



November 10, 2003

DRILS Technician Guide

Table of Contents

<i><u>Obtaining Support.....</u></i>	<i><u>Error! Bookmark not defined.</u></i>
<i><u>Induct a Repairable Item into DRILS.....</u></i>	<i><u>3</u></i>
<i><u>Assigning An In-Work Status To An Item.....</u></i>	<i><u>9</u></i>
<i><u>Method 1 of 4 – Assigning A Status From The Home Page</u></i>	<i><u>10</u></i>
<i><u>Method 2 of 4 – Assigning A Status From Units in Shop</u></i>	<i><u>11</u></i>
<i><u>Method 3 of 4 – Assigning A Status From Search Results</u></i>	<i><u>12</u></i>
<i><u>Method 4 of 4 – Assigning A Status From the Serial Number History Report</u></i>	<i><u>14</u></i>
<i><u>Maintenance Menu.....</u></i>	<i><u>18</u></i>
<i><u>Add a Part.....</u></i>	<i><u>21</u></i>
<i><u>Document Other Maintenance and Adjust a Part</u></i>	<i><u>24</u></i>
<i><u>Defer Maintenance of an Item</u></i>	<i><u>27</u></i>
<i><u>Assign an Awm Status to an Item</u></i>	<i><u>27</u></i>
<i><u>Assign an AWP Status to an Item.....</u></i>	<i><u>29</u></i>
<i><u>Out-process an End Item</u></i>	<i><u>31</u></i>
<i><u>Common Error Messages</u></i>	<i><u>33</u></i>

Obtaining Support

REVISION

20 Nov, 2008 Contacts Updated

SUPPORT VIA THE INTERNET

<https://drils.hill.af.mil> – Click the ‘**E-mail DRILS**’ command on the Help menu at the top of the sign-in screen. Your request will be handled by the next available support technician.

DRILS SUPPORT PERSONNEL LIST

Name/E-mail	Position	Bld	DSN	Hours (MST)
	DRILS Support (Primary #)	5 M	777-8865	08:00 – 21:00
	DRILS Support (Alternate #)	5 M	586-6390	08:00 – 17:00
	DRILS Support (Alternate #)	1121	777-2999	07:00 – 16:30
Paul Blair Paul.Blair@hill.af.mil	Government Program Manager OO-ALC/IT	1211	586-6869	06:00 – 15:30
Tony Pombo tpombo@tqsinc.com	CEO Total Quality Systems	TQS	Commercial 801-731-2150	08:00 – 17:00
Kevin Berk kberk@tqsinc.com	DRILS Program Manager Total Quality Systems	TQS	Commercial 801-731-2150	07:00 – 17:00
Alan Jackson Alan.Jackson@hill.af.mil	Senior Support Technician Total Quality Systems	5 M	777-8865	09:00 – 18:00
Buddy Spinks Buddy.Spinks@hill.af.mil	Support Technician Total Quality Systems	5 M	777-8865	08:00 – 18:00

Induct a Repairable Item into DRILS

INDUCTING AN ITEM INTO DRILS

1. Click the Induct Item button located on the DRILS main menu.
2. Ensure that the input cursor is inside the **Scan or Type ITN** text box.
3. Scan a barcoded, or type the, Inventory Tracking Number (ITN) on your Work Control Document with an appropriate barcode scanner.

Figure 1 – Induction Screen Scan or Type ITN

POSSIBLE RESULTS

DRILS will attempt to find the ITN and will display one of three result screens:

1. ITN is Not Found in DRILS and a Matching ITN is Found in ITS.
2. ITN is Not Found in DRILS and a Matching ITN Cannot Be Found in ITS.
3. ITN is Found in DRILS and a Matching ITN is Found in ITS.

DRILS will determine if the ITN already exists. If it does not exist in DRILS and your shop uses the G337 Inventory Tracking System (ITS), DRILS will query the ITS database to see a matching ITN can be found. If found, the identification information will be imported from ITS into the DRILS induction screen for verification.

1. Verify the information imported from ITS.



The identification information imported from ITS only partially satisfies the data requirements for induction into DRILS. You will need to complete the rest of the fields using information from documentation attached to the repairable item such as an AFTO Form 350, NRTS (Green) Tag and a local Work Control Document.

2. Fill in the remaining fields as shown in Figure 3 with the requested information.
3. Click the **Send to AWM** button to assign an awaiting maintenance status to the item. You will be returned to the Induct Items Into Shop screen to allow you to induct more items.
 - a. **Or**, Click the **Place In Work** button to assign an in work status using your user name. You will be returned to your home page to begin documenting maintenance or logout to perform maintenance.
 - b. **Or**, Click the **Cancel Data Entry** button to abort the induction process and return to your home page.

The screenshot shows the 'Induct Items Into Shop' window. At the top is a 'Scan or Type ITN:' field with a 'Go' button. Below this are several data entry fields, many of which have a red star icon next to them, indicating they are required. A yellow callout box points to one of these stars with the text: 'Red star annotates fields that will be required to fill in.'

Shop:	Radio Frequency
Part Nbr., NSN:	758R888G01, 1270012330011, Modular Low Power Radio Frequency (MLPRF) Assy, 74AN0
Serial Nbr.:	10042
CAGE:	97942
SRD, MDS, Block:	AKD, F016C, 040
Look Up Org By:	All
Org / Kind / Type:	(0000 OOA CE) HILL AFB, UT
JCN:	032059042
PDN:	51572C
EPS Doc. Nbr.:	MLAB9N31975437
QDR:	<input type="checkbox"/>
Special Processing:	None
ETI Meter In:	2341
Discrepancy:	MFL 055

At the bottom of the window are three buttons: 'Cancel Data Entry', 'Send To AWM', and 'Place In Work'.

Figure 2 - Induction Screen Manually Entered Data Fields

1. Visually compare the DRILS and ITS information for possible updates.
2. If there is data that needs to be updated in DRILS, click the **View DRILS Record** link to update the information. You will be taken to the DRILS Edit 350 Tag Data screen to update the information.

System	ITN #	EPS DOC #	PART #	Serial #
ITS Info.	01978577	MLAB9N30845811	758R800G01	10328
DRILS Info.		MLAB9N30845811	758R800G01	10328

This item has already been inducted into your shop. [View DRILS Record](#) **REVIEW**

Figure 3 - Induction Information Comparison Screen



NOTE: If an ITN number is not in DRILS, ITS is searched for a possible match using Part Number, Serial Number and Document Number. If a match is not found, a final attempt is made to find a match using the Part Number and Serial Number.

DRILS compares its induction data to the ITS identification information and highlights any differences in the data. You must approve the update before DRILS will update its copy of the information.

1. Review the differences in identification information between DRILS and ITS that is displayed at the top of the screen.
2. You may automatically update the necessary DRILS fields by clicking the **Update** button. The ITS information will be copied to the appropriate form fields.
3. Click the **Update 350 Info** button to save the updates to DRILS. The updated information will be saved to the DRILS database and you will be returned to your home page. Click the **Cancel** button to abort the update information process. The item will remain inducted in DRILS, but any updated information will not be saved and you will be returned to your home page.

Edit 350 Tag Data

ITS inconsistencies

item	DRILS	ITS	Update
ITN		01978577	<input type="button" value="Update"/>

Shows inconsistencies from ITS and DRILS. Click on Update to automatically correct inconsistencies if required.

Nomenclature: Antenna (C/D,800)

Part Nbr: 758R800G01, 5985012122950, Antenna (C/D,800), 74AM0

ITN:

Serial Nbr.: **CAGE:**

SRD, MDS, Block:

Look Up Org By:

Org / Kind / Type:

JCN: **EPS Doc. Nbr.:**

Production Nbr.:

QDR: ☐

Special Processing: **ETI Meter In:**

Discrepancy:

Figure 4 - Update Induction Information Screen

DRILS was unable to locate a matching ITN within its database and could not find a match in ITS either. When this occurs, you will have to complete all fields on the Induct Items Into Shop screen. This information can be found on the AFTO Form 350 and local work control documentation attached to the item.

1. Fill in the required fields with the requested information.
2. Click the **Send to AWM** button to assign an awaiting maintenance status to this item. You will return to the Induct Items screen ready to record the next induction.
 - a. **Or**, Click the **Place In Work** button to assign an in work status to the item using your user name. You will be returned to your home page to begin documenting maintenance or logoff to perform maintenance.
 - b. **Or**, Click the **Cancel Data Entry** button to abort the induction process and return to your home page.

Induct Items Into Shop

Scan or Type ITN : **Go**

Your search for ITN # **00887871** was not found.

Shop: Radio Frequency

Part Nbr., NSN: == Select Item ==

Serial Nbr.:

CAGE:

SRD, MDS, Block: === Select SRD ===

Look Up Org By: All

Org / Kind / Type: == Select ==

JCN: **Create JCN**

PDN: == Select == **New PCN**

EPS Doc. Nbr.:

QDR: ☐

Special Processing: None

Discrepancy:

Cancel Data Entry **Send To AWM** **Place In Work**

Notifies that the ITN entered was not located in ITS or in DRILS

Fill in all required fields with the appropriate information

Figure 5 - ITN Not Found Induction Screen

Assigning An In-Work Status To An Item

OVERVIEW

Assigning an in-work status to an item is one of the most frequently used functions. DRILS provides several methods within the software in order to accomplish this task. An item may be assigned an in-work status from within one of the following functions described in this Technician Guide:


1. Induct Items into Shop Screen
2. My Units List of Your Home Screen
3. Units in Shop Screen
4. Results From The Search For Function
5. Serial Number History Report

Method 1 of 4—Assigning A Status From The Home Page

STEP 1 OF 1 - SELECTING A PART NUMBER FAMILY

You may assign an in-work status to a serial numbered item from your home page by drilling down to the detailed Units In Shop list for a specific part number family.



1. Select the part number family whose serial number you wish to change the status of. You will be taken to the detailed Units In Shop list for that part number.

Technician 									
My Units List ...			Labels		Change Password	EDIT My Units List	My Goals Report		
Shop	Part No	NSN	Noun	Total	INW	AWM	AWP	SERV	Notes
TADMIL	RD-593/U	7025014296898	PRINTER, AUTOMATIC DATA PROCESSING	6	1	3	2	0	(0)

Click on Part No to go to Units In-Shop List

Figure 6 - Home Page, My Units List Section

2. Find the desired serial number of the unit you want to place in-work and click the Serial Number text. See figure 8.
3. A confirmation box will be displayed to confirm that you want to place the item in-work or to take over that item from someone else who has it in work. See figures 15 and 16 for examples of these screens.

Tobyhanna - MILSTAR Units In-Shop List  						
Rows Per Page: All		Records found: 6		Output to Excel		
Nomenclature:			PRINTER, AUTOMATIC DATA PROCESSING		Part No: RD-593/U	
Serial No	Status	Received	History	Discrepancy	Print Label	
041	AWM on 02-Jun-03	10-Apr-03		Door Assembly Chassis Broken, Plate Mounted Rear Connector Broken, Rest Unknown		
1021	AWM on 10-Apr-03	10-Apr-03		No PS; No Power On Switch; Bad A4A3		
3021	AWM on 28-Jul-03	01-May-03		none		
3001	In Work on 01-Jun-03	01-May-03		unknown		
1011	AWP on 13-Mar-03	28-Feb-03		Burned out I/O Cable; Rest Unknown		
3026	AWP on 02-Jun-03	10-Apr-03		A4A3; Printhead; Spring Sensor		

Click on Serial Number of item to be placed in INW status

In Work By: Tammy Schirra

AWP For: 3001

AWP For: 3001

Power On Switch

Figure 7 - Units In-Shop List

Method 2 of 4—Assigning A Status From Units in Shop

STEP 1 OF 1 - SELECT A PART NUMBER FAMILY

DRILS provides the capability to assign a status to an item from the Units In Shop list by drilling down to the Detailed Units In Shop list for a specific part number.

1. Click the **Units In-Shop** button on the DRILS main menu.
2. Find the part number family in the list whose serial number you wish the assign the status to.
3. Click the **Nomenclature** of the appropriate part within the Units In-Shop list. You will be taken to the Detailed Units In Shop list for that part number.



Note: Your DRILS shop may be configured to display a National Stock Number (NSN) rather than the Nomenclature. Where this is true, click the appropriate NSN to drill down to the Detailed Units In Shop list.

Units You Have In Work									
You do not have any units in-work at this time.									
Units Currently In Shop									
Rows Per Page: <input type="button" value="All"/>		Records found: 9		Output to Excel					
Nomenclature 	Part No 	Default Prod No 	Total 	INW 	AWM 	AWP 	SERV 	UNSERV 	Notes
HCI POWER INPUT ASSEMBLY	110692-100	0	2	0	2	0	0	0	(0)
CASSETTE ASSEMBLY	113593-100	Unknown	5	0	5	0	0	0	(0)
CIRCUIT CARD ASSY (ESD)	112501-100	0	1	0	1	0	0	0	(0)
CIRCUIT CARD ASSY(ESD) LOGIC	113605-101	Unknown	4	0	4	0	0	0	(0)
DOOR ASSEMBLY	113627-100	Unknown	6	0	6	0	0	0	(0)
PANEL ASSY, CONTROL	113614-100	Unknown	2	0	2	0	0	0	(0)
PAPER TAKE-UP ASSEMBLY		Unknown	2	0	2	0	0	0	(0)
POWER SUPPLY ASSEMBLY		0	2	0	2	0	0	0	(0)
PRINTER, AUTOMATIC DATA PROCESSING	RD-593/U	1G3R9123	6	1	3	2	0	0	(0)
Totals			30	1	27	2	0	0	

Figure 8 - Units In-Shop Screen

The results are the same as previously described in Method 1 of 4 of this section. Please refer to this section to view examples of the results.

Method 3 of 4—Assigning A Status From Search Results

STEP 1 OF 2 - SEARCHING FOR A REPAIRABLE ITEM

DRILS provides the capability within its main menu area to locate repairable items within the shop by serial number, Exchangeables Production System (EPS) Document Number, ITN, or Job Control Number (JCN).

1. The **Search for** drop down list determines how DRILS will search the database. The default is to search for a serial number. Select the appropriate data type for your search.
2. Enter the appropriate data in the **text box** for the type you selected in step one. The figure below illustrates searching for an item by serial number.
3. Click the **Go** button or press the **Enter** key on your keyboard to initiate the search. DRILS will search the database for all matches and display the results. This could take several seconds depending on the search criteria.



Note: DRILS provides the capability to use wildcard characters to search for repairable items. The '%' character is the wildcard and it may be applied in the following ways:

- 07187% - finds all starting with '07187'
- %C19% - finds all that contain 'C19'
- %C1915 - finds all ending with 'C1915'

Search for Serial Nbr 3021 Go

Enter Serial Number of item and click on Go.

Figure 9 - Search For Function Available From The DRILS Main Menu

STEP 2 OF 2 - SELECT THE APPROPRIATE REPAIRABLE ITEM

The search results page is broken into two sections; (1) Matching Units Not Sold, and (2) Matching Units Sold. Any matches currently in the shop will be displayed in the **Matching Units Not Sold** section. Any matching units that are completed and no longer in the shop will be displayed in the **Matching Units Sold** section.



Note: Depending on the search criteria that you entered, DRILS may find one or more matches, particularly in the Matching Units Sold section where each time the matched item(s) were completed will be displayed.

Only matching items in the Matching Units Not Sold section may have their status changed to in work. Matches displayed in the Matching Units Sold section may only be viewed.

4. Locate the appropriate match in the Matching Units Not Sold section and click the Serial Number text.
5. A verification box will pop up to verify you want to place that item in-work or to take over that item from someone else that has it in work. See figures 15 and 16.

Search Results

Your search for Serial Number 3021 returned ...

Matching Units Not Sold

Advanced Search Tips

Description	Part Number	Serial Number	JCN	EPS Doc Number	Status	As of Date	History
PRINTER, AUTOMATIC DATA PROCESSING	RD-593/U	3021	031421006	0	AWM	28-Jul-03	<div style="display: flex; gap: 5px;"> <div style="background-color: #ccc; padding: 2px 5px; font-size: 0.7em;">PN</div> <div style="background-color: #ccc; padding: 2px 5px; font-size: 0.7em;">SN</div> <div style="background-color: #ccc; padding: 2px 5px; font-size: 0.7em;">SH</div> <div style="background-color: #ccc; padding: 2px 5px; font-size: 0.7em;">300</div> </div>

Matching Units Sold

Click on Serial Number of item to place in INW status.

Description	Part Number	Serial Number	JCN	EPS Doc Number	Status	As of Date	History
No Matching Serial Numbers Found.							

Figure 10 - Search Results Screen

Method 4 of 4—Assigning A Status From the Serial Number History Report

STEP 1 OF 2 - VIEW THE SERIAL NUMBER HISTORY REPORT

The Serial Number History Report provides a means to retrieve history on one or more serial numbered items using search criteria you define in the **Quick Find** form of the report.

1. To view the Serial Number History report, click on **Reports** from the DRILS main menu and then click on **Serial Number History**. The Serial Number History page is broken into several report criteria.
2. Click the **Find Part** button or press the **Enter** key on your keyboard to initiate the search. DRILS will use your report criteria to search the database and return a list of matching items.

Serial Number History

Quick Find
Enter One or More Fields

Part No:

NSN:

WUC:

Serial No:

Find Part

Enter the data that the report will be generated from. You may enter data in more than one field.

Figure 11 - Serial Number History

STEP 2 OF 2 - SELECT THE APPROPRIATE SERIAL NUMBER

Based on your search criteria, DRILS will display zero (0) or more matches in the search results section of the screen.

3. Locate the desired item and click on the serial number of the item in the **Serial No** column. DRILS will display the serial number history of the selected item.

Serial Number History

Quick Find
Enter One or More Fields
Part No:
NSN:
WUC:
Serial No: 3021

Select from the items below

Part No	NSN	WUC	Serial No
622-1275-001	5826010409798	71BA0	3021
681R366G01	1270010830398	74ACH	3021
758R570G01	1270012088409	74ANC	3021
762R353G01	5998012419554	74AQ4	3021
765R054G01	5841011826997	74A99	3021
765R487G01	1270012740548	74APA	3021
RD-593/U	7025014296898	BAAT0	3021

Click on the Serial Number of the item.

Figure 12 - Serial Number History

The serial number history report lists a summary of all inductions recorded in DRILS ranked in reverse chronological order. If an item is currently in the shop, its current status is displayed and the **Work Item** button is visible to authorized users who may change the status of the item to in-work.

4. To change the status of the item, click on the **Work Item** button.
5. A verification box will pop up to verify you want to place that item in-work or to take over that item from someone else who has it in work. See figures 15 and 16.

Serial Number History

Nomenclature		Part No	Serial No
PRINTER, AUTOMATIC DATA PROCESSING		110691-101	3021

Serial Number Summary

Ref. Des.	Description	Part Number Installed	Total	Replaced	Adjusted	Other
N/A	Disassemble & Barcode	N/A	1	0	0	1

Dates of Repair

Date Inducted	Date Complete	Part Nbr	JCN	ETI In	ETI Out	QDR	NFF	Shipped From	Repaired By
10-Apr-03	In-Shop - AWP Work Item <input type="button" value="Review"/>	110691-101	031001006	8557	0	No	No	0 ARM CE TOBYHANNA	0 TAD CE TOBYHANNA

AWP For	Power On Switch (O/O - 6-4-03); Mount Bearing PN: 110299 & Spacer Ring Percision PN: B8-04 (Both O/O 6-16-03 for Paper Tray)		
Discrepancy	Bad PS; No Power On Switch; Bad A4A3		
Failed Tests			
Corrective Action	Disassemble & Barcode		
Technician Notes	Needs Power On Switch		

Action	Qty	Ref. Des.	Description	Reason	Part Out	Serial Out	Part In	Serial In
Other	1	N/A	Disassemble & Barcode	N/A				

Figure 13 - Serial Number History Report Summary

RESULT

You will be prompted to verify that you want to place that serial number in-work (Fig 15) or that you want to take over an in-work item from another technician (Fig 16). Click the **OK** button to proceed. Click the **Cancel** button to abort changing the status of the item.

When you click **OK**, you will be returned to your home page and the item will be displayed within the Units You Have In-Work section.



Figure 14 - Place In Work Conformation

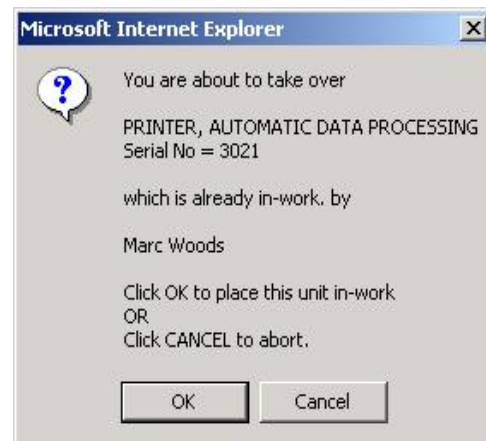


Figure 15 - Take Over In Work Conformation

RESULT (CONT.)

When you have confirmed that you wish to place an item in-work, DRILS will change the status of the item to in-work under your user name. You will be returned to your home page where the in-work item will be displayed in the Units You Have In Work section.



Note: DRILS allows you to change the status of multiple items to in-work. Each in-work item will appear in the Units You Have In- Work section of your home page.

Once you have one or more items in-work, you may begin documenting maintenance immediately or log out while you perform maintenance. DRILS will keep the items in-work even while you are logged out, until you explicitly change the status or DRILS automatically changes the status to awaiting maintenance (AWM) at a predetermined time of day (i.e. at the end of the shift).

When you are ready to document maintenance performed, click on the appropriate Serial Number text in the **Serial No** column of the Units You Have In Work section of your home page. You will be taken to the Maintenance Menu screen.

The screenshot shows the DRILS Technician Home Page. At the top is a blue header bar with the word "Technician" and a printer icon. Below this is a section titled "Units You Have In Work" in a blue bar. Underneath is a table with the following data:

Nomenclature	Part No	Serial No	Date In Work	Review
PRINTER, AUTOMATIC DATA PROCESSING	RD-593/U	3021	28/07/2003 10:50	Review

Below the table are several buttons: "My Units List ...", "Labels", "Change Password", and "My Goals Report". A callout bubble points to the "Serial No" column with the text "Click on Serial Number to go to Maintenance Menu".

Below the buttons is another table with the following data:

Shop	Part No	NSN	Noun	Total	AWP	SERV	Notes
TADMIL	RD-593/U	7025014296898	PRINTER, AUTOMATIC DATA PROCESSING	6	2	2	0

Figure 16 - Home Page With Units You Have In Work Section Displayed

Maintenance Menu

Documentation of maintenance actions begins at the Maintenance Menu screen. You may access the maintenance menu only after an item has been assigned an in-work status.

The upper part of the screen will give you basic identification information about the item that you are working. It also displays how long you have had the item in work, how many maintenance actions have been documented, and provides links to frequently used historical reports.

The lower portion of the screen is divided into three sections.

1. The left column lists commands that allow you to document maintenance several ways.
2. The middle column lists commands that allow you to out-process the item when maintenance is completed.
3. The right column lists command that allow you to defer maintenance of an item.

Maintenance Menu				
P/N: 8000284-921	Noun: Multifunction Display (MFD)	<div> ● S/N > twice the mean (1.41). ● S/N > mean but <= twice the mean. ● S/N <= mean. </div>		
S/N: 07187C1146	JCN: 013534400			
In-Work By	In-Work At	Time In-Work	Actions	History
Marc Woods	08-Aug-03 09:17	0 hrs 2 min	R/R = 1 Adj = 0 Other = 0	
<div> <div> Remove/Install a Part Adjust a Part Other Maintenance Repair Kits Issue Request </div> <div> Sell Serviceable (Repaired) Sell Serviceable (CND/RTOK) Unserviceable NRTS Condemned </div> <div> Send to AWM Send to AWP </div> </div>				

Figure 17 – Maintenance Menu

Remove and Install a Part

REMOVE/INSTALL A PART

You should already have an item in-work and be at the maintenance menu for the item you wish to document maintenance against.

1. Click the **Remove/Install a Part** button on the maintenance menu (see Figure 18). The Remove/Install a Part screen will be displayed.
2. Select a part from the **Description** drop down list (see Figure 19).
3. Select the appropriate part number being removed from **Part No Out** drop down list. Select "Missing" from the list if the part was missing from the item.
4. Enter the complete **Serial No Out** (if required), **CAGE Out**, and **Qty** for the part being removed. This information can be found on the labeling of the part.
5. Select an appropriate reason for removal from the **Removed For** drop down list.
6. Select an appropriate How Malfunction (**How Mal**) code from the drop down list. You may use the **Avionics** and **Physical/Mechanical** buttons to change the list of codes displayed. The codes may also be sorted by **Code** or **Alphabetically** by clicking the appropriate button.
7. Select the appropriate part number being installed from the **Part No In** drop down list. If the part is missing or the part will not be installed select the corresponding action from the Part No In drop down list.
8. Enter the complete **Serial No In** (if required), and **CAGE In** for the part being installed. This information can be found on the labeling of the part.
9. Click the **Save** button to save the information that you entered. Click the **Cancel** button to discard the information that you just entered.

Remove/Install a Part

P/N: RD-593/U Noun: PRINTER, AUTOMATIC DATA PROCESSING S/N: 3029 JCN: 030591003

Scan Remove: Install: Add

Description: A1, PANEL ASSY, CONTROL, 113614-100, 7050013456485

Part No Out: 113614-100 Part No In: Not Installed

Serial No Out: 1432 Serial No In:

CAGE Out: CAGE In:

Qty: 1

Removed For: Failure

Avionics Physical/Mechanical Sort by: Code Alphabetically

How Mal: 290 - Fails Diagnostic/Automatic Test

Cancel Save Go To:

Currently Documented Maintenance Actions

Edit	Action	Reference Symbol	Part Out	Serial Out	Part In	Serial In	Qty	Del
No records were found								

Figure 18 - Remove/Install a Part Screen

Edit a Removal Record

1. To edit a record, Click on the **Edit** button on the left side of the table (see Figure 20). This will load the form fields on Remove/Install a part screen with the data from the item you selected to edit. This will allow you to alter the previously entered data. The **Save** button will change to an **Update** button. Edit the data as necessary and click the **Update** button to save the edited data.
2. Clicking the “**Click Here to Install**” text within the **Part In** column (see Figure 20) has the same results as clicking the Edit button, but with the intent that you will complete the installed part information that includes Part No In, Serial No In, and CAGE in. Click the **Update** button to save the installed part data. Click the **Cancel** button to discard the installed part data.

Remove/Install a Part

P/N: RD-593/U Noun: PRINTER, AUTOMATIC DATA PROCESSING S/N: 3029 JCN: 030591003

Scan Remove: Install: Add

Description: == Select Reference Symbol ==

Part No Out: == Missing == Part No In: Not Installed

Serial No Out: Serial No In:

CAGE Out: CAGE In:

Qty: 1

Removed For: Failure

Avionics Physical/Mechanical Sort by: Code Alphabetically

How Mal: 290 - Fails Diagnostic/Automatic Test

Cancel Save Go To: == Select Link ==

Currently Documented Maintenance Actions

Edit	Action	Reference Symbol	Part Out	Serial Out	Part In	Serial In	Qty	Del
2011	R/R	A1, PANEL ASSY, CONTROL	113614-100	1432	Click Here to Install		1	

Figure 19 - Remove/Install Part Screen (Edit Mode)

Add a Part

STEP 1 OF 2 - ADDING A NEW PART TO THE CONFIGURATION

1. If the item that is to be removed and installed is not documented in the Description drop down box. Click on the **Add** button on the Remove/Install a Part Screen.



NOTE: You can reduce the amount of data entry required by selecting a similar part from the drop down list. For example, If the item that is to be removed and installed is listed in the drop down list, but with a different Reference Designator. Select the item from the list and click on the **ADD** button. The Add a New Item screen will be automatically populated with information that you can modify for the part you wish to add.

2. The top portion of the Add a New Item screen allows you to search the DRILS database for part information. Enter the **PartNo**, **NSN** or **Noun** of the part that you wish to add to the end item configuration.



NOTE: Use of “%” wildcard character is supported. For example, to find all parts whose part number begins with “MS122” you would enter “MS122%” in the PartNo field.

3. Click the **GO** button search the DRILS database for matches. Matching parts will appear in the drop down list adjacent to the **Copy It** button.

Add a New Item

Parts Lookup to Copy
 Enter One or More Fields

PartNo:
 NSN:
 Noun:

== Select ==

▼

Stock Number:	<input type="text"/>	(i.e. 1234011231234 (no dashes or spaces), 13 characters max)
Part Number:	<input type="text"/>	(25 characters max)
Nomenclature:	<input type="text"/>	(150 characters max)
WUC:	<input type="text" value="74K99"/>	(First three characters must be " 74K ")
Ref. Symbol:	<input type="text"/>	(20 characters max)
Adjust Allowed:	<input type="checkbox"/>	(Check if adjustment of components is allowed during testing)
Serial Numbered:	<input type="checkbox"/>	(Check if serial number is required)
Repairable:	<input type="checkbox"/>	(Check if item is repairable)

Cancel Data Entry

Add New Item
 Return to Previous Page

Figure 20 – Add a New Item Screen

4. Select the part from the drop down list adjacent to the **Copy It** button and click **Copy It**.

5. Clicking the **Copy It** button will copy the basic part information to the bottom portion of the Add a New Item screen.
6. If the part cannot be found to copy information from, all fields in the lower portion of the Add a New Item screen must be entered (see Figure 22).

STEP 2 OF 2 - ADDING A NEW PART TO THE CONFIGURATION

1. To validate the new entry:
 - a. Verify Stock Number, Part Number and Nomenclature.
 - b. Verify the Work Unit Code and update it if necessary.
 - c. Enter the Reference Designator for the part in the Ref. Symbol field. If an official Reference Designator does NOT exist in the T.O., you may assign an unofficial reference designator. DRILS will give special treatment to unofficial reference designators when they are prefaced with a carrot “^” character followed by a descriptive Reference Designator.
 - d. Check the **Adjust Allowed** checkbox if an item can be repaired by merely adjusting the part being added.
 - e. Check the Serial Numbered checkbox if the item is a serially controlled item.
 - f. Check the Repairable checkbox if the item is repairable. These are generally assemblies where repair is allowed within the shop. If the part is a throw away item or no repair is allowed, leave the checkbox unchecked.
2. Click **Add New Item - Return to Previous Page** button and the new part information will be added to the list of replaceable parts for the item you are working. Click the Cancel Data Entry button to discard the part information you have entered. Clicking either button will return you to the Remove/Install a Part screen.

Add a New Item

Parts Lookup to Copy
Enter One or More Fields

PartNo: MS122079 NSN: Noun: Go!

== Select == Copy It

Stock Number: 5325003684708 (i.e. 1234011231234 (no dashes or spaces), 13 characters max)

Part Number: MS122079 (25 characters max)

Nomenclature: Insert (150 characters max)

WUC: 74K99 (First three characters must be " 74K ")

Ref. Symbol: ^Insert (20 characters max)

Adjust Allowed: ☐ (Check if adjustment of components is allowed during testing)

Serial Numbered: ☐ (Check if serial number is required)

Repairable: ☐ (Check if item is repairable)

Cancel Data Entry Add New Item
Return to Previous Page

Figure 21 – Add a New Item Screen

3. The item that you just added will be selected from the **Description** drop down list and the **Part No Out** will be defaulted to the one that was entered (see Figure 23).

Remove/Install a Part

P/N: 110691-101 Noun: PRINTER, AUTOMATIC DATA PROCESSING ● S/N > twice the mean (1.45).

S/N: 3029 JCN: 030591003 ● S/N > mean but ≤ twice the mean.

● S/N ≤ mean.

Scan Remove: Install:

Description: ^INSERT, Insert, MS122079, 5325003684708 Add

Part No Out: MS122079 Part No In: Not Installed

Serial No Out: Serial No In:

CAGE Out: CAGE In:

Qty: 1

Removed For: Failure

☒ Avionics ☐ Physical/Mechanical Sort by ☒ Code ☐ Alphabetically

How Mal: 290 - Fails Diagnostic/Automatic Test

Cancel Save Go To: == Select Link ==

Figure 22 - Remove/Install a Part Screen with New Part Displayed

4. Continue to document Remove and Install maintenance actions. Refer to Remove and Install documentation (page 19).

Document Other Maintenance and Adjust a Part

ACCESS THE OTHER MAINTENANCE SCREEN

You should already have an item in-work and be at the maintenance menu for the item you wish to document maintenance against. The Adjust a Part and Other Maintenance screens function identically. The steps below illustrate how to document other maintenance.

1. Click the Other Maintenance button. The Other Maintenance screen is displayed.
2. Select the **Description** from the dropdown list describing the maintenance performed.
3. Click the **Save** button to complete the maintenance action. Click the Cancel button to discard the data you have entered on the screen.

Other Maintenance

P/N: 110691-101	Noun: PRINTER, AUTOMATIC DATA PROCESSING	<div style="color: red;">● - S/N > twice the mean (1.45).</div> <div style="color: orange;">● - S/N > mean but <= twice the mean.</div> <div style="color: green;">● - S/N <= mean.</div>
S/N: 3029	JCN: 030591003	

Description: == Add New Description == ▼

New Description:

Cancel
 Save
Go To: == Select Link == ▼

Currently Documented Maintenance Actions

Edit	Action	Reference Symbol	Part Out	Serial Out	Part In	Serial In	Qty	Del
EDIT	R/R	8-1-67, LAMP, INCANDESCENT	MS90451-6832		MS90451-6832		9	
EDIT	R/R	A2, CIRCUIT CARD ASSY(ESD) LOGIC	113605-101	1051	113605-101	0726	1	
EDIT	Adjust	Printhead,					1	
EDIT	Other	Bent Case,					1	

Figure 23 – Other Maintenance Screen

The “Other Maintenance” and “Adjust Part” screens display the documented maintenance actions the same way as the Remove/Install a Part screen. All documented actions are displayed in the “Currently Documented Maintenance Actions” Block and you can choose to edit any of them by clicking on the **Edit** button.

To add a new description of an Adjustment or Other Maintenance, select **Add New Description** from the **Description** drop-down list as shown in Figure 24. Enter the description of the maintenance action in the blank **New Description** text box and click the **Save** button.

THINGS TO REMEMBER WHEN MAKING NEW ENTRIES:

- Begin the entry with the “action” (Repair, Clean, Tighten, Resolder, etc) then identify the component or item on which the “action” was performed. For Example: Resolder U21, Straighten bent case lid, Tighten screws, Repair broken wires. You can enter words like “broken” or “bent” etc. to more clearly identify the action. The rule is keep it short – example “Straighten bent pin on P1 connector” should be entered simply as “Straighten P1 pin” (it wouldn’t need straightening if it wasn’t bent and we already know P1 is a connector). Also, these are not sentences so they do not need periods at the end!!

Examples: Resolder U21; Straighten bent Case Lid; Tighten screws; Repair wires; Hardwire J1-23 to U2-16; Tighten IFF Knob.

- Avoid redundant entries such as “Clean P1 connector” This is redundant because we already know P1 is a connector because of its Reference Symbol. This would simply be “Clean P1”.
- For Adjustments other than reseating a card, all that is needed is the Reference Symbol (R12, C3, R88, etc.) Card reseating is an Adjustment as defined by T.O. 00-20-2 and is entered as Reseat A1, Reseat A2, etc. Other than reseating a card or a connector pin, all “Adjustments” are electrical; mechanical adjustments are documented as Other Maintenance (Align knob, Adjust spring tension, etc.).

Defer Maintenance of an Item

ASSIGN AN AWM STATUS TO AN ITEM

You should already have an item in-work and be at the maintenance menu for the item you wish to defer maintenance.

1. On the Maintenance Menu, click on **Send to AWM**. The “AWM – Update Maintenance Performed” screen will be displayed (see Figure 25).
2. Enter the appropriate data into the **Failed Test Number(s)** block. This is an optional data entry field.
3. Enter the maintenance actions that were performed into the **Corrective Action(s)** block. You may click the **Auto Fill** button to have DRILS fill in the maintenance actions automatically based on what has been documented. This is an optional data entry field.
4. Enter important notes about this item in the **Notes** block. This is an optional data entry field.
5. Verify the **Start Date/Time** when you assigned the in-work status and the **Stop Date/Time** when you completed work. Adjust these values as required with the associated drop-down lists.
6. Select the appropriate How Malfunction (**How Mal**) code from the drop-down list. A default value is automatically selected by DRILS that may be changed when appropriate.
7. Select the appropriate **Action Taken** code from the drop-down list. DRILS will select a default value automatically. You may change this selection when appropriate.
8. You may optionally select a **Special Processing** identifier from the drop-down list (Science Project, Engineering Eval, Software Resolution).
9. Click the **Send To AWM** button when complete, your inputs will be saved and the status will be changed (you will be returned to your home page). Click the Cancel button to discard the data you have entered on the screen and return to the maintenance menu.

AWM - Update Maintenance Performed			
P/N: 8000284-940	Noun: Multifunction Display (MFD) - NVIS	<div> <div></div> S/N > twice the mean (1.22). <div></div> S/N > mean but <= twice the mean. <div></div> S/N <= mean. </div>	
S/N: 5545	JCN: 023390354		
Failed Test Number(s): <input type="text"/>			
Corrective Action(s): <input type="text" value="R/R-A7"/> <input type="button" value="Auto Fill"/>			
Notes: <input type="text" value="waiting for nvis tube, A3 card, already replaced the bezel"/>			
Start Date/Time: Aug / 5 / 2003 @ 12 : 29			
Stop Date/Time: Aug / 5 / 2003 @ 12 : 31			
<input checked="" type="radio"/> Avionics <input type="radio"/> Physical/Mechanical Sort by: <input checked="" type="radio"/> Code <input type="radio"/> Alphabetically			
How Mal: 290 - Fails Diagnostic/Automatic Test			
Action Taken: F - Repair			
Units Completed: 0 Crew Size: 1 Special Processing: None			
<input type="button" value="Cancel"/> <input type="button" value="Send To AWM"/>			

Figure 24 – AWM - Update maintenance Performed Screen

ASSIGN AN AWP STATUS TO AN ITEM

You should already have an item in-work and be at the maintenance menu for the item you wish to defer maintenance.

1. Click the **Send to AWP** button on the Maintenance Menu. You will be taken to the AWP – Update Maintenance Performed Screen (see Figure 26).
2. Assigning an AWP status to an item is the same as assigning it an AWM status except that you will be taken to one additional screen. Please refer to the data entry instructions found in *Assigning An AWM Status To An Item* when completing this screen.

AWP - Update Maintenance Performed

P/N: 8000284-940	Noun: Multifunction Display (MFD) - NVIS	● - S/N > twice the mean (1.22). ● - S/N > mean but <= twice the mean. ● - S/N <= mean.
S/N: 5545	JCN: 023390354	

Failed Test Number(s):

Corrective Action(s):

Notes:

Start Date/Time: Aug / 5 / 2003 @ 12 : 32

Stop Date/Time: Aug / 5 / 2003 @ 12 : 32

☒ Avionics
 ☐ Physical/Mechanical
 Sort by: ☒ Code ☐ Alphabetically

How Mal: 290 - Fails Diagnostic/Automatic Test

Action Taken: A - Bench Checked - Repaired

Units Completed: **Crew Size:**

Figure 25 – AWP Screen

3. Click on the **Send to AWP** button. You will be taken to the AWP Unit screen (see Figure 27) where the reason this item is going AWP will be input. Click the **Cancel** button to discard the data that you entered on this screen and return to the maintenance menu.

AWP Unit		
Nomenclature	Part No	Serial No
Multifunction Display (MFD) - NVIS	8000284-940	5545

Awaiting parts : waiting for nvis tube A3card, already replaced the bezel

Auto Fill

Cancel Update AWP Info

Figure 26 - Awaiting Parts screen

4. If parts have been removed and not installed you can click on **Auto Fill** to automatically fill in the Awaiting parts text box with that information. You can also type in the reason this item is going AWP.
5. Click on **Update AWP Info** and your inputs will be saved, the status will be changed and you will be returned to your home page. Click the **Cancel** button to discard the data that you entered on the screen and return to the AWP – Update Maintenance Performed screen.

Out-process an End Item

SELL ITEM

To Sell an Item, whether it is Serviceable (repaired or CND/NFF), Unserviceable, NRTS, or Condemned, highlight and click the appropriate button on the Maintenance Menu. You will go to the “SELL – Final Documentation” page or you may get a error message (see Common Out Processing Error Messages on page 32).

You should already have an item in-work and be at the maintenance menu for the item you wish to out process.

1. Click the appropriate Sell button from the middle column of the maintenance menu.
 - a. Sell Serviceable (Repaired) – Click this button if you have **performed repairs** to the item to return it to a serviceable condition.
 - b. Sell Serviceable (CND/RTOK) – Click this button if you troubleshooted the item and **Could Not Duplicate** (CND) the fault reported.
 - c. Unserviceable – Click this button if you are returning the item in an unserviceable condition. For example, The item failed a Quality Deficiency Report (QDR) check and test and it is being returned to the warehouse for a future repair induction.
 - d. NRTS – Click this button if the item is Not Repairable This Station (NRTS) and must be shipped to another repair location where the repair will be completed. For example, the repairs needed exceeds the repair capability of your shop and must be shipped to the manufacturer.
 - e. Condemned – Click this button if the item cannot be repaired and condemnation has been approved by the appropriate manager.
2. Enter the appropriate data into the **Failed Test Number(s)** block. This is an optional data entry field.
3. Enter the maintenance actions that were performed into the **Corrective Action(s)** block. You may click the **Auto Fill** button to have DRILS fill in the maintenance actions automatically based on what has been documented.
4. Enter important notes about this item in the **Notes** block. This is an optional data entry field.
5. Select the appropriate How Malfunction (**How Mal**) code from the drop-down list. A default value is automatically selected by DRILS that may be changed when appropriate.

6. Select the appropriate **Action Taken** code from the drop-down list. DRILS will select a default value automatically. You may change this selection when appropriate.
7. Verify the **Start Date/Time** when you assigned the in-work status and the **Stop Date/Time** when you completed work. Adjust these values as required with the associated drop-down lists.
8. Enter the Elapsed Time Indicator (**ETI**) meter reading (if available).
9. Click the **Sell (condition) Unit** button when complete (you will be returned to your home page). Click the **Cancel** button to discard the data that you have entered on the screen.

SELL - Final Documentation

P/N: 8000284-921	Noun: Multifunction Display (MFD)	● - S/N > twice the mean [1.41]. ● - S/N > mean but <= twice the mean. ● - S/N <= mean.
S/N: 07187C1146	JCN: 013534400	

Failed Test Number(s): Fail T/N 4 CRT would not stay in focus.

Corrective Action(s): R/R-A1 Auto Fill

Notes:

☒ Avionics
 ☐ Physical/Mechanical
 Sort by: ☒ Code ☐ Alphabetically

How Mal: 290 - Fails Diagnostic/Automatic Test

Action Taken: A - Bench Checked - Repaired

Start Date: Aug / 8 / 2003 **Time:** 09 / 17 **Hrs.**
Out Process Date: Aug / 8 / 2003 **Time:** 09 / 20 **Hrs.**

Track Item: ☐ Yes ☒ No
 Units Completed: 1 **Crew Size:** 1

Cancel
Sell Serviceable Unit
Out Process & View 349

Figure 27 - Sell Final Documentation

Common Out Processing Messages

You must install the missing parts before you can sell this item

You will receive this error message (See Figure 29) if you are trying to sell an item Serviceable with parts removed but not installed. You must document installation of all parts before the item can be sold. Refer to Remove and Install Parts.



Figure 28 - Error Missing Parts

T H E R E A R E N O R E P A I R A C T I O N S R E C O R D E D

You will receive the confirmation message (see Figure 30) if you are trying to sell an item serviceable and zero (0) maintenance actions have been documented. If you performed no maintenance on the item then click **OK** to sell the item as a cannot duplicate (CND/RTOK/NFF). If you performed maintenance, but have not documented it, click the **Cancel** button to return to the maintenance menu and document the maintenance performed. Refer to Remove and Install a Part and Other Maintenance/Adjust a Part sections of this guide for instructions.



Figure 29 - Error No Repair Action

ARE YOU SURE YOU WANT TO CND THE ITEM?

You will receive this confirmation message (see Figure 31) if you are trying to sell an item serviceable (CND/RTOK/NFF) and you have documented maintenance in DRILS. If the item is truly a CND/RTOK/NFF and the documented maintenance is correct, click the **OK** button to document the item as a CND/RTOK/NFF. If the documented maintenance is incorrect, click the **Cancel** button to return to the Maintenance Menu and correct the documented maintenance. Refer to Remove and Install a Part, Other Maintenance/Adjust a Part sections of this guide for instructions.



Figure 30 - Error CND with repairs documented