

**RAMCO AVIATION SOLUTION
VERSION 5.9**

USER GUIDE

REPAIR ORDER MANAGEMENT

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The documentation has been provided for the entire Aviation solution, although only a part of the entire solution may be deployed at the customer site, in accordance with the license agreement between the customer and **Ramco Systems Limited**. Therefore, the documentation made available to the customer may refer to features that are not present in the solution purchased / deployed at the customer site.

ABOUT THIS MANUAL

This manual briefly describes the basic processes and functions in Ramco Aviation Solution.

WHO SHOULD READ THIS MANUAL

This manual is intended for users who are managing the Aviation industry processes and are new to Ramco Aviation Solution.

This manual assumes that the user is familiar with the Aviation Industry nomenclatures and systems based soft

HOW TO USE THIS MANUAL

Ramco Aviation Solution provides extensive Online Help that contains detailed instructions on how to use the application. Users are suggested to use this manual for specific references, along with the Online Help. This manual contains enough information to help the users perform the basic tasks and points toward the Online Help for more detailed information.

HOW THIS MANUAL IS ORGANIZED


The User Guide is divided into 3 chapters and index. Given below is a brief run-through of what each chapter consists of.

Chapter 1 provides an overview of the entire **Repair Order Management** business process. The sub processes are explained in the remaining chapters.

Chapter 2 focuses on the **Repair Order Administration** sub process.

The **Index** offers a quick reference to selected words used in the manual.

DOCUMENT CONVENTIONS

- The data entry has been explained taking into account the “Create” business activity. Specific references (if any) to any other business activity such as “Modify” and “View” are given as “Note” at the appropriate places.
- **Boldface** is used to denote commands and user interface labels.
Example: Enter **Company Code** and click the **Get Details** pushbutton.
- Italics used for references.
Example: *See Figure 1.1.*
- The  icon is used for Notes, to convey additional information.

REFERENCE DOCUMENTATION

This User Guide is part of the documentation set that comes with Ramco Aviation Solution.

The documentation is generally provided in two forms:

- The Documentation CD in Adobe® Systems’ Portable Document Format (PDF).
- Context-sensitive Online Help information accessible from the application screens.

WHOM TO CONTACT FOR QUERIES

Please locate the nearest office for your geographical area from www.ramco.com for assistance.

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1. INTRODUCTION

The lack of adequate in-house capability or capacity necessitates the execution of maintenance of a component by outside agencies. The Repair Order Management business process administers the repair orders for availing maintenance services for aircraft components from external repair agencies. The **Repair Order Management** business process comprises the following sub processes.

The **Repair Order Administration** sub process deals with the creation of repair orders and sending the components for repair to external agencies.

The **Repair Order Hub** sub process deals with the visibility of Repair Orders in different statuses grouped by their statuses and exceptions.

2. REPAIR ORDER ADMINISTRATION

Repairs constitute an important part of an Airline Operator's day-to-day operations. Quality repairs not only ensure the safety of the passengers during flight, their timely return ensures that there is as little down time as possible, thus enhancing the dispatch reliability of the aircraft.

Repairs are performed on a single component or multiple parts / components / facilities when,

- ▶ The object(s) fails (unscheduled repair)
- ▶ A routine shop visit is due (scheduled)
- ▶ It is time for a bench check
- ▶ The object(s) needs to be recalibrated
- ▶ An Engineering Order is due (Service Bulletin or Directive)

When a component is due for a repair, it is identified whether the same is covered by warranty or not. The component maintenance planner or the warranty administrator (if the component is covered by warranty) ascertains the work scope of the repair and also checks the availability of service or capability for carrying out the repair in-house. Components are sent to a repair shop, under the following circumstances:

- ▶ when the in-house repair shop does not possess the required facility
- ▶ when the in-house repair shop has a capacity constraint
- ▶ when the external repair shop can perform it at a lower cost.

A repair order is raised when the component is sent to a repair shop. It is raised based on the repair shop's capability to meet the repair requirements.

A repair order document traverses through the following stages:

Raise repair order

The component maintenance planner raises a repair order to meet the repair requirements. The repair order contains a list of defects in the objects and the work that must be performed on it to rectify the defects. The other necessary information such as the component / part history, warranty details, the expected date of return of the component is also available in the repair order. The status of the repair order on creation is set to **"Fresh"** if all the mandatory information is entered on the repair order, or **"Draft"** if the mandatory information is not yet entered.

Release Repair order

On releasing a repair order, a notification is sent to stores that the component must be shipped for repair to the repair shop. The status of the repair order on release changes to **"Released"**. However, if the Quote Generation Basis attribute of the repair order is **"Automatic"**, the Status can become **"Quoted"**, **"Confirmed"** or **"Authorized"**.

Subsequent to the release of parts for shipping, the Stock Issue for a repair order is generated automatically in **"Fresh"** status and a MMD is created.

Acknowledgement of the repair order

The repair shop acknowledges the details of the components that are received for repair. The status of the repair order on acknowledgement changes to **"Acknowledged"** only if its earlier status is **"Shipped"**. However, the status of the repair order remains unchanged, if the current status is **"Quoted"**, **"Confirmed"** or **"Authorized"**.

Raise quotation

The repair shop quotes for the intended repair and estimates the cost of repair. However, if it is a standard job of overhaul and/or embodiment of the Airline Directive or Service Bulletin, this can be quoted as standard cost of overhaul. However, the repair shop can still report additional cost, over and above standard cost of overhaul, upon findings (Strip Report). The status of the repair order changes to **"Quoted"**.

Automatic Generation of quotation

The system can automatically generate the quotation for a repair order comprising contracted as well as non-contracted parts. This happens when the **"Quote Generation Basis"** attribute of the repair order is set to **"Automatic"**. In such a scenario, the Status of the repair order would become **"Quoted"**, **"Confirmed"** or **"Authorized"** after it is released for shipping based on certain conditions.

Confirmation of the repair order

The planner receives and confirms the repair shop's quotation. The repair quote raised by the repair shop is approved, either for repair or for discarding the item under BER. At this instance, the work scope and the parameters are finalized for the repair order. The status of the repair order changes to **"Confirmed"**.

Authorize the repair order

The repair order document goes through a multi-level authorization process. The repair shop can commence the repair work on the component / part only when the repair order has been authorized. The status of the repair order, upon authorization, changes to **“Authorized”**. If it has been decided that the repairs on the component/part is not economical (BER) and instead can be salvaged by the repair shop, the status of the repair order changes to **“BER Closed”**. But if the operator performs the salvage action, which implies that the component / part can be returned to the operator, the status of the repair order changes to **Authorized** only.

Amend the repair order

Any modifications to the repair order, after it has been confirmed or authorized, can only be done through the process of amendment. The status of the repair order changes to **“Amended”**. An amended repair order needs to be confirmed and authorized for repair work to be taken up based on it.

Goods received after repair

A repair receipt is raised once the goods are received after repair. The goods are inspected and moved into the warehouse. The repair order is then closed and the status of the repair order changes to **“Closed”**. See Figure 2.1.

The following diagram depicts the various statuses of a repair order:

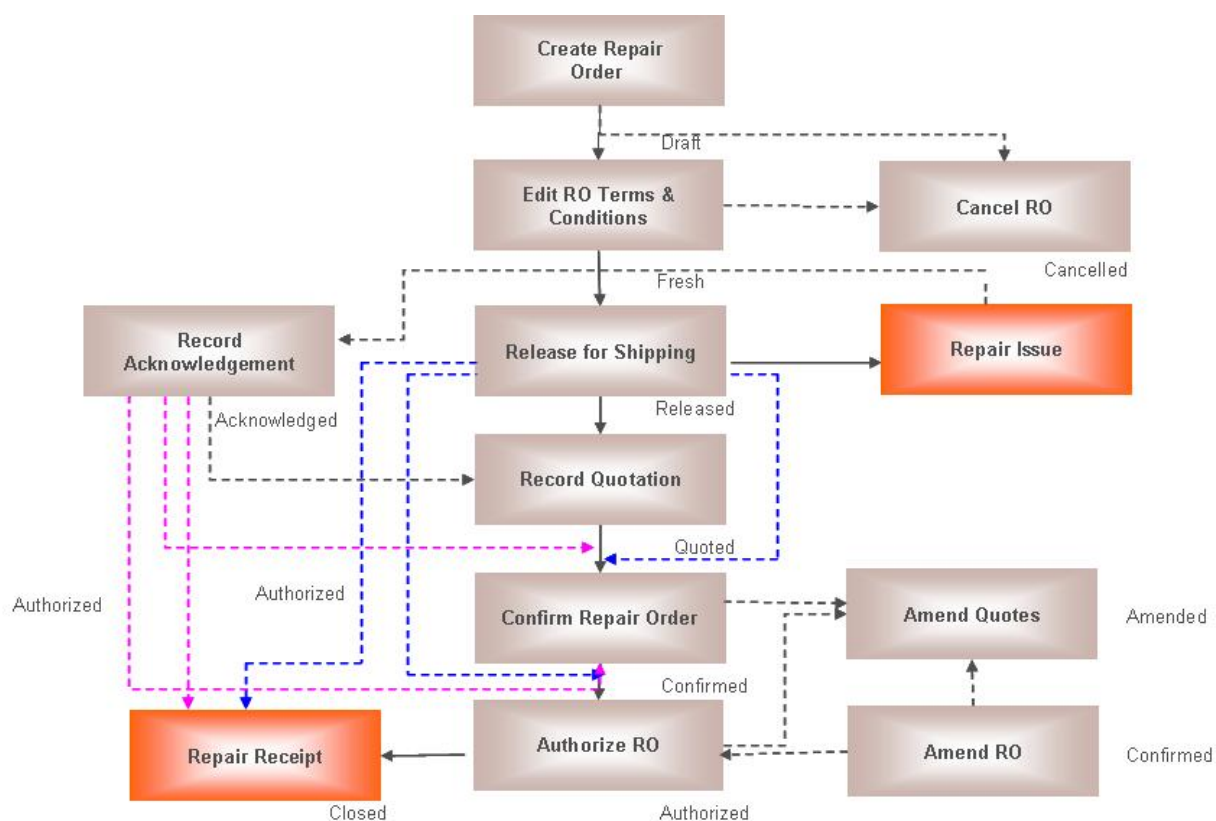


Figure 2.1 Repair Order Statuses

2.1 RAISING A REPAIR ORDER

You can capture the basic information required to manufacture a part, like 'Lead Time', 'Mfr. Valuation Method' (Stock Valuation), 'Default Work Center', etc. Certificate details required to be issued for the finished parts can also be defined in this page. You are required to define the Source of the part as "Make" in the **Maintain Planning Information** page of the **Part Administration** business component.

2.1.1 SETTING OPTIONS

1. Select **Set Options** under the **Repair Order** business component. The **Set Options** page appears. See *Figure 2.2*.

Set Options

Date Format: yyyy-dd-mm

Field	Value
Default Repair Agency in Repair Order	Yes
Acknowledgement of Order	Non Mandatory
Part-Repair Process Code mapped to Supplier	Non Mandatory
Repair Order only on Unserviceable parts	No
Component in Warehouse Check	Enforce
Spares Supplied By	Both
Spares Shipping	With Core Only
Return to Location different from Issue Location	Allowed
Default Insured Value in Repair Order	Standard Cost
Retrieval of Related Tasks in Repair Order	Required
Default Repair Process Code for Perpetual Tasks	Repair

Record Statistics

Created by: MKESAVAN
Last Modified by: DMUSER

Created Date: 2011-07-11
Last Modified Date: 2016-06-04

Figure 2.2 Setting repair order options

2. Select the **Repair Options** tab. See *Figure 2.2*.

In the multiline, enter the following,

3. Use the **Default Repair Agency in Repair Order** field, to indicate whether the **Repair Shop #** field in the **Create Repair Order** page must display the preferred repair agency for the part, by default. Select "Yes", to display value in the **Repair Shop #** field in the **Create Repair Order** page. Select "No", if you do not want to display the preferred repair agency on launch of the page.
4. Set the **Acknowledgement of Order** field as "Mandatory" or "Non Mandatory".
5. Set the **Part-Repair Process Code mapped to Supplier** field to:
 - "Mandatory", if the part repair process code must be mapped to the supplier for creating a RO.
 - "Mandatory for Selective Suppliers, if the part repair process code must be mapped only to the selective suppliers
 - "Non Mandatory", if the part repair process code need not be mapped to the supplier.
6. Set the **Repair Order only on Unserviceable Parts** field as "Yes" to allow the repair order only on unserviceable parts. Select "No" otherwise.
7. Set the **Component in Warehouse Check** field to "Enforce" or "Do Not Enforce".
8. Set the **Spares Supplied By** field as "Operator", "Repair Shop" or "Both".
9. Set the **Spares Shipping** field to "Separate" to indicate that the spares are to be shipped separately. Select "With Core Only" if the spares are to be shipped only with the core part.
10. Set the **Return to Location different from Issue Location** field as "Allowed" to allow the return of part to a location different from issues location.
11. Set the **Default Insured Value in Repair Order** field to "Not Required", "Standard Cost" or "Standard Purchase Price".

12. Set the **Retrieval of Related Tasks in Repair Order** field to “Required” to retrieve the related tasks in the repair order.
13. Select the **Default Repair Process Code for Perpetual Tasks** from the list of repair process code.

Recording quotation and quotation and authorization parameters

1. Select the **Quotation and Authorization Options** tab. See Figure 2.3.

The screenshot displays the 'Set Options' window with the 'Quotation and Authorization Options' tab active. The configuration fields are as follows:

Field	Value
Quote Generation Basis	Manual
RO Status for non-contracted parts	Not Applicable
Under Warranty Repairs	Manual Quote
Quotation Type Allowed for Invoicing	Firm
Allow Cost Amendment for RO	Yes
Component List Price	Standard Cost
Auto Authorization Limit (%)	50.00
Max. Allowable Repair Cost (%)	50.00

At the bottom of the window, the 'Set Options' button is visible. The footer section includes 'Record Statistics', 'Created by MKESAVAN', 'Last Modified by DMUSER', 'Created Date 2011-07-11', and 'Last Modified Date 2016-06-04'.

Figure 2.3 Setting quotation and authorization options

In the multiline, specify the following,

2. Use the **Quote Generation Basis** drop-down list box to select the basis for generating quotes for repair orders. The list box displays the following options: Manual, Automatic only for Contracted Parts and Automatic for all parts.
3. Use the **RO Status** for non-contracted parts drop-down list box to select the status of repair orders for non-contracted parts for which the system automatically generates quotations.
4. Select the **Under Warranty Repairs** to generate under warranty repairs “Manual Quote” or “Auto Quote and Authorize”.
5. Use the **Quotation Type** Allowed for Invoicing drop down list box to select the quotation type that is allowed for invoicing as “Firm” or “Firm & Estimate”.
6. Select the **Allow Cost Amend for PO** for amending the cost for RO as “Yes” or “No”.
7. Set the **Component List Price** field as “Enterable” or “Standard Cost”.
8. Enter the **Auto-Authorization Limit (%)** field to specify the limit for automatic authorization.
9. Enter the **Max. Allowable Repair Cost (%)**.

Recording numbering and work scope parameters

1. Select the **Numbering and Workscope Options** tab. See *Figure 2.4*.

Set Options

Date Format: yyyy-dd-mm

Repair Options | Quotation and Authorization Options | **Numbering and Work Scope Options**

Default Numbering Type for Auto Repair Order: AFRO

Default Num. Type for Auto Warranty RO: AFRO

Default Numbering Type for Discrepancies: ROD

Work Unit Addition: Allowed

Delete Defaulted Work Unit: Allowed

Addition of Non Routine Task: Allowed

Set Options

Record Statistics

Created by: MKESAVAN
Last Modified by: DMUSER

Created Date: 2011-07-11
Last Modified Date: 2016-06-04

Figure 2.4 Setting numbering and work scope options

2. Select **Default Numbering Type For Auto Repair Order** to specify the default numbering type for repair orders generated automatically.
3. Select **Default Numbering Type For Auto Warranty Repair Order** to specify the default numbering type for warranty repair orders generated automatically.
4. Select the **Default Numbering Type For Discrepancies**.
5. Set the **Work Unit Addition** field as “Allowed” to allow the addition of work units. Select “Not Allowed” otherwise.
6. Set the **Delete Defaulted Work Unit** field as “Allowed” to allow the deletion of default work units. Select “Not Allowed” otherwise.
7. Set the **Addition of Non Routine Task** field as “Allowed” to allow the addition of non-routine task. Select “Not Allowed” otherwise.
8. Select the **Set Options** pushbutton.

2.1.2 CREATING A REPAIR ORDER FOR A SINGLE COMPONENT

1. Select **Create Repair Order** under the **Repair Order** business component. The **Select Component** page appears.
2. Enter the **Part #** and **Serial #** or the **Component #** in **Direct Entry** and select the **Create RO** link provided alongside.

Or

3. Use the **Search Criteria** to search for a part for which repair order must be raised. Click the hyperlinked **Component #** in the multiline. The **Create Repair Order** page appears. See *Figure 2.5*.

2.1.3 CREATING A REPAIR ORDER FOR MULTIPLE PARTS / FACILITY OBJECTS

1. Select **Create Repair Order for Piece Parts / Facilities** under the **Repair Order** business component. The **Select Piece Parts / Facilities** page appears.
2. Use the **Search Criteria** to search for a part / facility object for which repair order must be raised. Select the required record in the multiline and click the **Create RO** link. The **Create Repair Order** page appears. See *Figure 2.5*.

Figure 2.5 Creating repair order

3. Select the **Numbering Type** by which the repair orders created must be numbered.

Note: For details on creating numbering types, refer to the section "Defining numbering types for transactions" in the "Inventory Setup" User Guide.

You can set a default numbering type in the Set Options activity, to specify the manner in which the repair orders that are generated automatically from the Component Maintenance Planning business component, must be numbered.

4. Select the type of the repair order in the **RO Type** field. The repair order can be of type "Normal" or "Exchange".

5. Select the expense type of the repair order, in the **Expense Type** drop-down list box.

6. Enter the identification number of the CAPEX proposal for the repair order, in the **CAPEX Proposal #** field.

Note: If CIM exists with Repair Order and Asset Planning components and, the Expense Type is Capital, the CAPEX Proposal # becomes mandatory.

Note: Ensure that the CAPEX Proposal you specify is active on the date of repair order creation.


7. Enter the number identifying the shop where the component must be repaired, in the **Repair Shop #** field.

8. Enter the **Address ID** of the contact person of the supplier. On click of enter, if the Entered Address ID is valid, the system defaults the Address, Contact Person, Phone #, email and Fax corresponding to the Address ID defined in the "Edit Contact information" screen of the "Supplier" business component for the Corresponding Supplier -Contact Person combination.


9. Enter the person to be contacted in the repair shop, in the **Contact Person** field.

10. Select the **EDI Required?** drop-down list box to specify whether the EDI capabilities in Repair Order are required or not.

11. Select the priority to be assigned to the repair order, in the **Priority** drop-down list box.

 *Note: If the priority is set to "AOG" (Aircraft on Ground) then specify the registration number of the aircraft in the For Aircraft Reg # field.*

12. Select the shop job type of the repair order, in the **Shop Job Type** drop-down list box.

 *Note: (1) If the 'Create RO' page is accessed from the "Select Component" page, the system defaults the above field to Component. (2) Similarly, the shop job type becomes Piece Part, if the "Create RO" page is opened from the "Select Piece Part / Facility Objects" page.*

13. Select the currency in which you must pay the repair cost, in the **Currency** drop-down list box.

14. Enter the date by which the component / part is expected to be shipped, in the **Repair Shop Shipping Date** field.


15. Select the category to which the repair order belongs in the **RO Category** drop-down list box.


16. Enter the identification number of the warehouse from where the component is issued for repair, in the **From Warehouse #** field.

17. Select the location to which the component / part must be returned after repair, in the **Return to Location** drop-down list box.

18. Enter the code identifying the warehouse to which the component must be returned after repair, in the **Return Warehouse** field.

19. Select the type of change allowed on the returned component / part, after the repair is performed, in the **Core Return Option** drop-down list box. The system provides the options, "P/N Change Allowed", "S/N Change Allowed", "P/N and S/N Change Allowed" and "No Change Allowed".

 *Note: No Change Allowed, P/N & S/N Change Allowed, P/N Change Allowed and, S/N Change Allowed are available, if you have selected Component or Piece Part in the Shop Job Type field and RO Type is selected as Exchange.*

 *No Change Allowed is available, if Facility is specified as the Shop Job Type and the RO Type is selected as Normal.*

 *If "RO Type" is "Exchange", the system displays "S/N Change Allowed" is the only available option. For RO Type "Normal" and Shop Job Type "Facility, the system provides you with only one option – "No Change Allowed".*

20. Set the Spares field to "Shipped" or "Not Shipped" to specify whether spares are shipped along with the component / part or not.

21. Select the type of the reference document, in the **Ref. Doc Type** drop-down list box.

22. Enter the number identifying the reference document in the **Ref. Document #** field.

 *Note: This field can be entered only if the reference document type is selected.*

23. Enter the **Work Center #**, that must execute the repair order. The system displays the primary work center defined for the reference document, if the reference document type is "Shop Work Order".

24. Use the drop-down list box to indicate the **Quote Generation Basis** for generating the quotation for the repair order. By default, the drop-down list displays "Manual", if you have set the **Quote Generation Basis** as "Manual" in the "Set Options" activity. However, if you have set the **Quote Generation Basis** as "Automatic only for Contracted Parts" or "Automatic for all Parts" in the "Set Options" activity, this field offers options: "Manual" and "Automatic".

 *Note: The quote generation basis you specify in this page overrides the quote generation basis you have set in the Set Options activity.*

25. In the **Customer Information** group box, enter the identification number of the customer order, in the **Customer Order #** field.

26. Select the [Maint. Object & Work Scope Details](#) tab to specify maintenance object and workscope details.

27. Select the [Part & Warranty Details](#) tab to specify the part and warranty details.

28. Click the **Create RO** pushbutton.

For further details,

- ▶ Select the **Edit Terms and Conditions** link to add terms and conditions for carrying out the repair.
- ▶ Select the **Edit User Defined Details** link to enter the user defined details for the repair order.
- ▶ Select the **Edit Discrepancies** link to enter the discrepancies reported.
- ▶ Select the **Edit Repair Order** link to modify the repair order details.
- ▶ Select the **View Repair Instructions** link at the bottom of the page to view the repair instructions applicable for the Part-Serial/Lot.
- ▶ Select the **Upload Documents** link at the bottom of the page to upload the documents.
- ▶ Select the **Generate RO Report** link to generate the Repair Order Report.
- ▶ Select the **Attach Clause** link to attach clauses to Purchase Order/Repair Order.
- ▶ Select the **View Discrepancies** link to view the discrepancies reported.
- ▶ Select the **View Repair Cost History** link to view the cost information of the previous repairs done for the part.
- ▶ Select the **View Parameter Information** link to view parameter information.
- ▶ Select the **View Warehouse Planning Parameter** link to know the storage and transit details of the warehouse, which receives parts after repair.
- ▶ Select the **View Parts Under Repair** link to know the total quantity of the specific piece part/facility/component in the repair process.
- ▶ Select the **View Associated Doc. Attachments** link at the bottom of the page to view associated document attachments.
- ▶ Select the **View Repair Instructions** link at the bottom of the page to view the Repair Instructions applicable for a Part-Serial/Lot.

Recording part and work scope details

1. Select the **Maint. Object & Work Scope Details** tab. See Figure 2.5. The **Maint. Object Details** and **Workscope Details** tabs appears.

Recording Maint. Object Details

This tab enables the user to save the Maint. Objects in the Repair Order at first.

2. In the **Maint. Object Details** multiline; enter the identification number of the part for repair, in the **Part #** field.
3. Enter the number of parts that need repairs, in the **Quantity** field.
4. Enter the serial number of the part, in the **Serial #** field.
5. Enter the **Lot #** and **Manufacturer Lot #** of the part.
6. Enter the user-defined stock status of the part, in the **Stock Status** drop-down list box.
7. **Repair Inst.** indicates availability of any repair instructions defined for the Part / Part-Serial/Lot # combination, in the Notes link available in “Reliability Dashboard” and “Manage Engineering Document” screens. Click the icon to view the repair instructions.
8. Enter the estimated cost of the part / parts, in the **Total Cost** field.
9. Elaborate on the repair job to be executed on the part, specific to the serial #, in the **Work Requested** field.
10. Enter your observations or additional information on the repair order, in the **Remarks** field.

Recording Workscope Details

This tab enables the user to provide Workscope for specific Maint. Object Line #s.

11. In the **Work Scope** multiline, select the repair process that must be carried out on the part, in the **Repair Process Code** drop-down list box.
12. Select the type of maintenance to be performed on the component / part, in the **Maintenance Type** drop-down list box.

13. Enter the work unit to be performed on the component, in the **Work Unit #** field, and select the type of the work unit in the **Work Unit Type** drop-down list box.

*Note: You can add new work units only if the “Work Unit Addition” option is set to “Allowed” in the **Set Options** business activity. Also, the system allows you to delete the work units that are retrieved by default, only if the “Delete Defaulted Work Unit” option is set to “Allowed”.*
14. Enter the **Part#** and the **Serial #** on which the work has to be performed.
15. Enter your observations or additional information relating to the creation of the repair order in the **Comments** field.
16. Click the **Print Task Card** pushbutton to print the task card details

Recording part warranty details

1. Select the **Part & Warranty Details** tab. See Figure 2.6

Note: If more than one record exists in the “Maint. Object Details” multiline, the “Part #” field displays ‘Multiple’ and the rest of the fields display no value in the Part Details group box. Alternatively, if only one part specified for repair, the below-mentioned details are shown.
2. In the **Part Details** group box, select the operator of the aircraft, in the **Owned By** field.
3. Elaborate on the reason for the removal of the part / piece part / facility from the aircraft, in the **Reason for Removal** field.
4. In the **Warranty Claim Details** group box, indicate whether the part / component / facility is covered under warranty, in the **Under Warranty** field.
5. Use the **Warranty Claim On** drop-down list box to select the basis on which the warranty claim must be computed.

Note: Ensure that you do not leave this field blank, if the “Under Warranty” is set to “Yes”.
6. Use the **Ref. Document Type** drop-down list box to select the type of the reference document for the repair order.
7. The **Ref. Document #** for the repair order.
8. Enter the number identifying the supplier agreement document, in the **Supplier Agreement Ref #** field.

The screenshot shows the 'Part & Warranty Details' tab. The 'Part Details' section contains the following fields: Part # (N1:54718), Part Description (CONCENTRATION TESTER), Condition (New), Owned By (03), Mfr. # (54718), Removed From Aircraft Regn #, NHA Part #, NHA Serial #, Removed at Station, Reason For Removal, Serial # (80CDC226-89), Component # (A100022), Owner Name, Manufacturer Name (Supplier 343), Manufacturer Serial # (80CDC226-89), Model of Applicability, NHA Part Desc, Position in NHA, and Reason for Removal. The 'Warranty Claim Details' section contains: Under Warranty (No), Ref. Document Type (Repair Order), Supplier Agreement Ref #, Warranty Reference #, Warranty Claim #, Warranty Notes, Evaluate Warranty button, Warranty Claim On (Full), Ref. Document # (AFRO-000001-2011), Supplier Warranty Ref #, Warranty Type (New), and Claim Date (2016-30-04). A yellow callout box points to the 'Under Warranty' field with the text: 'Indicates whether the parts in the repair order are covered by warranty agreement with the repair shop'.

Figure 2.6 Recording part and warranty details at the time of creating repair order

9. Enter the number identifying the supplier warranty agreement document, in the **Supplier Warranty Ref #** field.
 - ▶ Enter any additional information pertaining to warranty, in the **Warranty Notes** field.

2.1.4 SPECIFYING THE TERMS AND CONDITIONS WHILE CREATING A REPAIR ORDER

You can enter the terms and conditions of the repair order. The payment terms like the mode in which the payment has to be made, the supplier to whom the payment has to be made, the insurance details and shipping information are entered. You can also specify the details of the spares that are sent along with the component / part for carrying out the repair. On creating the repair order, the status of the repair order is set to "Draft". After entering the details in this page, the status changes to "Fresh". You can also release the component for shipping. The status of the repair order is set as "Released". However, if the Quote Generation Basis attribute of the repair order is "Automatic", the Status can become "Quoted", "Confirmed" or "Authorized".

1. Select the **Edit Terms and Conditions** link in the **Create Repair Order** page. The **Edit Terms and Conditions** page appears. See Figure 2.6.

Figure 2.7 Specifying the terms and conditions while creating a repair order

The system retrieves the details of the repair order for which terms and conditions must be specified.

2. Enter the person to be contacted while shipping the components to the repair shop, in the **Shipping Contact** field.
3. Select the method in which the component must be shipped, in the **Ship Core By** drop-down list box.
4. Select the packaging method in the **Packaging Code** drop-down list box.

Recording terms and conditions

1. Select the **Terms and Conditions** tab. See Figure 2.7.

In the **Terms and Conditions** group box, enter the following,

2. Use the drop down list box to select the **Advance Payable** option as "Yes" or "No" to specify whether advance is payable for the specified repair order or not.
3. The date before which the advance amount has to be paid, in the **Advance Payable By Date**.
4. The percentage of the advance payment to be made, in the **Advance Percent**.

5. Use the **Advance Percent On** drop-down list box to indicate if the advance percent is applicable on "Total" or "Basic" value.
6. The actual amount payable in the **Advance Payable** field. If you have specified a percent in the **Advance Percent** field, the system displays the advance payable amount.
7. Enter the **Tolerance Percent** on the advance payable percent.
8. Enter the pay term to define the terms of payment in the **Pay Term** field.
9. Select the mode in which the payment must be made, in the **Payment Mode** drop-down list box.
10. Select the priority for the payment to be made, in the **Payment Priority** drop-down list box.
11. Select the **Matching Type** to indicate the manner in which the quality and the values of goods available at different points in the procurement process must be compared. The system provides the options "Four way at RR" and "Four way at RO".
12. Enter the code identifying the supplier to whom the payment is to be made, in the **Pay to Supplier #** field.
13. Use the drop down list box to select the **Pay To Supplier Address ID**.

In the **Terms and Conditions** group box, enter the following,

14. Use the **Insurance Liability** drop-down list box to specify the person liable to pay the insurance amount.
15. Use the **DD Charges Borne By** drop –down list box to specify whether the DD charges are to be borne by the repair shop.

In the **Special Warranty Terms** group box, enter the following,

16. Use the **Under Warranty ?** drop-down list box to indicate whether the parts are covered by a warranty agreement.
17. Use the **Warranty Basis** drop-down list box to specify the basis for the warranty of the parts.
18. The identification number of the warranty agreement in the **Reference Agreement #**.
19. Use the **Warranty Begins On** drop-down list box to specify the date of commencement of warranty for the parts.
20. The period for which the parts in the repair order are covered by the warranty agreement, in the **Warranty Duration**. Specify the UOM for the effective warranty period in the drop-down list box beside the input field.
21. The number of **Flight Hours** for which the parts in the repair order are covered by the warranty agreement.
22. The number of **Flight Cycles** for which the parts in the repair order are covered by the warranty agreement.

Recording shipping and GTA details

1. Select the **Inbound Shipment and GTA Details** tab. *See Figure 2.7.*

Figure 2.8 Specifying shipment and GTA details

In the **Core Return Shipment** group box,

2. Select the method of returning the component in the **Return Core By** drop-down list box.

3. Select the mode of payment for shipping a component / part, in the **Shipping Payment** drop-down list box.
4. Select the packaging method of the component that is returned, in the **Packaging Code** drop-down list box.
5. Use the **Spares Return** drop-down list box to specify whether the excess spares or tools must be returned.
6. Select the type of certificate that is issued to the specified part or supplier, in the **Certificate Type** drop-down list box.
7. Specify the person who must perform the inspection checks on the component / part at the time of delivery, in the **Inspection Type** drop-down list box. The system provides the options “Self” and “By Inspector”.
8. Use the drop-down to select the **INCO Term** for the repair order.
9. Use the drop-down to select the **Carrier / Agency#**.
10. Specify the **Port of Departure** and the **Port of Destination**.
11. Select the **Delivery To Code** drop-down list box to select the shipping destination.

In the Spares Return Shipment group box,

12. Use the **Return Spares by** drop-down list box to specify the method of returning the spare, which could be air, rail or road.
13. Use the **Shipping Payment** drop-down list box to specify the mode of payment for shipping.
14. Use the **Packaging Code** drop-down list box to specify the packaging method of the spares to be returned during shipping.

In the General Terms Agreement Details group box,

15. Enter the **GTA #**.
16. Enter the date on which the reference document was created in the **Ref. Document Date**.

Recording shipped spares details

17. Select the **Spares Shipped** tab. See Figure 2.9.

#	Part #	Part Description	Qty.	UOM	Stock Status	Location	From Warehouse #	Return Type	Return to Location	Return V
1	:35895	EXPRESS U.S. RATE SH EET	12		Accepted	RAMCO OU	0123	Non Returnable	RAMCO OU	
2					Accepted	RAMCO OU		Non Returnable	RAMCO OU	

Figure 2.9 Specifying details of spares to be shipped while creating a repair order


In the **Spares Shipped** multiline,

18. Enter the code identifying the spare, which is shipped for repair along with the component, in the **Part #** field in the multiline.

Note: The spare part must be of type “Consumable”, “Expendable” or “Tools”.

19. Enter the quantity of the spare to be shipped for repair, in the **Quantity** field.
20. Enter the unit of measurement of the spare, in the **UOM** field.

21. Select the location from where the spare must be issued, in the **Location** field.
22. Enter the **From Warehouse #** from which the spare must be issued.
23. Select the type of return of the spare in the **Return Type** field. The system provides the options “Returnable” and “Non-Returnable”.
24. Select the location to which the spare must be returned to, in the **Return To Location** drop-down list box.
25. Enter the **Return Warehouse #** to which the spare must be returned.

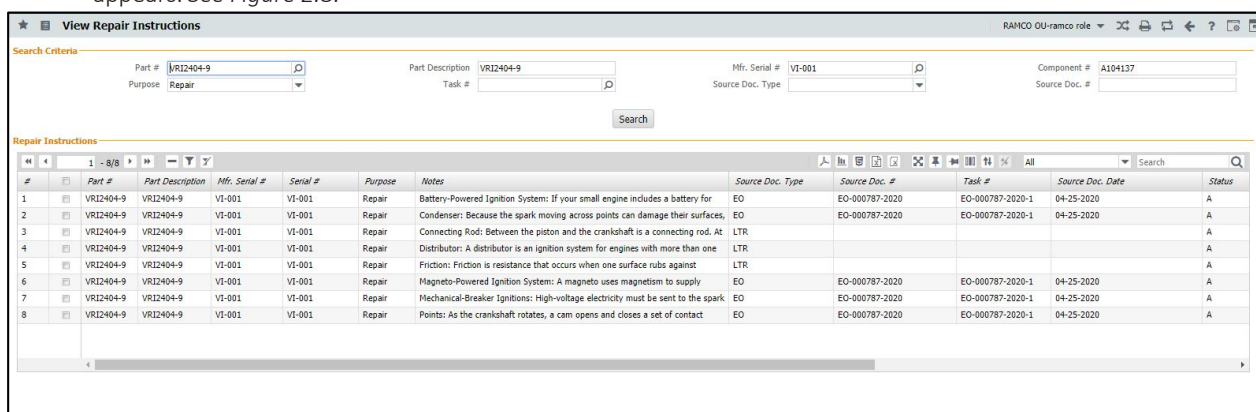
 *Note: The return details of the spare as specified in Steps 21 and 22 needs to be specified only if the Return Type field is set as “Returnable”.*

26. Click the **Edit Terms and Conditions** pushbutton.

2.1.5 VIEWING REPAIR INSTRUCTIONS

Standard Instructions that are essential for reference gets identified for a Part / Part-Serial/Lot # combination during various analyses, Reliability and Service Bulletins being few sources. Any information that needs to be served as a reference during Execution will be defined as a Task in the execution documents. Reliability and Engineering notes caters the definition of these repair instructions. This screen enables the user to view the Repair Instructions applicable for a Part-Serial/Lot, which will be useful during Planning for Work Execution.

1. Select the **View Repair Instructions** link in the **Create/Edit/View Repair Order** pages. The **View Repair Instructions** page appears. See Figure 2.8.



#	Part #	Part Description	Mfr. Serial #	Serial #	Purpose	Notes	Source Doc. Type	Source Doc. #	Task #	Source Doc. Date	Status
1	VR12404-9	VR12404-9	VI-001	VI-001	Repair	Battery-Powered Ignition System: If your small engine includes a battery for	EO	EO-000787-2020	EO-000787-2020-1	04-25-2020	A
2	VR12404-9	VR12404-9	VI-001	VI-001	Repair	Condenser: Because the spark moving across points can damage their surfaces,	EO	EO-000787-2020	EO-000787-2020-1	04-25-2020	A
3	VR12404-9	VR12404-9	VI-001	VI-001	Repair	Connecting Rod: Between the piston and the crankshaft is a connecting rod. At	LTR				A
4	VR12404-9	VR12404-9	VI-001	VI-001	Repair	Distributor: A distributor is an ignition system for engines with more than one	LTR				A
5	VR12404-9	VR12404-9	VI-001	VI-001	Repair	Friction: Friction is resistance that occurs when one surface rubs against	LTR				A
6	VR12404-9	VR12404-9	VI-001	VI-001	Repair	Magneto-Powered Ignition System: A magneto uses magnetism to supply	EO	EO-000787-2020	EO-000787-2020-1	04-25-2020	A
7	VR12404-9	VR12404-9	VI-001	VI-001	Repair	Mechanical-Breaker Ignitions: High-voltage electricity must be sent to the spark	EO	EO-000787-2020	EO-000787-2020-1	04-25-2020	A
8	VR12404-9	VR12404-9	VI-001	VI-001	Repair	Points: As the crankshaft rotates, a cam opens and closes a set of contact	EO	EO-000787-2020	EO-000787-2020-1	04-25-2020	A

Figure 2.7 Viewing Repair Instructions

2. In the “Search Criteria” group box, specify the search fields such as ‘Part #’, ‘Part Description’, ‘Mfr. Serial’, ‘Component #’, ‘Purpose’, ‘Task #’, ‘Source Doc. Type’ and ‘Source Doc. #’ to retrieve the Repair Instruction details.
3. The part **Notes** defined in the **Reliability Notes** screen of **Reliability Analysis** business component / defined in any Engineering Order - Task # combination at Part-Serial or Part level will be retrieved in the “Repair Instructions” multiline.


2.1.6 CANCELING A REPAIR ORDER

You can enter the terms and conditions of the repair order. The payment terms like the mode in which the payment has to be made, the supplier to whom the payment has to be made, the insurance details and shipping information are entered. You can also

1. Select **Edit Repair Order** under the **Repair Order** business component. The **Select Repair Order** page appears.
2. Search and retrieve the repair orders in the multiline.
3. Select the repair order to be canceled and click the **Cancel RO** pushbutton.

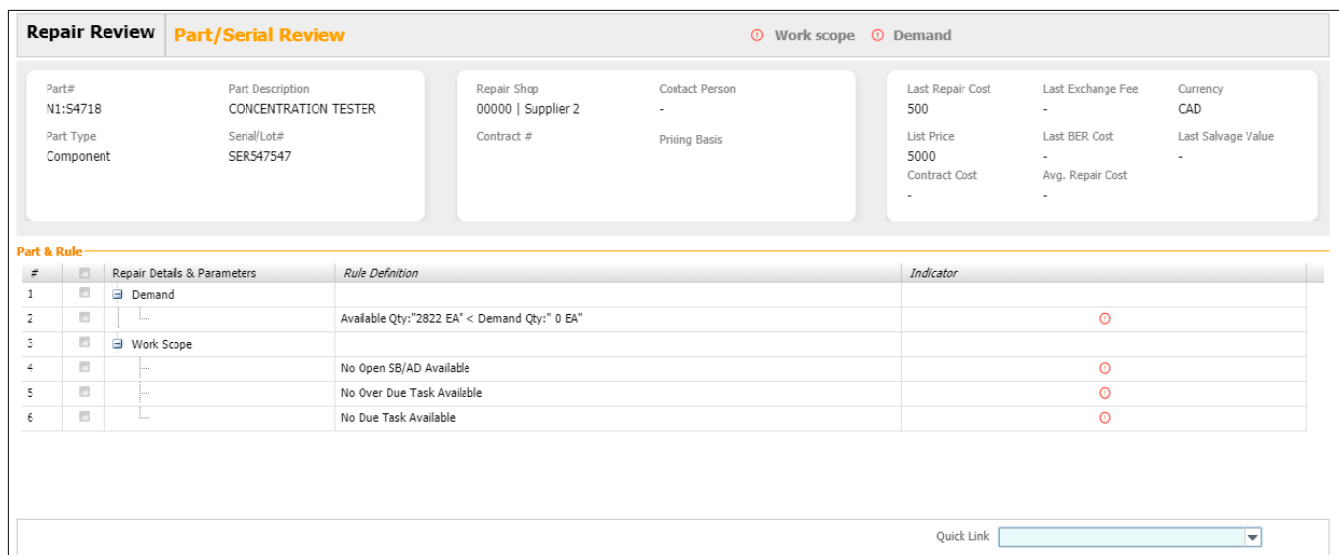
 *Note: The repair order is canceled and the status of the repair order is set as “Canceled”.*

 *Note: When the status of the repair order is “Released”, the repair order can only be cancelled; it cannot be modified.*

 *Note: When the status of the repair order is changed from “Fresh” to “Canceled”, the workflow is enabled. Notification messages can be sent as per the settings you have defined in the **Workflow Management** business component.*

2.1.7 REVIEWING REPAIR ORDER

1. Select **Review RO** icon in the **Create Repair Order** business component. The **Repair Review** Pop-up appears.
2. This Pop-up can also be launched from **Authorize Repair Order** and **Create Repair Order for Piece Parts/Facilities** activities.





Repair Review		Part/Serial Review		Work scope		Demand	
Part#	Part Description	Repair Shop	Contact Person	Last Repair Cost	Last Exchange Fee	Currency	
N1:54718	CONCENTRATION TESTER	00000 Supplier 2	-	500	-	CAD	
Part Type	Serial/Lot#	Contract #	Pricing Basis	List Price	Last BER Cost	Last Salvage Value	
Component	SER547547			5000	-	-	
				Contract Cost	Avg. Repair Cost		
				-	-		

#		Repair Details & Parameters	Rule Definition	Indicator
1	<input checked="" type="checkbox"/>	Demand		
2	<input checked="" type="checkbox"/>		Available Qty: "2822 EA" < Demand Qty: "0 EA"	
3	<input checked="" type="checkbox"/>	Work Scope		
4	<input checked="" type="checkbox"/>		No Open SB/AD Available	
5	<input checked="" type="checkbox"/>		No Over Due Task Available	
6	<input checked="" type="checkbox"/>		No Due Task Available	

Quick Link:

Figure 2.8 Reviewing Repair Pop-up

In the header section,

3. The Repair Order # and the Amendment number of the repair order are displayed.
-  *Note: This field appears only if the pop-up is launched from “Authorize Repair Order” activity.*
4. Use the drop-down list box to specify the level at which the Repair Order is to be reviewed. The system lists the values “RO Level” and “Line Level”.
5. Use the drop-down list box to specify the line number of the Repair Order that is to be reviewed. The system lists all the line numbers available for the repair order.
-  *Note: The above drop-down fields appear only if the pop-up is launched from “Authorize Repair Order” activity.*
6. **Workscope** displays one of the following colour icons based on the Rule defined for Workscope:
 - Red Icon - If one of the definition under the Workscope is RED.
 - Orange Icon – If one of the definition under the Workscope is Orange and No Red icon is available.
 - Green Icon - If all the definition under the Workscope is Green.
7. **Demand** displays one of the following colour icons based on the Rule defined for Demand:
 - Red Icon - If one of the definition under the Demand is RED.
 - Orange Icon – If one of the definition under the Demand is Orange and No Red icon is available.
 - Green Icon - If all the definition under the Demand is Green.

In the Part Details Card section,

8. The system displays the **Part #**, **Part Description**, **Part Type** and **Serial/Lot #** of the part.
9. The system displays the **Shop Job Type**, **RO Type** and **RO Priority** of the Repair Order.

In the Supplier Details card section,


10. The system displays the **Repair Shop** and **Contact Person** of the repair shop.
11. The system displays the **Contract #** and **Pricing Basis** of the part for which the contract is applicable.
12. In the Cost Details Card section,
13. The system displays the **Last Repair Cost**, **Total Repair Cost**, and **Contract Cost** of the part.
14. The system displays the **Salvage Value|BER Cost**, **Last Salvage Value**, **BER Limit** and **Avg. Repair Cost** of the part.
15. In the **Part & Rule** multiline,
16. **Repair Details & Parameters** displays the options “Cost”, “Demand” and “Workscope”.
17. **Rule Definition** displays the rules defined based on the parameter defined in the “Purchase Option Settings” activity of the “Logistics Common Master” business component.
18. **Indicator** displays one of the following colour icons based on the value of Rule definition:
 - Red Icon
 - Orange Icon
 - Green Icon
19. Use the **Quick Links** drop-down list box to specify the screen to navigate. The system lists the following screens:
 - View Contract Information
 - View Repair Cost History
 - Inquire Material Count and Location
 - Initialize Maint. Prog. & Update Compliance
 - Part Serial/Lot Name Plate

2.2 RELEASING REPAIR ORDER

A notification is sent to stores that the component must be shipped for repair to the repair shop. The status of the repair order on release changes to “**Released**”. However, if the Quote Generation Basis attribute of the repair order is “Automatic”, the Status can become “Quoted”, “Confirmed” or “Authorized”.

Subsequent to the release of parts for shipping, the Stock Issue for a repair order is generated automatically in “Fresh” status and a MMD is created.

1. Select the **Edit Terms and Conditions** link in the **Create Repair Order** page. The **Edit Terms and Conditions** page appears. See Figure 2.7.
2. Click the **Release For Shipping** pushbutton to release the components for repair, thereby changing the status of the repair order to “Released”.

 *Note: This action is workflow-enabled. Notification messages can be sent as per the settings you have defined in the **Workflow Management** business component.*

2.3 RECORDING ACKNOWLEDGEMENT OF THE REPAIR ORDER

The repair shop acknowledges the receipt of the repair order along with the component / part sent for repair. Once the repair shop acknowledges the receipt of the repair order, the status of the repair order is changed to “Acknowledged”. However, if the status of the repair order is other than “Shipped” at the time of acknowledgement, the status will remain the same after acknowledgement.

1. Select **Record Acknowledgement** under the **Repair Order** business component. The Select Repair Order page appears.
2. Enter the Repair Order # directly and select the **Record Acknowledgement** link provided alongside, to acknowledge the repair order.

Or

3. Select the repair order by searching based on filter criteria. Click the hyperlinked Repair Order # in the multiline. The **Record Acknowledgement** page appears. See Figure 2.10.

Record Acknowledgement

Date Format: yyyy-dd-mm

Repair Shop Details

Repair Order # AFRO-000001-2011
 Repair Shop # 85625
 Address 1465 WOODLAND DRIVE SALINE 48176 MICHIGAN UNITED STATES
 Contact Person OV01 - JACKSON
 Ref. Document Type
 Work Center #

Status Amended
 Repair Shop Supplier 287
 Phone # 734-944-6377
 Ref. Document #

Part Details

Part # 767C0000-01:F1
 Mfr. Part # 767C0000-01
 Component # C40

Part Description PNEU. TEMP SENSOR
 Serial # test-end-cmc-22
 Condition UnServiceable

Customer Information

Customer # 490592
 Customer Order # CO-000004-2011

Customer Name Customer 202
 Promised Delivery Date

Repair Order Info

Acknowledgement Ref. # RO1
 Customer Shipping Note #
 Comments

Date 2016-31-03
 Receipt Satisfactory Yes

Record Statistics

Created by SBARABEY
 Last Modified by DMUSER

Created Date 2011-16-11
 Last Modified Date 2016-13-04

Record Acknowledgement

Figure 2.10 Recording acknowledgement of the repair order

4. Enter a unique reference number identifying the acknowledgment of the receipt for the selected repair order, in the **Acknowledgement Ref. #** field.
5. Enter the date on which the receipt of the repair order is acknowledged, in the **Date** field.
6. Enter a unique number identifying the note attached by the customer while shipping the component / part, in the **Customer Shipping Note #** field.
7. Specify whether the component was received in the same condition as it was before shipment, in the **Receipt Satisfactory** drop-down list box.
8. Click the **Record Acknowledgement** pushbutton.

For further details,

- ▶ Select the **Edit User Defined Details** link to enter user defined details for the repair order.
- ▶ Select the **View Issue Details** link to view the issue details.


2.4 RECORDING REPAIR ESTIMATE OR QUOTATION DETAILS FROM REPAIR AGENCY

MRO's involve external agencies / third parties for repairing the parts as it is cost effective and easy to manage. In many cases, a single Repair Order is created for multiple parts to reduce the processing cost. However the repair agency might not be able to provide a quote for all the parts received and hence would be providing a partial quote. This provides the need to save the repair quote partially. The **Manage Repair Quote** activity allows recording partial quote for the parts in the repair order either at the part level or part quantity level.

2.4.1 MANAGING REPAIR QUOTE

1. Select **Manage Repair Quote** activity under the **Repair Order** business component. The **Manage Repair Quote** page appears. See Figure 2.11
2. Enter the repair order number directly and click **Go** button provided alongside.
3. Select the Amendment number of the repair order

RO Details

4. Use the drop-down list box to select the **RO Type**, which could be "Normal" or "Exchange".
5. Use the drop down list box to select **Exchange Type** of the component / part as "With Repair " or "Flat".
 *Note: Ensure that the exchange type is set to blank if the RO Type selected is "Normal".*
6. Select the **RO Category** and User Status of the Repair Order.
7. Use the drop-down list box to specify the repair classification that differentiates the tasks, which are over and above the contract (COA - Contract Over and Above), between the operator and the MRO.

Repair Shop Details

8. Enter the **Repair Shop #** where the component must be repaired.
9. Select the **Currency** of the repair order.
10. Select the **EDI Required?** drop-down list box to specify whether the EDI capabilities in Repair Order are required or not.

Repair Cost Details

The system displays the following repair cost details as tiles:

- ▶ **Total Repair Cost** - The sum of repair cost of all parts in the multiline.
- ▶ **Total Exchange Cost** - The sum of the exchange cost of all parts in the multiline.
- ▶ **Total BER Cost** - The sum of BER cost of all parts in the multiline.
- ▶ **Total Salvage Cost** - The sum of salvage cost in the multiline.
- ▶ **Total Cost.** - $Total Cost = Total Repair Cost + Total Exchange Cost + BER Cost - Salvage Cost + Additional Cost$. (Additional Cost is the Cost incurred on the TCD's specified at the Document level for the Repair Order.)
- ▶ **Base Currency Value** - The value of the repair order in base currency
- ▶ **Total TCD Amount** - The sum of the TCD cost of all parts in the multiline.
- ▶ **Total TCD Amount (Base Curr.)** - The value of the Total TCD Amount in base currency.

To proceed, carry out the following:

- ▶ Select the **Repair Quote Details** tab to record repair quote details.
- ▶ Select the **Supplier, Part & Warranty Details** tab to update supplier, part and warranty details.
- ▶ Select the **View Repair Instructions** link at the bottom of the page to view the repair instructions applicable for the Part-Serial/Lot.

Recording repair quote details

1. Select the **Repair Quote Details** tab. See Figure 2.9

Manage Repair Quote

Repair Order # Go Amend. # RO Date 2020-01-24 Quote Status Complete RO Status Authorized

RO Details View Reference Doc. Details

Priority Manual Shop Job Type Piece Part Expense Type Revenue RO Type Normal Core Return Option No Change Allowed User Status

Repair Shop Details

Repair Shop HAECO Repair Shop Name HONG KONG AIRCRAFT ... Currency USD Exchange Rate 1.00000000 Contact Person View Price Held Firm Time (Days) EDI Required? No

Repair Cost Details

Total Repair Cost 400.00 Total Exchange Cost 0.00 Total BER Cost 0.00 Total Salvage Cost 0.00 Total Cost 400.00 Base Currency Value 400.00

Repair Quote Details Supplier, Part & Warranty Details

#	Line / Part #	Description	RO Qty	UOM	Quote Qty	Repair Cost	Repair Cost Break	BER Cost
1	1/25012020-4	Cross-impinging triplet	1.00	EA	1.00	100.00	Optional	
2	2/25012020-4	Cross-impinging triplet	1.00	EA	1.00	100.00	Optional	
3	3/25012020-4	Cross-impinging triplet	1.00	EA	1.00	100.00	Optional	
4	4/25012020-4	Cross-impinging triplet	1.00	EA	1.00	100.00	Optional	
5								

View File

Other Det ☐ Override BER Limit Confirm RO

Record Material Cost Upload Documents Maintain Repair Shop Correspondence Part - Serial # / Lot # Transaction History View Repair Cost History View Issue Details View Invoice View Part Repair Shop Mapping


Record Discrepancy Analysis Edit TCD Authorize RO Attach Clause View Quotation History View Associated Doc. Attachments View Material Costs

Edit Terms and Conditions Edit User defined Details Generate RO Report View Parameter Information View Part Supply Chain Performance View TCD

Figure 2.11 Recording quotation for the repair order


2. In the multiline, enter the line number of the repair order and part number in the **Line / Part #** field.
3. Enter the **Quote Qty** indicating the quantity of parts that is quoted
4. Enter **Repair Cost** and **Exchange Cost** for the part.
5. Click the hyperlinked **Repair Cost Break** field to manage the Material cost at Workscope level. On click of the hyperlink **Manage Workscope Level Quotation** page appears.
6. Select the **BER?** Check box to indicate that the part is declared as Beyond Economic Repair (BER). Enter the cost incurred in evaluating component as BER, in the **BER Cost** field.
7. Enter the estimated scrap value of the component / part, in the **Salvage Value** field.
8. Select the place where the component / part that has been declared as BER is to be salvaged, in the **Salvage Action** field. You can select from "By Repair Shop" or "By Operator".
9. Use the **Reason for Scrap** drop-down list box to specify the reason for scrap of the part.

Note: The system ensures that the "BER Cost" is entered, If this field is selected.
10. Enter the **Delivery Date** of part from the repair agency.
11. Enter the unique reference number identifying the quotation in the **Quotation Ref #** field.
12. Select the **Quotation Type**. The system provides the options "Firm" and "Estimate".

13. Enter the **Quotation Date**.
 14. Enter the list price of the component / part, in the **List Price** field.
 15. Enter the exchange fee charged by the repair shop for an exchange repair order, in the **Exchange Fee** field.
 16. Enter the total man-hours estimated to complete the repair order, in the **Est. Man Hrs.** field.
 17. Enter the cost per person spent in hours, in the **Cost / Man Hr.** field.
-  *Note: It is mandatory to enter this cost if the estimated man-hours are specified.*
18. The total estimated labor cost that will be incurred on the repair order, in the **Labor Cost** field.
 19. The cost of material that will be incurred on the repair order, in the **Material Cost** field.
 20. Enter any extra cost that will be incurred on the repair order, in the **Misc. Cost** field.
 21. Enter any additional comments, pertaining to the quotation given by the repair shop, in the **Remarks** field.
 22. Enter **Quotation Comments**, if you intend to select the Override BER Limit check box.
 23. **Repair Inst.** indicates availability of any repair instructions defined for the Part / Part-Serial/Lot # combination, in the Notes link available in "Reliability Dashboard" and "Manage Engineering Document" screens. Click the icon to view the repair instructions.

Recording supplier and part warranty details

1. Select the **Supplier, Part & Warranty Details** tab. See Figure 2.10.
2. In the **Supplier Findings** group box, specify whether the discrepancies reported by the supplier are confirmed or not, in the **Confirm Discrepancies Reported** drop-down list box. The system provides the options "Fully Confirmed", "Partially Confirmed" and "No Fault Found".
3. Confirm the additional discrepancies detected by the supplier in the **Additional Discrepancies Detected** drop-down list box.
4. Enter any **Additional Problems** detected by the repair shop.
5. In the **Warranty Details** group box, use the drop down list box to select the **Claim Acceptance Status** of the repair order as "Fully Accepted", "Partially Accepted" or "Rejected".
6. Use the drop down list box to select **Claim Accepted On** as "Full", "Labor", "Material" or "Others".

 *Note: If the under warranty field is set to "No", then the system will display the value as blank for both Claim Acceptance Status and Claim Accepted On.*

Repair Quote Details		Supplier, Part & Warranty Details	
Customer Information			
Customer #	490592	Customer Name	Customer 201
Promised Delivery Date		Customer Order #	CO-000033-2011
Part Details			
Part #	767C0000-01:f1958	Mfr. Part #	767C0000-01
Serial #	111	Component #	C748
Reason #		Condition	UnServiceable
Supplier Findings			
Confirm Discrepancies Reported	Fully Confirmed	Additional Discrepancies Detected	No
Comments	TEST INFORMATIONWORKSCOPE: OVERHAULSERVICE BULLETINS: SB 1234567FINDINGS: TESTING TESTING TESTINGCOST: \$2000.00TAT: 14 DAYS		
Warranty Details			
Under Warranty ?	Not Evaluated	Ref. Document Type	Ref. Document #
Warranty Claim On		Warranty Claim #	Supplier Warranty Ref #
Warranty Notes		Claim Acceptance Status	Claim Accepted On
Reason			

Figure 2.12 Recording supplier, part and warranty details for the repair order

To proceed further,

7. To exempt component/parts from the organization BER Limit and facilitate external repair, select the **Override BER Limit** check box.

8. Click the **Save** pushbutton to save the repair quote details.
9. Click the **Confirm** pushbutton to confirm the repair quote details.

For further details,

- ▶ Select the **Confirm RO** link to confirm the repair order.
 - ▶ Select the **Record Material Cost** link to record the material cost of the repair order.
 - ▶ Select the **Record Discrepancy Analysis** link to record the analysis on discrepancy.
 - ▶ Select the **Edit Terms and Conditions** link from the bottom of the page to record the terms and conditions of the repair order.
 - ▶ Select the **Edit TCD** link to modify the taxes, charges and discounts of the repair order.
- Note: The system does not allow the user to add or amend TCD details when the Repair Receipt is in the "Received" status.*
- ▶ Select the **Edit User Defined Details** link to enter the user defined details.
 - ▶ Select the **Maintain Repair Shop Correspondence** to record/update details of correspondence with the repair shop associated with the repair order.
 - ▶ Select the **Attach Clause** link to attach clauses to the Purchase Order/Repair Order.
 - ▶ Select the **View Repair Cost History** link to view the history of the repair order.
 - ▶ Select the **View Quotation History** link to view the history of the quotation.
 - ▶ Select the **View Parameter Information** link to view the parameter details.
 - ▶ Select the **View Issue Details** link to view the issue details.
 - ▶ Select the **Upload Documents** link to upload the documents.
 - ▶ Select the **View Associated Doc. Attachments** link at the bottom of the page to view associated document attachments.
 - ▶ Select the **View Part Supply Chain Performance** link to view part supply chain performance.

2.4.2 ENTERING MATERIAL COST FOR THE REPAIR ORDER

1. Select the **Record Material Cost** link in the **Manage Repair Quote** page. The **Material Cost** page appears. See Figure 2.11.

Material Cost

Repair Order Details

Repair Order # AFRO-000010-2011
 Part # 767C0000-01:f1958
 Mfr. Part # 767C0000-01
 Serial # 114
 Material Cost 20.00

Amendment # 0
 Status Quoted
 Part Description DRILL COUNTERBORE
 Component # C751
 Currency CAD

Material Details

#	Matl Line #	Mfr. Part #	Part Description	Qty.	UOM	Unit Cost
1		A116-1E:U1918		2.00	EA	
2						

Record Material Cost

[Edit TCD](#)

Record Statistics

Created by: FDUVAL
 Created Date: 2011-21-11

Figure 2.13 Specifying material cost

The system displays the repair order details in the **Repair Order Details** group box.

Note: If the Shop Job Type of the repair order is "Component" and the quantity of the part that required repairs is one, the Part #, Serial #, Part Description and Component fields display values. However, if the number of parts to be repaired is more than one, the Part # field displays "Multiple" and the other fields remain blank.

2. Enter the **Manufacturer Part #** of the parts that are to be used in the repair of the component / part on which the repair order is raised.
3. Enter the quantity of the part in the **Quantity** field.
4. Enter the **UOM** of the part.
5. Enter the **Unit Cost** of the part.
6. Click the **Record Material Cost** pushbutton.

To provide further details,

- ▶ Select the **Edit TCD** link to enter the taxes and charges details for the repair order.

2.4.3 SPECIFYING TERMS AND CONDITIONS IN RO WHILE RECORDING QUOTATION

1. Select the **Edit Terms and Conditions** link in the **Manage Repair Quote** page. The **Edit Terms and Conditions** page appears. See Figure 2.12.

Edit Terms and Conditions

Repair Order Details

Repair Order # AFRO-000010-2011
 Currency CAD
 Repair Shop # 99999
 Email
 Ship To Address Id 1-Manufacturer
 Ship Core By As per routing guide
 Spares Shipped No
 RMA #

Amendment # 0
 Status Quoted
 Shipping Contact
 Fax
 Ship To Address MGR MATERIAL & COMPONENTS SYSTEM, FACILITIES & SUPPLY, DC
 Packaging Code BOX
 Ship Spares By
 RMA Date

Part Details

Part # 767C0000-01:f1958
 Mfr. Part # 767C0000-01
 Component # C751
 Part Description PNEU. TEMP SENSOR
 Serial # 114
 Condition UnServiceable

Terms and Conditions

Advance Payable No
 Advance Percent
 Advance Payable
 Pay Term W030D000_00.0
 Payment Priority Normal
 Pay to Supplier # 99999
 Pay To Supplier Address AIR CANADA, MGR. MATERIAL & COI
 Insurance Liability Supplier
 Remarks
 Advance Payable By Date
 Advance Percent On
 Advance Tolerance Percent
 Payment Mode Check
 Matching Type Four Way at RR
 Pay To Supplier Address ID 1-Purchase
 DD Charges Borne By Self
 Insured Value

Special Warranty Terms

Under Warranty? No
 Reference Agreement #
 Warranty Duration
 Flight Cycles CYC
 Terms and References
 Warranty Basis
 Warranty Begins On
 Flight Hours HRS

Record Statistics

Created by FDUVAL
 Last Modified by DMUSER
 Created Date 2011-21-11
 Last Modified Date 2016-13-04

Figure 2.14 Recording repair order terms and conditions during quotation

The system displays the details of the repair order for which terms and conditions must be specified.

Recording terms and conditions

2. Select the **Terms and Conditions** tab. See Figure 2.14.
3. In the Terms and Conditions group box, Use the drop down list box to select the **Advance Payable** option as “Yes” or “No” to specify whether advance is payable for the specified repair order or not.
4. Enter the pay term to define the terms of payment, in the **Pay Term** field.
5. Select the mode in which the payment must be made, in the **Payment Mode** drop-down list box.

6. Select the priority for the payment to be made in the **Payment Priority** drop-down list box.
7. Select the **Matching Type** to indicate the manner in which the quality and the values of goods available at different points in the procurement process must be compared. The system provides the options "Four way at RR" and "Four way at RO".
8. Enter the code identifying the supplier to whom the payment is to be made, in the **Pay to Supplier #** field.
9. Use the drop down list box to select the **Pay To Supplier Address ID**.
10. Specify who must bear the insurance amount of the shipped parts, in the **Insurance Liability** drop-down list box. The system provides the options "Ours", "Supplier" and "Others".
11. Use the drop down list box to specify **DD Charges Borne By** as "Repair Shop" or "Self".

In the **Special Warranty Terms** group box, specify

12. Use the **Under Warranty?** drop-down list box to indicate whether the parts are covered by a warranty agreement.
13. Use the **Warranty Basis** drop-down list box to specify the basis for the warranty of the parts.
14. The identification number of the warranty agreement in the **Reference Agreement #**.
15. Use the **Warranty Begins On** drop-down list box to specify the date of commencement of warranty for the parts.
16. The period for which the parts in the repair order are covered by the warranty agreement, in the **Warranty Duration**. Specify the UOM for the effective warranty period in the drop-down list box beside the input field.
17. The number of **Flight Hours** for which the parts in the repair order are covered by the warranty agreement.
18. The number of **Flight Cycles** for which the parts in the repair order are covered by the warranty agreement.

Recording shipping and GTA details

1. Select the **Inbound Shipment and GTA Details** tab. *See Figure 2.13.*

Figure 2.15 Recording shipping and GTA details during quotation

2. The **Return Warehouse** to which the goods must be returned after repair.
3. Select the method of returning the component, in the **Return Core By** drop-down list box.
4. Select the mode of payment for shipping a component, in the **Shipping Payment** drop-down list box.
5. Select the packaging method of the component / part that is returned, in the **Packaging Code** drop-down list box.
6. Select the **Certificate Type** that is issued to the specified supplier.
7. Specify the person who must perform the inspection checks on the component at the time of delivery, in the **Inspection Type** drop-down list box. The system provides the options "Self" and "By Inspector".

8. Enter the code identifying the part which is to be shipped for repair, in the **Part #** field in the multiline.
9. Enter the unique code identifying the shipping destination in the **Delivery To Code** field.

Recording shipped spares details

1. Select the **Spares Shipped** tab. See Figure 2.14.

#	Part #	Part Description	Qty.	UOM	Stock Status	Location	From Warehouse #	Return Type	Return to Location	Return V
1	:35895	EXPRESS U.S.RATE 5H EET	12		Accepted	RAMCO OU	0123	Non Returnable	RAMCO OU	
2					Accepted	RAMCO OU		Non Returnable	RAMCO OU	

Figure 2.16 Recording shipped spares during quotation

2. Enter the quantity of part to be shipped for repair, in the **Qty.** field.
3. Enter the unit of measurement of the part, in the **UOM** field.
4. Select the location from where the part must be issued, in the **Location** field.
5. Enter the **Warehouse #** from where the part must be issued.
6. Select the **Return Type** of the part. The system provides the options “Returnable” and “Non-Returnable”.
7. Select the location to which the part must be returned, in the **Return To Location** drop-down list box.
8. Enter the **Warehouse #** to which the part must be returned.

*Note: The return details of the spares as specified in Steps 14 and 15 needs to be specified only if the **Return Type** field is set as “Non-Returnable”.*

9. Click the **Edit Terms And Conditions** pushbutton.

To provide further details,

- ▶ Select the **Generate RO Report** link to generate the Repair Order Report.

Recording discrepancy analysis

1. Select the **Record Discrepancy Analysis** link in the Manage Repair Quote page. The Record Discrepancy Analysis page appears. See Figure 2.15.

Record Discrepancy Analysis

Date Format: yyyy-dd-mm

Repair Order Details

Repair Order # REP-000370-2016
 Part # 0-0440-4-000
 Mfr. Part # 0-0440-4
 Component Replacement #
 Source Doc Type

Amend. # 0
 Status Quoted
 Serial # 6565654
 Replacement Date
 Source Document #

Discrepancy Info

#	Discrepancy #	Discrepancy Description	Discrepancy Status	ATA #	Part #	Serial #	Comments
1	DISC-009199	Cracked Surface	Fully Confirmed	12-21	0-0440-4	6565654	Cracked Surface
2			Fully Confirmed				

Record Observations

Figure 2.17 Recording discrepancy analysis

- The system retrieves the details of the repair order for which the discrepancy analysis must be recorded.

Note: You can open this page only if the Repair Order's Shop Job Type is "Component". In other words, the repair order must specify only a single component / part for repair.

- Specify the **Discrepancy** reported, which could be "Fully Confirmed", "Partially Confirmed" or "No Fault Found".
- Click the **Record Observations** pushbutton.

Specifying the tax, charge or discount details of the part

Whenever the material cost is quoted for a repair order, in addition to the quantity and rate, applicable taxes such as duty, sales tax, discount and freight charges may be specified. All these affect the repair order either positively or negatively. While taxes and charges add to the basic value, discounts reduce the value. The tax, charges and the discount vary from time to time.

- Select the **Edit TCD** link in the **Manage Repair Quote** page. The **Edit TCD** page appears. See Figure 2.16.
- Select the **TCD Mode**, which can be "Document" or "Quote Line # / Part #".
- Use the **Quote Line # / Part #** drop-down list box to select the line number, which is already quoted in the "Manage Repair Quote" page.
- Click the **Get Details** pushbutton to retrieve the TCD details for the Quote line # / Part # selected.

Edit TCD

Repair Order Info

Repair Order # AFRO-000244-2012
 Repair Order Date 2012-01-30
 Repair Shop # 00198
 TCD Mode Document
 Amend. # 0
 Status Quoted
 Repair Shop Supplier 9
 Quote Line # / Part #
 TCD Value
 Currency USD

TCD Information

#	Seq #	TCD Mode	Quote Line # / Part #	TCD #	TCD Variant #	TCD Type	Basis	Taxable Amount	TCD Rate
1		Document		ATSVAT	ATSVAT	Tax	Percentage		
2		Document							

Get Details

Edit TCD

Record Statistics

Created by
 Last Modified by

Created Date
 Last Modified Date

Figure 2.18 Specifying tax, charges and discount details for the repair order

5. Enter the **TCD Mode, Quote Line # / Part #** fields in the multiline.
6. Enter the code identifying the TCD in the **TCD #** field.
7. Enter the **TCD Variant #**.
8. Enter the taxable amount on which the TCD amount will be calculated in the **Taxable Amount** field.
9. Enter the **TCD Rate**.
10. Use the **Pay to Supplier #** drop-down list box to select the supplier to whom the payment must be made.
11. Select the payment currency of the repair order, in the **Payment Currency** field.

Note: 1) For the TCD #s of the TCD Type "Charge" or "Discount", the payment currency you specify must be the same as the Quotation currency. 2) For the TCD Type "Taxes", the currency can be Quotation currency or Base currency.

12. Click the **Edit TCD** pushbutton.

2.4.4 MANAGING WORKSCOPE LEVEL QUOTATION

This screen enables the user to record the Repair Quotation and the Material cost at Workscope level. Workscope Level Quotation will be a break-down for the Repair Quotation entered. In the Workscope Level Quotation, provision will be available to modify the Repair Cost that will be updated back in Part Level Quotation.

1. Select the hyperlinked **Record Cost Break** field in the **Manage Repair Quote** page. The **Manage Workscope Level Quotation** page appears. See Figure 2.17.

Figure 2.19 Managing Workscope level quotation

The system displays the repair order details in the **Repair Order Details** group box.

2. Use the **Quote Line # / Part #** drop-down list box to specify the Quote Line # and Part # for which the workscope is managed.

In the **Quotation Details** multiline

3. Use the **Quote Line #** drop-down list box to specify the line number of the quotation.
4. Use the **Workscope Line #** drop-down list box to specify the line number of the Workscope.
5. Specify the **Repair Process Code** and **Work Unit Type** for the part.
6. Specify the **Repair Classification** and enter the **Repair Cost** of the part.

- Enter the **Est. Man Hrs, Cost/Man Hours, Labor Cost, Material Cost** and **Misc. Cost**.
- Click the **Save** pushbutton to save the entered workscope details for the quotation at line level.

Note: The “Save” pushbutton is not visible when the “Manage Workscope Level Quotation” page is invoked from “View Repair Order”.

Managing material cost in Wworkspace Level Quotation

The Material Cost break-down at the Workscope level can be defined if Material Cost is recorded in the Quotation Line # level in the **Manage Repair Quote** screen and at Workscope level in the **Manage Workscope Level Quotation** screen.

- Select the hyperlinked **Material Cost (Workscope)** field in the **Manage Workscope level quotation** page. The **Material Cost popup** appears. See Figure 2.18.

Material Cost

Repair Order Details

Repair Order # REP-000246-2020 Amend. # 0 Status Quoted

Repair Shop 00198 Repair Shop Name OV01 - JENIC BELANGER Material Cost 10.00

Quote Line #/Part # All Workscope Quote Line # 4 | Qt. Line: 2 Material Cost (Workscope)

Material Details

#	Quote Line # / Part #	Quote Part Desc.	Workscope Quote Line #	Repair Process Code	Work Unit #
1	2/repl3		4 Qt. Line: 2		
2	All		All		
3	All		4 Qt. Line: 2		

Record Material Cost

Edit TCD

Figure 2.20 Material Cost popup

In the **Repair Order Details** group box,

- Use the **Quote Line # / Part #** drop-down list box to specify the Quote Line # and Part # for which the material cost is managed at workscope level.
- Use the **Workscope Quote Line #** drop-down list box to specify the combination of Workscope Quote Line # and Quote Line #.

In the **Material Details** multiline,

- The system displays the **Repair Process Codes, Work Unit #** and **Work Unit Comments** for the Workscope Quote Line # and Quote Line # combination.
- Click the **Record Material Cost** pushbutton to save the Material Cost break-down at the Workscope level.

2.5 AUTHORIZING A REPAIR ORDER

Multi-level authorization of repair order is done based on the various stages that are already defined in the “Workflow Management” business component. The status of the repair order depends on the settings for authorization. For example, if the user is in “Sequence 5”, then the system sets the status as “Under Authorization”. If the user is in the last sequence, the system sets the status as “Authorized”.

1. Select **Authorize Repair Order** activity under the **Repair Order** business component. The **Select Repair Order** page appears. See Figure 2.19.

Select Repair Order

Repair Order # View RO

Primary Search Criteria | **Advanced Search Criteria**

Repair Order #

Date: From / To RO Date 20-08-2017 20-09-2017

Buyer Group

Part # / Mfr. Part #

Expense Type

Ref. Document Type

Ref. Document #

Repair for

Search

Search Results

#	Repair Order #	Repair Shop #	Repair Shop	Part #	Mfr. Part #	Serial #	App. His.	Shipped ?	Part Type	ATA #
1	REP-000221-2017	00000	Supplier 2	0-00-21200-	0-00-21200-19927-1			No	Raw Material	
2	REP-000222-2017	00060	Supplier 3	N21F2-90-R-	N21F2-90-R-1	EF2E8E1D-2		No	Component	00-00
3	REP-000223-2017	00198	Supplier 9	0-0440-4-	123	MSN-2016-25		Yes	Component	72-00
4	REP-000224-2017	00198	Supplier 9	0-0440-4-	123	MSN-2016-27		Yes	Component	72-00
5	REP-000225-2017	00000	Supplier 2	0-1:09058	0-1	5532B7BA-7D		Yes	Component	138-20

Callout 1: The system retrieves the repair orders that are in “Confirmed” or “Under Authorization” status

Callout 2: On clicking this icon, RO Approval History Pop-up will be displayed

Figure 2.19 Authorizing repair orders

2. Search for the repair orders to be authorized and click the **Search** pushbutton.
3. Select the repair orders to be authorized and click the **Authorize RO** pushbutton.

Note: This action is workflow-enabled. You can configure further processing of this document in the “Workflow Management” business component.

On authorization of the repair order, if “BER” is set as “Yes” and “Salvage Action” is set as “By Repair Shop”, the system generates a purchase request.

For repair order with customer order reference, the system authorizes the repair order only if Quotation Status of customer order is “Quoted” or “Not Required”.

2.6 RECORDING REPAIR SHOP CORRESPONDENCE DETAILS

You can record the details of correspondence with a repair shop for repair orders, which are in “Draft”, “Fresh”, “Cancelled”, “Released”, “Issued”, “Acknowledged”, “Quoted”, “Confirmed”, “Authorized”, “Under Auth.”, “Amended” or “BER Closed” status.

1. Select the **Maintain Repair Shop Correspondence** link under **Repair Order** business component. The **Select Repair Order** page appears.
2. Provide filter criteria to search for a repair order and click the Search pushbutton.
3. Click the hyperlinked repair order number in the multiline, to record the repair shop correspondence details. The Maintain Repair Shop Correspondence page appears. See Figure 2.20.

Note: If a single part is specified for repair, the Part #, Serial # and Part Description fields displays values. If more than one part is specified, the Part # field displays “Multiple” and Part Description, Serial #, Component # fields remain blank.

4. Use the Amendment number drop-down list box to select the amendment number of the repair order for which the correspondence details must be recorded.

Maintain Repair Shop Correspondence

Date Format yyyy-dd-mm

Repair Order Info

Repair Order # AFRO-000001-2011
 Repair Order Date 2011-16-11
 RO Type Normal
 Ref. Document Type
 Work Center #

Amendment # 1
 Status Amended
 Remarks
 Ref. Document #

Repair Shop Info

Repair Shop # 85625
 Address 1465 WOODLAND DRIVESALINE48176MICHIGANUNITED STATES
 Contact Person OV01 - JACKSON LETITIA
 Email letitia.jackson@liebherr.com

Repair Shop Supplier 287
 Phone # 734-944-6377
 Fax

Part Details

Part # 767C0000-01:F1958
 Mfr. Part # 767C0000-01
 Component # C40

Part Description PNEU. TEMP SENSOR
 Serial # test-end-cmc-22
 Condition UnServiceable

Correspondence Details

#	Date	Repair Shop Remarks	Buyer Remarks
1	2016-01-04		
2			

Record Statistics

Last Modified by
 Last Modified Date

Maintain Correspondence Details

[View Repair Order](#)

Figure 2.20 Recording correspondence details

5. Enter the **Date** on which the repair shop correspondence details are recorded for a repair order.
6. Enter the **Repair Shop Remarks** to state the repair shop remarks for the repair order line number.
7. Enter the **Buyer Remarks** to state the buyer remarks for the repair order line number.
8. Click the **Maintain Correspondence Details** pushbutton to record the repair shop correspondence details.

For further details,

- Select the **View Repair Order** link to view the repair order details.

2.7 AMENDING A REPAIR ORDER

When the quotation or the work scope requires a revision after authorization, an amendment is made. You can also amend the material cost, terms and condition, TCD and the discrepancies that are reported. After amendment, the repair order must be re-authorized.


2.7.1 AMENDING THE QUOTATION

1. Select **Amend Repair Order** under the **Repair Order** business component. The **Select Repair Order** page appears.
2. Enter the repair order number directly and select the **Amend Quotes** link provided alongside.

Or

3. Search for the repair order and click the **Search** pushbutton. Select the hyperlinked repair order number in the multiline.
4. The **Amend Quotes** page appears. *See Figure 2.21.*

The system retrieves the details of the quotation.

5. Enter the **Repair Shop #** and the **Contact Person** in the repair shop
6. Select the type of the repair order in the **RO Type** drop-down list box. The system provides the options “Normal” and “Exchange”.
7. Select the **Exchange Type** of the component as “With repair” or “Flat”,
 *Note: Leave the exchange type blank, if the RO Type selected is “Normal”.*
8. Select the category to which the repair order belongs in the **RO Category** drop-down list box.
9. Select the user status of the repair order, in the **User Status** field.
10. Use the **Repair Classification** drop-down list box to differentiate tasks, which are over and above the contract (COA - Contract Over and Above), between the operator and the MRO.

Amend Quotes

Repair Order Details

Repair Order # AFRO-000001-2011
 Repair Order Date 2011-16-11
 Priority
 Repair Shop # 85625
 Contact Person OV01 - JACKSON LETITIA
 RO Type Normal
 RO Category CS-REPAIR
 Ref. Document Type
 Work Center #
 Expense Type Revenue
 Move To Warehouse
 Customer Quote #

Amendment # 1
 RO Status Amended
 Quote Basis Manual
 Repair Shop Supplier
 Phone # 734-944
 Exchange Type
 User Status WS con
 Ref. Document #
 Shop Job Type Component
 CAPEX Proposal #
 Repair Classification
 Customer Authorization Status Required

Maint. Object & Quotation Details

Maint. Object Details

#	Line #	Part #	Mfr. Part #	Repair Cost	Exchange Cost	BER Quantity	BER Cost	Salvage Action	Salvage Value / Unit
1	1	767C0000-01:F...	767C0000-01	5.00					
2									

Quotation Details

Quotation Ref # 1234567
 Quotation Date
 Currency CAD
 Component List Price
 Est. Man Hrs.
 Labor Cost
 Material Cost
 Misc. Cost
 Total Cost 5.00
 Remarks
 Quotation Comments
 Customer Comments

Quotation Type Firm
 Price Held Firm Time
 Exchange Rate 1.00000000
 Cost / Man Hr.
 Total Labor Cost
 Total Material Cost 200.00
 Total Repair Cost
 Base Currency Value CAD 5.00

Document Attachment Details

File Name
☐ Override BER Limit
 Amend Quotes

Record Statistics

Created by DMUSER
 Last Modified by DMUSER
 Authorized by MPAGANO
 Created Date 2011-16-11
 Last Modified Date 2016-15-04
 Authorized Date 2011-17-11

Figure 2.21 Amending the quotation



Recordings part and quotation details

1. Select the **Maint. Object & Quotation Details** tab. See Figure 2.21.
2. In the **Maint. Object Details** multiline; enter the estimated **Repair Cost** and **Exchange Cost** for the part.
3. Enter the number of parts declared Beyond Economic Repair, in the **BER Quantity** field.

Note: The BER quantity must be Zero for parts, if the RO Type is "Exchange". Additionally, the system does not you to modify the quantity to a lesser value, though you can change the quantity to a higher value than previously specified.

The "BER Quantity" should not be less than the "Received Quantity".
4. Enter the cost incurred in evaluating component as BER, in the **BER Cost** field.
5. Use the **Salvage Action** drop-down list box, to specify whether the "Repair Shop" or the "Operator" must salvage the component / part that has been declared as "BER".

Note: You must select a salvage action, if the BER quantity is greater than Zero. Alternatively, if you do not select any salvage action, the BER quantity must be Zero.
6. Enter the estimated scrap value of the component / part, in the **Salvage Value / Unit** field and its **Remarks**.

7. In the **Quotation Details** group box, enter the reference number of the quotation in the **Quotation Ref #** field.
8. Select the **Quotation Type**, which could be “Firm” or “Estimate”.
9. Enter the date on which the repair shop confirms the quotation in the **Quotation Date** field.
10. Enter the validity time frame given by the repair shop for the quotation, in **Price Held Firm Time** drop-down list box.
11. Use the **Currency** drop-down list box to select the currency of the quotation.
12. Enter the list price of the component / part, in the **Component List Price** field.
 -  *Note: The above field is mandatory if the Shop Job Type is specified as “Component”.*
 -  *Note: This field is relevant only for repair orders of the RO Type: “Exchange”.*
13. Enter the total man-hours estimated to complete the repair order, in the **Est. Man Hrs.** field.
14. Enter the labor rate per person per hour, in the **Cost / Man Hr.** field.
15. Enter the cost of labor that will be incurred on the repair order, in the **Labor Cost** field.
16. Enter the cost of material that will be incurred on the repair order, in the **Material Cost** field.
17. Enter any extra cost that will be incurred on the repair order, in the **Misc. Cost** field.
18. Enter the total estimated cost of the repair order, in the **Total Repair Cost** field.
19. Note: The amount of total repair cost you specify must be equal to the sum of the total cost of all the records in the “Maint. Object Details” multiline.
20. Enter **Quotation Comments**, if you intend to select the **Override BER Limit** check box.

Recording supplier and part warranty details



1. Select the **Supplier, Part & Warranty Details** tab. See Figure 2.22.
2. In the **Supplier Findings** group box, amend the additional discrepancies detected by the supplier, which could be “Yes” or “No”, in the **Additional Discrepancies Detected** field.
3. In the **Warranty Details** group box, use the drop down list box to select the **Claim Acceptance Status** of the repair order as “Fully Accepted”, “Partially Accepted” or “Rejected”.
4. Use the drop down list box to select **Claim Accepted On** as “Full”, “Labor”, “Material” or “Others”.
 -  *Note: If the under warranty field is set to “No”, then the system will display the value as blank for both Claim Acceptance Status and Claim Accepted On*
5. Enter the reference document you want to attach to the amended repair order, in the **File Name** field.
6. To exempt component/parts from the organization BER Limit and facilitate external repair, select the **Override BER Limit** check box.
7. Click the **Amend Quotes** pushbutton.
 -  *Note: If the RO status is “Closed”, the system ensures that the “Quotation Ref #”, “Remarks (in Quotation details)”, “ Total Cost”, “ Material Cost”, “ Labour Cost”, “Misc. Cost” and “Total Repair Cost” fields are modified. If the RO status is “BER Closed”, the system ensures that the “Quotation Ref #”, “Remarks (in Quotation details)”, “Total Cost”, “Material Cost”, “Labour Cost”, “Misc. Cost”, “BER Cost” and “Total Repair Cost” fields are modified.*

Figure 2.22 Amending supplier, part and warranty details

To provide further details,

- ▶ Select the **Confirm RO Amendment** at the bottom of the page to modify and confirm the selected RO.
- ▶ Select the **Amend Material Cost** link to amend the material cost of the repair order.

Follow the steps listed under the “Recording material cost of the repair order” topic.

- ▶ Select the **Amend Reported Discrepancies** link to amend the discrepancies reported on the repair order.

Follow the steps listed under the “Recording discrepancy analysis” topic.

- ▶ Select the **Amend Terms and Conditions** link from the bottom of the page to record the terms and conditions of the repair order.

Follow the steps listed under the “Specifying terms and conditions in a repair order while recording quotation” topic.

- ▶ Select the **Amend TCD** link to amend the tax, charge and discount details of the repair order.

Follow the steps listed under the “Specifying the tax, charge or discount details of the part” topic.

- ▶ Select the **Amend User Defined Details** link to amend the user defined details of the repair order.
- ▶ Select the **Generate RO Report** to generate the RO report.
- ▶ Select the **Maintain Repair Shop Correspondence** to record/update details of correspondence with the repair shop associated with the repair order.
- ▶ Select the **View Repair cost History** link to view the cost information on previous repairs incurred for the part.
- ▶ Select the **Amend TCD** link to amend the tax, charge and discount details of the repair order.
- ▶ Select the **View Parameter Information** link to view the parameter values updated for the component / part for which the repair order has been created.
- ▶ Select the **View Quotation History** link to view the details of quotations raised for the repair order.
- ▶ Select the **View Issue List** link to view the issue details raised for the repair order.
- ▶ Select the **View Part Supply Chain Performance** link to view part supply chain performance

Confirming RO amendment

1. Select the **Confirm RO Amendment** link in the **Amend Quotes** page. The **Edit Repair Order** page appears. *See Figure 2.23.*
2. Enter the **Repair Shop #** to indicate the number identifying the shop where the component must be repaired field.
3. Specify the **Repair Shop Shipping Date** to indicate the date on which the component is expected to be shipped.
4. Select the **RO Category** to specify the category to which the repair order belongs.
5. Enter the number identifying the warehouse that issues the component in the **From Warehouse #**.
6. Select the location to which the component should be returned after repair, in the **Return to Location** drop-down list

box.

- Enter the warehouse to which the component must be returned after repair, in the **Warehouse #** field.
- Specify the **Spares** to indicate whether spares are shipped along with the component.

Recording part and work scope details

- Select the **Maint. Object & Work Scope Details** tab. See Figure 2.23.

Edit Repair Order

Repair Order Info

Repair Order # RO20000002 Amend. # Status Draft
 RO Type Normal Expense Type Revenue RO Date 2020-01-25
 Capex Proposal #
 Remarks

Repair Shop Details

Repair Shop HAECO Repair Shop HONG KONG AIRCRAFT ENGINE... Address ID 1
 Address --- HK
 Contact Person Phone # 2767 6210 Email procurement@haeco.com
 Fax EDI Required? No

Repair Order Details

Priority NRM For Aircraft Reg # B-HSD Shop Job Type Component
 Exchange Type Currency
 Repair Shop Shipping Date 2020-01-25 Shipping Date Control
 User Status From Warehouse # BKK306
 Return to Location HAECO OU Return Warehouse # BKK306
 Spares No Buyer Group Not Applicable
 Ref. Document Type Ref. Document #
 Station Quote Generation Basis Manual
 Discrepancies Associated? No Repair Classification
 Move To Warehouse

Repair for & Expense Details

Repair for Self Repair for Trading Partner #
 RO & Inv. Org. HXITM Expense to Trading Partner Name

Customer Information

Customer # CPA Customer Name CATHAY PACIFIC AIRWAYS LIM... Customer Order # COS20000021
 Promised Delivery Date

Maint. Object & Work Scope Details **Part & Warranty Details**

Maint. Object Details

#	Line #	Part #	Part Description	Quantity	Stock UOM	Serial #	Lot #	Manufacturer Lot #	Stock Status	Total Cost	Work f
1	1	0111-0005-...	Assembly Sensor	1.00	EA	3589601			CUSTOMER OWNED		Repair
2											

Work Scope Details

Save

Edit RO **Cancel RO** [Edit Terms and Conditions](#)

Edit User Defined Details
 Upload Documents
 Attach Clause

Edit Discrepancies
 Authorize RO

Generate RO Report
 Maintain Repair Shop Correspondence

View Repair Cost History
 View Parameter Information
 View Associated Doc. Attachments
 View Part Information
 View Customer Order


View Part Repair Shop Mapping
 View Warehouse Planning Parameter
 View Warranty Ref. Documents
 View Shipping Note

View Parts Under Repair
 View Warranty Claim
 View Part Supply Chain Performance
 View Advance Shipping Note Information

Figure 2.23 Amending repair order

- In the **Maint. Object Details**, specify the **Part #** and **Quantity** to be confirmed.
- In the **Work Scope**, specify the **Work Unit #** to indicate the work unit to be performed on the component.

4. Click the **Print Task Card** pushbutton to print the task card details.
5. Click the **Get Pending Tasks** pushbutton to fetch the pending tasks into the work scope multiline.
6. Click the **Confirm RO** pushbutton to confirm the repair order.

 *Note: This action is workflow-enabled. You can configure further processing of this document in the **Workflow Management** business component.*

2.8 WORK COMPLETION AND TEARDOWN REPORT

2.8.1 WORK COMPLETION AND TEARDOWN REPORT

An MRO/Operator receives a post execution document that contains work completion and teardown information against a repair order. This information can be recorded in the system and viewed or edited using this screen. This screen also enables the user to know the means in which the information can be captured/modified in 'Work Completion and Teardown Report'. This screen bulk processes completion records of multiple repair orders.

1. Select **Work Completion and Teardown Report** under the **Repair Order** business component. The **Work Completion and Teardown Report** page appears. See *Figure 2.24*.
2. Select the **Create** or **Edit/View** radio button to create or modify/view the Work Completion and Teardown report..
3. In the **Search Criteria** group box, use the **Exec. Order** drop-down list box and specify the search criteria.

#	Exec. Order Type	Order #	Main Core Part #	Main Core Mfg. Serial #	Mod #	Main Core Mfg. Lot #	New Part #	New Mfg. Serial #	New Mod #	Removal Type	Rem.
1	Repair Order	AFRO-003014-2020	CA2304-1	CASL-01	1		000	4	1	Unscheduled	Unsk
2	Repair Order	AFRO-003009-2020	CA2304-1	11							
3	Repair Order	AFRO-003010-2020	000:99999	14							
4	Repair Order	AFRO-003030-2020	00001	123							
5	Repair Order										

Figure 2.24 Work Completion and Teardown Report

4. Select the [Work Execution Info.](#) tab to record the information related to Repair Order.
5. Select the [Bill of Material](#) tab to record the information related to the tools and its cost which are used in respective Repair Orders of Work Execution Info.

Recording Work Execution Info.

This tab enables the user to record the information related to Repair Order. There is no restriction for providing the other information in this tab.

6. Select the **Work Execution Info.** tab in the **Work Completion and Teardown Report** page. This tab appears by default. See *Figure 2.24*.
7. Use the **Exec. Order Type** to specify the type of the execution order which is "Repair Order".
8. Enter the **Order #**, **Main Core Part #**, **Main Core Mfr. Serial #**, **Main Core Mfr. Lot #** and **Mod #** of the repair order.
9. Enter the **New Part #**, **New Serial #** and **New Mod #**.
10. Specify the **Removal Type**, **Removed Condition** and **Removal Reason** of the removed part.
11. Use the **Warranty Claim** drop-down list box to specify whether the Warranty claim is applicable for the part or not.
12. Enter the **TSN**, **TSA**, **TSO**, **TSR**, **TSI**, **CSN**, **CSA**, **CSO**, **CSR** and **CSI**.
13. Specify the **Certificate Type** and enter **Certificate #**.
14. Click the **Save** pushbutton to record the repair order details.

Recording Bill of Material

This tab enables the user to record the information related to the tools and its cost which are used in respective Repair Orders of Work Execution Info.

15. Select the **Bill of Material** tab in the **Work Completion and Teardown Report** page. The **Bill of Material** tab appears. See *Figure 2.25*.

Work Completion and Teardown Report RAMCO OU-ramco role

Create Edit/View

Search Criteria

Main Core Part # Main Core Mfg. Serial # Main Core Mfg. Lot #

Exec. Order Search by

Search Results

Work Execution Info. Bill of Material

#	Exec. Order Type	Order #	Part #	Mfg. Serial #	Mod #	Mfg. lot #	Qty	UoM	Replacement Reason	Remarks	Price
1	Repair Order	AFRO-003020-2020	0001	123	MOD1		1.00	EA	No reason	Unit testing	
2	Repair Order	AFRO-003012-2020	DMH1	seral99		LOT-007391-2019	1.00	12			
3	Repair Order	AFRO-003018-2020	CA2304-5	CASL-005a							
4	Repair Order	AFRO-003014-2020	CA2304-1	CASL-01							
5	Repair Order	AFRO-002969-2020	P-EXP-2	CO-008370-2020							
6	Repair Order	AFRO-002971-2020	P-EXP-4	CO-008373-2020							
7	Repair Order	REP-000320-2020	08854-42:P6356	0.871137747536442							
8	Repair Order	REP-000316-2020	0-1:58065	4AE0E64E-							


Figure 2.25 Recording Bill of Material

16. Use the **Exec. Order Type** to specify the type of the execution order which is “Repair Order”.
17. Enter **Order #, Part #, Serial #, Mod #, Lot #, Quantity** and **UOM**.
18. Enter the **Replacement Reason** for the repair part.
19. Specify the **currency** and user defined details.
20. Click the **Save** pushbutton to record the cost details of the repair order.

2.9 RECEIVING REPAIRED PARTS

2.9.1 CREATING REPAIR RECEIPT

You can create a repair receipt for the parts that are received after repair.

1. Select **Manage Goods Receipt** under the **Goods Inward** business component. The **Manage Goods Receipt** page appears. See Figure 2.26.
2. In the **Select Ref. Doc. #/ Receipt #** group box, enter the repair order # in the **Ref. Document #** field.
 *Note: A repair receipt can be created only for a Repair Order (RO) document that is in the "Authorized" status, and has the latest amendment number, if it has been amended.*

In the **Receipt Info** group box;

3. From the **Receipt #** drop-down, select "New Receipt" and enter **Receipt Date**.
4. Enter **Way Bill #** and **Way Bill Date**.
5. Use the **Receipt Priority** drop-down list to assign priority to the receipt document.
6. Enter **Packing Slip #** and **Packing Slip Date**.
7. In the **Received At** group box, enter **Receiving Location**, **Receiving Warehouse** and **Receiving Area**.
8. In the **Received From** group box, enter **Supplier #** or **Customer #**.
9. In the **Additional Details** group box, enter Package and Consignment details.
10. Enter **Gate Pass #** and **Gate Pass Date**.
11. Select the [Part Details](#) tab for recording the details of the part.
12. Select the [Serial/ Lot Details](#) tab for recording the serial/ lot details of the part.
13. Select the [Supplementary Info](#) tab for recording the additional details of the part.
14. Select the [Movement Details](#) tab for recording details of the part movement after acceptance.
15. Select the **Update Inspection** check box to update inspection details of parts at the time of receipt for those received parts that do not require inspection or those are not Shelf-life Controlled.
16. Check the **Move Parts** check box to move to the warehouse those received parts that do not require inspection.
17. Click the **Confirm Receipt** pushbutton to confirm the receipt document or a specific received part.

For recording additional information on the received part;

- ▶ Select the **Record Hazmat Compliance** link at the bottom of the page to record the Compliance details for Hazmat parts in the document.
- ▶ Select the **Record Inspection Information** link at the bottom of the page to record the inspection information of the received part number.
- ▶ Select the **Upload Documents** link at the bottom of the page to upload the documents for goods receipt.
- ▶ Select the **Request New Part / Part Attribute Change** link at the bottom of the page to request new part or to change the attribute of the existing part.
- ▶ Select the **Maintain External Stock Allocation** link at the bottom of the page to maintain external stock allocation details.

Manage Goods Receipt

Select Ref. Doc. # / Receipt #

Ref. Document # APO00419320 Purchase Order Go

Receipt Details

Receipt Info.

Receipt # New Receipt
 Receipt Date 2021/02/07
 Receipt Priority
 Pack Slip #

Received At

Receiving Location JFK
 Receiving Warehouse # 0123
 Receiving Area R1

Received From

Supplier # 00000 View
 Customer # View
 Supplier / Customer Name RAMCO AVIATION & AEROSPAC...

Ref. Doc. Info.

Ref. Doc. # APO00419320 View
 Ref. Doc. Type Purchase Order
 Ref. Doc. Sub Type General

Other Info

Supplementary Info? Work Requested? Parts Quarantined?

Additional Details

Part Details Serial/Lot Details Supplementary Info Movement Details Reports

#	NXT	INS	PCT	HAZ	STK	PRT	Received Part #	Pending Qty	Qty	UOM	Duty Document Check	No. of Lots
1							00000584	7.00		EA	Not Applicable	
2											Not Applicable	

Get Storage Info. Record/Update Receipt

View Alternate Parts

☐ Update Inspection ☒ Move Parts Cancel Receipt Reverse Receipt

Record Additional Receipt Info

Record Hazmat Compliance Record Inspection Information Upload Documents
 Request New Part / Part Attribute Change Maintain External Stock Allocation Review Records Update

View Records

View GR List for Ref. Doc. # View Associated Doc. Attachments Inquire New Part / Part Attribute Change Request Status

Figure 2.26 Creating repair receipt

Recording Part details

The **Part Details** tab in the Manage Goods Receipt page is typically used to record part details of received parts. You can record details including part #, incoming quantity of the received part, stock status, condition, warehouse to which these parts must be shifted post upon inspection. Accepted parts are moved to warehouse, rejected parts are sent back to the repair shop and the quarantined parts are stored for further inspection.

You can also record information on a received part that has undergone an inapplicable maintenance process.

1. Select the **Part Details** tab in the **Manage Goods Receipt** page. The **Part Details** tab appears. See Figure 2.27.

Part Details Serial/Lot Details Supplementary Info Movement Details Reports

#	NXT	INS	PCT	HAZ	STK	PRT	Received Part #	Pending Qty	Qty	UOM	Duty Document Check	No. of Lots
1							00000584	7.00		EA	Not Applicable	
2											Not Applicable	

Get Storage Info. Record/Update Receipt

View Alternate Parts

☐ Update Inspection ☒ Move Parts Cancel Receipt Reverse Receipt

Record Additional Receipt Info

Record Hazmat Compliance Record Inspection Information Upload Documents
 Request New Part / Part Attribute Change Maintain External Stock Allocation Review Records Update

View Records

View GR List for Ref. Doc. # View Associated Doc. Attachments Inquire New Part / Part Attribute Change Request Status

Figure 2.27 Record received part details

2. Enter **Received Part #** and **Qty**.

- Specify **UOM** for the received part.
- Enter **Package Code** and **Package Condition** of the received part.
- Enter **Stock Status** for the received part.
- Enter **Warehouse #**, **Zone #** and **Bin #** to which the received quantities of the part must be moved.
- Enter Quarantine details for the part, if the received part has been quarantined.
- Use the **Resolution Resp.?** drop-down list to select the entity that is responsible for the resolution or quarantine issues.
- Enter **Resolution Comments**, if the received part has been quarantined.
- Select **Quarantine Area** and **Inspection Area** for the received part.
- Enter **Rejected Qty** to indicate the quantity of the received part that has been rejected on receipt of delivery.
- Enter **Reason for Rejection**, if the received part has been rejected.
- Check the **New Part?** check box, if the received part is not defined in the inventory.
- Enter the **Ref. Doc. Line #** for the received part in the repair order for which you wish to create the repair receipt.
- Click the **Get Storage Info.** pushbutton to retrieve the warehouse, zone, bin information for the parts to be received.
- Click the **Record/ Update Receipt** pushbutton to record the receipt document.

Recording Serial/Lot details

In addition to the **Part Details** tab in the **Manage Goods Receipt** page, users are required to record the **Serial/Lot Details** tab, if the received part is **Serial-Controlled** or **Lot-controlled**. For the serial/lot # of the received part, you can record similar details as in the **Part Details** tab.

However, this tab is not applicable for None-Controlled parts.

- Select the **Serial/Lot Details** tab in the **Manage Goods Receipt** page. The **Part Details** tab appears. *See Figure 2.28.*

The screenshot displays the 'Serial/Lot Details' tab within the 'Manage Goods Receipt' application. The top navigation bar includes 'Part Details', 'Serial/Lot Details' (active), 'Supplementary Info', 'Movement Details', and 'Reports'. Below the navigation bar, there are fields for 'Display Option' (set to 'All line # - Pending Serial / Lot #'), 'Receipt Line #', and 'Default Mfr. Lot #'. A toolbar with various icons is present above the main data table. The table has columns: #, PCT, SLF, CRT, Line #, Received Part #, Received Mfr. Serial #, Serial #, Received Mfr. Lot #, Qty, and UOM. The table contains three rows of data. Below the table, there are buttons for 'View File' and 'Save'. At the bottom of the window, there are several links: 'Specify Tech Records / Maint. Info for components', 'Re-initialize / Update Parameter Values', 'Maintain Discrepancy Information', 'View Records', 'Inquire Engineering Service Request Status', 'Initialize Maint. Program / Update Compliance', 'Create Engineering Service Request', 'Initialize & Update Comp. Configuration', and 'Edit Component Maintenance Program'.

Figure 2.28 Specifying lot and serial number information for the received parts r

- Enter **Received Serial #**, if the received part is a Serial-Controlled part.
- Enter **Received Lot #**, if the received part is a Lot-Controlled part.
- Enter **Qty** of the received part.
- Use the **Received Condition** drop-down list to select the condition of the received goods.
- Use the **Change Type** drop-down list box to select the variance in issued and received parts. However, if the issued and received parts are the same, do not select any option from the drop-down list box.
- Use the **Change Basis** drop-down list box to select the cause for variance in the issued and received parts.

8. Enter the Operator # for the aircraft associated with the part.
9. Enter the Certificate details for the part.
10. Use the **Shelf Life Check?** drop-down list to enforce or override the shelf life check on the part based on the Expiry Date.
11. Enter **Quarantine** details for the part, if the received part has been quarantined.
12. Use the **Resolution Resp.?** drop-down list to select the entity that is responsible for the resolution or quarantine issues.
13. Enter **Resolution Comments**, if the received part has been quarantined.
14. Select **Quarantine Area** and **Inspection Area** for the received part.
15. Enter **Rejected Qty** to indicate the quantity of the received part that has been rejected on receipt of delivery.
16. Enter **Reason for Rejection**, if the received part has been rejected.
17. Select the **Deviated Part?** check box to indicate the part was deviated from the maintenance process it must have complied with.
18. Enter **Deviation Comments** for the variance in the maintenance on the deviated part.
19. Click the **Save** pushbutton to save the serial/ lot details.

Specify Tech Records/ Maint. Info for components

- ▶ Select the **Re-Initialize/ Update Parameter Values** link to reinitialize and update the parameter values.
- ▶ Select the **Initialize Maint. Program & Update Compliance** link to initialize the maintain program and update the compliance.
- ▶ Select the **Initialize & Update Com. Configuration** link to initialize and update the component configuration.
- ▶ Select the **Maintain Discrepancy Information** link to edit the deferment details already specified for a work unit.
- ▶ Select the **Create Engineering Service Request** link to raise an ESR and confirm it.
- ▶ Select the **Edit Component Maintenance Program** link to update the maintenance program for a received component.

Recording Supplementary details

The **Supplementary Details** tab in the **Manage Goods Receipt** page enables you to specify values for various supplementary entities associated with the received part.

1. Select the **Supplementary Details** tab in the **Manage Goods Receipt** page. The **Supplementary Details** tab appears. See *Figure 2.29*.

The screenshot displays the 'Supplementary Info' tab within a software application. At the top, there are navigation tabs: 'Part Details', 'Serial/Lot Details', 'Supplementary Info' (which is active), 'Movement Details', and 'Reports'. Below these tabs is a toolbar with various icons for actions like back, forward, search, and print. A 'Display Option' dropdown menu is set to 'All'. To the right, there is a 'Part #' dropdown menu. The main area contains a table with the following headers: '#', 'Part #', 'Supp. Entity', 'Description', 'Mandatory?', 'Supp. Entity Value', and 'Part Description'. The table has one row with the number '1' in the first column, but the rest of the row is empty. Below the table, there is a 'Save' button.

Figure 2.29 Recording supplementary information for the received part

2. Enter **Supp. Entity Value** for the received part in the multiline.
3. Click the **Save** pushbutton to save the details.

Recording Movement details

Typically, users record movement details of received parts that have passed inspection and have been accepted by the

buyer organization in the Moment Details tab of the Manage Goods Receipt page. Typically, this tab can be used in scenarios in which binning of received parts is not a separate /mandatory process.

1. Select the **Movement Details** tab in the **Manage Goods Receipt** page. The **Movement Details** tab appears. See Figure 2.30.

Figure 2.30 Recording movement details for the received part

2. Recording Select **Movement Type** for moving the received part for storage.
3. Enter **Move Qty** to indicate the numbers of the received part to be moved.
4. Select **Move to Area** to indicate the interim place to which the received part must be shifted. The drop-down list box displays "Rejection Area", "Shipping Area" and "Scrap Area".
5. Select **Area ID**.
6. Use the **Stock Status** drop-down list to select the stock status of the received part.
7. Use the **Condition** drop-down list to indicate the condition of the received goods.
8. Select **Warehouse #**, **Zone #** and **Bin #** in which the received part is stocked.
9. Specify the employee who moved the received parts in **Moved by** field.
10. Enter **Moved Date**.
11. Enter **Transfer to Warehouse #** to indicate the warehouse to which the received must be transferred.

Note: This field is relevant and mandatory only if the Movement Type is "Transfer - Allocation"
12. Click the **Get Storage Info.** pushbutton to retrieve the warehouse, zone, bin information for the parts to be received.
13. Click the **Simulate Allocation** pushbutton to identify those pending material requests that must be recipients of the received parts.

Note: When a Received part has undergone a Part Data Change, then Simulate Allocation is not allowed and Movement type is always stamped as Binning.
14. Click the **Move Parts** pushbutton to save movement details and move the part to the specified movement type.

Inspecting the goods received after repair

Inspection is required for all the part numbers that are received after repair. The goods received can be inspected at the warehouse by the user or by an external agency. After the inspection process, the quantity, which has been accepted, rejected or quarantined, can be updated. Inspection is of two different types:

Lot-controlled part inspection – Indicates lot controlled parts are inspected and the inspection report is entered accordingly. This type of inspection is done on the receipt of consumables, expendables etc.

Serial-controlled part inspection – Indicates that parts that are serial controlled are inspected and the inspection report is entered for the various serial numbers supplied. This type of inspection is done on receipt of components or tools. Partial inspection of these parts is not possible.

However, the Inspect Parts activity becomes mandatory, if the process parameter “Tech. Record update during Inspection” under the category Goods Inward – Repair Receipt” in the Set Inventory Process Parameters activity of Logistics Common Master is set as 1 (Yes).

Note: You can inspect only those repair receipt documents, which are in “Receipts Frozen”, “Inspected” or “Partially Inspected” status.

1. Select **Inspect Parts** under the **Good Inward** business component. The **Inspect Parts** page appears. See Figure 2.31.

The screenshot displays the 'Inspect Parts' interface. At the top, there's a breadcrumb trail: Stock Management > Goods Inward > Inspect Parts. Below this, the 'Inspect Parts' title is shown. The interface is divided into several sections:

- Receipt Details:** Includes fields for Receipt # (GI-011354-2020), Receipt Date, Receipt Priority, Receipt Type, Way Bill #, Pack Slip #, Receipt Status, Way Bill Date, and Pack Slip Date.
- Received At:** Includes Receiving Location, Receiving Warehouse #, and Receiving Area.
- Received From:** Includes Supplier #, Customer #, and Supplier / Customer Name.
- Ref. Doc. Info.:** Includes Ref. Doc. #, Ref. Doc. Type, and Ref. Doc. Sub Type.
- Inspection Info:** Includes Supplementary Info?, Inspection Check List?, and Parts Quarantined?.
- Additional Details:** A section with tabs for Part Details, Supplementary Info, Inspection Check List, Movement Details, and Reports.

The **Part Details** tab is selected, showing a table with columns: #, NXT, HAZ, SLF, CRT, ICL, PV, CRAD, PTDR, PRG, CFG, Eng. Doc., INS, PRT, Received Part #, Mfr. Part #, and Received Mfr. Serial #. The table currently shows one row with the value '1' in the first column. Below the table, there are buttons for 'Move Parts', 'Confirm Inspection', and 'Reverse Inspection'. At the bottom, there are links for 'Record Additional Receipt Info', 'Upload Documents', 'Maintain External Stock Allocation', 'View Documents', and 'View Associated Doc. Attachments'.

Figure 2.31 Recording inspection details of received parts

2. Enter the **Receipt #** to display details of the repair receipt in the screen.
3. Record the [Part Details](#) tab.
4. Record the [Supplementary Info.](#) tab.
5. Record the [Inspection Check List](#) tab.
6. Record the [Movement Details](#) tab.
7. Select the **Move Parts** checkbox to move received parts to the pre-defined warehouse upon inspection without recording the **Movement Details** tab.
8. Click the **Confirm Inspection** pushbutton to confirm the inspection of the received parts.

Recording Part details

The **Part Details** tab in the **Inspect Parts** page is typically used to record inspection details of received parts. You can record details of received parts including part # and serial #/lot #, incoming quantity, stock status, condition, warehouse to which these parts must be shifted upon inspection.

You can record rejection and quarantine details of received parts, if any quantity has been rejected or quarantined, in this tab. You can also record information on a received part that has undergone an inapplicable maintenance process.

9. Select the **Part Details** tab in the **Inspect Parts** page. The **Inspect Parts** page appears. See Figure 2.29.

For the received part,

10. Enter **Received Mfr. Serial #** or **Received Mfr. Lot #**.
11. Enter **Accepted Qty** and **Condition**.
12. Use the **Change Type** drop-down list box to indicate the variance in the issued and received part.
13. Use the **Change Basis** drop-down list box to select the reason for the variance in the issued and received part.
14. Enter **Operator #** for the airline company that owns the received part.
15. Use the **Records Update?** drop-down list to indicate the status of the technical records update.
16. Enter Quarantine details.
17. Select **Resolution Resp.?** to indicate the entity that is authorized to resolve the quarantined parts issue and enter Resolution Comments.
18. Use the **Quarantine Area** drop-down list box to select the warehouse that is used to store quarantined parts.
19. Enter **Rejected Qty** of the received part and, **Reason for Rejection**.
20. Enter **Certificate details** of the received part.
21. Enter **Mfr. Date** and **Expiry Date**.
22. Use the **Shelf Life Check?** drop-down list box to indicate whether shelf life check on the received part is mandatory or can be ignored. However, this field is relevant only if the received part is Shelf Life-Controlled.
23. Check the **Deviated Part?** check box to indicate that the received part has complied with an invalid maintenance process and Deviation Comments.
24. Enter Inspection details.
25. Click the **Record / Update Inspection** pushbutton to save part details.

Specify Tech Records/ Maint. Info for received parts/components that you selected in the multiline:

- ▶ Select the **Re-Initialize/ Update Parameter Values** link to reinitialize and update the parameter values.
- ▶ Select the **Initialize Maint. Program & Update Compliance** link to initialize the maintain program and update the compliance.
- ▶ Select the **Initialize & Update Com. Configuration** link to initialize and update the component configuration.
- ▶ Select the **Maintain Discrepancy Information** link to modify the deferment details.
- ▶ Select the **Create Engineering Service Request** link to raise an ESR and confirm it.
- ▶ Select the **Edit Component Maintenance Program** link to update the maintenance program.
- ▶ Select the **Review Records Update** link to record update status of technical records.

Recording Supplementary details

The **Supplementary Details** tab in the Inspect Parts page enables you to specify values for various supplementary entities associated with the received part.

1. Select the **Supplementary Details** tab in the Inspect Parts page. The Supplementary Details tab appears. *See Figure 2.32.*

Part Details **Supplementary Info** Inspection Check List Movement Details Reports

Display Option: All Part #:

Found no rows to display!!!

#	Part #	Supp. Entity	Description	Mandatory?	Supp. Entity Value	Part Description
1						

Save

Figure 2.32 Records supplementary details of received parts

2. Enter **Supp. Entity Value** for the supplementary entity
3. Click the **Save** pushbutton to save details.

Recording Inspection check list

You can record the Inspection Check List tab, if Inspection Check List is applicable for the repair receipt. You can specify quantitative or qualitative values of parts at the time of receipt based on attribute type of parts.

1. Select the **Inspection Check List** tab in the **Inspect Parts** page. The **Inspection Check List** tab appears. See Figure 2.33.

Part Details Supplementary Info **Inspection Check List** Movement Details Reports

Display Option: All Part #:

1 - 4/4

#	Received Part #	Serial/ Lot#	Check List / Att.Code	Description	Mandatory?	Verified?	Comments	Part Description
1			ST test	test	YES	<input checked="" type="checkbox"/>		
2			Test	Test123	YES	<input checked="" type="checkbox"/>		
3	00000584		Test1234	Test	NO	<input checked="" type="checkbox"/>		00000584
4	00000584	LOTCHK	Round3	Qa-test	YES	<input checked="" type="checkbox"/>		00000584
5						<input type="checkbox"/>		

☐ Verified All Save

Figure 2.33 Recording Inspection check list for the received part

For the received part,

2. Select the **Verified** checkbox to indicate whether the checklist or attribute information is verified by the inspector.
3. Enter **Avg Min. Value**, **Avg Max. Value** and **Avg Value** for parts with the attribute type as 'Quantitative'.
4. Enter **Qualitative Value** for parts with the attribute type as 'Qualitative'.
5. Check the **Verified All** check box to select the **Verified?** checkbox in the multiline for all the received parts in the multiline.
6. Click the **Save** pushbutton to save the inspection check list information.

Recording Movement details

You can use the **Movement Details** tab in the **Inspect Parts** page to record storage details for those quantities of received parts that are accepted upon inspection. Alternatively, you can select the Move Parts checkbox to move received goods automatically on successful inspection.

1. Select the **Movement Details** tab in the **Inspect Parts** page. The **Movement Details** tab appears. See Figure 2.34.

#	HAZ	MVD	Error Indicator	Message Center	Mvmt. Proc. Status	Received Part #	Mfr. Part #	Movement Type	Pending Qty	Move Qty	UOM	Move to Area
1		YES				00000584		Binning	0.00	3.00	EA	
2								Allocation				

Get Storage Info. Simulate Allocation Move Parts

Figure 2.34 Recording movement details of the received part during inspection

2. For the received and inspected part, select **Movement Type** as Binning, Allocation, Transfer – Allocation, Rejection, Rejection - Return to Supplier, Rejection – Scrap, Work Center, Ship to Customer and Ship to Supplier – Exchange.

Note: To simulate allocation for repair receipts, you must select Binning, Allocation or Transfer-Allocation as the movement type.
3. Use the **Move to Area** drop-down list to select the interim storage area to which the part must be moved, if the movement type is related to rejection.
4. Select **Area ID** for the interim storage area in the receiving warehouse for the storage of rejected parts.
5. Select **Stock Status, Condition, Warehouse #, Zone #** and **Bin #**.
6. Specify **Moved by** to name the employee who moved the received part and **Moved Date**.
7. Specify **Transfer to Warehouse #** identifying the warehouse to which the part is transferred. This field is applicable only if Movement Type is “Transfer – Allocation”.
8. Click the **Get Storage Info.** pushbutton to retrieve the warehouse, zone, bin information for the parts to be received.
9. Click the **Simulate Allocation** pushbutton to allocate pending material requests, which is permitted only for certain movement types.
10. Click the **Move Parts** pushbutton to save movement details.

2.10 BINNING THE PARTS RECEIVED AFTER REPAIR

After inspection, the parts can be moved from the place of receipt to the warehouse designated in the Customer Order/ Purchase Order/Release Slip/ Repair Order / Direct Customer Goods Receipt. The received parts are usually moved to the precise zone and bin in the warehouse after the acceptance has been frozen upon inspection.

An authorized person typically undertakes this activity to record the movement/binning of the part. Inventory postings are done after the movement.

This recording of this activity is mandatory, if the “Binning is a separate process” process parameter under the category Goods Inward is 1 (Yes) in the Define Inventory Process Parameters activity.

1. Select **Bin Parts** under the **Goods Inward** business component. The **Bin Parts** page appears. See Figure 2.35.
2. Enter **Search Criteria** and then click **Get Parts** to retrieve the repair receipt of received parts you wish to move to the designated storage place.

The screenshot displays the 'Bin Parts' application window. At the top, there's a breadcrumb trail: Home > Stock Management > Goods Inward > Bin Parts. Below this is a search section with fields for 'Receiving Location', 'Receiving Warehouse #', and 'Search On', along with a 'Get Parts' button. The main section is titled 'Binning Details' and contains a table with 13 columns: #, PCT, HAZ, Receipt #, Error Indicator, Message Center, Mvmt. Proc. Status, Received Part #, Mfr. Part #, UOM, Stock Status, To Stock Status, and Co. The table lists 10 rows of data, including receipt numbers like GI-008218-2013 and GI-008441-2013, and stock statuses like CUSTOMER OWNED and Accepted. Below the table is a 'Get Storage Info.' button. At the bottom, there are 'Save' and 'Confirm' buttons, and a section for 'Generate Reports' and 'Record Additional Receipt Info' with links like 'Generate Part Barcode Label', 'Generate MMD Report', 'Record Hazmat Compliance', and 'Maintain External Stock Allocation'.

Figure 2.35 Recording the binning of parts

3. In the **Binning Details** multiline, select **Stock Status** and **Condition** of the received part.
4. Select **Warehouse #**, **Zone #** and **Bin #** to which the received part must be shifted for storage.
5. Alternatively, you can click the **Get Storage Info.** pushbutton to retrieve warehouse, zone and bin predefined for the part.

Note: The selected line item must not be in "Moved" status.

6. Click the **Save** pushbutton to record details.
7. Click the **Save & Confirm** pushbutton to record and confirm details at one go.

For recording additional information,

- ▶ Select the **Record Hazmat Compliance** link at the bottom of the page to record the Compliance details for Hazmat parts in the document.
- ▶ Select the **Maintain External Stock Allocation** link at the bottom of the page to maintain external stock allocation details.

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