CHAPTER
46

INFORMATION SYSTEMS

Subject/Page	Date	COC	Subject/Page	Date	COC	Subject/Page	Date	COC
46-EFFECTIVE PAGES			46-13-00 (cont)					
1	Feb 15/2025		227	Jun 15/2024				
2	BLANK		228	Jun 15/2024				
46-CONTENTS			229	Jun 15/2024				
1	Feb 15/2024		230	Jun 15/2024				
2	Jun 15/2024		46-13-01					
3	Jun 15/2024		201	Feb 15/2024				
4	Jun 15/2024		202	Feb 15/2024				
5	Jun 15/2024		203	Feb 15/2024				
6	Feb 15/2024		204	Feb 15/2024				
46-13-00			R 205	Feb 15/2025				
R 201	Feb 15/2025		206	Feb 15/2024				
202	Feb 15/2024		207	Jun 15/2024				
R 203	Feb 15/2025		R 208	Feb 15/2025				
R 204	Feb 15/2025		209	Jun 15/2024				
205	Feb 15/2024		R 210	Feb 15/2025				
206	Jun 15/2024		O 211	Feb 15/2025				
R 207	Feb 15/2025		R 212	Feb 15/2025				
R 208	Feb 15/2025		213	Feb 15/2024				
209	Feb 15/2024		214	Jun 15/2024				
R 210	Feb 15/2025		R 215	Feb 15/2025				
R 211	Feb 15/2025		R 216	Feb 15/2025				
212	Feb 15/2024		O 217	Feb 15/2025				
213	Feb 15/2024		R 218	Feb 15/2025				
R 214	Feb 15/2025		R 219	Feb 15/2025				
R 215	Feb 15/2025		220	Feb 15/2024				
O 216	Feb 15/2025		R 221	Feb 15/2025				
R 217	Feb 15/2025		R 222	Feb 15/2025				
R 218	Feb 15/2025		46-13-01					
R 219	Feb 15/2025		R 401	Feb 15/2025				
O 220	Feb 15/2025		402	Feb 15/2024				
R 221	Feb 15/2025		403	Feb 15/2024				
O 222	Feb 15/2025		R 404	Feb 15/2025				
O 223	Feb 15/2025		405	Feb 15/2024				
O 224	Feb 15/2025		406	Jun 15/2024				
O 225	Feb 15/2025		46-13-01					
226	Jun 15/2024		R 501	Feb 15/2025				
			502	Feb 15/2024				

A = Added, R = Revised, D = Deleted, O = Overflow, C = Customer Originated Change

46-EFFECTIVE PAGES

46-CONTENTS

46-CONTENTS

46-CONTENTS

46-CONTENTS

46-CONTENTS

46-CONTENTS

ONBOARD NETWORK SYSTEM - MAINTENANCE PRACTICES

1. **General**

    A. This section gives maintenance tasks that support the onboard network system (ONS) and mass storage device (MSD).

    (1) ONS tasks show the steps to operate the ONS browser, to interface with other line replaceable units (LRU).

    (2) MSD tasks show the steps to maintain loadable software airplane parts (LSAP) hosted by network file server's internal drive.

TASK 46-13-00-480-801

2. **Onboard Network System Maintenance Laptop Connection**

    A. **General**

    (1) This task gives the steps to connect the universal maintenance device, SPL-11321 with the Onboard Network System (ONS), and start the ONS Maintenance browser.

    NOTE: The universal maintenance device, SPL-11321 part number, G45003-1 has replaced part number, G45002-29.

    (a) ONS Maintenance is a web site hosted by the Network File Server (NFS), M2889.

    (b) The desktop icon tells the laptop's browser (typically, Internet Explorer) to connect with ONS Maintenance.

    B. **Tools/Equipment**

    NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

Reference	Description
SPL-11321	Device - Universal Maintenance (UMD)
	Part #: G45004-31 Supplier: 81205
	Part #: G45004-37 Supplier: 81205
	Opt Part #: G45003-3 Supplier: 81205
	Opt Part #: G45004-3 Supplier: 81205
STD-9080	Cable - Ethernet (Cat 5E, RJ-45 Connectors)

    C. **Location Zones**

Zone	Area
211	Flight Compartment - Left

    D. **Before Laptop Connection**

    SUBTASK 46-13-00-860-006

    (1) Make sure that this circuit breaker is closed:

    F/O Electrical System Panel, P6-12

Row	Col	Number	Name

    LOM 445-447, 455, 456 POST SB 737-46-1014 AND PRE SB 737-46-1050; LOM 450, 453, 454, 457, 461-463 PRE SB 737-46-1050

Row	Col	Number	Name
C	1	C01958	NETWORK FILE SERVER

    LOM 445-447 PRE SB 737-46-1050 AND POST SB 737-46-1014; LOM 450, 453, 454, 457, 461-463 PRE SB 737-46-1050; LOM 455, 456 POST SB 737-46-1014 AND PRE SB 737-46-1050

┌─ EFFECTIVITY ─
LOM 445-447 PRE SB 737-46-1050 AND POST SB 737-46-1014; LOM 450, 453, 454, 457, 461-463 PRE SB 737-46-1050; LOM 455, 456 POST SB 737-46-1014 AND PRE SB 737-46-1050

46-13-00

Page 201
Feb 15/2025

D633A101-LOM

ECCN 9E991 BOEING PROPRIETARY - See title page for details

E.   **Connection Procedure Using Ethernet Cable**

SUBTASK 46-13-00-480-008

(1)   Connect one end of the RJ-45 Ethernet cable, STD-9080 to the RJ45 port of the universal maintenance device, SPL-11321. Connect the opposite end to one of these data ports:

   • Flight deck port, M2979, located in the flight deck closet.

   • NFS front panel, shelf E5-2, M2889.

SUBTASK 46-13-00-480-009

(2)   Energize the universal maintenance device, SPL-11321.

   (a)   When it shows Welcome to Windows, then continue.

SUBTASK 46-13-00-480-010

(3)   Log-in as follows:

   (a)   Push the CTRL, ALT and DELETE keys at the same time.

      1)   Make sure it shows: Log On to Windows.

   (b)   Enter the User Name and Password, and then select OK.

SUBTASK 46-13-00-860-007

(4)   Set your web browser to show the ONS Maintenance menu.

   NOTE: The desktop icon contains the URL: http://ms.ons.pnet.

   (a)   Double-click on the ONS Maintenance desktop icon, or use your web browser and input this URL: http://ms.ons.pnet.

   (b)   Make sure the ONS Maintenance main menu shows.

———— END OF TASK ————

TASK 46-13-00-720-801

3.   **Onboard Network System NFS Message Check**

A.   **General**

(1)   This task gives the steps to do a check of the network file server (NFS) fault messages.

   NOTE: The universal maintenance device, SPL-11321 part number, G45003-1 has replaced part number, G45002-29.

   (a)   When the fault results show no LRU names, and no messages, then the NFS senses normal operation of each interface.

   (b)   When the fault results show an LRU, there is an interface problem between that LRU and NFS.

   (c)   When a message shows for the NFS, it can refer to an internal fault or software configuration problem.

   (d)   When a message shows for an LRU other than NFS, it refers to an interface fault with NFS, or a fault reported by the LRU.

   (e)   The NFS Message page shows the condition at the time you made the page selection. To examine the present message condition, you must refresh the browser page. You can click once on the refresh button, or select a different page and then select again the NFS Message page.

EFFECTIVITY
**LOM 445-447 PRE SB 737-46-1050 AND POST SB
737-46-1014; LOM 450, 453, 454, 457, 461-463 PRE
SB 737-46-1050; LOM 455, 456 POST SB
737-46-1014 AND PRE SB 737-46-1050**

D633A101-LOM

46-13-00

Page 202
Feb 15/2024

ECCN 9E991 BOEING PROPRIETARY - See title page for details

B.   **Tools/Equipment**

NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

Reference	Description
SPL-11321	Device - Universal Maintenance (UMD)
	Part #: G45004-31 Supplier: 81205
	Part #: G45004-37 Supplier: 81205
	Opt Part #: G45003-3 Supplier: 81205
	Opt Part #: G45004-3 Supplier: 81205

C.   **Location Zones**

Zone	Area
211	Flight Compartment - Left

D.   **Before the Fault Check**

SUBTASK 46-13-00-480-007

(1)   Do this task: Onboard Network System Maintenance Laptop Connection, TASK 46-13-00-480-801.

(a)   Using the universal maintenance device, SPL-11321, activate the ONS maintenance browser.

E.   **NFS Message Check of Interfacing Systems**

SUBTASK 46-13-00-720-009

(1)   Using the ONS maintenance browser, make your selection: Extended Maintenance > ONS Maintenance > Existing Faults.

(a)   Examine the message adjacent to each LRU.

NOTE: The result only shows an LRU client when there is a message. When there is no message, the LRU does not show.

SUBTASK 46-13-00-720-010

(2)   Select one target LRU at a time, and examine the fault details. Do these steps:

(a)   Click once on the LRU name.

(b)   Examine the specific fault data in the Fault Details box.

(c)   Use the scroll bar to see the complete message, or multiple messages.

(d)   Do the steps again for each LRU.

(e)   If you find a problem, then a maintenance action is required.

F.   **Put the Aircraft Back to it's Usual Condition**

SUBTASK 46-13-00-080-007

(1)   If the universal maintenance device, SPL-11321 is no longer required, stop the ONS maintenance browser, and disconnect the laptop.

——— **END OF TASK** ———

EFFECTIVITY
LOM 445-447 PRE SB 737-46-1050 AND POST SB 737-46-1014; LOM 450, 453, 454, 457, 461-463 PRE SB 737-46-1050; LOM 455, 456 POST SB 737-46-1014 AND PRE SB 737-46-1050

D633A101-LOM

46-13-00

Page 203
Feb 15/2025

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 46-13-00-750-801

4. **Onboard Network System Airplane Credentials Check**

A. **General**

(1)   This task contains four sections.

NOTE: The universal maintenance device, SPL-11321 part number, G45003-1 has replaced part number, G45002-29.

(a)   Steps to do a check of the airplane credential installed in the network file server (NFS).

(b)   Steps to make (or, generate) a certificate signing request (CSR).

NOTE: The Boeing Company recommends that you make a CSR only when specified by a maintenance order.

(c)   Steps to install the serviceable software part (or, NFS OAS airplane keys) into the NFS operating system.

(d)   Installation check.

(2)   There can be multiple ways to transmit the CSR. Refer to your Engineering department for the preferred method.

• Manual - using an approved data loader or laptop.

• Automatic - using Boeing Electronic Distribution of Software (BEDS).

(3)   To do this task, the aircraft must be on the ground with its weight compressing the landing gear.

B. **References**

Reference	Title
46-13-01-470-801	Network File Server Software Installation (P/B 201)

C. **Tools/Equipment**

NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

Reference	Description
SPL-11321	Device - Universal Maintenance (UMD)
	Part #: G45004-31 Supplier: 81205
	Part #: G45004-37 Supplier: 81205
	Opt Part #: G45003-3 Supplier: 81205
	Opt Part #: G45004-3 Supplier: 81205

D. **Location Zones**

Zone	Area
211	Flight Compartment - Left

E. **Before the Procedure**

SUBTASK 46-13-00-480-004

(1)   Connect the universal maintenance device, SPL-11321 to the NFS. Do this task: (Onboard Network System Maintenance Laptop Connection, TASK 46-13-00-480-801).

(a)   Activate the ONS maintenance browser.

EFFECTIVITY
LOM 445-447 PRE SB 737-46-1050 AND POST SB
737-46-1014; LOM 450, 453, 454, 457, 461-463 PRE
SB 737-46-1050; LOM 455, 456 POST SB
737-46-1014 AND PRE SB 737-46-1050

D633A101-LOM

46-13-00

Page 204
Feb 15/2025

ECCN 9E991 BOEING PROPRIETARY - See title page for details

F. **Airplane Credentials Check**

SUBTASK 46-13-00-720-002

(1) On the ONS maintenance browser menu bar, make your selection: Line Maintenance > Security > Security Airplane Credentials.

    (a) A progress window can show temporarily.

    (b) Examine the result in the box below the words Airplane Credentials Status.

        1) If the conditions that follow exist, then the credential is serviceable.

            a) The result shows the words: A valid, CA-signed Airplane Certificate exists.

            b) The time/date stamp agrees with your airline or operator's requirements.

            c) Stop, and then go to the step below titled "Put the Aircraft Back to it's Usual Condition."

        2) If you find a problem, then continue.

G. **Credential Signing Request - Procedure**

SUBTASK 46-13-00-470-003

(1) To make a new certificate signing request (CSR), do the steps that follow.

    (a) Click once on the GENERATE CREDENTIALS button.

    (b) When the confirmation box shows, confirm the data shown and push CONTINUE.

    (c) Examine the result in the box below the words Key Generation Status.

        1) If the result shows a file was successfully created, then make a record of this file name.

        NOTE: You will need the file name to locate and upload the file in the next step.

SUBTASK 46-13-00-470-004

(2) Transfer the CSR file from the NFS to the maintenance laptop.

    (a) Using the maintenance browser, make your selection: LINE MAINTENANCE > CLIENT FILES.

    (b) Below the words CLIENT NAME, make your selection NFS.OAS, and then select CONTINUE.

    (c) Find the CSR file and click on it once, to highlight it.

    NOTE: The CSR file will show in this format: GMTdate-GMTtime-<Tail ID>-CSR.

    (d) Make your selection COPY, and then select CONTINUE.

    (e) Make your selection SAVE, and then navigate to save the file to a directory on the maintenance laptop.

SUBTASK 46-13-00-860-004

(3) Transmit the file to your engineering department, or network operator for processing.

SUBTASK 46-13-00-070-003

(4) If you found one or more obsolete CSR files on the server, you can erase them, if time permits.

NOTE: Do not erase the most recent CSR, the one you sent to engineering.

    (a) Click once on the target CSR file to highlight.

    (b) Click once on the ERASE button.

EFFECTIVITY
LOM 445-447 PRE SB 737-46-1050 AND POST SB
737-46-1014; LOM 450, 453, 454, 457, 461-463 PRE
SB 737-46-1050; LOM 455, 456 POST SB
737-46-1014 AND PRE SB 737-46-1050

46-13-00

Page 205
Feb 15/2024

D633A101-LOM

ECCN 9E991 BOEING PROPRIETARY - See title page for details

H.   **Airplane Keys Installation Procedure**

SUBTASK 46-13-00-470-005

(1)   Receive the new Loadable Software Airplane Part (LSAP), and transfer the part from the laptop to the MSD. Do this task: (Stage Software Parts on a Mass Storage Device via Ground Network or Software Management Tool, TASK 46-13-00-470-804).

NOTE: When BEDS is serviceable, you can disregard this step. The LSAP is sent to the MSD automatically by the network administrator.

NOTE: Typically, this LSAP is identified as: 46 NFS OAS AIRPLANE KEYS AMI.

SUBTASK 46-13-00-470-006

(2)   On the MSD, find this same LSAP, and install into the NFS operating system. Do this task: (Network File Server Software Installation, TASK 46-13-01-470-801).

I.   **Installation Test**

SUBTASK 46-13-00-720-003

(1)   On the ONS maintenance browser menu bar, make your selection: Line Maintenance > Security > Security Airplane Credentials.

(a)   Examine the result in the box below the words Airplane Credentials Status.

1)   Make sure the result shows the words: A valid, CA-signed Airplane Certificate exists.

2)   Make sure the time/date stamp agrees with the credential you just installed.

SUBTASK 46-13-00-720-004

(2)   Do a check of the NFS fault messages. This is the task: (Onboard Network System NFS Message Check, TASK 46-13-00-720-801).

(a)   If you find a problem, then a maintenance action is required.

J.   **Put the Aircraft Back to it's Usual Condition**

SUBTASK 46-13-00-080-004

(1)   If the universal maintenance device, SPL-11321 is no longer required, stop the ONS maintenance browser, and disconnect the laptop.

——— **END OF TASK** ———

TASK 46-13-00-750-802

5.   **Onboard Network System Server Credentials Check**

A.   **General**

(1)   This task gives the steps to do a check, and if necessary, to make new server credentials.

NOTE: The universal maintenance device, SPL-11321 part number, G45003-1 has replaced part number, G45002-29.

NOTE: When a new server credential is made, new client credentials are also made at the same time.

(2)   The Boeing Company recommends that you make a new server credential only when specified by a maintenance order.

(3)   To do this task, the aircraft must be on the ground with its weight compressing the landing gear.

┌─── EFFECTIVITY ───
LOM 445-447 PRE SB 737-46-1050 AND POST SB
737-46-1014; LOM 450, 453, 454, 457, 461-463 PRE
SB 737-46-1050; LOM 455, 456 POST SB
737-46-1014 AND PRE SB 737-46-1050

46-13-00

Page 206
Jun 15/2024

D633A101-LOM

ECCN 9E991 BOEING PROPRIETARY - See title page for details

B. **Tools/Equipment**

NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

Reference	Description
SPL-11321	Device - Universal Maintenance (UMD)
	Part #: G45004-31 Supplier: 81205
	Part #: G45004-37 Supplier: 81205
	Opt Part #: G45003-3 Supplier: 81205
	Opt Part #: G45004-3 Supplier: 81205

C. **Location Zones**

Zone	Area
211	Flight Compartment - Left

D. **Before the Procedure**

SUBTASK 46-13-00-480-011

(1) Connect the universal maintenance device, SPL-11321. Do this task: (Onboard Network System Maintenance Laptop Connection, TASK 46-13-00-480-801).

    (a) Activate the ONS maintenance browser.

E. **Server Credentials Check**

SUBTASK 46-13-00-720-011

(1) On the ONS maintenance browser menu bar, make your selection: Line Maintenance > Security > Security Server Credentials.

    (a) Wait for the result to show below the words: Select server(s) to generate new credentials.

    (b) Examine the result in the box as follows:

        1) The data shows a time-date stamp when the last credentials were made.

        2) If you find a problem, then continue.

        NOTE: Know and follow the policies and procedures set by your airline or operator. If the credentials do not show, or are expired based on your operator's policy, then continue with the next step.

SUBTASK 46-13-00-470-012

(2) To make a new server credential, do these steps:

NOTE: The Boeing Company recommends that you do this only when specified by a maintenance order.

    (a) Click once on the GENERATE CREDENTIALS button.

    (b) When the confirmation box shows, click once on CONTINUE.

    (c) A progress box will show. Wait for the result.

    (d) Examine the result in the box below the words: Server Credentials Results.

        1) A successful result will show these words:

            • Credentials last generated on: <date/time stamp of the credential>

            • Successfully generated onboard certificate authority

EFFECTIVITY
**LOM 445-447 PRE SB 737-46-1050 AND POST SB
737-46-1014; LOM 450, 453, 454, 457, 461-463 PRE
SB 737-46-1050; LOM 455, 456 POST SB
737-46-1014 AND PRE SB 737-46-1050**

46-13-00

Page 207
Feb 15/2025

D633A101-LOM

ECCN 9E991 BOEING PROPRIETARY - See title page for details

F. **Put the Aircraft Back to it's Usual Condition**

SUBTASK 46-13-00-080-008

(1) If the laptop is no longer required, stop the ONS maintenance browser, and disconnect the laptop.

——— **END OF TASK** ———

TASK 46-13-00-750-803

6. **Onboard Network System Client Credentials Check**

A. **General**

(1) This task gives the steps to do a check, and if it is necessary, to make and install a new client credential.

NOTE: The universal maintenance device, SPL-11321, part number, G45003-1 has replaced part number, G45002-29.

NOTE: Each Line Replaceable Unit (LRU) must have a serviceable client credential to communicate with the server.

(2) To do this task, the aircraft must be on the ground with its weight compressing the landing gear.

B. **Tools/Equipment**

NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

Reference	Description
SPL-11321	Device - Universal Maintenance (UMD)
	Part #: G45004-31 Supplier: 81205
	Part #: G45004-37 Supplier: 81205
	Opt Part #: G45003-3 Supplier: 81205
	Opt Part #: G45004-3 Supplier: 81205

C. **Location Zones**

Zone	Area
211	Flight Compartment - Left

D. **Prepare for the Client Credentials Check**

SUBTASK 46-13-00-480-012

(1) Do this task: Onboard Network System Maintenance Laptop Connection, TASK 46-13-00-480-801.

(a) Use the universal maintenance device, SPL-11321, to activate the Onboard Network System (ONS) maintenance browser.

E. **Client Credentials Check**

SUBTASK 46-13-00-860-014

(1) Make sure that power is supplied to any LRU(s) that requires a credential check for at least three minutes.

NOTE: If any of the client LRUs are not powered (e.g. EEC-1 and EEC-2), their status will remain "No credentials exist".

EFFECTIVITY
LOM 445-447 PRE SB 737-46-1050 AND POST SB 737-46-1014; LOM 450, 453, 454, 457, 461-463 PRE SB 737-46-1050; LOM 455, 456 POST SB 737-46-1014 AND PRE SB 737-46-1050

D633A101-LOM

46-13-00

Page 208
Feb 15/2025

ECCN 9E991 BOEING PROPRIETARY - See title page for details

SUBTASK 46-13-00-720-012

(2)   On the ONS maintenance browser menu bar, make your selection: LINE MAINTENANCE > SECURITY > SECURITY CLIENT CREDENTIALS.

    (a)   Wait for the result to show below the words: Select client(s) to generate new credentials.

    (b)   Examine the record to find each client, and the condition of its credential.

        NOTE: Typically, the credentials status will show the words "Last generated" with a date and time stamp. If the status shows the words: No credentials exist, then this condition is unserviceable.

        1)   If you find a problem, then continue.

SUBTASK 46-13-00-470-013

(3)   To make one or more new client credentials, do these steps:

    NOTE: Each client (or, LRU) must have its own unique credential.

    (a)   Click once on the client name to highlight it.

    (b)   Make your selection GENERATE CREDENTIALS.

    (c)   In the confirmation box, make your selection CONTINUE.

    (d)   Examine the result in the box below the words Credentials Generation Status.

        1)   A credential is serviceable when the status shows the words: Successfully retrieved and installed credentials

        2)   Use the scroll bar to see all of the clients and the status.

    (e)   Let the Network File Server (NFS) operate for at least two minutes before you do the next ONS maintenance task.

  F.   Put the Aircraft Back to Its Usual Condition

SUBTASK 46-13-00-080-009

(1)   If the universal maintenance device, SPL-11321, is not necessary, close the ONS maintenance browser and disconnect the maintenance device.

——— **END OF TASK** ———

  TASK 46-13-00-860-801

7.   Onboard Network System Airplane Identification Check

  A.   General

(1)   This task gives the steps to do a check, and if necessary, to update the airplane identification in network file server (NFS).

    NOTE: The universal maintenance device, SPL-11321 part number, G45003-1 has replaced part number, G45002-29.

    (a)   If ONS senses that Airplane Identification data is missing, a pop-up message shows when you get access to the ONS maintenance web site.

    (b)   Without Airplane Identification information, some ONS Maintenance functions are unserviceable.

(2)   The tail ID numbers entered in the onboard network system (ONS), and the tail ID number recorded on the flight compartment placard, must agree.

(3)   To do this task, the aircraft must be on the ground with its weight compressing the landing gear.

┌─ EFFECTIVITY ─
LOM 445-447 PRE SB 737-46-1050 AND POST SB
737-46-1014; LOM 450, 453, 454, 457, 461-463 PRE
SB 737-46-1050; LOM 455, 456 POST SB
737-46-1014 AND PRE SB 737-46-1050

46-13-00

Page 209
Feb 15/2024

D633A101-LOM

ECCN 9E991 BOEING PROPRIETARY - See title page for details

B.   **References**

Reference	Title
24-22-00-860-811	Supply Electrical Power (P/B 201)

C.   **Tools/Equipment**

NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

Reference	Description
SPL-11321	Device - Universal Maintenance (UMD)
	Part #: G45004-31 Supplier: 81205
	Part #: G45004-37 Supplier: 81205
	Opt Part #: G45003-3 Supplier: 81205
	Opt Part #: G45004-3 Supplier: 81205

D.   **Location Zones**

Zone	Area
211	Flight Compartment - Left

E.   **Before the Procedure**

SUBTASK 46-13-00-840-001

(1)   If the aircraft is not energized, then supply electrical power, (Supply Electrical Power, TASK 24-22-00-860-811).

SUBTASK 46-13-00-480-015

(2)   Do this task: (Onboard Network System Maintenance Laptop Connection, TASK 46-13-00-480-801).

    (a)   Using the universal maintenance device, SPL-11321, activate the ONS maintenance browser.

F.   **Airplane Identification Check**

SUBTASK 46-13-00-860-008

(1)   Find and examine the aircraft placard, and make a record of the aircraft registration number (tail number).

SUBTASK 46-13-00-860-009

(2)   Using the ONS maintenance browser, make your selection: Line Maintenance > Airplane Identification.

    (a)   Examine the data shown with the aircraft placard data.

        1)   If Model, Aircraft Number, and ATA-Airline ID all agree, then click once on the Home icon, in the upper left corner. No additional action is necessary.

        2)   If one or more data records does not agree, then continue.

G.   **Airplane Identification Changes**

SUBTASK 46-13-00-860-010

(1)   Enter the correct data: Model, Aircraft Number, and ATA-Airline ID, and then click once on SAVE.

    (a)   Select the correct Aircraft model from the drop-down menu.

    (b)   Enter the correct Aircraft Number data using the virtual keyboard function.

    (c)   Enter the correct ATA-Airline ID using the virtual keyboard function.

┌─── EFFECTIVITY ───
LOM 445-447 PRE SB 737-46-1050 AND POST SB 737-46-1014; LOM 450, 453, 454, 457, 461-463 PRE SB 737-46-1050; LOM 455, 456 POST SB 737-46-1014 AND PRE SB 737-46-1050

46-13-00

Page 210
D633A101-LOM
Feb 15/2025

(d)   When complete, click once on SAVE, to save to memory.

H.   Put the Aircraft Back to it's Usual Condition

SUBTASK 46-13-00-840-002

(1)   If the laptop is no longer required, stop the ONS maintenance browser, and disconnect the laptop.

——— **END OF TASK** ———

TASK 46-13-00-720-802

8.   Onboard Network System Input Monitoring Check

A.   General

(1)   This task gives the steps to do a check of the analog and digital inputs of the network file server (NFS), M2889.

NOTE: The universal maintenance device, SPL-11321 part number, G45003-1 has replaced part number, G45002-29.

(2)   This task gives you the condition of the communication channels that follow, for the targeted unit:

- Ethernet
- 429 receive
- 429 transmit
- 717 Receive
- Input discretes
- Output discretes.

(3)   To do this task the weight-on-wheels discrete must be in the GROUND condition.

B.   Tools/Equipment

NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

Reference	Description
SPL-11321	Device - Universal Maintenance (UMD)
	Part #: G45004-31 Supplier: 81205
	Part #: G45004-37 Supplier: 81205
	Opt Part #: G45003-3 Supplier: 81205
	Opt Part #: G45004-3 Supplier: 81205

C.   Location Zones

Zone	Area
211	Flight Compartment - Left

D.   Before the Check

SUBTASK 46-13-00-480-013

(1)   Do this task: Onboard Network System Maintenance Laptop Connection, TASK 46-13-00-480-801.

(a)   Using the universal maintenance device, SPL-11321, activate the ONS maintenance browser.

EFFECTIVITY
LOM 445-447 PRE SB 737-46-1050 AND POST SB 737-46-1014; LOM 450, 453, 454, 457, 461-463 PRE SB 737-46-1050; LOM 455, 456 POST SB 737-46-1014 AND PRE SB 737-46-1050

46-13-00

Page 211
Feb 15/2025

D633A101-LOM

ECCN 9E991 BOEING PROPRIETARY - See title page for details

E. **ONS Input Monitoring Check - Procedure**

SUBTASK 46-13-00-720-013

(1) Set the ONS browser to show the INPUT MONITORING page as follows:

    (a) From the menu bar, make the selection: EXTENDED MAINTENANCE > INPUT MONITORING.

    (b) Select NFS and then click once on CONTINUE.

        1) Make sure the result shows the correct target, and these buttons:

            • Ethernet

            • 429 Receive

            • 429 Transmit

            • 717 Receive

            • Input Discretes

            • Output Discretes.

SUBTASK 46-13-00-720-014

(2) Click once on the ETHERNET button.

    (a) Examine the result for each port shown.

        1) If the status shows UP, the connection is serviceable.

        2) If the status shows DOWN or UNAVAILABLE, the connection is unserviceable.

        3) Use the NEXT and PREVIOUS buttons to show more pages of data.

    (b) To return to the input monitor page, click once on RETURN.

SUBTASK 46-13-00-720-015

(3) Click once on the 429 RECEIVE button.

    (a) Examine the result for each port shown.

        1) If the status shows UP, the connection is serviceable.

        2) If the status shows DOWN or UNAVAILABLE, the connection is unserviceable.

        3) Use the NEXT and PREVIOUS buttons to show more pages of data.

    (b) To return to the input monitor page, click once on RETURN.

SUBTASK 46-13-00-720-016

(4) Click once on the 429 TRANSMIT button.

    (a) Examine the result for each port shown.

        1) If the status shows UP, the connection is serviceable.

        2) If the status shows DOWN or UNAVAILABLE, the connection is unserviceable.

        3) Use the NEXT and PREVIOUS buttons to show more pages of data.

    (b) To return to the input monitor page, click once on RETURN.

SUBTASK 46-13-00-720-017

(5) Click once on the INPUT DISCRETES button.

    (a) Examine the result for each port shown.

        1) If the status shows Ground, the connection is serviceable.

        2) If the status shows Open, Disabled, Failed, or Unavailable, then the connection is unserviceable.

EFFECTIVITY
LOM 445-447 PRE SB 737-46-1050 AND POST SB 737-46-1014; LOM 450, 453, 454, 457, 461-463 PRE SB 737-46-1050; LOM 455, 456 POST SB 737-46-1014 AND PRE SB 737-46-1050

46-13-00

Page 212
Feb 15/2024

D633A101-LOM

ECCN 9E991 BOEING PROPRIETARY - See title page for details

      3)   Use the NEXT and PREVIOUS buttons to show more pages of data.

    (b)   To return to the input monitor page, click once on RETURN.

SUBTASK 46-13-00-720-018

    (6)   Click once on the OUTPUT DISCRETES button.

        (a)   Examine the result for each port shown.

            1)   If the status shows Ground, the connection is serviceable.

            2)   If the status shows Open, Disabled, Failed, or Unavailable, then the connection is unserviceable.

            3)   Use the NEXT and PREVIOUS buttons to show more pages of data.

        (b)   To return to the input monitor page, click once on RETURN.

SUBTASK 46-13-00-720-022

    (7)   Click once on the 717 RECEIVE button.

        (a)   Examine the result for each bus shown.

            1)   If the status shows Active, the connection is serviceable.

            2)   If the status shows Failed, the connection is unserviceable.

            3)   Use the NEXT and PREVIOUS buttons to show more pages of data.

        (b)   To return to the input monitor page, click once on RETURN.

   F.   Put the Aircraft Back to it's Usual Condition

SUBTASK 46-13-00-080-010

    (1)   If the universal maintenance device, SPL-11321 is no longer required, stop the ONS maintenance browser, and disconnect the laptop.

———— **END OF TASK** ————

   TASK 46-13-00-720-803

9.   Onboard Network System Configuration Check

   A.   General

    (1)   This task gives you the serial number, hardware number, and software part number from the target server.

        NOTE: The universal maintenance device, SPL-11321 part number, G45003-1 has replaced part number, G45002-29.

    (2)   This procedure is applicable to the unit that follows:

        • Network file server (NFS), M2889.

    (3)   To do this task the weight-on-wheels discrete must be in the GROUND condition.

   B.   References

Reference	Title
46-13-01-470-802	Network File Server Initial Data Load (IDL) Software Installation (P/B 201)

   C.   Tools/Equipment

    NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

┌── EFFECTIVITY ──
LOM 445-447 PRE SB 737-46-1050 AND POST SB
737-46-1014; LOM 450, 453, 454, 457, 461-463 PRE
SB 737-46-1050; LOM 455, 456 POST SB
737-46-1014 AND PRE SB 737-46-1050

46-13-00

Page 213
D633A101-LOM   Feb 15/2024

ECCN 9E991 BOEING PROPRIETARY - See title page for details

Reference	Description
SPL-11321	Device - Universal Maintenance (UMD)
	Part #: G45004-31 Supplier: 81205
	Part #: G45004-37 Supplier: 81205
	Opt Part #: G45003-3 Supplier: 81205
	Opt Part #: G45004-3 Supplier: 81205

I

D.   **Location Zones**

Zone	Area
211	Flight Compartment - Left

E.   **ONS Configuration Check - Procedure**

SUBTASK 46-13-00-480-014

(1)   Do this task: Onboard Network System Maintenance Laptop Connection, TASK 46-13-00-480-801.

    (a)   Using the universal maintenance device, SPL-11321, activate the ONS maintenance browser.

SUBTASK 46-13-00-720-019

(2)   Using the ONS maintenance browser, make your selection: Line Maintenance > ONS System Configuration.

    (a)   Make sure the result shows the words System Configuration, and a table of data.

    (b)   If "MUST LOAD XXX" prompt is shown, initial data load must be accomplished. Do this task: Network File Server Initial Data Load (IDL) Software Installation, TASK 46-13-01-470-802.

SUBTASK 46-13-00-720-020

(3)   If necessary, make a record of the data for your target LRU.

    • LRU name

    • Software part number

    • Nomenclature.

    (a)   To download a complete record of the software parts shown, make your selection: DOWNLOAD REPORT, and follow the on-screen commands.

    (b)   To examine the hardware part number and serial number, click once on the target LRU, below the words LRU NAME, to highlight.

        1)   The hardware data shows below the words: Details of Selected Hardware.

    (c)   Make sure the data agrees with the requirement specified by your airline or operator.

F.   **Put the Aircraft Back To Its Usual Condition**

SUBTASK 46-13-00-080-011

(1)   If the universal maintenance device, SPL-11321 is no longer required, stop the ONS maintenance browser, and disconnect the laptop.

——— **END OF TASK** ———

EFFECTIVITY
**LOM 445-447 PRE SB 737-46-1050 AND POST SB
737-46-1014; LOM 450, 453, 454, 457, 461-463 PRE
SB 737-46-1050; LOM 455, 456 POST SB
737-46-1014 AND PRE SB 737-46-1050**

46-13-00

D633A101-LOM

Page 214
Feb 15/2025

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 46-13-00-470-801

10. <u>Onboard Network System LRU Software Installation</u>

    A. **General**

        (1)   This procedure gives the steps to operate the ONS maintenance browser to do a software installation, using the universal maintenance device, SPL-11321.

            <u>NOTE</u>: The universal maintenance device, SPL-11321 part number, G45003-1 has replaced part number, G45002-29.

        (2)   This procedure is applicable to the unit(s) that follow:

            • Network File Server (NFS) M2889

        (3)   The ONS maintenance browser is a web site hosted by the Network File Server (NFS).

        (4)   The LSAP to be installed is saved on the Mass Storage Device (MSD), which is a function of the NFS.

        (5)   Refer to the software installation task for your specific LRU for additional steps and checks.

        (6)   To do this task the aircraft must be on the ground, with its weight compressing the landing gear.

    B. **Tools/Equipment**

       <u>NOTE</u>: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

Reference	Description
SPL-11321	Device - Universal Maintenance (UMD)
	Part #: G45004-31 Supplier: 81205
	Part #: G45004-37 Supplier: 81205
	Opt Part #: G45003-3 Supplier: 81205
	Opt Part #: G45004-3 Supplier: 81205

    C. **Location Zones**

Zone	Area
211	Flight Compartment - Left

    D. **Before Software Installation**

       SUBTASK 46-13-00-480-005

        (1)   Do this task: (Onboard Network System Maintenance Laptop Connection, TASK 46-13-00-480-801).

           (a)   Using the universal maintenance device, SPL-11321, activate the ONS maintenance browser.

       SUBTASK 46-13-00-470-007

        (2)   Do this task: (Mass Storage Device Software Parts Check, TASK 46-13-00-720-804).

           (a)   Make sure that the correct software parts, those required for the target LRU, are available in the MSD.

    E. **ONS Maintenance Browser Operation - LRU Software Installation**

       SUBTASK 46-13-00-470-008

        (1)   Using the ONS maintenance browser, make your selection: Line Maintenance > Data Load.

       SUBTASK 46-13-00-470-009

        (2)   In the DATA LOAD window, find and select the target LRU.

┌─ EFFECTIVITY ─
LOM 445-447 PRE SB 737-46-1050 AND POST SB 737-46-1014; LOM 450, 453, 454, 457, 461-463 PRE SB 737-46-1050; LOM 455, 456 POST SB 737-46-1014 AND PRE SB 737-46-1050

46-13-00

Page 215
Feb 15/2025

D633A101-LOM

ECCN 9E991 BOEING PROPRIETARY - See title page for details

(a)   Select CONTINUE.

(b)   If another pop-up box shows (for example, to select left or right), make your selection and click once on CONTINUE.

(c)   Make sure a window shows with the words: Select part number(s) to load to the selected LRU(s).

SUBTASK 46-13-00-470-010

(3)   Select one or more parts to install.

(a)   Click once on each software part to highlight it.

(b)   Click once on the SELECT button.

NOTE: The SELECT button causes a second box to show with your selections.

(c)   Make sure the parts in the box shown below the words Selected Parts are correct.

NOTE: To remove a part from the group, click once on the part to highlight. Then click once on UNSELECT.

(d)   Click once on CONTINUE.

SUBTASK 46-13-00-470-011

(4)   If one or more confirmation window shows, do these steps:

(a)   Read and follow the instruction shown.

(b)   Make your selection: CONFIRM.

SUBTASK 46-13-00-720-005

(5)   Examine the DATA LOAD RESULT page.

(a)   Adjacent to each part number installed, make sure the LOAD STATUS shows the word SUCCESS.

F.   Installation Check

SUBTASK 46-13-00-720-006

(1)   Return to the software installation procedure for your applicable LRU.

NOTE: The software installation task, for the applicable LRU, will give you specific steps to do the software installation check.

G.   Put the Aircraft Back to it's Usual Condition

SUBTASK 46-13-00-080-005

(1)   If the laptop is no longer required, stop the ONS maintenance browser, and disconnect the laptop.

─────── END OF TASK ───────

TASK 46-13-00-070-801

11. **Mass Storage Device Software Removal**

A.   General

(1)   This task gives the steps to remove one or more software parts from the Onboard Network System (ONS) Mass Storage Device (MSD).

NOTE: The universal maintenance device, SPL-11321 part number, G45003-1 has replaced part number, G45002-29.

(a)   Removal prevents that file from future installation into the target Line Replaceable Unit (LRU).

┌─ EFFECTIVITY ─
LOM 445-447 PRE SB 737-46-1050 AND POST SB
737-46-1014; LOM 450, 453, 454, 457, 461-463 PRE
SB 737-46-1050; LOM 455, 456 POST SB
737-46-1014 AND PRE SB 737-46-1050

46-13-00

Page 216
Feb 15/2025

D633A101-LOM

ECCN 9E991 BOEING PROPRIETARY - See title page for details

(b)   After removal, an electronic software delivery system can attempt to replace the part with the same, or similar part. Coordinate your action with your network operator.

B.   Tools/Equipment

NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

Reference	Description
SPL-11321	Device - Universal Maintenance (UMD)
	Part #: G45004-31 Supplier: 81205
	Part #: G45004-37 Supplier: 81205
	Opt Part #: G45003-3 Supplier: 81205
	Opt Part #: G45004-3 Supplier: 81205

C.   Location Zones

Zone	Area
211	Flight Compartment - Left

D.   Before Software Removal

SUBTASK 46-13-00-480-001

(1)   Do this task: (Onboard Network System Maintenance Laptop Connection, TASK 46-13-00-480-801).

(a)   Using the universal maintenance device, SPL-11321, activate the ONS maintenance browser.

E.   MSD Software Part Removal - Procedure

SUBTASK 46-13-00-070-001

(1)   Make the selection: Line Maintenance > MSD > MSD - Manage.

(a)   Examine the data that shows below the words: Select LSAP(s) to erase.

(b)   Use the scroll bar to see the complete record.

SUBTASK 46-13-00-070-002

(2)   To make your selection and remove one or more parts. Do these steps:

(a)   Click once on the part to highlight your selection.

   1)   To deselect, click again on the part.

   2)   The page will let you select one, some, or all of the parts.

(b)   Click once on the ERASE button.

(c)   When the confirmation box shows, click once on CONTINUE.

(d)   Make sure that the progress box shows with the words: Successfully erased the selected LSAP(s).

(e)   In the confirmation box, click once on the OK button.

F.   Put the Aircraft Back to it's Usual Condition

SUBTASK 46-13-00-080-001

(1)   If the universal maintenance device, SPL-11321 is no longer required, stop the ONS maintenance browser, and disconnect the laptop.

——— **END OF TASK** ———

EFFECTIVITY
**LOM 445-447 PRE SB 737-46-1050 AND POST SB
737-46-1014; LOM 450, 453, 454, 457, 461-463 PRE
SB 737-46-1050; LOM 455, 456 POST SB
737-46-1014 AND PRE SB 737-46-1050**

D633A101-LOM

46-13-00

Page 217
Feb 15/2025

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 46-13-00-720-804

12. **Mass Storage Device Software Parts Check**

    A. **General**

      (1) This task gives the steps to do a check of software parts hosted by the Network File Server (NFS) Mass Storage Device (MSD).

          NOTE: The universal maintenance device, SPL-11321 part number, G45003-1 has replaced part number, G45002-29.

          NOTE: The MSD refers to the server environment available to the overall network. In contrast, this task is not applicable to check software that operates the network file server.

        (a) These parts contain the software to be installed into a connected Line Replaceable Unit (LRU).

        (b) Before you can install parts into a network-connected LRU, you must make sure the correct parts are on the server.

      (2) To do this task, you will operate the Onboard Network System (ONS) maintenance browser using a maintenance laptop.

      (3) This task gives access to a screen that can erase and add software parts from the MSD.

        • If you must remove software, refer to this task: (Mass Storage Device Software Removal, TASK 46-13-00-070-801).

        • If you must add software, refer to this task: (Stage Software Parts on a Mass Storage Device via Ground Network or Software Management Tool, TASK 46-13-00-470-804).

      (4) To do this task the weight-on-wheels discrete must be in the GROUND condition.

    B. **Tools/Equipment**

      NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

Reference	Description
SPL-11321	Device - Universal Maintenance (UMD)
	Part #: G45004-31 Supplier: 81205
	Part #: G45004-37 Supplier: 81205
	Opt Part #: G45003-3 Supplier: 81205
	Opt Part #: G45004-3 Supplier: 81205

    C. **Location Zones**

Zone	Area
211	Flight Compartment - Left

    D. **Prepare for the Check**

      SUBTASK 46-13-00-480-003

      (1) Do this task: (Onboard Network System Maintenance Laptop Connection, TASK 46-13-00-480-801).

        (a) Using the universal maintenance device, SPL-11321, activate the ONS maintenance browser.

    E. **Software Parts Check of Mass Storage Device - Procedure**

      SUBTASK 46-13-00-860-003

      (1) Make the selection: Line Maintenance > MSD > MSD - Manage.

EFFECTIVITY
**LOM 445-447 PRE SB 737-46-1050 AND POST SB
737-46-1014; LOM 450, 453, 454, 457, 461-463 PRE
SB 737-46-1050; LOM 455, 456 POST SB
737-46-1014 AND PRE SB 737-46-1050**

46-13-00

Page 218
Feb 15/2025

D633A101-LOM

ECCN 9E991 BOEING PROPRIETARY - See title page for details

(a)   Examine the table of data below the words: Select LSAP(s) to erase.

(b)   Use the scroll bar to see the complete record.

(c)   Make sure that the software parts that show agree with the requirement specified by your airline or operator.

F.   **Put the Aircraft Back to it's Usual Condition**

SUBTASK 46-13-00-080-003

(1)   If the laptop is no longer required, stop the ONS maintenance browser, and disconnect the laptop.

———— **END OF TASK** ————

TASK 46-13-00-470-803

13.   **Download Files using the Software Management Tool (SMT)**

A.   **Tools/Equipment**

NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

Reference	Description
SPL-11321	Device - Universal Maintenance (UMD)
	Part #: G45004-31 Supplier: 81205
	Part #: G45004-37 Supplier: 81205
	Opt Part #: G45003-3 Supplier: 81205
	Opt Part #: G45004-3 Supplier: 81205

B.   **General**

SUBTASK 46-13-00-800-001

(1)   This task instructs how to download a file that is stored in the NFS Mass Storage Device (MSD) to the Universal Maintenance Device (UMD).

(2)   Do this task when you get access to the Onboard Network System (ONS) maintenance browser with the UMD.

C.   **Prepare for the Procedure**

SUBTASK 46-13-00-480-021

(1)   Do this task: Onboard Network System Maintenance Laptop Connection, TASK 46-13-00-480-801.

(a)   Make sure that the universal maintenance device, SPL-11321, is connected to the airplane by a Wired connection.

SUBTASK 46-13-00-860-015

(2)   Start the Software Management Tool (SMT) on the universal maintenance device, SPL-11321.

(a)   Make sure that the desktop of the universal maintenance device, SPL-11321, is shown.

(b)   If the "LSAPL-SMT" icon shows on the desktop of the universal maintenance device, SPL-11321, double-click on the icon.

1)   Make sure that the Software Management Tool window shows.

(c)   If the "LSAPL-SMT" icon does not show, do these steps:

1)   Click of the Start button on the desktop menu bar.

NOTE: The Start button is usually located at the bottom left of the desktop window.

┌─ EFFECTIVITY ─
LOM 445-447 PRE SB 737-46-1050 AND POST SB 737-46-1014; LOM 450, 453, 454, 457, 461-463 PRE SB 737-46-1050; LOM 455, 456 POST SB 737-46-1014 AND PRE SB 737-46-1050

46-13-00

Page 219
Feb 15/2025

D633A101-LOM

ECCN 9E991 BOEING PROPRIETARY - See title page for details

    2)   Click on All Programs.

        NOTE: The subsequent menu shows.

    3)   Click on LSAPL-SMT.

        NOTE: The subsequent menu shows.

    4)   Click on LSAPL-SMT on the menu.

        a)   Make sure that the Software Management Tool window shows.

(d)   Select "Get Data from Airplane" button on the SMT screen.

(e)   If the "Unable to connect to the airplane..." message shows in the Status Messages section, do these steps:

    1)   Wait a minimum of two (2) minutes.

    2)   Select the "Get Data from Airplane" button.

    3)   If the error message still shows, then refer to the IFIM and do the applicable procedure(s).

(f)   Make sure the "Successfully connected to airplane..." message with the current date and time shows in the Status Messages section.

(g)   Make sure the Airplane Tail ID is correct.

        NOTE: The Airplane Tail ID is shown at the upper right corner of the screen as "Airplane: xxxxxx".

(h)   Select the "This SMT" button in the "Redirect Downlinks to" box.

D.   **Check the Files Downloaded to the Maintenance Laptop**

SUBTASK 46-13-00-860-016

(1)   Do these steps on the Software Management Tool (SMT) window:

(a)   Verify the files in the "List of Airplane Data for XXXXXX" frame are correct.

        NOTE: XXXXXX is the airplane Tail ID.

    1)   Make sure that the File Name, Airplane and Received information of the files are correct.

        NOTE: The Location will show the location where the file is stored on the UMD.

    2)   Make sure that the download is completed.

        NOTE: The Status will show SUCCESS when the download is completed.

E.   **Put the Airplane Back to Its Usual Condition**

SUBTASK 46-13-00-080-014

(1)   Close the Onboard Storage Management (OSM) window.

(2)   Close the Software Management Tool (SMT) window.

(3)   If necessary, disconnect the universal maintenance device, SPL-11321, from the airplane. Do the following steps:

(a)   Disconnect the Ethernet cable from the airplane.

(b)   Disconnect the Ethernet cable from the universal maintenance device, SPL-11321.

——— **END OF TASK** ———

EFFECTIVITY
LOM 445-447 PRE SB 737-46-1050 AND POST SB 737-46-1014; LOM 450, 453, 454, 457, 461-463 PRE SB 737-46-1050; LOM 455, 456 POST SB 737-46-1014 AND PRE SB 737-46-1050

46-13-00

Page 220
Feb 15/2025

D633A101-LOM

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 46-13-00-470-804

14. <u>Stage Software Parts on a Mass Storage Device via Ground Network or Software Management Tool</u>

   A. **General**

   (1) Make sure to have all software parts on the Universal Maintenance Device (UMD) before going to the airplane.

   (2) This task includes the steps to stage parts to the airplane's Mass Storage Device (MSD) from:

   (a) Ground Network:

   1) Loadable Software Airplane Part (LSAP) Librarian

   2) LSAP Librarian Proxy Server

   (b) Software Maintenance Tool (SMT)

   (c) Other

   (3) These are the steps to send part(s) to the airplane:

   (a) Get the part(s) from the Ground Network, SMT, or other location and store them on the UMD.

   (b) Send the part(s) from the UMD to the MSD on the airplane.

   (c) Send the data report back to the Ground Network.

   (4) A universal maintenance device, SPL-11321, is necessary for this task.

   B. **Tools/Equipment**

   NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

Reference	Description
SPL-11321	Device - Universal Maintenance (UMD)
	Part #: G45004-31 Supplier: 81205
	Part #: G45004-37 Supplier: 81205
	Opt Part #: G45003-3 Supplier: 81205
	Opt Part #: G45004-3 Supplier: 81205

   C. **Location Zones**

Zone	Area
211	Flight Compartment - Left
212	Flight Compartment - Right

   D. **Prepare for Loading**

   SUBTASK 46-13-00-470-021

   (1) Start the Software Maintenance Tool (SMT) application on the universal maintenance device, SPL-11321.

   (a) To start the SMT, do this task: Download Files using the Software Management Tool (SMT), TASK 46-13-00-470-803.

   SUBTASK 46-13-00-470-022

   (2) Make sure that the airplane time is correct.

   NOTE: Time mismatch between the airplane and the universal maintenance device, SPL-11321, can prevent the staging of the LSAP.

EFFECTIVITY
LOM 445-447 PRE SB 737-46-1050 AND POST SB 737-46-1014; LOM 450, 453, 454, 457, 461-463 PRE SB 737-46-1050; LOM 455, 456 POST SB 737-46-1014 AND PRE SB 737-46-1050

46-13-00

Page 221
Feb 15/2025

D633A101-LOM

ECCN 9E991 BOEING PROPRIETARY - See title page for details

E.   **Get Scheduled Parts onto the Maintenance Laptop**

SUBTASK 46-13-00-480-018

(1)   Make sure that the universal maintenance device, SPL-11321, is connected to the Ground Network through a ground-wired Ethernet connection.

SUBTASK 46-13-00-470-023

(2)   To get scheduled parts, do these steps:

(a)   Select the "Get Parts Scheduled" button on the SMT screen (Figure 201 (Sheet 1)).

(b)   Make sure that the status shows "SUCCESS" for all parts.

(c)   Select the Finish button.

NOTE: After you select the Finish button, the "View Parts on SMT" module will show.

NOTE: If you selected the Ground Network location, SMT disconnects from the Ground Network.

F.   **Get Unscheduled Parts onto the Maintenance Laptop**

SUBTASK 46-13-00-470-024

(1)   To get parts, do these steps:

(a)   If you want to search for parts from the Ground Network, make sure that the universal maintenance device, SPL-11321, is connected to the Ground Network through a ground-wired Ethernet connection.

(b)   Select the "Get Parts Unscheduled" button on the SMT screen (Figure 201 (Sheet 2) and Figure 201 (Sheet 3)).

NOTE: The Get Parts Unscheduled screen will show Page 1 of 4.

(c)   Select a location to search for part(s) in the lower half of the screen.

1)   Select SMT or Ground Network or Other.

NOTE: The SMT option lets you search for parts on SMT residing on the UMD.

The Ground Network option lets you search for parts in LSAP Librarian or LSAP Librarian Proxy Server associated with the current SMT Location.

The Other option lets you to search for parts from other media.

NOTE: You can enter the full or partial of a part name in the "Enter part name" field to filter your search.

(d)   Select the Next button.

NOTE: The subsequent screen will show Page 2 of 4.

1)   If you select Other, find the part(s) on the directory.

(e)   Make sure that the search results are shown.

(f)   Select the correct parts in the Part Results table.

1)   Select the box adjacent to the parts or click on the parts.

NOTE: You can select multiple parts.

(g)   Make sure that a check mark shows in the box adjacent to the selected part(s).

(h)   Select the Next button.

NOTE: The subsequent screen will show Page 3 of 4.

SUBTASK 46-13-00-470-025

(2)   Select the Tail # and Destination to create uplink tasks for the part(s), do these steps:

EFFECTIVITY
LOM 445-447 PRE SB 737-46-1050 AND POST SB 737-46-1014; LOM 450, 453, 454, 457, 461-463 PRE SB 737-46-1050; LOM 455, 456 POST SB 737-46-1014 AND PRE SB 737-46-1050

46-13-00

Page 222
Feb 15/2025

D633A101-LOM

ECCN 9E991 BOEING PROPRIETARY - See title page for details

(a)   Make sure that the selected parts shown in the "Select Parts to Transfer" table.

(b)   Select the airplane for the parts.

    1)   Click on the cell under the "Airplane" column for the part.

       NOTE: Tail # should automatically fill in.

      a)   If the Tail # does not automatically fill in, do these steps:

         <1>   If a drop-down box shows, select the correct Airplane #.

         <2>   If a drop-down box does not show, enter the correct Airplane #.

    2)   Select the Tail # for all parts.

(c)   Select a destination system for each part.

    NOTE: The destination system for the part should automatically fill in after the Airplane # is selected.

    1)   If the destination system for a part does not show, do these steps:

      a)   Click on the cell in the Destination System column for the part.

      b)   Select a destination system from the drop-down box.

      c)   Make sure that the destination system is correct.

(d)   Select the Next button.

    NOTE: The subsequent screen will show Page 4 of 4.

(e)   Make sure that the uplink tasks in the Status Messages window are correct.

(f)   Select the Finish button.

    NOTE: After you select the Finish button, the "View Parts on SMT" module will show.

    NOTE: If you selected the Ground Network location, SMT disconnects from the Ground Network.

G.   Send Parts to the Airplane

SUBTASK 46-13-00-480-019

(1)   Connect the universal maintenance device, SPL-11321, to the airplane. Do these steps:

(a)   If the universal maintenance device, SPL-11321, is ground-wired connected to the Ground Network, disconnect the universal maintenance device, SPL-11321, from the Ground Network.

(b)   To connect the UMD to the airplane, do this task: Onboard Network System Maintenance Laptop Connection, TASK 46-13-00-480-801.

    1)   Make sure that the UMD is connected to the airplane by a Wired connection.

      NOTE: The Connection feature on the Maintenance Control Display Function (MCDF) banner shows how the UMD is connected to the airplane.

SUBTASK 46-13-00-470-026

(2)   To send the parts to the airplane, do these steps:

(a)   Select the "Send Parts to Airplane" button on the SMT screen (Figure 201 (Sheet 4)).

(b)   If the "Unable to connect to the airplane..." message shows in the Status Messages section, do these steps:

    1)   Wait a minimum of two minutes.

    2)   Select the "Send Parts to Airplane" button.

EFFECTIVITY
LOM 445-447 PRE SB 737-46-1050 AND POST SB 737-46-1014; LOM 450, 453, 454, 457, 461-463 PRE SB 737-46-1050; LOM 455, 456 POST SB 737-46-1014 AND PRE SB 737-46-1050

46-13-00

D633A101-LOM

Page 223
Feb 15/2025

ECCN 9E991 BOEING PROPRIETARY - See title page for details

(c)   Make sure that the "Successfully connected to airplane..." message with the current date and time shows in the Status Messages section.

(d)   Make sure that the airplane Tail ID is correct.

NOTE: The airplane Tail ID is shown at the upper right corner of the screen as "Tail #: xxxxx".

(e)   Select the part(s) to send to the airplane from the "Select Part(s) for Transfer to the Airplane" section:

1)   Click on the box adjacent to a part or click on a row to select.

NOTE: You can select multiple parts.

To select all parts, click on the box adjacent to Select All.

(f)   Select the Next button.

NOTE: The subsequent screen will show Page 2 of 2.

NOTE: Parts will start uplinking. The Status column shows the progress of the uplink.

(g)   Make sure that all uplinks are success.

NOTE: The word "SUCCESS" will show in the Status for each successfully uplinked part.

NOTE: If software parts are not transferred after 60 minutes, the software parts will be deleted and the status will show a timed out error code.

(h)   For CSS, to verify parts were delivered, do these steps:

NOTE: For certain CSS fault conditions, the status will not show. Do these steps to make sure that software parts are transferred to the CSS MSD even if the SMT status does not show.

1)   Go to an attendant control panel (ACP).

2)   Select the CABIN MAINTENANCE button.

3)   Select the CABIN DATA LOAD button.

4)   Select the REGISTRY SET-UP button.

5)   Make sure that the CSS parts show.

NOTE: The amount of time it takes for the parts to show in the Registry Set-up screen depends on how many CSS parts are being transferred and how many non-CSS parts are being transferred to other systems. If only CSS parts are being transferred, it can take up to 20 minutes for a full set of CSS parts.

(i)   Select the Finish button.

NOTE: After you select the Finish button, the "View Parts on SMT" module will show.

SUBTASK 46-13-00-080-012

(3)   Disconnect the universal maintenance device, SPL-11321, from the airplane.

H.   Send Data to Ground Network

SUBTASK 46-13-00-480-020

(1)   Connect the universal maintenance device, SPL-11321, to the ground network through a ground-wired Ethernet connection.

EFFECTIVITY
LOM 445-447 PRE SB 737-46-1050 AND POST SB 737-46-1014; LOM 450, 453, 454, 457, 461-463 PRE SB 737-46-1050; LOM 455, 456 POST SB 737-46-1014 AND PRE SB 737-46-1050

46-13-00

D633A101-LOM

Page 224
Feb 15/2025

ECCN 9E991 BOEING PROPRIETARY - See title page for details

SUBTASK 46-13-00-470-027

    (2)   Select the "Send Data to Ground Network" button on the SMT window (Figure 201 (Sheet 5)).

        NOTE: When "Send Data to Ground Network" button is selected, SMT automatically connects to the LSAP Librarian or LSAP Librarian Proxy Server. When connected, SMT automatically returns successfully uplinked tasks, failed uplink tasks, downlinked files, and event logs.

        NOTE: The Status Messages section will show the status.

    (3)   Select the Finish button.

        NOTE: After you select the Finish button, the "View Parts on SMT" module will show.

I.   Put the Airplane Back to Its Usual Condition
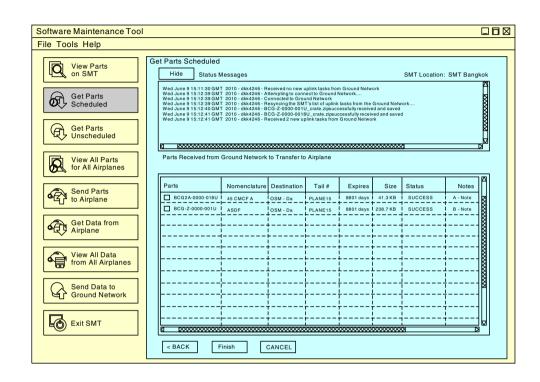
SUBTASK 46-13-00-080-013

    (1)   If necessary, close the Software Maintenance Tool.

        (a)   Select Exit SMT on the SMT screen.

———— **END OF TASK** ————

┌─ EFFECTIVITY ─
LOM 445-447 PRE SB 737-46-1050 AND POST SB
737-46-1014; LOM 450, 453, 454, 457, 461-463 PRE
SB 737-46-1050; LOM 455, 456 POST SB
737-46-1014 AND PRE SB 737-46-1050

D633A101-LOM

46-13-00

Page 225
Feb 15/2025

ECCN 9E991 BOEING PROPRIETARY - See title page for details

Software Maintenance Tool

File Tools Help

| View Parts on SMT |
| Get Parts Scheduled |
| Get Parts Unscheduled |
| View All Parts for All Airplanes |
| Send Parts to Airplane |
| Get Data from Airplane |
| View All Data from All Airplanes |
| Send Data to Ground Network |
| Exit SMT |

Get Parts Scheduled

Hide   Status Messages   SMT Location: SMT Bangkok

Wed June 9 15:11:30 GMT 2010 - dkk4246 - Received no new uplink tasks from Ground Network
Wed June 9 15:12:39 GMT 2010 - dkk4246 - Attempting to connect to Ground Network....
Wed June 9 15:12:39 GMT 2010 - dkk4246 - Connected to Ground Network
Wed June 9 15:12:39 GMT 2010 - dkk4246 - Resyncing the SMT's list of uplink tasks from the Ground Network....
Wed June 9 15:12:40 GMT 2010 - dkk4246 - BCG-Z-0000-001U_crate.zipsuccessfully received and saved
Wed June 9 15:12:41 GMT 2010 - dkk4246 - BCG-Z-0000-0018U_crate.zipsuccessfully received and saved
Wed June 9 15:12:41 GMT 2010 - dkk4246 - Received 2 new uplink tasks from Ground Network

Parts Received from Ground Network to Transfer to Airplane

Parts	Nomenclature	Destination	Tail #	Expires	Size	Status	Notes
☐ BCG2A-0000-018U	45 CMCF A	OSM - Da	PLANE15	8801 days	41.3 KB	SUCCESS	A - Note
☐ BCG-Z-0000-001U	ASDF	OSM - Da	PLANE15	8801 days	238.7 KB	SUCCESS	B - Note

< BACK   Finish   CANCEL

NOTE:

THE DATA SHOWN ON THE DISPLAYS
IS ONLY AN EXAMPLE.

3060102 S0000823436_V1

**Software Maintenance Tool
Figure 201/46-13-00-990-801 (Sheet 1 of 5)**

EFFECTIVITY
**LOM 445-447 PRE SB 737-46-1050 AND POST SB
737-46-1014; LOM 450, 453, 454, 457, 461-463 PRE
SB 737-46-1050; LOM 455, 456 POST SB
737-46-1014 AND PRE SB 737-46-1050**

46-13-00

D633A101-LOM

Page 226
Jun 15/2024

ECCN 9E991 BOEING PROPRIETARY - See title page for details

Software Maintenance Tool

File Tools Help

View Parts on SMT
Get Parts Scheduled
Get Parts Unscheduled
View All Parts for All Airplanes
Send Parts to Airplane
Get Data from Airplane
View All Data from All Airplanes
Send Data to Ground Network
Exit SMT

Get Parts Unscheduled   Page 1 of 4
Status Messages   SMT Location Seattle

Search

Select where to search for part:
○ SMT Inventory
○ Ground Network
○ Other Location

Optional
Enter LSAP name (some of all):

< BACK   NEXT >   CANCEL

Software Maintenance Tool

File Tools Help

View Parts on SMT
Get Parts Scheduled
Get Parts Unscheduled
View All Parts for All Airplanes
Send Parts to Airplane
Get Data from Airplane
View All Data from All Airplanes
Send Data to Ground Network
Exit SMT

Get Parts Unscheduled   Page 2 of 4
Status Messages   SMT Location: Seattle

Mon May 19 20:32:07 GMT 2008 - uq281a - Browsing inventory in Ground Network....
Mon May 19 20:32:08 GMT 2008 - uq281a - Found 87 LSAPs from Ground Network matching specified search criteria %
Mon May 19 20:32:59 GMT 2008 - uq281a - Attempting to connect to ground Network....
Mon May 19 20:32:59 GMT 2008 - uq281a - Connected to Ground Network...
Mon May 19 20:32:59 GMT 2008 - uq281a - Browsing inventory in Groung Network...
Mon May 19 20:32:59 GMT 2008 - uq281a - Found 87 LSAPs from Groung Network matching specified search criteria %

Part Results
☐ Select All

Parts	Nomenclature	Expires	Size
☐ BCG42-1234-3333	This is a rather short description	2034-07-14 00:38:43.0	
☐ BCG52-0000-00AU	This is a rather short description	2034-07-14 00:38:43.0	
☐ BCG-Z-0000-001U	BCG22-0000-001U	2034-07-14 00:38:43.0	
☐ BCG-Z-0000-00AU	This is a rather short description	2034-07-14 00:38:43.0	
☐ COL30-0022-001A	This is a rather short description	2034-07-14 00:38:43.0	
☐ COL444	ASDFA	2034-07-14 00:38:43.0	
☐ CSCTWORK37216	This is a rather short description	2034-07-14 00:38:43.0	
☐ CSH_LSAPL_12345	This is a rather short description	2034-07-14 00:38:43.0	
☐ DDD	This is a rather short description	2034-07-14 00:38:43.0	
☐ DDD-ZDDDDDDDDD	This is a rather short description	2034-07-14 00:38:43.0	
☐ DON-Z-123-456-0	This is a rather short description	2034-07-14 00:38:43.0	

< BACK   Next >   CANCEL

NOTE:

THE DATA SHOWN ON THE DISPLAYS
IS ONLY AN EXAMPLE.

3060103 S0000823437_V1

**Software Maintenance Tool
Figure 201/46-13-00-990-801 (Sheet 2 of 5)**

EFFECTIVITY
**LOM 445-447 PRE SB 737-46-1050 AND POST SB
737-46-1014; LOM 450, 453, 454, 457, 461-463 PRE
SB 737-46-1050; LOM 455, 456 POST SB
737-46-1014 AND PRE SB 737-46-1050**

46-13-00

Page 227
Jun 15/2024

D633A101-LOM

ECCN 9E991 BOEING PROPRIETARY - See title page for details

Software Maintenance Tool □ ⊡ ⊠

File Tools Help

| View Parts on SMT |
| Get Parts Scheduled |
| Get Parts Unscheduled |
| View All Parts for All Airplanes |
| Send Parts to Airplane |
| Get Data from Airplane |
| View All Data from All Airplanes |
| Send Data to Ground Network |
| Exit SMT |

Get Parts Unscheduled   Page 3 of 4

Status Messages   SMT location: Seattle

Mon May 19 20:32:50 GMT 2008 - uq281a - Part inventory item BCG-Z-0000-00AU is loaded on the Maintenance Laptop
Mon May 19 20:32:53 GMT 2008 - uq281a - Part inventory item ENG48-CD50-5003 is loaded on the Maintenance Laptop
Mon May 19 20:32:53 GMT 2008 - uq281a - Selected LSAPs have been transferred to your SMT
Mon May 19 20:32:53 GMT 2008 - uq281a - Enter a Destination System and a Tail #
Mon May 19 20:52:44 GMT 2008 - uq281a - Selected LSAPs have been transferred to your SMT
Mon May 19 20:52:44 GMT 2008 - uq281a - Enter a Destination System and a Tail #

Select Part(s) for Transfer to the Airplane

Parts	Nomenclature	Destination	Tail #	Expires	Size	Status
BCG-Z-0000-00AU	This is a rather short desc..	CIS:OSM	N415RC	2034-07-14	0	
ENG48-CD50-5003	This is a rather short desc..	CMCF - C	<Click to	2034-07-14	0	

[< BACK] [NEXT >] [CANCEL]

Software Maintenance Tool □ ⊡ ⊠

File Tools Help

| View Parts on SMT |
| Get Parts Scheduled |
| Get Parts Unscheduled |
| View All Parts for All Airplanes |
| Send Parts to Airplane |
| Get Data from Airplane |
| View All Data from All Airplanes |
| Send Data to Ground Network |
| Exit SMT |

Get Parts Unscheduled   Page 4 of 4

Status Messages   SMT Location: Seattle

Mon May 19 20:54:34 GMT 2008 - uq281a - Created uplink command for BCG-Z-0000-00AU_crate.zipto OSM - DATA Load Onboard
Mon May 19 20:54:34 GMT 2008 - uq281a - Created uplink command for ENG4B-CD50-5003_crate.zipto CMCF - Central Maintenance
Mon May 19 20:54:34 GMT 2008 - uq281a - LSAPs are ready to be transferred to the airplane
Mon May 19 20:54:34 GMT 2008 - uq281a - Step complete

[< BACK] [FINISH] [CANCEL]

NOTE:

THE DATA SHOWN ON THE DISPLAYS
IS ONLY AN EXAMPLE.

3060104 S0000823438_V1

Software Maintenance Tool
Figure 201/46-13-00-990-801 (Sheet 3 of 5)

EFFECTIVITY
**LOM 445-447 PRE SB 737-46-1050 AND POST SB
737-46-1014; LOM 450, 453, 454, 457, 461-463 PRE
SB 737-46-1050; LOM 455, 456 POST SB
737-46-1014 AND PRE SB 737-46-1050**

D633A101-LOM

46-13-00

Page 228
Jun 15/2024

ECCN 9E991 BOEING PROPRIETARY - See title page for details

Software Maintenance Tool ▫ ▫ ☒

File Tools Help

| | Send Parts to Airplane | Page 1 of 2 |

TAIL ID

Tail #: N415RC

View Parts on SMT

Get Parts Scheduled

Get Parts Unscheduled

View All Parts for All Airplanes

Send Parts to Airplane

Get Data from Airplane

View All Data from All Airplanes

Send Data to Ground Network

Exit SMT

Status Messages

Mon May 19 21:02:47 GMT 2008 - uq281a - Attempting to connect to the airplane...
Mon May 19 21:02:48 GMT 2008 - uq281a - Successfully connected to airplane N415RC...

Select Part(s) for Transfer to the Airplane

☐ Select All

	Parts	Nomenclature	Destination	Tail #	Expires	Size	Status
☐	BCG-Z-0000-00AU	This is a rather short desc..	CIS:OSM	N415RC	2034-07-14	0	
☐	ENG48-CD50-5003	This is a rather short desc..	CMC:CMC	N415RC	2034-07-14	0	
☐	XXX2A-1931-140M	This is a rather short desc..	ACM:AC	N415RC	2034-07-14	573794	SUCCESS
☐	XXX2C-4654-532C	21 EE COOLING OPS	CSS:CSSUP	N415RC	2034-07-14	1032651	
☐	XXX37-9621-5021	21 ICS CRU OPS	CMC:CMC	N415RC	2034-07-14	1030722	
☐	XXX38-9790-210T	21 EE COOLING OPS	ACM:AC	N415RC	2034-07-14	1032849	
☐	XXX38-9790-210T	21 EE COOLING OPS	C15:OSM	N415RC	2034-07-14	1032849	
☐	XXX8Z-A000-0100	XXX8Z-A000-0100	C55:C55UP	N415RC	2034-07-14	145411	

[< BACK] [NEXT >] [CANCEL]

Software Maintenance Tool ▫ ▫ ☒

File Tools Help

| | Send Parts to Airplane | Page 2 of 2 |

Tail #: N415RC

View Parts on SMT

Get Parts Scheduled

Get Parts Unscheduled

View All Parts for All Airplanes

Send Parts to Airplane

Get Data from Airplane

View All Data from All Airplanes

Send Data to Ground Network

Exit SMT

Status Messages

Mon May 19 20:32:07 GMT 2008 - uq281a - Error uplinking cmd 50A80168011A02F64FBFC43202EF45F4on airplane N415RC due to: E

Part(s) transferring to the Airplane

Parts	Nomenclature	Destination	Tail #	Expires	Size	Status
BCG-Z-0000-00AU	This is a rather short desc..	CIS:OSM	N415RC	2034-07-14	0	SUCCESS
ENG48-CD50-5003	This is a rather short desc..	CMC:CMC	N415RC	2034-07-14	0	ERROR: Target sys...
XXX2A-1931-140M	This is a rather short desc..	ACM:AC..	N415RC	2034-07-14	573794	SUCCESS
XXX2C-4654-532C	21 EE COOLING OPS	CSS:CSSUP	N415RC	2034-07-14	1032851	SUCCESS
XXX37-9621-502T	21 ICS CRU OPS	CMC:CMC	N415RC	2034-07-14	1030722	
XXX38-9621-210T	21 EE COOLING OPS	ACM:AC..	N415RC	2034-07-14	1032849	
XXX38-9621-210T	21 EE COOLING OPS	CIS:OSM	N415RC	2034-07-14	1032849	
XXX82-A000-0100	XXX82-A000-0100	CSS:CSSUP	N415RC	2034-07-14	145411	

[< BACK] [Next >] [CANCEL]

NOTE:

THE DATA SHOWN ON THE DISPLAYS
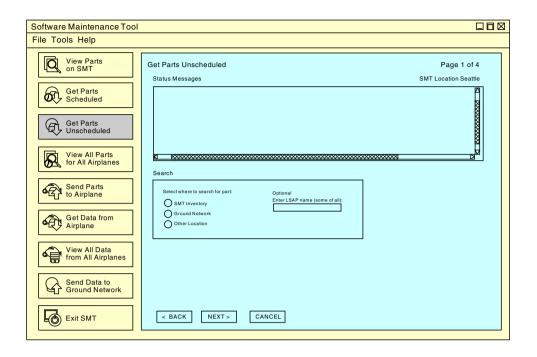IS ONLY AN EXAMPLE.
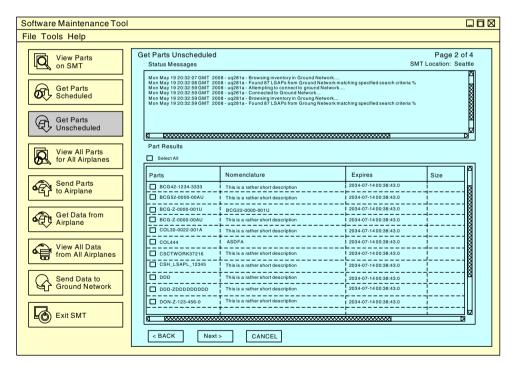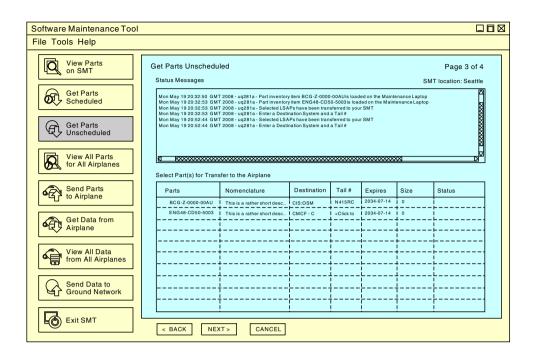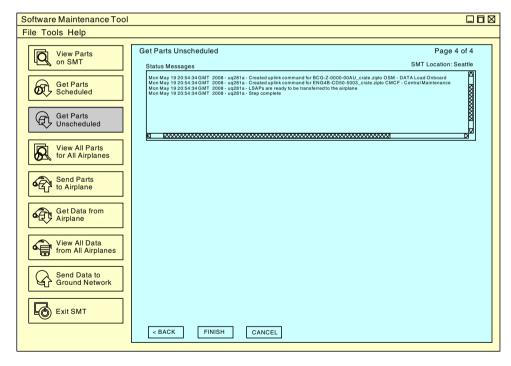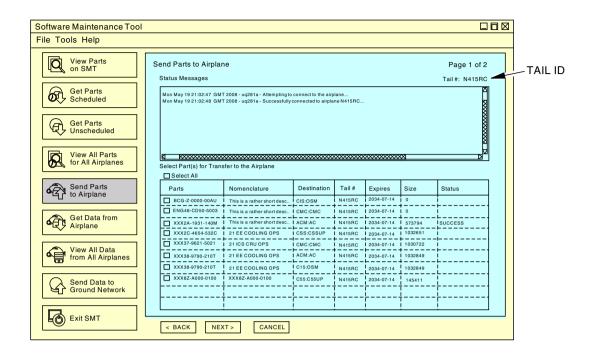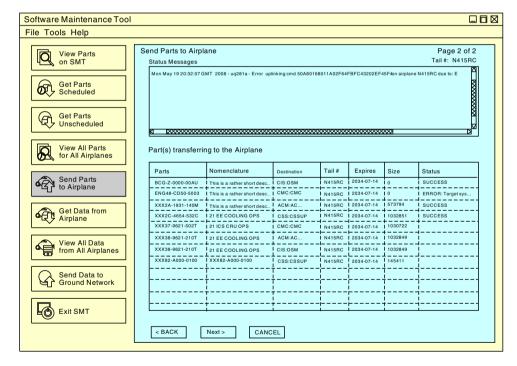
3060105 S0000823439_V1

Software Maintenance Tool
Figure 201/46-13-00-990-801 (Sheet 4 of 5)

┌─ EFFECTIVITY ─
**LOM 445-447 PRE SB 737-46-1050 AND POST SB
737-46-1014; LOM 450, 453, 454, 457, 461-463 PRE
SB 737-46-1050; LOM 455, 456 POST SB
737-46-1014 AND PRE SB 737-46-1050**

46-13-00

Page 229
Jun 15/2024

D633A101-LOM

Software Maintenance Tool

File Tools Help

| View Parts on SMT |
| Get Parts Scheduled |
| Get Parts Unscheduled |
| View All Parts for All Airplanes |
| Send Parts to Airplane |
| Get Data from Airplane |
| View All Data from All Airplanes |
| Send Data to Ground Network |
| Exit SMT |

Send Data to Ground

Status Messages   SMT Location: Seattle

Mon May 19 21:22:24 GMT 2008 - uq281a - Connected to Ground Network
Mon May 19 21:22:24 GMT 2008 - uq281a - Forwarding successful commands to the Ground Network...
Mon May 19 21:22:27 GMT 2008 - uq281a - Forwarding Failed commands to the Ground Network ...
Mon May 19 21:22:27 GMT 2008 - uq281a - Forwarding downlinked files to the Ground Network...
Mon May 19 21:22:29 GMT 2008 - uq281a - Forwarding event log files to the Ground Network...
Mon May 19 21:22:29 GMT 2008 - uq281a - Sent successfully-uplinked commands, downlinked files, and event log to the Ground Network

< BACK   FINISH   CANCEL

NOTE:

THE DATA SHOWN ON THE DISPLAYS
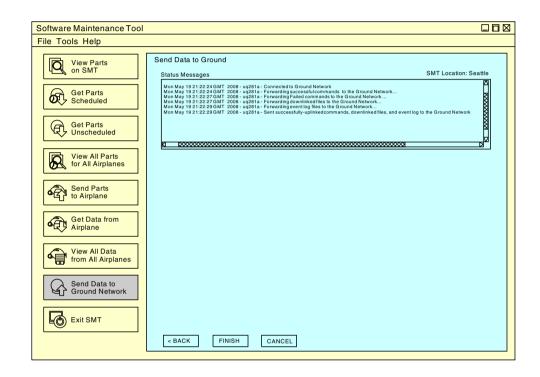IS ONLY AN EXAMPLE.

3060106 S0000823440_V1

Software Maintenance Tool
Figure 201/46-13-00-990-801 (Sheet 5 of 5)

EFFECTIVITY
**LOM 445-447 PRE SB 737-46-1050 AND POST SB
737-46-1014; LOM 450, 453, 454, 457, 461-463 PRE
SB 737-46-1050; LOM 455, 456 POST SB
737-46-1014 AND PRE SB 737-46-1050**

46-13-00

Page 230
Jun 15/2024

D633A101-LOM

ECCN 9E991 BOEING PROPRIETARY - See title page for details

<u>NETWORK FILE SERVER - MAINTENANCE PRACTICES</u>

1. <u>General</u>

A. This procedure gives you tasks to do maintenance to the Network File Server (NFS), M2889.

   (1) Network File Server Deactivation.

   (2) Network File Server Activation.

   (3) A software installation task, to install software that operates the NFS.

   (4) A Initial Data Load (IDL) software installation task to install minimum operating system and configuration software parts.

   (5) A task that deletes software parts from the NFS.

   (6) A task that reformats (or, erases) the NFS operational drive, and installs the minimum operating system software parts into the NFS operating system.

   (7) A fault log check, to examine faults recorded by the NFS.

   (8) A log file check, to view log files, copy (or download) files, or delete files from the NFS.

   (9) A software configuration check, to examine the operational software parts installed in the NFS.

   (10) Network File Server OS Downgrade OS9.1 to OS7.1.

   (11) Network File Server OS Downgrade OS9.1 to OS7.0.

   (12) Network File Server OS Downgrade OS7.1 to OS7.0.

B. For tasks that require a serviceable NFS to operate or maintain the onboard network system, and mass storage device, refer to (ONBOARD NETWORK SYSTEM - MAINTENANCE PRACTICES, PAGEBLOCK 46-13-00/201).

   TASK 46-13-01-040-801

2. <u>Network File Server - Deactivation</u>

   (Figure 201)

A. **General**

   (1) This procedure removes electrical power from the Network File Server.

B. **Location Zones**

Zone	Area
211	Flight Compartment - Left
212	Flight Compartment - Right

C. **Access Panels**

Number	Name/Location
117A	Electronic Equipment Access Door

D. **Procedure**

   SUBTASK 46-13-01-860-015

   (1) Open this circuit breaker and install safety tag:

   F/O Electrical System Panel, P6-12

Row	Col	Number	Name

   LOM 445-447, 455, 456 POST SB 737-46-1014 AND PRE SB 737-46-1050; LOM 450, 453, 454, 457, 461-463 PRE SB 737-46-1050

Row	Col	Number	Name
C	1	C01958	NETWORK FILE SERVER

EFFECTIVITY
LOM 445-447 PRE SB 737-46-1050 AND POST SB 737-46-1014; LOM 450, 453, 454, 457, 461-463 PRE SB 737-46-1050; LOM 455, 456 POST SB 737-46-1014 AND PRE SB 737-46-1050

46-13-01

Page 201
Feb 15/2024

D633A101-LOM

ECCN 9E991 BOEING PROPRIETARY - See title page for details

LOM 445-447 PRE SB 737-46-1050 AND POST SB 737-46-1014; LOM 450, 453, 454, 457, 461-463 PRE SB 737-46-1050; LOM 455, 456 POST SB 737-46-1014 AND PRE SB 737-46-1050

E. **Network File Server - Tryout**

NOTE: This tryout is to make sure the Network File Server is in a zero energy state.

SUBTASK 46-13-01-010-003

(1) Open this access panel:

Number	Name/Location
117A	Electronic Equipment Access Door

SUBTASK 46-13-01-860-016

(2) Make sure that this circuit breaker is open and has safety tag:

F/O Electrical System Panel, P6-12

Row	Col	Number	Name

LOM 445-447, 455, 456 POST SB 737-46-1014 AND PRE SB 737-46-1050; LOM 450, 453, 454, 457, 461-463 PRE SB 737-46-1050

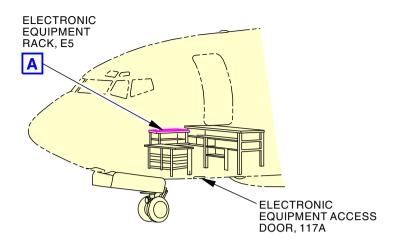| Row	Col	Number	Name
C	1	C01958	NETWORK FILE SERVER

LOM 445-447 PRE SB 737-46-1050 AND POST SB 737-46-1014; LOM 450, 453, 454, 457, 461-463 PRE SB 737-46-1050; LOM 455, 456 POST SB 737-46-1014 AND PRE SB 737-46-1050

SUBTASK 46-13-01-700-001

(3) Make sure the LED lights on the front panel of the Network File Server are not illuminated.

————— **END OF TASK** —————

EFFECTIVITY
LOM 445-447 PRE SB 737-46-1050 AND POST SB 737-46-1014; LOM 450, 453, 454, 457, 461-463 PRE SB 737-46-1050; LOM 455, 456 POST SB 737-46-1014 AND PRE SB 737-46-1050
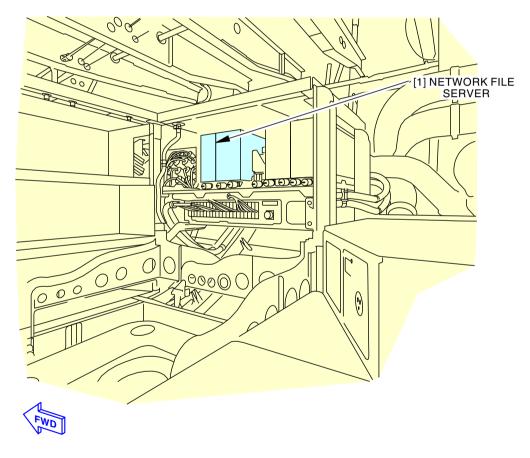
46-13-01

Page 202
Feb 15/2024

D633A101-LOM

ELECTRONIC
EQUIPMENT
RACK, E5

A

ELECTRONIC
EQUIPMENT ACCESS
DOOR, 117A

[1] NETWORK FILE
SERVER

FWD

2304347 S0000517972_V2

Network File Server
Figure 201/46-13-01-990-802

EFFECTIVITY
LOM 445-447 PRE SB 737-46-1050 AND POST SB
737-46-1014; LOM 450, 453, 454, 457, 461-463 PRE
SB 737-46-1050; LOM 455, 456 POST SB
737-46-1014 AND PRE SB 737-46-1050

46-13-01

Page 203
Feb 15/2024

D633A101-LOM

TASK 46-13-01-440-801

3.   Network File Server - Activation

(Figure 201)

A.   **General**

(1)   This procedure adds electrical power to the Network File Server.

B.   **Location Zones**

Zone	Area
211	Flight Compartment - Left
212	Flight Compartment - Right

C.   **Access Panels**

Number	Name/Location
117A	Electronic Equipment Access Door

D.   **Procedure**

SUBTASK 46-13-01-860-017

(1)   Remove the safety tag and close this circuit breaker:

F/O Electrical System Panel, P6-12

Row	Col	Number	Name

LOM 445-447, 455, 456 POST SB 737-46-1014 AND PRE SB 737-46-1050; LOM 450, 453, 454, 457, 461-463 PRE SB 737-46-1050

Row	Col	Number	Name
C	1	C01958	NETWORK FILE SERVER

LOM 445-447 PRE SB 737-46-1050 AND POST SB 737-46-1014; LOM 450, 453, 454, 457, 461-463 PRE SB 737-46-1050; LOM 455, 456 POST SB 737-46-1014 AND PRE SB 737-46-1050

SUBTASK 46-13-01-440-001

(2)   Close this access panel:

Number	Name/Location
117A	Electronic Equipment Access Door

——————— END OF TASK ———————

TASK 46-13-01-470-801

4.   Network File Server Software Installation

A.   **General**

(1)   This task gives the steps to install operational software into the Network File Server (NFS), M2889, from the mass storage device (MSD).

NOTE: The universal maintenance device, SPL-11321 part number, G45003-1 has replaced part number, G45002-29.

(a)   This task is applicable to software hosted by the NFS operating system:

- NFS SERVER OS
- NFS OPC
- NFS NETMANAGER APP
- NFS BOOT OS
- NSP OPS
- NSP OPC

EFFECTIVITY
**LOM 445-447 PRE SB 737-46-1050 AND POST SB
737-46-1014; LOM 450, 453, 454, 457, 461-463 PRE
SB 737-46-1050; LOM 455, 456 POST SB
737-46-1014 AND PRE SB 737-46-1050**

D633A101-LOM

46-13-01

Page 204
Feb 15/2024

ECCN 9E991 BOEING PROPRIETARY - See title page for details

(2)   To do this task, the weight-on-wheels discrete must be in the GROUND condition.

B.   **References**

Reference	Title
46-13-00-470-801	Onboard Network System LRU Software Installation (P/B 201)
46-13-00-480-801	Onboard Network System Maintenance Laptop Connection (P/B 201)
46-13-00-720-801	Onboard Network System NFS Message Check (P/B 201)
46-13-00-720-804	Mass Storage Device Software Parts Check (P/B 201)
46-13-00-750-803	Onboard Network System Client Credentials Check (P/B 201)

C.   **Tools/Equipment**

NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

Reference	Description
SPL-11321	Device - Universal Maintenance (UMD)

       Part #: G45004-31   Supplier: 81205
       Part #: G45004-37   Supplier: 81205
       Opt Part #: G45003-3   Supplier: 81205
       Opt Part #: G45004-3   Supplier: 81205

D.   **Location Zones**

Zone	Area
211	Flight Compartment - Left

E.   **Before the NFS Software Installation**

SUBTASK 46-13-01-860-009

(1)   Make sure that this circuit breaker is closed:

F/O Electrical System Panel, P6-12

Row	Col	Number	Name

LOM 445-447, 455, 456 POST SB 737-46-1014 AND PRE SB 737-46-1050; LOM 450, 453, 454, 457, 461-463 PRE SB 737-46-1050

Row	Col	Number	Name
C	1	C01958	NETWORK FILE SERVER

LOM 445-447 PRE SB 737-46-1050 AND POST SB 737-46-1014; LOM 450, 453, 454, 457, 461-463 PRE SB 737-46-1050; LOM 455, 456 POST SB 737-46-1014 AND PRE SB 737-46-1050

SUBTASK 46-13-01-480-006

(2)   Do this task: (Onboard Network System Maintenance Laptop Connection, TASK 46-13-00-480-801).

   (a)   Using the universal maintenance device, SPL-11321, activate the ONS maintenance browser.

SUBTASK 46-13-01-860-010

(3)   Make sure that the new software part, or parts, are available on the MSD. Do this task: (Mass Storage Device Software Parts Check, TASK 46-13-00-720-804).

F.   **NFS Software Installation - Procedure**

SUBTASK 46-13-01-470-005

(1)   Using the ONS maintenance browser, make your selection: Line Maintenance > ONS Configuration.

      EFFECTIVITY
**LOM 445-447 PRE SB 737-46-1050 AND POST SB
737-46-1014; LOM 450, 453, 454, 457, 461-463 PRE
SB 737-46-1050; LOM 455, 456 POST SB
737-46-1014 AND PRE SB 737-46-1050**

46-13-01

Page 205
Feb 15/2025

D633A101-LOM

ECCN 9E991 BOEING PROPRIETARY - See title page for details

(a) Make sure the result shows the words ONS Configuration, and a table of data.

SUBTASK 46-13-01-470-006

(2) Make a record of the NFS hardware and software configuration. You can download, or get the data one line at a time.

    (a) To download the record as a software file, make your selection DOWNLOAD REPORT.

        1) Follow the on-screen instructions.

    (b) To examine the data manually, do these steps that follow.

        1) In the column for LRU NAME, use the cursor to click once on NFS.

            a) Examine the data below the words: Details of Selected Hardware.

        2) Make a record of the data for the NFS:

           • Serial number

           • Hardware part number

           • Software part number.

    (c) Compare the data with the requirement specified by your airline or operator.

SUBTASK 46-13-01-470-007

(3) Install the new software part, or parts. This is the task: (Onboard Network System LRU Software Installation, TASK 46-13-00-470-801).

    NOTE: During software installation to the NFS, the installation program will install the parts, shut down, and reboot the NFS.

G. Software Installation Check

SUBTASK 46-13-01-720-009

(1) Using the ONS browser, make your selection: Line Maintenance > ONS Configuration.

    (a) Make sure the result shows the words ONS Configuration, and a table of data.

    (b) In the column for LRU NAME, use the cursor to click once on NFS.

        1) Examine the data below the words: Details of Selected Hardware.

    (c) Update your record of NFS data:

        • Serial number

        • Hardware number

        • Software part number.

    (d) Make sure the result agrees with the requirement specified by your airline or operator.

SUBTASK 46-13-01-720-010

(2) Do a check of the client credentials. Do this task: (Onboard Network System Client Credentials Check, TASK 46-13-00-750-803).

    (a) If you find a problem, then you must generate new client credentials.

SUBTASK 46-13-01-720-011

(3) Do a check of the NFS messages. This is the task: (Onboard Network System NFS Message Check, TASK 46-13-00-720-801).

    (a) If you find a problem, then maintenance action is required.

    (b) The software installation is serviceable when no LRU, and no messages, show on the NFS messages page.

EFFECTIVITY
**LOM 445-447 PRE SB 737-46-1050 AND POST SB
737-46-1014; LOM 450, 453, 454, 457, 461-463 PRE
SB 737-46-1050; LOM 455, 456 POST SB
737-46-1014 AND PRE SB 737-46-1050**

D633A101-LOM

46-13-01

Page 206
Feb 15/2024

ECCN 9E991 BOEING PROPRIETARY - See title page for details

H. Put the Airplane Back to Its Usual Condition

SUBTASK 46-13-01-080-007

(1) If the laptop is no longer required, stop the ONS maintenance browser and disconnect the laptop.

————— **END OF TASK** —————

TASK 46-13-01-470-802

5. **Network File Server Initial Data Load (IDL) Software Installation**

A. **General**

(1) This task gives instructions to do the Initial Data Load (IDL) software installation for the Network File Server (NFS). The IDL installs the minimum operating system and configuration software parts.

(2) Do this task:

(a) On a new or replacement task where only a 46 NFS BOOT OS is installed.

(b) Immediately after the NFS has been reimaged.

(c) When instructed by your engineering department.

(3) Use IDL function to import the specified parts, one at a time, and then install the part as a group.

(4) These main software parts will be installed to get the system operational:

• 46 NFS SERVER OS

• 46 NFS OPC

• 46 NFS NETMANAGER APP

NOTE: These main software parts must be uploaded in the order listed on the IDL page to activate the DATA LOAD button at the bottom right of the IDL page.

(5) To do this task, the aircraft must be on the ground with its weight on compressing the landing gear.

(6) Do this task when you get access to the NFS INITIAL LOAD page with the Maintenance Laptop or other type of approved Portable Maintenance Device (PMD).

B. **References**

Reference	Title
46-13-00-470-804	Stage Software Parts on a Mass Storage Device via Ground Network or Software Management Tool (P/B 201)
46-13-00-480-801	Onboard Network System Maintenance Laptop Connection (P/B 201)
46-13-00-720-803	Onboard Network System Configuration Check (P/B 201)
46-13-00-720-804	Mass Storage Device Software Parts Check (P/B 201)
46-13-00-750-803	Onboard Network System Client Credentials Check (P/B 201)

C. **Tools/Equipment**

NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

EFFECTIVITY
LOM 445-447 PRE SB 737-46-1050 AND POST SB 737-46-1014; LOM 450, 453, 454, 457, 461-463 PRE SB 737-46-1050; LOM 455, 456 POST SB 737-46-1014 AND PRE SB 737-46-1050

46-13-01

D633A101-LOM

Page 207
Jun 15/2024

ECCN 9E991 BOEING PROPRIETARY - See title page for details

Reference	Description
SPL-11321	Device - Universal Maintenance (UMD)

      Part #: G45004-31   Supplier: 81205
      Part #: G45004-37   Supplier: 81205
      Opt Part #: G45003-3   Supplier: 81205
      Opt Part #: G45004-3   Supplier: 81205

D. **Location Zones**

Zone	Area
211	Flight Compartment - Left

E. **Prepare for NFS Initial Data Load**

SUBTASK 46-13-01-480-007

(1) Do this task: Onboard Network System Maintenance Laptop Connection, TASK 46-13-00-480-801.

    (a) Using the universal maintenance device, SPL-11321, activate the ONS maintenance browser.

SUBTASK 46-13-01-470-017

(2) Do these steps to transfer the correct software parts to the universal maintenance device, SPL-11321, and into the IDL directory:

    NOTE: The following parts are required to perform the IDL:

        • 46 NFS SERVER OS
        • 46 NFS OPC
        • 46 NFS NETMANAGER APP

    (a) Use the laptop to mount the source media.

        NOTE: Typically, the software parts can be on compact disk (CD) or USB memory stick. Or, the parts can already be present in a predefined laptop directory.

    (b) With the Windows Explorer application, examine the directory where software parts are stored.

        1) You can erase unserviceable (or, expired) parts that you find.

    (c) With the Windows Explorer application, transfer the software parts from the media to the storage directory of the software parts.

F. **NFS Initial Data Load**

SUBTASK 46-13-01-470-018

(1) Do the initial data load as follows:

    (a) Make sure that the NFS is powered up.

    (b) Start the ONS Browser session on the universal maintenance device, SPL-11321, after 80 seconds or longer after power is applied to the NFS.

    (c) Double click on the ONS maintenance browser desktop icon.

    (d) Make sure that the Initial Data Load screen appears and verify which Boot OS version is shown in the configuration section.

        NOTE: Reimage/IDL Alert Dialogue window will display:

           • NFS Operational Software has not been installed.
           • Install Operational Software and restore MSD.

EFFECTIVITY
LOM 445-447 PRE SB 737-46-1050 AND POST SB 737-46-1014; LOM 450, 453, 454, 457, 461-463 PRE SB 737-46-1050; LOM 455, 456 POST SB 737-46-1014 AND PRE SB 737-46-1050

46-13-01

Page 208
Feb 15/2025

D633A101-LOM

ECCN 9E991 BOEING PROPRIETARY - See title page for details

(e) On the IDL page, click on the INITIAL DATA LOAD and proceed to select IMPORT PARTS.

  1) Make sure that the IDL screen shows a text box with a list of the NFS files to import for data loading:

- 46 NFS SERVER OS
- 46 NFS OPC
- 46 NFS NETMANAGER APP

(f) The IDL page will display a window to select the software parts to import, click the BROWSE button.

(g) Locate the software part location and select the applicable parts to import.

(h) Click on the OPEN button and then select IMPORT.

(i) Continue to upload all required parts.

  1) Make sure that the test box list of the missing software on the IDL screen will update for every software loaded.

(j) After the completion of the software installation of the three parts, do these steps:

  1) On the browser's main menu bar, select INITIAL DATA LOAD>EXECUTE DATA LOAD.

  2) Make sure that the applicable target and software parts are specified.

(k) The ONS system will do the installation and reboot automatically.

(l) Make sure that the ONS Maintenance browser shows the installation is complete.

G. Software Check

SUBTASK 46-13-01-720-018

(1) Do this task: Onboard Network System Configuration Check, TASK 46-13-00-720-803.

(a) Make sure that all required software parts are installed.

(b) If you must install parts in the NFS operational drive, do this task: Network File Server Software Installation, TASK 46-13-01-470-801.

SUBTASK 46-13-01-720-019

(2) Do this task: Mass Storage Device Software Parts Check, TASK 46-13-00-720-804.

(a) Make sure that all required software parts are installed.

(b) If you must install parts to the MSD, do this task: Stage Software Parts on a Mass Storage Device via Ground Network or Software Management Tool, TASK 46-13-00-470-804.

H. Credentials Check

SUBTASK 46-13-01-470-019

(1) Do this task: Onboard Network System Client Credentials Check, TASK 46-13-00-750-803.

I. Put the Airplane Back to Its Usual Condition

SUBTASK 46-13-01-080-009

(1) If the laptop is no longer required, stop the ONS maintenance browser and disconnect the laptop.

——— END OF TASK ———

EFFECTIVITY
LOM 445-447 PRE SB 737-46-1050 AND POST SB 737-46-1014; LOM 450, 453, 454, 457, 461-463 PRE SB 737-46-1050; LOM 455, 456 POST SB 737-46-1014 AND PRE SB 737-46-1050

D633A101-LOM

46-13-01

Page 209
Jun 15/2024

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 46-13-01-070-801

6. <u>Network File Server Software Removal</u>

   A. **General**

   (1) This task gives the steps to remove operational software parts from the Network File Server (NFS), M2889.

   <u>NOTE</u>: The universal maintenance device, SPL-11321 part number, G45003-1 has replaced part number, G45002-29.

   (a) This task is applicable to software hosted by the NFS operating system.

   (2) To do this task, you will operate the Onboard Network System (ONS) maintenance browser using a maintenance laptop.

   (3) To do this task, the aircraft must be on the ground with its weight compressing the landing gear.

   B. **References**

Reference	Title
46-13-00-480-801	Onboard Network System Maintenance Laptop Connection (P/B 201)

   C. **Tools/Equipment**

   <u>NOTE</u>: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

Reference	Description
SPL-11321	Device - Universal Maintenance (UMD)
	Part #: G45004-31 Supplier: 81205
	Part #: G45004-37 Supplier: 81205
	Opt Part #: G45003-3 Supplier: 81205
	Opt Part #: G45004-3 Supplier: 81205

   D. **Location Zones**

Zone	Area
211	Flight Compartment - Left

   E. **Prepare for Software Removal**

   SUBTASK 46-13-01-860-007

   (1) Make sure that this circuit breaker is closed:

   F/O Electrical System Panel, P6-12

Row	Col	Number	Name

   LOM 445-447, 455, 456 POST SB 737-46-1014 AND PRE SB 737-46-1050; LOM 450, 453, 454, 457, 461-463 PRE SB 737-46-1050

Row	Col	Number	Name
C	1	C01958	NETWORK FILE SERVER

   LOM 445-447 PRE SB 737-46-1050 AND POST SB 737-46-1014; LOM 450, 453, 454, 457, 461-463 PRE SB 737-46-1050; LOM 455, 456 POST SB 737-46-1014 AND PRE SB 737-46-1050

   SUBTASK 46-13-01-480-005

   (2) Do this task: (Onboard Network System Maintenance Laptop Connection, TASK 46-13-00-480-801).

   (a) Using the universal maintenance device, SPL-11321, activate the ONS maintenance browser.

EFFECTIVITY
LOM 445-447 PRE SB 737-46-1050 AND POST SB 737-46-1014; LOM 450, 453, 454, 457, 461-463 PRE SB 737-46-1050; LOM 455, 456 POST SB 737-46-1014 AND PRE SB 737-46-1050

46-13-01

Page 210
Feb 15/2025

D633A101-LOM

ECCN 9E991 BOEING PROPRIETARY - See title page for details

F.   **NFS Software Removal - Procedure**

SUBTASK 46-13-01-070-002

(1)   Using the ONS maintenance browser, make your selection: Line Maintenance > ONS Configuration.

(a)   Make sure the result shows the words ONS Configuration, and a table of data.

SUBTASK 46-13-01-070-003

(2)   Make your selection: UNINSTALL NFS PARTS.

SUBTASK 46-13-01-070-004

(3)   Below the words SOFTWARE PART NUMBER:

(a)   Click once on each LSAP to highlight the row.

1)   You can select one or more parts at this time.

(b)   Make your selection: SELECT.

SUBTASK 46-13-01-070-005

(4)   Below the words: Selected Parts:

(a)   Make sure that each LSAP shown is correct for removal.

1)   To remove an LSAP from the group, click once to highlight and make your selection: UNSELECT.

(b)   Make your selection: CONTINUE.

NOTE: In the selected parts box, all parts shown (highlighted or not) will be erased.

SUBTASK 46-13-01-070-006

(5)   In the confirmation box, make your selection: CONTINUE.

(a)   Make sure the box shows the words: Uninstalling selected parts.

SUBTASK 46-13-01-070-007

(6)   In the results window, make sure the status for each LSAP shows the word: Successful.

SUBTASK 46-13-01-860-008

(7)   To download a record of the new software configuration, you can do the steps that follow:

(a)   Using the ONS menu bar, make your selection: Line Maintenance > ONS Configuration.

(b)   Make your selection: DOWNLOAD.

1)   Follow the on-screen instructions.

G.   **Put the Airplane Back to Its Usual Condition**

SUBTASK 46-13-01-080-006

(1)   If the universal maintenance device, SPL-11321 is not required for another task:

(a)   Close the browser window.

(b)   Shut down the laptop.

(c)   Disconnect the Ethernet cable between the laptop and data port.

─────── **END OF TASK** ───────

EFFECTIVITY
LOM 445-447 PRE SB 737-46-1050 AND POST SB 737-46-1014; LOM 450, 453, 454, 457, 461-463 PRE SB 737-46-1050; LOM 455, 456 POST SB 737-46-1014 AND PRE SB 737-46-1050

46-13-01

Page 211
Feb 15/2025

D633A101-LOM

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 46-13-01-070-802

7. Network File Server Drive Reformat Procedure

A. General

(1) This task gives the steps to erase all software parts on the Network File Server (NFS) operational drive, and to install the minimum operating system software parts.

NOTE: The universal maintenance device, SPL-11321 part number, G45003-1 has replaced part number, G45002-29.

(a) You will reboot the NFS to operate from the BOOT OS, and then replace the software on the operational drive.

(b) You will use the initial data loader (IDL) function to import the three specified crated parts, one at a time, and then install the parts as a group.

(2) To do this task, the aircraft must be on the ground with its weight compressing the landing gear.

B. References

Reference	Title
46-13-00-470-804	Stage Software Parts on a Mass Storage Device via Ground Network or Software Management Tool (P/B 201)
46-13-00-480-801	Onboard Network System Maintenance Laptop Connection (P/B 201)
46-13-00-720-803	Onboard Network System Configuration Check (P/B 201)
46-13-00-720-804	Mass Storage Device Software Parts Check (P/B 201)
46-13-00-750-803	Onboard Network System Client Credentials Check (P/B 201)

C. Tools/Equipment

NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

Reference	Description
SPL-11321	Device - Universal Maintenance (UMD)
	Part #: G45004-31 Supplier: 81205
	Part #: G45004-37 Supplier: 81205
	Opt Part #: G45003-3 Supplier: 81205
	Opt Part #: G45004-3 Supplier: 81205

D. Location Zones

Zone	Area
211	Flight Compartment - Left

E. Prepare for NFS Software Installation

SUBTASK 46-13-01-480-001

(1) Do this task: (Onboard Network System Maintenance Laptop Connection, TASK 46-13-00-480-801).

(a) Using the universal maintenance device, SPL-11321, activate the ONS maintenance browser.

SUBTASK 46-13-01-470-001

(2) Transfer the correct software parts to the universal maintenance device, SPL-11321, and into the IDL directory. Do these steps:

EFFECTIVITY
LOM 445-447 PRE SB 737-46-1050 AND POST SB 737-46-1014; LOM 450, 453, 454, 457, 461-463 PRE SB 737-46-1050; LOM 455, 456 POST SB 737-46-1014 AND PRE SB 737-46-1050

46-13-01

Page 212
Feb 15/2025

D633A101-LOM

ECCN 9E991 BOEING PROPRIETARY - See title page for details

(a)   Mount the source media using the laptop.

NOTE: Typically, the software parts can be on compact disk (CD) or USB memory stick. Or, the parts can already be present in a predefined laptop directory.

(b)   Using the Windows Explorer application, examine the directory D:\IDL\737\CRATES.

1)   You can erase unserviceable (or, expired) parts that you find.

(c)   Using the Windows Explorer application, transfer the software parts from the media to directory D:\IDL\737\CRATES.

SUBTASK 46-13-01-470-002

(3)   If the NFS is serviceable, download applicable log files from the NFS to the maintenance laptop. Do this task: (Network File Server Log File Check, TASK 46-13-01-710-802).

NOTE: Know and follow your airline's requirement for retention of log files. The steps that follow will erase all data from the NFS.

F.   **NFS Drive Reformat - Procedure**

SUBTASK 46-13-01-860-013

(1)   Reboot the system into Boot OS. These are the steps:

(a)   Make your selection: Extended Maintenance > ONS Maintenance > Reboot to Boot OS.

(b)   Make your selection: Reboot.

(c)   Make your selection: Continue.

1)   Make sure the status screen shows.

NOTE: The NFS can take approximately five minutes to reboot into Boot OS, and show the status screen.

SUBTASK 46-13-01-470-011

(2)   Mount the source data using the universal maintenance device, SPL-11321. These are the steps:

(a)   Make your selection: INITIAL DATA LOAD > IMPORT PARTS.

1)   Make sure the part import page shows.

(b)   Make your selection: Browse.

(c)   Put the source media into the maintenance laptop.

1)   The source data can be a compact disc (CD), USB memory stick, or other method specified by your airline or operator.

SUBTASK 46-13-01-470-003

(3)   Import the three specified software parts. Do these steps that follow:

NOTE: You must install all three software parts, and only the three parts specified, or the NFS will not operate.

(a)   Make your selection: NFS SERVER OS.

(b)   Make your selection: Open.

1)   Make sure the file path shows adjacent to the Browse button.

(c)   Make your selection: IMPORT.

1)   Make sure the result shows the words: Successful upload of part.

(d)   Make your selection: NFS NETMANAGER APP.

(e)   Make your selection: Open.

1)   Make sure the file path shows adjacent to the Browse button.

EFFECTIVITY
LOM 445-447 PRE SB 737-46-1050 AND POST SB 737-46-1014; LOM 450, 453, 454, 457, 461-463 PRE SB 737-46-1050; LOM 455, 456 POST SB 737-46-1014 AND PRE SB 737-46-1050

46-13-01

Page 213
Feb 15/2024

D633A101-LOM

ECCN 9E991 BOEING PROPRIETARY - See title page for details

(f)   Make your selection: IMPORT.

    1)   Make sure the result shows the words: Successful upload of part.

(g)   Make your selection: NFS OPC.

(h)   Make your selection: Open.

    1)   Make sure the file path shows adjacent to the Browse button.

(i)   Make your selection: IMPORT.

    1)   Make sure the result shows the words: Successful upload of part.

SUBTASK 46-13-01-470-012

(4)   Complete the software installation of the three parts. Do these steps:

(a)   On the browser's main menu bar, make your selection: INITIAL DATA LOAD > EXECUTE DATA LOAD.

(b)   Make sure the applicable target and software parts are specified.

(c)   Make your selection: CONTINUE.

    1)   The system will do the installation, and reboot automatically.

    2)   When the ONS Maintenance browser shows, the installation is complete.

G.   Software Check - Procedure

SUBTASK 46-13-01-720-001

(1)   Do a check of the NFS operational software. This is the task:

Onboard Network System Configuration Check, TASK 46-13-00-720-803.

(a)   Make sure that all required software parts are installed.

(b)   If you must install parts in the NFS operational drive, refer to this task: (Network File Server Software Installation, TASK 46-13-01-470-801).

SUBTASK 46-13-01-720-002

(2)   Do this task: (Mass Storage Device Software Parts Check, TASK 46-13-00-720-804).

(a)   Make sure that all required software parts are installed.

(b)   If you must install parts to the MSD, refer to this task: (Stage Software Parts on a Mass Storage Device via Ground Network or Software Management Tool, TASK 46-13-00-470-804).

H.   Credentials Check - Procedure

SUBTASK 46-13-01-470-004

(1)   You must generate new credentials for each network client. Do this task: (Onboard Network System Client Credentials Check, TASK 46-13-00-750-803).

I.   Put the Airplane Back to Its Usual Condition

SUBTASK 46-13-01-080-001

(1)   If the laptop is no longer required, stop the ONS maintenance browser, and disconnect the laptop.

——— **END OF TASK** ———

EFFECTIVITY
**LOM 445-447 PRE SB 737-46-1050 AND POST SB
737-46-1014; LOM 450, 453, 454, 457, 461-463 PRE
SB 737-46-1050; LOM 455, 456 POST SB
737-46-1014 AND PRE SB 737-46-1050**

D633A101-LOM

46-13-01

Page 214
Jun 15/2024

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 46-13-01-710-801

8. <u>Network File Server Fault Check</u>

A. **General**

(1) This task gives the steps to do a fault log check of the Network File Server (NFS), M2889.

NOTE: The universal maintenance device, SPL-11321 part number, G45003-1 has replaced part number, G45002-29.

(2) To do this check, the weight-on-wheels discrete must be in the ground condition.

B. **References**

Reference	Title
46-13-00-480-801	Onboard Network System Maintenance Laptop Connection (P/B 201)

C. **Tools/Equipment**

NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

Reference	Description
SPL-11321	Device - Universal Maintenance (UMD)
	Part #: G45004-31 Supplier: 81205
	Part #: G45004-37 Supplier: 81205
	Opt Part #: G45003-3 Supplier: 81205
	Opt Part #: G45004-3 Supplier: 81205

D. **Location Zones**

Zone	Area
211	Flight Compartment - Left

E. **Before the Fault Log Check**

SUBTASK 46-13-01-480-002

(1) Do this task: (Onboard Network System Maintenance Laptop Connection, TASK 46-13-00-480-801).

(a) Using the universal maintenance device, SPL-11321, activate the ONS maintenance browser.

F. **NFS Fault Log Check Procedure**

SUBTASK 46-13-01-720-003

(1) Using the ONS maintenance browser, make your selection: Extended Maintenance > ONS Maintenance > Existing Faults.

(a) If the result shows no Line Replaceable Unit (LRU), and no fault message, then the NFS is serviceable.

(b) If one or more LRUs shows, then continue.

NOTE: The result only shows an LRU client when there is a message. When there is no message, the LRU does not show. When an LRU does show, typically the message refers to an NFS-to-LRU interface problem, or an NFS software or hardware problem. Some conditions can cause more than one message to show.

SUBTASK 46-13-01-720-004

(2) Select one target LRU at a time, and examine the fault details. Do these steps:

(a) Click once on the LRU name.

┌─ EFFECTIVITY ─
LOM 445-447 PRE SB 737-46-1050 AND POST SB
737-46-1014; LOM 450, 453, 454, 457, 461-463 PRE
SB 737-46-1050; LOM 455, 456 POST SB
737-46-1014 AND PRE SB 737-46-1050

46-13-01

Page 215
Feb 15/2025

D633A101-LOM

ECCN 9E991 BOEING PROPRIETARY - See title page for details

     (b)   Make a record of each fault code shown in the Fault Details box.

     (c)   Use the scroll bar to see the message, or messages.

     (d)   Do the steps for each LRU shown in the Fault Results box.

     (e)   If you find one or more maintenance messages, then a maintenance action is required.

  G. **Put the Aircraft Back to its Usual Condition**

SUBTASK 46-13-01-080-002

    (1)   Exit the ONS browser, and disconnect the maintenance laptop, if not required for another task.

———— **END OF TASK** ————

TASK 46-13-01-710-802

9. **Network File Server Log File Check**

  A. **General**

    (1)   This procedure gives access to the Network File Server (NFS) log files. You can do three tasks as follows:

       NOTE: The universal maintenance device, SPL-11321 part number, G45003-1 has replaced part number, G45002-29.

     (a)   View a record of available log files.

     (b)   Make a copy of one or more log files to the laptop's internal drive, or removable media.

     (c)   Delete (or, erase) one or more log files from the NFS.

    (2)   To do this check, you will operate the ONS maintenance browser using the universal maintenance device, SPL-11321.

    (3)   To do this check, the weight-on-wheels discrete must be in the ground condition.

  B. **References**

Reference	Title
46-13-00-480-801	Onboard Network System Maintenance Laptop Connection (P/B 201)

  C. **Tools/Equipment**

    NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

Reference	Description
SPL-11321	Device - Universal Maintenance (UMD)
	Part #: G45004-31 Supplier: 81205
	Part #: G45004-37 Supplier: 81205
	Opt Part #: G45003-3 Supplier: 81205
	Opt Part #: G45004-3 Supplier: 81205

  D. **Location Zones**

Zone	Area
211	Flight Compartment - Left

  E. **Before Log File Check Procedure**

SUBTASK 46-13-01-480-003

    (1)   Do this task: (Onboard Network System Maintenance Laptop Connection, TASK 46-13-00-480-801).

EFFECTIVITY
LOM 445-447 PRE SB 737-46-1050 AND POST SB 737-46-1014; LOM 450, 453, 454, 457, 461-463 PRE SB 737-46-1050; LOM 455, 456 POST SB 737-46-1014 AND PRE SB 737-46-1050

D633A101-LOM

46-13-01

Page 216
Feb 15/2025

ECCN 9E991 BOEING PROPRIETARY - See title page for details

(a)   Using the universal maintenance device, SPL-11321, activate the ONS maintenance browser.

F.   **Log File Check Procedure**

SUBTASK 46-13-01-860-001

(1)   Set the ONS maintenance browser to show the NFS LOGS page.

(a)   Make your selection: Extended Maintenance > ONS Maintenance > Logs.

(b)   In the NFS LOGS box, make your selection.

1)   Click once on one of the log types:

- Performance

- Security

- Syslogs.

2)   Click once on the CONTINUE button.

SUBTASK 46-13-01-860-002

(2)   The result can contain many files, on one or more pages. To examine all files, do these steps:

(a)   If shown, use the vertical scroll bar to examine all records on the page.

(b)   If shown, use the FIRST, LAST, PREVIOUS, or NEXT buttons to examine all pages.

NOTE: A page can show 100 log files.

SUBTASK 46-13-01-860-014

(3)   If your selection was SYSLOGS, then do this step:

(a)   Make your selection: GET LATEST LOGS.

SUBTASK 46-13-01-860-003

(4)   To download a log file, do the steps that follow.

(a)   Click once on the target log file. You can highlight one, some, or all of the log files.

(b)   Click once on the DOWNLOAD button.

(c)   When the operating system shows the navigation box, save the log files into a folder on the internal drive, or removable media.

SUBTASK 46-13-01-070-001

(5)   To erase a log file from the NFS, do the steps that follow.

(a)   Click once on the target log file. You can highlight one, some, or all of the log files.

(b)   Click once on the DELETE button.

(c)   When the confirmation box shows, click once on the CONFIRM button.

G.   **Put the Airplane Back to Its Usual Condition**

SUBTASK 46-13-01-080-003

(1)   If the universal maintenance device, SPL-11321 is no longer required, stop the ONS maintenance browser, and disconnect the laptop.

——— **END OF TASK** ———

EFFECTIVITY
LOM 445-447 PRE SB 737-46-1050 AND POST SB
737-46-1014; LOM 450, 453, 454, 457, 461-463 PRE
SB 737-46-1050; LOM 455, 456 POST SB
737-46-1014 AND PRE SB 737-46-1050

46-13-01

Page 217
Feb 15/2025

D633A101-LOM

ECCN 9E991 BOEING PROPRIETARY - See title page for details

TASK 46-13-01-710-803

10. __Network File Server Software Check__

A. **General**

(1) This procedure gives the steps to examine the software installed in the network file server (NFS).

NOTE: The universal maintenance device, SPL-11321 part number, G45003-1 has replaced part number, G45002-29.

NOTE: The software in the task refers to the parts that operate the server.

(2) To do this task, you will use the universal maintenance device, SPL-11321 to operate the ONS maintenance browser.

(3) The aircraft must be on the ground before you can install software.

B. **References**

Reference	Title
46-13-00-720-803	Onboard Network System Configuration Check (P/B 201)

C. **Tools/Equipment**

NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

Reference	Description
SPL-11321	Device - Universal Maintenance (UMD)
	Part #: G45004-31 Supplier: 81205
	Part #: G45004-37 Supplier: 81205
	Opt Part #: G45003-3 Supplier: 81205
	Opt Part #: G45004-3 Supplier: 81205

D. **Location Zones**

Zone	Area
212	Flight Compartment - Right

E. **Prepare for the Procedure**

SUBTASK 46-13-01-860-004

(1) Get a record of correct software part numbers for the NFS on the target aircraft.

SUBTASK 46-13-01-860-005

(2) Make sure that this circuit breaker is closed:

F/O Electrical System Panel, P6-12
__Row   Col   Number   Name__

LOM 445-447, 455, 456 POST SB 737-46-1014 AND PRE SB 737-46-1050; LOM 450, 453, 454, 457, 461-463 PRE SB 737-46-1050
C   1   C01958   NETWORK FILE SERVER

LOM 445-447 PRE SB 737-46-1050 AND POST SB 737-46-1014; LOM 450, 453, 454, 457, 461-463 PRE SB 737-46-1050; LOM 455, 456 POST SB 737-46-1014 AND PRE SB 737-46-1050

F. **Procedure**

SUBTASK 46-13-01-720-005

(1) Do a check of the NFS operational software. This is the task: (Onboard Network System Configuration Check, TASK 46-13-00-720-803).

EFFECTIVITY
LOM 445-447 PRE SB 737-46-1050 AND POST SB 737-46-1014; LOM 450, 453, 454, 457, 461-463 PRE SB 737-46-1050; LOM 455, 456 POST SB 737-46-1014 AND PRE SB 737-46-1050

46-13-01

Page 218
Feb 15/2025

D633A101-LOM

ECCN 9E991 BOEING PROPRIETARY - See title page for details

    (a)   Make sure that all software parts installed on the NFS agree with the software specified in your record.

G. Put the Aircraft Back To Its Usual Condition

SUBTASK 46-13-01-080-004

(1)   Exit the ONS browser, and disconnect the maintenance laptop, if not required for another task.

———— **END OF TASK** ————

TASK 46-13-01-470-803

11. **Network File Server OS Downgrade OS9.1 to OS7.1**

    A. General

    (1)   This task gives the steps to downgrade the Network File Server (NFS) OS9.1 to OS7.1.

       (a)   Gather all the software parts you need on removable media or Universal Maintenance Device (UMD) before leaving for the airplane.

          NOTE: The OS7.1 46 NFS Boot OS is: BCG2A-U000-0458.

          NOTE: The OS9.1 46 NFS Boot OS is: BCG27-U000-0895.

    (2)   The aircraft must be on the ground to do this task.

    (3)   This task is available when the Onboard Network System (ONS) is accessed with the UMD.

    B. References

Reference	Title
46-13-00-480-801	Onboard Network System Maintenance Laptop Connection (P/B 201)
46-13-00-720-803	Onboard Network System Configuration Check (P/B 201)

    C. Tools/Equipment

    NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

Reference	Description
SPL-11321	Device - Universal Maintenance (UMD)
	Part #: G45004-31 Supplier: 81205
	Part #: G45004-37 Supplier: 81205
	Opt Part #: G45003-3 Supplier: 81205
	Opt Part #: G45004-3 Supplier: 81205

    D. Location Zones

Zone	Area
211	Flight Compartment - Left

    E. Procedure

SUBTASK 46-13-01-470-021

    (1)   Connect the universal maintenance device, SPL-11321, do this task: Onboard Network System Maintenance Laptop Connection, TASK 46-13-00-480-801.

       (a)   Activate the ONS maintenance browser.

EFFECTIVITY
LOM 445-447 PRE SB 737-46-1050 AND POST SB 737-46-1014; LOM 450, 453, 454, 457, 461-463 PRE SB 737-46-1050; LOM 455, 456 POST SB 737-46-1014 AND PRE SB 737-46-1050

46-13-01

D633A101-LOM

Page 219
Feb 15/2025

ECCN 9E991 BOEING PROPRIETARY - See title page for details

SUBTASK 46-13-01-470-020

(2)   If the NFS is in a fully operational OS9.1 state, reimage the NFS. Do this task: Network File Server Drive Reformat Procedure, TASK 46-13-01-070-802.

NOTE: If only the OS9.1 Boot OS is present on the NFS (the NFS is in an Initial Data Load state), skip this step.

(3)   Install the core OS7.1 software parts. Do this task: Network File Server Initial Data Load (IDL) Software Installation, TASK 46-13-01-470-802.

NOTE: The IDL Software Installation task can be used to install the remaining OS7.1 software parts and return the NFS to a fully operational state.

NOTE: When staging and dataloading the rest of the OS7.1 software parts after the IDL, make sure to stage and install the OS7.1 Boot OS as well.

(4)   Run a system configuration of the NFS to ensure all OS9.1 software parts have been replaced with OS7.1 software parts. Do this task: Onboard Network System Configuration Check, TASK 46-13-00-720-803.

F.   **Put the Airplane Back to Its Usual Condition**

SUBTASK 46-13-01-080-010

(1)   If the universal maintenance device, SPL-11321, is not necessary, close the ONS maintenance browser and disconnect the maintenance device.

——— **END OF TASK** ———

TASK 46-13-01-470-804

12.   **Network File Server OS Downgrade OS9.1 to OS7.0**

A.   **General**

(1)   This task gives the steps to downgrade the Network File Server (NFS) OS9.1 to OS7.0.

(a)   Gather all the software parts you need on removable media or Universal Maintenance Device (UMD) before leaving for the airplane.

NOTE: The OS7.0 46 NFS Boot OS is: BCG57-U000-02E3.

NOTE: The OS9.1 46 NFS Boot OS is: BCG27-U000-0895.

(2)   The aircraft must be on the ground to do this task.

(3)   This task is available when the Onboard Network System (ONS) is accessed with the UMD.

B.   **References**

Reference	Title
46-13-00-480-801	Onboard Network System Maintenance Laptop Connection (P/B 201)
46-13-00-720-803	Onboard Network System Configuration Check (P/B 201)

C.   **Tools/Equipment**

NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

EFFECTIVITY
LOM 445-447 PRE SB 737-46-1050 AND POST SB 737-46-1014; LOM 450, 453, 454, 457, 461-463 PRE SB 737-46-1050; LOM 455, 456 POST SB 737-46-1014 AND PRE SB 737-46-1050

46-13-01

Page 220
Feb 15/2024

D633A101-LOM

ECCN 9E991 BOEING PROPRIETARY - See title page for details

Reference	Description
SPL-11321	Device - Universal Maintenance (UMD)
	Part #: G45004-31 Supplier: 81205
	Part #: G45004-37 Supplier: 81205
	Opt Part #: G45003-3 Supplier: 81205
	Opt Part #: G45004-3 Supplier: 81205

D. Location Zones

Zone	Area
211	Flight Compartment - Left

E. Procedure

SUBTASK 46-13-01-470-022

(1) Connect the universal maintenance device, SPL-11321, do this task: Onboard Network System Maintenance Laptop Connection, TASK 46-13-00-480-801.

   (a) Activate the ONS maintenance browser.

SUBTASK 46-13-01-470-023

(2) If the NFS is in a fully operational OS9.1 state, reimage the NFS. Do this task: Network File Server Drive Reformat Procedure, TASK 46-13-01-070-802.

   NOTE: If only the OS9.1 Boot OS is present on the NFS (the NFS is in an Initial Data Load state), skip this step.

(3) Install the core OS7.0 software parts. Do this task: Network File Server Initial Data Load (IDL) Software Installation, TASK 46-13-01-470-802.

   NOTE: The IDL Software Installation task can be used to install the remaining OS7.0 software parts and return the NFS to a fully operational state.

   NOTE: When staging and dataloading the rest of the OS7.0 software parts after the IDL, make sure to stage and install the OS7.0 Boot OS as well.

(4) Run a system configuration of the NFS to ensure all OS9.1 software parts have been replaced with OS7.0 software parts. Do this task: Onboard Network System Configuration Check, TASK 46-13-00-720-803.

F. Put the Airplane Back to Its Usual Condition

SUBTASK 46-13-01-080-011

(1) If the universal maintenance device, SPL-11321, is not necessary, close the ONS maintenance browser and disconnect the maintenance device.

——— END OF TASK ———

TASK 46-13-01-470-805

13. __Network File Server OS Downgrade OS7.1 to OS7.0__

A. General

(1) This task gives the steps to downgrade the Network File Server (NFS) OS7.1 to OS7.0.

   (a) Gather all the software parts you need on removable media or Universal Maintenance Device (UMD) before leaving for the airplane.

   NOTE: The OS7.0 46 NFS Boot OS is: BCG57-U000-02E3.

   NOTE: The OS7.1 46 NFS Boot OS is: BCG2A-U000-0458.

(2) The aircraft must be on the ground to do this task.

(3) This task is available when the Onboard Network System (ONS) is accessed with the UMD.

EFFECTIVITY
LOM 445-447 PRE SB 737-46-1050 AND POST SB 737-46-1014; LOM 450, 453, 454, 457, 461-463 PRE SB 737-46-1050; LOM 455, 456 POST SB 737-46-1014 AND PRE SB 737-46-1050

46-13-01

Page 221
Feb 15/2025

D633A101-LOM

ECCN 9E991 BOEING PROPRIETARY - See title page for details

B.   **References**

Reference	Title
46-13-00-480-801	Onboard Network System Maintenance Laptop Connection (P/B 201)
46-13-00-720-803	Onboard Network System Configuration Check (P/B 201)

C.   **Tools/Equipment**

NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

Reference	Description
SPL-11321	Device - Universal Maintenance (UMD)
	Part #: G45004-31 Supplier: 81205
	Part #: G45004-37 Supplier: 81205
	Opt Part #: G45003-3 Supplier: 81205
	Opt Part #: G45004-3 Supplier: 81205

D.   **Location Zones**

Zone	Area
211	Flight Compartment - Left

E.   **Procedure**

SUBTASK 46-13-01-470-024

(1)   Connect the universal maintenance device, SPL-11321, do this task: Onboard Network System Maintenance Laptop Connection, TASK 46-13-00-480-801.

    (a)   Activate the ONS maintenance browser.

SUBTASK 46-13-01-470-025

(2)   If the NFS is in a fully operational OS7.1 state, reimage the NFS. Do this task: Network File Server Drive Reformat Procedure, TASK 46-13-01-070-802.

    NOTE: If only the OS7.1 Boot OS is present on the NFS (the NFS is in an Initial Data Load state), skip this step.

(3)   Install the core OS7.0 software parts. Do this task: Network File Server Initial Data Load (IDL) Software Installation, TASK 46-13-01-470-802.

    NOTE: The IDL Software Installation task can be used to install the remaining OS7.0 software parts and return the NFS to a fully operational state.

    NOTE: When staging and dataloading the rest of the OS7.0 software parts after the IDL, make sure to stage and install the OS7.0 Boot OS as well.

(4)   Run a system configuration of the NFS to ensure all OS7.1 software parts have been replaced with OS7.0 software parts. Do this task: Onboard Network System Configuration Check, TASK 46-13-00-720-803.

F.   **Put the Airplane Back to Its Usual Condition**

SUBTASK 46-13-01-080-012

(1)   If the universal maintenance device, SPL-11321, is not necessary, close the ONS maintenance browser and disconnect the maintenance device.

———— END OF TASK ————

EFFECTIVITY
LOM 445-447 PRE SB 737-46-1050 AND POST SB 737-46-1014; LOM 450, 453, 454, 457, 461-463 PRE SB 737-46-1050; LOM 455, 456 POST SB 737-46-1014 AND PRE SB 737-46-1050

46-13-01

Page 222
Feb 15/2025

D633A101-LOM

1. **General**

    A. This procedure contains two tasks:

      (1) Removal of the NFS, M2889.

      (2) Installation of the NFS, M2889.

    TASK 46-13-01-000-801

2. **Network File Server Removal**

    Figure 401

    A. **General**

      (1) This task gives the steps to remove the Network File Server (NFS).

        NOTE: The universal maintenance device, SPL-11321 part number, G45003-1 has replaced part number, G45002-29.

        (a) The NFS, M2889, is installed on shelf E5-2.

    B. **References**

Reference	Title
06-41-00-800-801	Finding an Access Door or Panel on the Lower Half of the Fuselage (P/B 201)
20-10-07-000-801	E/E Box Removal (P/B 201)
20-40-12-000-802	ESDS Handling for Metal Encased Unit Removal (P/B 201)
46-13-01-710-802	Network File Server Log File Check (P/B 201)

    C. **Tools/Equipment**

      NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

Reference	Description
SPL-11321	Device - Universal Maintenance (UMD)
	Part #: G45004-31 Supplier: 81205
	Part #: G45004-37 Supplier: 81205
	Opt Part #: G45003-3 Supplier: 81205
	Opt Part #: G45004-3 Supplier: 81205

    D. **Location Zones**

Zone	Area
118	Electrical and Electronics Compartment - Right
211	Flight Compartment - Left

    E. **Access Panels**

Number	Name/Location
117A	Electronic Equipment Access Door

┌─ EFFECTIVITY ─
**LOM 445-447 PRE SB 737-46-1050 AND POST SB
737-46-1014; LOM 450, 453, 454, 457, 461-463 PRE
SB 737-46-1050; LOM 455, 456 POST SB
737-46-1014 AND PRE SB 737-46-1050**

D633A101-LOM

46-13-01

Page 401
Feb 15/2025

F. Prepare for the Procedure

SUBTASK 46-13-01-470-008

(1) The Boeing Company recommends you make a back-up copy of the applicable files from the NFS to the universal maintenance device, SPL-11321. Do this task: (Network File Server Log File Check, TASK 46-13-01-710-802).

NOTE: Know and follow your airline or operator's procedure for record retention.

SUBTASK 46-13-01-040-001

(2) Open this circuit breaker and install safety tag:

F/O Electrical System Panel, P6-12

Row	Col	Number	Name

LOM 445-447, 455, 456 POST SB 737-46-1014 AND PRE SB 737-46-1050; LOM 450, 453, 454, 457, 461-463 PRE SB 737-46-1050

Row	Col	Number	Name
C	1	C01958	NETWORK FILE SERVER

LOM 445-447 PRE SB 737-46-1050 AND POST SB 737-46-1014; LOM 450, 453, 454, 457, 461-463 PRE SB 737-46-1050; LOM 455, 456 POST SB 737-46-1014 AND PRE SB 737-46-1050

SUBTASK 46-13-01-010-001

(3) Get access to the main equipment center.

　(a) You can refer to:(Finding an Access Door or Panel on the Lower Half of the Fuselage, TASK 06-41-00-800-801).

　(b) Open this access panel:

Number	Name/Location
117A	Electronic Equipment Access Door

G. NFS Removal Procedure

SUBTASK 46-13-01-020-001

(1) Do this task: (ESDS Handling for Metal Encased Unit Removal, TASK 20-40-12-000-802).

SUBTASK 46-13-01-020-002

> ⚠ **CAUTION**
>
> DO NOT TOUCH THE CONNECTOR PINS OR OTHER CONDUCTORS ON THE UNIT. IF YOU TOUCH THESE CONDUCTORS, ELECTROSTATIC DISCHARGE CAN CAUSE DAMAGE TO THE UNIT.
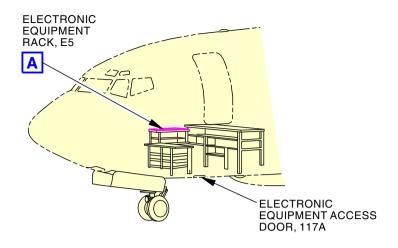
(2) Remove the network file network file server [1]. This is the task: (E/E Box Removal, TASK 20-10-07-000-801).

　(a) Put protective covers on the electrical connectors.
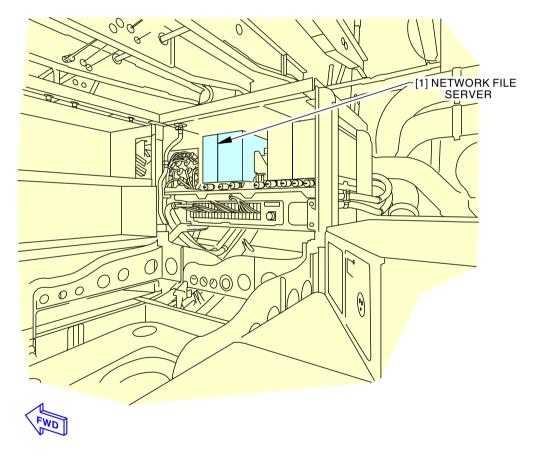
——— **END OF TASK** ———

EFFECTIVITY
LOM 445-447 PRE SB 737-46-1050 AND POST SB 737-46-1014; LOM 450, 453, 454, 457, 461-463 PRE SB 737-46-1050; LOM 455, 456 POST SB 737-46-1014 AND PRE SB 737-46-1050

46-13-01

D633A101-LOM

Page 402
Feb 15/2024

ECCN 9E991 BOEING PROPRIETARY - See title page for details

ELECTRONIC
EQUIPMENT
RACK, E5

A

ELECTRONIC
EQUIPMENT ACCESS
DOOR, 117A

[1] NETWORK FILE
SERVER

FWD

2304347 S0000517972_V2

**Network File Server Installation
Figure 401/46-13-01-990-801**

46-13-01

D633A101-LOM

TASK 46-13-01-400-801

3. Network File Server Installation

   Figure 401

   A. General

   (1) This task gives the steps to install the Network File Server (NFS), M2889.

   NOTE: The universal maintenance device, SPL-11321 part number, G45003-1 has replaced part number, G45002-29.

   (2) The NFS is installed on shelf E5-2 in the E/E bay.

   (3) To complete this task, a universal maintenance device, SPL-11321 is required.

   B. References

Reference	Title
06-41-00-800-801	Finding an Access Door or Panel on the Lower Half of the Fuselage (P/B 201)
20-10-07-400-801	E/E Box Installation (P/B 201)
20-40-12-400-802	ESDS Handling for Metal Encased Unit Installation (P/B 201)
46-13-00-470-804	Stage Software Parts on a Mass Storage Device via Ground Network or Software Management Tool (P/B 201)
46-13-00-720-803	Onboard Network System Configuration Check (P/B 201)
46-13-00-720-804	Mass Storage Device Software Parts Check (P/B 201)
46-13-00-750-803	Onboard Network System Client Credentials Check (P/B 201)
46-13-01-470-801	Network File Server Software Installation (P/B 201)
46-13-01-720-801	Network File Server Operational Test (P/B 501)

   C. Tools/Equipment

   NOTE: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

Reference	Description
SPL-11321	Device - Universal Maintenance (UMD)
	Part #: G45004-31 Supplier: 81205
	Part #: G45004-37 Supplier: 81205
	Opt Part #: G45003-3 Supplier: 81205
	Opt Part #: G45004-3 Supplier: 81205

   D. Expendables/Parts

AMM Item	Description	AIPC Reference	AIPC Effectivity
1	Network file server	46-00-00-01-050	LOM 445-447, 450, 453-457, 461-463

   E. Location Zones

Zone	Area
118	Electrical and Electronics Compartment - Right
211	Flight Compartment - Left

   F. Access Panels

Number	Name/Location
117A	Electronic Equipment Access Door

EFFECTIVITY
LOM 445-447 PRE SB 737-46-1050 AND POST SB 737-46-1014; LOM 450, 453, 454, 457, 461-463 PRE SB 737-46-1050; LOM 455, 456 POST SB 737-46-1014 AND PRE SB 737-46-1050

D633A101-LOM

46-13-01

Page 404
Feb 15/2025

ECCN 9E991 BOEING PROPRIETARY - See title page for details

G. **Prepare for the Installation**

SUBTASK 46-13-01-860-011

(1)   Make sure that this circuit breaker is open and has safety tag:

F/O Electrical System Panel, P6-12

Row	**Col**	**Number**	**Name**

LOM 445-447, 455, 456 POST SB 737-46-1014 AND PRE SB 737-46-1050; LOM 450, 453, 454, 457, 461-463 PRE SB 737-46-1050

C	1	C01958	NETWORK FILE SERVER

LOM 445-447 PRE SB 737-46-1050 AND POST SB 737-46-1014; LOM 450, 453, 454, 457, 461-463 PRE SB 737-46-1050; LOM 455, 456 POST SB 737-46-1014 AND PRE SB 737-46-1050

SUBTASK 46-13-01-010-002

(2)   Make sure that this access panel is open:

Number	**Name/Location**
117A	Electronic Equipment Access Door

(a)   You can refer to:(Finding an Access Door or Panel on the Lower Half of the Fuselage, TASK 06-41-00-800-801).

H. **NFS Installation Procedure**

SUBTASK 46-13-01-420-001

> ⚠️ **CAUTION**
> DO NOT TOUCH THE UNIT BEFORE YOU DO THE PROCEDURE FOR DEVICES THAT ARE SENSITIVE TO ELECTROSTATIC DISCHARGE. ELECTROSTATIC DISCHARGE CAN CAUSE DAMAGE TO THE UNIT.

(1)   Do this task: (ESDS Handling for Metal Encased Unit Installation, TASK 20-40-12-400-802).

SUBTASK 46-13-01-420-002

(2)   Remove the protective covers from the connectors and examine the electrical connectors and wires for damage, and dirt.

(a)   Repair the problems that you find.

SUBTASK 46-13-01-420-003

(3)   Install the network file server [1]. This is the task: (E/E Box Installation, TASK 20-10-07-400-801).

SUBTASK 46-13-01-860-012

(4)   Remove the safety tag and close this circuit breaker:

F/O Electrical System Panel, P6-12

Row	**Col**	**Number**	**Name**

LOM 445-447, 455, 456 POST SB 737-46-1014 AND PRE SB 737-46-1050; LOM 450, 453, 454, 457, 461-463 PRE SB 737-46-1050

C	1	C01958	NETWORK FILE SERVER

LOM 445-447 PRE SB 737-46-1050 AND POST SB 737-46-1014; LOM 450, 453, 454, 457, 461-463 PRE SB 737-46-1050; LOM 455, 456 POST SB 737-46-1014 AND PRE SB 737-46-1050

I. **LRU Post-Installation Test**

SUBTASK 46-13-01-720-012

(1)   Do a check of the NFS operational software. This is the task: (Onboard Network System Configuration Check, TASK 46-13-00-720-803).

EFFECTIVITY
LOM 445-447 PRE SB 737-46-1050 AND POST SB 737-46-1014; LOM 450, 453, 454, 457, 461-463 PRE SB 737-46-1050; LOM 455, 456 POST SB 737-46-1014 AND PRE SB 737-46-1050

46-13-01

D633A101-LOM

Page 405
Feb 15/2024

ECCN 9E991 BOEING PROPRIETARY - See title page for details

(a)   Make sure that all required software parts are installed.

(b)   If you must install parts in the NFS operational drive, refer to this task: (Network File Server Software Installation, TASK 46-13-01-470-801).

SUBTASK 46-13-01-470-009

(2)   Do this task: (Mass Storage Device Software Parts Check, TASK 46-13-00-720-804).

(a)   Make sure that all required software parts are installed.

(b)   If you must install parts in the MSD, refer to this task: (Stage Software Parts on a Mass Storage Device via Ground Network or Software Management Tool, TASK 46-13-00-470-804).

SUBTASK 46-13-01-470-010

(3)   You must generate new credentials for each network client. On the P5 Panel, turn the ENGINE START SWITCH clockwise to CONT.

NOTE: Turning the switch counter clockwise will rotate the engine.

SUBTASK 46-13-01-860-025

(4)   Do this task: Onboard Network System Client Credentials Check, TASK 46-13-00-750-803.

SUBTASK 46-13-01-720-013

(5)   Do an operational test. Do this task: (Network File Server Operational Test, TASK 46-13-01-720-801).

J.   **Put the Airplane Back to Its Usual Condition**

SUBTASK 46-13-01-080-008

(1)   Stop the ONS maintenance browser, and disconnect the laptop.

SUBTASK 46-13-01-410-001

(2)   Close this access panel:

Number	Name/Location
117A	Electronic Equipment Access Door

———— **END OF TASK** ————

EFFECTIVITY
LOM 445-447 PRE SB 737-46-1050 AND POST SB 737-46-1014; LOM 450, 453, 454, 457, 461-463 PRE SB 737-46-1050; LOM 455, 456 POST SB 737-46-1014 AND PRE SB 737-46-1050

D633A101-LOM

46-13-01

Page 406
Jun 15/2024

<u>**NETWORK FILE SERVER - ADJUSTMENT/TEST**</u>

1. <u>General</u>

    A. This procedure has one task:

    (1) An operational test to make sure that the network file server (NFS), M2889, is serviceable.

    TASK 46-13-01-720-801

2. <u>**Network File Server Operational Test**</u>

    A. **General**

    (1) This procedure makes sure that the Network File Server (NFS) is serviceable.

    <u>NOTE</u>: The universal maintenance device, SPL-11321 part number, G45003-1 has replaced part number, G45002-29.

    • NFS, M2889 on shelf E5-2, in the E/E bay.

    (2) The aircraft must be on the ground with weight on the wheels before you do this task.

    B. **References**

Reference	Title
46-13-00-480-801	Onboard Network System Maintenance Laptop Connection (P/B 201)
46-13-00-720-801	Onboard Network System NFS Message Check (P/B 201)
46-13-01-710-802	Network File Server Log File Check (P/B 201)

    C. **Tools/Equipment**

    <u>NOTE</u>: When more than one tool part number is listed under the same "Reference" number, the tools shown are alternates to each other within the same airplane series. Tool part numbers that are replaced or non-procurable are preceded by "Opt:", which stands for Optional.

Reference	Description
SPL-11321	Device - Universal Maintenance (UMD)
	Part #: G45004-31 Supplier: 81205
	Part #: G45004-37 Supplier: 81205
	Opt Part #: G45003-3 Supplier: 81205
	Opt Part #: G45004-3 Supplier: 81205

    D. **Location Zones**

Zone	Area
211	Flight Compartment - Left

    E. **Before the Operational Test**

    SUBTASK 46-13-01-860-006

    (1) Make sure that this circuit breaker is closed:

    F/O Electrical System Panel, P6-12

Row	Col	Number	Name

    LOM 445-447, 455, 456 POST SB 737-46-1014 AND PRE SB 737-46-1050; LOM 450, 453, 454, 457, 461-463 PRE SB 737-46-1050

Row	Col	Number	Name
C	1	C01958	NETWORK FILE SERVER

    LOM 445-447 PRE SB 737-46-1050 AND POST SB 737-46-1014; LOM 450, 453, 454, 457, 461-463 PRE SB 737-46-1050; LOM 455, 456 POST SB 737-46-1014 AND PRE SB 737-46-1050

EFFECTIVITY
LOM 445-447 PRE SB 737-46-1050 AND POST SB 737-46-1014; LOM 450, 453, 454, 457, 461-463 PRE SB 737-46-1050; LOM 455, 456 POST SB 737-46-1014 AND PRE SB 737-46-1050

46-13-01

D633A101-LOM

Page 501
Feb 15/2025

F. **Operational Test Procedure**

SUBTASK 46-13-01-480-004

(1) Do this task: (Onboard Network System Maintenance Laptop Connection, TASK 46-13-00-480-801).

  (a) Using the universal maintenance device, SPL-11321, activate the ONS maintenance browser.

SUBTASK 46-13-01-720-006

(2) Do this task: (Network File Server Log File Check, TASK 46-13-01-710-802).

  (a) If you find a problem, then a maintenance action is required.

SUBTASK 46-13-01-720-008

(3) Do a check of the NFS Messages. This is the task: (Onboard Network System NFS Message Check, TASK 46-13-00-720-801).

  (a) If no NFS messages show, then the NFS is serviceable.

G. **Put the Aircraft Back to its Usual Condition**

SUBTASK 46-13-01-080-005

(1) Exit the ONS browser, and disconnect the universal maintenance device, SPL-11321, if not required for another task.

——— **END OF TASK** ———

EFFECTIVITY
LOM 445-447 PRE SB 737-46-1050 AND POST SB 737-46-1014; LOM 450, 453, 454, 457, 461-463 PRE SB 737-46-1050; LOM 455, 456 POST SB 737-46-1014 AND PRE SB 737-46-1050

46-13-01

Page 502
Feb 15/2024

D633A101-LOM

ECCN 9E991 BOEING PROPRIETARY - See title page for details