 - 2 MANIPULATE WITH TOOLS
 - 8 ZONE 8, BAY 8
- 11 INST PLANET SENSOR
 - 1 MANIPULATE BY HAND
 - 8 ZONE 8, BAY 8
 - 2 MANIPULATE WITH TOOLS
 - 8 ZONE 8, BAY 8
- 12 S/C SECURED JAN 4
 - 17 SECURED IN TENT
- 13 S/C INTERFACE TEST
 - 9 VISUAL INSPECTION
- 14 SOLDER CONNECTORS
 - 8 SOLDER (SUNSOLDER)
 - 8 ZONE 8, BAY 8
 - 8 SOLDER (SUNSOLDER)
 - 8 ZONE 8, BAY 8
- 15 S/C SECURED JAN 5-7
 - 17 SECURED IN TENT
- 16 INST PINPULLER BRACKET
 - 2 MANIPULATE WITH TOOLS
 - 26 ZONE 26, LO-GAIN ANTENNA
- 17 INST MAGNETOMETER
 - 1 MANIPULATE BY HAND
 - 26 ZONE 26, LO-GAIN ANTENNA
 - 2 MANIPULATE WITH TOOLS
 - 26 ZONE 26, LO-GAIN ANTENNA
- 18 TIE 9W26 HARN TO L-G ANT
 - 1 MANIPULATE BY HAND
 - 26 ZONE 26, LO-GAIN ANTENNA
- 19 TIE 9W22 HARN TO L-G ANT
 - 1 MANIPULATE BY HAND
 - 26 ZONE 26, LO-GAIN ANTENNA
- 20 TIE 9W29 HARN TO L-G ANT
 - 1 MANIPULATE BY HAND
 - 26 ZONE 26, LO-GAIN ANTENNA
- 5 MECHANICAL ASSBLY/TEST
 - 1 TIE 9W39HARN TO L-G ANT
 - 1 MANIPULATE BY HAND
 - 26 ZONE 26, LO-GAIN ANTENNA
 - 2 REM EA 8 FROM S/C
 - 2 MANIPULATE WITH TOOLS
 - 55 ZONE 55, EA VIII CASE
 - 1 MANIPULATE BY HAND
 - 55 ZONE 55, EA VIII CASE

- 3 REM PLANET SENSOR
 - 2 MANIPULATE WITH TOOLS
 - 66 PLANET SENSOR
 - 1 MANIPULATE BY HAND
 - 66 PLANET SENSOR
- 4 REM MAGNETOMETER
 - 2 MANIPULATE WITH TOOLS
 - 26 ZONE 26, LO-GAIN ANTENNA
 - 1 MANIPULATE BY HAND
 - 26 ZONE 26, LO-GAIN ANTENNA
- 5 S/C-USE POWER INTERFACE
 - 9 VISUAL INSPECTION
- 6 MOVE S/C TO NEW POSITION
 - 16 MANEUVER SPACECRAFT
- 7 S/C SECURED JAN 7-9
 - 17 SECURED IN TENT
- 8 INST ACCELER ON S/C
 - 1 MANIPULATE BY HAND
 - 11 ZONE 11, BAY 3 INWARD
 - 2 MANIPULATE WITH TOOLS
 - 11 ZONE 11, BAY 3 INWARD
- 9 INSTALL PAS
 - 1 MANIPULATE BY HAND
 - 9 ZONE 9, BAY 1 INWARD
 - 2 MANIPULATE WITH TOOLS
 - 9 ZONE 9, BAY 1 INWARD
- 10 INSTALL PRIM SUN SENSOR
 - 2 MANIPULATE WITH TOOLS
 - 2 ZONE 2, BAY 2
 - 1 MANIPULATE BY HAND
 - 2 ZONE 2, BAY 2
- 11 INSTALL PRIM SUN SENSOR
 - 1 MANIPULATE BY HAND
 - 6 ZONE 6, BAY 6
 - 2 MANIPULATE WITH TOOLS
 - 6 ZONE 6, BAY 6
- 12 INSTALL THERMAL CANNSTR
 - 1 MANIPULATE BY HAND
 - 11 ZONE 11, BAY 3 INWARD
 - 2 MANIPULATE WITH TOOLS
 - 11 ZONE 11, BAY 3 INWARD
- 13 MOVE S/C TO NEW POSITION
 - 16 MANEUVER SPACECRAFT
- 14 INSTALL 3 CLAMPS
 - 2 MANIPULATE WITH TOOLS
 - 42 ZONE 42, LEG D
 - 1 MANIPULATE BY HAND
 - 42 ZONE 42, LEG D
- 15 INSTALL PILLOW BLOCKS
 - 1 MANIPULATE BY HAND
 - 25 ZONE 25, HI-GAIN ANTENNA
 - 2 MANIPULATE WITH TOOLS
 - 25 ZONE 25, HI-GAIN ANTENNA
- 16 S/C SECURED JAN 9
 - 17 SECURED IN TENT
- 17 INSP EA 5 CASE
 - 9 VISUAL INSPECTION
 - 52 ZONE 52, EA V CASE
- 18 INSP EA 8 CASE
 - 9 VISUAL INSPECTION
 - 55 ZONE 55, EA VIII CASE
- 19 INSP 9#17 HARN ASSY

- 9 VISUAL INSPECTION
 - 80 EAS HARNESS
- 20 INSP 16A1-16A6 MOD
 - 9 VISUAL INSPECTION
 - 61 OCTAGON
 - 62 MPILE D LD-1S -- SS B(HSE-XH
 - 64 BATTERY
 - 65 CANOPUS SENSOR
 - 67 UPPER RING HARNESS
- 6 MECHANICAL ASSBLY/TEST
 - 1 PREPARE 9W17 HARN
 - 9 VISUAL INSPECTION
 - 80 EAS HARNESS
 - 2 INST 6 MODULES IN EA 5
 - 1 MANIPULATE BY HAND
 - 52 ZONE 52, EA V CASE
 - 2 MANIPULATE WITH TOOLS
 - 52 ZONE 52, EA V CASE
 - 3 TIE HARN ASSY
 - 14 TIE HARNESSSES
 - 34 QJWYM4A CA-GH OSH(H C-QSSSN 8UU?
 - 4 INSTALL CONNECTORS
 - 1 MANIPULATE BY HAND
 - 34 QJWYM4A CA-GH OSH(H C-QSSSN 8UU?
 - 2 MANIPULATE WITH TOOLS
 - 34 QJWYM4A CA-GH OSH(H C-QSSSN 8UU?
 - 5 INST EA 5 IN HANDL FRAME
 - 1 MANIPULATE BY HAND
 - 52 ZONE 52, EA V CASE
 - 6 INST EA 5 IN S/C
 - 5 MOVE IN HANDLING FRAME
 - 52 ZONE 52, EA V CASE
 - 2 MANIPULATE WITH TOOLS
 - 52 ZONE 52, EA V CASE
 - 7 INST EA 6 IN HANDL FRAME
 - 1 MANIPULATE BY HAND
 - 53 ZONE 53, EA VI CASE
 - 8 INST EA 6 IN S/C
 - 5 MOVE IN HANDLING FRAME
 - 53 ZONE 53, EA VI CASE
 - 2 MANIPULATE WITH TOOLS
 - 53 ZONE 53, EA VI CASE
 - 9 SOLDER XDUCER TO ANTENNA
 - 8 SOLDER (SUNSOLDER)
 - 26 ZONE 26, LO-GAIN ANTENNA
 - 10 INST BATTERY ON U-RINGS
 - 1 MANIPULATE BY HAND
 - 55 ZONE 55, EA VIII CASE
 - 2 MANIPULATE WITH TOOLS
 - 55 ZONE 55, EA VIII CASE
 - 11 SOLDER 9W19 HARN LEADS
 - 8 SOLDER (SUNSOLDER)
 - 26 ZONE 26, LO-GAIN ANTENNA
 - 12 MATE PAS CONNECTORS
 - 11 MATE (DEMATE) CONNECTORS
 - 9 ZONE 9, BAY 1 INWARD
 - 13 S/C SECURED JAN 10-12
 - 17 SECURED IN TENT
 - 14 REM EA 5 FROM S/C
 - 2 MANIPULATE WITH TOOLS
 - 52 ZONE 52, EA V CASE
 - 5 MOVE IN HANDLING FRAME

- 52 ZONE 52, EA V CASE
- 15 INST SHEAR PLATE
 - 1 MANIPULATE BY HAND
 - 48 ZONE 48, OCTAGON SIDES
 - 2 MANIPULATE WITH TOOLS
 - 48 ZONE 48, OCTAGON SIDES
- 16 REM EA 6 FROM S/C
 - 2 MANIPULATE WITH TOOLS
 - 53 ZONE 53, EA VI CASE
 - 5 MOVE IN HANDLING FRAME
 - 88 GYRO MODULE (7A2)
- 17 INST SHEAR PLATE
 - 1 MANIPULATE BY HAND
 - 6 ZONE 6, BAY 6
 - 2 MANIPULATE WITH TOOLS
 - 6 ZONE 6, BAY 6
- 18 REM EA 7 FROM S/C
 - 2 MANIPULATE WITH TOOLS
 - 54 ZONE 54, EA VII CASE
 - 5 MOVE IN HANDLING FRAME
 - 54 ZONE 54, EA VII CASE
- 19 INST SHEAR PLATE
 - 1 MANIPULATE BY HAND
 - 7 ZONE 7, BAY 7
 - 2 MANIPULATE WITH TOOLS
 - 7 ZONE 7, BAY 7
- 7 MECHANICAL ASSBLY/TEST
 - 1 REM BATTERY FROM S/C
 - 2 MANIPULATE WITH TOOLS
 - 64 BATTERY
 - 1 MANIPULATE BY HAND
 - 64 BATTERY
 - 3 REM 6 MODULES, EAS
 - 2 MANIPULATE WITH TOOLS
 - 52 ZONE 52, EA V CASE
 - 1 MANIPULATE BY HAND
 - 52 ZONE 52, EA V CASE
 - 4 REM 1 MODULE, EA7
 - 2 MANIPULATE WITH TOOLS
 - 88 GYRO MODULE (7A2)
 - 1 MANIPULATE BY HAND
 - 88 GYRO MODULE (7A2)
 - 5 INSPECT TRD
 - 9 VISUAL INSPECTION
 - 6 MAP EA 6 CASE
 - 9 VISUAL INSPECTION
 - 53 ZONE 53, EA VI CASE
 - 7 INST 5 MOD IN EA 5
 - 1 MANIPULATE BY HAND
 - 52 ZONE 52, EA V CASE
 - 2 MANIPULATE WITH TOOLS
 - 52 ZONE 52, EA V CASE
 - 8 CONN 9W17 HANN
 - 1 MANIPULATE BY HAND
 - 34 QJWYM4A CA-GH OSH(H C-QSSSN BUUI
 - 2 MANIPULATE WITH TOOLS
 - 34 QJWYM4A CA-GH OSH(H C-QSSSN BUUI
 - 9 INST GYRO IN EA 7
 - 1 MANIPULATE BY HAND
 - 54 ZONE 54, EA VII CASE
 - 2 MANIPULATE WITH TOOLS
 - 54 ZONE 54, EA VII CASE

- 10 INST SCREWS IN BATT
 - 1 MANIPULATE BY HAND
 - 2 MANIPULATE WITH TOOLS
- 11 MAP EA CASE 5
 - 9 VISUAL INSPECTION
 - 52 ZONE 52, EA V CASE
- 12 XPORT EA CASE 6 TO SR
 - 5 MOVE IN HANDLING FRAME
 - 53 ZONE 53, EA VI CASE
- 13 XPORT BATTERY TO SR
 - 1 MANIPULATE BY HAND
- 14 XPORT EA 5 FROM SR
 - 5 MOVE IN HANDLING FRAME
 - 52 ZONE 52, EA V CASE
- 15 XPORT EA 6 FROM SR
 - 5 MOVE IN HANDLING FRAME
 - 53 ZONE 53, EA VI CASE
- 16 REM EA 5 FROM FIXTURE
 - 1 MANIPULATE BY HAND
 - 52 ZONE 52, EA V CASE
 - 2 MANIPULATE WITH TOOLS
 - 52 ZONE 52, EA V CASE
- 17 INST EA 5 IN S/C
 - 1 MANIPULATE BY HAND
 - 52 ZONE 52, EA V CASE
- 18 INST BATTERY ON U-RING
 - 1 MANIPULATE BY HAND
 - 2 MANIPULATE WITH TOOLS
- 19 INST EA 4 IN S/C
 - 1 MANIPULATE BY HAND
 - 51 ZONE 51, EA IV CASE
 - 2 MANIPULATE WITH TOOLS
 - 51 ZONE 51, EA IV CASE
- 20 S/C SECURED JAN 12
 - 17 SECURED IN TENT
- A MECHANICAL ASSBLY/TEST
 - 1 REM EA 4 FROM S/C
 - 2 MANIPULATE WITH TOOLS
 - 51 ZONE 51, EA IV CASE
 - 1 MANIPULATE BY HAND
 - 51 ZONE 51, EA IV CASE
 - 2 XPORT EA 4 TO SR
 - 5 MOVE IN HANDLING FRAME
 - 51 ZONE 51, EA IV CASE
 - 3 INSPECT EA 4 MODULES
 - 10 INSPECTION WITH GAUGES
 - 89 EA3 CABLE
 - 90 EA3 CABLE
 - 4 INST 9 MODULES IN EA 4
 - 1 MANIPULATE BY HAND
 - 51 ZONE 51, EA IV CASE
 - 2 MANIPULATE WITH TOOLS
 - 51 ZONE 51, EA IV CASE
 - 5 S/C SECURED JAN 13-17
 - 17 SECURED IN TENT
 - 6 REM EA 4 SCREWS
 - 1 MANIPULATE BY HAND
 - 51 ZONE 51, EA IV CASE
 - 1 MANIPULATE BY HAND
 - 51 ZONE 51, EA IV CASE
 - 7 INST EA 4 IN HANDL FRAME
 - 1 MANIPULATE BY HAND

51 ZONE 51, EA IV CASE
 2 MANIPULATE WITH TOOLS
 51 ZONE 51, EA IV CASE
 8 INST 7 MODULES IN EA 4
 1 MANIPULATE BY HAND
 51 ZONE 51, EA IV CASE
 2 MANIPULATE WITH TOOLS
 51 ZONE 51, EA IV CASE
 9 MATE 7 CONN IN EA 4
 11 MATE (DEMATE) CONNECTORS
 33 HSEN A(H MSHA ASS-.556XB(H CS(1P D-P
 10 XPORT 14 EA 3 MODULES
 1 MANIPULATE BY HAND
 107 EA3 MODULES
 108 EA3 MODULES
 109 EA3 MODULES
 110 EA3 MODULES
 111 EA3 MODULES
 112 EA3 MODULES
 113 EA3 MODULES
 114 EA3 MODULES
 115 EA3 MODULES
 116 EA3 MODULES
 117 EA3 MODULES
 118 EA3 MODULES
 119 EA3 MODULES
 120 EA3 MODULES
 11 INST 9 MODULES IN EA 3
 1 MANIPULATE BY HAND
 50 ZONE 50, EA III CASE
 2 MANIPULATE WITH TOOLS
 50 ZONE 50, EA III CASE
 12 INST EA 4 ON S/C
 1 MANIPULATE BY HAND
 51 ZONE 51, EA IV CASE
 13 INST 6 MODULES IN EA 3
 1 MANIPULATE BY HAND
 50 ZONE 50, EA III CASE
 2 MANIPULATE WITH TOOLS
 50 ZONE 50, EA III CASE
 14 REM TRD FROM FIXTURE
 1 MANIPULATE BY HAND
 62 TRD
 15 INST TRD ON S/C
 1 MANIPULATE BY HAND
 4 ZONE 4, BAY 4
 2 MANIPULATE WITH TOOLS
 4 ZONE 4, BAY 4
 16 TORQUE EA 3 SCREWS
 2 MANIPULATE WITH TOOLS
 50 ZONE 50, EA III CASE
 17 MATE EA 3 CONN
 11 MATE (DEMATE) CONNECTORS
 32 C3 KS-HSEN HSEI)SSSSQA 3E-CY UR3
 11 MATE (DEMATE) CONNECTORS
 32 C3 KS-HSEN HSEI)SSSSQA 3E-CY UR3
 18 REM EA 4 FROM S/C
 2 MANIPULATE WITH TOOLS
 51 ZONE 51, EA IV CASE
 1 MANIPULATE BY HAND
 51 ZONE 51, EA IV CASE
 19 INST EA 4 IN FRAME 18

- 1 MANIPULATE BY HAND
 - 51 ZONE 51, EA IV CASE
- 20 INST CABLES 9W20,21
 - 1 MANIPULATE BY HAND
 - 32 C3 KS-HSEN HSEI)SSSSQA 3E-CY UR3
- 9 MECHANICAL ASSBLY/TEST
 - 1 REM EA 4 FROM FRAME
 - 1 MANIPULATE BY HAND
 - 51 ZONE 51, EA IV CASE
 - 2 INST EA 4 IN S/C
 - 1 MANIPULATE BY HAND
 - 51 ZONE 51, EA IV CASE
 - 2 MANIPULATE WITH TOOLS
 - 51 ZONE 51, EA IV CASE
 - 3 MATE EA 3 LOCKWIRE CONN
 - 11 MATE (DEMATE) CONNECTORS
 - 50 ZONE 50, EA III CASE
 - 4 REM EA 3 FROM FRAME
 - 1 MANIPULATE BY HAND
 - 50 ZONE 50, EA III CASE
 - 5 INST EA 3 IN S/C
 - 1 MANIPULATE BY HAND
 - 50 ZONE 50, EA III CASE
 - 2 MANIPULATE WITH TOOLS
 - 50 ZONE 50, EA III CASE
 - 6 S/C SECURED JAN 17
 - 17 SECURED IN TENT
 - 7 XPORT EA 3 MODULES/SR
 - 1 MANIPULATE BY HAND
 - 50 ZONE 50, EA III CASE
 - 8 INST 2 MODULES IN EA 3
 - 1 MANIPULATE BY HAND
 - 50 ZONE 50, EA III CASE
 - 2 MANIPULATE WITH TOOLS
 - 50 ZONE 50, EA III CASE
 - 9 REM PLAS PROBE/CONTAINER
 - 1 MANIPULATE BY HAND
 - 65 PLASMA PROBE
 - 10 INST PLASMA PROBE IN S/C
 - 1 MANIPULATE BY HAND
 - 11 ZONE 11, BAY 3 INWARD
 - 2 MANIPULATE WITH TOOLS
 - 11 ZONE 11, BAY 3 INWARD
 - 11 REM MAGNETOM/CONTAINER
 - 1 MANIPULATE BY HAND
 - 66 MAGNETOMER
 - 12 INST MAGNETOMIN S/C
 - 1 MANIPULATE BY HAND
 - 26 ZONE 26, LO-GAIN ANTENNA
 - 2 MANIPULATE WITH TOOLS
 - 26 ZONE 26, LO-GAIN ANTENNA
 - 13 MATE CONNECTORS
 - 11 MATE (DEMATE) CONNECTORS
 - 26 ZONE 26, LO-GAIN ANTENNA
 - 14 INST UV STIMULUS
 - 1 MANIPULATE BY HAND
 - 15 S/C SECURED JAN 18
 - 17 SECURED IN TENT
 - 16 TENSION U-RING CABLE
 - 2 MANIPULATE WITH TOOLS
 - 17 INSTALL TRD SOURCE
 - 1 MANIPULATE BY HAND

- 4 ZONE 4, BAY 4
- 18 INTERFACE TEST
 - 9 VISUAL INSPECTION
- 19 REM TRD
 - 2 MANIPULATE WITH TOOLS
 - 67 TRD
 - 1 MANIPULATE BY HAND
 - 67 TRD
- 20 REM TRD SOURCE
 - 1 MANIPULATE BY HAND
 - 4 ZONE 4, BAY 4
- 10 MECHANICAL ASSBLY/TEST
 - 1 INTERFACE TEST
 - 9 VISUAL INSPECTION
 - 2 DEMATE CONNECTOR
 - 11 MATE (DEMATE) CONNECTORS
 - 33 HSEN A(H MSHA ASS-.SS6XB(H CS(I(P D-P
 - 3 S/C SECURED JAN 19
 - 17 SECURED IN TENT
 - 4 SCI INTERFACE TEST
 - 11 MATE (DEMATE) CCONNECTORS
 - 5 S/C SECURED JAN 20
 - 17 SECURED IN TENT
 - 6 TIE 4 SOL PAN HARN
 - 12 POTTING, PAINTING
 - 24 ZONE 24, PANEL 7 SPAR
 - 12 POTTING, PAINTING
 - 23 ZONE 23, PANEL 5 SPAR
 - 12 POTTING, PAINTING
 - 22 ZONE 22, PANEL 3 SPAR
 - 12 POTTING, PAINTING
 - 21 ZONE 21, PANEL 1 SPAR
 - 7 CONN BREAKOUT BOX
 - 1 MANIPULATE BY HAND
 - 8 PYRO INTERFACE TEST
 - 9 VISUAL INSPECTION
 - 9 S/C SECURE JAN 21-23
 - 17 SECURED IN TENT
 - 10 DEMATE 4 CONNECTORS
 - 11 MATE (DEMATE) CONNECTORS
 - 30 ZONE 30, UPPER RING HARN
 - 11 REM BREAKOUT BOX
 - 1 MANIPULATE BY HAND
 - 30 ZONE 30, UPPER RING HARN
 - 12 INSTALL TRD SOURCE
 - 1 MANIPULATE BY HAND
 - 4 ZONE 4, BAY 4
 - 13 SCIENCE TEST
 - 9 VISUAL INSPECTION
 - 14 REM 4 EA 3 ALIGN SCREWS
 - 2 MANIPULATE WITH TOOLS
 - 40 ZONE 50, EA III CASE
 - 15 INST FLUX TANK LEGS
 - 1 MANIPULATE BY HAND
 - 2 MANIPULATE WITH TOOLS
 - 16 DEPLOY/BOLT GAS FRAMES
 - 1 MANIPULATE BY HAND
 - 2 MANIPULATE WITH TOOLS
 - 17 INST FLUX TANK/CABLES
 - 1 MANIPULATE BY HAND
 - 2 MANIPULATE WITH TOOLS
 - 18 SCI SUBSYSTEM TEST

- 9 VISUAL INSPECTION
- 19 INSPECT SOL PANEL
 - 9 VISUAL INSPECTION
 - 17 ZONE 17, SOLAR PANEL 1
- 20 S/C SECURED JAN 23
 - 17 SECURED IN TENT
- 11 MECHANICAL PREPARATION/TEST
 - 1 SCI SUBSYSTEM TEST
 - 10 INSPECTION WITH GAUGES
 - 2 INST 2 SPAR SHLDS/SP 005
 - 1 MANIPULATE BY HAND
 - 23 ZONE 23, PANEL 5 SPAR
 - 2 MANIPULATE WITH TOOLS
 - 23 ZONE 23, PANEL 5 SPAR
 - 3 WEIGHT/CG MEAS ON 4 SP
 - 1 MANIPULATE BY HAND
 - 17 ZONE 17, SOLAR PANEL 1
 - 18 ZONE 18, SOLAR PANEL 3
 - 19 ZONE 19, SOLAR PANEL 5
 - 20 ZONE 20, SOLAR PANEL 7
 - 4 PYRO HARN RESIST CHECK
 - 1 MANIPULATE BY HAND
 - 5 S/C SECURED JAN 24
 - 17 SECURED IN TENT
 - 6 SUBSYSTEM TESTS
 - 10 INSPECTION WITH GAUGES
 - 7 REM LF TENT
 - 1 MANIPULATE BY HAND
 - 8 INST WHEEL RAIL GUIDES
 - 1 MANIPULATE BY HAND
 - 9 S/C SECURED JAN 25
 - 17 SECURED IN TENT
 - 10 DEMATE 2 CONN FOR TEST
 - 11 MATE (DEMATE) CONNECTORS
 - 11 MATE (DEMATE) CONNECTORS
 - 11 DATA ENCOD/COMM S/S TEST
 - 10 INSPECTION WITH GAUGES
 - 12 MATE CONNECTORS
 - 11 MATE (DEMATE) CONNECTORS
 - 11 MATE (DEMATE) CONNECTORS
 - 13 S/C SECURED JAN 26
 - 17 SECURED IN TENT
 - 14 POWER SYS CALIBRATION
 - 9 VISUAL INSPECTION
 - 15 S/C SECURED JAN 27
 - 17 SECURED IN TENT
 - 16 INST ACGS GAS LINES
 - 1 MANIPULATE BY HAND
 - 2 MANIPULATE WITH TOOLS
 - 21 ZONE 21, PANEL 1 SPAR
 - 17 REM EA 1 CASE
 - 2 MANIPULATE WITH TOOLS
 - 49 ZONE 49, EA I CASE
 - 1 MANIPULATE BY HAND
 - 49 ZONE 49, EA I CASE
 - 18 REM EA 8 CASE
 - 2 MANIPULATE WITH TOOLS
 - 55 ZONE 55, EA VIII CASE
 - 1 MANIPULATE BY HAND
 - 55 ZONE 55, EA VIII CASE
 - 19 INSPECT EA 1 CASE
 - 9 VISUAL INSPECTION

- 49 ZONE 49, EA I CASE
- 20 INSPECT EA 8 CASE
 - 9 VISUAL INSPECTION
 - 55 ZONE 55, EA VIII CASE
- 12 MECHANICAL PREPARATION/TEST
 - 1 INST EA 1 CASE
 - 1 MANIPULATE BY HAND
 - 49 ZONE 49, EA I CASE
 - 2 MANIPULATE WITH TOOLS
 - 49 ZONE 49, EA I CASE
 - 2 INST EA 8 CASE
 - 1 MANIPULATE BY HAND
 - 55 ZONE 55, EA VIII CASE
 - 2 MANIPULATE WITH TOOLS
 - 55 ZONE 55, EA VIII CASE
 - 3 ACGS PRESSURIZATION TEST
 - 10 INSPECTION WITH GAUGES
 - 4 REM BATTERY FROM S/C
 - 2 MANIPULATE WITH TOOLS
 - 61 BATTERY
 - 1 MANIPULATE BY HAND
 - 5 S/C SECURED JAN 28-30
 - 17 SECURED IN TENT
 - 6 INSTALL BATTERY ON S/C
 - 1 MANIPULATE BY HAND
 - 61 BATTERY
 - 2 MANIPULATE WITH TOOLS
 - 61 BATTERY
 - 7 COMPUTER INTERFACE TEST
 - 9 VISUAL INSPECTION
 - 8 REM TEST CABLES
 - 2 MANIPULATE WITH TOOLS
 - 1 MANIPULATE BY HAND
 - 9 REM EA 5 CABLES
 - 2 MANIPULATE WITH TOOLS
 - 34 QJWYH4A CA-GH OSH(H C-QSS\$N 8UUI
 - 1 MANIPULATE BY HAND
 - 34 QJWYH4A CA-GH OSH(H C-QSS\$N 8UUI
 - 10 REM EA 6 CABLES
 - 2 MANIPULATE WITH TOOLS
 - 35 CY 1P4 ISS-PS,KDS -3S+3HA3SU3HA
 - 1 MANIPULATE BY HAND
 - 35 CY 1P4 ISS-PS,KDS -3S+3HA3SU3HA
 - 11 REM FLUX TANK
 - 1 MANIPULATE BY HAND
 - 2 MANIPULATE WITH TOOLS
 - 12 REM EA 5
 - 1 MANIPULATE BY HAND
 - 52 ZONE 52, EA V CASE
 - 2 MANIPULATE WITH TOOLS
 - 52 ZONE 52, EA V CASE
 - 13 PLACE EA 5 IN FIXTURE
 - 1 MANIPULATE BY HAND
 - 52 ZONE 52, EA V CASE
 - 14 REM EA 6
 - 2 MANIPULATE WITH TOOLS
 - 53 ZONE 53, EA VI CASE
 - 1 MANIPULATE BY HAND
 - 53 ZONE 53, EA VI CASE
 - 15 PLACE EA 6 IN FIXTURE
 - 1 MANIPULATE BY HAND
 - 53 ZONE 53, EA VI CASE

APPENDIX 2 (Continued)

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- 16 INSTALL EA 5 SHEAR PLATE
 - 1 MANIPULATE BY HAND
 - 5 ZONE 5, BAY 5
 - 2 MANIPULATE WITH TOOLS
 - 5 ZONE 5, BAY 5
- 17 MOVE LF TENT
 - 1 MANIPULATE BY HAND
- 18 MOVE S/C TO NEW POSITION
 - 16 MANEUVER SPACECRAFT
- 19 MOVE TENT OVER S/C
 - 1 MANIPULATE BY HAND
- 20 S/C SECURED JAN 30
 - 17 SECURED IN TENT
- 13 MECHANICAL PREPARATION/TEST
 - 1 INSTALL TEST CONNECTORS
 - 1 MANIPULATE BY HAND
 - 2 MANIPULATE WITH TOOLS
 - 2 EA 5 SUBSYSTEM TEST
 - 9 VISUAL INSPECTION
 - 3 EA 6 SUBSYSTEM TEST
 - 9 VISUAL INSPECTION
 - 4 REM EA 5 FROM FIXTURE
 - 2 MANIPULATE WITH TOOLS
 - 52 ZONE 52, EA V CASE
 - 1 MANIPULATE BY HAND
 - 52 ZONE 52, EA V CASE
 - 5 REM EA 6 FROM FIXTURE
 - 2 MANIPULATE WITH TOOLS
 - 53 ZONE 53, EA VI CASE
 - 1 MANIPULATE BY HAND
 - 53 ZONE 53, EA VI CASE
 - 6 INSTALL EA 5 ON S/C
 - 1 MANIPULATE BY HAND
 - 52 ZONE 52, EA V CASE
 - 2 MANIPULATE WITH TOOLS
 - 52 ZONE 52, EA V CASE
 - 7 INSTALL EA 6 ON S/C
 - 1 MANIPULATE BY HAND
 - 53 ZONE 53, EA VI CASE
 - 2 MANIPULATE WITH TOOLS
 - 53 ZONE 53, EA VI CASE
 - 8 S/C SECURED JAN 31
 - 17 SECURED IN TENT
 - 9 BIOLOGICAL SAMPLING
 - 2 MANIPULATE WITH TOOLS
- 10 INST H-G ANT PARTS
 - 1 MANIPULATE BY HAND
 - 25 ZONE 25, HI-GAIN ANTENNA
 - 2 MANIPULATE WITH TOOLS
 - 25 ZONE 25, HI-GAIN ANTENNA
- 11 OPEN EA 3 CASE
 - 2 MANIPULATE WITH TOOLS
 - 50 ZONE 50, EA III CASE
- 12 DEMATE CONNECTORS
 - MATE (DEMATE) CONNECTORS
 - 32 C3 K3-HSEN HSEI)SSSSQA 3E-CY UR3
- 13 REM 4 EA 3 MODULES
 - 2 MANIPULATE WITH TOOLS
 - 50 ZONE 50, EA III CASE
 - 1 MANIPULATE BY HAND
 - 50 ZONE 50, EA III CASE
- 14 PLACE MODULES IN CASE

APPENDIX 2 (Continued)

- 1 MANIPULATE BY HAND
 - 50 ZONE 50, EA III CASE
- 15 REM 3 MODULES/CASES
 - 2 MANIPULATE WITH TOOLS
 - 50 ZONE 50, EA III CASE
 - 1 MANIPULATE BY HAND
 - 50 ZONE 50, EA III CASE
- 16 INST 3 MODULES IN EA 3
 - 1 MANIPULATE BY HAND
 - 50 ZONE 50, EA III CASE
 - 2 MANIPULATE WITH TOOLS
 - 50 ZONE 50, EA III CASE
- 17 CLOSE EA 3 CASE
 - 2 MANIPULATE WITH TOOLS
 - 50 ZONE 50, EA III CASE
- 18 INSTALL H-G ANTENNA
 - 1 MANIPULATE BY HAND
 - 25 ZONE 25, HI-GAIN ANTENNA
 - 2 MANIPULATE WITH TOOLS
 - 25 ZONE 25, HI-GAIN ANTENNA
- 19 INSPECT H-G ANT
 - 9 VISUAL INSPECTION
 - 25 ZONE 25, HI-GAIN ANTENNA
- 20 POS S/C-VERTICAL
 - 16 MANEUVER SPACECRAFT
- 14 MECHANICAL PREPARATION/TEST
 - 1 S/C SECURED FEB 1
 - 17 SECURED IN TENT
 - 2 BIOLOGICAL SAMPLING
 - 9 VISUAL INSPECTION
 - 3 ATACH TEST COUPONS
 - 1 MANIPULATE BY HAND
 - 2 MANIPULATE WITH TOOLS
 - 4 REM S/C FROM WEST POSIT
 - 1 MANIPULATE BY HAND
 - 5 XPORT S/C
 - 3 MOVE W/CRANE
 - 6 INST S/C ON EAST POSIT
 - 1 MANIPULATE BY HAND
 - 7 S/C SECURED FEB 2
 - 17 SECURED IN TENT
 - 8 BIOLOGICAL SAMPLING
 - 9 VISUAL INSPECTION
 - 9 INSPECT CASE 516 RADIO
 - 9 VISUAL INSPECTION
 - 52 ZONE 52, EA V CASE
 - 9 VISUAL INSPECTION
 - 53 ZONE 53, EA VI CASE
 - 10 REM CASE PROTOTYPE RADIO
 - 2 MANIPULATE WITH TOOLS
 - 68 PROTOTYPE RADIO
 - 1 MANIPULATE BY HAND
 - 68 PROTOTYPE RADIO
 - 11 INSTALL RADIO SYS-8
 - 1 MANIPULATE BY HAND
 - 52 ZONE 52, EA V CASE
 - 1 MANIPULATE BY HAND
 - 52 ZONE 52, EA V CASE
 - 12 INST EA 6 HANDL FIXTURE
 - 1 MANIPULATE BY HAND
 - 53 ZONE 53, EA VI CASE
 - 2 MANIPULATE WITH TOOLS

- 53 ZONE 53, EA VI CASE
- 13 INSTALL FLUX TANK
 - 1 MANIPULATE BY HAND
- 14 INST MOD 16A2-A6 IN EA 5
 - 1 MANIPULATE BY HAND
 - 52 ZONE 52, EA V CASE
 - 2 MANIPULATE WITH TOOLS
 - 52 ZONE 52, EA V CASE
- 15 TIE EA 5 CASE HARN
 - 14 TIE HARNESSSES
 - 34 QJWYM4A CA-GH OSH(H C-QSSSN 80U1
- 16 INSTALL EA 5 ON S/C
 - 1 MANIPULATE BY HAND
 - 52 ZONE 52, EA V CASE
 - 2 MANIPULATE WITH TOOLS
 - 52 ZONE 52, EA V CASE
- 17 S/C SECURED FEB 3
 - 17 SECURED IN TENT
- 18 RADIO VER/PWR SURV TEST
 - 9 VISUAL INSPECTION
- 19 REM BATTERY
 - 2 MANIPULATE WITH TOOLS
 - 61 BATTERY
 - 1 MANIPULATE BY HAND
 - 61 BATTERY
- 20 S/C SECURED FEB 4-6
 - 17 SECURED IN TENT
- 15 MECHANICAL PREPARATION/TEST
 - 1 INST JET VANE ACTUATORS
 - 1 MANIPULATE BY HAND
 - 2 ZONE 2, BAY 2
 - 2 MANIPULATE WITH TOOLS
 - 2 ZONE 2, BAY 2
 - 2 INST BATTERY
 - 1 MANIPULATE BY HAND
 - 55 ZONE 55, EA VIII CASE
 - 2 MANIPULATE WITH TOOLS
 - 55 ZONE 55, EA VIII CASE
 - 3 SYSTEM TEST
 - 10 INSPECTION WITH GAUGES
 - 4 INSTALL TRD SOURCES
 - 1 MANIPULATE BY HAND
 - 4 ZONE 4, BAY 4
 - 5 SYSTEM TEST(CONT)
 - 9 VISUAL INSPECTION
 - 6 REM TRD SOURCES
 - 2 MANIPULATE WITH TOOLS
 - 4 ZONE 4, BAY 4
 - 7 S/C SECURED FEB 6
 - 17 SECURED IN TENT
 - 8 INSTALL TRD SOURCES
 - 1 MANIPULATE BY HAND
 - 4 ZONE 4, BAY 4
 - 9 SYSTEM TEST(CONT)
 - 9 VISUAL INSPECTION
 - 10 REM TRD SOURCES
 - 2 MANIPULATE WITH TOOLS
 - 4 ZONE 4, BAY 4
 - 11 S/C SECURED FEB 7
 - 17 SECURED IN TENT
 - 12 BIOLOGICAL SAMPLING
 - 9 VISUAL INSPECTION

APPENDIX 2 (Continued)

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- 13 SYSTEM TEST (CONT)
 - 10 INSPECTION WITH GAUGES
- 14 S/C SECURED FEB 8
 - 17 SECURED IN TENT
- 15 BIOLOGICAL SAMPLING
 - 9 VISUAL INSPECTION
- 16 INSTALL COUPONS
 - 1 MANIPULATE BY HAND
- 17 DFR SPECIAL TESTS
 - 9 VISUAL INSPECTION
- 18 DEMATE TEST CONNECTORS
 - 11 MATE (DEMATE) CONNECTORS
 - 11 MATE (DEMATE) CONNECTORS
- 19 S/C SECURED FEB 9
 - 17 SECURED IN TENT
- 16 MECHANICAL PREPARATION/TEST
 - 1 POWER VARIATION TESTS
 - 9 VISUAL INSPECTION
 - 2 S/C SECURED FEB 10
 - 17 SECURED IN TENT
 - 3 POWER VARIATION TESTS
 - 10 INSPECTION WITH GAUGES
 - 4 S/C SECURED FEB 11-13
 - 17 SECURED IN TENT
 - 5 REM CABLES FROM S/C
 - 2 MANIPULATE WITH TOOLS
 - 1 MANIPULATE BY HAND
 - 6 ROTATE S/C-HORIZONTAL
 - 16 MANEUVER SPACECRAFT
 - 7 REM FLUX TANK
 - 2 MANIPULATE WITH TOOLS
 - 1 MANIPULATE BY HAND
 - 8 MOVE LF TENT TO WEST POS
 - 15 MANEUVER EQUIPMENT
 - 9 ROTATE S/C-VERTICAL
 - 16 MANEUVER SPACECRAFT
 - 10 INSTALL BATTERY
 - 1 MANIPULATE BY HAND
 - 55 ZONE 55, EA VIII CASE
 - 2 MANIPULATE WITH TOOLS
 - 55 ZONE 55, EA VIII CASE
 - 11 FREE MODE TEST
 - 9 VISUAL INSPECTION
 - 12 POT CONNECTORS
 - 12 POTTING, PAINTING
 - 30 ZONE 30, UPPER RING HARN
 - 13 MOVE LF TENT OVER S/C
 - 15 MANEUVER EQUIPMENT
 - 14 POT CONNECTORS (CONT)
 - 12 POTTING, PAINTING
 - 30 ZONE 30, UPPER RING HARN
 - 15 S/C SECURED FEB 14
 - 17 SECURED IN TENT
 - 16 BIOLOGICAL SAMPLING
 - 1 MANIPULATE BY HAND
 - 17 INSPECT DAS MOD (20A2-4)
 - 9 VISUAL INSPECTION
 - 77 DAS MODULE (20A2)
 - 78 DAS MODULE (20A3)
 - 79 DAS MODULE (20A4)
 - 18 CURE POTTING
 - 12 POTTING, PAINTING

- 19 REM FLUX TANK LEG
 - 2 MANIPULATE WITH TOOLS
 - 1 MANIPULATE BY HAND
- 20 OPEN EA 3 CASE
 - 2 MANIPULATE WITH TOOLS
 - 50 ZONE 50, EA III CASE
 - 1 MANIPULATE BY HAND
 - 50 ZONE 50, EA III CASE
- 17 MECHANICAL ASSEMBLY/TEST
 - 1 REM MOD 20A2-4 PROTO/SC
 - 2 MANIPULATE WITH TOOLS
 - 80 PROTO MODULES (20A2)
 - 81 PROTO MODULES (20A3)
 - 82 PROTO MODULES (20A4)
 - 1 MANIPULATE BY HAND
 - 80 PROTO MODULES (20A2)
 - 81 PROTO MODULES (20A3)
 - 82 PROTO MODULES (20A4)
 - 2 INST MOD 20A2-4 IN S/C
 - 1 MANIPULATE BY HAND
 - 77 DAS MODULE (20A2)
 - 78 DAS MODULE (20A3)
 - 79 DAS MODULE (20A4)
 - 2 MANIPULATE WITH TOOLS
 - 77 DAS MODULE (20A2)
 - 78 DAS MODULE (20A3)
 - 79 DAS MODULE (20A4)
 - 3 CLOSE EA 3
 - 1 MANIPULATE BY HAND
 - 50 ZONE 50, EA III CASE
 - 4 INSTALL FLUX TANK
 - 1 MANIPULATE BY HAND
 - 2 MANIPULATE WITH TOOLS
 - 5 INSTALL CONNECTOR
 - 1 MANIPULATE BY HAND
 - 6 INSTALL TRD
 - 1 MANIPULATE BY HAND
 - 4 ZONE 4, BAY 4
 - 2 MANIPULATE WITH TOOLS
 - 4 ZONE 4, BAY 4
 - 7 INSTALL BATTERY
 - 1 MANIPULATE BY HAND
 - 55 ZONE 55, EA VIII CASE
 - 2 MANIPULATE WITH TOOLS
 - 55 ZONE 55, EA VIII CASE
 - 8 POT CONNECTORS
 - 12 POTTING, PAINTING
 - 9 S/C SECURED FEB 15
 - 17 SECURED IN TENT
 - 10 ROTATE S/C-HORIZONTAL
 - 16 MANEUVER SPACECRAFT
 - 11 REMOVE FLUX TANK
 - 2 MANIPULATE WITH TOOLS
 - 1 MANIPULATE BY HAND
 - 12 INSTALL BAY 1 LOUV BLADE
 - 1 MANIPULATE BY HAND
 - 85 LOUVERS BAY 1
 - 2 MANIPULATE WITH TOOLS
 - 85 LOUVERS BAY 1
 - 13 INSTALL BAY 3 LOUV BLADE
 - 1 MANIPULATE BY HAND
 - 86 LOUVERS BAY 3

- 2 MANIPULATE WITH TOOLS
86 LOUVERS BAY 3
- 14 INSTALL BAY 5 LOUV BLADE
 - 1 MANIPULATE BY HAND
87 LOUVERS BAY 5
 - 2 MANIPULATE WITH TOOLS
87 LOUVERS BAY 5
- 15 INSTALL BAY 6 LOUV BLADE
 - 1 MANIPULATE BY HAND
88 LOUVERS BAY 6
 - 2 MANIPULATE WITH TOOLS
88 LOUVERS BAY 6
- 16 INSTALL BAY 7 LOUV BLADE
 - 1 MANIPULATE BY HAND
89 LOUVERS BAY 7
 - 2 MANIPULATE WITH TOOLS
89 LOUVERS BAY 7
- 17 INSTALL BAY 8 LOUV BLADE
 - 1 MANIPULATE BY HAND
90 LOUVERS BAY 8
 - 2 MANIPULATE WITH TOOLS
90 LOUVERS BAY 8
- 18 INST EA 6 LOUV ASSY
 - 1 MANIPULATE BY HAND
53 ZONE 53, EA VI CASE
 - 2 MANIPULATE WITH TOOLS
53 ZONE 53, EA VI CASE
- 19 INST EA 3 LOUV ASSY
 - 1 MANIPULATE BY HAND
50 ZONE 50, EA III CASE
 - 2 MANIPULATE WITH TOOLS
50 ZONE 50, EA III CASE
- 20 INST EA 5 LOUV ASSY
 - 1 MANIPULATE BY HAND
52 ZONE 52, EA V CASE
 - 2 MANIPULATE WITH TOOLS
52 ZONE 52, EA V CASE
- 18 MECHANICAL ASSEMBLY/TEST
 - 1 INSTALL EA 6 CLAMPS
 - 1 MANIPULATE BY HAND
53 ZONE 53, EA VI CASE
 - 2 INSTALL EA 5 CLAMPS
 - 1 MANIPULATE BY HAND
52 ZONE 52, EA V CASE
 - 3 INSTALL EA 3 CLAMPS
 - 1 MANIPULATE BY HAND
50 ZONE 50, EA III CASE
 - 4 REM CASE 8 FROM S/C
 - 2 MANIPULATE WITH TOOLS
55 ZONE 55, EA VIII CASE
 - 1 MANIPULATE BY HAND
55 ZONE 55, EA VIII CASE
 - 5 INST BATTERY IN CASE 8
 - 1 MANIPULATE BY HAND
55 ZONE 55, EA VIII CASE
 - 2 MANIPULATE WITH TOOLS
55 ZONE 55, EA VIII CASE
 - 6 REM JET VANE ACTUATORS
 - 2 MANIPULATE WITH TOOLS
92 JET VANE ACTUATORS
 - 1 MANIPULATE BY HAND
92 JET VANE ACTUATORS

APPENDIX 2 (Continued)

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- 7 REPLACE 10 SWUIBS
 - 2 MANIPULATE WITH TOOLS
- 8 INSTALL PIPS
 - 1 MANIPULATE BY HAND
 - 2 ZONE 2, BAY 2
 - 2 MANIPULATE WITH TOOLS
 - 2 ZONE 2, BAY 2
- 9 REM 4A7 S PANEL/TRAILER
 - 2 MANIPULATE WITH TOOLS
 - 20 ZONE 20, SOLAR PANEL 7
 - 1 MANIPULATE BY HAND
 - 20 ZONE 20, SOLAR PANEL 7
- 10 INST 9W38 HARN ON PANEL
 - 1 MANIPULATE BY HAND
 - 20 ZONE 20, SOLAR PANEL 7
 - 2 MANIPULATE WITH TOOLS
 - 20 ZONE 20, SOLAR PANEL 7
- 11 REM 4A5 S PANEL/TRAILER
 - 2 MANIPULATE WITH TOOLS
 - 19 ZONE 19, SOLAR PANEL 5
 - 1 MANIPULATE BY HAND
 - 19 ZONE 19, SOLAR PANEL 5
- 12 INST 9W38 HARN ON PANEL
 - 1 MANIPULATE BY HAND
 - 19 ZONE 19, SOLAR PANEL 5
 - 2 MANIPULATE WITH TOOLS
 - 19 ZONE 19, SOLAR PANEL 5
- 13 REM 4A3 S PANEL/TRAILER
 - 2 MANIPULATE WITH TOOLS
 - 18 ZONE 18, SOLAR PANEL 3
 - 1 MANIPULATE BY HAND
 - 18 ZONE 18, SOLAR PANEL 3
- 14 INST 9W38 HARN ON PANEL
 - 1 MANIPULATE BY HAND
 - 18 ZONE 18, SOLAR PANEL 3
 - 2 MANIPULATE WITH TOOLS
 - 18 ZONE 18, SOLAR PANEL 3
- 15 INST BOOST DAMP/4A7 PAN
 - 1 MANIPULATE BY HAND
 - 20 ZONE 20, SOLAR PANEL 7
 - 2 MANIPULATE WITH TOOLS
 - 20 ZONE 20, SOLAR PANEL 7
- 16 INST BOOST DAMP/4A5 PAN
 - 1 MANIPULATE BY HAND
 - 19 ZONE 19, SOLAR PANEL 5
 - 2 MANIPULATE WITH TOOLS
 - 19 ZONE 19, SOLAR PANEL 5
- 17 INST BOOST DAMP/4A3 PAN
 - 1 MANIPULATE BY HAND
 - 18 ZONE 18, SOLAR PANEL 3
 - 2 MANIPULATE WITH TOOLS
 - 18 ZONE 18, SOLAR PANEL 3
- 18 INST 4A7 PAN CAB CLAMPS
 - 2 MANIPULATE WITH TOOLS
 - 20 ZONE 20, SOLAR PANEL 7
- 19 INST 4A5 PAN CAB CLAMPS
 - 2 MANIPULATE WITH TOOLS
 - 19 ZONE 19, SOLAR PANEL 5
- 20 INST 4A3 PAN CAB CLAMPS
 - 2 MANIPULATE WITH TOOLS
 - 18 ZONE 18, SOLAR PANEL 3
- 19 MECHANICAL ASSEMBLY/TEST

- 1 INST BAY 7 SOLAR PANEL
 - 1 MANIPULATE BY HAND
20 ZONE 20, SOLAR PANEL 7
 - 2 MANIPULATE WITH TOOLS
20 ZONE 20, SOLAR PANEL 7
- 2 SECURE GAS SYSTEM LINES
 - 1 MANIPULATE BY HAND
24 ZONE 24, PANEL 7 SPAR
 - 2 MANIPULATE WITH TOOLS
24 ZONE 24, PANEL 7 SPAR
- 3 INSTALL DFR CABLES ON SC
 - 1 MANIPULATE BY HAND
22 ZONE 22, PANEL 3 SPAR
 - 2 MANIPULATE WITH TOOLS
22 ZONE 22, PANEL 3 SPAR
- 4 REM 4A1 S PANEL/TRAILER
 - 2 MANIPULATE WITH TOOLS
17 ZONE 17, SOLAR PANEL 1
 - 1 MANIPULATE BY HAND
17 ZONE 17, SOLAR PANEL 1
- 5 INST 9W38 HARN ON PANEL
 - 1 MANIPULATE BY HAND
17 ZONE 17, SOLAR PANEL 1
 - 2 MANIPULATE WITH TOOLS
17 ZONE 17, SOLAR PANEL 1
- 6 INST 50MC DFR ANT ON PAN
 - 1 MANIPULATE BY HAND
21 ZONE 21, PANEL 1 SPAR
 - 2 MANIPULATE WITH TOOLS
21 ZONE 21, PANEL 1 SPAR
- 7 INST BOOST DAMP/4A1 PAN
 - 1 MANIPULATE BY HAND
21 ZONE 21, PANEL 1 SPAR
 - 2 MANIPULATE WITH TOOLS
21 ZONE 21, PANEL 1 SPAR
- 8 REM UV PHOTOMETER
 - 2 MANIPULATE WITH TOOLS
108 UV PHOTOMETER
 - 1 MANIPULATE BY HAND
108 UV PHOTOMETER
- 9 INST BAY 3 SOLAR PANEL
 - 1 MANIPULATE BY HAND
18 ZONE 18, SOLAR PANEL 3
 - 2 MANIPULATE WITH TOOLS
18 ZONE 18, SOLAR PANEL 3
- 10 SECURE GAS SYSTEM LINES
 - 1 MANIPULATE BY HAND
22 ZONE 22, PANEL 3 SPAR
- 11 INST UV PHOTOMETER
 - 1 MANIPULATE BY HAND
2 ZONE 2, BAY 2
 - 2 MANIPULATE WITH TOOLS
2 ZONE 2, BAY 2
- 12 INST BAY 1 SOLAR PANEL
 - 1 MANIPULATE BY HAND
17 ZONE 17, SOLAR PANEL 1
 - 2 MANIPULATE WITH TOOLS
17 ZONE 17, SOLAR PANEL 1
- 13 SECURE GAS SYSTEM LINES
 - 1 MANIPULATE BY HAND
21 ZONE 21, PANEL 1 SPAR
 - 2 MANIPULATE WITH TOOLS

- 21 ZONE 21, PANEL 1 SPAR
- 14 INST 9W15 HARN
 - 1 MANIPULATE BY HAND
 - 21 ZONE 21, PANEL 1 SPAR
 - 2 MANIPULATE WITH TOOLS
 - 21 ZONE 21, PANEL 1 SPAR
- 15 INST 9W16 HARN
 - 1 MANIPULATE BY HAND
 - 21 ZONE 21, PANEL 1 SPAR
 - 2 MANIPULATE WITH TOOLS
 - 21 ZONE 21, PANEL 1 SPAR
- 16 INST BAY 2 SHEAR PLATE
 - 1 MANIPULATE BY HAND
 - 2 ZONE 2, BAY 2
 - 2 MANIPULATE WITH TOOLS
 - 2 ZONE 2, BAY 2
- 17 REM CANOPUS SENSOR
 - 2 MANIPULATE WITH TOOLS
 - 112 CANOPUS SENSOR
 - 1 MANIPULATE BY HAND
 - 112 CANOPUS SENSOR
- 18 INSTALL 2W45 CABLE
 - 1 MANIPULATE BY HAND
 - 1 ZONE 1, BAY 1
 - 2 MANIPULATE WITH TOOLS
 - 1 ZONE 1, BAY 1
- 19 INSTALL 2W46 CABLE
 - 1 MANIPULATE BY HAND
 - 2 ZONE 2, BAY 2
 - 2 MANIPULATE WITH TOOLS
 - 2 ZONE 2, BAY 2
- 20 REM LIGHT SOURCES
 - 2 MANIPULATE WITH TOOLS
 - 2 ZONE 2, BAY 2
 - 1 MANIPULATE BY HAND
 - 2 ZONE 2, BAY 2
- 20 MECHANICAL ASSEMBLY/TEST
 - 1 REM UV LIGHT SOURCE
 - 1 MANIPULATE BY HAND
 - 2 ZONE 2, BAY 2
 - 2 REM LOUVER COVERS
 - 2 MANIPULATE WITH TOOLS
 - 3 ZONE 3, BAY 3
 - 1 MANIPULATE BY HAND
 - 3 ZONE 3, BAY 3
 - 3 REM PLASMA PROBE COVER
 - 1 MANIPULATE BY HAND
 - 11 ZONE 11, BAY 3 INWARD
 - 4 INSTALL 24 ATTACH ANGLES
 - 1 MANIPULATE BY HAND
 - 11 ZONE 11, BAY 3 INWARD
 - 2 MANIPULATE WITH TOOLS
 - 11 ZONE 11, BAY 3 INWARD
 - 5 INST CANOPUS SENSOR
 - 1 MANIPULATE BY HAND
 - 8 ZONE 8, BAY 8
 - 2 MANIPULATE WITH TOOLS
 - 8 ZONE 8, BAY 8
 - 6 INST TRD
 - 1 MANIPULATE BY HAND
 - 4 ZONE 4, BAY 4
 - 2 MANIPULATE WITH TOOLS

- 4 ZONE 4, BAY 4
- 7 INSTALL 12 ATTACH ANGLES
 - 1 MANIPULATE BY HAND
 - 4 ZONE 4, BAY 4
 - 2 MANIPULATE WITH TOOLS
 - 4 ZONE 4, BAY 4
- 8 INSTALL UMB SHIELD
 - 1 MANIPULATE BY HAND
 - 2 ZONE 2, BAY 2
 - 2 MANIPULATE WITH TOOLS
 - 2 ZONE 2, BAY 2
- 9 REM U-RING SCREWS
 - 2 MANIPULATE WITH TOOLS
- 10 ATTACH S/C LIFT FIXTURE
 - 1 MANIPULATE BY HAND
 - 2 MANIPULATE WITH TOOLS
- 11 MOVE S/C TO WEST POSIT
 - 16 MANEUVER SPACECRAFT
- 12 REM LIFT FIXTURE
 - 2 MANIPULATE WITH TOOLS
 - 1 MANIPULATE BY HAND
- 13 CONN DFR COAX CABLE 4A1
 - 11 MATE (DEMATE) CONNECTORS
 - 21 ZONE 21, PANEL 1 SPAR
- 14 CONN DFR CIAX CABLE 4A3
 - 11 MATE (DEMATE) CONNECTORS
 - 22 ZONE 22, PANEL 3 SPAR
- 15 DEPLOY/LEVEL 5 PANEL 1
 - 1 MANIPULATE BY HAND
 - 21 ZONE 21, PANEL 1 SPAR
- 16 DEPLOY/LEVEL 5 PANEL 3
 - 1 MANIPULATE BY HAND
 - 22 ZONE 22, PANEL 3 SPAR
- 17 DEPLOY/LEVEL 5 PANEL 5
 - 1 MANIPULATE BY HAND
 - 23 ZONE 23, PANEL 5 SPAR
- 18 DEPLOY/LEVEL 5 PANEL 7
 - 1 MANIPULATE BY HAND
 - 24 ZONE 24, PANEL 7 SPAR
- 19 MATE 4 SQUIB HARN CONN
 - 11 MATE (DEMATE) CONNECTORS
 - 21 ZONE 21, PANEL 1 SPAR
 - 22 ZONE 22, PANEL 3 SPAR
 - 23 ZONE 23, PANEL 5 SPAR
 - 24 ZONE 24, PANEL 7 SPAR
- 20 INST TEMP CONTROL REF
 - 1 MANIPULATE BY HAND
 - 21 ZONE 21, PANEL 1 SPAR
 - 2 MANIPULATE WITH TOOLS
 - 21 ZONE 21, PANEL 1 SPAR
- 21 MECHANICAL ASSEMBLY/TEST
 - 1 INSTALL COAX CABLE
 - 1 MANIPULATE BY HAND
 - 21 ZONE 21, PANEL 1 SPAR
 - 2 MANIPULATE WITH TOOLS
 - 21 ZONE 21, PANEL 1 SPAR
 - 2 CALIBRATION TEST
 - 9 VISUAL INSPECTION
 - 3 INSTALL S/C LIFTING EARS
 - 1 MANIPULATE BY HAND
 - 46 ZONE 46, OCTAGON TOP
 - 2 MANIPULATE WITH TOOLS

- 46 ZONE 46, OCTAGON TOP
- 4 TAPE CABLE TROUGH SHIELD
 - 1 MANIPULATE BY HAND
 - 27 ZONE 27, TOP RING TRAY
- 5 INSTALL UPPER SHIELD
 - 1 MANIPULATE BY HAND
 - 27 ZONE 27, TOP RING TRAY
 - 2 MANIPULATE WITH TOOLS
 - 27 ZONE 27, TOP RING TRAY
- 6 ELEVATE S/C
 - 16 MANEUVER SPACECRAFT
- 7 INSTALL SUN SHADE
 - 1 MANIPULATE BY HAND
 - 47 ZONE 47, OCTAGON BOTTOM
 - 2 MANIPULATE WITH TOOLS
 - 47 ZONE 47, OCTAGON BOTTOM
- 8 EMI TEST
 - 9 VISUAL INSPECTION
- 9 INSTALL ANT PINPULLER
 - 1 MANIPULATE BY HAND
 - 21 ZONE 21, PANEL 1 SPAR
- 10 REM TROUGH SHIELD
 - 2 MANIPULATE WITH TOOLS
 - 27 ZONE 27, TOP RING TRAY
 - 1 MANIPULATE BY HAND
 - 27 ZONE 27, TOP RING TRAY
- 11 REM UPPER SHIELD
 - 2 MANIPULATE WITH TOOLS
 - 71 UPPER SHIELD
 - 1 MANIPULATE BY HAND
 - 71 UPPER SHIELD
- 12 SECURE 4 SOLAR PANELS
 - 2 MANIPULATE WITH TOOLS
 - 21 ZONE 21, PANEL 1 SPAR
 - 22 ZONE 22, PANEL 3 SPAR
 - 23 ZONE 23, PANEL 5 SPAR
 - 24 ZONE 24, PANEL 7 SPAR
- 13 INSTALL LOUVER COVERS
 - 1 MANIPULATE BY HAND
 - 49 ZONE 49, EA I CASE
 - 2 MANIPULATE WITH TOOLS
 - 49 ZONE 49, EA I CASE
- 14 MOVE LF TENT OVER S/C
 - 1 MANIPULATE BY HAND
- 15 REM 5 THERMAL SHIELDS
 - 1 MANIPULATE BY HAND
 - 75 EAS SHEAR PLATE
 - 2 MANIPULATE WITH TOOLS
 - 7 ZONE 7, BAY 7
- 16 REM 5 COAX CABLES
 - 2 MANIPULATE WITH TOOLS
 - 76 5 COAX CABLES
 - 1 MANIPULATE BY HAND
 - 76 5 COAX CABLES
- 17 REM EA 3 CASE FROM S/C
 - 2 MANIPULATE WITH TOOLS
 - 50 ZONE 50, EA III CASE
 - 1 MANIPULATE BY HAND
 - 50 ZONE 50, EA III CASE
- 18 INST EA 3 CASE IN FRAME
 - 1 MANIPULATE BY HAND
 - 50 ZONE 50, EA III CASE

- 2 MANIPULATE WITH TOOLS
50 ZONE 50, EA III CASE
- 19 OPEN EA 1 CASE
 - 2 MANIPULATE WITH TOOLS
49 ZONE 49, EA I CASE
- 20 REM POWER MODULE 4A18
 - 1 MANIPULATE BY HAND
49 ZONE 49, EA I CASE
 - 2 MANIPULATE WITH TOOLS
49 ZONE 49, EA I CASE
- 22 MECHANICAL ASSEMBLY/TEST
 - 1 INST NEW POWER MOD 4A18
 - 1 MANIPULATE BY HAND
49 ZONE 49, EA I CASE
 - 2 MANIPULATE WITH TOOLS
49 ZONE 49, EA I CASE
 - 2 CLOSE EA 1 CASE
 - 1 MANIPULATE BY HAND
49 ZONE 49, EA I CASE
 - 3 REMOVE EA 8 CASE
 - 2 MANIPULATE WITH TOOLS
55 ZONE 55, EA VIII CASE
 - 1 MANIPULATE BY HAND
55 ZONE 55, EA VIII CASE
 - 4 REMOVE BATTERY
 - 2 MANIPULATE WITH TOOLS
79 BATTERY
 - 1 MANIPULATE BY HAND
79 BATTERY
 - 5 REMOVE SENSOR 7LS8
 - 2 MANIPULATE WITH TOOLS
80 PLANET SENSOR
 - 1 MANIPULATE BY HAND
80 PLANET SENSOR
 - 6 INSTALL 2 ANGLE SHIELDS
 - 1 MANIPULATE BY HAND
3 ZONE 3, BAY 3
 - 2 MANIPULATE WITH TOOLS
3 ZONE 3, BAY 3
 - 7 DEMATE EA 3 CONN
 - 11 MATE (DEMATE) CONNECTORS
32 C3 K5-HSEN HSEI 1SS\$SQA 3E-CY UR3
 - 8 EA 3 BENCH TEST
 - 9 VISUAL INSPECTION
 - 9 INSTALL BATTERY
 - 1 MANIPULATE BY HAND
55 ZONE 55, EA VIII CASE
 - 2 MANIPULATE WITH TOOLS
55 ZONE 55, EA VIII CASE
 - 10 MATE EA 3 CONN
 - 11 MATE (DEMATE) CONNECTORS
32 C3 K5-HSEN HSEI 1SS\$SQA 3E-CY UR3
 - 11 INSTALL EA 8 CASE
 - 1 MANIPULATE BY HAND
55 ZONE 55, EA VIII CASE
 - 2 MANIPULATE WITH TOOLS
55 ZONE 55, EA VIII CASE
 - 12 REM EA 3 CASE/FRAME
 - 2 MANIPULATE WITH TOOLS
50 ZONE 50, EA III CASE
 - 1 MANIPULATE BY HAND
50 ZONE 50, EA III CASE

- 13 TENSION U-RING CABLE
 - 2 MANIPULATE WITH TOOLS
- 14 PRESSURIZE ACGS
 - 2 MANIPULATE WITH TOOLS
- 15 REMOVE PLASMA PROBE
 - 1 MANIPULATE BY HAND
 - 11 ZONE 11, BAY 3 INWARD
- 16 SOLDER XDUCER LEAD
 - 5 MOVE IN HANDLING FRAME
 - 11 ZONE 11, BAY 3 INWARD
- 17 INSTALL PLASMA PROBE
 - 1 MANIPULATE BY HAND
 - 81 PLASMA PROBE
- 18 INSTALL THERMAL SHIELD
 - 1 MANIPULATE BY HAND
 - 82 THERMAL SHIELD
 - 2 MANIPULATE WITH TOOLS
 - 82 THERMAL SHIELD
- 19 REM S/C FROM L-L POSIT
 - 16 MANEUVER SPACECRAFT
- 20 INSTALL S/C ON TRIPOD
 - 16 MANEUVER SPACECRAFT
- 23 MECHANICAL ASSEMBLY/TEST
 - 1 INSTALL 4 SOL PANEL RODS
 - 1 MANIPULATE BY HAND
 - 21 ZONE 21, PANEL 1 SPAR
 - 22 ZONE 22, PANEL 3 SPAR
 - 23 ZONE 23, PANEL 5 SPAR
 - 24 ZONE 24, PANEL 7 SPAR
 - 2 MANIPULATE WITH TOOLS
 - 21 ZONE 21, PANEL 1 SPAR
 - 22 ZONE 22, PANEL 3 SPAR
 - 23 ZONE 23, PANEL 5 SPAR
 - 24 ZONE 24, PANEL 7 SPAR
 - 2 INSTALL LANYARD
 - 1 MANIPULATE BY HAND
 - 47 ZONE 47, OCTAGON BOTTOM
 - 2 MANIPULATE WITH TOOLS
 - 47 ZONE 47, OCTAGON BOTTOM
 - 3 REPLACE BAD BRACKET
 - 2 MANIPULATE WITH TOOLS
 - 3 ZONE 3, BAY 3
 - 1 MANIPULATE BY HAND
 - 3 ZONE 3, BAY 3
 - 4 INSTALL BAY 4 SHIELD
 - 1 MANIPULATE BY HAND
 - 4 ZONE 4, BAY 4
 - 2 MANIPULATE WITH TOOLS
 - 4 ZONE 4, BAY 4
 - 5 INSERT 2 TEST CABLES
 - 1 MANIPULATE BY HAND
 - 2 MANIPULATE WITH TOOLS
 - 6 INST CABLE TROUGH SHIELD
 - 1 MANIPULATE BY HAND
 - 30 ZONE 30, UPPER RING HARN
 - 2 MANIPULATE WITH TOOLS
 - 30 ZONE 30, UPPER RING HARN
 - 7 TIE CABLES
 - 17 SECURED IN TENT
 - 30 ZONE 30, UPPER RING HARN
 - 8 INSTALL UPPER SHIELD
 - 1 MANIPULATE BY HAND

- 46 ZONE 46, OCTAGON TOP
- 2 MANIPULATE WITH TOOLS
- 46 ZONE 46, OCTAGON TOP
- 9 REM LOUVER COVERS
- 2 MANIPULATE WITH TOOLS
- 49 ZONE 49, EA I CASE
- 1 MANIPULATE BY HAND
- 49 ZONE 49, EA I CASE
- 10 ELEVATE S/C
- 16 MANEUVER SPACECRAFT
- 11 DFR COMPATIBILITY TESTS
- 9 VISUAL INSPECTION
- 12 REMOVE UPPER SHIELD
- 2 MANIPULATE WITH TOOLS
- 86 UPPER SHIELD
- 1 MANIPULATE BY HAND
- 86 UPPER SHIELD
- 13 REMOVE OSE CABLES
- 2 MANIPULATE WITH TOOLS
- 14 INSTL CONNECTORS (2)
- 1 MANIPULATE BY HAND
- 31 ZONE 31, LOWER RING HARN
- 15 UNSCREW COAX.
- 2 MANIPULATE WITH TOOLS
- 31 ZONE 31, LOWER RING HARN
- 16 HI-GAIN TESTS
- 9 VISUAL INSPECTION
- 17 REMOVE CONNECTORS
- 2 MANIPULATE WITH TOOLS
- 31 ZONE 31, LOWER RING HARN
- 18 INSTL TROUGH SHIELD
- 1 MANIPULATE BY HAND
- 27 ZONE 27, TOP RING TRAY
- 19 INSTL UPPER SHIELD
- 1 MANIPULATE BY HAND
- 46 ZONE 46, OCTAGON TOP
- 20 TEST ANTENNA
- 9 VISUAL INSPECTION
- 24 MECHANICAL ASSEMBLY/TEST
- 1 REMOVE UPPER SHIELD
- 2 MANIPULATE WITH TOOLS
- 86 UPPER SHIELD
- 2 REMOVE TROUGH SHIELD
- 2 MANIPULATE WITH TOOLS
- 27 ZONE 27, TOP RING TRAY
- 3 REMOVE OSE CABLES
- 1 MANIPULATE BY HAND
- 2 MANIPULATE WITH TOOLS
- 4 MATE COAX. (2#46)
- 11 MATE (DEMATE) CONNECTORS
- 31 ZONE 31, LOWER RING HARN
- 5 INSTL H1-6 ANT PIN-PULLR
- 1 MANIPULATE BY HAND
- 26 ZONE 26, LO-GAIN ANTENNA
- 2 MANIPULATE WITH TOOLS
- 26 ZONE 26, LO-GAIN ANTENNA
- 6 DFR TEST
- 9 VISUAL INSPECTION
- 7 INSTL U-RING
- 1 MANIPULATE BY HAND
- 2 MANIPULATE WITH TOOLS
- 8 INSTL LOUVER COVERS

- 1 MANIPULATE BY HAND
 - 46 ZONE 46, OCTAGON TOP
- 2 MANIPULATE WITH TOOLS
 - 46 ZONE 46, OCTAGON TOP
- 9 SECURE SOLAR PANELS(4)
 - 2 MANIPULATE WITH TOOLS
 - 21 ZONE 21, PANEL 1 SPAR
 - 22 ZONE 22, PANEL 3 SPAR
 - 23 ZONE 23, PANEL 5 SPAR
 - 24 ZONE 24, PANEL 7 SPAR
- 10 MOVE S/C
 - 1 MANIPULATE BY HAND
- 11 REMOVE LOWER SHIELD
 - 2 MANIPULATE WITH TOOLS
 - 90 LOWER SHIELD
 - 1 MANIPULATE BY HAND
 - 90 LOWER SHIELD
- 12 REMOVE GROUND WIRE(EA3)
 - 2 MANIPULATE WITH TOOLS
 - 50 ZONE 50, EA III CASE
- 13 REMOVE ANGLE SHIELDS(2)
 - 2 MANIPULATE WITH TOOLS
 - 50 ZONE 50, EA III CASE
- 14 REMOVE CONNECTORS(6)
 - 2 MANIPULATE WITH TOOLS
 - 32 C3 KS-HSEN HSEI)SSSSQA 3E-CY UR3
 - 1 MANIPULATE BY HAND
 - 32 C3 KS-HSEN HSEI)SSSSQA 3E-CY UR3
- 15 REMOVE 2 MODULES(DAS)
 - 2 MANIPULATE WITH TOOLS
 - 91 DAS MODULE
 - 92 DAS MODULE
 - 1 MANIPULATE BY HAND
 - 91 DAS MODULE
 - 92 DAS MODULE
- 16 REMOVE TEMP CNTRL REF
 - 2 MANIPULATE WITH TOOLS
 - 93 TEMP CONTROL REF
- 17 REMOVE SOLAR PANEL(4A7)
 - 1 MANIPULATE BY HAND
 - 20 ZONE 20, SOLAR PANEL 7
 - 2 MANIPULATE WITH TOOLS
 - 20 ZONE 20, SOLAR PANEL 7
- 18 REMOVE PYRO HARNESS(9W38)
 - 2 MANIPULATE WITH TOOLS
 - 94 PYRO HARNESS
 - 1 MANIPULATE BY HAND
 - 94 PYRO HARNESS
- 19 INSTL PYRO HARNESS (9W38)
 - 1 MANIPULATE BY HAND
 - 24 ZONE 24, PANEL 7 SPAR
 - 2 MANIPULATE WITH TOOLS
 - 24 ZONE 24, PANEL 7 SPAR
- 20 INSTL SOLAR PANEL(4A7)
 - 1 MANIPULATE BY HAND
 - 20 ZONE 20, SOLAR PANEL 7
 - 2 MANIPULATE WITH TOOLS
 - 20 ZONE 20, SOLAR PANEL 7
- 25 MECHANICAL ASSEMBLY/TEST
 - 1 INSTL SHIELD
 - 1 MANIPULATE BY HAND
 - 47 ZONE 47, OCTAGON BOTTOM

- 2 MANIPULATE WITH TOOLS
 - 47 ZONE 47, OCTAGON BOTTOM
- 2 INSTL BOOST DAMPER
 - 1 MANIPULATE BY HAND
 - 20 ZONE 20, SOLAR PANEL 7
 - 2 MANIPULATE WITH TOOLS
 - 20 ZONE 20, SOLAR PANEL 7
- 3 SOLDER MOTION SENSORS(4)
 - 8 SOLDER (SUNSOLDER)
 - 98 MOTION SENSOR
 - 99 MOTION SENSOR
 - 100 MOTION SENSOR
 - 101 MOTION SENSOR
- 4 REMOVE ATTACH ANGLE
 - 2 MANIPULATE WITH TOOLS
 - 1 ZONE 1, BAY 1
- 5 REMOVE SHEAR PLATE
 - 2 MANIPULATE WITH TOOLS
 - 96 SHEAR PLATE
 - 1 MANIPULATE BY HAND
 - 96 SHEAR PLATE
- 6 REMOVE PIPS
 - 1 MANIPULATE BY HAND
 - 97 PIPS
 - 2 MANIPULATE WITH TOOLS
 - 97 PIPS
- 7 INSTL MOTION SENSOR(4)
 - 1 MANIPULATE BY HAND
 - 2 ZONE 2, BAY 2
 - 4 ZONE 4, BAY 4
 - 6 ZONE 6, BAY 6
 - 8 ZONE 8, BAY 8
 - 2 MANIPULATE WITH TOOLS
 - 2 ZONE 2, BAY 2
 - 4 ZONE 4, BAY 4
 - 6 ZONE 6, BAY 6
 - 8 ZONE 8, BAY 8
- 8 INSTL DEPLOY SPRINGS
 - 1 MANIPULATE BY HAND
 - 46 ZONE 46, OCTAGON TOP
 - 2 MANIPULATE WITH TOOLS
 - 46 ZONE 46, OCTAGON TOP
- 9 SECURE S/C(TENT)FEB18-20
 - 17 SECURED IN TENT
- 26 MECHANICAL ASSEMBLY/TEST
 - 1 INSTL 2 MODULES(20A2/4)
 - 1 MANIPULATE BY HAND
 - 50 ZONE 50, EA III CASE
 - 2 MANIPULATE WITH TOOLS
 - 50 ZONE 50, EA III CASE
 - 2 SOLDER MOTION SENSOR(8MS)
 - 8 SOLDER (SUNSOLDER)
 - 2 ZONE 2, BAY 2
 - 4 ZONE 4, BAY 4
 - 6 ZONE 6, BAY 6
 - 8 ZONE 8, BAY 8
 - 3 INSTL CONNECTOR
 - 1 MANIPULATE BY HAND
 - 32 C3 KS-HSEN HSEI)SSSSQA 3E-CY UR3
 - 2 MANIPULATE WITH TOOLS
 - 32 C3 KS-HSEN HSEI)SSSSQA 3E-CY UR3
 - 4 INSTL CRUISE DAMPERS(4)

- 1 MANIPULATE BY HAND
 - 49 ZONE 49, EA I CASE
 - 50 ZONE 50, EA III CASE
 - 52 ZONE 52, EA V CASE
 - 54 ZONE 54, EA VII CASE
- 2 MANIPULATE WITH TOOLS
 - 49 ZONE 49, EA I CASE
 - 50 ZONE 50, EA III CASE
 - 52 ZONE 52, EA V CASE
 - 54 ZONE 54, EA VII CASE
- 5 INSTL DFR COAX CABLES(4)
 - 1 MANIPULATE BY HAND
 - 21 ZONE 21, PANEL 1 SPAR
 - 2 MANIPULATE WITH TOOLS
 - 21 ZONE 21, PANEL 1 SPAR
- 6 INSTL LOWER SHIELD
 - 1 MANIPULATE BY HAND
 - 47 ZONE 47, OCTAGON BOTTOM
 - 2 MANIPULATE WITH TOOLS
 - 47 ZONE 47, OCTAGON BOTTOM
- 7 REMOVE OOUVER COVER
 - 1 MANIPULATE BY HAND
 - 113 BOTTOM SHIELD
- 8 REMOVE CASE 5+CRUIS DAMP
 - 2 MANIPULATE WITH TOOLS
 - 115 CRUISE DAMPER (EAS)
 - 1 MANIPULATE BY HAND
 - 115 CRUISE DAMPER (EAS)
- 9 INSTL CASE 5 IN HNDL FIX
 - 1 MANIPULATE BY HAND
 - 52 ZONE 52, EA V CASE
- 10 INSTL UV PHOTOMETER(34A1)
 - 1 MANIPULATE BY HAND
 - 2 ZONE 2, BAY 2
 - 2 MANIPULATE WITH TOOLS
 - 2 ZONE 2, BAY 2
- 11 REMOVE 6 MODULES(CASE 5)
 - 2 MANIPULATE WITH TOOLS
 - 61 MODULE EAS
 - 62 MODULE EAS
 - 63 MODULE EAS
 - 64 MODULE EAS
 - 65 MODULE EAS
 - 66 MODULE EAS
 - 1 MANIPULATE BY HAND
 - 61 MODULE EAS
 - 62 MODULE EAS
 - 63 MODULE EAS
 - 64 MODULE EAS
 - 65 MODULE EAS
 - 66 MODULE EAS
- 12 SPECIAL TEST (CASE 5)
 - 9 VISUAL INSPECTION
 - 52 ZONE 52, EA V CASE
- 13 REMOVE CONNECTORS(3)
 - 2 MANIPULATE WITH TOOLS
 - 34 QJWYH4A CA-GH OSH(H C-QSSSN 8UU1
 - 1 MANIPULATE BY HAND
 - 34 QJWYH4A CA-GH OSH(H C-QSSSN 8UU1
- 14 DEMATE TEMP XDUCE CABLE
 - 11 MATE (DEMATE) CONNECTORS
 - 34 QJWYH4A CA-GH OSH(H C-QSSSN 8UU1

- 15 SECURE S/C(TENT) FEB 20
- 17 SECURED IN TENT
- 27 MECHANIKER ASSEMBLY/TEST
 - 1 INSTL TRAP RAD DET(25A1)
 - 1 MANIPULATE BY HAND
 - 4 ZONE 4, BAY 4
 - 2 MANIPULATE WITH TOOLS
 - 4 ZONE 4, BAY 4
 - 2 INSTL HARNESS(9W13/17)
 - 1 MANIPULATE BY HAND
 - 33 HSEN A(H MSHA ASS-.SS6XB(H CS(IP D-P
 - 2 MANIPULATE WITH TOOLS
 - 33 HSEN A(H MSHA ASS-.SS6XB(H CS(IP D-P
 - 3 INSTL 6 MODULES(EA 5)
 - 1 MANIPULATE BY HAND
 - 52 ZONE 52, EA V CASE
 - 2 MANIPULATE WITH TOOLS
 - 52 ZONE 52, EA V CASE
 - 4 REM 5 UPPER ANGLE SHIELD
 - 2 MANIPULATE WITH TOOLS
 - 70 SUPPER ANGLE SHIELD
 - 1 MANIPULATE BY HAND
 - 70 SUPPER ANGLE SHIELD
 - 5 TORQUE CONNECTOR SCREWS
 - 2 MANIPULATE WITH TOOLS
 - 5 ZONE 5, BAY 5
 - 6 INST TRD THERMAL SHIELD
 - 1 MANIPULATE BY HAND
 - 4 ZONE 4, BAY 4
 - 2 MANIPULATE WITH TOOLS
 - 4 ZONE 4, BAY 4
 - 7 INST OMNI COAX
 - 1 MANIPULATE BY HAND
 - 26 ZONE 26, LO-GAIN ANTENNA
 - 2 MANIPULATE WITH TOOLS
 - 26 ZONE 26, LO-GAIN ANTENNA
 - 8 INST CASE 5
 - 1 MANIPULATE BY HAND
 - 52 ZONE 52, EA V CASE
 - 2 MANIPULATE WITH TOOLS
 - 52 ZONE 52, EA V CASE
 - 9 INST 2 CHANNELS
 - 1 MANIPULATE BY HAND
 - 46 ZONE 46, OCTAGON TOP
 - 2 MANIPULATE WITH TOOLS
 - 46 ZONE 46, OCTAGON TOP
 - 10 WRAP PEDESTAL SHIELD
 - 1 MANIPULATE BY HAND
 - 6 ZONE 6, BAY 6
 - 11 INST LOWER COVER(EA5)
 - 1 MANIPULATE BY HAND
 - 51 ZONE 51, EA IV CASE
 - 2 MANIPULATE WITH TOOLS
 - 51 ZONE 51, EA IV CASE
 - 12 INST CHUISE DAMPER(EA5)
 - 1 MANIPULATE BY HAND
 - 52 ZONE 52, EA V CASE
 - 13 WRAP UPPER SHIELD
 - 1 MANIPULATE BY HAND
 - 34 QJWYM4A CA-GH OSH(H C-QSSN BUUI
 - 14 INST 6 UPPER CHANNELS
 - 1 MANIPULATE BY HAND

- 46 ZONE 46, OCTAGON TOP
- 2 MANIPULATE WITH TOOLS
- 46 ZONE 46, OCTAGON TOP
- 15 INST 4 ANGLES
- 1 MANIPULATE BY HAND
- 46 ZONE 46, OCTAGON TOP
- 2 MANIPULATE WITH TOOLS
- 46 ZONE 46, OCTAGON TOP
- 16 INST 5 SHIELDS
- 1 MANIPULATE BY HAND
- 46 ZONE 46, OCTAGON TOP
- 2 MANIPULATE WITH TOOLS
- 46 ZONE 46, OCTAGON TOP
- 17 INST 5 LOWER CHANNELS
- 1 MANIPULATE BY HAND
- 47 ZONE 47, OCTAGON BOTTOM
- 2 MANIPULATE WITH TOOLS
- 47 ZONE 47, OCTAGON BOTTOM
- 18 LIFT S/C
- 3 MOVE W/CRANE
- 19 REMOVE BOTTOM SHIELD
- 2 MANIPULATE WITH TOOLS
- 113 BOTTOM SHIELD
- 1 MANIPULATE BY HAND
- 113 BOTTOM SHIELD
- 20 INST SUN SHADE
- 1 MANIPULATE BY HAND
- 47 ZONE 47, OCTAGON BOTTOM
- 2 MANIPULATE WITH TOOLS
- 47 ZONE 47, OCTAGON BOTTOM
- 2R MECHANIKER ASSEMBLY/TEST
- 1 DISCONNECT SHIELD
- 2 MANIPULATE WITH TOOLS
- 2 BAY 4 SHIELD
- 1 MANIPULATE BY HAND
- 61 BAY4 SHIELD
- 3 INST 6 LOUVER COVERS
- 1 MANIPULATE BY HAND
- 62 MODULE EAS
- 2 MANIPULATE WITH TOOLS
- 62 MODULE EAS
- 4 REM TRD SHIELD AND BRKT
- 1 MANIPULATE BY HAND
- 63 MODULE EAS
- 2 MANIPULATE WITH TOOLS
- 63 MODULE EAS
- 5 MOVE S/C
- 16 MANEUVER SPACECRAFT
- 6 LOWER SOLAR PANELS(4)
- 16 MANEUVER SPACECRAFT
- 21 ZONE 21, PANEL 1 SPAR
- 22 ZONE 22, PANEL 3 SPAR
- 23 ZONE 23, PANEL 5 SPAR
- 24 ZONE 24, PANEL 7 SPAR
- 7 LEVEL/SECURE SOL/PANELS
- 16 MANEUVER SPACECRAFT
- 21 ZONE 21, PANEL 1 SPAR
- 22 ZONE 22, PANEL 3 SPAR
- 23 ZONE 23, PANEL 5 SPAR
- 24 ZONE 24, PANEL 7 SPAR
- 8 WT AND C.G. MEASUREMENT
- 9 VISUAL INSPECTION

- 9 RETURN S/C TO LOW LEV PS
 - 1 MANIPULATE BY HAND
- 10 SECURE S/C(TENT)FEB 21
 - 17 SECURED IN TENT
- 29 MECHANIKER ASSEMBLY/TEST
 - 1 REM BAY 4 SHIELD
 - 1 MANIPULATE BY HAND
 - 64 BAY4 SHIELD
 - 2 INST 2 CHANNEL SHIELDS
 - 1 MANIPULATE BY HAND
 - 65 CHANNEL SHIELD
 - 66 CHANNEL SHIELD
 - 3 INST TCM LIFT BRACKETS
 - 1 MANIPULATE BY HAND
 - 46 ZONE 46, OCTAGON TOP
 - 2 MANIPULATE WITH TOOLS
 - 46 ZONE 46, OCTAGON TOP
 - 4 C.G. OF BAY 2 FRAME
 - 9 VISUAL INSPECTION
 - 2 ZONE 2, BAY 2
 - 5 SECURE RODS,SOL/P 3,5
 - 2 MANIPULATE WITH TOOLS
 - 22 ZONE 22, PANEL 3 SPAR
 - 23 ZONE 23, PANEL 5 SPAR
 - 6 SECURE 4 SPREAD BAR CBLE
 - 2 MANIPULATE WITH TOOLS
 - 46 ZONE 46, OCTAGON TOP
 - 7 LIFT S/C
 - 16 MANEUVER SPACECRAFT
 - 8 SECURE RODS,SOL/P 1,7
 - 2 MANIPULATE WITH TOOLS
 - 21 ZONE 21, PANEL 1 SPAR
 - 24 ZONE 24, PANEL 7 SPAR
 - 9 2-AXIS WT AND C.G. MEAS.
 - 9 VISUAL INSPECTION
 - 10 CLOSE SOL/P 1,7
 - 2 MANIPULATE WITH TOOLS
 - 21 ZONE 21, PANEL 1 SPAR
 - 24 ZONE 24, PANEL 7 SPAR
 - 11 LOWER S/C
 - 16 MANEUVER SPACECRAFT
 - 12 INST COVERS,SCIAND SENS
 - 1 MANIPULATE BY HAND
 - 46 ZONE 46, OCTAGON TOP
 - 2 MANIPULATE WITH TOOLS
 - 46 ZONE 46, OCTAGON TOP
 - 13 INST LOUVER COVERS(6)
 - 1 MANIPULATE BY HAND
 - 49 ZONE 49, EA I CASE
 - 2 MANIPULATE WITH TOOLS
 - 49 ZONE 49, EA I CASE
 - 14 REM LIFT BRACKETS
 - 2 MANIPULATE WITH TOOLS
 - 15 INST CRUISE DAMPER(EA5)
 - 1 MANIPULATE BY HAND
 - 52 ZONE 52, EA V CASE
 - 16 REM PLANET SENSOR(7SL8)
 - 2 MANIPULATE WITH TOOLS
 - 90 PLANET SENSOR
 - 17 REM CANOPUS SENSOR(7LS8)
 - 2 MANIPULATE WITH TOOLS
 - 91 CANOPUS SENSOR

APPENDIX 2 (Continued)

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- 18 REM SCREWS ON CASE 8
 - 2 MANIPULATE WITH TOOLS
 - 55 ZONE 55, EA VIII CASE
- 19 REM BATTERY(4A14)
 - 2 MANIPULATE WITH TOOLS
 - 92 BATTERY
 - 1 MANIPULATE BY HAND
 - 92 BATTERY
- 20 INST BATTERY(4A14)
 - 1 MANIPULATE BY HAND
 - 93 NEW BATTERY
 - 2 MANIPULATE WITH TOOLS
 - 93 NEW BATTERY
- 30 MECHANICAL ASSEMBLY/TEST
 - 1 INST ACCELEROMETER(1AC1)
 - 1 MANIPULATE BY HAND
 - 16 ZONE 16, BAY 8 INWARD
 - 2 MANIPULATE WITH TOOLS
 - 16 ZONE 16, BAY 8 INWARD
 - 2 INST CASE 8 SCREWS
 - 1 MANIPULATE BY HAND
 - 55 ZONE 55, EA VIII CASE
 - 2 MANIPULATE WITH TOOLS
 - 55 ZONE 55, EA VIII CASE
 - 3 INST CANOPUS SENSOR(7CS8)
 - 1 MANIPULATE BY HAND
 - 8 ZONE 8, BAY 8
 - 2 MANIPULATE WITH TOOLS
 - 8 ZONE 8, BAY 8
 - 4 INST CHANNEL SHIELD
 - 1 MANIPULATE BY HAND
 - 46 ZONE 46, OCTAGON TOP
 - 2 MANIPULATE WITH TOOLS
 - 46 ZONE 46, OCTAGON TOP
 - 5 INST PLANET SENSOR(7LS8)
 - 1 MANIPULATE BY HAND
 - 8 ZONE 8, BAY 8
 - 2 MANIPULATE WITH TOOLS
 - 8 ZONE 8, BAY 8
 - 6 INST UMBILICAL SHIELD
 - 1 MANIPULATE BY HAND
 - 10 ZONE 10, BAY 2 INWARD
 - 2 MANIPULATE WITH TOOLS
 - 10 ZONE 10, BAY 2 INWARD
 - 7 INST BAFFLE BOX
 - 1 MANIPULATE BY HAND
 - 2 ZONE 2, BAY 2
 - 2 MANIPULATE WITH TOOLS
 - 2 ZONE 2, BAY 2
 - 8 INST 4 LIFTING BARS
 - 1 MANIPULATE BY HAND
 - 9 INST EAGLE SHIELD
 - 2 MANIPULATE WITH TOOLS
 - 5 ZONE 5, BAY 5
 - 10 INST BAY 2 PLATE
 - 1 MANIPULATE BY HAND
 - 2 ZONE 2, BAY 2
 - 2 MANIPULATE WITH TOOLS
 - 2 ZONE 2, BAY 2
 - 11 VELCO/FIT UPPER SHIELD
 - 1 MANIPULATE BY HAND
 - 95 CHANNEL SHIELD

- 2 MANIPULATE WITH TOOLS
 - 95 CHANNEL SHIELD
- 12 MOVE S/C
 - 16 MANEUVER SPACECRAFT
- 13 MATE S/C TO ADAPTER
 - 1 MANIPULATE BY HAND
 - 2 MANIPULATE WITH TOOLS
- 14 INST CMSC SHROUD OAR S/C
 - 1 MANIPULATE BY HAND
 - 2 MANIPULATE WITH TOOLS
- 15 SECURE, PURGE S/C FEB22
 - 17 SECURED IN TENT
- 31 MECHANIKER ASSEMBLY/TEST
 - 1 PRE-COUNTDOWN, TEMP TEST
 - 17 SECURED IN TENT
 - 2 S/C PURGE (IN SHROUD) 2/23
 - 17 SECURED IN TENT
 - 3 PRE-COUNTDOWN TEST
 - 17 SECURED IN TENT
 - 4 CANOPUS TEMP TEST
 - 17 SECURED IN TENT
 - 5 REM SHROUD
 - 1 MANIPULATE BY HAND
 - 2 MANIPULATE WITH TOOLS
 - 6 REM CORNER SHIELD
 - 2 MANIPULATE WITH TOOLS
 - 61 CORNER SHIELD
 - 7 TIE 4 TEST STRUTS
 - 14 TIE HARNESSSES
 - 8 LOWER 4 SOL/P (HORIZ. POS)
 - 1 MANIPULATE BY HAND
 - 9 REM DFR COAX.
 - 1 MANIPULATE BY HAND
 - 62 DFR COAX
 - 10 INST DFR COAX
 - 1 MANIPULATE BY HAND
 - 21 ZONE 21, PANEL 1 SPAR
 - 2 MANIPULATE WITH TOOLS
 - 21 ZONE 21, PANEL 1 SPAR
 - 11 STOW 4 SOL/P (BOOST POS)
 - 1 MANIPULATE BY HAND
 - 21 ZONE 21, PANEL 1 SPAR
 - 22 ZONE 22, PANEL 3 SPAR
 - 23 ZONE 23, PANEL 5 SPAR
 - 24 ZONE 24, PANEL 7 SPAR
 - 12 REM UPPER SHIELD BLANKET
 - 2 MANIPULATE WITH TOOLS
 - 63 UPPER SHIELD BLANKET
 - 1 MANIPULATE BY HAND
 - 63 UPPER SHIELD BLANKET
 - 13 POWER SUBSYSTEM TEST
 - 9 VISUAL INSPECTION
 - 14 INST 6 LOUVER COVERS
 - 1 MANIPULATE BY HAND
 - 46 ZONE 46, OCTAGON TOP
 - 2 MANIPULATE WITH TOOLS
 - 46 ZONE 46, OCTAGON TOP
 - 15 STOWED PANELS
 - 1 MANIPULATE BY HAND
 - 46 ZONE 46, OCTAGON TOP
 - 16 TAPE UMBILICAL COVER CAP
 - 1 MANIPULATE BY HAND

- 2 ZONE 2, BAY 2
- 17 SECURE S/C FEB 24
 - 17 SECURED IN TENT
- 32 MECHANIKER ASSEMBLY/TEST
 - 1 REM SOL/P DEPLOY STRUTS
 - 2 MANIPULATE WITH TOOLS
 - 65 SOLAR PANEL STRUTS
 - 1 MANIPULATE BY HAND
 - 65 SOLAR PANEL STRUTS
 - 2 MONITOR CONNECTORS
 - 9 VISUAL INSPECTION
 - 3 CAMERA SETUP TIME
 - 9 VISUAL INSPECTION
 - 4 TENSION V-BAND
 - 1 MANIPULATE BY HAND
 - 5 INST 5 PIN-PULLERS
 - 1 MANIPULATE BY HAND
 - 2 MANIPULATE WITH TOOLS
 - 6 PYRO TEST (FIRE 7 SQUIBS)
 - 9 VISUAL INSPECTION
 - 7 INST DUMMY PIN-PULLER
 - 1 MANIPULATE BY HAND
 - 2 MANIPULATE WITH TOOLS
 - 8 DEPLOY, SECURE 4 SOL/P
 - 1 MANIPULATE BY HAND
 - 21 ZONE 21, PANEL 1 SPAR
 - 22 ZONE 22, PANEL 3 SPAR
 - 23 ZONE 23, PANEL 5 SPAR
 - 24 ZONE 24, PANEL 7 SPAR
 - 9 DEMATE 2 COAX (2W46)
 - 11 MATE (DEMATE) CONNECTORS
 - 30 ZONE 30, UPPER RING HARN
 - 10 MATE 2 COAX (15E3)
 - 11 MATE (DEMATE) CONNECTORS
 - 30 ZONE 30, UPPER RING HARN
 - 11 MONITOR DFR TEST
 - 11 MATE (DEMATE) CONNECTORS
 - 12 REM SOL/P SCREWS (STRUTS)
 - 2 MANIPULATE WITH TOOLS
 - 21 ZONE 21, PANEL 1 SPAR
 - 1 MANIPULATE BY HAND
 - 21 ZONE 21, PANEL 1 SPAR
 - 13 REM CANOPUS SENSOR
 - 2 MANIPULATE WITH TOOLS
 - 66 CANOPUS SENSOR
 - 1 MANIPULATE BY HAND
 - 66 CANOPUS SENSOR
 - 14 REM PLANET SENSOR
 - 2 MANIPULATE WITH TOOLS
 - 67 PLANET SENSOR
 - 1 MANIPULATE BY HAND
 - 67 PLANET SENSOR
 - 15 INST S/C LIFT FIXURES
 - 1 MANIPULATE BY HAND
 - 46 ZONE 46, OCTAGON TOP
 - 2 MANIPULATE WITH TOOLS
 - 46 ZONE 46, OCTAGON TOP
 - 16 REM 2 LOUVER COVERS
 - 1 MANIPULATE BY HAND
 - 46 ZONE 46, OCTAGON TOP
 - 17 REM SCREWS ON CASE 5
 - 2 MANIPULATE WITH TOOLS

- 52 ZONE 52, EA V CASE
- 18 REM SCREWS ON CASE 8
 - 2 MANIPULATE WITH TOOLS
- 55 ZONE 55, EA VIII CASE
- 19 REM BATTERY
 - 2 MANIPULATE WITH TOOLS
 - 69 BATTERY
- 20 TENSION S/C CABLE
 - 2 MANIPULATE WITH TOOLS
- 33 MECHANICAL ASSEMBLY/TEST
 - 1 REMOVE LIFTING BARS
 - 2 MANIPULATE WITH TOOLS
 - 46 ZONE 46, OCTAGON TOP
 - 2 INST SCREWS IN CASE 5
 - 1 MANIPULATE BY HAND
 - 52 ZONE 52, EA V CASE
 - 3 REM 9W17 HARNESS
 - 1 MANIPULATE BY HAND
 - 70 HARNESS
 - 4 REM 6 MODULES (16A1/6)
 - 2 MANIPULATE WITH TOOLS
 - 71 MODULES (16A1)
 - 72 MODULES (16A2)
 - 73 MODULES (16A3)
 - 74 MODULES (16A4)
 - 75 MODULES (16A5)
 - 76 MODULES (16A6)
 - 1 MANIPULATE BY HAND
 - 71 MODULES (16A1)
 - 72 MODULES (16A2)
 - 73 MODULES (16A3)
 - 74 MODULES (16A4)
 - 75 MODULES (16A5)
 - 76 MODULES (16A6)
- 5 COVER BATTERY, CASES 5, 8
 - 1 MANIPULATE BY HAND
- 6 SECURE S/C (TENT) FEB 25/7
 - 17 SECURED IN TENT
- 7 REM SCREWS FROM CASE 8
 - 2 MANIPULATE WITH TOOLS
- 55 ZONE 55, EA VIII CASE
- 8 INST BATTERY (4A14)
 - 1 MANIPULATE BY HAND
- 55 ZONE 55, EA VIII CASE
- 2 MANIPULATE WITH TOOLS
- 55 ZONE 55, EA VIII CASE
- 9 INST SCREWS IN CASE 8
 - 1 MANIPULATE BY HAND
- 55 ZONE 55, EA VIII CASE
- 2 MANIPULATE WITH TOOLS
- 55 ZONE 55, EA VIII CASE
- 10 INST PLANET SENSOR
 - 1 MANIPULATE BY HAND
- 8 ZONE 8, BAY 8
- 11 INST CANOPUS SENSOR
 - 1 MANIPULATE BY HAND
- 8 ZONE 8, BAY 8
- 12 INST CASE 5
 - 1 MANIPULATE BY HAND
- 52 ZONE 52, EA V CASE
- 2 MANIPULATE WITH TOOLS
- 52 ZONE 52, EA V CASE

- 13 INST CRUISE DAMPER
 - 1 MANIPULATE BY HAND
 - 5 ZONE 5, BAY 5
- 14 INST LOWER SHIELD
 - 1 MANIPULATE BY HAND
 - 5 ZONE 5, BAY 5
 - 2 MANIPULATE WITH TOOLS
 - 5 ZONE 5, BAY 5
- 15 INST SPRING BRACKETS
 - 1 MANIPULATE BY HAND
 - 47 ZONE 47, OCTAGON BOTTOM
 - 2 MANIPULATE WITH TOOLS
 - 47 ZONE 47, OCTAGON BOTTOM
- 16 CONNECT COAX(2)
 - 1 MANIPULATE BY HAND
 - 31 ZONE 31, LOWER RING HARN
- 17 REM 2 CHANNEL SHIELDS
 - 2 MANIPULATE WITH TOOLS
 - 79 CHANNEL SHIELD
 - 80 CHANNEL SHIELD
- 18 REM LOUVERS
 - 2 MANIPULATE WITH TOOLS
 - 81 LOUVERS (1SET)
 - 1 MANIPULATE BY HAND
 - 81 LOUVERS (1SET)
- 19 REM 9 MODULES(5A1/9)
 - 2 MANIPULATE WITH TOOLS
 - 81 LOUVERS (1SET)
 - 82 MODULE (5A1)
 - 83 MODULE (5A2)
 - 84 MODULE (5A3)
 - 85 MODULE (5A4)
 - 86 MODULE (5A5)
 - 87 MODULE (5A6)
 - 88 MODULE (5A7)
 - 89 MODULE (5A8)
 - 90 MODULE (5A9)
 - 1 MANIPULATE BY HAND
 - 81 LOUVERS (1SET)
 - 82 MODULE (5A1)
 - 83 MODULE (5A2)
 - 84 MODULE (5A3)
 - 85 MODULE (5A4)
 - 86 MODULE (5A5)
 - 87 MODULE (5A6)
 - 88 MODULE (5A7)
 - 89 MODULE (5A8)
 - 90 MODULE (5A9)
- 20 REM GYRO(7A2)
 - 2 MANIPULATE WITH TOOLS
 - 91 GYRO
 - 1 MANIPULATE BY HAND
 - 91 GYRO
- 34 MECHANICAL ASSEMBLY/TEST
 - 1 INST SCREWS(CASE 7)
 - 1 MANIPULATE BY HAND
 - 54 ZONE 54, EA VII CASE
 - 2 MANIPULATE WITH TOOLS
 - 54 ZONE 54, EA VII CASE
 - 2 REM TRAP RAD DETECTOR
 - 2 MANIPULATE WITH TOOLS
 - 92 TRD

- 3 INST LOUVER
 - 1 MANIPULATE BY HAND
 - 51 ZONE 51, EA IV CASE
 - 2 MANIPULATE WITH TOOLS
 - 51 ZONE 51, EA IV CASE
- 4 INST BAND PASS FILTER
 - 1 MANIPULATE BY HAND
 - 4 ZONE 4, BAY 4
- 5 INST LOW PASS FILTER
 - 1 MANIPULATE BY HAND
 - 4 ZONE 4, BAY 4
- 6 INST TRAP RAD DETECTOR
 - 1 MANIPULATE BY HAND
 - 4 ZONE 4, BAY 4
 - 2 MANIPULATE WITH TOOLS
 - 4 ZONE 4, BAY 4
- 7 TORQ 2 COAX(35A3/4)
 - 1 MANIPULATE BY HAND
 - 33 HSEN A(H MSHA ASS-.S36XB(H CS(I(P D-P
 - 2 MANIPULATE WITH TOOLS
 - 33 HSEN A(H MSHA ASS-.S36XB(H CS(I(P D-P
- 8 INST DEPLOY BRACKET
 - 1 MANIPULATE BY HAND
 - 46 ZONE 46, OCTAGON TOP
 - 2 MANIPULATE WITH TOOLS
 - 46 ZONE 46, OCTAGON TOP
- 9 UNMATE 4 CONNECTORS
 - 11 MATE (DEMATE) CONNECTORS
 - 27 ZONE 27, TOP RING TRAY
- 10 VELCO UPPER SHIELD
 - 1 MANIPULATE BY HAND
 - 46 ZONE 46, OCTAGON TOP
 - 2 MANIPULATE WITH TOOLS
 - 46 ZONE 46, OCTAGON TOP
- 11 ATTACH LIFTING CABLES
 - 2 MANIPULATE WITH TOOLS
 - 46 ZONE 46, OCTAGON TOP
- 12 INST S/C COVERS
 - 1 MANIPULATE BY HAND
- 13 MOVE S/C
 - 16 MANEUVER SPACECRAFT
- 14 SECURE S/C(PLASTIC)2/27
 - 17 SECURED IN TENT
- 15 TENSION V-BAND
 - 1 MANIPULATE BY HAND
- 16 RELEASE TENSION SPRINGS
 - 1 MANIPULATE BY HAND
- 17 REM LIFTING BARS
 - 2 MANIPULATE WITH TOOLS
 - 46 ZONE 46, OCTAGON TOP
 - 1 MANIPULATE BY HAND
 - 46 ZONE 46, OCTAGON TOP
- 18 REM 6 LOUVER COVERS
 - 2 MANIPULATE WITH TOOLS
 - 46 ZONE 46, OCTAGON TOP
 - 1 MANIPULATE BY HAND
 - 46 ZONE 46, OCTAGON TOP
- 19 INST CORNER SHIELD
 - 1 MANIPULATE BY HAND
 - 46 ZONE 46, OCTAGON TOP
 - 2 MANIPULATE WITH TOOLS
 - 46 ZONE 46, OCTAGON TOP

- 20 CK PYRO ARM SWITCH
 - 9 VISUAL INSPECTION
 - 9 ZONE 9, BAY 1 INWARD
- 35 MECHANICAL ASSEMBLY/TEST
 - 1 ENGAGE BOLT(SIT SWITCH)
 - 1 MANIPULATE BY HAND
 - 47 ZONE 47, OCTAGON BOTTOM
 - 2 INST SHROUD FIXTURES
 - 1 MANIPULATE BY HAND
 - 2 MANIPULATE WITH TOOLS
 - 3 MATE IN/FLIGHT DISCONN
 - 11 MATE (DEMATE) CONNECTORS
 - 5 ZONE 5, BAY 5
 - 4 REM SENSOR LITE HOOD
 - 2 MANIPULATE WITH TOOLS
 - 97 SENSOR LITE HOOD
 - 5 INST SHROUD(PRELIMINARY)
 - 1 MANIPULATE BY HAND
 - 2 MANIPULATE WITH TOOLS
 - 6 DEMATE 3 CONNECTORS
 - 11 MATE (DEMATE) CONNECTORS
 - 30 ZONE 30, UPPER RING HARN
 - 7 CONNECT RF CABLES
 - 2 MANIPULATE WITH TOOLS
 - 30 ZONE 30, UPPER RING HARN
 - 8 TENSION V-BAND(CONTINUED)
 - 1 MANIPULATE BY HAND
 - 9 INST,PREPARE UMBILICAL
 - 1 MANIPULATE BY HAND
 - 31 ZONE 31, LOWER RING HARN
 - 2 MANIPULATE WITH TOOLS
 - 31 ZONE 31, LOWER RING HARN
 - 10 RF TESTS
 - 9 VISUAL INSPECTION
 - 11 SECURE S/C WITH SHROUD
 - 17 SECURED IN TENT
 - 12 DEMATE UMBILICAL
 - 11 MATE (DEMATE) CONNECTORS
 - 2 ZONE 2, BAY 2
 - 13 LOOSE VBAND,LIFT SHROUD
 - 1 MANIPULATE BY HAND
 - 14 REM UPPER SHIELD
 - 2 MANIPULATE WITH TOOLS
 - 46 ZONE 46, OCTAGON TOP
 - 1 MANIPULATE BY HAND
 - 46 ZONE 46, OCTAGON TOP
 - 15 DISCONNECT CABLES
 - 2 MANIPULATE WITH TOOLS
 - 30 ZONE 30, UPPER RING HARN
 - 16 INST LIFING BARS
 - 1 MANIPULATE BY HAND
 - 46 ZONE 46, OCTAGON TOP
 - 2 MANIPULATE WITH TOOLS
 - 46 ZONE 46, OCTAGON TOP
 - 17 INST LOUVER COVERS
 - 1 MANIPULATE BY HAND
 - 46 ZONE 46, OCTAGON TOP
 - 2 MANIPULATE WITH TOOLS
 - 46 ZONE 46, OCTAGON TOP
 - 18 REM SAFETY STRAP
 - 2 MANIPULATE WITH TOOLS
 - 19 REMOVE VBAND

- 16 MANEUVER SPACECRAFT
- 20 REM INFLIGHT DISCONNECT
- 11 MATE (DEMATE) CONNECTORS
 - 5 ZONE 5, BAY 5
- 36 MECHANICAL ASSEMBLY/TEST
 - 1 MOVE SIT PIN
 - 1 MANIPULATE BY HAND
 - 47 ZONE 47, OCTAGON BOTTOM
 - 2 INST. LOCKING TOOLS
 - 1 MANIPULATE BY HAND
 - 2 MANIPULATE WITH TOOLS
 - 3 RAISE S/C
 - 1 MANIPULATE BY HAND
 - 4 CHANGE S/C ADAPTER
 - 1 MANIPULATE BY HAND
 - 5 LOWER S/C
 - 1 MANIPULATE BY HAND
 - 6 ADJUST SIT
 - 1 MANIPULATE BY HAND
 - 47 ZONE 47, OCTAGON BOTTOM
 - 7 REMOVE S/C SLING
 - 2 MANIPULATE WITH TOOLS
 - 8 TENSION VBAND
 - 1 MANIPULATE BY HAND
 - 9 CK PAS CLEARANCE
 - 1 MANIPULATE BY HAND
 - 10 REM SCREWS FROM LOUV COV
 - 2 MANIPULATE WITH TOOLS
 - 46 ZONE 46, OCTAGON TOP
 - 11 CK S/P LANYARD CLEARANCE
 - 1 MANIPULATE BY HAND
 - 12 REM VBAND
 - 2 MANIPULATE WITH TOOLS
 - 1 MANIPULATE BY HAND
 - 13 INSP MODULE (A/C ELECTRON
 - 9 VISUAL INSPECTION
 - 113 A/C ELECT MODULE
 - 14 REM TRAP RAD DETECTOR
 - 2 MANIPULATE WITH TOOLS
 - 100 TRD
 - 1 MANIPULATE BY HAND
 - 100 TRD
 - 15 REM 8 CHANNEL SHIELDS
 - 2 MANIPULATE WITH TOOLS
 - 101 8 CHANNEL SHIELDS
 - 1 MANIPULATE BY HAND
 - 101 8 CHANNEL SHIELDS
 - 16 REM SUN/SHOE DEPLOY SPRG
 - 2 MANIPULATE WITH TOOLS
 - 47 ZONE 47, OCTAGON BOTTOM
 - 1 MANIPULATE BY HAND
 - 47 ZONE 47, OCTAGON BOTTOM
 - 17 REM SUN SHADE
 - 2 MANIPULATE WITH TOOLS
 - 102 SUN SHADE
 - 1 MANIPULATE BY HAND
 - 102 SUN SHADE
 - 18 REM BAY 4 SHIELD
 - 2 MANIPULATE WITH TOOLS
 - 103 BAY 4 SHIELD
 - 19 REM LOWER SHIELD
 - 2 MANIPULATE WITH TOOLS

- 104 LOWER SHIELD
 - 1 MANIPULATE BY HAND
- 104 LOWER SHIELD
- 20 REM CRUISE DAMPER
 - 2 MANIPULATE WITH TOOLS
- 105 CRUISE DAMPER
- 37 MECHANICAL ASSEMBLY/TEST
 - 1 INST LOUVER COVERS
 - 1 MANIPULATE BY HAND
 - 46 ZONE 46, OCTAGON TOP
 - 2 MANIPULATE WITH TOOLS
 - 46 ZONE 46, OCTAGON TOP
 - 2 INST S/C ON POSITIONER
 - 1 MANIPULATE BY HAND
 - 2 MANIPULATE WITH TOOLS
 - 3 REM UPPER SHIELD
 - 2 MANIPULATE WITH TOOLS
 - 106 UPPER SHIELD
 - 1 MANIPULATE BY HAND
 - 106 UPPER SHIELD
 - 4 REM TROUGH SHIELD
 - 2 MANIPULATE WITH TOOLS
 - 107 TROUGH SHIELD
 - 5 REM PEDESTAL COVERS
 - 2 MANIPULATE WITH TOOLS
 - 46 ZONE 46, OCTAGON TOP
 - 6 REM BAY 7 LOUVER COVER
 - 2 MANIPULATE WITH TOOLS
 - 7 ZONE 7, BAY 7
 - 7 REM CASE 7, INST IN FRAME
 - 1 MANIPULATE BY HAND
 - 54 ZONE 54, EA VII CASE
 - 2 MANIPULATE WITH TOOLS
 - 54 ZONE 54, EA VII CASE
 - 8 REM BAFFLE ASSEMBLY
 - 2 MANIPULATE WITH TOOLS
 - 109 BAFFLE ASSEMBLY
 - 1 MANIPULATE BY HAND
 - 109 BAFFLE ASSEMBLY
 - 9 INST BAY 7 SHEAR PLATE
 - 1 MANIPULATE BY HAND
 - 110 SHEAR PLATE
 - 2 MANIPULATE WITH TOOLS
 - 110 SHEAR PLATE
 - 10 REM PLANET SENSOR
 - 2 MANIPULATE WITH TOOLS
 - 111 PLANET SENSOR
 - 11 REM CANOPUS SENSOR
 - 2 MANIPULATE WITH TOOLS
 - 112 CANOPUS SENSOR
 - 12 RELEASE LOUVER ASSEMBLY
 - 2 MANIPULATE WITH TOOLS
 - 114 LOUVER ASSEMBLY
 - 13 INST LOUV ASSY IN FRAME
 - 1 MANIPULATE BY HAND
 - 114 LOUVER ASSEMBLY
 - 14 REM SCHEWS FROM CASE 8
 - 2 MANIPULATE WITH TOOLS
 - 55 ZONE 55, EA VIII CASE
 - 15 REM BATTERY
 - 2 MANIPULATE WITH TOOLS
 - 69 BATTERY

- 1 MANIPULATE BY HAND
- 69 BATTERY
- 16 INST SCREWS CASE 8
 - 1 MANIPULATE BY HAND
 - 55 ZONE 55, EA VIII CASE
- 17 INST PLANET SENSOR
 - 1 MANIPULATE BY HAND
 - 8 ZONE 8, BAY 8
 - 2 MANIPULATE WITH TOOLS
 - 8 ZONE 8, BAY 8
- 16 INST LOVER COVER
 - 1 MANIPULATE BY HAND
 - 46 ZONE 46, OCTAGON TOP
 - 2 MANIPULATE WITH TOOLS
 - 46 ZONE 46, OCTAGON TOP
- 19 REM BAY 2 SHEAR WEB
 - 2 MANIPULATE WITH TOOLS
 - 115 BAY 2 SHEAR WEB
 - 1 MANIPULATE BY HAND
 - 115 BAY 2 SHEAR WEB
- 20. INST MODULE (A/C ELECTRON)
 - 1 MANIPULATE BY HAND
 - 54 ZONE 54, EA VII CASE
 - 2 MANIPULATE WITH TOOLS
 - 54 ZONE 54, EA VII CASE
- 3A MECHANICAL ASSEMBLY/TEST
 - 1 SECURE S/C (TENT) MAR 1
 - 17 SECURED IN TENT
 - 2 RF TEST
 - 9 VISUAL INSPECTION
 - 3 INST UMBILICAL CONNECTOR
 - 9 VISUAL INSPECTION
 - 2 ZONE 2, BAY 2
 - 4 REM CASE 5
 - 2 MANIPULATE WITH TOOLS
 - 52 ZONE 52, EA V CASE
 - 1 MANIPULATE BY HAND
 - 52 ZONE 52, EA V CASE
 - 5 REM 4 DEPLOY SPRINGS
 - 2 MANIPULATE WITH TOOLS
 - 5 ZONE 5, BAY 5
 - 1 MANIPULATE BY HAND
 - 5 ZONE 5, BAY 5
 - 6 REM UV PHOTOMETER
 - 2 MANIPULATE WITH TOOLS
 - 61 UV PHOTOMETER
 - 1 MANIPULATE BY HAND
 - 61 UV PHOTOMETER
 - 7 REM S/P SPAR CONNECTORS
 - 2 MANIPULATE WITH TOOLS
 - 21 ZONE 21, PANEL 1 SPAR
 - 1 MANIPULATE BY HAND
 - 21 ZONE 21, PANEL 1 SPAR
 - 8 REM COAX CONNECTOR
 - 1 MANIPULATE BY HAND
 - 21 ZONE 21, PANEL 1 SPAR
 - 9 REM 3 TEMP CONT REFS
 - 2 MANIPULATE WITH TOOLS
 - 62 DFR COAX
 - 63 UPPER SHIELD BLANKET
 - 64 BAY 4 SHIELD
 - 1 MANIPULATE BY HAND

- 62 DFR COAX
- 63 UPPER SHIELD BLANKET
- 64 BAY4 SHIELD
- 10 REM SOL/P SCHEWS(4A5)
 - 2 MANIPULATE WITH TOOLS
 - 23 ZONE 23, PANEL 5 SPAR
- 11 REM SHIELD AND BRACKET
 - 2 MANIPULATE WITH TOOLS
 - 65 SHIELD + BRACKET
 - 1 MANIPULATE BY HAND
 - 65 SHIELD + BRACKET
- 12 REM CASE 5 HARNESS
 - 11 MATE (DEMATE) CONNECTORS
 - 36 CZ KSH(H P3GH 0,3=ISQ0S(5 FL(HSCS.(
- 13 RELEASE SOL/P(4A5)
 - 1 MANIPULATE BY HAND
 - 19 ZONE 19, SOLAR PANEL 5
- 14 REM BOOST DAMPER
 - 2 MANIPULATE WITH TOOLS
 - 66 BOOST DAMPER
 - 1 MANIPULATE BY HAND
 - 66 BOOST DAMPER
- 15 REM SQUIB HARNESS
 - 2 MANIPULATE WITH TOOLS
 - 67 SQUIB HARNESS
 - 1 MANIPULATE BY HAND
 - 67 SQUIB HARNESS
- 16 RELEASE SOL/P(4A7)
 - 1 MANIPULATE BY HAND
 - 20 ZONE 20, SOLAR PANEL 7
- 17 REM SQUIB HARNESS
 - 2 MANIPULATE WITH TOOLS
 - 68 SQUIB HARNESS
 - 1 MANIPULATE BY HAND
 - 68 SQUIB HARNESS
- 18 INST CASE 5 HARNESS
 - 11 MATE (DEMATE) CONNECTORS
 - 36 CZ KSH(H P3GH 0,3=ISQ0S(5 FL(HSCS.(
- 19 REM A/C JET SHADE
 - 2 MANIPULATE WITH TOOLS
 - 69 BATTERY
 - 1 MANIPULATE BY HAND
 - 69 BATTERY
- 20 REM BOOST DAMPER
 - 2 MANIPULATE WITH TOOLS
 - 71 BOOST DAMPER
 - 1 MANIPULATE BY HAND
 - 71 BOOST DAMPER
- 30 MECHANICAL ASSEMBLY/TEST
 - 1 PUT SOL/P IN CARRIER(4A5
 - 1 MANIPULATE BY HAND
 - 19 ZONE 19, SOLAR PANEL 5
 - 2 REM SOL/P SCREW(4A1-BAY1
 - 2 MANIPULATE WITH TOOLS
 - 17 ZONE 17, SOLAR PANEL 1
 - 1 MANIPULATE BY HAND
 - 17 ZONE 17, SOLAR PANEL 1
 - 3 REM DFR ANT FROM SOL/P
 - 1 MANIPULATE BY HAND
 - 72 DFR ANT
 - 2 MANIPULATE WITH TOOLS
 - 72 DFR ANT

- 4 STORE HARNESS(9W)7
 - 1 MANIPULATE BY HAND
 - 79 HARNESS
- 5 INST 6 MODULES(TAPE RECV
 - 1 MANIPULATE BY HAND
 - 52 ZONE 52, EA V CASE
 - 2 MANIPULATE WITH TOOLS
 - 52 ZONE 52, EA V CASE
- 6 INST HARNESS(9W)7
 - 1 MANIPULATE BY HAND
 - 34 QJWYH4A CA-GH OSH(H C-QSSSN 8UUI
 - 2 MANIPULATE WITH TOOLS
 - 34 QJWYH4A CA-GH OSH(H C-QSSSN 8UUI
- 7 PUT SOL/P IN CARRIER(4A7
 - 1 MANIPULATE BY HAND
 - 20 ZONE 20, SOLAR PANEL 7
- 8 REM BOOST DAMPER
 - 1 MANIPULATE BY HAND
 - 80 BOOST DAMPER
 - 2 MANIPULATE WITH TOOLS
 - 80 BOOST DAMPER
- 9 PUT SOL/P IN CARRIER(4A1
 - 1 MANIPULATE BY HAND
 - 17 ZONE 17, SOLAR PANEL 1
- 10 REM JET SHADE AND BRKT
 - 1 MANIPULATE BY HAND
 - 81 JET SHADE + BRACKET(R)
 - 2 MANIPULATE WITH TOOLS
 - 81 JET SHADE + BRACKET(R)
- 11 INST 10 PIPS SQUIBS
 - 1 MANIPULATE BY HAND
 - 2 ZONE 2, BAY 2
 - 2 MANIPULATE WITH TOOLS
 - 2 ZONE 2, BAY 2
- 12 REM MAGNETOMETER
 - 1 MANIPULATE BY HAND
 - 82 MAGNETOMETER
 - 2 MANIPULATE WITH TOOLS
 - 82 MAGNETOMETER
- 13 TORQUE EA V SCREWS
 - 2 MANIPULATE WITH TOOLS
 - 52 ZONE 52, EA V CASE
- 14 REM DUAL FREQ RECEIVER
 - 2 MANIPULATE WITH TOOLS
 - 83 DUAL FREQ RCVR
 - 1 MANIPULATE BY HAND
 - 83 DUAL FREQ RCVR
- 15 REM SHIELD AND BRKT
 - 2 MANIPULATE WITH TOOLS
 - 84 SHIELD + BRACKET
 - 1 MANIPULATE BY HAND
 - 84 SHIELD + BRACKET
- 16 INST 9 MODULES(CASE 7)
 - 2 MANIPULATE WITH TOOLS
 - 54 ZONE 54, EA VII CASE
 - 1 MANIPULATE BY HAND
 - 54 ZONE 54, EA VII CASE
- 17 INST CONNECTORS(CASE 7)
 - 11 MATE (DEMATE) CONNECTORS
 - 36 CZ KSH(H PSGH 0.3=ISQOS(5 FL(MSCS.(
- 18 PIPS WT AND C.G. MEAS.
 - 9 VISUAL INSPECTION

19 REPAIR A/C CABLE

1 MANIPULATE BY HAND

46 ZONE 46, OCTAGON TOP

20 INSP MAGNETOMETER

9 VISUAL INSPECTION

82 MAGNETOMETER

40 MECHANICAL ASSEMBLY/TEST

1 INST CRUISE DAMPER(CASE5

1 MANIPULATE BY HAND

52 ZONE 52, EA V CASE

2 MANIPULATE WITH TOOLS

52 ZONE 52, EA V CASE

2 REM CASE 5(FROM FIXTURE)

2 MANIPULATE WITH TOOLS

52 ZONE 52, EA V CASE

1 MANIPULATE BY HAND

52 ZONE 52, EA V CASE

3 INST CASE 5

1 MANIPULATE BY HAND

52 ZONE 52, EA V CASE

2 MANIPULATE WITH TOOLS

52 ZONE 52, EA V CASE

4 INST SWING OUT (EA5)

1 MANIPULATE BY HAND

52 ZONE 52, EA V CASE

2 MANIPULATE WITH TOOLS

52 ZONE 52, EA V CASE

5 REM CASE 7(FROM FIXTURE)

2 MANIPULATE WITH TOOLS

54 ZONE 54, EA VII CASE

1 MANIPULATE BY HAND

54 ZONE 54, EA VII CASE

6 INST CASE 7

1 MANIPULATE BY HAND

54 ZONE 54, EA VII CASE

2 MANIPULATE WITH TOOLS

54 ZONE 54, EA VII CASE

7 INST GYROS (7A2

1 MANIPULATE BY HAND

54 ZONE 54, EA VII CASE

2 MANIPULATE WITH TOOLS

54 ZONE 54, EA VII CASE

8 INST CONNECTORS (9W5)

1 MANIPULATE BY HAND

36 CZ K3H(H PSGH 0,3=ISQOS(5 FL(HSCS.(

9 INSP TRAP RAD DET (25A1)

1 MANIPULATE BY HAND

102 TRD

10 INSP U.V. PHOTOMETER

1 MANIPULATE BY HAND

2 ZONE 2, BAY 2

11 INST MIDCOURSE MOTOR

1 MANIPULATE BY HAND

2 ZONE 2, BAY 2

2 MANIPULATE WITH TOOLS

2 ZONE 2, BAY 2

12 INST MAGNETOMETER

1 MANIPULATE BY HAND

26 ZONE 26, LO-GAIN ANTENNA

2 MANIPULATE WITH TOOLS

26 ZONE 26, LO-GAIN ANTENNA

13 INST TRAP RAD DET

- 1 MANIPULATE BY HAND
 - 4 ZONE 4, BAY 4
- 2 MANIPULATE WITH TOOLS
 - 4 ZONE 4, BAY 4
- 14 INST FLUX TANK LEGS
 - 1 MANIPULATE BY HAND
 - 2 MANIPULATE WITH TOOLS
- 15 PERF UMBILICAL TEST
 - 1 MANIPULATE BY HAND
 - 2 MANIPULATE WITH TOOLS
- 16 INST FLUX TANK
 - 1 MANIPULATE BY HAND
 - 2 MANIPULATE WITH TOOLS
- 17 REM U.V. PHOTOMETER
 - 2 MANIPULATE WITH TOOLS
 - 103 UV PHOTOMETER
 - 1 MANIPULATE BY HAND
 - 103 UV PHOTOMETER
- 18 UNMATE UMBILICAL
 - 11 MATE (DEMATE) CONNECTORS
 - 2 ZONE 2, BAY 2
- 19 TIE 4 CABLES TO GASFRAME
 - 1 MANIPULATE BY HAND
 - 47 ZONE 47, OCTAGON BOTTOM
 - 2 MANIPULATE WITH TOOLS
 - 47 ZONE 47, OCTAGON BOTTOM
- 20 SECURE S/C(TENT) MAR 2
 - 9 VISUAL INSPECTION
- 41 MECHANICAL ASSEMBLY/TEST
 - 1 INST BATT ON LOW-LEV POS
 - 1 MANIPULATE BY HAND
 - 69 BATTERY
 - 2 MANIPULATE WITH TOOLS
 - 69 BATTERY
- 2 INST UV PHOTOMETER
 - 1 MANIPULATE BY HAND
 - 2 ZONE 2, BAY 2
 - 2 MANIPULATE WITH TOOLS
 - 2 ZONE 2, BAY 2
- 3 REM HARDLINE COAX
 - 2 MANIPULATE WITH TOOLS
 - 89 HARDLINE COAX
- 4 INST UV STIMULUS
 - 1 MANIPULATE BY HAND
 - 2 ZONE 2, BAY 2
- 5 TENSION U-RING CABLE
 - 1 MANIPULATE BY HAND
- 6 S/C-MOS 1/F TESTS
 - 9 VISUAL INSPECTION
- 7 INST PRESSURE TANKS TEST
 - 1 MANIPULATE BY HAND
 - 47 ZONE 47, OCTAGON BOTTOM
 - 2 MANIPULATE WITH TOOLS
 - 47 ZONE 47, OCTAGON BOTTOM
- 8 SECURE S/C(TENT)
 - 17 SECURED IN TENT
- 9 REM UMBIL. POTTING TEST
 - 11 MATE (DEMATE) CONNECTORS
 - 2 ZONE 2, BAY 2
- 10 INST UMBILICAL
 - 11 MATE (DEMATE) CONNECTORS
 - 2 ZONE 2, BAY 2

- 11 REM UV SOURCE
 - 2 MANIPULATE WITH TOOLS
 - 2 ZONE 2, BAY 2
- 12 DEMATE UMBILICAL
 - 2 MANIPULATE WITH TOOLS
 - 2 ZONE 2, BAY 2
- 13 REM BATTERY
 - 2 MANIPULATE WITH TOOLS
 - 69 BATTERY
 - 1 MANIPULATE BY HAND
 - 69 BATTERY
- 14 REM A/C MODULE (EA7)
 - 2 MANIPULATE WITH TOOLS
 - 106 UPPER SHIELD
 - 1 MANIPULATE BY HAND
 - 106 UPPER SHIELD
- 15 INST A/C MODULE (EA7)
 - 1 MANIPULATE BY HAND
 - 54 ZONE 54, EA VII CASE
 - 2 MANIPULATE WITH TOOLS
 - 54 ZONE 54, EA VII CASE
- 16 RELEASE BAY 1 LEGS
 - 1 MANIPULATE BY HAND
 - 1 ZONE 1, BAY 1
 - 2 MANIPULATE WITH TOOLS
 - 1 ZONE 1, BAY 1
- 17 REM LOUVER BLADE (BAY 1)
 - 2 MANIPULATE WITH TOOLS
 - 49 ZONE 49, EA I CASE
- 18 INSP UMBILICAL
 - 2 MANIPULATE WITH TOOLS
 - 2 ZONE 2, BAY 2
- 19 RELEASE MODULE 4A13 (CASE 1)
 - 2 MANIPULATE WITH TOOLS
 - 108 EA1 MODULE
 - 1 MANIPULATE BY HAND
 - 108 EA1 MODULE
- 20 INST MODULE 4A18 (CASE 1)
 - 1 MANIPULATE BY HAND
 - 49 ZONE 49, EA I CASE
 - 2 MANIPULATE WITH TOOLS
 - 49 ZONE 49, EA I CASE
- 42 MECHANICAL ASSEMBLY/TEST
 - 1 INST MODULE 4A13 (CASE 1)
 - 1 MANIPULATE BY HAND
 - 49 ZONE 49, EA I CASE
 - 2 MANIPULATE WITH TOOLS
 - 49 ZONE 49, EA I CASE
 - 2 INSP, SOLDER UMBIL PIN
 - 1 MANIPULATE BY HAND
 - 2 ZONE 2, BAY 2
 - 2 MANIPULATE WITH TOOLS
 - 2 ZONE 2, BAY 2
 - 3 INST LOUVER BLADE (BAY 1)
 - 2 MANIPULATE WITH TOOLS
 - 49 ZONE 49, EA I CASE
 - 4 INST FLUX TANK LEGS
 - 1 MANIPULATE BY HAND
 - 2 MANIPULATE WITH TOOLS
 - 5 TORQUE UMBILICAL PIN NUT
 - 2 MANIPULATE WITH TOOLS
 - 2 ZONE 2, BAY 2

APPENDIX 2 (Continued)

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- 6 RF TEST, UMBIL PIN CONN
 - 9 VISUAL INSPECTION
- 7 SPOT BOND POTTING PIN
 - 12 POTTING, PAINTING
- 8 REM COAX// (SOL/P FIXTURE)
 - 2 MANIPULATE WITH TOOLS
 - 1 MANIPULATE BY HAND
- 9 INST COAX IN S/P FIXTURE
 - 1 MANIPULATE BY HAND
 - 61 UV PHOTOMETER
 - 2 MANIPULATE WITH TOOLS
 - 61 UV PHOTOMETER
- 10 REM SOL/P FROM FIXTURE
 - 2 MANIPULATE WITH TOOLS
 - 17 ZONE 17, SOLAR PANEL 1
 - 1 MANIPULATE BY HAND
 - 17 ZONE 17, SOLAR PANEL 1
- 11 BOND SPRING RELEASE
 - 1 MANIPULATE BY HAND
 - 17 ZONE 17, SOLAR PANEL 1
- 12 INST SPAR SHIELD
 - 2 MANIPULATE WITH TOOLS
 - 21 ZONE 21, PANEL 1 SPAR
 - 1 MANIPULATE BY HAND
 - 21 ZONE 21, PANEL 1 SPAR
- 13 SOL/P WT AND C.G. MEAS.
 - 9 VISUAL INSPECTION
 - 17 ZONE 17, SOLAR PANEL 1
- 14 INST SOL/P IN FIXTURE
 - 1 MANIPULATE BY HAND
 - 17 ZONE 17, SOLAR PANEL 1
 - 2 MANIPULATE WITH TOOLS
 - 17 ZONE 17, SOLAR PANEL 1
- 15 REM SOL/P FROM FIXTURE
 - 1 MANIPULATE BY HAND
 - 18 ZONE 18, SOLAR PANEL 3
 - 2 MANIPULATE WITH TOOLS
 - 18 ZONE 18, SOLAR PANEL 3
- 16 BOND SPRING RELEASE
 - 1 MANIPULATE BY HAND
 - 18 ZONE 18, SOLAR PANEL 3
 - 2 MANIPULATE WITH TOOLS
 - 18 ZONE 18, SOLAR PANEL 3
- 17 INST SPAR SHIELD
 - 1 MANIPULATE BY HAND
 - 22 ZONE 22, PANEL 3 SPAR
 - 2 MANIPULATE WITH TOOLS
 - 22 ZONE 22, PANEL 3 SPAR
- 18 SOL/P WT AND C.G. MEAS.
 - 9 VISUAL INSPECTION
 - 18 ZONE 18, SOLAR PANEL 3
- 19 INST SOL/P IN FIXTURE
 - 1 MANIPULATE BY HAND
 - 18 ZONE 18, SOLAR PANEL 3
 - 2 MANIPULATE WITH TOOLS
 - 18 ZONE 18, SOLAR PANEL 3
- 20 REM SOL/P FROM FIXTURE
 - 2 MANIPULATE WITH TOOLS
 - 19 ZONE 19, SOLAR PANEL 5
 - 1 MANIPULATE BY HAND
 - 19 ZONE 19, SOLAR PANEL 5
- 43 MECHANICAL ASSEMBLY/TEST

APPENDIX 2 (Continued)

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- 1 REM SOL/P FROM FIXTURE
 - 2 MANIPULATE WITH TOOLS
 - 20 ZONE 20, SOLAR PANEL 7
 - 1 MANIPULATE BY HAND
 - 20 ZONE 20, SOLAR PANEL 7
- 2 BOND SPRING RELEASE
 - 2 MANIPULATE WITH TOOLS
 - 20 ZONE 20, SOLAR PANEL 7
- 3 INST SPAR SHIELD
 - 1 MANIPULATE BY HAND
 - 24 ZONE 24, PANEL 7 SPAR
 - 2 MANIPULATE WITH TOOLS
 - 24 ZONE 24, PANEL 7 SPAR
- 4 SOL/P WT. AND C.G. MEAS.
 - 9 VISUAL INSPECTION
- 5 INST SOL/P IN FIXTURE
 - 1 MANIPULATE BY HAND
 - 24 ZONE 24, PANEL 7 SPAR
 - 2 MANIPULATE WITH TOOLS
 - 24 ZONE 24, PANEL 7 SPAR
- 6 SECURE S/C(TENT) MAR 4
 - 17 SECURED IN TENT
- 7 CLEAN, PRIME, CLEAN UMBIL.
 - 6 DECONTAMINATION
- 8 REM BRACKET
 - 1 MANIPULATE BY HAND
 - 65 SHIELD + BRACKET
 - 2 MANIPULATE WITH TOOLS
 - 65 SHIELD + BRACKET
- 9 INST POTTING FORM
 - 1 MANIPULATE BY HAND
 - 2 ZONE 2, BAY 2
 - 2 MANIPULATE WITH TOOLS
 - 2 ZONE 2, BAY 2
- 10 POTTING OF UMBILICAL
 - 12 POTTING, PAINTING
 - 2 ZONE 2, BAY 2
- 11 MONITOR/INSP POTTING
 - 9 VISUAL INSPECTION
- 12 SECURE S/C(TEN)
 - 17 SECURED IN TENT
- 13 REM POTTING FORM
 - 2 MANIPULATE WITH TOOLS
 - 2 ZONE 2, BAY 2
- 14 CLEAN UMBILICAL
 - 6 DECONTAMINATION
- 15 INST BATTERY
 - 1 MANIPULATE BY HAND
 - 55 ZONE 55, EA VIII CASE
- 16 INST UV SOURCE(TIE)
 - 1 MANIPULATE BY HAND
 - 2 ZONE 2, BAY 2
- 17 INST UMBILICAL BRKT
 - 1 MANIPULATE BY HAND
 - 2 ZONE 2, BAY 2
 - 2 MANIPULATE WITH TOOLS
 - 2 ZONE 2, BAY 2
- 18 MATE CONNECTOR
 - 11 MATE (DEMATE) CONNECTORS
 - 2 ZONE 2, BAY 2
- 19 S/C TEST(RF TESTS)
 - 9 VISUAL INSPECTION

20 REM SOL/P(4) FROM FIXT
2 MANIPULATE WITH TOOLS
20 ZONE 20, SOLAR PANEL 7
1 MANIPULATE BY HAND
20 ZONE 20, SOLAR PANEL 7
44 MECHANIKER ASSEMBLY/TEST
1 INST S/PSS IN DOLLY, PIX
1 MANIPULATE BY HAND
17 ZONE 17, SOLAR PANEL 1
18 ZONE 18, SOLAR PANEL 3
19 ZONE 19, SOLAR PANEL 5
20 ZONE 20, SOLAR PANEL 7
2 MANIPULATE WITH TOOLS
17 ZONE 17, SOLAR PANEL 1
18 ZONE 18, SOLAR PANEL 3
19 ZONE 19, SOLAR PANEL 5
20 ZONE 20, SOLAR PANEL 7
2 REM S/PSS FROM DOLLY
2 MANIPULATE WITH TOOLS
17 ZONE 17, SOLAR PANEL 1
18 ZONE 18, SOLAR PANEL 3
19 ZONE 19, SOLAR PANEL 5
20 ZONE 20, SOLAR PANEL 7
1 MANIPULATE BY HAND
17 ZONE 17, SOLAR PANEL 1
18 ZONE 18, SOLAR PANEL 3
19 ZONE 19, SOLAR PANEL 5
20 ZONE 20, SOLAR PANEL 7
3 INST SOL/P IN FIXTURES
1 MANIPULATE BY HAND
17 ZONE 17, SOLAR PANEL 1
18 ZONE 18, SOLAR PANEL 3
19 ZONE 19, SOLAR PANEL 5
20 ZONE 20, SOLAR PANEL 7
2 MANIPULATE WITH TOOLS
17 ZONE 17, SOLAR PANEL 1
18 ZONE 18, SOLAR PANEL 3
19 ZONE 19, SOLAR PANEL 5
20 ZONE 20, SOLAR PANEL 7
4 MATE CABLES
11 MATE (DEMATE) CONNECTORS
30 ZONE 30, UPPER RING HARN
5 INST 4 PYRO CABLES ON SP
1 MANIPULATE BY HAND
21 ZONE 21, PANEL 1 SPAR
22 ZONE 22, PANEL 3 SPAR
23 ZONE 23, PANEL 5 SPAR
24 ZONE 24, PANEL 7 SPAR
2 MANIPULATE WITH TOOLS
21 ZONE 21, PANEL 1 SPAR
22 ZONE 22, PANEL 3 SPAR
22 ZONE 22, PANEL 3 SPAR
24 ZONE 24, PANEL 7 SPAR
7 TEST TRD WITH SOURCE
9 VISUAL INSPECTION
8 REM PAINT SPOTS ON SOL/P
6 DECONTAMINATION
9 INST COVERS(PIPS AND A/C
2 MANIPULATE WITH TOOLS
2 ZONE 2, BAY 2
10 FILTER COAXES TORQUED
2 MANIPULATE WITH TOOLS

- 30 ZONE 30, UPPER RING HARN
- 11 MILL, INST, TORQUE NUTS
 - 1 MANIPULATE BY HAND
 - 46 ZONE 46, OCTAGON TOP
 - 2 MANIPULATE WITH TOOLS
 - 46 ZONE 46, OCTAGON TOP
- 12 INST TERMINAL COVER
 - 1 MANIPULATE BY HAND
 - 46 ZONE 46, OCTAGON TOP
 - 2 MANIPULATE WITH TOOLS
 - 46 ZONE 46, OCTAGON TOP
- 13 SECURE S/C(TENT) MAR6
 - 17 SECURED IN TENT
- 14 REM BATTERY
 - 2 MANIPULATE WITH TOOLS
 - 69 BATTERY
 - 1 MANIPULATE BY HAND
 - 69 BATTERY
- 15 INST BATTERY
 - 1 MANIPULATE BY HAND
 - 69 BATTERY
 - 2 MANIPULATE WITH TOOLS
 - 69 BATTERY
- 16 REM LOUVER COVER(EA 5)
 - 2 MANIPULATE WITH TOOLS
 - 52 ZONE 52, EA V CASE
- 17 TIE AND MATE PYRO HARNES
 - 14 TIE HARNESES
 - 30 ZONE 30, UPPER RING HARN
- 18 REM LOUVER ASSEMBLY(EA5)
 - 1 MANIPULATE BY HAND
 - 66 BOOST DAMPER
 - 2 MANIPULATE WITH TOOLS
 - 66 BOOST DAMPER
- 19 SYSTEMS TEST #2
 - 9 VISUAL INSPECTION
- 20 2 SOL/P REM FROM FIXTURE
 - 2 MANIPULATE WITH TOOLS
 - 17 ZONE 17, SOLAR PANEL 1
 - 18 ZONE 18, SOLAR PANEL 3
 - 1 MANIPULATE BY HAND
 - 17 ZONE 17, SOLAR PANEL 1
 - 18 ZONE 18, SOLAR PANEL 3
- 45 MECHANICAL ASSEMBLY/TEST
 - 1 PYRO HARNESS INST ON S/P
 - 1 MANIPULATE BY HAND
 - 23 ZONE 23, PANEL 5 SPAR
 - 2 REM BAY 3 FLUX TANK LEG
 - 1 MANIPULATE BY HAND
 - 3 ZONE 3, BAY 3
 - 2 MANIPULATE WITH TOOLS
 - 3 ZONE 3, BAY 3
 - 3 REM CASE 3 LOUVER COVER
 - 2 MANIPULATE WITH TOOLS
 - 50 ZONE 50, EA III CASE
 - 4 REM CASE 3 LOUVER ASSY
 - 1 MANIPULATE BY HAND
 - 68 EA3 LOUVER ASSY
 - 2 MANIPULATE WITH TOOLS
 - 68 EA3 LOUVER ASSY
 - 5 REM CASE 5 RADIO MODULE
 - 2 MANIPULATE WITH TOOLS

- 75 EAS MODULE
 - 1 MANIPULATE BY HAND
- 75 EAS MODULE
- 6 CLEAN RADIO TERMINALS
- 6 DECONTAMINATION
- 7 INST BAY 3 FLUX TANK LEG
 - 1 MANIPULATE BY HAND
 - 3 ZONE 3, BAY 3
 - 2 MANIPULATE WITH TOOLS
 - 3 ZONE 3, BAY 3
- 8 REM FLUX TANK LEG(EA 1)
 - 1 MANIPULATE BY HAND
 - 1 ZONE 1, BAY 1
 - 2 MANIPULATE WITH TOOLS
 - 1 ZONE 1, BAY 1
- 9 REM EA1 LOUVER ASSEMBLY
 - 1 MANIPULATE BY HAND
 - 76 EA1 LOUVER ASSY
 - 2 MANIPULATE WITH TOOLS
 - 76 EA1 LOUVER ASSY
- 10 INST FLUX TANK LEG(EA1)
 - 1 MANIPULATE BY HAND
 - 1 ZONE 1, BAY 1
 - 2 MANIPULATE WITH TOOLS
 - 1 ZONE 1, BAY 1
- 11 SWING OUT FIXT(EA1)
 - 1 MANIPULATE BY HAND
 - 49 ZONE 49, EA 1 CASE
- 12 REM EA1
 - 2 MANIPULATE WITH TOOLS
 - 49 ZONE 49, EA 1 CASE
 - 1 MANIPULATE BY HAND
 - 49 ZONE 49, EA 1 CASE
- 13 INSP EA1
 - 9 VISUAL INSPECTION
 - 49 ZONE 49, EA 1 CASE
- 14 INST EA1
 - 1 MANIPULATE BY HAND
 - 49 ZONE 49, EA 1 CASE
 - 2 MANIPULATE WITH TOOLS
 - 49 ZONE 49, EA 1 CASE
- 15 SECURE S/C(TENT) MAR 7
 - 17 SECURED IN TENT
- 16 REM INST 30 BIO-SPECIMN
 - 1 MANIPULATE BY HAND
- 17 TORQUE PIPS SCREW
 - 2 MANIPULATE WITH TOOLS
 - 2 ZONE 2, BAY 2
- 18 SCIENCE TEST
 - 9 VISUAL INSPECTION
- 19 MATED HARNESS CONN(EA3)
 - 11 MATE (DEMATE) CONNECTORS
 - 31 ZONE 31, LOWER RING HARN
- 20 SYSTEMS TEST #2, PART 2
 - 9 VISUAL INSPECTION
- 46 MECHANICAL ASSEMBLY/TEST
 - 1 REM FLUX TANK(BAY 3)
 - 2 MOVE W/CRANE
 - 3 ZONE 3, BAY 3
 - 1 MANIPULATE BY HAND
 - 3 ZONE 3, BAY 3
 - 2 REM MAGNETOMETER(2E2 ANT

- 2 MANIPULATE WITH TOOLS
77 EAS MODULE
- 1 MANIPULATE BY HAND
77 EAS MODULE
- 3 REM BAY 3 FLUX TANK LEG
2 MANIPULATE WITH TOOLS
3 ZONE 3, BAY 3
- 4 CLEAN 3 MOD(33A1/3LAM RM
6 WIPE (CLEAN OR ASSAY)
- 5 UNMATE COAX,GRND WIRE(E3
11 MATE (DEMATE) CONNECTORS
32 C3 K5-HSEN HSEI 1SSSSQA 3E-CY UR3
- 6 INST HNDLG FIX(OVER EA3
1 MANIPULATE BY HAND
50 ZONE 50, EA III CASE
- 7 OPEN EA3(REMOVE SCREWS
2 MANIPULATE WITH TOOLS
50 ZONE 50, EA III CASE
1 MANIPULATE BY HAND
50 ZONE 50, EA III CASE
- 8 REMOVE 2 MODULES(33A2/3
2 MANIPULATE WITH TOOLS
78 EAS MODULE
79 HARNESS
1 MANIPULATE BY HAND
78 EAS MODULE
79 HARNESS
- 9 INST 2 MODULES(EA3
1 MANIPULATE BY HAND
50 ZONE 50, EA III CASE
2 MANIPULATE WITH TOOLS
50 ZONE 50, EA III CASE
- 10 CLOSE EA 3
1 MANIPULATE BY HAND
50 ZONE 50, EA III CASE
- 11 UNMATE,MATE 9W20 CONNECT
11 MATE (DEMATE) CONNECTORS
32 C3 K5-HSEN HSEI 1SSSSQA 3E-CY UR3
- 12 INST MAGNET(2E2 ANTENNA
1 MANIPULATE BY HAND
26 ZONE 26, LO-GAIN ANTENNA
2 MANIPULATE WITH TOOLS
26 ZONE 26, LO-GAIN ANTENNA
- 13 INST FLUX TANK LEG(EA3
1 MANIPULATE BY HAND
3 ZONE 3, BAY 3
2 MANIPULATE WITH TOOLS
3 ZONE 3, BAY 3
- 14 UNMATE,MATE 9W26 CONNECT
11 MATE (DEMATE) CONNECTORS
32 C3 K5-HSEN HSEI 1SSSSQA 3E-CY UR3
- 15 INST FLUX TANK(BAY 3
1 MANIPULATE BY HAND
3 ZONE 3, BAY 3
2 MANIPULATE WITH TOOLS
3 ZONE 3, BAY 3
- 16 INST HNDLG FIX(OVER EA7
1 MANIPULATE BY HAND
54 ZONE 54, EA VII CASE
- 17 OPEN CASE 7
2 MANIPULATE WITH TOOLS
54 ZONE 54, EA VII CASE

- 18 REM GYRO(CASE 7
 - 2 MANIPULATE WITH TOOLS
 - 80 BOOST DAMPER
 - 1 MANIPULATE BY HAND
 - 80 BOOST DAMPER
- 19 INST GYRO MODULE(CASE 7
 - 1 MANIPULATE BY HAND
 - 54 ZONE 54, EA VII CASE
 - 2 MANIPULATE WITH TOOLS
 - 54 ZONE 54, EA VII CASE
- 20 UNMATE,MATE 9W7 CONNECT
 - 11 MATE (DEMATE) CONNECTORS
 - 36 CZ KSH(H PSGH 0,3=ISQOS(5 FL(HSCS.(
- 47 MECHANICAL ASSEMBLY/TEST
 - 1 CLOSE EA7,TORQUE SCREWS
 - 2 MANIPULATE WITH TOOLS
 - 54 ZONE 54, EA VII CASE
 - 2 INST 5 COAX,GRND WIRE
 - 1 MANIPULATE BY HAND
 - 36 CZ KSH(H PSGH 0,3=ISQOS(5 FL(HSCS.(
 - 2 MANIPULATE WITH TOOLS
 - 36 CZ KSH(H PSGH 0,3=ISQOS(5 FL(HSCS.(
 - 3 MATE 9 TEST CONNECTORS
 - 11 MATE (DEMATE) CONNECTORS
 - 4 SYSTEMS TEST #2(CONT.
 - 9 VISUAL INSPECTION
 - 5 SECURE S/C(TENT) MAR 8
 - 17 SECURED IN TENT
 - 6 REM DAS KLUGE HARNESS
 - 2 MANIPULATE WITH TOOLS
 - 33 HSEN A(H MSHA ASS-.SS6XB(H CS(IP D-P
 - 1 MANIPULATE BY HAND
 - 33 HSEN A(H MSHA ASS-.SS6XB(H CS(IP D-P
 - 7 REM 2 MAGNET KLG HARNESS
 - 2 MANIPULATE WITH TOOLS
 - 26 ZONE 26, LO-GAIN ANTENNA
 - 1 MANIPULATE BY HAND
 - 26 ZONE 26, LO-GAIN ANTENNA
 - 8 MOVE TENT
 - 1 MANIPULATE BY HAND
 - 9 DEMATE 2 CONNECT(33A)/3
 - 11 MATE (DEMATE) CONNECTORS
 - 30 ZONE 30, UPPER RING HARN
 - 10 REM FLUX TANK(EA 3
 - 2 MANIPULATE WITH TOOLS
 - 3 ZONE 3, BAY 3
 - 1 MANIPULATE BY HAND
 - 3 ZONE 3, BAY 3
 - 11 DEMATE 2 CONNECT/2 COAX
 - 11 MATE (DEMATE) CONNECTORS
 - 32 C3 K3-HSEN HSEI)SSSSQA 3E-CY UR3
 - 12 REM MAGNETOMETER
 - 2 MANIPULATE WITH TOOLS
 - 77 EAS MODULE
 - 1 MANIPULATE BY HAND
 - 77 EAS MODULE
 - 13 INTL MAG IN FIXTURE
 - 1 MANIPULATE BY HAND
 - 77 EAS MODULE
 - 2 MANIPULATE WITH TOOLS
 - 77 EAS MODULE
 - 14 INST 2 CONNECT/2 COAX

1 MANIPULATE BY HAND
 32 C3 K5-HSEN HSEI)SSSSQA 3E-CY UR3
 2 MANIPULATE WITH TOOLS
 32 C3 K5-HSEN HSEI)SSSSQA 3E-CY UR3
 15 INST EA3 SWING/OUT FIXT
 1 MANIPULATE BY HAND
 50 ZONE 50, EA III CASE
 16 REM CASES SCREWS
 2 MANIPULATE WITH TOOLS
 50 ZONE 50, EA III CASE
 1 MANIPULATE BY HAND
 50 ZONE 50, EA III CASE
 17 REM 9W20 HARNESS(EA3
 2 MANIPULATE WITH TOOLS
 81 JET SHADE + BRACKET(R)
 1 MANIPULATE BY HAND
 81 JET SHADE + BRACKET(R)
 18 REM 2 MODULES(33A213)EA3
 2 MANIPULATE WITH TOOLS
 82 MAGNETOMETER
 83 DUAL FREQ RCVR
 1 MANIPULATE BY HAND
 82 MAGNETOMETER
 83 DUAL FREQ RCVR
 19 INST 2 MODULES(SAME)EA3
 1 MANIPULATE BY HAND
 50 ZONE 50, EA III CASE
 2 MANIPULATE WITH TOOLS
 50 ZONE 50, EA III CASE
 20 INST 9W20 HARNESS(EA3
 1 MANIPULATE BY HAND
 32 C3 K5-HSEN HSEI)SSSSQA 3E-CY UR3
 2 MANIPULATE WITH TOOLS
 32 C3 K5-HSEN HSEI)SSSSQA 3E-CY UR3
 4A MECHANICAL ASSEMBLY/TEST
 1 CLOSE EA3
 2 MANIPULATE WITH TOOLS
 50 ZONE 50, EA III CASE
 2 REM EA3 SWING FIXTURE
 2 MANIPULATE WITH TOOLS
 50 ZONE 50, EA III CASE
 3 INST 9 CONNECTORS(TEST
 1 MANIPULATE BY HAND
 32 C3 K5-HSEN HSEI)SSSSQA 3E-CY UR3
 2 MANIPULATE WITH TOOLS
 32 C3 K5-HSEN HSEI)SSSSQA 3E-CY UR3
 4 INST FLUX TANK LEGS(EA3
 1 MANIPULATE BY HAND
 3 ZONE 3, BAY 3
 5 INST FLUX TANK
 1 MANIPULATE BY HAND
 3 ZONE 3, BAY 3
 2 MANIPULATE WITH TOOLS
 3 ZONE 3, BAY 3
 6 TIGHTEN EA3 CONN SCREWS
 2 MANIPULATE WITH TOOLS
 32 C3 K5-HSEN HSEI)SSSSQA 3E-CY UR3
 7 REM S/P FROM FIXTURE
 2 MANIPULATE WITH TOOLS
 17 ZONE 17, SOLAR PANEL 1
 1 MANIPULATE BY HAND
 17 ZONE 17, SOLAR PANEL 1

- 8 MAG MAP SOL/P
 - 9 VISUAL INSPECTION
 - 17 ZONE 17, SOLAR PANEL 1
- 9 INST SOL/P ON FIXTURE
 - 1 MANIPULATE BY HAND
 - 17 ZONE 17, SOLAR PANEL 1
 - 2 MANIPULATE WITH TOOLS
 - 17 ZONE 17, SOLAR PANEL 1
- 10 REM S/P FROM FIXTURE
 - 2 MANIPULATE WITH TOOLS
 - 18 ZONE 18, SOLAR PANEL 3
 - 1 MANIPULATE BY HAND
 - 18 ZONE 18, SOLAR PANEL 3
- 11 MAG MAP SOL/P
 - 9 VISUAL INSPECTION
 - 18 ZONE 18, SOLAR PANEL 3
- 12 INST SOL/P ON FIXTURE
 - 1 MANIPULATE BY HAND
 - 18 ZONE 18, SOLAR PANEL 3
 - 2 MANIPULATE WITH TOOLS
 - 18 ZONE 18, SOLAR PANEL 3
- 13 ACCEL BONDED ON A/C FRAM
 - 12 POTTING, PAINTING
 - 21 ZONE 21, PANEL 1 SPAR
- 14 SYSTEMS TEST #2, PART 3
 - 10 INSPECTION WITH GAUGES
- 15 INST TRD SOURCE
 - 1 MANIPULATE BY HAND
 - 4 ZONE 4, BAY 4
- 16 REM TRD SOURCE
 - 1 MANIPULATE BY HAND
 - 4 ZONE 4, BAY 4
- 17 TORQUE VERIFICATION
 - 2 MANIPULATE WITH TOOLS
- 18 SECURE S/C (TENT) MAR 9
 - 17 SECURED IN TENT
- 19 REM INST 30 BIO-SPECIMEN
 - 1 MANIPULATE BY HAND
- 20 MATE UMBILICAL
 - 11 MATE (DEMATE) CONNECTORS
 - 2 ZONE 2, BAY 2
- 49 MECHANICAL ASSEMBLY/TEST
 - 1 MATE HG AND OMNI COAX
 - 11 MATE (DEMATE) CONNECTORS
 - 25 ZONE 25, HI-GAIN ANTENNA
 - 11 MATE (DEMATE) CONNECTORS
 - 26 ZONE 26, LO-GAIN ANTENNA
 - 2 SCREW D SOURCE IN
 - 2 MANIPULATE WITH TOOLS
 - 26 ZONE 26, LO-GAIN ANTENNA
 - 3 SYSTEMS TEST #2, PART 4
 - 10 INSPECTION WITH GAUGES
 - 26 ZONE 26, LO-GAIN ANTENNA
 - 4 UNSCREW D SOURCE
 - 2 MANIPULATE WITH TOOLS
 - 26 ZONE 26, LO-GAIN ANTENNA
 - 5 DEMATE 33A2 CONNECTOR
 - 11 MATE (DEMATE) CONNECTORS
 - 30 ZONE 30, UPPER RING HARN
 - 6 HANDHOLD SPECIAL SOURCE
 - 1 MANIPULATE BY HAND
 - 7 S/C TEST

10 INSPECTION WITH GAUGES
 8 BOND ACCEL ON EACH SOL/P
 12 POTTING, PAINTING
 17 ZONE 17, SOLAR PANEL 1
 12 POTTING, PAINTING
 18 ZONE 18, SOLAR PANEL 2
 12 POTTING, PAINTING
 19 ZONE 19, SOLAR PANEL 5
 12 POTTING, PAINTING
 20 ZONE 20, SOLAR PANEL 7
 9 MATE 9W30 CABLES
 11 MATE (DEMATE) CONNECTORS
 30 ZONE 30, UPPER RING HARN
 10 S/L TEST
 10 INSPECTION WITH GAUGES
 11 REM FLUX TANK, LEGS
 1 MANIPULATE BY HAND
 3 ZONE 3, BAY 3
 12 INST PRESSURE LINES
 1 MANIPULATE BY HAND
 47 ZONE 47, OCTAGON BOTTOM
 2 MANIPULATE WITH TOOLS
 47 ZONE 47, OCTAGON BOTTOM
 13 BLEED TANKS
 1 MANIPULATE BY HAND
 47 ZONE 47, OCTAGON BOTTOM
 14 INST SWING FIXTURES (EA3)
 1 MANIPULATE BY HAND
 50 ZONE 50, EA III CASE
 15 REM CASE 3
 2 MANIPULATE WITH TOOLS
 50 ZONE 50, EA III CASE
 1 MANIPULATE BY HAND
 50 ZONE 50, EA III CASE
 16 REM 4 MODULES (DAS/MAG)
 2 MANIPULATE WITH TOOLS
 88 MODULE, EA3
 89 MODULE, EA3
 90 MODULE, EA3
 91 MODULE, EA3
 1 MANIPULATE BY HAND
 88 MODULE, EA3
 89 MODULE, EA3
 90 MODULE, EA3
 91 MODULE, EA3
 17 REM 8 9W21 CONNECTORS
 11 MATE (DEMATE) CONNECTORS
 32 C3 K5-HSEN HSEI)SSSSQA 3E-CY UR3
 1 MANIPULATE BY HAND
 32 C3 K5-HSEN HSEI)SSSSQA 3E-CY UR3
 18 INST SWING FIXTURE (EA4)
 1 MANIPULATE BY HAND
 51 ZONE 51, EA IV CASE
 2 MANIPULATE WITH TOOLS
 51 ZONE 51, EA IV CASE
 19 OPEN CASE 4
 2 MANIPULATE WITH TOOLS
 51 ZONE 51, EA IV CASE
 20 TORQUE (VERIFY) CASE 4
 2 MANIPULATE WITH TOOLS
 51 ZONE 51, EA IV CASE
 50 MECHANICAL ASSEMBLY/TEST

- 1 CLOSE CASE 4
 - 2 MANIPULATE WITH TOOLS
51 ZONE 51, EA IV CASE
- 2 REM SWING FIXTURE(EA4)
 - 2 MANIPULATE WITH TOOLS
51 ZONE 51, EA IV CASE
 - 1 MANIPULATE BY HAND
51 ZONE 51, EA IV CASE
- 3 INST SWING FIXTURE(EA5)
 - 1 MANIPULATE BY HAND
52 ZONE 52, EA V CASE
 - 2 MANIPULATE WITH TOOLS
52 ZONE 52, EA V CASE
- 4 OPEN CASE 5
 - 2 MANIPULATE WITH TOOLS
52 ZONE 52, EA V CASE
- 5 TORQUE(VERIFY)CASE 5
 - 2 MANIPULATE WITH TOOLS
52 ZONE 52, EA V CASE
- 6 CLOSE CASE 5
 - 2 MANIPULATE WITH TOOLS
52 ZONE 52, EA V CASE
- 7 REM SWING FIXTURE(EA5)
 - 2 MANIPULATE WITH TOOLS
52 ZONE 52, EA V CASE
 - 1 MANIPULATE BY HAND
52 ZONE 52, EA V CASE
- 8 INST SWING FIXTURE(EA6)
 - 1 MANIPULATE BY HAND
53 ZONE 53, EA VI CASE
 - 2 MANIPULATE WITH TOOLS
53 ZONE 53, EA VI CASE
- 9 OPEN CASE 6
 - 2 MANIPULATE WITH TOOLS
53 ZONE 53, EA VI CASE
- 10 TORQUE(VERIFY)CASE 6
 - 2 MANIPULATE WITH TOOLS
53 ZONE 53, EA VI CASE
- 11 CLOSE CASE 6
 - 2 MANIPULATE WITH TOOLS
53 ZONE 53, EA VI CASE
- 12 REM SWING FIXTURE(EA6)
 - 2 MANIPULATE WITH TOOLS
53 ZONE 53, EA VI CASE
 - 1 MANIPULATE BY HAND
53 ZONE 53, EA VI CASE
- 13 REM BATTERY
 - 2 MANIPULATE WITH TOOLS
69 BATTERY
 - 1 MANIPULATE BY HAND
69 BATTERY
- 14 INST SIT SWITCH
 - 1 MANIPULATE BY HAND
47 ZONE 47, OCTAGON BOTTOM
- 15 INST SWING FIXTURE(EA1)
 - 1 MANIPULATE BY HAND
49 ZONE 49, EA I CASE
 - 2 MANIPULATE WITH TOOLS
49 ZONE 49, EA I CASE
- 16 OPEN CASE 1
 - 2 MANIPULATE WITH TOOLS
49 ZONE 49, EA I CASE

- 17 REM 2 MODULES(8A1/2
 - 2 MANIPULATE WITH TOOLS
 - 93 EA7 MODULE
 - 94 EA7 MODULE
 - 1 MANIPULATE BY HAND
 - 93 EA7 MODULE
 - 94 EA7 MODULE
- 18 INST 2 MODULES(CASE 1
 - 2 MANIPULATE WITH TOOLS
 - 49 ZONE 49, EA I CASE
 - 1 MANIPULATE BY HAND
 - 49 ZONE 49, EA I CASE
- 19 UNMATE, MATE 2 CONN(EA 1
 - 11 MATE (DEMATE) CONNECTORS
 - 31 ZONE 31, LOWER RING HARN
 - 11 MATE (DEMATE) CONNECTORS
 - 31 ZONE 31, LOWER RING HARN
- 20 WIRE XDUCER(EA1
 - 14 TIE HARNESSSES
 - 49 ZONE 49, EA I CASE
- 51 MECHANICAL ASSEMBLY/TEST
 - 1 TORQUE(VERIFY)CASE 1
 - 2 MANIPULATE WITH TOOLS
 - 49 ZONE 49, EA I CASE
 - 2 CLOSE CASE 1
 - 2 MANIPULATE WITH TOOLS
 - 49 ZONE 49, EA I CASE
 - 3 REM SWING FIXTURE(EA 1
 - 2 MANIPULATE WITH TOOLS
 - 49 ZONE 49, EA I CASE
 - 4 INSP 2 MODULES(8A1/2
 - 9 VISUAL INSPECTION
 - 49 ZONE 49, EA I CASE
 - 5 REM MAGNETOM(FRM 2E2 ANT
 - 2 MANIPULATE WITH TOOLS
 - 77 EA5 MODULE
 - 1 MANIPULATE BY HAND
 - 77 EA5 MODULE
 - 6 REM LIGHT SOURCE
 - 2 MANIPULATE WITH TOOLS
 - 2 ZONE 2, BAY 2
 - 7 SECURE S/C(TENT) MAR 10
 - 17 SECURED IN TENT
 - 8 REM UMBILICAL
 - 2 MANIPULATE WITH TOOLS
 - 97 UMBILICAL
 - 9 REM PIPS
 - 2 MANIPULATE WITH TOOLS
 - 99 PIPS
 - 1 MANIPULATE BY HAND
 - 99 PIPS
 - 10 REM LIGHT SOURCES
 - 2 MANIPULATE WITH TOOLS
 - 2 ZONE 2, BAY 2
 - 11 REM PRIMARY SUN SENSORS
 - 2 MANIPULATE WITH TOOLS
 - 100 PRI SUN SENSOR
 - 101 PRI SUN SENSOR
 - 12 INST LOUVER ASSEMBLY(BYS
 - 1 MANIPULATE BY HAND
 - 52 ZONE 52, EA V CASE
 - 2 MANIPULATE WITH TOOLS

- 52 ZONE 52, EA V CASE
- 13 MONITOR A/C GAS PRESSURE
 - 9 VISUAL INSPECTION
- 14 ADJUST BELLEV SPRINGS
 - 1 MANIPULATE BY HAND
 - 47 ZONE 47, OCTAGON BOTTOM
- 15 REM SERVO ACTUATOR
 - 1 MANIPULATE BY HAND
 - 102 SERVO ACTUATOR
 - 2 MANIPULATE WITH TOOLS
 - 102 SERVO ACTUATOR
- 16 INST LOUVER COVER(BAY 5)
 - 1 MANIPULATE BY HAND
 - 52 ZONE 52, EA V CASE
 - 2 MANIPULATE WITH TOOLS
 - 52 ZONE 52, EA V CASE
- 17 ADJUST BELLEV SPRINGS
 - 1 MANIPULATE BY HAND
 - 47 ZONE 47, OCTAGON BOTTOM
 - 2 MANIPULATE WITH TOOLS
 - 47 ZONE 47, OCTAGON BOTTOM
- 18 ADJ HIGAIN ANTENN SPRG
 - 1 MANIPULATE BY HAND
 - 25 ZONE 25, HI-GAIN ANTENNA
 - 2 MANIPULATE WITH TOOLS
 - 25 ZONE 25, HI-GAIN ANTENNA
- 19 INST MOTION SENSOR
 - 1 MANIPULATE BY HAND
 - 21 ZONE 21, PANEL 1 SPAR
 - 2 MANIPULATE WITH TOOLS
 - 21 ZONE 21, PANEL 1 SPAR
- 20 INST MICRO SWITCH
 - 1 MANIPULATE BY HAND
 - 21 ZONE 21, PANEL 1 SPAR
 - 2 MANIPULATE WITH TOOLS
 - 21 ZONE 21, PANEL 1 SPAR
- 52 MECHANICAL ASSEMBLY/TEST
 - 1 MATE COAX STRINGTIE
 - 11 MATE (DEMATE) CONNECTORS
 - 30 ZONE 30, UPPER RING HARN
 - 14 TIE HARNESSSES
 - 30 ZONE 30, UPPER RING HARN
- 2 INST PIPS
 - 1 MANIPULATE BY HAND
 - 2 ZONE 2, BAY 2
 - 2 MANIPULATE WITH TOOLS
 - 2 ZONE 2, BAY 2
- 3 INST LOUVER ASSY(BAY 7)
 - 1 MANIPULATE BY HAND
 - 54 ZONE 54, EA VII CASE
 - 2 MANIPULATE WITH TOOLS
 - 54 ZONE 54, EA VII CASE
- 4 REM REINST TRD
 - 2 MANIPULATE WITH TOOLS
 - 4 ZONE 4, BAY 4
- 5 REM UV PHOTOMETER
 - 2 MANIPULATE WITH TOOLS
 - 1 ZONE 1, BAY 1
- 6 INST JET V HARNESS
 - 1 MANIPULATE BY HAND
 - 54 ZONE 54, EA VII CASE
- 7 TORQUE(VERIFY) LOUVER

- 2 MANIPULATE WITH TOOLS
 - 54 ZONE 54, EA VII CASE
- 8 INST SHEAR PLATE
 - 1 MANIPULATE BY HAND
 - 7 ZONE 7, BAY 7
 - 2 MANIPULATE WITH TOOLS
 - 7 ZONE 7, BAY 7
- 9 POSITION S/C
 - 1 MANIPULATE BY HAND
- 10 REM S/P FIXTURE SCREWS
 - 1 MANIPULATE BY HAND
- 11 INST BOOST DAMPION S/P
 - 1 MANIPULATE BY HAND
 - 19 ZONE 19, SOLAR PANEL 5
 - 2 MANIPULATE WITH TOOLS
 - 19 ZONE 19, SOLAR PANEL 5
- 12 REM A/C GAS FIXTURE (BAYS)
 - 1 MANIPULATE BY HAND
 - 5 ZONE 5, BAY 5
 - 2 MANIPULATE WITH TOOLS
 - 5 ZONE 5, BAY 5
- 13 INST SOL/P (BAY 5)
 - 1 MANIPULATE BY HAND
 - 19 ZONE 19, SOLAR PANEL 5
 - 2 MANIPULATE WITH TOOLS
 - 19 ZONE 19, SOLAR PANEL 5
- 14 POSITION SPACER
 - 1 MANIPULATE BY HAND
 - 5 ZONE 5, BAY 5
- 15 INST SUN SHADES
 - 1 MANIPULATE BY HAND
 - 47 ZONE 47, OCTAGON BOTTOM
 - 2 MANIPULATE WITH TOOLS
 - 47 ZONE 47, OCTAGON BOTTOM
- 16 UNMATE 9W38 PYRO HARN
 - 11 MATE (DEMATE) CONNECTORS
 - 34 QJWYH4A CA-GH OSH(M C-QSS\$N BUUI
- 17 POSITION S/C
 - 1 MANIPULATE BY HAND
- 18 REM S/P 4A3 FROM FIXT
 - 1 MANIPULATE BY HAND
 - 18 ZONE 18, SOLAR PANEL 3
 - 2 MANIPULATE WITH TOOLS
 - 18 ZONE 18, SOLAR PANEL 3
- 19 INST RSTT DAMP/ON 4A3
 - 1 MANIPULATE BY HAND
 - 18 ZONE 18, SOLAR PANEL 3
 - 2 MANIPULATE WITH TOOLS
 - 18 ZONE 18, SOLAR PANEL 3
- 20 INSP DFR ANTENNA
 - 9 VISUAL INSPECTION
 - 112 D-R ANT (49-8)
- 53 MECHANICAL ASSEMBLY/TEST
 - 1 INST DFR 50MM ON 4A3 S/P
 - 1 MANIPULATE BY HAND
 - 22 ZONE 22, PANEL 3 SPAR
 - 2 MANIPULATE WITH TOOLS
 - 22 ZONE 22, PANEL 3 SPAR
 - 2 REM A/C GAS FRAME (BAY 3)
 - 1 MANIPULATE BY HAND
 - 3 ZONE 3, BAY 3
 - 2 MANIPULATE WITH TOOLS

- 3 ZONE 3, BAY 3
- 3 INST 4A3 S/P
- 1 MANIPULATE BY HAND
 - 18 ZONE 18, SOLAR PANEL 3
- 2 MANIPULATE WITH TOOLS
- 18 ZONE 18, SOLAR PANEL 3
- 4 INSP DFR 423.33MH ANTEN
- 1 MANIPULATE BY HAND
 - 61 DFR ANT (423)
- 5 INSP 3 TCR(TT61,5,7
- 9 VISUAL INSPECTION
 - 62 SPAR SHIELD
 - 9 VISUAL INSPECTION
 - 63 SPAR SHIELD
 - 9 VISUAL INSPECTION
 - 64 SPAR SHIELD
- 6 REM 4A1 S/P FROM FIX
- 2 MANIPULATE WITH TOOLS
 - 17 ZONE 17, SOLAR PANEL 1
 - 1 MANIPULATE BY HAND
 - 17 ZONE 17, SOLAR PANEL 1
- 7 INST 2 BOOST DAMP ON 4A1
- 1 MANIPULATE BY HAND
 - 17 ZONE 17, SOLAR PANEL 1
 - 2 MANIPULATE WITH TOOLS
 - 17 ZONE 17, SOLAR PANEL 1
- 8 INST 50MH DFR ON 4A1 S/P
- 1 MANIPULATE BY HAND
 - 21 ZONE 21, PANEL 1 SPAR
 - 2 MANIPULATE WITH TOOLS
 - 21 ZONE 21, PANEL 1 SPAR
- 9 INSP DEPLOY SPRINGS
- 1 MANIPULATE BY HAND
- 10 REM A/C GAS FRAME(BAY 1
- 2 MANIPULATE WITH TOOLS
 - 1 ZONE 1, BAY 1
 - 1 MANIPULATE BY HAND
 - 1 ZONE 1, BAY 1
- 11 INST 4A1 S/P
- 1 MANIPULATE BY HAND
 - 17 ZONE 17, SOLAR PANEL 1
 - 2 MANIPULATE WITH TOOLS
 - 17 ZONE 17, SOLAR PANEL 1
- 12 REM 4A7 S/P FROM FIX
- 2 MANIPULATE WITH TOOLS
 - 20 ZONE 20, SOLAR PANEL 7
 - 1 MANIPULATE BY HAND
 - 20 ZONE 20, SOLAR PANEL 7
- 13 ROTATE S/C TO BAY 7
- 1 MANIPULATE BY HAND
- 14 REM A/C GAS FRAME(BAY 7
- 2 MANIPULATE WITH TOOLS
 - 7 ZONE 7, BAY 7
 - 1 MANIPULATE BY HAND
 - 7 ZONE 7, BAY 7
- 15 INST 4A7 S/P
- 1 MANIPULATE BY HAND
 - 20 ZONE 20, SOLAR PANEL 7
 - 2 MANIPULATE WITH TOOLS
 - 20 ZONE 20, SOLAR PANEL 7
- 16 INST 2 BOOST DAMP ON 4A7
- 1 MANIPULATE BY HAND

20 ZONE 20, SOLAR PANEL 7
2 MANIPULATE WITH TOOLS
20 ZONE 20, SOLAR PANEL 7
17 INST 3 TCR, S(ON 4A1, 7, 5)
1 MANIPULATE BY HAND
21 ZONE 21, PANEL 1 SPAR
1 MANIPULATE BY HAND
23 ZONE 23, PANEL 5 SPAR
1 MANIPULATE BY HAND
24 ZONE 24, PANEL 7 SPAR
18 INST DPLY SPRGS(EACH SP
2 MANIPULATE WITH TOOLS
21 ZONE 21, PANEL 1 SPAR
2 MANIPULATE WITH TOOLS
22 ZONE 22, PANEL 3 SPAR
2 MANIPULATE WITH TOOLS
23 ZONE 23, PANEL 5 SPAR
2 MANIPULATE WITH TOOLS
24 ZONE 24, PANEL 7 SPAR
19 INST 423.3MH DFR ON 4A3
2 MANIPULATE WITH TOOLS
22 ZONE 22, PANEL 3 SPAR
20 REM CANOPUS SENS
2 MANIPULATE WITH TOOLS
70 A/C JET SHADE
1 MANIPULATE BY HAND
70 A/C JET SHADE
54 MECHANICAL ASSEMBLY/TEST
1 INST 3 CR DAMP/EA1, 5, 7
2 MANIPULATE WITH TOOLS
1 ZONE 1, BAY 1
2 MANIPULATE WITH TOOLS
5 ZONE 5, BAY 5
2 MANIPULATE WITH TOOLS
7 ZONE 7, BAY 7
2 S/C BOTTOM PLAS INST
1 MANIPULATE BY HAND
3 MOVE TENT
1 MANIPULATE BY HAND
4 REM TRD(25A1)
1 MANIPULATE BY HAND
4 ZONE 4, BAY 4
5 REM PLANET SENS(7L58)
1 MANIPULATE BY HAND
8 ZONE 8, BAY 8
6 INST PLAS BAG
1 MANIPULATE BY HAND
7 SECUR/PURGE S/C MAR11/12
17 SECURED IN TENT
8 REM PLAS BAG
1 MANIPULATE BY HAND
9 INST 4 9W36 PYRO HARN
1 MANIPULATE BY HAND
21 ZONE 21, PANEL 1 SPAR
2 MANIPULATE WITH TOOLS
21 ZONE 21, PANEL 1 SPAR
1 MANIPULATE BY HAND
22 ZONE 22, PANEL 3 SPAR
2 MANIPULATE WITH TOOLS
22 ZONE 22, PANEL 3 SPAR
1 MANIPULATE BY HAND
23 ZONE 23, PANEL 5 SPAR

- 2 MANIPULATE WITH TOOLS
 - 23 ZONE 23, PANEL 5 SPAR
- 1 MANIPULATE BY HAND
 - 24 ZONE 24, PANEL 7 SPAR
- 2 MANIPULATE WITH TOOLS
 - 24 ZONE 24, PANEL 7 SPAR
- 10 REM LOUVER
 - 1 MANIPULATE BY HAND
- 11 INSP BATT,UV PHOTO
 - 9 VISUAL INSPECTION
 - 69 BATTERY
- 12 INST PLANET SENSOR
 - 1 MANIPULATE BY HAND
 - 8 ZONE 8, BAY 8
- 13 INSP CANOPUS SENSOR
 - 1 MANIPULATE BY HAND
- 14 INST EAB SWING FIXTURE
 - 2 MANIPULATE WITH TOOLS
 - 55 ZONE 55, EA VIII CASE
 - 1 MANIPULATE BY HAND
 - 55 ZONE 55, EA VIII CASE
- 15 OPEN CASE 8
 - 2 MANIPULATE WITH TOOLS
 - 55 ZONE 55, EA VIII CASE
- 16 INST 4A14 BATTERY
 - 1 MANIPULATE BY HAND
 - 55 ZONE 55, EA VIII CASE
 - 2 MANIPULATE WITH TOOLS
 - 55 ZONE 55, EA VIII CASE
- 17 CLOSE,TORQ CASE 8
 - 2 MANIPULATE WITH TOOLS
 - 55 ZONE 55, EA VIII CASE
- 18 REM EAB SWING FIXTURE
 - 2 MANIPULATE WITH TOOLS
 - 55 ZONE 55, EA VIII CASE
 - 1 MANIPULATE BY HAND
 - 55 ZONE 55, EA VIII CASE
- 19 INST ATTCH ANG5/BAY 8
 - 1 MANIPULATE BY HAND
 - 8 ZONE 8, BAY 8
- 20 INSP CASE 3,MOD 20A9
 - 9 VISUAL INSPECTION
 - 78 MODULE,EA3(20A9)
- 55 MECHANICAL ASSEMBLY/TEST
 - 1 INST UV PHOTOM(34A1
 - 1 MANIPULATE BY HAND
 - 2 ZONE 2, BAY 2
 - 2 MANIPULATE WITH TOOLS
 - 2 ZONE 2, BAY 2
 - 2 INST CANOPUS SENSOR
 - 1 MANIPULATE BY HAND
 - 8 ZONE 8, BAY 8
 - 2 MANIPULATE WITH TOOLS
 - 8 ZONE 8, BAY 8
 - 3 INST EA3 SWING FIXTURE
 - 1 MANIPULATE BY HAND
 - 50 ZONE 50, EA III CASE
 - 2 MANIPULATE WITH TOOLS
 - 50 ZONE 50, EA III CASE
 - 4 INST EA3(LEFT OPEN)
 - 1 MANIPULATE BY HAND
 - 50 ZONE 50, EA III CASE

- 5 INST 2 MODS/EA3(20A8/9)
 - 1 MANIPULATE BY HAND
 - 50 ZONE 50, EA III CASE
 - 2 MANIPULATE WITH TOOLS
 - 50 ZONE 50, EA III CASE
- 6 INST 2 MODS/EA3(33A2/3)
 - 1 MANIPULATE BY HAND
 - 50 ZONE 50, EA III CASE
 - 2 MANIPULATE WITH TOOLS
 - 50 ZONE 50, EA III CASE
- 7 MATE 11 CONN/EA3
 - 11 MATE (DEMATE) CONNECTORS
 - 32 C3 KS-HSEN HSEI)SSSSQA 3E-CY UR3
- 8 CLOSE TORQ CASE 3
 - 2 MANIPULATE WITH TOOLS
 - 50 ZONE 50, EA III CASE
- 9 INST EA3 LOUVERS
 - 1 MANIPULATE BY HAND
 - 50 ZONE 50, EA III CASE
 - 2 MANIPULATE WITH TOOLS
 - 50 ZONE 50, EA III CASE
- 10 INST EA3 CRUISE DAMPER
 - 1 MANIPULATE BY HAND
 - 3 ZONE 3, BAY 3
- 11 MOVE S/C TO HORIZ POS
 - 16 MANEUVER SPACECRAFT
- 12 INST CK MAG(33A1)
 - 2 MANIPULATE WITH TOOLS
 - 26 ZONE 26, LO-GAIN ANTENNA
 - 9 VISUAL INSPECTION
 - 26 ZONE 26, LO-GAIN ANTENNA
- 13 VELCO UPPER SHIELD(0943)
 - 1 MANIPULATE BY HAND
 - 46 ZONE 46, OCTAGON TOP
- 14 INST 2 SUN SENS BLANKETS
 - 1 MANIPULATE BY HAND
 - 2 ZONE 2, BAY 2
 - 1 MANIPULATE BY HAND
 - 6 ZONE 6, BAY 6
- 15 INST THERM BLANKET(1886)
 - 1 MANIPULATE BY HAND
 - 46 ZONE 46, OCTAGON TOP
- 16 S/C TEST(DAS)
 - 10 INSPECTION WITH GAUGES
- 17 SECURE S/C(SHEETS)MAR 13
 - 17 SECURED IN TENT
- 18 S/C TEST(MAG)
 - 10 INSPECTION WITH GAUGES
- 19 RAISE S/C
 - 16 MANEUVER SPACECRAFT
- 20 REM ALL LOUVER COVERS
 - 2 MANIPULATE WITH TOOLS
 - 46 ZONE 46, OCTAGON TOP
 - 1 MANIPULATE BY HAND
 - 46 ZONE 46, OCTAGON TOP
- 56 MECHANICAL ASSEMBLY/TEST
 - 1 INST LWR THERM SHLD(0918)
 - 1 MANIPULATE BY HAND
 - 47 ZONE 47, OCTAGON BOTTOM
 - 2 MANIPULATE WITH TOOLS
 - 47 ZONE 47, OCTAGON BOTTOM
 - 2 INST DISCON SHLD(1781)

- 1 MANIPULATE BY HAND
- 2 ZONE 2, BAY 2
- 3 INST UMBILICAL SHLD(0938
- 1 MANIPULATE BY HAND
- 2 ZONE 2, BAY 2
- 4 INST 8 SUN SHD DPLY SPRG
- 1 MANIPULATE BY HAND
- 47 ZONE 47, OCTAGON BOTTOM
- 2 MANIPULATE WITH TOOLS
- 47 ZONE 47, OCTAGON BOTTOM
- 5 VELCO TRD SHADE
- 1 MANIPULATE BY HAND
- 4 ZONE 4, BAY 4
- 6 INST SUN SHADE, STRINGTIE
- 2 MANIPULATE WITH TOOLS
- 47 ZONE 47, OCTAGON BOTTOM
- 14 TIE HARNESSSES
- 47 ZONE 47, OCTAGON BOTTOM
- 7 INST LOUVER COVERS
- 1 MANIPULATE BY HAND
- 46 ZONE 46, OCTAGON TOP
- 2 MANIPULATE WITH TOOLS
- 46 ZONE 46, OCTAGON TOP
- 8 LOWER S/C SET ON U-RING
- 16 MANEUVER SPACECRAFT
- 9 INST BOTTOM S/C COVER
- 1 MANIPULATE BY HAND
- 2 MANIPULATE WITH TOOLS
- 10 RAISE S/C AND U-RING
- 16 MANEUVER SPACECRAFT
- 11 INST S/C IN XPORTER
- 16 MANEUVER SPACECRAFT
- 12 INST S/C PURGE(LN2)
- 1 MANIPULATE BY HAND
- 13 MOVE S/C UNDER PURGE
- 17 SECURED IN TENT
- 14 UNCOVER S/C
- 1 MANIPULATE BY HAND
- 15 REM S/C FROM U-RING
- 1 MANIPULATE BY HAND
- 16 INST S/C ON SHAKER ADAPT
- 2 MANIPULATE WITH TOOLS
- 1 MANIPULATE BY HAND
- 17 CK PYRO SWITCH(PAS
- 9 VISUAL INSPECTION
- 47 ZONE 47, OCTAGON BOTTOM
- 18 ADJUST CLEARANCE, INSTWSH
- 1 MANIPULATE BY HAND
- 47 ZONE 47, OCTAGON BOTTOM
- 19 REMOVE LIFT BARS
- 2 MANIPULATE WITH TOOLS
- 46 ZONE 46, OCTAGON TOP
- 20 REM S/P SAFETY CALBES
- 11 MATE (DEMATE) CONNECTORS
- 21 ZONE 21, PANEL 1 SPAR
- 57 MECHANICAL ASSEMBLY/TEST
- 1 INST, TENSION V-BAND
- 1 MANIPULATE BY HAND
- 2 MANIPULATE WITH TOOLS
- 2 CK PAS(PYRO) SWITCH
- 9 VISUAL INSPECTION
- 47 ZONE 47, OCTAGON BOTTOM

- 3 ADJUST SIT SWITCH
 - 1 MANIPULATE BY HAND
 - 47 ZONE 47, OCTAGON BOTTOM
- 4 MATE INFLIGHT DISCONNECT
 - 11 MATE (DEMATE) CONNECTORS
 - 5 ZONE 5, BAY 5
- 5 TIE VBAND MONITOR CABLES
 - 14 TIE HARNESSSES
- 6 INST 8 CORNER SHIELDS
 - 1 MANIPULATE BY HAND
 - 46 ZONE 46, OCTAGON TOP
 - 2 MANIPULATE WITH TOOLS
 - 46 ZONE 46, OCTAGON TOP
- 7 REM LOUVER COVERS
 - 2 MANIPULATE WITH TOOLS
 - 46 ZONE 46, OCTAGON TOP
 - 1 MANIPULATE BY HAND
 - 46 ZONE 46, OCTAGON TOP
- 8 REM CANOPUS LITE SRCE(S8)
 - 2 MANIPULATE WITH TOOLS
 - 8 ZONE 8, BAY 8
- 9 REM EARTH SENS SOURCE(S6)
 - 2 MANIPULATE WITH TOOLS
 - 8 ZONE 8, BAY 8
- 10 INST BAFFLE ASSY(0589)
 - 1 MANIPULATE BY HAND
 - 8 ZONE 8, BAY 8
 - 2 MANIPULATE WITH TOOLS
 - 8 ZONE 8, BAY 8
- 11 MATE ACCEL TEST CBLES(9)
 - 11 MATE (DEMATE) CONNECTORS
 - 31 ZONE 31, LOWER RING HARN
- 12 REM TRD(25A1)
 - 2 MANIPULATE WITH TOOLS
 - 4 ZONE 4, BAY 4
- 13 CK, REPAIR UMBILICAL CONN
 - 1 MANIPULATE BY HAND
 - 2 ZONE 2, BAY 2
- 14 CK UMBIL, V-BAND, INSP S/C
 - 10 INSPECTION WITH GAUGES
- 15 S/C TESTS(VIBRATION TIME)
 - 10 INSPECTION WITH GAUGES
- 16 ROTATE S/C
 - 16 MANEUVER SPACECRAFT
- 17 SECURE S/C(SHEETS)MAR 15
 - 17 SECURED IN TENT
- 18 MATE UMBILICAL
 - 11 MATE (DEMATE) CONNECTORS
 - 2 ZONE 2, BAY 2
- 19 REM VBAND SAFETY STRAP
 - 2 MANIPULATE WITH TOOLS
- 20 REM SCI AND SENSOR COVER
 - 1 MANIPULATE BY HAND
- 5A MECHANIKER ASSEMBLY/TEST
 - 1 REM UMBILICAL CONNECT
 - 11 MATE (DEMATE) CONNECTORS
 - 2 ZONE 2, BAY 2
 - 2 S/C TESTS(VIBRATION TIME)
 - 10 INSPECTION WITH GAUGES
 - 3 CK UMBIL, V-BAND, INSP S/C
 - 10 INSPECTION WITH GAUGES
 - 2 ZONE 2, BAY 2

- 4 MISC INST. REMOVALS
 - 1 MANIPULATE BY HAND
 - 2 ZONE 2, BAY 2
 - 2 MANIPULATE WITH TOOLS
 - 2 ZONE 2, BAY 2
- 5 REM OSE INSTR.
 - 1 MANIPULATE BY HAND
- 6 REM CORNER SHIELDS
 - 1 MANIPULATE BY HAND
 - 46 ZONE 46, OCTAGON TOP
 - 1 MANIPULATE BY HAND
 - 46 ZONE 46, OCTAGON TOP
- 7 INST LOUVER COVERS
 - 1 MANIPULATE BY HAND
 - 46 ZONE 46, OCTAGON TOP
 - 2 MANIPULATE WITH TOOLS
 - 46 ZONE 46, OCTAGON TOP
- 8 INST LIFTING BARS
 - 1 MANIPULATE BY HAND
 - 46 ZONE 46, OCTAGON TOP
 - 2 MANIPULATE WITH TOOLS
 - 46 ZONE 46, OCTAGON TOP
- 9 DEMATE S/P BENDIX PLUGS
 - 11 MATE (DEMATE) CONNECTORS
 - 30 ZONE 30, UPPER RING HARN
- 10 DEMATE INFLITE DISCONN
 - 11 MATE (DEMATE) CONNECTORS
 - 5 ZONE 5, BAY 5
- 11 INST LIFT FIX TO S/C
 - 1 MANIPULATE BY HAND
 - 46 ZONE 46, OCTAGON TOP
 - 2 MANIPULATE WITH TOOLS
 - 46 ZONE 46, OCTAGON TOP
- 12 LOOSEN VBAND, SET SPRINGS
 - 1 MANIPULATE BY HAND
- 13 SET S/C ON XPORTR
 - 16 MANEUVER SPACECRAFT
- 14 INST S/C IN CANNISTER
 - 1 MANIPULATE BY HAND
- 15 INST BAND AROUND BAG
 - 1 MANIPULATE BY HAND
- 16 XPORT S/C (PURGE)
 - 16 MANEUVER SPACECRAFT
- 17 REM S/C FROM CANNISTER
 - 1 MANIPULATE BY HAND
- 18 SECURE S/C TO LOW POSR
 - 1 MANIPULATE BY HAND
- 19 REM LOUVER COVERS
 - 1 MANIPULATE BY HAND
 - 46 ZONE 46, OCTAGON TOP
- 20 REM SUN SHADE
 - 1 MANIPULATE BY HAND
 - 47 ZONE 47, OCTAGON BOTTOM
 - 2 MANIPULATE WITH TOOLS
 - 47 ZONE 47, OCTAGON BOTTOM
- 59 MECHANICAL ASSEMBLY/TEST
 - 1 REM DEPLY SPRNG ASSY
 - 2 MANIPULATE WITH TOOLS
 - 46 ZONE 46, OCTAGON TOP
 - 2 REM LOWER THERMAL SHIELD
 - 1 MANIPULATE BY HAND
 - 47 ZONE 47, OCTAGON BOTTOM

- 2 MANIPULATE WITH TOOLS
47 ZONE 47, OCTAGON BOTTOM
- 3 REM ATTACH ANGLES
 - 1 MANIPULATE BY HAND
47 ZONE 47, OCTAGON BOTTOM
 - 2 MANIPULATE WITH TOOLS
47 ZONE 47, OCTAGON BOTTOM
- 4 REM CHANNELS
 - 1 MANIPULATE BY HAND
47 ZONE 47, OCTAGON BOTTOM
 - 2 MANIPULATE WITH TOOLS
47 ZONE 47, OCTAGON BOTTOM
- 5 POS S/C ON LOW-LEVELER
 - 1 MANIPULATE BY HAND
- 6 REM EAGLE SHIELD
 - 1 MANIPULATE BY HAND
4 ZONE 4, BAY 4
 - 2 MANIPULATE WITH TOOLS
4 ZONE 4, BAY 4
- 7 INST LOUVER COVERS
 - 1 MANIPULATE BY HAND
46 ZONE 46, OCTAGON TOP
 - 2 MANIPULATE WITH TOOLS
46 ZONE 46, OCTAGON TOP
- 8 REM UPPER THERMAL SHIELD
 - 2 MANIPULATE WITH TOOLS
46 ZONE 46, OCTAGON TOP
 - 1 MANIPULATE BY HAND
46 ZONE 46, OCTAGON TOP
- 9 REM TROUGH SHIELD
 - 2 MANIPULATE WITH TOOLS
27 ZONE 27, TOP RING TRAY
- 10 REM BAY 2 SHEAR PLATE
 - 2 MANIPULATE WITH TOOLS
1 ZONE 1, BAY 1
 - 1 MANIPULATE BY HAND
1 ZONE 1, BAY 1
- 11 REM ACT HARNESS
 - 2 MANIPULATE WITH TOOLS
31 ZONE 31, LOWER RING HARN
 - 1 MANIPULATE BY HAND
31 ZONE 31, LOWER RING HARN
- 12 REM PIPS
 - 2 MANIPULATE WITH TOOLS
2 ZONE 2, BAY 2
 - 1 MANIPULATE BY HAND
2 ZONE 2, BAY 2
- 13 REM TCR (T61,5,7)
 - 1 MANIPULATE BY HAND
23 ZONE 23, PANEL 5 SPAR
 - 1 MANIPULATE BY HAND
21 ZONE 21, PANEL 1 SPAR
 - 1 MANIPULATE BY HAND
24 ZONE 24, PANEL 7 SPAR
- 14 REM 423.3 MC ANTEN (15E3)
 - 2 MANIPULATE WITH TOOLS
22 ZONE 22, PANEL 3 SPAR
 - 1 MANIPULATE BY HAND
22 ZONE 22, PANEL 3 SPAR
- 15 DEMATE 9W38 PYRO HARN
 - 11 MATE (DEMATE) CONNECTORS
22 ZONE 22, PANEL 3 SPAR

- 16 REM PWR HARN 4A1/7 (4)
 - 2 MANIPULATE WITH TOOLS
 - 21 ZONE 21, PANEL 1 SPAR
 - 2 MANIPULATE WITH TOOLS
 - 22 ZONE 22, PANEL 3 SPAR
 - 2 MANIPULATE WITH TOOLS
 - 23 ZONE 23, PANEL 5 SPAR
 - 2 MANIPULATE WITH TOOLS
 - 24 ZONE 24, PANEL 7 SPAR
- 17 REM DEPLY SPRGS/4A1/7
 - 2 MANIPULATE WITH TOOLS
 - 21 ZONE 21, PANEL 1 SPAR
 - 2 MANIPULATE WITH TOOLS
 - 22 ZONE 22, PANEL 3 SPAR
 - 2 MANIPULATE WITH TOOLS
 - 23 ZONE 23, PANEL 5 SPAR
 - 2 MANIPULATE WITH TOOLS
 - 24 ZONE 24, PANEL 7 SPAR
- 18 REM 0589 8FFLE ASSY
 - 2 MANIPULATE WITH TOOLS
 - 8 ZONE 8, BAY 8
 - 1 MANIPULATE BY HAND
 - 8 ZONE 8, BAY 8
- 19 INST 7CS8 LITE SOURCE
 - 1 MANIPULATE BY HAND
 - 4 ZONE 4, BAY 4
- 20 REM 7LS8, INST ON BLOCK
 - 2 MANIPULATE WITH TOOLS
 - 8 ZONE 8, BAY 8
 - 1 MANIPULATE BY HAND
 - 8 ZONE 8, BAY 8
- 60 MECHANICAL ASSEMBLY/TEST
 - 1 LOWER S/C
 - 2 MANIPULATE WITH TOOLS
 - 2 INST L/F TENT OVER S/C
 - 1 MANIPULATE BY HAND
 - 3 REN S/P(4A7) FROM BAY 7
 - 2 MANIPULATE WITH TOOLS
 - 20 ZONE 20, SOLAR PANEL 7
 - 1 MANIPULATE BY HAND
 - 20 ZONE 20, SOLAR PANEL 7
 - 4 INST S/C GAS SYS/BAY 7
 - 1 MANIPULATE BY HAND
 - 7 ZONE 7, BAY 7
 - 2 MANIPULATE WITH TOOLS
 - 7 ZONE 7, BAY 7
 - 5 REM ROOST DAMP/4A7
 - 2 MANIPULATE WITH TOOLS
 - 20 ZONE 20, SOLAR PANEL 7
 - 6 REM S/P(4A1)/BAY7
 - 2 MANIPULATE WITH TOOLS
 - 17 ZONE 17, SOLAR PANEL 1
 - 1 MANIPULATE BY HAND
 - 17 ZONE 17, SOLAR PANEL 1
 - 7 REM S/P (4A1), INST/FRAM
 - 1 MANIPULATE BY HAND
 - 17 ZONE 17, SOLAR PANEL 1
 - 2 MANIPULATE WITH TOOLS
 - 17 ZONE 17, SOLAR PANEL 1
 - 8 REM S/P(4A3)/BAY3
 - 2 MANIPULATE WITH TOOLS
 - 18 ZONE 18, SOLAR PANEL 3

- 1 MANIPULATE BY HAND
18 ZONE 18, SOLAR PANEL 3
- 9 REM 49.8 MH ANTEN/4A3
 - 2 MANIPULATE WITH TOOLS
22 ZONE 22, PANEL 3 SPAR
- 10 REM S/P (4A3), INST/FRAM
 - 2 MANIPULATE WITH TOOLS
18 ZONE 18, SOLAR PANEL 3
 - 1 MANIPULATE BY HAND
18 ZONE 18, SOLAR PANEL 3
- 11 INST A/C GAS SYS/FRAM
 - 1 MANIPULATE BY HAND
3 ZONE 3, BAY 3
 - 2 MANIPULATE WITH TOOLS
3 ZONE 3, BAY 3
- 12 ROTATE S/C
 - 1 MANIPULATE BY HAND
- 13 REM S/P (4A5)
 - 2 MANIPULATE WITH TOOLS
19 ZONE 19, SOLAR PANEL 5
 - 1 MANIPULATE BY HAND
19 ZONE 19, SOLAR PANEL 5
- 14 INST BRKOUT BOXES/S/C
 - 1 MANIPULATE BY HAND
47 ZONE 47, OCTAGON BOTTOM
 - 2 MANIPULATE WITH TOOLS
47 ZONE 47, OCTAGON BOTTOM
- 15 INST FLUX TANK, LEGS
 - 1 MANIPULATE BY HAND
46 ZONE 46, OCTAGON TOP
 - 2 MANIPULATE WITH TOOLS
46 ZONE 46, OCTAGON TOP
- 16 REM CRUIS DAMP
 - 2 MANIPULATE WITH TOOLS
70 A/C JET SHADE
 - 1 MANIPULATE BY HAND
70 A/C JET SHADE
- 17 INSP, INST PIPS (10A)
 - 9 VISUAL INSPECTION
2 ZONE 2, BAY 2
 - 1 MANIPULATE BY HAND
2 ZONE 2, BAY 2
 - 2 MANIPULATE WITH TOOLS
2 ZONE 2, BAY 2
- 18 S/C TEST (VIBRATION)
 - 10 INSPECTION WITH GAUGES
- 19 REM TRD COVER
 - 2 MANIPULATE WITH TOOLS
71 CRUISE DAMPER
 - 1 MANIPULATE BY HAND
71 CRUISE DAMPER
- 61 MECHANICAL ASSEMBLY/TEST
 - 1 REM CD LATCH ASSYS
 - 2 MANIPULATE WITH TOOLS
 - 1 MANIPULATE BY HAND
46 ZONE 46, OCTAGON TOP
 - 2 REM 2W46 COAX
 - 2 MANIPULATE WITH TOOLS
72 COAX
 - 3 INST 4 SQUIB HARNESS
 - 1 MANIPULATE BY HAND
 - 2 MANIPULATE WITH TOOLS

- 21 ZONE 21, PANEL 1 SPAR
- 22 ZONE 22, PANEL 3 SPAR
- 23 ZONE 23, PANEL 5 SPAR
- 24 ZONE 24, PANEL 7 SPAR
- 4 REM TRD
 - 2 MANIPULATE WITH TOOLS
 - 4 ZONE 4, BAY 4
- 5 CK, REPACE TRD
 - 1 MANIPULATE BY HAND
 - 2 MANIPULATE WITH TOOLS
 - 4 ZONE 4, BAY 4
- 6 UNMATE TEST CONN
 - 11 MATE (DEMATE) CONNECTORS
 - 33 HSEN A/H MSHA ASS-.SS6XB/H CS(IP D-P
- 7 HOOKUP A/C PHRESS CABLES
 - 1 MANIPULATE BY HAND
 - 31 ZONE 31, LOWER RING HARN
- 8 BLEED A/C TANKS
 - 2 MANIPULATE WITH TOOLS
- 9 MATE, ROUT JETV CABLES
 - 11 MATE (DEMATE) CONNECTORS
 - 31 ZONE 31, LOWER RING HARN
- 10 INST THERMOCOUPLES
 - 1 MANIPULATE BY HAND
 - 2 MANIPULATE WITH TOOLS
 - 46 ZONE 46, OCTAGON TOP
- 11 ADJ BELLEVIEW SPRINGS
 - 2 MANIPULATE WITH TOOLS
 - 46 ZONE 46, OCTAGON TOP
- 12 INST HEATERS
 - 1 MANIPULATE BY HAND
 - 46 ZONE 46, OCTAGON TOP
 - 2 MANIPULATE WITH TOOLS
 - 46 ZONE 46, OCTAGON TOP
- 13 REM FLUX TANK
 - 2 MANIPULATE WITH TOOLS
 - 1 MANIPULATE BY HAND
- 14 INST STRING TIES/HEAT C
 - 1 MANIPULATE BY HAND
 - 46 ZONE 46, OCTAGON TOP
 - 2 MANIPULATE WITH TOOLS
 - 46 ZONE 46, OCTAGON TOP
- 15 INST LOUVERS
 - 1 MANIPULATE BY HAND
 - 51 ZONE 51, EA IV CASE
 - 2 MANIPULATE WITH TOOLS
 - 51 ZONE 51, EA IV CASE
- 16 INST FLUX TANK
 - 1 MANIPULATE BY HAND
 - 2 MANIPULATE WITH TOOLS
- 17 RAISE S/C TO VERTICAL
 - 1 MANIPULATE BY HAND
 - 2 MANIPULATE WITH TOOLS
- 18 REM FLUX TANK LEG/BAY 6
 - 2 MANIPULATE WITH TOOLS
 - 6 ZONE 6, BAY 6
- 19 REM LOVER/BAY 6
 - 2 MANIPULATE WITH TOOLS
 - 75 EA5 MODULE
 - 1 MANIPULATE BY HAND
 - 75 EA5 MODULE
- 62 MECHANICAL ASSEMBLY/TEST

- 1 REM LOUVER COVER
 - 2 MANIPULATE WITH TOOLS
 - 55 ZONE 55, EA VIII CASE
- 2 REM BATTERY
 - 2 MANIPULATE WITH TOOLS
 - 69 BATTERY
 - 1 MANIPULATE BY HAND
 - 69 BATTERY
- 3 REM ATTACH ANGLES (2)
 - 1 MANIPULATE BY HAND
 - 8 ZONE 8, BAY 8
 - 2 MANIPULATE WITH TOOLS
 - 8 ZONE 8, BAY 8
- 4 CLOSE TORQ 4A8, BAY 8
 - 1 MANIPULATE BY HAND
 - 55 ZONE 55, EA VIII CASE
 - 2 MANIPULATE WITH TOOLS
 - 55 ZONE 55, EA VIII CASE
- 5 INST BATT
 - 1 MANIPULATE BY HAND
 - 55 ZONE 55, EA VIII CASE
 - 2 MANIPULATE WITH TOOLS
 - 55 ZONE 55, EA VIII CASE
- 6 INST LOUVER COVER
 - 1 MANIPULATE BY HAND
 - 55 ZONE 55, EA VIII CASE
- 7 INST THERMOCOUPLE
 - 1 MANIPULATE BY HAND
 - 8 ZONE 8, BAY 8
 - 2 MANIPULATE WITH TOOLS
 - 8 ZONE 8, BAY 8
- 8 INST C101 TORQ
 - 1 MANIPULATE BY HAND
 - 8 ZONE 8, BAY 8
 - 2 MANIPULATE WITH TOOLS
 - 8 ZONE 8, BAY 8
- 9 PREP 7GA FOR PRESSURE
 - 1 MANIPULATE BY HAND
 - 47 ZONE 47, OCTAGON BOTTOM
- 10 PRESSURIZE 7GA
 - 2 MANIPULATE WITH TOOLS
 - 47 ZONE 47, OCTAGON BOTTOM
- 11 TEDLAR WRAP CABLING
 - 1 MANIPULATE BY HAND
 - 30 ZONE 30, UPPER RING HARN
- 12 CONT TEDLAR WRAP
 - 1 MANIPULATE BY HAND
 - 30 ZONE 30, UPPER RING HARN
- 13 RAISE S/C
 - 1 MANIPULATE BY HAND
 - 2 MANIPULATE WITH TOOLS
- 14 MATE TEST CONNECTORS
 - 11 MATE (DEMATE) CONNECTORS
 - 31 ZONE 31, LOWER RING HARN
- 15 S/C TEST (SYS VERIF)
 - 10 INSPECTION WITH GAUGES
- 16 REM FLUX TANK
 - 2 MANIPULATE WITH TOOLS
 - 46 ZONE 46, OCTAGON TOP
 - 1 MANIPULATE BY HAND
 - 46 ZONE 46, OCTAGON TOP
- 17 A/C FAS SYS PREP

- 1 MANIPULATE BY HAND
 - 47 ZONE 47, OCTAGON BOTTOM
- 2 MANIPULATE WITH TOOLS
 - 47 ZONE 47, OCTAGON BOTTOM
- 18 REM THERMOCOUPLES
 - 2 MANIPULATE WITH TOOLS
 - 47 ZONE 47, OCTAGON BOTTOM
 - 1 MANIPULATE BY HAND
 - 47 ZONE 47, OCTAGON BOTTOM
- 19 REM MAG
 - 1 MANIPULATE BY HAND
 - 26 ZONE 26, LO-GAIN ANTENNA
 - 2 MANIPULATE WITH TOOLS
 - 26 ZONE 26, LO-GAIN ANTENNA
- 63 MECHANICAL ASSY/TEST
 - 1 A/C LEAK CHECK
 - 10 INSPECTION WITH GAUGES
 - 2 INST 33A1
 - 1 MANIPULATE BY HAND
 - 54 ZONE 54, EA VII CASE
 - 2 MANIPULATE WITH TOOLS
 - 54 ZONE 54, EA VII CASE
 - 3 A/C LEAK CHECK
 - 10 INSPECTION WITH GAUGES
 - 4 MATE 33A1 AND J3
 - 11 MATE (DEMATE) CONNECTORS
 - 36 CZ KSH(H PSGH 0,3=ISQOS(5 FL(HSC3,(
 - 5 DEMATE
 - 11 MATE (DEMATE) CONNECTORS
 - 36 CZ KSH(H PSGH 0,3=ISQOS(5 FL(HSC3,(
 - 6 REM CABLES(EA5)
 - 11 MATE (DEMATE) CONNECTORS
 - 34 QJWYH4A CA-GH OSH(H C-QSS\$N 8UUI
 - 7 MOVE S/C TO VERTICAL
 - 16 MANEUVER SPACECRAFT
 - 8 REM LOUVERS, ANGL(BAYS5,6
 - 2 MANIPULATE WITH TOOLS
 - 78 LOUVER ANGLE
 - 79 LOUVER ANGLE
 - 1 MANIPULATE BY HAND
 - 78 LOUVER ANGLE
 - 79 LOUVER ANGLE
 - 9 REM CASE 5
 - 2 MANIPULATE WITH TOOLS
 - 52 ZONE 52, EA V CASE
 - 1 MANIPULATE BY HAND
 - 52 ZONE 52, EA V CASE
 - 10 INST CASE 5 IN FRAME
 - 1 MANIPULATE BY HAND
 - 52 ZONE 52, EA V CASE
 - 2 MANIPULATE WITH TOOLS
 - 52 ZONE 52, EA V CASE
 - 11 REM TAPE REC
 - 2 MANIPULATE WITH TOOLS
 - 80 TAPE RECORDER
 - 1 MANIPULATE BY HAND
 - 80 TAPE RECORDER
 - 12 REM BATT
 - 2 MANIPULATE WITH TOOLS
 - 69 BATTERY
 - 1 MANIPULATE BY HAND
 - 69 BATTERY

- 13 TEDLAR WRAP CABLES
 - 1 MANIPULATE BY HAND
 - 74 QJWYH4A CA-GH OSH(M C-QSSSN BUUI
- 14 REM UV SOURCE
 - 2 MANIPULATE WITH TOOLS
 - 2 ZONE 2, BAY 2
 - 1 MANIPULATE BY HAND
 - 2 ZONE 2, BAY 2
- 15 REM 4A FROM FIX
 - 2 MANIPULATE WITH TOOLS
 - 17 ZONE 17, SOLAR PANEL 1
 - 1 MANIPULATE BY HAND
 - 17 ZONE 17, SOLAR PANEL 1
- 16 REM LOUVER ASSY/BAY 8
 - 2 MANIPULATE WITH TOOLS
 - 81 PYRO HARNESS(9W36)
 - 1 MANIPULATE BY HAND
 - 81 PYRO HARNESS(9W36)
- 17 REM 25A1, INST IN FIX
 - 1 MANIPULATE BY HAND
 - 54 ZONE 54, EA VII CASE
 - 2 MANIPULATE WITH TOOLS
 - 54 ZONE 54, EA VII CASE
- 18 REM BAY 2 SHEAR PLATE
 - 2 MANIPULATE WITH TOOLS
 - 83 PYRO HARNESS(9W36)
 - 1 MANIPULATE BY HAND
 - 83 PYRO HARNESS(9W36)
- 19 INST 16A1
 - 1 MANIPULATE BY HAND
 - 52 ZONE 52, EA V CASE
 - 2 MANIPULATE WITH TOOLS
 - 52 ZONE 52, EA V CASE
- 64 MECH ASSY/TEST
 - 1 INST 4A14(BATT
 - 1 MANIPULATE BY HAND
 - 55 ZONE 55, EA VIII CASE
 - 2 MANIPULATE WITH TOOLS
 - 55 ZONE 55, EA VIII CASE
 - 2 REM 7LS8,7CS8
 - 2 MANIPULATE WITH TOOLS
 - 85 MODULE EA3(33A2)
 - 86 EA3 LOUVERS
 - 1 MANIPULATE BY HAND
 - 85 MODULE EA3(33A2)
 - 86 EA3 LOUVERS
 - 3 INST SYSTEM #8,TORQ
 - 2 MANIPULATE WITH TOOLS
 - 52 ZONE 52, EA V CASE
 - 4 REM SHEAR PLATE(EA5
 - 2 MANIPULATE WITH TOOLS
 - 5 ZONE 5, BAY 5
 - 5 INST CASE 5,TQ SYS #8
 - 1 MANIPULATE BY HAND
 - 52 ZONE 52, EA V CASE
 - 2 MANIPULATE WITH TOOLS
 - 52 ZONE 52, EA V CASE
 - 6 INST LOUVERS ASSY
 - 1 MANIPULATE BY HAND
 - 55 ZONE 55, EA VIII CASE
 - 2 MANIPULATE WITH TOOLS
 - 55 ZONE 55, EA VIII CASE

- 7 INST CRUISE DAMP
 - 1 MANIPULATE BY HAND
 - 21 ZONE 21, PANEL 1 SPAR
 - 2 MANIPULATE WITH TOOLS
 - 21 ZONE 21, PANEL 1 SPAR
- 8 INST CHANNEL
 - 1 MANIPULATE BY HAND
 - 46 ZONE 46, OCTAGON TOP
 - 2 MANIPULATE WITH TOOLS
 - 46 ZONE 46, OCTAGON TOP
- 9 INST LOUVER ASSY
 - 1 MANIPULATE BY HAND
 - 53 ZONE 53, EA VI CASE
 - 2 MANIPULATE WITH TOOLS
 - 53 ZONE 53, EA VI CASE
- 10 INST SHEAR PLATE (BAY 2)
 - 1 MANIPULATE BY HAND
 - 2 ZONE 2, BAY 2
 - 2 MANIPULATE WITH TOOLS
 - 2 ZONE 2, BAY 2
- 11 INST ATTACH ANGLE (BAY 2)
 - 1 MANIPULATE BY HAND
 - 2 ZONE 2, BAY 2
 - 2 MANIPULATE WITH TOOLS
 - 2 ZONE 2, BAY 2
- 12 INST THERMOCOUPLES
 - 1 MANIPULATE BY HAND
 - 2 MANIPULATE WITH TOOLS
- 13 DEMATE CONN (EA 7)
 - 11 MATE (DEMATE) CONNECTORS
 - 36 CZ KSH(H PSGH 0,3=ISQOS(5 FL(HSCS.(
- 14 MATE CONN (EA7),TORQ
 - 11 MATE (DEMATE) CONNECTORS
 - 36 CZ KSH(H PSGH 0,3=ISQOS(5 FL(HSCS.(
- 15 INST THERM BLANK
 - 1 MANIPULATE BY HAND
 - 46 ZONE 46, OCTAGON TOP
 - 2 MANIPULATE WITH TOOLS
 - 46 ZONE 46, OCTAGON TOP
- 16 INST SHD DEPLY SPRGS
 - 1 MANIPULATE BY HAND
 - 47 ZONE 47, OCTAGON BOTTOM
 - 2 MANIPULATE WITH TOOLS
 - 47 ZONE 47, OCTAGON BOTTOM
- 17 INST UMB SHIELD
 - 1 MANIPULATE BY HAND
 - 2 ZONE 2, BAY 2
 - 2 MANIPULATE WITH TOOLS
 - 2 ZONE 2, BAY 2
- 18 INST SUN SHD ASSY
 - 1 MANIPULATE BY HAND
 - 47 ZONE 47, OCTAGON BOTTOM
 - 2 MANIPULATE WITH TOOLS
 - 47 ZONE 47, OCTAGON BOTTOM
- 19 INST INFLIGHT DISCONN
 - 1 MANIPULATE BY HAND
 - 5 ZONE 5, BAY 5
- 65 MECH ASSY/TEST
 - 1 INST LOUVER COVERS
 - 1 MANIPULATE BY HAND
 - 46 ZONE 46, OCTAGON TOP
 - 2 MANIPULATE WITH TOOLS

- 46 ZONE 46, OCTAGON TOP
- 2 PREP FOR S/C XPORT
 - 1 MANIPULATE BY HAND
 - 2 MANIPULATE WITH TOOLS
- 3 INST XPORTR,BAG
 - 1 MANIPULATE BY HAND
 - 2 MANIPULATE WITH TOOLS
- 4 MOVE S/C TO BLDG 248
- 16 MANEUVER SPACECRAFT
- 5 REM S/C FROM XPORTR
 - 1 MANIPULATE BY HAND
 - 2 MANIPULATE WITH TOOLS
- 6 INST S/C ON INVERTER
 - 1 MANIPULATE BY HAND
 - 2 MANIPULATE WITH TOOLS
 - 2 MANIPULATE WITH TOOLS
- 7 INST STABLE CABLES
 - 1 MANIPULATE BY HAND
 - 2 MANIPULATE WITH TOOLS
- 8 INST S/N33 LOUVERS
 - 1 MANIPULATE BY HAND
 - 55 ZONE 55, EA VIII CASE
 - 2 MANIPULATE WITH TOOLS
 - 55 ZONE 55, EA VIII CASE
- 9 INST EAGLE SHIELDS
 - 1 MANIPULATE BY HAND
 - 4 ZONE 4, BAY 4
 - 2 MANIPULATE WITH TOOLS
 - 4 ZONE 4, BAY 4
- 10 INST BAY8 UPPR,LWR CHAN
 - 1 MANIPULATE BY HAND
 - 8 ZONE 8, BAY 8
 - 2 MANIPULATE WITH TOOLS
 - 8 ZONE 8, BAY 8
- 11 INST TRD
 - 1 MANIPULATE BY HAND
 - 4 ZONE 4, BAY 4
 - 2 MANIPULATE WITH TOOLS
 - 4 ZONE 4, BAY 4
- 12 INST 7CS9,7LS8
 - 1 MANIPULATE BY HAND
 - 8 ZONE 8, BAY 8
 - 2 MANIPULATE WITH TOOLS
 - 8 ZONE 8, BAY 8
- 13 INST SHORT THERM CNT SP
 - 1 MANIPULATE BY HAND
 - 17 ZONE 17, SOLAR PANEL 1
 - 2 MANIPULATE WITH TOOLS
 - 17 ZONE 17, SOLAR PANEL 1
- 14 INST ISOLATE BOX
 - 1 MANIPULATE BY HAND
 - 47 ZONE 47, OCTAGON BOTTOM
 - 2 MANIPULATE WITH TOOLS
 - 47 ZONE 47, OCTAGON BOTTOM
- 15 HOOKUP TEST CABLES
 - 1 MANIPULATE BY HAND
 - 31 ZONE 31, LOWER RING HARN
- 16 INST BLACK VELVET
 - 1 MANIPULATE BY HAND
- 17 SOLAR CELL MAP CHAMBER
 - 1 MANIPULATE BY HAND
 - 2 MANIPULATE WITH TOOLS

- 18 DEPLOY SUN SHADES
 - 1 MANIPULATE BY HAND
 - 47 ZONE 47, OCTAGON BOTTOM
 - 2 MANIPULATE WITH TOOLS
 - 47 ZONE 47, OCTAGON BOTTOM
- 19 SOLAR CELL MAPPING
 - 1 MANIPULATE BY HAND
 - 2 MANIPULATE WITH TOOLS
- 66 MECH ASSY/TEST
 - 1 MATE CABLES
 - 11 MATE (DEMATE) CONNECTORS
 - 31 ZONE 31, LOWER RING HARN
 - 2 INST THERMOCOUPLES
 - 1 MANIPULATE BY HAND
 - 47 ZONE 47, OCTAGON BOTTOM
 - 2 MANIPULATE WITH TOOLS
 - 47 ZONE 47, OCTAGON BOTTOM
 - 3 INST PAS,SIT SWITCHES
 - 1 MANIPULATE BY HAND
 - 47 ZONE 47, OCTAGON BOTTOM
 - 2 MANIPULATE WITH TOOLS
 - 47 ZONE 47, OCTAGON BOTTOM
 - 4 REM LOUVER COVERS
 - 2 MANIPULATE WITH TOOLS
 - 46 ZONE 46, OCTAGON TOP
 - 1 MANIPULATE BY HAND
 - 46 ZONE 46, OCTAGON TOP
 - 5 INST THERMOCOUPLES
 - 1 MANIPULATE BY HAND
 - 46 ZONE 46, OCTAGON TOP
 - 2 MANIPULATE WITH TOOLS
 - 46 ZONE 46, OCTAGON TOP
 - 6 INS LOUVER COUVERS
 - 1 MANIPULATE BY HAND
 - 46 ZONE 46, OCTAGON TOP
 - 2 MANIPULATE WITH TOOLS
 - 46 ZONE 46, OCTAGON TOP
 - 7 INST B/OSPEC IN CHAMBER
 - 1 MANIPULATE BY HAND
 - 1 MANIPULATE BY HAND
 - 2 MANIPULATE WITH TOOLS
 - 2 MANIPULATE WITH TOOLS
 - 8 INST BIOSPEC ON S/P
 - 1 MANIPULATE BY HAND
 - 21 ZONE 21, PANEL 1 SPAR
 - 2 MANIPULATE WITH TOOLS
 - 21 ZONE 21, PANEL 1 SPAR
 - 9 VACUUM END BELL
 - 1 MANIPULATE BY HAND
 - 2 MANIPULATE WITH TOOLS
 - 10 INST HARNESSSES
 - 1 MANIPULATE BY HAND
 - 30 ZONE 30, UPPER RING HARN
 - 2 MANIPULATE WITH TOOLS
 - 30 ZONE 30, UPPER RING HARN
 - 2 MANIPULATE WITH TOOLS
 - 30 ZONE 30, UPPER RING HARN
 - 11 INST THERMAL GROUND
 - 1 MANIPULATE BY HAND
 - 2 MANIPULATE WITH TOOLS
 - 12 INST TCM THERMAL SHLDS
 - 1 MANIPULATE BY HAND

- 2 MANIPULATE WITH TOOLS
- 13 INST AC PLUMBING
 - 1 MANIPULATE BY HAND
 - 47 ZONE 47, OCTAGON BOTTOM
 - 2 MANIPULATE WITH TOOLS
 - 47 ZONE 47, OCTAGON BOTTOM
- 14 INST TCM UP THRM SHLD
 - 1 MANIPULATE BY HAND
 - 46 ZONE 46, OCTAGON TOP
 - 2 MANIPULATE WITH TOOLS
 - 46 ZONE 46, OCTAGON TOP
- 15 REM COVERS
 - 2 MANIPULATE WITH TOOLS
 - 46 ZONE 46, OCTAGON TOP
 - 1 MANIPULATE BY HAND
 - 46 ZONE 46, OCTAGON TOP
- 16 INST CORNER SHIELDS
 - 1 MANIPULATE BY HAND
 - 46 ZONE 46, OCTAGON TOP
 - 2 MANIPULATE WITH TOOLS
 - 46 ZONE 46, OCTAGON TOP
- 17 REM SIT SWITCH PIN
 - 2 MANIPULATE WITH TOOLS
 - 46 ZONE 46, OCTAGON TOP
 - 1 MANIPULATE BY HAND
 - 46 ZONE 46, OCTAGON TOP
- 18 INST SOURCES A,C,D
 - 1 MANIPULATE BY HAND
 - 46 ZONE 46, OCTAGON TOP
 - 2 MANIPULATE WITH TOOLS
 - 46 ZONE 46, OCTAGON TOP
- 19 LOWER END BELL 3 FT
 - 1 MANIPULATE BY HAND
 - 2 MANIPULATE WITH TOOLS
- 67 MECH ASSY/TEST
 - 1 LOWER REM WORK PLATFORM
 - 1 MANIPULATE BY HAND
 - 2 MANIPULATE WITH TOOLS
 - 2 RAISE END BELL, FLUS TANK
 - 1 MANIPULATE BY HAND
 - 2 MANIPULATE WITH TOOLS
 - 3 N2 LINES ENGAGED TO BELL
 - 1 MANIPULATE BY HAND
 - 2 MANIPULATE WITH TOOLS
 - 4 S/C TEST PREP (SPACE SIM
 - 1 MANIPULATE BY HAND
 - 2 MANIPULATE WITH TOOLS
 - 5 OPEN SPACE SIM, 02 CK
 - 1 MANIPULATE BY HAND
 - 2 MANIPULATE WITH TOOLS
 - 6 CK SOURCES
 - 1 MANIPULATE BY HAND
 - 2 MANIPULATE WITH TOOLS
 - 7 INST BIO-COUPONS (FLUX TK
 - 1 MANIPULATE BY HAND
 - 2 MANIPULATE WITH TOOLS
 - 8 REM INST UV SOURCE TWICE
 - 2 MANIPULATE WITH TOOLS
 - 1 MANIPULATE BY HAND
 - 9 S/C TEST PREP
 - 1 MANIPULATE BY HAND
 - 2 MANIPULATE WITH TOOLS

- 10 S/C SIMUL TEST MAR 22/9
 - 10 INSPECTION WITH GAUGES
- 11 OPEN SIMULATOR
 - 1 MANIPULATE BY HAND
 - 2 MANIPULATE WITH TOOLS
- 12 TAKE 02 ANALYSIS
 - 9 VISUAL INSPECTION
- 13 S/C INSP
 - 9 VISUAL INSPECTION
- 14 REM RIO-SPECIMEN
 - 2 MANIPULATE WITH TOOLS
 - 1 MANIPULATE BY HAND
- 15 REM FLUX TANK
 - 2 MANIPULATE WITH TOOLS
 - 46 ZONE 46, OCTAGON TOP
 - 1 MANIPULATE BY HAND
- 16 INST, RAISE WORK PLATFORM
 - 1 MANIPULATE BY HAND
 - 2 MANIPULATE WITH TOOLS
- 17 REM TRD
 - 2 MANIPULATE WITH TOOLS
 - 92 TRD
 - 1 MANIPULATE BY HAND
 - 92 TRD
- 18 SAMPLE BIOLOGICAL CONTAM
 - 1 MANIPULATE BY HAND
 - 2 MANIPULATE WITH TOOLS
- 19 INST UV COVER
 - 1 MANIPULATE BY HAND
 - 46 ZONE 46, OCTAGON TOP
- 68 MECH ASSY/TEST
 - 6 REM BOTTOM SHIELD
 - 2 MANIPULATE WITH TOOLS
 - 98 BOTTOM SHIELD
 - 1 MANIPULATE BY HAND
 - 98 BOTTOM SHIELD
 - 7 REM CHANNELS
 - 2 MANIPULATE WITH TOOLS
 - 100 CHANNELS (ALL)
 - 1 MANIPULATE BY HAND
 - 100 CHANNELS (ALL)
 - 8 REM THERMAL BLANKET
 - 2 MANIPULATE WITH TOOLS
 - 101 THERMAL BLANKET
 - 1 MANIPULATE BY HAND
 - 101 THERMAL BLANKET
 - 9 INST PLAS. LIGHT COVERS
 - 1 MANIPULATE BY HAND
 - 2 MANIPULATE WITH TOOLS
 - 10 INSP, PREP FOR PYRO TEST
 - 9 VISUAL INSPECTION
 - 11 REM UP RING TRAY BLANKT
 - 1 MANIPULATE BY HAND
 - 102 CORNER SHIELD
 - 2 MANIPULATE WITH TOOLS
 - 102 CORNER SHIELD
 - 2 MANIPULATE WITH TOOLS
 - 102 CORNER SHIELD
 - 12 PREP FOR TEST
 - 1 MANIPULATE BY HAND
 - 2 MANIPULATE WITH TOOLS
 - 13 TEST, CK RADIO

- 9 VISUAL INSPECTION
- 14 REM DUM PINPULL/2E1
 - 1 MANIPULATE BY HAND
 - 2 MANIPULATE WITH TOOLS
- 15 INST REAL PINPULL/2E1
 - 1 MANIPULATE BY HAND
 - 2 MANIPULATE WITH TOOLS
- 16 FIRE PINPULL/2E1
 - 1 MANIPULATE BY HAND
 - 2 MANIPULATE WITH TOOLS
- 17 REM DIRECT ACCESS CABLES
 - 2 MANIPULATE WITH TOOLS
 - 103 CORNER SHIELD
 - 1 MANIPULATE BY HAND
 - 103 CORNER SHIELD
- 18 INST DUM PINPULL
 - 1 MANIPULATE BY HAND
 - 2 MANIPULATE WITH TOOLS
- 19 INST HEATER (IN UMBILICAL)
 - 1 MANIPULATE BY HAND
 - 2 ZONE 2, BAY 2
 - 2 MANIPULATE WITH TOOLS
 - 2 ZONE 2, BAY 2
- 69 MECH ASSY/TEST
 - 1 INST A/C PRESS CABLES
 - 1 MANIPULATE BY HAND
 - 2 MANIPULATE WITH TOOLS
 - 2 REM V105/8 FROM S/C
 - 2 MANIPULATE WITH TOOLS
 - 104 CORNER SHIELD
 - 1 MANIPULATE BY HAND
 - 104 CORNER SHIELD
 - 3 FILL A/C GAS SYSTEM
 - 1 MANIPULATE BY HAND
 - 2 MANIPULATE WITH TOOLS
 - 4 REM ION GATE
 - 1 MANIPULATE BY HAND
 - 1 MANIPULATE BY HAND
 - 5 REM CCS BOX, SCI ISOL BOX
 - 2 MANIPULATE WITH TOOLS
 - 1 MANIPULATE BY HAND
 - 6 INST STRING TIES, UP SHLD
 - 1 MANIPULATE BY HAND
 - 2 MANIPULATE WITH TOOLS
 - 7 REM COVERS, LOUV, PLAS
 - 2 MANIPULATE WITH TOOLS
 - 1 MANIPULATE BY HAND
 - 8 INST UPPER SHIELD
 - 1 MANIPULATE BY HAND
 - 46 ZONE 46, OCTAGON TOP
 - 2 MANIPULATE WITH TOOLS
 - 46 ZONE 46, OCTAGON TOP
 - 9 INST PAS SWITCH
 - 1 MANIPULATE BY HAND
 - 47 ZONE 47, OCTAGON BOTTOM
 - 2 MANIPULATE WITH TOOLS
 - 47 ZONE 47, OCTAGON BOTTOM
 - 10 INST SQUIB HARNESSSES
 - 1 MANIPULATE BY HAND
 - 30 ZONE 30, UPPER RING HARN
 - 2 MANIPULATE WITH TOOLS
 - 30 ZONE 30, UPPER RING HARN

APPENDIX 2 (Continued)

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- 11 FTK CK
 - 1 MANIPULATE BY HAND
 - 2 MANIPULATE WITH TOOLS
- 12 INST BAY 4 EABLE SHIELD
 - 1 MANIPULATE BY HAND
 - 4 ZONE 4, BAY 4
 - 2 MANIPULATE WITH TOOLS
 - 4 ZONE 4, BAY 4
- 13 INST THERMAL SHIELD
 - 1 MANIPULATE BY HAND
 - 47 ZONE 47, OCTAGON BOTTOM
- 14 MODIFY CHANNEL (AT PAS)
 - 1 MANIPULATE BY HAND
 - 47 ZONE 47, OCTAGON BOTTOM
 - 2 MANIPULATE WITH TOOLS
 - 47 ZONE 47, OCTAGON BOTTOM
- 15 INST SUN SHADE, PED SHLD
 - 1 MANIPULATE BY HAND
 - 47 ZONE 47, OCTAGON BOTTOM
 - 2 MANIPULATE WITH TOOLS
 - 47 ZONE 47, OCTAGON BOTTOM
- 16 INST TROUGH SHIELD
 - 1 MANIPULATE BY HAND
 - 27 ZONE 27, TOP RING TRAY
 - 2 MANIPULATE WITH TOOLS
 - 27 ZONE 27, TOP RING TRAY
- 17 INST TEMP XDUCERS
 - 1 MANIPULATE BY HAND
 - 46 ZONE 46, OCTAGON TOP
 - 2 MANIPULATE WITH TOOLS
 - 46 ZONE 46, OCTAGON TOP
- 18 INST CORNER THERM SHLDS
 - 1 MANIPULATE BY HAND
 - 46 ZONE 46, OCTAGON TOP
 - 1 MANIPULATE BY HAND
 - 46 ZONE 46, OCTAGON TOP
- 19 REM CANOPUS STIMULUS
 - 1 MANIPULATE BY HAND
- 70 MECH ASSY/TEST
 - 1 REM COVERS
 - 1 MANIPULATE BY HAND
 - 46 ZONE 46, OCTAGON TOP
 - 2 MANIPULATE WITH TOOLS
 - 46 ZONE 46, OCTAGON TOP
 - 2 VISUAL INSP
 - 9 VISUAL INSPECTION
 - 3 REM WORK PLATFORM
 - 2 MANIPULATE WITH TOOLS
 - 1 MANIPULATE BY HAND
 - 4 POS END BELL VACUUM PLAT
 - 1 MANIPULATE BY HAND
 - 5 INST FLOOR PLATES
 - 1 MANIPULATE BY HAND
 - 2 MANIPULATE WITH TOOLS
 - 6 SECURE SIM FOR NITE (3/31)
 - 17 SECURED IN TENT
 - 7 INSP CHAMBER
 - 8 SOLDER (SUNSOLDER)
 - 8 HOOK COAX TO L/-GAIN ATN
 - 1 MANIPULATE BY HAND
 - 26 ZONE 26, LO-GAIN ANTENNA
 - 2 MANIPULATE WITH TOOLS

- 26 ZONE 26, LO-GAIN ANTENNA
- 9 REM TAPE/TERMINATOR SENS
 - 2 MANIPULATE WITH TOOLS
 - 2 ZONE 2, BAY 2
 - 1 MANIPULATE BY HAND
 - 2 ZONE 2, BAY 2
- 10 FINAL TEST PREP
 - 1 MANIPULATE BY HAND
- 11 SPACE SIM TEST = 2
 - 10 INSPECTION WITH GAUGES
- 12 OPEN CHAMBER DOOR
 - 1 MANIPULATE BY HAND
- 13 RELEASE END BELL
 - 2 MANIPULATE WITH TOOLS
- 14 INST WORK PLATFORM
 - 1 MANIPULATE BY HAND
 - 2 MANIPULATE WITH TOOLS
- 15 REM CABLES, TCM CORN SHLD
 - 2 MANIPULATE WITH TOOLS
 - 95 CORNER SHIELDS
 - 1 MANIPULATE BY HAND
 - 95 CORNER SHIELDS
- 16 REM REMAINING SHIELDS
 - 2 MANIPULATE WITH TOOLS
 - 95 CORNER SHIELDS
 - 1 MANIPULATE BY HAND
 - 95 CORNER SHIELDS
- 17 REM 25A1, BAFFLE BOX
 - 2 MANIPULATE WITH TOOLS
 - 107 MODULE
 - 1 MANIPULATE BY HAND
 - 107 MODULE
- 18 REM SIMULATED S/P
 - 2 MANIPULATE WITH TOOLS
 - 21 ZONE 21, PANEL 1 SPAR
 - 1 MANIPULATE BY HAND
 - 21 ZONE 21, PANEL 1 SPAR
- 19 REM BAY 8 LOUVER ASSY
 - 2 MANIPULATE WITH TOOLS
 - 108 LOUVER ASSY
 - 1 MANIPULATE BY HAND
 - 108 LOUVER ASSY
- 71 MECH ASSY/TEST
 - 1 INST LOUVER COVERS
 - 1 MANIPULATE BY HAND
 - 46 ZONE 46, OCTAGON TOP
 - 2 MANIPULATE WITH TOOLS
 - 46 ZONE 46, OCTAGON TOP
 - 2 INST INVERTER BRKT(BA4.8
 - 1 MANIPULATE BY HAND
 - 2 MANIPULATE WITH TOOLS
 - 3 REM END BELL
 - 2 MANIPULATE WITH TOOLS
 - 1 MANIPULATE BY HAND
 - P, INVERT S/C
 - 1 MANIPULATE BY HAND
 - 2 MANIPULATE WITH TOOLS
 - 5 POS S/C ON U-RING/XPORT
 - 1 MANIPULATE BY HAND
 - 6 BAG S/C, PURGE
 - 1 MANIPULATE BY HAND
 - 7 XPORT S/C TO BLG 179

- 16 MANEUVER SPACECRAFT
- 8 REM S/C XPORTR, XPORT BAG
 - 2 MANIPULATE WITH TOOLS
 - 1 MANIPULATE BY HAND
- 9 POS S/C LOW-LEV POSNR
 - 1 MANIPULATE BY HAND
 - 1 MANIPULATE BY HAND
- 10 RAISE S/C OFF U-RING
 - 1 MANIPULATE BY HAND
- 11 REM SUN SHD, LOUV COVERS
 - 2 MANIPULATE WITH TOOLS
 - 109 SUN SHADE
 - 1 MANIPULATE BY HAND
 - 109 SUN SHADE
- 12 REM ALL CHAN SHLD, ANGLES
 - 1 MANIPULATE BY HAND
 - 110 CHANNEL SHIELDS
 - 2 MANIPULATE WITH TOOLS
 - 110 CHANNEL SHIELDS
 - 2 MANIPULATE WITH TOOLS
 - 110 CHANNEL SHIELDS
- 13 REM BATT
 - 2 MANIPULATE WITH TOOLS
 - 69 BATTERY
 - 1 MANIPULATE BY HAND
 - 69 BATTERY
- 14 REM THERMOCOUPLES
 - 2 MANIPULATE WITH TOOLS
 - 46 ZONE 46, OCTAGON TOP
 - 1 MANIPULATE BY HAND
 - 46 ZONE 46, OCTAGON TOP
- 15 INST PL SENS, TRD, LIGT HD
 - 1 MANIPULATE BY HAND
 - 4 ZONE 4, BAY 4
 - 2 MANIPULATE WITH TOOLS
 - 4 ZONE 4, BAY 4
- 16 REM SHEAR PLATE/EA2
 - 2 MANIPULATE WITH TOOLS
 - 112 SHEAR PLATE
 - 1 MANIPULATE BY HAND
 - 112 SHEAR PLATE
- 17 INST BATT, UV/PLAN SOURCE
 - 1 MANIPULATE BY HAND
 - 55 ZONE 55, EA VIII CASE
 - 2 MANIPULATE WITH TOOLS
 - 55 ZONE 55, EA VIII CASE
- 18 LOWER S/C
 - 1 MANIPULATE BY HAND
 - 2 MANIPULATE WITH TOOLS
- 19 INST J/BOXES, A/C FRAMES
 - 1 MANIPULATE BY HAND
 - 2 MANIPULATE WITH TOOLS
- 72 MECH ASSY/TEST
 - 1 REM CR DAMP, A/C PLUMBING
 - 2 MANIPULATE WITH TOOLS
 - 46 ZONE 46, OCTAGON TOP
 - 1 MANIPULATE BY HAND
 - 46 ZONE 46, OCTAGON TOP
 - 2 INST FLUX TANK
 - 1 MANIPULATE BY HAND
 - 47 ZONE 47, OCTAGON BOTTOM
 - 2 MANIPULATE WITH TOOLS

- 47 ZONE 47, OCTAGON BOTTOM
- 3 INST A/C COVERS, PIPS TNK
 - 1 MANIPULATE BY HAND
 - 47 ZONE 47, OCTAGON BOTTOM
 - 2 MANIPULATE WITH TOOLS
 - 47 ZONE 47, OCTAGON BOTTOM
- 4 INST SUN GATE/BAY 6
 - 1 MANIPULATE BY HAND
 - 6 ZONE 6, BAY 6
 - 2 MANIPULATE WITH TOOLS
 - 6 ZONE 6, BAY 6
- 5 INST TEST CABLES
 - 1 MANIPULATE BY HAND
 - 47 ZONE 47, OCTAGON BOTTOM
 - 2 MANIPULATE WITH TOOLS
 - 47 ZONE 47, OCTAGON BOTTOM
- 6 MAKE BIO-SWABS
 - 1 MANIPULATE BY HAND
- 7 REM 4 CRUISE DAMPERS
 - 2 MANIPULATE WITH TOOLS
 - 65 CRUISE DAMPERS
 - 66 CRUISE DAMPERS
 - 67 CRUISE DAMPERS
 - 68 CRUISE DAMPERS
 - 1 MANIPULATE BY HAND
 - 65 CRUISE DAMPERS
 - 66 CRUISE DAMPERS
 - 67 CRUISE DAMPERS
 - 68 CRUISE DAMPERS
- 8 REM EA 5 LOUVER ASSY
 - 2 MANIPULATE WITH TOOLS
 - 70 LOUVER ASSY
 - 1 MANIPULATE BY HAND
 - 70 LOUVER ASSY
- 9 REM FLUX TNK LEG, LOUV(B3)
 - 2 MANIPULATE WITH TOOLS
 - 3 ZONE 3, BAY 3
 - 1 MANIPULATE BY HAND
 - 3 ZONE 3, BAY 3
- 10 INST FLUX TNK LEGS(BAY 3)
 - 1 MANIPULATE BY HAND
 - 3 ZONE 3, BAY 3
 - 2 MANIPULATE WITH TOOLS
 - 3 ZONE 3, BAY 3
- 11 REM FLUX TNK LEG, LOUV(B6)
 - 2 MANIPULATE WITH TOOLS
 - 6 ZONE 6, BAY 6
 - 1 MANIPULATE BY HAND
 - 6 ZONE 6, BAY 6
- 12 INST FLUX TNK LEG (BAY 6)
 - 1 MANIPULATE BY HAND
 - 6 ZONE 6, BAY 6
 - 2 MANIPULATE WITH TOOLS
 - 6 ZONE 6, BAY 6
- 13 REM FLUX TNK LEG, LOUV(B1)
 - 2 MANIPULATE WITH TOOLS
 - 54 ZONE 54, EA VII CASE
 - 1 MANIPULATE BY HAND
 - 54 ZONE 54, EA VII CASE
- 14 REM LOUVER ASSY, BAY 7
 - 2 MANIPULATE WITH TOOLS
 - 71 LOUVER ASSY

1 MANIPULATE BY HAND
71 LOUVER ASSY
15 INST FLUX TNK LEG/BAY 1
1 MANIPULATE BY HAND
1 ZONE 1, BAY I
2 MANIPULATE WITH TOOLS
1 ZONE 1, BAY I
16 INST L/F TENT
1 MANIPULATE BY HAND
2 MANIPULATE WITH TOOLS
17 SYS VERIFY/CY-1 TESTS
10 INSPECTION WITH GAUGES
18 REM TRD SOURCES, CONT TST
1 MANIPULATE BY HAND
4 ZONE 4, BAY 4
2 MANIPULATE WITH TOOLS
4 ZONE 4, BAY 4
19 PRESS PIPS
2 MANIPULATE WITH TOOLS
73 MECH ASSY/TEST
1 S/C TEST
10 INSPECTION WITH GAUGES
2 REM TRD/INST IN SHIP PKG
2 MANIPULATE WITH TOOLS
72 TRD
1 MANIPULATE BY HAND
72 TRD
3 REM SCREWS/EA 3,5,6,8
2 MANIPULATE WITH TOOLS
50 ZONE 50, EA III CASE
52 ZONE 52, EA V CASE
53 ZONE 53, EA VI CASE
55 ZONE 55, EA VIII CASE
1 MANIPULATE BY HAND
50 ZONE 50, EA III CASE
52 ZONE 52, EA V CASE
53 ZONE 53, EA VI CASE
55 ZONE 55, EA VIII CASE
4 DIS/ASSY, MAG MAPPING
10 INSPECTION WITH GAUGES
5 REM CASE 3, INST HNDG FIX
2 MANIPULATE WITH TOOLS
50 ZONE 50, EA III CASE
1 MANIPULATE BY HAND
50 ZONE 50, EA III CASE
6 INSP 2E1
9 VISUAL INSPECTION
50 ZONE 50, EA III CASE
7 REM 2PLAS MOD, 2MAG MOD
2 MANIPULATE WITH TOOLS
73 HEATERS
74 LOUVERS
75 EAS MODULE
76 EA1 LOUVER ASSY
2 MANIPULATE WITH TOOLS
73 HEATERS
74 LOUVERS
75 EAS MODULE
76 EA1 LOUVER ASSY
1 MANIPULATE BY HAND
73 HEATERS
74 LOUVERS

- 75 EA5 MODULE
- 76 EA1 LOUVER ASSY
- 8 REM DFR
 - 2 MANIPULATE WITH TOOLS
 - 78 LOUVER ANGLE
 - 1 MANIPULATE BY HAND
 - 78 LOUVER ANGLE
- 9 UNMATE CABLES
 - 11 MATE (DEMATE) CONNECTORS
 - 34 QJWYH4A CA-GH OSH(H C-QSSSN BUUI
- 10 REM BATT
 - 2 MANIPULATE WITH TOOLS
 - 69 BATTERY
 - 1 MANIPULATE BY HAND
 - 69 BATTERY
- 11 REM 33A1,7LSB
 - 2 MANIPULATE WITH TOOLS
 - 77 MAGNETOMETER
 - 79 LOUVER ANGLE
 - 1 MANIPULATE BY HAND
 - 77 MAGNETOMETER
 - 79 LOUVER ANGLE
- 12 REM RADIO/INST HNDG FIX
 - 1 MANIPULATE BY HAND
 - 80 RADIO MODULE
 - 2 MANIPULATE WITH TOOLS
 - 80 RADIO MODULE
- 13 REM EA6/INST HNDG FIXT
 - 1 MANIPULATE BY HAND
 - 53 ZONE 53, EA VI CASE
 - 2 MANIPULATE WITH TOOLS
 - 53 ZONE 53, EA VI CASE
- 14 REM 4A8,UNMATE 9W17
 - 2 MANIPULATE WITH TOOLS
 - 81 PYRO HARNESS(9W36)
 - 1 MANIPULATE BY HAND
 - 81 PYRO HARNESS(9W36)
- 15 REM 7 MOD/EA 5/INST SH P
 - 2 MANIPULATE WITH TOOLS
 - 82 25A1 MODULE
 - 83 PYRO HARNESS(9W36)
 - 84 MODULE
 - 85 MODULE EA3(33A2)
 - 86 EA3 LOUVERS
 - 87 MODULE,EA5
 - 88 MODULE,EA5
 - 1 MANIPULATE BY HAND
 - 82 25A1 MODULE
 - 83 PYRO HARNESS(9W36)
 - 84 MODULE
 - 85 MODULE EA3(33A2)
 - 86 EA3 LOUVERS
 - 87 MODULE,EA5
 - 88 MODULE,EA5
- 16 REM CASE 4
 - 2 MANIPULATE WITH TOOLS
 - 51 ZONE 51, EA IV CASE
 - 1 MANIPULATE BY HAND
 - 51 ZONE 51, EA IV CASE
- 17 OPEN FAT/REM 7A2
 - 2 MANIPULATE WITH TOOLS
 - 89 SUN SENSOR BLANKET

- 1 MANIPULATE BY HAND
- 89 SUN SENSOR BLANKET
- 18 REM EA 4 MODS(7)
 - 2 MANIPULATE WITH TOOLS
 - 91 MODULE EA4
 - 92 MODULE EA4
 - 93 MODULE EA4
 - 94 MODULE EA4
 - 95 MODULE EA4
 - 96 MODULE EA4
 - 97 MODULE EA4
- 1 MANIPULATE BY HAND
- 91 MODULE EA4
- 92 MODULE EA4
- 93 MODULE EA4
- 94 MODULE EA4
- 95 MODULE EA4
- 96 MODULE EA4
- 97 MODULE EA4
- 19 UMAT 9W3 CONNECTS
 - 11 MATE (DEMATE) CONNECTORS
 - 31 ZONE 31, LOWER RING HARN
- 74 MECH ASSY/TEST
 - 1 REM EA1/INST HNLG FIXT
 - 2 MANIPULATE WITH TOOLS
 - 49 ZONE 49, EA I CASE
 - 1 MANIPULATE BY HAND
 - 49 ZONE 49, EA I CASE
 - 2 REM CANOPUS SENS/2E1
 - 2 MANIPULATE WITH TOOLS
 - 90 LOUVERS
 - 1 MANIPULATE BY HAND
 - 90 LOUVERS
 - 3 REM 2 MODS/CASE7
 - 2 MANIPULATE WITH TOOLS
 - 100 CHANNELS (ALL)
 - 101 THERMAL BLANKET
 - 1 MANIPULATE BY HAND
 - 100 CHANNELS (ALL)
 - 101 THERMAL BLANKET
 - * REM 2 MODS/CASE 1
 - 2 MANIPULATE WITH TOOLS
 - 102 MODULE EA1
 - 103 MODULE EA1
 - 1 MANIPULATE BY HAND
 - 102 MODULE EA1
 - 103 MODULE EA1
 - 5 REM 2E1
 - 1 MANIPULATE BY HAND
 - 104 CORNER SHIELD
 - 6 REM 9W5,9W7 HARNESSSES
 - 11 MATE (DEMATE) CONNECTORS
 - 30 ZONE 30, UPPER RING HARN
 - 7 REM TYGON TUBING/GAS CAP
 - 2 MANIPULATE WITH TOOLS
 - 46 ZONE 46, OCTAGON TOP
 - 1 MANIPULATE BY HAND
 - 46 ZONE 46, OCTAGON TOP
 - 8 REM 2E2,32A1
 - 2 MANIPULATE WITH TOOLS
 - 107 MODULE
 - 108 LOUVER ASSY

- 1 MANIPULATE BY HAND
- 107 MODULE
- 108 LOUVER ASSY
- 9 REM BAS1
- 2 MANIPULATE WITH TOOLS
- 109 SUN SHADE
- 1 MANIPULATE BY HAND
- 109 SUN SHADE
- 10 REM +X,-Y LOG DAMP
- 2 MANIPULATE WITH TOOLS
- 105 CORNER SHIELD
- 106 PAS SWITCH
- 1 MANIPULATE BY HAND
- 105 CORNER SHIELD
- 106 PAS SWITCH
- 11 REM PIPS
- 2 MANIPULATE WITH TOOLS
- 99 PIPS
- 2 MANIPULATE WITH TOOLS
- 99 PIPS
- 1 MANIPULATE BY HAND
- 99 PIPS
- 12 REM POWER /PYRO HARNESS
- 2 MANIPULATE WITH TOOLS
- 31 ZONE 31, LOWER RING HARN
- 1 MANIPULATE BY HAND
- 31 ZONE 31, LOWER RING HARN
- 13 PREP MAG MAP FIXT
- 1 MANIPULATE BY HAND
- 2 MANIPULATE WITH TOOLS
- 2 MANIPULATE WITH TOOLS
- 2 MANIPULATE WITH TOOLS
- 14 MOVE S/C TO DEGAUSS FX
- 16 MANEUVER SPACECRAFT
- 16 MANEUVER SPACECRAFT
- 15 REMOVE S/C FROM DEGAUS
- 16 MANEUVER SPACECRAFT
- 16 INST DEPLY ATTACH ANGL
- 1 MANIPULATE BY HAND
- 46 ZONE 46, OCTAGON TOP
- 2 MANIPULATE WITH TOOLS
- 46 ZONE 46, OCTAGON TOP
- 17 INST S/C ON MAP FIXT
- 16 MANEUVER SPACECRAFT
- 18 MAG MAPPING
- 9 VISUAL INSPECTION
- 19 PREP S/C FOR DIMS INSP
- 1 MANIPULATE BY HAND
- 75 MECH ASSY/TEST
- 1 SECURE S/C APR 6/7
- 17 SECURED IN TENT
- 2 A/C LEAK TEST APR 8-10
- 10 INSPECTION WITH GAUGES
- 3 BUILD-UP CASES 1,7
- 1 MANIPULATE BY HAND
- 49 ZONE 49, EA I CASE
- 54 ZONE 54, EA VII CASE
- 2 MANIPULATE WITH TOOLS
- 49 ZONE 49, EA I CASE
- 54 ZONE 54, EA VII CASE
- 4 TAKE BIO-SPECIMENS
- 1 MANIPULATE BY HAND

- 2 MANIPULATE WITH TOOLS
- 5 INST 8AS1,8M1
 - 1 MANIPULATE BY HAND
 - 54 ZONE 54, EA VII CASE
 - 2 MANIPULATE WITH TOOLS
 - 54 ZONE 54, EA VII CASE
- 6 INST V17/EA1
 - 1 MANIPULATE BY HAND
 - 49 ZONE 49, EA I CASE
 - 2 MANIPULATE WITH TOOLS
 - 49 ZONE 49, EA I CASE
- 7 TORQUE CASES 1,7
 - 1 MANIPULATE BY HAND
 - 49 ZONE 49, EA I CASE
 - 54 ZONE 54, EA VII CASE
 - 2 MANIPULATE WITH TOOLS
 - 49 ZONE 49, EA I CASE
 - 54 ZONE 54, EA VII CASE
- 8 INST CASE 4
 - 1 MANIPULATE BY HAND
 - 51 ZONE 51, EA IV CASE
 - 2 MANIPULATE WITH TOOLS
 - 51 ZONE 51, EA IV CASE
- 9 INST FILTERS/EA6 IN SR
 - 1 MANIPULATE BY HAND
 - 53 ZONE 53, EA VI CASE
 - 2 MANIPULATE WITH TOOLS
 - 53 ZONE 53, EA VI CASE
- 10 BOND COLLAR/2E1
 - 11 MATE (DEMATE) CONNECTORS
 - 46 ZONE 46, OCTAGON TOP
- 11 CABLING,I,IV,VII BENDIX
 - 1 MANIPULATE BY HAND
 - 31 ZONE 31, LOWER RING HARN
 - 33 HSEN A(H MSHA ASS-.SS6XB(H CS(I(P D-P
 - 35 CY 1P4 ISS-PS,KDS -3S+3HA3SU3HA
 - 2 MANIPULATE WITH TOOLS
 - 31 ZONE 31, LOWER RING HARN
 - 33 HSEN A(H MSHA ASS-.SS6XB(H CS(I(P D-P
 - 35 CY 1P4 ISS-PS,KDS -3S+3HA3SU3HA
- 12 INSTMODS,LOUVERS ON EA6
 - 1 MANIPULATE BY HAND
 - 53 ZONE 53, EA VI CASE
 - 2 MANIPULATE WITH TOOLS
 - 53 ZONE 53, EA VI CASE
- 13 INST 34A1,PLAS PROBE
 - 1 MANIPULATE BY HAND
 - 3 ZONE 3, BAY 3
 - 2 MANIPULATE WITH TOOLS
 - 3 ZONE 3, BAY 3
- 14 MATE COAX,INST 16A1/A6
 - 11 MATE (DEMATE) CONNECTORS
 - 52 ZONE 52, EA V CASE
- 15 TORQ 16A1/A6 (EAS)
 - 2 MANIPULATE WITH TOOLS
 - 52 ZONE 52, EA V CASE
- 16 INSP,INST 7A2 GYROS
 - 1 MANIPULATE BY HAND
 - 54 ZONE 54, EA VII CASE
 - 2 MANIPULATE WITH TOOLS
 - 54 ZONE 54, EA VII CASE
- 17 BUILDUP CASE 3

- 1 MANIPULATE BY HAND
50 ZONE 50, EA III CASE
- 2 MANIPULATE WITH TOOLS
50 ZONE 50, EA III CASE
- 18 CLOSE CASE 7, INST COUVER
 - 1 MANIPULATE BY HAND
54 ZONE 54, EA VII CASE
 - 2 MANIPULATE WITH TOOLS
54 ZONE 54, EA VII CASE
- 19 INST 34A1(UV), 25A1
 - 1 MANIPULATE BY HAND
55 ZONE 55, EA VIII CASE
 - 2 MANIPULATE WITH TOOLS
55 ZONE 55, EA VIII CASE
- 76 MECH ASSY/TEST
 - 1 4 MUDS, WEIGHED, INST EA 3
 - 1 MANIPULATE BY HAND
50 ZONE 50, EA III CASE
 - 2 MANIPULATE WITH TOOLS
50 ZONE 50, EA III CASE
 - 2 INST BATT, (CASE 8)
 - 1 MANIPULATE BY HAND
55 ZONE 55, EA VIII CASE
 - 2 MANIPULATE WITH TOOLS
55 ZONE 55, EA VIII CASE
 - 3 INST 4A8/CASE 8
 - 1 MANIPULATE BY HAND
55 ZONE 55, EA VIII CASE
 - 2 MANIPULATE WITH TOOLS
55 ZONE 55, EA VIII CASE
 - 2 MANIPULATE WITH TOOLS
55 ZONE 55, EA VIII CASE
 - 4 INST LOUVERS, COVERS (EA 8)
 - 1 MANIPULATE BY HAND
55 ZONE 55, EA VIII CASE
 - 2 MANIPULATE WITH TOOLS
55 ZONE 55, EA VIII CASE
 - 5 INST EAS ON S/C
 - 1 MANIPULATE BY HAND
52 ZONE 52, EA V CASE
 - 2 MANIPULATE WITH TOOLS
52 ZONE 52, EA V CASE
 - 6 INST 9W27 PLAS IN/CONN
 - 11 MATE (DEMATE) CONNECTORS
30 ZONE 30, UPPER RING HARN
 - 7 INST 9W30 MAG IN/CONN
 - 11 MATE (DEMATE) CONNECTORS
30 ZONE 30, UPPER RING HARN
 - 8 INST 9W20, 9W21
 - 11 MATE (DEMATE) CONNECTORS
30 ZONE 30, UPPER RING HARN
 - 9 INST CANOPIUS SENS, 8FFLBX
 - 1 MANIPULATE BY HAND
8 ZONE 8, BAY 8
 - 2 MANIPULATE WITH TOOLS
8 ZONE 8, BAY 8
 - 10 INST 35A1/2 DFR
 - 1 MANIPULATE BY HAND
52 ZONE 52, EA V CASE
 - 2 MANIPULATE WITH TOOLS
52 ZONE 52, EA V CASE
 - 11 INST PL SENSOR

- 1 MANIPULATE BY HAND
 - 8 ZONE 8, BAY 8
- 2 MANIPULATE WITH TOOLS
 - 8 ZONE 8, BAY 8
- 12 DEGAUSS, INST CASE 3
 - 10 INSPECTION WITH GAUGES
 - 50 ZONE 50, EA III CASE
 - 9 VISUAL INSPECTION
 - 50 ZONE 50, EA III CASE
- 13 INST, LOUVRS, TORQ BAY 3
 - 1 MANIPULATE BY HAND
 - 50 ZONE 50, EA III CASE
 - 2 MANIPULATE WITH TOOLS
 - 50 ZONE 50, EA III CASE
 - 2 MANIPULATE WITH TOOLS
 - 50 ZONE 50, EA III CASE
- 14 REM BAY 7 LOUVERS
 - 2 MANIPULATE WITH TOOLS
 - 64 LOUVERS EA7
 - 1 MANIPULATE BY HAND
 - 64 LOUVERS EA7
- 15 REM 9 CCS MODS/EA 7
 - 2 MANIPULATE WITH TOOLS
 - 65 CRUISE DAMPERS
 - 66 CRUISE DAMPERS
 - 67 CRUISE DAMPERS
 - 68 CRUISE DAMPERS
 - 70 LOUVER ASSY
 - 71 LOUVER ASSY
 - 72 TRD
 - 73 HEATERS
 - 74 LOUVERS
 - 1 MANIPULATE BY HAND
 - 65 CRUISE DAMPERS
 - 66 CRUISE DAMPERS
 - 67 CRUISE DAMPERS
 - 68 CRUISE DAMPERS
 - 70 LOUVER ASSY
 - 71 LOUVER ASSY
 - 72 TRD
 - 73 HEATERS
 - 74 LOUVERS
- 16 REM 7A2/CASE 7, INST/FRAM
 - 2 MANIPULATE WITH TOOLS
 - 75 EAS MODULE
 - 1 MANIPULATE BY HAND
 - 75 EAS MODULE
- 17 REPAIR 2E1, INST FIXTURE
 - 1 MANIPULATE BY HAND
 - 76 2E1
 - 2 MANIPULATE WITH TOOLS
 - 76 2E1
- 18 INST, TORQ CASE 5
 - 1 MANIPULATE BY HAND
 - 52 ZONE 52, EA V CASE
 - 2 MANIPULATE WITH TOOLS
 - 52 ZONE 52, EA V CASE
- 19 INST 2#45/46, 2#2 ON S/C
 - 1 MANIPULATE BY HAND
 - 46 ZONE 46, OCTAGON TOP
 - 2 MANIPULATE WITH TOOLS
 - 46 ZONE 46, OCTAGON TOP

77 MECH ASSY/TEST

- 1 MAP 2E1
 - 9 VISUAL INSPECTION
- 2 INST. TORQ 9 MODS/EAM
 - 1 MANIPULATE BY HAND
 - 54 ZONE 54, EA VII CASE
 - 2 MANIPULATE WITH TOOLS
 - 54 ZONE 54, EA VII CASE
- 3 16A4P2 TORQ CANNON/EA 5
 - 1 MANIPULATE BY HAND
 - 34 QJWYH4A CA-GH OSH(H C-QSS\$N 8UUI
 - 2 MANIPULATE WITH TOOLS
 - 34 QJWYH4A CA-GH OSH(H C-QSS\$N 8UUI
- 4 INST GYRO, CLOSE CASE 7
 - 1 MANIPULATE BY HAND
 - 54 ZONE 54, EA VII CASE
 - 2 MANIPULATE WITH TOOLS
 - 54 ZONE 54, EA VII CASE
- 5 SECURE PIPS SLING
 - 1 MANIPULATE BY HAND
 - 2 ZONE 2, BAY 2
 - 2 MANIPULATE WITH TOOLS
 - 2 ZONE 2, BAY 2
- 6 REM SHEAR PLATE, UMBIL
 - 2 MANIPULATE WITH TOOLS
 - 81 PYRO HARNESS(9W36)
- 7 POS/TORQ 10A/PIPS
 - 1 MANIPULATE BY HAND
 - 2 ZONE 2, BAY 2
- 8 POS S/C, INST LIFT BRKT
 - 1 MANIPULATE BY HAND
 - 46 ZONE 46, OCTAGON TOP
- 9 INST SHEAR PLATE, CONN
 - 1 MANIPULATE BY HAND
 - 2 ZONE 2, BAY 2
 - 2 MANIPULATE WITH TOOLS
 - 2 ZONE 2, BAY 2
- 10 SET S/C ON U-RING
 - 16 MANEUVER SPACECRAFT
- 11 PREP/INST S/C /MAP FIXT
 - 1 MANIPULATE BY HAND
 - 2 MANIPULATE WITH TOOLS
- 12 MAG MAPPING
 - 10 INSPECTION WITH GAUGES
- 13 STOW/SECURE GAS FRAMES
 - 1 MANIPULATE BY HAND
- 14 POS S/C
 - 1 MANIPULATE BY HAND
- 15 REPLACE SEAL/99, 7GA VALVE
 - 1 MANIPULATE BY HAND
 - 54 ZONE 54, EA VII CASE
 - 1 MANIPULATE BY HAND
 - 54 ZONE 54, EA VII CASE
 - 2 MANIPULATE WITH TOOLS
 - 54 ZONE 54, EA VII CASE
- 16 PRESSURIZE A/C TANKS
 - 1 MANIPULATE BY HAND
 - 2 MANIPULATE WITH TOOLS
 - 2 MANIPULATE WITH TOOLS
- 17 REM LOUVER COVERS, ASSY
 - 2 MANIPULATE WITH TOOLS
 - 61 LOUVERS EAB

- 1 MANIPULATE BY HAND
- 61 LOUVERS EAB
- 18 REM CANOPUS BAFFLE
 - 2 MANIPULATE WITH TOOLS
 - 62 BAFFLE (CANOPUS SENSOR)
- 1 MANIPULATE BY HAND
- 62 BAFFLE (CANOPUS SENSOR)
- 19 INST CANOPUS LITE HOOD
 - 1 MANIPULATE BY HAND
 - 8 ZONE 8, BAY 8
 - 2 MANIPULATE WITH TOOLS
 - 8 ZONE 8, BAY 8
- 78 MECH ASSY/TEST
 - 1 ONST UV, TERMINAL LIT HD
 - 1 MANIPULATE BY HAND
 - 2 ZONE 2, BAY 2
 - 2 MANIPULATE WITH TOOLS
 - 2 ZONE 2, BAY 2
 - 2 POLISH LIGHT SENSOR
 - 2 MANIPULATE WITH TOOLS
 - 2 ZONE 2, BAY 2
 - 3 REM 2E2 FROM CANNISTER
 - 2 MANIPULATE WITH TOOLS
 - 4 INST LO-G DAMP/2E2
 - 1 MANIPULATE BY HAND
 - 26 ZONE 26, LO-GAIN ANTENNA
 - 2 MANIPULATE WITH TOOLS
 - 26 ZONE 26, LO-GAIN ANTENNA
 - 5 INST MAG(33A1), YORQ
 - 1 MANIPULATE BY HAND
 - 26 ZONE 26, LO-GAIN ANTENNA
 - 2 MANIPULATE WITH TOOLS
 - 26 ZONE 26, LO-GAIN ANTENNA
 - 6 REM 2E1 (FLITE SPARE)/FIX
 - 2 MANIPULATE WITH TOOLS
 - 83 PYRO HARNESS(9W36)
 - 1 MANIPULATE BY HAND
 - 83 PYRO HARNESS(9W36)
 - 7 INST HI-G ANTNA/2E1
 - 1 MANIPULATE BY HAND
 - 25 ZONE 25, HI-GAIN ANTENNA
 - 2 MANIPULATE WITH TOOLS
 - 25 ZONE 25, HI-GAIN ANTENNA
 - 2 MANIPULATE WITH TOOLS
 - 25 ZONE 25, HI-GAIN ANTENNA
 - 8 INST FLUX TANK LEGS
 - 1 MANIPULATE BY HAND
 - 46 ZONE 46, OCTAGON TOP
 - 2 MANIPULATE WITH TOOLS
 - 46 ZONE 46, OCTAGON TOP
 - 9 INST PLANET SENS HOOD
 - 1 MANIPULATE BY HAND
 - 8 ZONE 8, BAY 8
 - 2 MANIPULATE WITH TOOLS
 - 8 ZONE 8, BAY 8
 - 10 MOVE S/C
 - 16 MANEUVER SPACECRAFT
 - 11 INST FLUX TANK, CALBE SUP
 - 1 MANIPULATE BY HAND
 - 46 ZONE 46, OCTAGON TOP
 - 2 MANIPULATE WITH TOOLS
 - 46 ZONE 46, OCTAGON TOP

- 12 INST J-BOXES/GAS GRAMES
 - 1 MANIPULATE BY HAND
 - 2 MANIPULATE WITH TOOLS
- 13 INST SUN SENSOR LITE MD
 - 1 MANIPULATE BY HAND
 - 2 ZONE 2, BAY 2
 - 2 MANIPULATE WITH TOOLS
 - 2 ZONE 2, BAY 2
- 14 REM 2W46/2E1
 - 2 MANIPULATE WITH TOOLS
 - 84 2W46
 - 1 MANIPULATE BY HAND
 - 84 2W46
- 15 HOOK-UP TEST CABLES
 - 1 MANIPULATE BY HAND
 - 31 ZONE 31, LOWER RING HARN
 - 2 MANIPULATE WITH TOOLS
 - 31 ZONE 31, LOWER RING HARN
- 16 PREP PLASMA PROBE, INST
 - 1 MANIPULATE BY HAND
 - 3 ZONE 3, BAY 3
 - 2 MANIPULATE WITH TOOLS
 - 3 ZONE 3, BAY 3
- 17 PLASMA PROBE CALIBRATION
 - 10 INSPECTION WITH GAUGES
- 18 REM 9W30 (MAG HARNESS)
 - 1 MANIPULATE BY HAND
 - 86 9W30 HARNESS
 - 2 MANIPULATE WITH TOOLS
 - 86 9W30 HARNESS
- 19 REM PROBE
 - 2 MANIPULATE WITH TOOLS
 - 85 PLASMA PROBE
 - 1 MANIPULATE BY HAND
 - 85 PLASMA PROBE
- 79 MECH ASSY/TEST
 - 1 REM INST TEST CABLES
 - 1 MANIPULATE BY HAND
 - 31 ZONE 31, LOWER RING HARN
 - 2 MANIPULATE WITH TOOLS
 - 31 ZONE 31, LOWER RING HARN
 - 2 INST PLASMA PROBE
 - 1 MANIPULATE BY HAND
 - 3 ZONE 3, BAY 3
 - 2 MANIPULATE WITH TOOLS
 - 3 ZONE 3, BAY 3
 - 3 HOOK-UP PROBE/MAG MODS
 - 1 MANIPULATE BY HAND
 - 3 ZONE 3, BAY 3
 - 4 CALIB PLASMA PROBE
 - 10 INSPECTION WITH GAUGES
 - 5 REM FLUX TANK
 - 2 MANIPULATE WITH TOOLS
 - 46 ZONE 46, OCTAGON TOP
 - 1 MANIPULATE BY HAND
 - 46 ZONE 46, OCTAGON TOP
 - 6 REM INST UV SOURCE
 - 1 MANIPULATE BY HAND
 - 2 ZONE 2, BAY 2
 - 2 MANIPULATE WITH TOOLS
 - 2 ZONE 2, BAY 2
 - 7 INST HELIUM HOLT BALL

- 1 MANIPULATE BY HAND
- 2 MANIPULATE WITH TOOLS
- 8 CY-1 VERIFY OF FIX TEST
- 10 INSPECTION WITH GAUGES
- 9 PREP FOR CURRENT LOOP T
 - 1 MANIPULATE BY HAND
 - 2 MANIPULATE WITH TOOLS
- 10 CURRENT LOOP TEST
 - 10 INSPECTION WITH GAUGES
- 11 PULL ALL OSE CABLING
 - 1 MANIPULATE BY HAND
 - 31 ZONE 31, LOWER RING HARN
- 12 RAISE GAS FRAMES
 - 2 MANIPULATE WITH TOOLS
- 13 REM RADIO, TAPE REC/EA 5
 - 2 MANIPULATE WITH TOOLS
 - 87 RADIO MODULE
 - 88 TAPE RECORDER
 - 1 MANIPULATE BY HAND
 - 87 RADIO MODULE
 - 88 TAPE RECORDER
- 14 REM HELIUM HOLT BALL
 - 2 MANIPULATE WITH TOOLS
 - 1 MANIPULATE BY HAND
- 15 INST CASE 5, CK S/C
 - 1 MANIPULATE BY HAND
 - 52 ZONE 52, EA V CASE
 - 2 MANIPULATE WITH TOOLS
 - 52 ZONE 52, EA V CASE
- 16 GROUND INTEGRITY CHECK
 - 10 INSPECTION WITH GAUGES
- 17 MOUNT BATT/ON FIXTURE
 - 1 MANIPULATE BY HAND
 - 69 BATTERY
- 18 MOUNT 8M1 ON FIXTURE
 - 2 MANIPULATE WITH TOOLS
- 19 SYSTEMS TEST #3
 - 10 INSPECTION WITH GAUGES
- 80 MECH ASSY/TEST
 - 1 REM 33A1, 25A1, 7LS8, 7CS8
 - 2 MANIPULATE WITH TOOLS
 - 77 MAGNETOMETER
 - 89 SUN SENSOR BLANKET
 - 90 LOUVERS
 - 91 MODULE EA4
 - 1 MANIPULATE BY HAND
 - 77 MAGNETOMETER
 - 89 SUN SENSOR BLANKET
 - 90 LOUVERS
 - 91 MODULE EA4
 - 2 OPEN CASES 3, REM 33A2/A3
 - 2 MANIPULATE WITH TOOLS
 - 92 MODULE EA4
 - 93 MODULE EA4
 - 1 MANIPULATE BY HAND
 - 92 MODULE EA4
 - 93 MODULE EA4
 - 3 REM TERM SENS HOOD
 - 2 MANIPULATE WITH TOOLS
 - 94 HOOD, TERMINATOR SENSOR
 - 4 REM UV SOURCE
 - 2 MANIPULATE WITH TOOLS

- 2 ZONE 2, BAY 2
- 5 REM 4 SQIB HARNESS(9W38
 - 2 MANIPULATE WITH TOOLS
 - 95 MODULE EA4
 - 96 MODULE EA4
 - 97 MODULE EA4
 - 98 9W38
 - 1 MANIPULATE BY HAND
 - 95 MODULE EA4
 - 96 MODULE EA4
 - 97 MODULE EA4
 - 98 9W38
- 6 SIT SWITCH REM/BATTERY
 - 2 MANIPULATE WITH TOOLS
- 7 INST SIT SWITCH/FILE
 - 2 MANIPULATE WITH TOOLS
 - 55 ZONE 55, EA VIII CASE
- 8 POS CASE3
 - 1 MANIPULATE BY HAND
 - 50 ZONE 50, EA III CASE
- 9 REM BATTERY FROM POSNR
 - 1 MANIPULATE BY HAND
 - 69 BATTERY
- 10 REM CASE 7 SCREWS
 - 2 MANIPULATE WITH TOOLS
 - 54 ZONE 54, EA VII CASE
- 11 REM LITE SOURCES
 - 2 MANIPULATE WITH TOOLS
 - 46 ZONE 46, OCTAGON TOP
- 12 REM GYROS/CASE 7
 - 2 MANIPULATE WITH TOOLS
 - 101 THERMAL BLANKET
- 13 CLOSE CASE 7
 - 2 MANIPULATE WITH TOOLS
 - 54 ZONE 54, EA VII CASE
- 14 INST 2 HARDLINE COAX
 - 1 MANIPULATE BY HAND
 - 30 ZONE 30, UPPER RING HARN
 - 2 MANIPULATE WITH TOOLS
 - 30 ZONE 30, UPPER RING HARN
 - 2 MANIPULATE WITH TOOLS
 - 30 ZONE 30, UPPER RING HARN
- 15 PREP S/C FOR SHIPMENT
 - 1 MANIPULATE BY HAND
- 16 BAG CONNECTORS FOR SHIPG
 - 1 MANIPULATE BY HAND
- 17 INST BIO-SPECIMENS/S/C
 - 1 MANIPULATE BY HAND
- 18 REM BAY 2 SHEAR PLATE
 - 2 MANIPULATE WITH TOOLS
 - 103 MODULE EA1
- 19 SECURE PIPS HARNESS
 - 1 MANIPULATE BY HAND
 - 2 ZONE 2, BAY 2
- 81 MECH ASSY/TEST
 - 1 INST BAY 2 SHEAR PLATE
 - 1 MANIPULATE BY HAND
 - 2 ZONE 2, BAY 2
 - 2 MANIPULATE WITH TOOLS
 - 2 ZONE 2, BAY 2
 - 2 REM A/C J-BOXES FROM FIX
 - 1 MANIPULATE BY HAND

- 1 MANIPULATE BY HAND
- 3 REM LO-G ANTNA/2E2
 - 2 MANIPULATE WITH TOOLS
 - 26 ZONE 26, LO-GAIN ANTENNA
 - 1 MANIPULATE BY HAND
 - 26 ZONE 26, LO-GAIN ANTENNA
- 4 INST LO-G ANTNA/SHIP BOX
 - 1 MANIPULATE BY HAND
 - 26 ZONE 26, LO-GAIN ANTENNA
 - 2 MANIPULATE WITH TOOLS
 - 26 ZONE 26, LO-GAIN ANTENNA
- 5 CONT SHIPPING PREP
 - 1 MANIPULATE BY HAND
- 6 TENSION CABLE/SHIP BRKT
 - 1 MANIPULATE BY HAND
 - 2 MANIPULATE WITH TOOLS
- 7 S/C SECURED/IN TRANSIT
 - 16 MANEUVER SPACECRAFT
- 2 STAGE 2, ETH OPERATIONS
 - 1 MECHANICAL ASSY TEST
 - 1 REM EAS FROM FIXT
 - 1 MANIPULATE BY HAND
 - 52 ZONE 52, EA V CASE
 - 2 MANIPULATE WITH TOOLS
 - 52 ZONE 52, EA V CASE
 - 2 INST 7CS8,7TS2
 - 1 MANIPULATE BY HAND
 - 8 ZONE 8, BAY 8
 - 1 MANIPULATE BY HAND
 - 2 ZONE 2, BAY 2
 - 3 INST EAS SWING FIXTURE
 - 2 MANIPULATE WITH TOOLS
 - 52 ZONE 52, EA V CASE
 - 1 MANIPULATE BY HAND
 - 52 ZONE 52, EA V CASE
 - 4 INST EAS, TORQ BACK SCREW
 - 1 MANIPULATE BY HAND
 - 52 ZONE 52, EA V CASE
 - 2 MANIPULATE WITH TOOLS
 - 52 ZONE 52, EA V CASE
 - 5 TAKE BIO-SPECIMENS
 - 1 MANIPULATE BY HAND
 - 6 INST S/C TO LOW/LEV POSN
 - 16 MANEUVER SPACECRAFT
 - 7 INST LO-G ANTNA, DAMPERS
 - 1 MANIPULATE BY HAND
 - 26 ZONE 26, LO-GAIN ANTENNA
 - 2 MANIPULATE WITH TOOLS
 - 26 ZONE 26, LO-GAIN ANTENNA
 - 8 INST A/C BLACK BOXES
 - 1 MANIPULATE BY HAND
 - 2 MANIPULATE WITH TOOLS
 - 8
 - SSSSSSOZSS OMSLSL
 - 2 MANIPULATE WITH TOOLS
 - 8 ZONE 8, BAY 8
 - 10 INST MAG
 - 1 MANIPULATE BY HAND
 - 26 ZONE 26, LO-GAIN ANTENNA
 - 2 MANIPULATE WITH TOOLS
 - 26 ZONE 26, LO-GAIN ANTENNA
 - 11 OPEN CASE 3
 - 2 MANIPULATE WITH TOOLS

APPENDIX 2 (Continued)

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- 50 ZONE 50, EA III CASE
- 12 CLOSE CASE 3
 - 2 MANIPULATE WITH TOOLS
 - 50 ZONE 50, EA III CASE
- 13 REM 2W46 COAX
 - 2 MANIPULATE WITH TOOLS
 - 62 BAFFLE (CANOPUS SENSOR)
- 14 INST 25A1
 - 1 MANIPULATE BY HAND
 - 8 ZONE 8, BAY 8
 - 2 MANIPULATE WITH TOOLS
 - 8 ZONE 8, BAY 8
- 15 INST 33A1(MAG)
 - 2 MANIPULATE WITH TOOLS
 - 2 ZONE 2, BAY 2
- 16 ROUTE INST CABLES(3)
 - 1 MANIPULATE BY HAND
 - 31 ZONE 31, LOWER RING HARN
- 17 INST 33A2/A3 CASE 3
 - 1 MANIPULATE BY HAND
 - 50 ZONE 50, EA III CASE
 - 2 MANIPULATE WITH TOOLS
 - 50 ZONE 50, EA III CASE
- 18 INST A/C BLK BOXES
 - 1 MANIPULATE BY HAND
 - 2 MANIPULATE WITH TOOLS
- 19 MOVE S/C
 - 16 MANEUVER SPACECRAFT
- 2 MECH ASSY/TEST
 - 1 DEW PT CK
 - 10 INSPECTION WITH GAUGES
 - 2 PRESSURIZE SYSTEMS
 - 10 INSPECTION WITH GAUGES
 - 10 INSPECTION WITH GAUGES
 - 3 MAP GYROS DE-MAG
 - 10 INSPECTION WITH GAUGES
 - 54 ZONE 54, EA VII CASE
 - 4 COMPLETE MAPPING
 - 10 INSPECTION WITH GAUGES
 - 54 ZONE 54, EA VII CASE
 - 5 OPEN CASE 7
 - 2 MANIPULATE WITH TOOLS
 - 54 ZONE 54, EA VII CASE
 - 6 INST CASE 7 SWING FIXT
 - 1 MANIPULATE BY HAND
 - 54 ZONE 54, EA VII CASE
 - 7 INST GYROS/CASE 7
 - 1 MANIPULATE BY HAND
 - 54 ZONE 54, EA VII CASE
 - 2 MANIPULATE WITH TOOLS
 - 54 ZONE 54, EA VII CASE
 - 8 CLOSE CASE 7
 - 2 MANIPULATE WITH TOOLS
 - 54 ZONE 54, EA VII CASE
 - 9 INST BATT/CASE 7(OUTSIDE)
 - 2 MANIPULATE WITH TOOLS
 - 54 ZONE 54, EA VII CASE
 - 10 CONNECT OSE CABLING
 - 1 MANIPULATE BY HAND
 - 31 ZONE 31, LOWER RING HARN
 - 2 MANIPULATE WITH TOOLS
 - 31 ZONE 31, LOWER RING HARN

- 11 SYSTEMS TEST
 - 10 INSPECTION WITH GAUGES
- 12 SPECIAL TRD TEST
 - 10 INSPECTION WITH GAUGES
 - 4 ZONE 4, BAY 4
- 13 SYSTEMS TEST (CONTD) = 4
 - 10 INSPECTION WITH GAUGES
- 14 INST PLASMA PROBE (32A1)
 - 1 MANIPULATE BY HAND
 - 3 ZONE 3, BAY 3
 - 2 MANIPULATE WITH TOOLS
 - 3 ZONE 3, BAY 3
- 15 SYSTEMS TEST
 - 11 MATE (DEMATE) CONNECTORS
- 16 PLASMA PROB SPLICING
 - 1 MANIPULATE BY HAND
 - 3 ZONE 3, BAY 3
 - 2 MANIPULATE WITH TOOLS
 - 3 ZONE 3, BAY 3
- 17 REM BATT
 - 2 MANIPULATE WITH TOOLS
 - 69 BATTERY
 - 1 MANIPULATE BY HAND
 - 69 BATTERY
- 18 INST FLIGHT BATTERY
 - 1 MANIPULATE BY HAND
 - 55 ZONE 55, EA VIII CASE
 - 2 MANIPULATE WITH TOOLS
 - 55 ZONE 55, EA VIII CASE
- 19 REM CANOPUS SENSOR
 - 2 MANIPULATE WITH TOOLS
 - 91 MODULE EA4
 - 1 MANIPULATE BY HAND
 - 91 MODULE EA4
- 3 MECH ASSY/TEST
 - 1 VACUUM EAB INTERIOR FRAM
 - 7 DECONTAMINATION
 - 2 INST SN34, CANOPUS SENSOR
 - 1 MANIPULATE BY HAND
 - 8 ZONE 8, BAY 8
 - 2 MANIPULATE WITH TOOLS
 - 8 ZONE 8, BAY 8
 - 3 INST THERMOCOUPLES
 - 1 MANIPULATE BY HAND
 - 46 ZONE 46, OCTAGON TOP
 - 2 MANIPULATE WITH TOOLS
 - 46 ZONE 46, OCTAGON TOP
 - 2 MANIPULATE WITH TOOLS
 - 46 ZONE 46, OCTAGON TOP
 - 2 MANIPULATE WITH TOOLS
 - 46 ZONE 46, OCTAGON TOP
 - 4 PREP S/C FOR MOVE
 - 1 MANIPULATE BY HAND
 - 2 MANIPULATE WITH TOOLS
 - 5 MOVE S/C TO E.S.F.
 - 15 MANEUVER EQUIPMENT
 - 6 INST S/C ON POSITIONER
 - 1 MANIPULATE BY HAND
 - 2 MANIPULATE WITH TOOLS
 - 7 INST PRESS HOSES
 - 1 MANIPULATE BY HAND
 - 47 ZONE 47, OCTAGON BOTTOM

- 2 MANIPULATE WITH TOOLS
 - 47 ZONE 47, OCTAGON BOTTOM
- 8 HOOK UP TEST CABLE/EA3.8
 - 1 MANIPULATE BY HAND
 - 32 C3 KS-HSEN HSEI)SSSSQA 3E-CY UR3
 - 37 SSSSS8SSBAWCQSSVSSCI Q-SHS H OIX Fm.
 - 2 MANIPULATE WITH TOOLS
 - 32 C3 KS-HSEN HSEI)SSSSQA 3E-CY UR3
 - 37 SSSSS8SSBAWCQSSVSSCI Q-SHS H OIX Fm.
- 9 CK FLITE BATT VOLTAGE
- 10 INSPECTION WITH GAUGES
- 10 PULL PAS PIN
 - 1 MANIPULATE BY HAND
 - 47 ZONE 47, OCTAGON BOTTOM
- 11 UMATED DAP
 - 11 MATE (DEMATE) CONNECTORS
 - 33 HSEN A(H MSHA ASS-.SS6XB(H CS(IP D-P
- 12 INST TRD SOURCES
 - 1 MANIPULATE BY HAND
 - 4 ZONE 4, BAY 4
 - 2 MANIPULATE WITH TOOLS
 - 4 ZONE 4, BAY 4
 - 2 MANIPULATE WITH TOOLS
 - 4 ZONE 4, BAY 4
- 13 MATE DAS
 - 11 MATE (DEMATE) CONNECTORS
 - 33 HSEN A(H MSHA ASS-.SS6XB(H CS(IP D-P
 - 11 MATE (DEMATE) CONNECTORS
 - 33 HSEN A(H MSHA ASS-.SS6XB(H CS(IP D-P
 - 11 MATE (DEMATE) CONNECTORS
 - 33 HSEN A(H MSHA ASS-.SS6XB(H CS(IP D-P
- 14 REM TRD SOURCES
 - 2 MANIPULATE WITH TOOLS
 - 4 ZONE 4, BAY 4
 - 1 MANIPULATE BY HAND
 - 4 ZONE 4, BAY 4
- 15 INST D SOURCE
 - 1 MANIPULATE BY HAND
 - 46 ZONE 46, OCTAGON TOP
 - 2 MANIPULATE WITH TOOLS
 - 46 ZONE 46, OCTAGON TOP
- 16 INST C+D, SOURCES
 - 1 MANIPULATE BY HAND
 - 46 ZONE 46, OCTAGON TOP
 - 2 MANIPULATE WITH TOOLS
 - 46 ZONE 46, OCTAGON TOP
- 17 REM D SOURCE
 - 2 MANIPULATE WITH TOOLS
 - 46 ZONE 46, OCTAGON TOP
 - 1 MANIPULATE BY HAND
 - 46 ZONE 46, OCTAGON TOP
- 18 INST BLACK VELCO BAG
 - 1 MANIPULATE BY HAND
 - 46 ZONE 46, OCTAGON TOP
 - 2 MANIPULATE WITH TOOLS
 - 46 ZONE 46, OCTAGON TOP
 - 2 MANIPULATE WITH TOOLS
 - 46 ZONE 46, OCTAGON TOP
- 19 REM A,C SOURCES
 - 2 MANIPULATE WITH TOOLS
 - 46 ZONE 46, OCTAGON TOP
 - 1 MANIPULATE BY HAND

- 13 INST OSE CABLING
 - 1 MANIPULATE BY HAND
 - 31 ZONE 31, LOWER RING HARN
 - 2 MANIPULATE WITH TOOLS
 - 31 ZONE 31, LOWER RING HARN
- 14 PREP FOR SPEC RADIO TEST
 - 1 MANIPULATE BY HAND
- 15 SPECIAL RADIO TEST
 - 10 INSPECTION WITH GAUGES
 - 10 INSPECTION WITH GAUGES
- 16 UNMATE•MATE 9W2
 - 11 MATE (DEMATE) CONNECTORS
 - 30 ZONE 30, UPPER RING HARN
- 17 ESF ELECT TESTS
 - 10 INSPECTION WITH GAUGES
- 18 PLASMA CUP INSP
 - 9 VISUAL INSPECTION
 - 3 ZONE 3, BAY 3
- 19 TESTS CONTINUES
 - 10 INSPECTION WITH GAUGES
- 5 MECH ASSY/TEST
 - 1 POST/TEST OPERATIONS
 - 1 MANIPULATE BY HAND
 - 2 MANIPULATE WITH TOOLS
 - 2 CK BATT VOLTAGES
 - 10 INSPECTION WITH GAUGES
 - 3 DEMATE 25A1 CONNECTORS
 - 11 MATE (DEMATE) CONNECTORS
 - 37 SSSSS8SSBAWCOSSVSSCI Q•SHS H O(X F=.
 - 4 MATE 25A1 CONNECTORS
 - 11 MATE (DEMATE) CONNECTORS
 - 37 SSSSS8SSBAWCOSSVSSCI Q•SHS H O(X F=.
 - 5 CK, REPLACE DESSICANT
 - 1 MANIPULATE BY HAND
 - 2 MANIPULATE WITH TOOLS
 - 6 COMPATIBILITY TESTS
 - 10 INSPECTION WITH GAUGES
 - 7 REM OSE CABLES
 - 2 MANIPULATE WITH TOOLS
 - 31 ZONE 31, LOWER RING HARN
 - 1 MANIPULATE BY HAND
 - 31 ZONE 31, LOWER RING HARN
 - 8 CK BATT
 - 2 MANIPULATE WITH TOOLS
 - 55 ZONE 55, EA VIII CASE
 - 9 REM 34A1
 - 2 MANIPULATE WITH TOOLS
 - 72 34A1
 - 1 MANIPULATE BY HAND
 - 72 34A1
 - 10 VERIFY PLAS PROBE TORQ
 - 2 MANIPULATE WITH TOOLS
 - 3 ZONE 3, BAY 3
 - 11 REM FLUX TANK
 - 2 MANIPULATE WITH TOOLS
 - 46 ZONE 46, OCTAGON TOP
 - 1 MANIPULATE BY HAND
 - 46 ZONE 46, OCTAGON TOP
 - 12 INST S/P(BA7)BOOST DMPS
 - 1 MANIPULATE BY HAND
 - 20 ZONE 20, SOLAR PANEL 7
 - 2 MANIPULATE WITH TOOLS

- 46 ZONE 46, OCTAGON TOP
- 4 MECH ASSY/TEST
 - 1 UNMATE CABLES
 - 11 MATE (DEMATE) CONNECTORS
 - 31 ZONE 31, LOWER RING HARN
 - 2 CK BATT VOLTAGE
 - 10 INSPECTION WITH GAUGES
 - 3 REM BATTERY
 - 1 MANIPULATE BY HAND
 - 69 BATTERY
 - 4 REM TRD/BLOCKS, INST/FLGT
 - 2 MANIPULATE WITH TOOLS
 - 4 ZONE 4, BAY 4
 - 1 MANIPULATE BY HAND
 - 4 ZONE 4, BAY 4
 - 5 INST SIT/FLIGHT
 - 1 MANIPULATE BY HAND
 - 8 ZONE 8, BAY 8
 - 2 MANIPULATE WITH TOOLS
 - 8 ZONE 8, BAY 8
 - 6 TORQ SCREWS, CASES 3,7
 - 2 MANIPULATE WITH TOOLS
 - 50 ZONE 50, EA III CASE
 - 54 ZONE 54, EA VII CASE
 - 7 THERMAL CLEAN 3,7
 - 6 DECONTAMINATION
 - 8 PRESSURIZE, CK A/C GAS SS
 - 1 MANIPULATE BY HAND
 - 47 ZONE 47, OCTAGON BOTTOM
 - 2 MANIPULATE WITH TOOLS
 - 47 ZONE 47, OCTAGON BOTTOM
 - 9 REM PIPS, INST SHIP BOX
 - 2 MANIPULATE WITH TOOLS
 - 99 PIPS
 - 1 MANIPULATE BY HAND
 - 99 PIPS
 - 10 INST LOUV, BAYS 3,5,6,7,8
 - 1 MANIPULATE BY HAND
 - 50 ZONE 50, EA III CASE
 - 52 ZONE 52, EA V CASE
 - 53 ZONE 53, EA VI CASE
 - 54 ZONE 54, EA VII CASE
 - 55 ZONE 55, EA VIII CASE
 - 2 MANIPULATE WITH TOOLS
 - 50 ZONE 50, EA III CASE
 - 52 ZONE 52, EA V CASE
 - 53 ZONE 53, EA VI CASE
 - 54 ZONE 54, EA VII CASE
 - 55 ZONE 55, EA VIII CASE
 - 2 MANIPULATE WITH TOOLS
 - 50 ZONE 50, EA III CASE
 - 52 ZONE 52, EA V CASE
 - 53 ZONE 53, EA VI CASE
 - 54 ZONE 54, EA VII CASE
 - 55 ZONE 55, EA VIII CASE
 - 11 INST LOUV COUVERS
 - 1 MANIPULATE BY HAND
 - 46 ZONE 46, OCTAGON TOP
 - 2 MANIPULATE WITH TOOLS
 - 46 ZONE 46, OCTAGON TOP
 - 12 CK BATT VOLTAGE
 - 10 INSPECTION WITH GAUGES

- 20 ZONE 20, SOLAR PANEL 7
- 13 INST. TORQ SPRING ARBOR
 - 1 MANIPULATE BY HAND
 - 24 ZONE 24, PANEL 7 SPAR
 - 2 MANIPULATE WITH TOOLS
 - 24 ZONE 24, PANEL 7 SPAR
- 14 INST S/P(BA5)BOOST DMPRS
 - 1 MANIPULATE BY HAND
 - 19 ZONE 19, SOLAR PANEL 5
 - 2 MANIPULATE WITH TOOLS
 - 19 ZONE 19, SOLAR PANEL 5
- 15 INST A/C SHADE/SN005
 - 1 MANIPULATE BY HAND
 - 23 ZONE 23, PANEL 5 SPAR
 - 2 MANIPULATE WITH TOOLS
 - 23 ZONE 23, PANEL 5 SPAR
- 16 INST TORQ SPRING ARBOR
 - 1 MANIPULATE BY HAND
 - 23 ZONE 23, PANEL 5 SPAR
 - 2 MANIPULATE WITH TOOLS
 - 23 ZONE 23, PANEL 5 SPAR
- 17 INST S/P(BA3)BOOST DMPRS
 - 1 MANIPULATE BY HAND
 - 18 ZONE 18, SOLAR PANEL 3
 - 2 MANIPULATE WITH TOOLS
 - 18 ZONE 18, SOLAR PANEL 3
- 18 INST A/C SHADE/SN008
 - 1 MANIPULATE BY HAND
 - 22 ZONE 22, PANEL 3 SPAR
 - 2 MANIPULATE WITH TOOLS
 - 22 ZONE 22, PANEL 3 SPAR
- 19 INST. TORQ SPRING ARBOR
 - 1 MANIPULATE BY HAND
 - 22 ZONE 22, PANEL 3 SPAR
 - 2 MANIPULATE WITH TOOLS
 - 22 ZONE 22, PANEL 3 SPAR
- 6 MECH ASSY/TEST
 - 1 INST S/P(BA1)BOOST DMPRS
 - 1 MANIPULATE BY HAND
 - 17 ZONE 17, SOLAR PANEL 1
 - 2 MANIPULATE WITH TOOLS
 - 17 ZONE 17, SOLAR PANEL 1
 - 2 INST A/C SHADE /SN007
 - 1 MANIPULATE BY HAND
 - 21 ZONE 21, PANEL 1 SPAR
 - 2 MANIPULATE WITH TOOLS
 - 21 ZONE 21, PANEL 1 SPAR
 - 3 INST A/C SHADE /SN006
 - 1 MANIPULATE BY HAND
 - 24 ZONE 24, PANEL 7 SPAR
 - 2 MANIPULATE WITH TOOLS
 - 24 ZONE 24, PANEL 7 SPAR
 - 4 INST. TORQ SPRING ARBOR
 - 1 MANIPULATE BY HAND
 - 21 ZONE 21, PANEL 1 SPAR
 - 2 MANIPULATE WITH TOOLS
 - 21 ZONE 21, PANEL 1 SPAR
 - 5 INST. TORQ TLS8(PLAN SENS
 - 1 MANIPULATE BY HAND
 - 8 ZONE 8, BAY 8
 - 2 MANIPULATE WITH TOOLS
 - 8 ZONE 8, BAY 8

- 6 REMEXPORT TCR TO AM BLDG
 - 1 MANIPULATE BY HAND
 - 78 TEMPO.CONTR.REF.
 - 2 MANIPULATE WITH TOOLS
 - 78 TEMPO.CONTR.REF.
- 8 INST.TORQ UV PHOTOM
 - 1 MANIPULATE BY HAND
 - 2 ZONE 2, BAY 2
 - 2 MANIPULATE WITH TOOLS
 - 2 ZONE 2, BAY 2
- 9 TAKE BIO-SPECIMENS
 - 1 MANIPULATE BY HAND
 - 1 MANIPULATE BY HAND
- 10 LOWER S/C(HORIZONTAL POS
 - 16 MANEUVER SPACECRAFT
- 11 HOOK-UP TEST CABLES
 - 1 MANIPULATE BY HAND
 - 31 ZONE 31, LOWER RING HARN
- 12 MATE.TORQ CONNECTORS
 - 11 MATE (DEMATE) CONNECTORS
 - 31 ZONE 31, LOWER RING HARN
- 13 RAISE S/C(VERTICAL POSIT
 - 16 MANEUVER SPACECRAFT
- 14 MATE CABLES
 - 11 MATE (DEMATE) CONNECTORS
 - 30 ZONE 30, UPPER RING HARN
- 15 PREP/SPECIAL CANOPS TEST
 - 1 MANIPULATE BY HAND
 - 8 ZONE 8, BAY 8
- 16 CANOPUS SPECIAL TEST
 - 10 INSPECTION WITH GAUGES
- 17 POST TEST OPERATIONS
 - 1 MANIPULATE BY HAND
 - 8 ZONE 8, BAY 8
 - 2 MANIPULATE WITH TOOLS
 - 8 ZONE 8, BAY 8
- 18 CK BATT
 - 2 MANIPULATE WITH TOOLS
 - 55 ZONE 55, EA VIII CASE
- 19 INST FLITE NOZZLES
 - 1 MANIPULATE BY HAND
 - 21 ZONE 21, PANEL 1 SPAR
 - 2 MANIPULATE WITH TOOLS
 - 21 ZONE 21, PANEL 1 SPAR
 - 2 MANIPULATE WITH TOOLS
 - 21 ZONE 21, PANEL 1 SPAR
- 7 MECH ASSY/TEST
 - 1 RECORD/CHANGE NOZZLES
 - 1 MANIPULATE BY HAND
 - 21 ZONE 21, PANEL 1 SPAR
 - 2 MANIPULATE WITH TOOLS
 - 21 ZONE 21, PANEL 1 SPAR
 - 2 INST JET SHD/BAYS3,7,1,5
 - 1 MANIPULATE BY HAND
 - 21 ZONE 21, PANEL 1 SPAR
 - 22 ZONE 22, PANEL 3 SPAR
 - 23 ZONE 23, PANEL 5 SPAR
 - 24 ZONE 24, PANEL 7 SPAR
 - 2 MANIPULATE WITH TOOLS
 - 21 ZONE 21, PANEL 1 SPAR
 - 22 ZONE 22, PANEL 3 SPAR
 - 23 ZONE 23, PANEL 5 SPAR

- 24 ZONE 24, PANEL 7 SPAR
- 3 STATIC TEST
 - 10 INSPECTION WITH GAUGES
- 4 INST TCR SN16,19/BAY 5,7
 - 1 MANIPULATE BY HAND
 - 23 ZONE 23, PANEL 5 SPAR
 - 24 ZONE 24, PANEL 7 SPAR
 - 2 MANIPULATE WITH TOOLS
 - 23 ZONE 23, PANEL 5 SPAR
 - 24 ZONE 24, PANEL 7 SPAR
- 5 INST PIPS/TEST TABLE
 - 1 MANIPULATE BY HAND
 - 2 MANIPULATE WITH TOOLS
- 6 PREP FOR ELECT TEST
 - 1 MANIPULATE BY HAND
- 7 ELECT TESTS AT BLDG A0
 - 10 INSPECTION WITH GAUGES
- 8 CK BATT
 - 2 MANIPULATE WITH TOOLS
- 9 MOVE S/C TO 70 DEG/ROTAT
 - 16 MANEUVER SPACECRAFT
- 10 MOVE S/C TO VERTICAL
 - 16 MANEUVER SPACECRAFT
- 11 INST HI-G COAX
 - 1 MANIPULATE BY HAND
 - 30 ZONE 30, UPPER RING HARN
 - 2 MANIPULATE WITH TOOLS
 - 30 ZONE 30, UPPER RING HARN
- 12 PREP S/C FOR XPORT/ESF
 - 1 MANIPULATE BY HAND
- 13 CHANGE LO XPORT/PURG/HOS
 - 1 MANIPULATE BY HAND
 - 1 MANIPULATE BY HAND
- 14 CONT PREP FOR XPORT
 - 1 MANIPULATE BY HAND
 - 1 MANIPULATE BY HAND
- 15 S/C IN TRANSIT
 - 16 MANEUVER SPACECRAFT
- 16 PURGE S/C
 - 16 MANEUVER SPACECRAFT
- 17 ASSY/INST OXIDIZ CARTRDG
 - 1 MANIPULATE BY HAND
 - 2 ZONE 2, BAY 2
 - 2 MANIPULATE WITH TOOLS
 - 2 ZONE 2, BAY 2
- 18 PRESS,TEST OX CART,ASSY
 - 10 INSPECTION WITH GAUGES
 - 2 ZONE 2, BAY 2
 - 10 INSPECTION WITH GAUGES
 - 2 ZONE 2, BAY 2
- 19 INST SERVO RING/JET VACT
 - 1 MANIPULATE BY HAND
 - 2 ZONE 2, BAY 2
 - 2 MANIPULATE WITH TOOLS
 - 2 ZONE 2, BAY 2
- 8 MECH ASSY/TEST
 - 1 TORQ SERVO RING
 - 2 MANIPULATE WITH TOOLS
 - 2 ZONE 2, BAY 2
 - 2 INST 10A/XPORT CONTAINR
 - 1 MANIPULATE BY HAND
 - 2 MANIPULATE WITH TOOLS

- 99 PIPS
- 3 INST S/C ON U-RING
 - 1 MANIPULATE BY HAND
 - 2 MANIPULATE WITH TOOLS
- 4 LOWER 4 S/P INST BRKTS
 - 1 MANIPULATE BY HAND
 - 21 ZONE 21, PANEL 1 SPAR
 - 22 ZONE 22, PANEL 3 SPAR
 - 23 ZONE 23, PANEL 5 SPAR
 - 24 ZONE 24, PANEL 7 SPAR
 - 2 MANIPULATE WITH TOOLS
 - 21 ZONE 21, PANEL 1 SPAR
 - 22 ZONE 22, PANEL 3 SPAR
 - 23 ZONE 23, PANEL 5 SPAR
 - 24 ZONE 24, PANEL 7 SPAR
- 5 INST DFR ANTNA/SP5
 - 1 MANIPULATE BY HAND
 - 22 ZONE 22, PANEL 3 SPAR
 - 2 MANIPULATE WITH TOOLS
 - 22 ZONE 22, PANEL 3 SPAR
- 6 INST SN104 ANTNA/SP1+3
 - 1 MANIPULATE BY HAND
 - 21 ZONE 21, PANEL 1 SPAR
 - 22 ZONE 22, PANEL 3 SPAR
 - 2 MANIPULATE WITH TOOLS
 - 21 ZONE 21, PANEL 1 SPAR
 - 22 ZONE 22, PANEL 3 SPAR
- 7 TORQUE DFR COAX
 - 2 MANIPULATE WITH TOOLS
 - 30 ZONE 30, UPPER RING HARN
- 8 CABLING FOR DFR TEST
 - 11 MATE (DEMATE) CONNECTORS
 - 30 ZONE 30, UPPER RING HARN
- 9 CK BATTERY
 - 10 INSPECTION WITH GAUGES
 - 10 INSPECTION WITH GAUGES
- 10 DFR TEST
 - 10 INSPECTION WITH GAUGES
 - 10 INSPECTION WITH GAUGES
 - 10 INSPECTION WITH GAUGES
- 11 CK/BATTERY
 - 10 INSPECTION WITH GAUGES
 - 10 INSPECTION WITH GAUGES
- 12 LEVEL U-RING S/P(4)
 - 1 MANIPULATE BY HAND
 - 2 MANIPULATE WITH TOOLS
- 13 RAISE S/P TO VERTICAL(4)
 - 16 MANEUVER SPACECRAFT
 - 21 ZONE 21, PANEL 1 SPAR
 - 22 ZONE 22, PANEL 3 SPAR
 - 23 ZONE 23, PANEL 5 SPAR
 - 24 ZONE 24, PANEL 7 SPAR
- 14 INST S/C ON LOW/L POSNR
 - 16 MANEUVER SPACECRAFT
- 15 INST S/P CR DAMPRS/BRKT
 - 1 MANIPULATE BY HAND
 - 21 ZONE 21, PANEL 1 SPAR
 - 22 ZONE 22, PANEL 3 SPAR
 - 23 ZONE 23, PANEL 5 SPAR
 - 24 ZONE 24, PANEL 7 SPAR
 - 2 MANIPULATE WITH TOOLS
 - 21 ZONE 21, PANEL 1 SPAR

- 22 ZONE 22, PANEL 3 SPAR
- 23 ZONE 23, PANEL 5 SPAR
- 24 ZONE 24, PANEL 7 SPAR
- 16 PREP S/C FOR N2 PURGE
 - 1 MANIPULATE BY HAND
- 17 TORQ SERVO RING
 - 2 MANIPULATE WITH TOOLS
 - 2 ZONE 2, BAY 2
- 18 INST 10A/XPORT CONTAINR
 - 1 MANIPULATE BY HAND
 - 99 PIPS
 - 2 MANIPULATE WITH TOOLS
 - 99 PIPS
- 19 PREP FOR OXIDIZ/FUELING
 - 1 MANIPULATE BY HAND
 - 2 MANIPULATE WITH TOOLS
 - 2 MANIPULATE WITH TOOLS
 - 2 MANIPULATE WITH TOOLS
- 20 PRESS/CK PROPELL TANK
 - 2 MANIPULATE WITH TOOLS
- 9 MECH ASSY/TEST
 - 1 SETUP FOR OPTICAL ALIGN
 - 1 MANIPULATE BY HAND
 - 2 MANIPULATE WITH TOOLS
 - 2 INST UP ATTCH ANGLES
 - 1 MANIPULATE BY HAND
 - 2 MANIPULATE WITH TOOLS
 - 3 REM INST PLANET SENSR
 - 1 MANIPULATE BY HAND
 - 8 ZONE 8, BAY 8
 - 2 MANIPULATE WITH TOOLS
 - 8 ZONE 8, BAY 8
 - 4 CAN S/C FOR PURGE
 - 1 MANIPULATE BY HAND
 - 2 MANIPULATE WITH TOOLS
 - 5 PURGE S/C
 - 16 MANEUVER SPACECRAFT
 - 6 REMOVE S/C FROM CAN
 - 1 MANIPULATE BY HAND
 - 7 INST FLGT DUST CAPS
 - 1 MANIPULATE BY HAND
 - 46 ZONE 46, OCTAGON TOP
 - 8 INST ATTCH ANGLS/UP CHAN
 - 1 MANIPULATE BY HAND
 - 46 ZONE 46, OCTAGON TOP
 - 2 MANIPULATE WITH TOOLS
 - 46 ZONE 46, OCTAGON TOP
 - 9 CLEAN OMNI ANTENNA
 - 6 DECONTAMINATION
 - 10 CLOSE S/P BAY 5
 - 1 MANIPULATE BY HAND
 - 23 ZONE 23, PANEL 5 SPAR
 - 11 REM LOUVER COVERS
 - 1 MANIPULATE BY HAND
 - 46 ZONE 46, OCTAGON TOP
 - 12 INST LOWER THERM BLANKET
 - 1 MANIPULATE BY HAND
 - 47 ZONE 47, OCTAGON BOTTOM
 - 13 COMPLETE THERM SLD INST
 - 1 MANIPULATE BY HAND
 - 47 ZONE 47, OCTAGON BOTTOM
 - 2 MANIPULATE WITH TOOLS

- 47 ZONE 47, OCTAGON BOTTOM
- 14 CAN S/C FOR PURGE
 - 1 MANIPULATE BY HAND
- 15 SECURE PIPS/XPORT CONTR
 - 1 MANIPULATE BY HAND
 - 99 PIPS
 - 1 MANIPULATE BY HAND
 - 99 PIPS
- 16 XPORT PIPS TO ESA BLDG
 - 3 MOVE W/CRANE
 - 99 PIPS
- 16 MANEUVER SPACECRAFT
 - 99 PIPS
- 17 PREP 10A FOR TEST
 - 1 MANIPULATE BY HAND
 - 99 PIPS
 - 2 MANIPULATE WITH TOOLS
 - 99 PIPS
- 11 MATE (DEMATE) CONNECTORS
 - 99 PIPS
- 18 INST TRD SHADE, SHIELD
 - 1 MANIPULATE BY HAND
 - 4 ZONE 4, BAY 4
 - 2 MANIPULATE WITH TOOLS
 - 4 ZONE 4, BAY 4
- 19 PREP FOR WT/C.G MEAS
 - 1 MANIPULATE BY HAND
- 10 MECH ASSY/TEST
 - 1 COMPLETE WT/CG 2-AXIS
 - 1 MANIPULATE BY HAND
 - 2 INST TRD, PLAS P, UV COVER
 - 1 MANIPULATE BY HAND
 - 4 ZONE 4, BAY 4
 - 2 MANIPULATE WITH TOOLS
 - 4 ZONE 4, BAY 4
 - 3 REM LOWER T/S
 - 2 MANIPULATE WITH TOOLS
 - 62 BAFFLE (CANOPUS SENSOR)
 - 1 MANIPULATE BY HAND
 - 62 BAFFLE (CANOPUS SENSOR)
 - 4 REM LOWER BLANKET
 - 2 MANIPULATE WITH TOOLS
 - 63 LOWER THERM BLANKET
 - 1 MANIPULATE BY HAND
 - 63 LOWER THERM BLANKET
 - 5 LOWER 2 S/P FOR RADIO CK
 - 1 MANIPULATE BY HAND
 - 22 ZONE 22, PANEL 3 SPAR
 - 2 MANIPULATE WITH TOOLS
 - 21 ZONE 21, PANEL 1 SPAR
 - 6 RF TEST/RADIO COAX
 - 10 INSPECTION WITH GAUGES
 - 10 INSPECTION WITH GAUGES
 - 10 INSPECTION WITH GAUGES
 - 7 RAISE S/PS(4) TO VERTICL
 - 1 MANIPULATE BY HAND
 - 21 ZONE 21, PANEL 1 SPAR
 - 1 MANIPULATE BY HAND
 - 22 ZONE 22, PANEL 3 SPAR
 - 1 MANIPULATE BY HAND
 - 23 ZONE 23, PANEL 5 SPAR
 - 1 MANIPULATE BY HAND

- 24 ZONE 24, PANEL 7 SPAR
- 8 CAN S/C FOR PURGE
 - 1 MANIPULATE BY HAND
- 9 INST MYLAR XPORT BAG/S/C
 - 1 MANIPULATE BY HAND
- 10 START N2 PURGE MAY 17
 - 17 SECURED IN TENT
- 11 REM CAN FROM S/C
 - 1 MANIPULATE BY HAND
- 12 CK BATTERY
 - 9 VISUAL INSPECTION
- 13 LOWER S/PS
 - 1 MANIPULATE BY HAND
 - 21 ZONE 21, PANEL 1 SPAR
 - 1 MANIPULATE BY HAND
 - 22 ZONE 22, PANEL 3 SPAR
 - 1 MANIPULATE BY HAND
 - 23 ZONE 23, PANEL 5 SPAR
 - 1 MANIPULATE BY HAND
 - 24 ZONE 24, PANEL 7 SPAR
- 14 SYSTEM TEST
 - 10 INSPECTION WITH GAUGES
 - 10 INSPECTION WITH GAUGES
 - 10 INSPECTION WITH GAUGES
- 15 STOW S/P
 - 1 MANIPULATE BY HAND
 - 21 ZONE 21, PANEL 1 SPAR
 - 1 MANIPULATE BY HAND
 - 22 ZONE 22, PANEL 3 SPAR
 - 1 MANIPULATE BY HAND
 - 23 ZONE 23, PANEL 5 SPAR
 - 1 MANIPULATE BY HAND
 - 24 ZONE 24, PANEL 7 SPAR
- 16 REM S/P SUPPORT BRKT
 - 2 MANIPULATE WITH TOOLS
 - 1 MANIPULATE BY HAND
- 17 REM UP THERM BLANKET
 - 2 MANIPULATE WITH TOOLS
 - 64 FIGHT TRD
 - 1 MANIPULATE BY HAND
 - 64 FIGHT TRD
- 18 REM INST 7LSB
 - 1 MANIPULATE BY HAND
 - 8 ZONE 8, BAY 8
 - 2 MANIPULATE WITH TOOLS
 - 8 ZONE 8, BAY 8
- 19 INST UP CHANNEL
 - 1 MANIPULATE BY HAND
 - 46 ZONE 46, OCTAGON TOP
 - 2 MANIPULATE WITH TOOLS
 - 46 ZONE 46, OCTAGON TOP
- 11 MECH ASSY/TEST
 - 1 INST CR DAMPR
 - 1 MANIPULATE BY HAND
 - 21 ZONE 21, PANEL 1 SPAR
 - 2 MANIPULATE WITH TOOLS
 - 21 ZONE 21, PANEL 1 SPAR
 - 2 SET CANNISTR ON L/L POSR
 - 1 MANIPULATE BY HAND
 - 3 CK BATTERY
 - 10 INSPECTION WITH GAUGES
 - 4 LOCKWIRE COAX 2W46

- 1 MANIPULATE BY HAND
 - 30 ZONE 30, UPPER RING HARN
- 5 ESF PRECOUNTDOWN TESTS
 - 10 INSPECTION WITH GAUGES
- 6 PREP FOR PYRO TEST
 - 1 MANIPULATE BY HAND
 - 1 MANIPULATE BY HAND
- 7 INST A/C IN XPORT CONTR
 - 1 MANIPULATE BY HAND
 - 2 MANIPULATE WITH TOOLS
- 8 GAS LEAK CK
 - 10 INSPECTION WITH GAUGES
 - 10 INSPECTION WITH GAUGES
- 9 N2 PURGE BEGUN, LEAK TEST
 - 17 SECURED IN TENT
- 10 PREP FOR PRESS GAS SYSTM
 - 1 MANIPULATE BY HAND
- 11 PRESS SN 29/7GA
 - 1 MANIPULATE BY HAND
 - 1 MANIPULATE BY HAND
- 12 PRESS SN 28/7GA
 - 1 MANIPULATE BY HAND
 - 1 MANIPULATE BY HAND
 - 1 MANIPULATE BY HAND
- 13 REM FILL MANIFOLD
 - 2 MANIPULATE WITH TOOLS
 - 47 ZONE 47, OCTAGON BOTTOM
 - 1 MANIPULATE BY HAND
 - 47 ZONE 47, OCTAGON BOTTOM
- 14 LOCKWIRE SN 28
 - 1 MANIPULATE BY HAND
 - 47 ZONE 47, OCTAGON BOTTOM
 - 1 MANIPULATE BY HAND
 - 47 ZONE 47, OCTAGON BOTTOM
- 15 START N2 PURGE
 - 17 SECURED IN TENT
- 16 REM S/C FROM CAN
 - 1 MANIPULATE BY HAND
- 17 ESF ELECT TESTS
 - 10 INSPECTION WITH GAUGES
 - 10 INSPECTION WITH GAUGES
 - 10 INSPECTION WITH GAUGES
- 18 POST TEST OPERATIONS
 - 17 SECURED IN TENT
 - 15 MANEUVER EQUIPMENT
- 19 SECURE S/C, N2 PURGE 5/23
 - 17 SECURED IN TENT
- 12 MECH ASSY/TEST
 - 1 REM XPORT BAG
 - 1 MANIPULATE BY HAND
 - 2 INST FLITE BATTERY
 - 1 MANIPULATE BY HAND
 - 55 ZONE 55, EA VIII CASE
 - 2 MANIPULATE WITH TOOLS
 - 55 ZONE 55, EA VIII CASE
 - 3 UMATE UMBILICAL
 - 11 MATE (DEMATE) CONNECTORS
 - 2 ZONE 2, BAY 2
 - 4 REM TEST MAG
 - 2 MANIPULATE WITH TOOLS
 - 77 MAGNETOMETER
 - 1 MANIPULATE BY HAND

- 77 MAGNETOMETER
- 5 INST SHEAR PLATE
 - 1 MANIPULATE BY HAND
 - 2 ZONE 2, BAY 2
 - 2 MANIPULATE WITH TOOLS
 - 2 ZONE 2, BAY 2
- 6 INST TEMP XDUCR, LOCKWIRE
 - 1 MANIPULATE BY HAND
 - 46 ZONE 46, OCTAGON TOP
 - 2 MANIPULATE WITH TOOLS
 - 46 ZONE 46, OCTAGON TOP
- 7 REM LOUVER COVERS
 - 1 MANIPULATE BY HAND
 - 46 ZONE 46, OCTAGON TOP
- 8 INST LIFT EAKS, TORQ
 - 1 MANIPULATE BY HAND
 - 46 ZONE 46, OCTAGON TOP
- 9 INST HOIST LIFT SLING
 - 15 MANEUVER EQUIPMENT
- 10 INST STRING TIES/BTH RNG
 - 14 TIE HARNESSSES
 - 47 ZONE 47, OCTAGON BOTTOM
- 11 INST BOTTOM SHIELD
 - 1 MANIPULATE BY HAND
 - 47 ZONE 47, OCTAGON BOTTOM
 - 2 MANIPULATE WITH TOOLS
 - 47 ZONE 47, OCTAGON BOTTOM
- 12 INST TEMP XDUCER LOCKS
 - 1 MANIPULATE BY HAND
 - 47 ZONE 47, OCTAGON BOTTOM
 - 2 MANIPULATE WITH TOOLS
 - 47 ZONE 47, OCTAGON BOTTOM
- 13 ROUTE TEMP XDUCER WIRE
 - 1 MANIPULATE BY HAND
 - 31 ZONE 31, LOWER RING HARN
- 14 TORQ SCREWS/LWR ATTH ANG
 - 2 MANIPULATE WITH TOOLS
 - 47 ZONE 47, OCTAGON BOTTOM
- 15 LOAD S/C FOR ESF MOVE
 - 1 MANIPULATE BY HAND
- 16 S/C IN TRANSIT
 - 3 MOVE W/CRANE
 - 3 MOVE W/CRANE
- 17 SNOOP TEST/INSP PIPS
 - 10 INSPECTION WITH GAUGES
 - 2 ZONE 2, BAY 2
- 18 SECURE LIFT EYES
 - 1 MANIPULATE BY HAND
 - 46 ZONE 46, OCTAGON TOP
- 19 RAISE PIPS
 - 1 MANIPULATE BY HAND
 - 99 PIPS
- 13 MECH ASSY/TEST
 - 1 INST PIPS, REM IDENT TAG
 - 1 MANIPULATE BY HAND
 - 2 ZONE 2, BAY 2
 - 2 HOLD/DOWN HOWRE INST
 - 1 MANIPULATE BY HAND
 - 2 ZONE 2, BAY 2
 - 3 MOVE S/C TO VERTICAL
 - 16 MANEUVER SPACECRAFT
 - 4 TORQ UMB BRK!

- 2 MANIPULATE WITH TOOLS
 - 2 ZONE 2, BAY 2
- 5 ROUTE, TORO J VANE HARNES
 - 1 MANIPULATE BY HAND
 - 30 ZONE 30, UPPER RING HARN
 - 2 MANIPULATE WITH TOOLS
 - 30 ZONE 30, UPPER RING HARN
- 6 ESF ELECT TESTS
 - 10 INSPECTION WITH GAUGES
 - 10 INSPECTION WITH GAUGES
- 7 REM BAY2 SHEAR PLATE
 - 2 MANIPULATE WITH TOOLS
 - 70 SHEAR PLATE
 - 1 MANIPULATE BY HAND
 - 70 SHEAR PLATE
- 8 INST SHEAR PLATE
 - 1 MANIPULATE BY HAND
 - 2 ZONE 2, BAY 2
 - 2 MANIPULATE WITH TOOLS
 - 2 ZONE 2, BAY 2
- 9 INST UMB SHIELD
 - 1 MANIPULATE BY HAND
 - 2 ZONE 2, BAY 2
- 10 LIFT S/C
 - 16 MANEUVER SPACECRAFT
- 11 INST DPLY SPRG/LWR CHAN
 - 1 MANIPULATE BY HAND
 - 46 ZONE 46, OCTAGON TOP
 - 2 MANIPULATE WITH TOOLS
 - 46 ZONE 46, OCTAGON TOP
- 12 INST BALL RETAINERS,CK
 - 1 MANIPULATE BY HAND
 - 46 ZONE 46, OCTAGON TOP
 - 2 MANIPULATE WITH TOOLS
 - 46 ZONE 46, OCTAGON TOP
- 13 INST EAGLE SHIELD/BAY 4
 - 1 MANIPULATE BY HAND
 - 4 ZONE 4, BAY 4
 - 2 MANIPULATE WITH TOOLS
 - 4 ZONE 4, BAY 4
- 14 INST SUN SHADE
 - 1 MANIPULATE BY HAND
 - 47 ZONE 47, OCTAGON BOTTOM
 - 2 MANIPULATE WITH TOOLS
 - 47 ZONE 47, OCTAGON BOTTOM
- 15 INST LANYARDS
 - 14 TIE HARNESSSES
 - 47 ZONE 47, OCTAGON BOTTOM
- 16 INST TRD
 - 1 MANIPULATE BY HAND
 - 4 ZONE 4, BAY 4
 - 2 MANIPULATE WITH TOOLS
 - 4 ZONE 4, BAY 4
- 17 STOW SUN SHC TIE LANYRD
 - 14 TIE HARNESSSES
 - 47 ZONE 47, OCTAGON BOTTOM
 - 1 MANIPULATE BY HAND
 - 47 ZONE 47, OCTAGON BOTTOM
- 18 VACUUM PRI, SEC SUN SENS
 - 7 DECONTAMINATION
 - 7 DECONTAMINATION
- 19 INST LOUVER COVERS

- 1 MANIPULATE BY HAND
 - 46 ZONE 46, OCTAGON TOP
- 2 MANIPULATE WITH TOOLS
 - 46 ZONE 46, OCTAGON TOP
- 14 MECHAN ASSY/TEST
 - 1 INST UP THERM SHLD
 - 1 MANIPULATE BY HAND
 - 46 ZONE 46, OCTAGON TOP
 - 2 MANIPULATE WITH TOOLS
 - 46 ZONE 46, OCTAGON TOP
 - 2 CONN. TIE XDUCER WIRES
 - 11 MATE (DEMATE) CONNECTORS
 - 46 ZONE 46, OCTAGON TOP
 - 14 TIE HARNESSSES
 - 46 ZONE 46, OCTAGON TOP
 - 3 INST S/C IN CAN
 - 1 MANIPULATE BY HAND
 - 4 SECURE S/C (PURGE) 5/25
 - 17 SECURED IN TENT
 - 5 PREP LOCKHEED SHROUD
 - 1 MANIPULATE BY HAND
 - 74 LOCKHEED SHROUD
 - 2 MANIPULATE WITH TOOLS
 - 74 LOCKHEED SHROUD
 - 5 MOVE IN HANDLING FRAME
 - 74 LOCKHEED SHROUD
 - 11 MATE (DEMATE) CONNECTORS
 - 74 LOCKHEED SHROUD
 - 6 VACUUM LOCKHEED ADAPTR
 - 7 VACUUM CLEAN
 - 7 INST S/C ON ADAPTER
 - 3 MOVE W/CRANE
 - 1 MANIPULATE BY HAND
 - 2 MANIPULATE WITH TOOLS
 - 8 SECURE S/C ON ADAPTER
 - 1 MANIPULATE BY HAND
 - 47 ZONE 47, OCTAGON BOTTOM
 - 2 MANIPULATE WITH TOOLS
 - 47 ZONE 47, OCTAGON BOTTOM
 - 2 MANIPULATE WITH TOOLS
 - 47 ZONE 47, OCTAGON BOTTOM
 - 9 INST V-BAND/TENSION
 - 1 MANIPULATE BY HAND
 - 47 ZONE 47, OCTAGON BOTTOM
 - 2 MANIPULATE WITH TOOLS
 - 47 ZONE 47, OCTAGON BOTTOM
 - 2 MANIPULATE WITH TOOLS
 - 47 ZONE 47, OCTAGON BOTTOM
 - 16 MANEUVER SPACECRAFT
 - 47 ZONE 47, OCTAGON BOTTOM
 - 10 SECURE S/C (NO PURGE)
 - 17 SECURED IN TENT
 - 11 REM PAS. SIT PINS
 - 2 MANIPULATE WITH TOOLS
 - 47 ZONE 47, OCTAGON BOTTOM
 - 1 MANIPULATE BY HAND
 - 47 ZONE 47, OCTAGON BOTTOM
 - 12 VACUUM CANOPUS INSTLN
 - 7 DECONTAMINATION
 - 13 INST AFFLE BOX, TORQ
 - 1 MANIPULATE BY HAND
 - 8 ZONE 8, BAY 8

- 2 MANIPULATE WITH TOOLS
8 ZONE 8, BAY 8
- 14 S/C ESF ELECT TESTS
10 INSPECTION WITH GAUGES
- 15 SPLICE/REPAIR LWR TH BLK
4 DRILL, FILE, ETC.
46 ZONE 46, OCTAGON TOP
- 14 TIE HARNESSSES
46 ZONE 46, OCTAGON TOP
- 16 REM UV, SENSER AND MOD
2 MANIPULATE WITH TOOLS
2 ZONE 2, BAY 2
1 MANIPULATE BY HAND
2 ZONE 2, BAY 2
- 17 REM SN MC-2
2 MANIPULATE WITH TOOLS
55 ZONE 55, EA VIII CASE
1 MANIPULATE BY HAND
55 ZONE 55, EA VIII CASE
1 MANIPULATE BY HAND
55 ZONE 55, EA VIII CASE
- 18 INST BAY 3 LOUVER COVER
1 MANIPULATE BY HAND
50 ZONE 50, EA III CASE
2 MANIPULATE WITH TOOLS
50 ZONE 50, EA III CASE
- 19 ELECT CHECKS, TESTS
10 INSPECTION WITH GAUGES
10 INSPECTION WITH GAUGES
10 INSPECTION WITH GAUGES
- 15 MECH ASSY/TEST
1 ESF ELECT TESTS 5/27
10 INSPECTION WITH GAUGES
2 FTK CHECK
10 INSPECTION WITH GAUGES
3 FINAL FTK CHECK
10 INSPECTION WITH GAUGES
4 INST FLITE CORNR SHIELD
1 MANIPULATE BY HAND
46 ZONE 46, OCTAGON TOP
2 MANIPULATE WITH TOOLS
46 ZONE 46, OCTAGON TOP
- 5 FINAL CLEAN UP
7 DECONTAMINATION
- 6 ESF ELECT TESTS 5/28
10 INSPECTION WITH GAUGES
- 7 SHROUD INST
1 MANIPULATE BY HAND
57 (H ACCA NKSD PH-A XI-PMSSOPD1 UF.
2 MANIPULATE WITH TOOLS
57 (H ACCA NKSD PH-A XI-PMSSOPD1 UF.
- 8 MATE SHROUD
1 MANIPULATE BY HAND
57 (H ACCA NKSD PH-A XI-PMSSOPD1 UF.
2 MANIPULATE WITH TOOLS
57 (H ACCA NKSD PH-A XI-PMSSOPD1 UF.
- 9 INST PURGE HOSE
1 MANIPULATE BY HAND
2 MANIPULATE WITH TOOLS
- 10 TENSION V-BAND
1 MANIPULATE BY HAND
1 MANIPULATE BY HAND

- 2 MANIPULATE WITH TOOLS
- 11 ESF MECH PREP
 - 1 MANIPULATE BY HAND
 - 1 MANIPULATE BY HAND
 - 1 MANIPULATE BY HAND
 - 2 MANIPULATE WITH TOOLS
 - 2 MANIPULATE WITH TOOLS
 - 4 DRILL, FILE, ETC.
 - 7 VACUUM CLEAN
 - 9 VISUAL INSPECTION
 - 10 INSPECTION WITH GAUGES
 - 11 MATE (DEMATE) CONNECTORS
 - 11 MATE (DEMATE) CONNECTORS
 - 11 MATE (DEMATE) CONNECTORS
 - 16 MANEUVER SPACECRAFT
- 12 ESF TESTS (PRECOUNTDOWN)
 - 10 INSPECTION WITH GAUGES

APPENDIX 2 (Continued)

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02.55.49. D304002. HEAD.
02.55.54. D304002. PP 005 SEC.
02.58.19. D304002. D304,0,300,70000.
02.58.19. D304002. CHARGE. 03 WD000 2043540980000001 0497
02.58.19. D304002. 38774 R. MEUSER
02.58.19. D304002. COPYCR(INPUT,OUTPUT)
02.58.20. D304002. ASGN50, TAPE9. READ MOUNT T2906
02.58.20. D304002. 50 ASSIGNED
02.58.20. D304002. REWIND(TAPE9)
02.58.20. D304002. RUN(P,,,,,377777,,77)
02.58.23. D304002. 034200 OCTAL REQUIRED TO COMPILE
02.58.24. D304002. LGO.
02.58.25. D304002. 051500 OCTAL REQUIRED FOR EXECUTION
03.07.56. D304002. EXIT
03.07.56. D304002. UNLOAD(TAPE9)
03.07.57. D304002. CP 50.181 SEC.
03.07.57. D304002. CT 22279
03.07.57. D304002. PP 549.496 SEC.
03.08.11. D304002. PUNCH- PP 013 SEC.
03.19.17. D304002. PRINT-PP 123 SEC.
09/26/68. A6400 SCOPE 2.0.34