



11490

eShop Order

SACS-Cincinnati

Agenda



Generate Barcode/Pin



Log in to SA Menu



Log on to a job



Read a Router



Sign off a job



Log out of a job



Transfer the part

History/Importance



Go Green!

Streamline process



**Consistency among
completed repairs**

Document retention

**Best documentation
practices**

Traceability

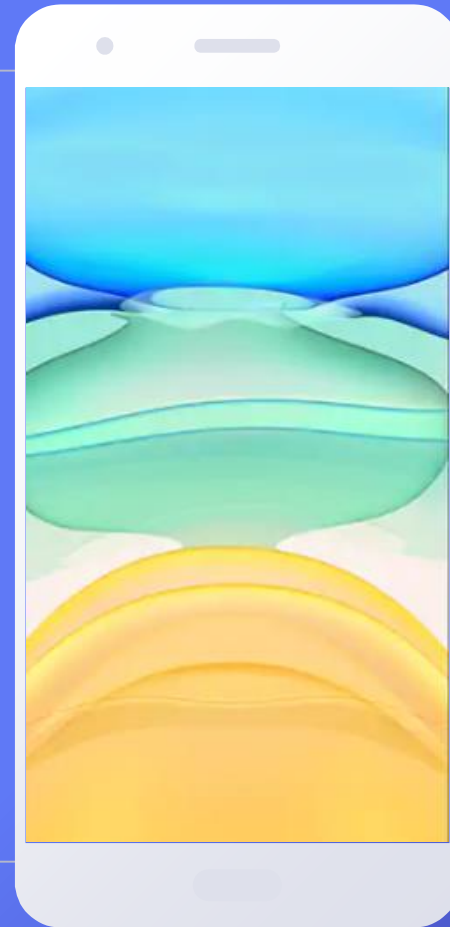
1. The Router Packet

Introduction to understanding the Router



Router Packet

- ▶ The Packet contains pertinent customer information & technician provided documentation concerning the part. The Packet travels through the facility with the part.
- ▶ As you would be glued to your cell phone at home, the Router is always near the part.



Router Packet

- **Solid Red:** used for parts going to Large & LLP.

Red line on clear folder: used for parts that are Warranty parts only.

- **Yellow** line on clear folder: used for parts that are not going to Large & Life Limited Part cells or warranty.

Green: used for parts that need to be expedited.

Blue line on clear folder: used for parts for rotatable sales.

- **Solid blue:** used for parts for new Military work.

Cycle 1 Router: Receiving thru inspection (orange)

INFORMATION

NUT RETAINING / SELF LOCKING

PMS P/N T448AP72550241D REV 8 QTY 1 DUE DATE
OEM P/N 301-547-905-0 S/N TAG AD446749
MODIFY TO Cincinnati TSN N/A CSN N/A
TCN **AD446749** S/O **S5T20** NCT/
MRB

PART NAME: _____
REMARKS: _____

GENERATED BY _____ WORK GROUP 00
CUSTOMER SNEAME SAFRAN AIRCRAFT ENGINE SERVICES AMERI
REMVD FROM E/I NUT RETAINING / SELF LOCKING
ENGINE MODEL CFM56-5A S/N TAG AD446749
E/I SHOP ORDER S5T20 KIT ID _____ W/G NSN 121609
EMPLOYEE: _____

ASSEMBLY CELL

9



INFORMATION


NUT, RETAINING NO.5 BEARING

PMS P/N AD0241 REV 50 QTY 1 DUE DATE

OEM P/N 301-547-905-0 S/N TAG AD446749

MODIFY TO TSN N/A CSN N/A

TCN **AD446749** S/O **S64UF** NCT/
MRB

PART NAME:  **9**

REMARKS:

GENERATED BY STEVEN BENZ WORK GROUP 00

CUSTOMER SNEAME SAFRAN AIRCRAFT ENGINE SERVICES AMERI

REMOVED FROM E/I NUT RETAINING / SELF LOCKING

ENGINE MODEL CFM56-5A S/N TAG AD446749

E/I SHOP ORDER S5T20 KIT ID W/G NSN 121609

EMPLOYEE: ASSEMBLY CELL

CREATED 23-Jan-2020

**Cycle 2 Router:
Repair (white)**

2. Generating a Barcode

Introduction to generating a barcode

Guard your pin! If you leave your Badge at home or need to reprint, the new Pin invalidates the previous one.

Use your barcode to sign-off on the job sequence you are currently working on.



Generating a barcode

1.	Log in to <i>SA Menu</i> by typing in your <i>Username</i> and <i>Password</i> : <ul style="list-style-type: none"> • <u>Username</u>: Employee ID number. • <u>Password</u>: Computer log on password.
2.	Maximize the screen.
3.	Locate the “Qualifications and Training” <i>Tab</i> (seventh from bottom).
4.	Double-click on <i>Tab</i> (several gray cells appear).
5.	Double-click on “Generate Pin” <i>Tab</i> .
6.	Drop-down Menu displays <i>Printer</i> options. Ensure <i>Printer</i> is mapped to correct <i>Printer</i> . If <u>not</u> , proceed as follows: <ul style="list-style-type: none"> • Click on <i>Start Menu</i> button. • <u>Type</u>: //wkrp/Printer Name {ex. //A5062}. • Press “Enter” on keyboard. • <u>Note</u>: When <i>Printer Queue</i> displays on screen, click “OK” to exit <i>Printer Queue</i>.
7.	Return to “Generate Pin” screen.
8.	Type in your <i>Username</i> and <i>Password</i> (same as Step 1).
9.	Verify <i>Pin</i> will be sent to correct <i>Printer</i> .
10.	Click “Generate Pin and Print” button.
11.	Retrieve <i>Pin</i> from <i>Printer</i> .
12.	Use scissors and tape to: <ul style="list-style-type: none"> • Cut <i>Pin</i> out. • Tape <i>Pin</i> to back of your <i>Badge</i>.

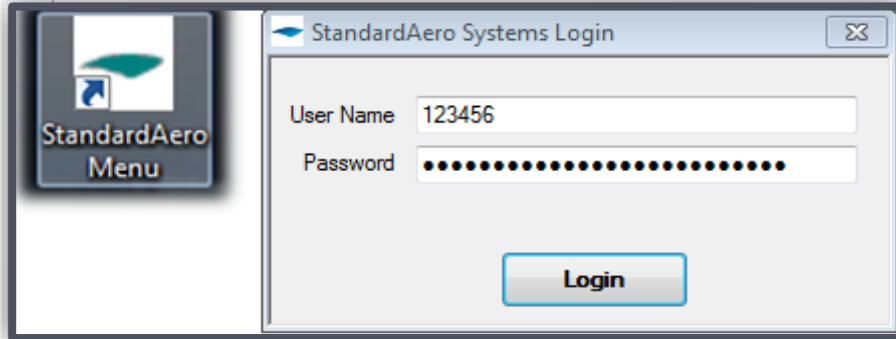
“ Treat your barcode like you would your ATM card. Do not leave Barcode/Pin on your desk.



3. Logging into SAM

Introduction to logging into SA Menu (SAM)





1

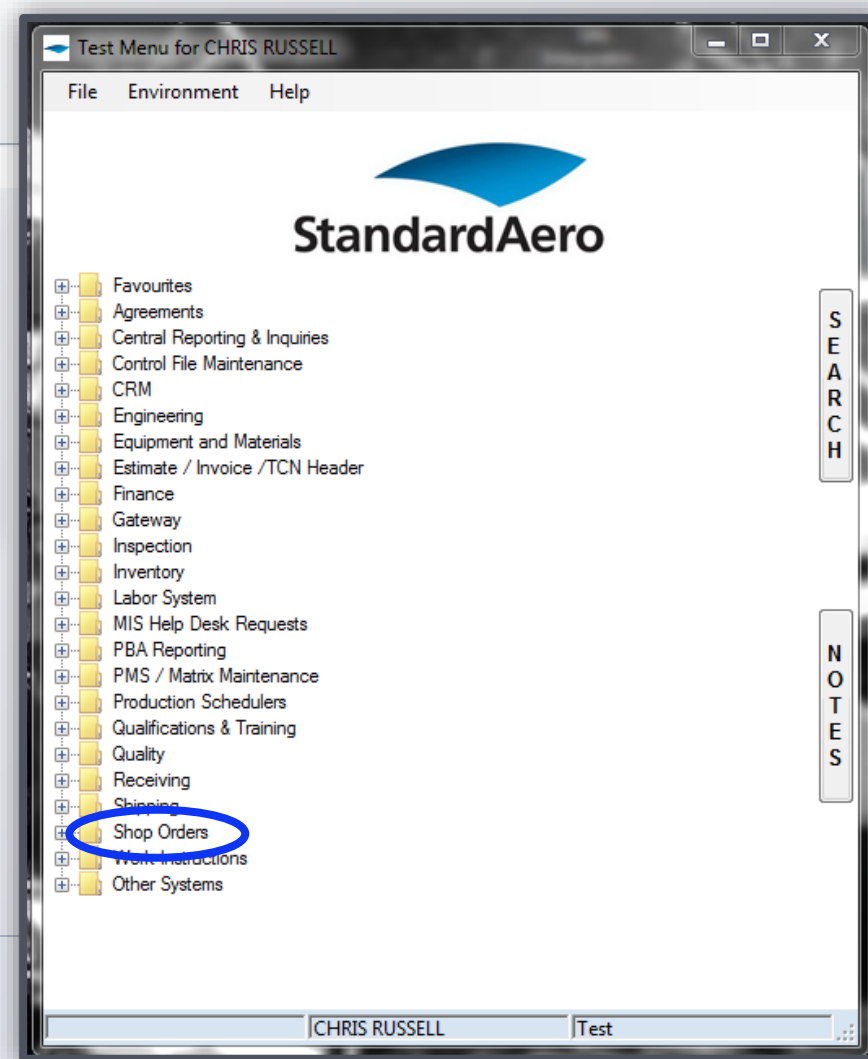
On your Desktop, double-click **SA Menu** icon.

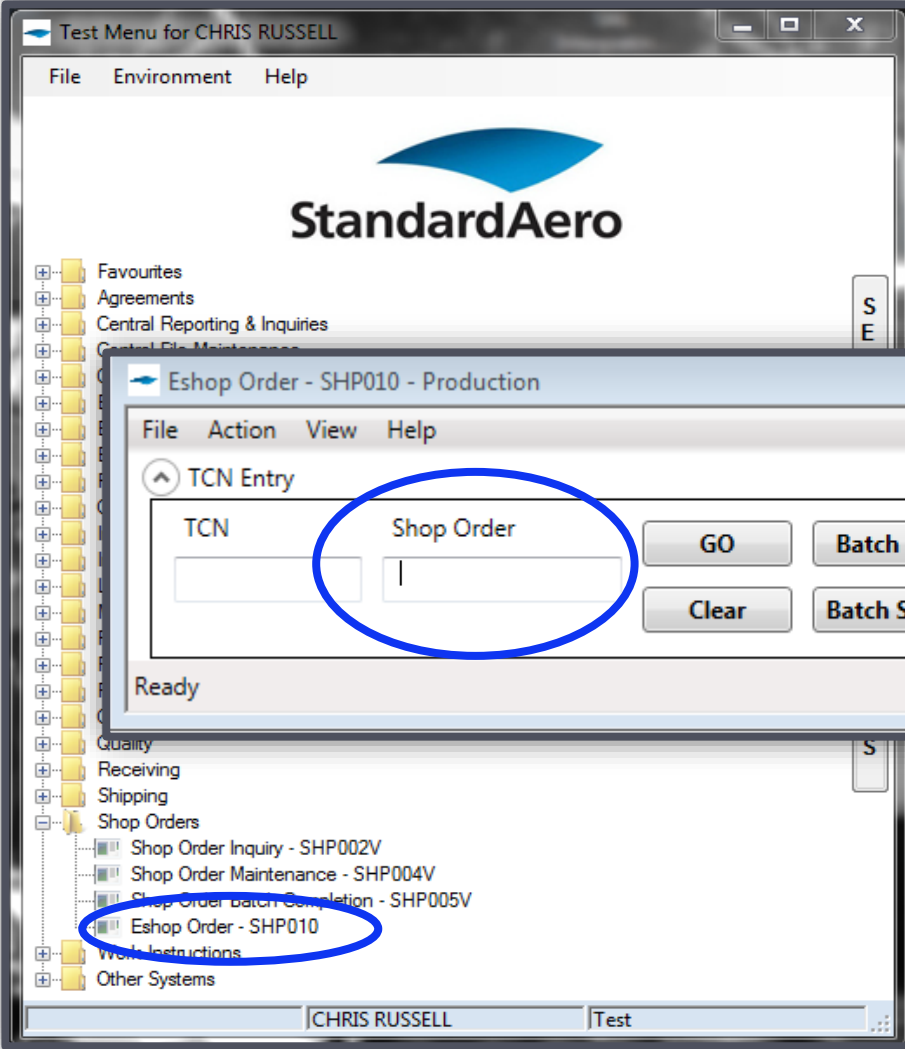
2

Log into the system by using your username and password.

3

Double-click on the *Shop Orders* folder.





- 1 Double-click on the *Eshop Order-SHP010* folder.
- 2 Scan the barcode located on the Sticker in the **Shop Order** field. Make sure the cursor is located in the correct box.

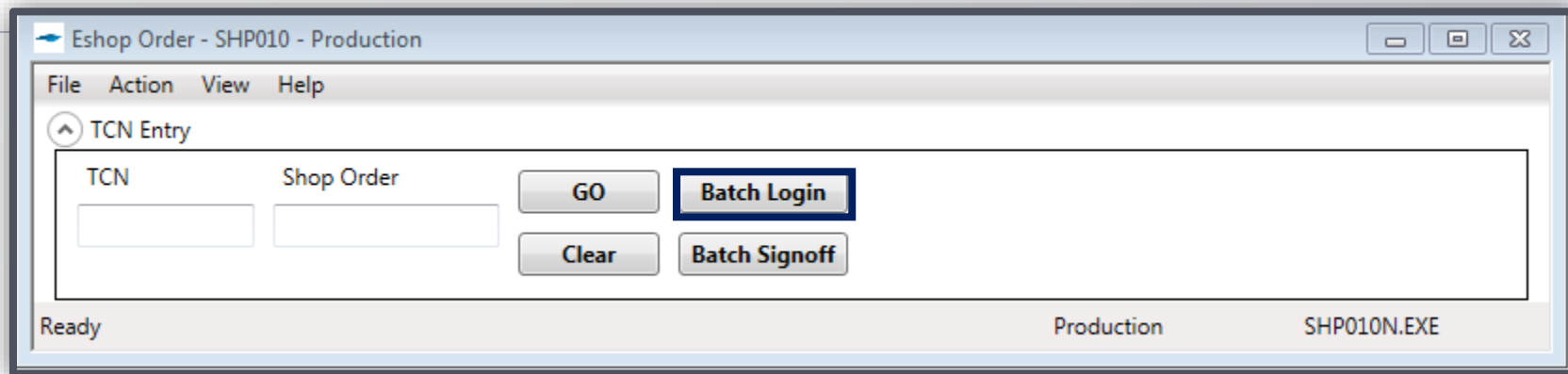
4. Batch Logging a job



1

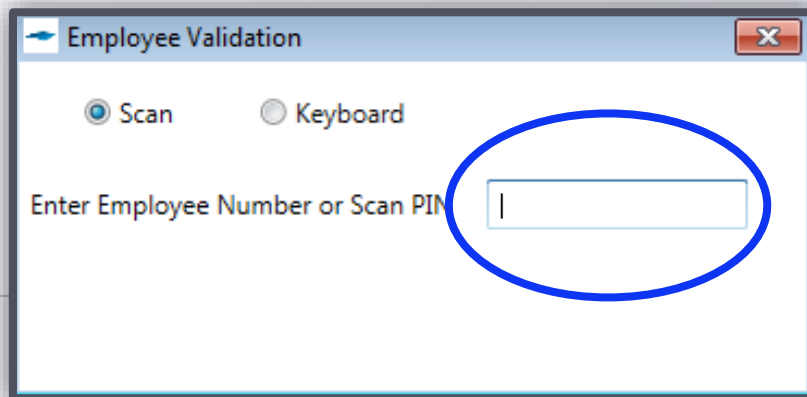
Click **Batch Login** button.

18



2

Enter Employee Number or Scan Pin.



Note: Please discuss with your manager before batching an order. Batch mode is always at the discretion of your manager.

3 Place your cursor in the **Scan Shop Order** field.

4 Scan the barcode located on the Sticker in the **Scan Shop Order** field.

Batch Log-On Shop Orders

Employee Number 3123

Employee Name JASON MOORE

Scan Shop Order

Select Sequence

Training

Equip. Code

Log-On

End Batch

Do Not Include in Batch

0 of 0

Ready JASON MOORE Production SHP010N.EXE

5

In the **Select Sequence** field, use the drop down menu to select accurate Work Center.

6

Click **Log-On** button.

7

Repeat steps 3 thru 6 until you have scanned into all sequences assigned to you.

Batch Log-On Shop Orders

Employee Number 3123

Employee Name JASON MOORE

Scan Shop Order RU36V

Select Sequence 14 SSTMSK

Training

Equip. Code

Log-On

End Batch

Do Not Include in Batch

Mask Aft Flange Face (Rep 027)

Tooling: n/a
Reference Figure 24.

Clean and Visually Inspect

(1) Wipe part clean using a clean cloth and virgin acetone.

(2) Visually inspect the areas to be thermal sprayed with a black light to verify no residual penetrant is present.

(3) Inspect edges of area to be coated to ensure no burrs or sharp edges are present. If burrs are found, notify supervisor to have burrs removed.

Mask Aft Flange Face for Thermal Spray

NOTE: Minimum of 2 layers of tape is required for all masked surfaces to ensure part protection. If thermal spraying by HVOF method, metal or HVOF tape is required.

(1) Mask areas adjacent to those being coated using high temperature tape and/or approved hard masking. Reference masking figures/diagrams.

Ready JASON MOORE Production SHP010N.EXE

8

After you have completed scanning into all of the required sequences, click **End Batch**.

9

Return to the E-Shop Order login screen.

Note: Scan the barcode located on the Sticker in the **Shop Order** field.

Batch Log-On Shop Orders

Employee Number 3123

Employee Name JASON MOORE

Mask Diameter C (Rep 004)

Tooling: n/a
Reference Figure 6.

Clean and Visually Inspect

(1) Wipe part clean using a clean cloth and virgin acetone.

(2) Visually inspect the areas to be thermal sprayed with a black light to verify no residual penetrant is present.

(3) Inspect edges of area to be coated to ensure no burrs or sharp edges are present. If burrs are found, notify supervisor to have burrs removed.

Mask Diameter C for Thermal Spray

NOTE: Minimum of 2 layers of tape is required for all masked surfaces to ensure part protection. If thermal spraying by HVOF method, metal or HVOF tape is required.

(1) Mask areas adjacent to those being coated using high temperature tape and/or approved hard masking. Reference masking figures/diagrams.

Scan Shop Order RU36V

Select Sequence 15 SSTMSK

Training

Equip. Code

Log-On

End Batch

Eshop Order - SHP010 - Production

File Action View Help

TCN Entry

TCN

Shop Order

CO

Batch Login

Clear

Batch Signoff

Ready

Production

SHP010N.EXE

5. In The Router



Eshop Order - SHP010 - Production

File Action View Help

TCN Entry

TCN: AD405089 Shop Order: RQF36

GO Batch Login Clear Batch Signoff

Shop Order Summary **Shop Order Detail** ROCs History Attachments Supporting Documentation

Current Shop Order

TCN: AD405089 PMS #: AD2456 AIR/OIL SEPARATOR Rev #: 175 Dest Cell: ADSMMD00 TSN: N/A CSN: N/A

Qty: 1 Part #: 337-108-502-0 Modify to Part # Date Due: 29-Apr-2019 Date Created: 22-Mar-2019 Ref: T448AK

Detail Inspection UBS: (N/A) DWI: (N/A) **New NCT** + NCT Tree NDT FAI Info Images Save

RQF36 SMFISP FINAL INSPECTION ADSMMD00 SMALL/MEDIUM CELL

Training: [Dropdown]

Sequence Notes ***Sequence Notes are intended as a means of communicating non-technical sequence specific information.***

Created By & Date: AARON DUERK 26-Mar-2019 15:59:41 PM Remove Repair 003 from findings. Damage was minor and locally blended.

Unique ID 1362378

Log on Job

Log-On

Sequences/ Work Centers

- 16 SM-BEN ✓
- 17 SMPISP ✓
- 18 SM-WLD ✓
- 19 SM-WLD ✓
- 20 SM-BAL ✓
- 21 LFPIPE ✓
- 22 SM-BEN ✓
- 23 SMPISP ✓
- 24 SM-BEN ✓
- 25 SM-BEN ✓
- 26 SMFISP**

Manage Seq.Notes

Final Inspection

Ref. Figure(s): N/A

Work Directions

VERIFY WARNING LABEL HAS BEEN APPLIED TO THE OUTSIDE OF BAG.

(1) Visually inspect part for any obvious damage.

(2) Verify legibility of part markings.

(3) Verify that the inspection documentation and all routing operations are complete and

Electronic Signature

Sign-Off Required

Production SHP010N.EXE

NonConformance Tag

Images

Sequence Notes

Log on Job

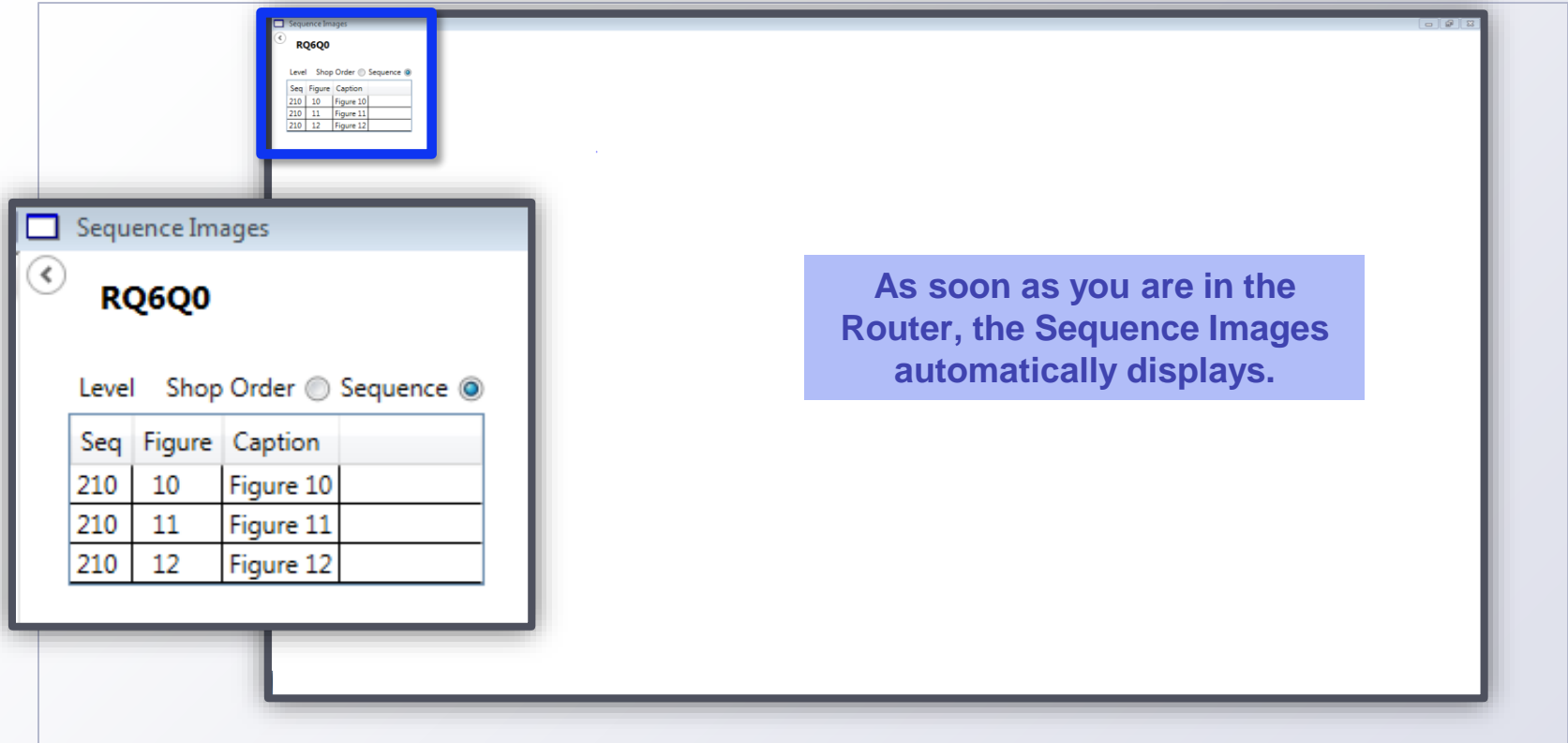
Log-On

Sequences/ Work Centers

Work Directions

Electronic Signature

Sign-Off Required



Sequence Images

RQ6Q0

Level Shop Order Sequence

Seq	Figure	Caption
210	10	Figure 10
210	11	Figure 11
210	12	Figure 12

Sequence Images

RQ6Q0

Level Shop Order Sequence

Seq	Figure	Caption
210	10	Figure 10
210	11	Figure 11
210	12	Figure 12

As soon as you are in the Router, the Sequence Images automatically displays.

Sequence Images

RQ6Q0

Level Shop Order Sequence

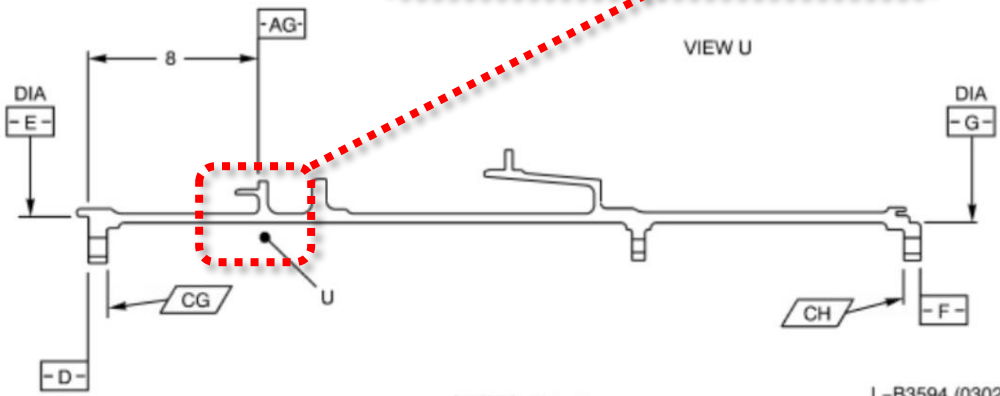
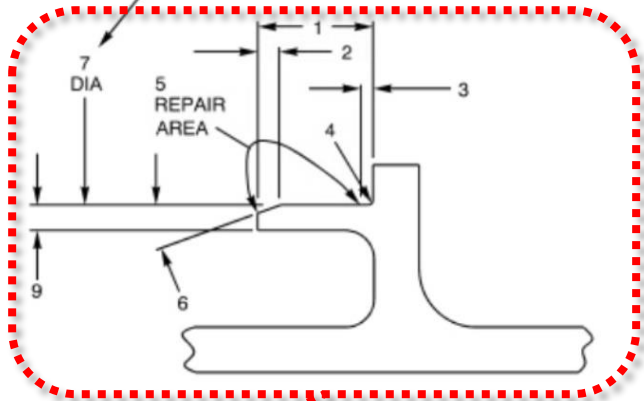
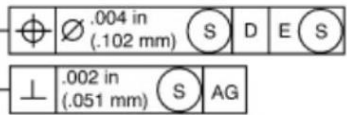
Seq	Figure	Caption
210	10	Figure 10
210	11	Figure 11
210	12	Figure 12

Sequence Images

RQ6Q0

Level Shop Order Sequence

Seq	Figure	Caption
210	10	Figure 10
210	11	Figure 11
210	12	Figure 12



SECTION M-M

L-B3594 (0302)
PW V

In this example, clicking on Figure 10 displays the corresponding drawings.

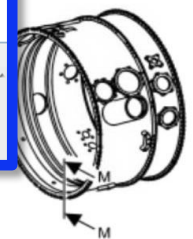
Level Shop Order Sequence

Seq	Figure	Caption
14	9	Figure 9
15	6	Figure 6
15	9	Figure 9
16	6	Figure 6
16	9	Figure 9
17	2	Figure 2
17	5	Figure 5
17	9	Figure 9
18	9	Figure 9
19	9	Figure 9
21	1	Figure 1
21	9	Figure 9
22	1	Figure 1
23	1	Figure 1
23	9	Figure 9
24	1	Figure 1
24	9	Figure 9
25	7	Figure 7
25	9	Figure 9
25	10	Seal Teeth Masking
26	1	Figure 1
26	9	Figure 9
27	1	Figure 1
27	9	Figure 9
28	7	Figure 7
28	9	Figure 9
28		Thermal Spray Seal Serrations
29	9	Figure 9
30	6	Figure 6
30	9	Figure 9
31	6	Figure 6
31	9	Figure 9

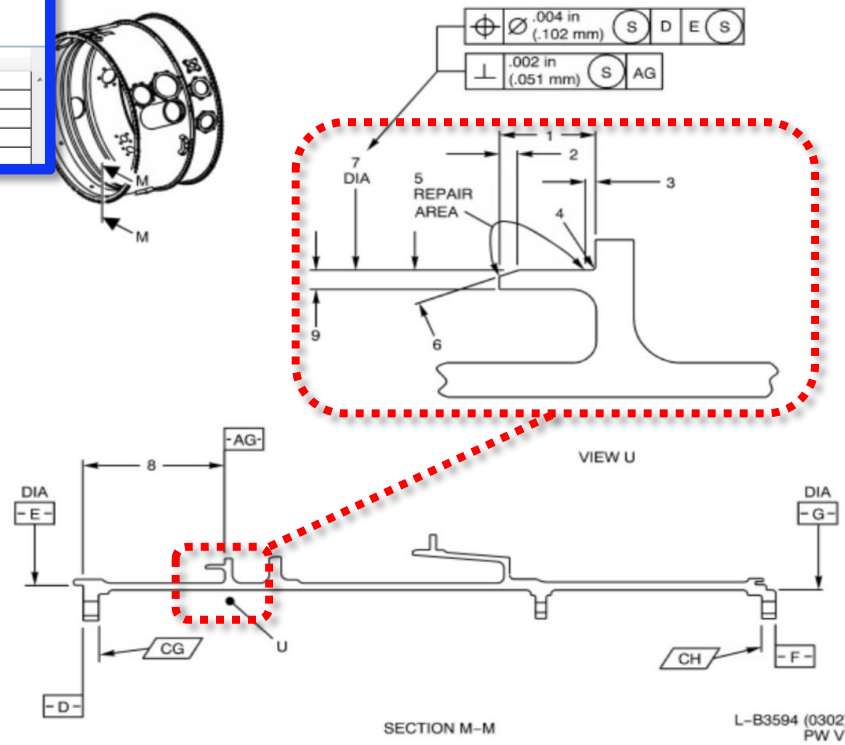
RR76E

Level Shop Order Sequence

Seq	Figure	Caption
14	9	Figure 9
15	6	Figure 6
15	9	Figure 9
16	6	Figure 6
16	9	Figure 9
17	2	Figure 2
17	5	Figure 5
17	9	Figure 9
18	9	Figure 9
19	9	Figure 9
21	1	Figure 1
21	9	Figure 9
22	1	Figure 1
23	1	Figure 1
23	9	Figure 9
24	1	Figure 1
24	9	Figure 9
25	7	Figure 7
25	9	Figure 9
25	10	Seal Teeth Masking
26	1	Figure 1
26	9	Figure 9
27	1	Figure 1
27	9	Figure 9
28	7	Figure 7
28	9	Figure 9
28		Thermal Spray Seal Serrations
29	9	Figure 9
30	6	Figure 6
30	9	Figure 9
31	6	Figure 6
31	9	Figure 9



In this example, clicking on Shop Order displays all drawings attached to the Router.



Quick Tips

- ▶ After logging into the Router, double check to make sure the P/N & S/N on the part matches the P/N & S/N in the Router and on the Sticker.
- ▶ Double check to make sure that you are at the top of the Router. Scroll to top, if necessary.
- ▶ Verify Router opens to your sequence/job operation.
- ▶ Verify previous steps are signed off.
- ▶ Check for Sequence Notes.
- ▶ Report Router discrepancies to engineer or manager.





Stay focused! Read
and understand
Router completely
before proceeding.



6. Logging on a job



Logging on a job

- ▶ There are multiple options to select when logging on a job.

Log on Job

Training

ST Student (Train ▾)

SP Student (Production)

ST Student (Training)

TP Trainer (Production)

TT Trainer (Training)

Log-On

<p style="text-align: center;">SP Student (Production)</p>	<p style="text-align: center;">ST Student (Training)</p>	<p style="text-align: center;">TP Trainer (Production)</p>	<p style="text-align: center;">TT Trainer (Training)</p>
--	--	--	--

Trainee Production

- Under “Training,” select “**SP Student (Production)**”
- Select “**Log On**” button.
- After the Employee Validation window opens:
- Scan Badge or Type in Employee # & Password (same as the SA Menu password)
- Select “**Ok**” button. “Log On” button should be highlighted green and the word “Accepted” should display for 3 seconds.

Trainees can log on to various sequences but cannot sign the sequence off. Trainer must always sign in after trainee to the appropriate category.

Trainee Non Production

- Under “Training,” select “**ST Student (Training)**”
- Select “**Log On**” button.
- After the Employee Validation window opens:
- Scan Badge or Type in Employee # & Password (same as the SA Menu password)
- Select “**Ok**” button. “Log On” button should be highlighted green and the word “**Accepted**” should display for 3 seconds.

- ❖ When the **trainee** logs in to **training**, the **trainer** logs in to **production**.
- ❖ When the trainer/manager decides that the trainee is close to being out of training, the **trainee** logs in to **production**, the **trainer** logs in to **Training**.

Make sure that when you log into a job, you’re actually starting the job!

Trainer Non Production

- Under “Training,” select “**TT Trainer (Training)**”
- Select “**Log On**” button.
- After the Employee Validation window opens:
- Scan Badge or Type in Employee # & Password (same as the SA Menu password)
- Select “**Ok**.” “Log On” button should be highlighted green and the word “Accepted” should display for 3 seconds.

7. Reading the Router



Sequence Notes

- Useful notes to relay additional information for the operation by engineering and inspection. If box is present, carefully read the note.

The screenshot displays the 'Eshop Order - SHP010 - Production' application window. The 'TCN Entry' section shows TCN AD405089 and Shop Order RQF36. The 'Current Shop Order' section includes details for TCN, PMS #, AIR/OIL SEPARATOR, Rev #, Dest Cell, TSN, CSN, Qty, Part #, and Date Due. A 'Sequence Notes' section is highlighted in orange, containing the following information:

RQF36 SMFISP FINAL INSPECTION ADSMMDD00 SMALL/MEDIUM CELL

Training: [Dropdown]
 Equip. Code: [Dropdown]
 Log-On: [Button]

Sequence Notes ***Sequence Notes are intended as a means of communicating non-technical sequence specific information.***
 Created By & Date: AARON DUERK 26-Mar-2019 15:59:41 PM Remove Repair 003 from findings. Damage was minor and locally blended.

Unique ID 1362378

Sequence

13	SMLAT4	✓
14	SMLAT4	✓
15	SM-BEN	✓
16	SM-BEN	✓
17	SMFISP	✓
18	SM-WLD	✓
19	SM-WLD	✓
20	SM-BAL	✓
21	LFPIPE	✓
22	SM-BEN	✓
23	SMFISP	✓
24	SM-BEN	✓
25	SM-BEN	✓
26	SMFISP	✓

Final Inspection
 Ref. Figure(s): N/A
 VERIFY WARNING LABEL HAS BEEN APPLIED TO THE OUTSIDE OF BAG.

- (1) Visually inspect part for any obvious damage.
- (2) Verify legibility of part markings.
- (3) Verify that the inspection documentation and all routing operations are complete and

Management buttons: Detail Inspection, UBS: (N/A), DWI: (N/A), New NCT, + NCT Tree, NDT, FAI Info, Images, Save.

Management buttons: Manage Seq. Notes

Production SHP010N.EXE

Handover

- Used to leave detailed instruction for the next operator or technicians about an incomplete sequence.

Shop Order Summary | Shop Order Detail | ROCs | History | Attachments | Supporting Documentation

Current Shop Order

TCN: AD424991 | PMS #: AD0627 | STAGE 5 PT ROTOR AIR SEAL | Rev #: 40 | Dest Cell: ADDABB00 | TSN: N/A | CSN: N/A

Qty: 1 | Part #: 9395M67P02 | Modify to Part #: | S/N: TAG AD424991 | Date Due: 27-Aug-2019 | Date Created: 21-Aug-2019 | Model Ref: T104LD

Buttons: Detail Inspection | UBS: (N/A) | DWI: (N/A) | New NCT | + NCT Tree | NDT | FAI Info | Images | Save

RY8XR **LLPLT3 LATHE-KINGSTON** **ADDABB00 DABBER CELL**

Training: 9395M67P04: TL-0494

Equip. Code: Ref. Figure(s): 1, 2 and 5
(See View A for correct seal tooth angle)

Log-On

Sequence

1	LLPBN3	✓
2	LLPC2G	✓
3	LFPIPE	✓
4	LLPWLD	✓
5	SS-HT	✓
6	LLPLT3	
7	LFPIPE	
8	SSTMSK	
9	SS-TSP	
10	SSTMSK	
11	LLPLT3	
12	LLPBN3	
13	LLPFI1	

(1) Set up fixture on Lathe.
(2) Indicate top surface of fixture to within .001".
(3) Place part in fixture and secure with bolts, eight places equally spaced.
(4) Machine Diameter A to the following In-Process Dimensions

MIN. MAX.
Diameter A 28.445" - 28.449" Checks:

Manage Seq. Notes

Handover Qty Acc: Qty Rej:

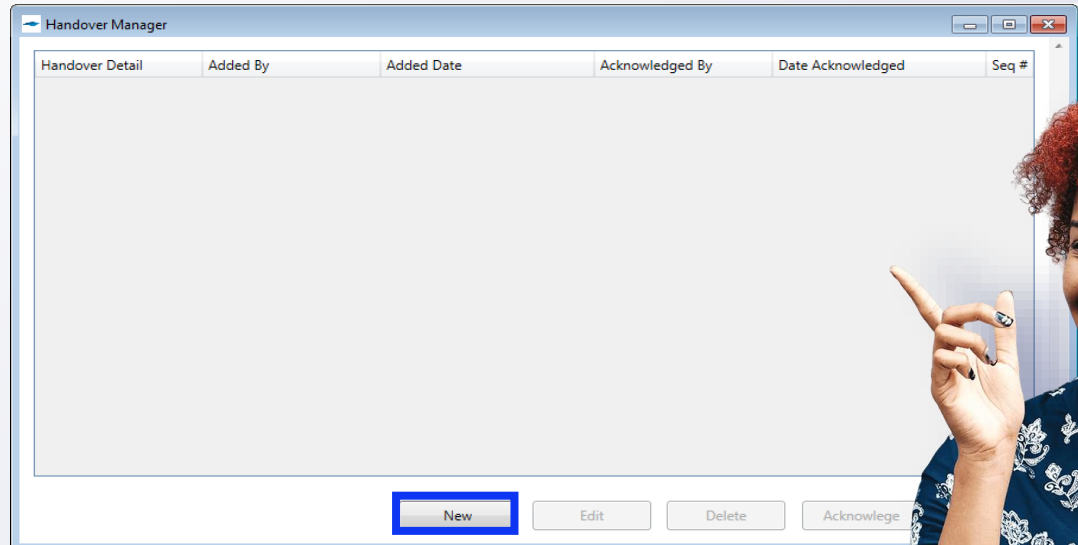
Sign-Off Required

1

Click the **Handover** button.

2

On the Handover Manager screen, click **New**.

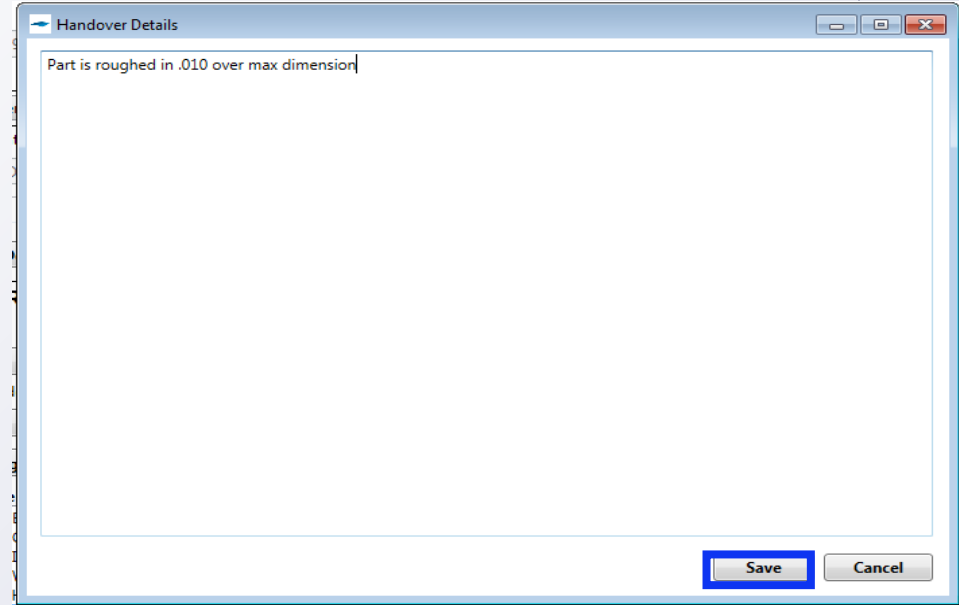


3

On the **Handover Details** page, enter in detailed instructions for all prior work performed. If a part cannot be completely repaired before you leave for the day, the handover function lets the next person know exactly what work has been done. These instructions must be detailed enough for the next person to pick up where you left off.

4

Click **Save**. By clicking save, you are acknowledging that you have performed the work.



1

Once the handover message is entered and saved, the operator who logs into the Router will see the **Review Handover** message button.

2

Click **Review Handover** for the sign-off being currently completed.

Shop Order Summary **Shop Order Detail** | DCs | History | Attachments | Supporting Documentation

Current Shop Order

TCN YM351839 PMS # Y102FM7233CYCL CYCLE 1 & 3, HPC REAR STATOR -CFM56-7B Rev # 19 Dest Cell YMAD0000 TSN N/A CSN N/A

Qty 1 Part # Modify to Part # S/N Date Due 28-Feb-2019 Date Created 28-Feb-2019 Model Ref

Detail Inspection UBS: (CANO) DWI: (OPEN) New NCT + NCT Tree NDT FAI Info Images Save

RDU3L Y-M-D MA&D DISASSEMBLE MODULE YMAD0000 CF34 MA & D CELL

Training Unique ID 1418898

Equip. Code *RECEIVE MODULE, REVIEW TCN HEADER, DWI AND CHECK-IN. RECORD ANY DAMAGE, MISSING PARTS, PHOTOS, ETC.*

Log-On

Sequence

1	Y-M-D	DISMANTLE REAR COMPRESSOR STATOR ASSEMBLIES
2	Y-M-CL	UPPER
3	Y-M-DI	
4	Y-P-CL	
5	Y-P-FP	LOWER
6	Y-CMM	
7	Y-C-DI	
8	Y-H-A	
9	Y-H-A	REMARKS
10	Y-H-QI	

Manage Seq.Notes

Handover

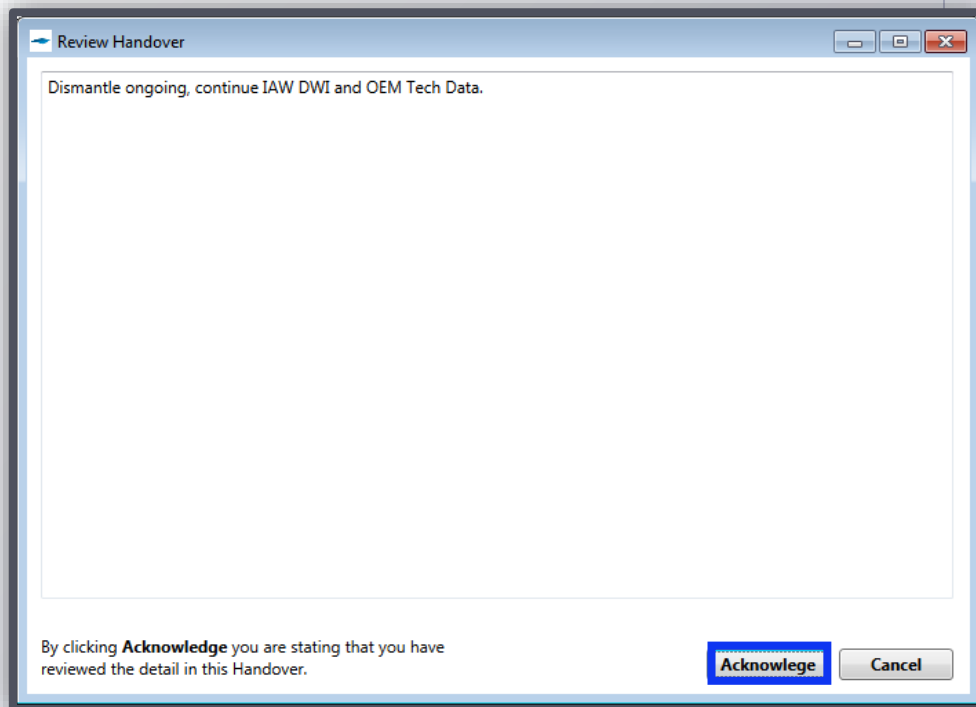
Review Handover

Review Handover

3 Review the Handover message.

4 Click **Acknowledge** only after you completely understand the Handover message.

5 Back on the Shop Order Details page, all Review Handover buttons change to Sign-off Required. At this point, you can sign-off the job when operation is completed.



Approved Measurement System

- ▶ The Router calls out the appropriate measurement tool(s) to use when measuring parts.

Eshop Order - SHP010 - Production

File Action View Help

TCN Entry

TCN Shop Order GO Batch Login
AD386430 Clear Batch Signoff

Shop Order Summary Shop Order Detail **POCs** History Attachments Supporting Documentation

Current Shop Order

TCN AD386430 PMS # AD6254 IPC FRONT BRG SUPPORT AND IGV ASSEMBLY Rev # 4 Dest Cell ADRAD000 TSN N/A CSN N/A

Qty 1 Part # ULL9915 Modify to Part # S/N GB71048 Date Due 26-Nov-2018 Date Created 21-Nov-2018 Model Ref

Detail Inspection UBS: (N/A) DWI: (N/A) New NCT + NCT Tree NCT Status APVD NDT FAI Info Images Save

RJ6U5 SMFAIR FAIR REVIEW ADMMMD00 SMALL/MEDIUM CELL

Training Unique ID 1746519

Equip. Code Enqineer Review of previous operations for FAIR

Log-On

Sequence

6	SSCLN	✓
7	SSTMSK	✓
8	SS-TSP	✓
9	SS-TSP	✓
11	SSTMSK	✓
11	RD-BEN	✓
12	RD-VTL	✓
13	SMFAIR	✓
14	RD-BEN	✓
15	SSCLN	✓
16	RD/PSP	✓
17	SSEMARK	✓
18	RD/FISP	✓
19	RD-ENG	✓

1) Perform independent verification of runouts and flatness.

BAL 1, Datum A flat within .001", Checks:

Gauge: .0001" Indicator Gauge ID:

BAL 8, G. B. Housing Parallel .001" to Datum A, Checks:

Gauge: Height Gauge Gauge ID:

Gauge: .0001" Indicator Gauge ID:

BAL 13, Remove Burrs But Keep Sharp Edges, Checks:

Gauge: Visual

2) Take photograph of repair area.

Complete

3592 PETER MATHIAS 26-NOV-2018

Ready Production SHP010N.EXE

DO:

- ✓ Use the equipment identified in the Router.
- ✓ Document the Gauge ID number.
- ✓ Verify your gauges have been calibrated.
- ✓ Contact your cell engineer if you have questions.
- ✓ Contact your cell engineer if you do not have the specified equipment.

DO NOT:

- X Use unapproved equipment.
- X Use un-calibrated equipment (unless specified).
- X Take measurements using your machine DRO (unless approved).
- X Make substitutions for gauges – “This must be close enough.”
- X “N/A” or “N/R” the fields.

NOTE: Using an unapproved measurement system is equivalent to not measuring the feature at all. It is not acceptable to use unapproved gauges.

Machined to Size

- If you see parts that are able to be machined to size without the need for Thermal Spray repairs, N/R or N/A operation and DO NOT send to Thermal Spray.

Eshop Order - SHP010 - Production

File Action View Help

TCN Entry

TCN Shop Order GO Batch Login
AD386430 Clear Batch Signoff

Shop Order Summary Shop Order Detail **OCs** History Attachments Supporting Documentation

Current Shop Order

TCN AD386430 PMS # AD6254 IPC FRONT BRG SUPPORT AND IGV ASSEMBLY Rev # 4 Dest Cell ADRAD000 TSN N/A CSN N/A

Qty 1 Part # UL19915 Modify to Part # S/N G871048 Date Due 26-Nov-2018 Date Created 21-Nov-2018 Model Ref

Detail Inspection UBS: (N/A) DWI: (N/A) New NCT + NCT Tree NCT Status APVD NDT FAI Info Images Save

RSODA CMCNCL CNC LATHE ADCOMP00 COMPOSITES CELL

Training

Equip. Code

Log-On

Sequence

1	CMSHRD	✓
2	CMCNCL	✓
3	CMCNCL	✓
4	CMCNCL	✓
5	LPFRET	✓
6	LFPRIW	✓
7	CMSHRD	✓
8	CM-OVE	✓
9	SSTMSK	✓
10	SS-TSP	✓
11	SSTMSK	✓
12	CMCNCL	✓
13	SSTMSK	✓
14	SSTMSK	✓

Tooling: TL-1361 (MACHINING FIXTURE)

1) If feature can be skim cut, N/A prep and thermal spray, and complete finish machine sequence.

2) Machine set-up:

- Surface FS runout, 0.001" max, Checks: 0.0006
- Diameter FT runout, 0.001" max, Checks: 0.0005

3) In-process dimensions:

- Dia M, Lim: 13.584 - 13.598, Checks: 13.5962

Ready Production SHP010N.EXE

Quick Tip

- ▶ **Engineers:** Routers configured for operators to N/A or N/R an operation must have the required box unchecked. If it is checked, the operator must be qualified to N/A or N/R the operation.

Qualifications Sign-Offs

PMS / Matrix ID Sequence #

Sign Off Fields

Sign Off Field	Qualification Category	Qualification Function	Qualification Limitation	Required
▶ [Sign Off 1]	INSPECTION	QUALITY INSPECTOR		<input checked="" type="checkbox"/>
[Sign Off 1]	ENGINEERING	IN-PROCESS ROUTING AUTH...		<input checked="" type="checkbox"/>
[Sign Off 1]	PROCESSES	BENCH		<input checked="" type="checkbox"/>

Add New Signoff Remove Signoff Save

Work Directions

- Detailed directions on how to do the job. Work Instructions are followed to ensure consistency among products repaired. Work Instructions are sometimes called out on the Router, and start with a W, followed by a section number.

SSCCLN CHEMICAL CLEANING

ADPLS000 PRODUCT LINE SERVICES CELL

CLEAN

- Mask all areas with thermal spray coatings, if any, per SP 70-18-01 prior to clean.
- Alkaline Clean per [W 7.5.1-3](#) Sample Work Instruction
- Unmask thermal spray coating areas after part has been sufficiently cleaned.

Technician to N/A following steps that do not apply

Chemical Clean Qty Acc Qty Rej
Work
Directions
Mechanical Clean Qty Acc Qty Rej

NCTs

- Better known as nonconformance tags. Used to document unserviceable, out of limits, or reworked parts. If you need to create an NCT, this is commonly done by inspectors and engineers. The first time making an NCT discuss with your cell manager to see if it needs to be done.

Current Shop Order

TCN: AD405089 PMS #: AD2456 AIR/OIL SEPARATOR Rev #: 175 Dest Cell: ADSMMD00 TSN: N/A CSN: N/A

Qty: 1 Part #: 337-108-502-0 Modify to Part #: 337-108-520-0 S/N: DD018146 Date Due: 29-Apr-2019 Date Created: 22-Mar-2019 Model Ref: T448AK

Buttons: Detail Inspection UBS: (N/A) DWI: (N/A) **New NCT** + NCT Tree NDT FAI Info Images Save

RQF36 SMFISP FINAL INSPECTION ADSMMD00 SMALL/MEDIUM CELL

Training: Sequence Notes: ***Sequence Notes are intended as a means of communicating non-technical sequence specific information.***

Created By & Date: AARON DUERK 26-Mar-2019 15:59:41 PM Remove Repair 003 from findings. Damage was minor and locally blended.

Equip. Code: Unique ID: 1362378

Log-On

Sequence

13	SMLAT4	✓
14	SMLAT4	✓
15	SM-BEN	✓
16	SM-BEN	✓
17	SMFISP	✓
18	SM-WLD	✓
19	SM-WLD	✓
20	SM-BAL	✓
21	LPIPE	✓
22	SM-BEN	✓
23	SMFISP	✓
24	SM-BEN	✓
25	SM-BEN	✓
26	SMFISP	✓

Final Inspection

Ref. Figure(s): N/A

VERIFY WARNING LABEL HAS BEEN APPLIED TO THE OUTSIDE OF BAG.

- (1) Visually inspect part for any obvious damage.
- (2) Verify legibility of part markings.
- (3) Verify that the inspection documentation and all routing operations are complete and

Buttons: Manage Seq.Notes

Production SHP010N.EXE

Shop Order Summary

- ▶ Shop Order Summary: Communicates what has been done and what will happen to the part during Cycle 1 and Cycle 2. Also, serves as a reference for how to do your job.

Eshop Order - SHP010 - Production

File Action View Help

TCN Entry

TCN Shop Order

Shop Order Summary | Shop Order Detail | ROCs | History | Attachments | Supporting Documentation

TCN: AD404933 PMS: T104LD72991612D SEAL_COMPRESSOR STATIONARY AIR Status: PFIN Engine Mod: LM2500
 Customer: NUOVO PIGNONE S.R.L. S/N: TAG AD404933 End Item S/C: RQ5PH

WG	Shop Order	Part Number	Part Description	Current W/C	Current Seq	Date Created	Due Date	Est Only	Custom S/O	N/R	NCT	FAI	Close InProc	E-Shop Order	Over-ride?	Cond. Accept?
00	RQ5PH	T104LD72991612D	SEAL_COMPRESSOR STATIONARY AIR	CLOSED	21-MAR	16-Mar-2019	15-Apr-2019	N	N			N	N	Y		
00	RQ72	AD1612	SEAL_COMPRESSOR STATIONARY AIR	CMFISP	17 of 17	21-Mar-2019	15-Apr-2019	N	N			N	N	Y		

Production SHP010N.EXE

Shop Order Detail

- Communicates information on Cycle 1 and Cycle 2 Router.

Eshop Order - SHP010 - Production

File Action View Help

TCN Entry

TCN: AD405089 Shop Order: RQF36

GO Batch Login

Clear Batch Signoff

Shop Order Summary Shop Order Detail RQF History Attachments Supporting Documentation

Current Shop Order

TCN: AD405089 PMS #: AD2456 AIR/OIL SEPARATOR Rev #: 175 Dest Cell: ADSMMD00 TSN: N/A CSN: N/A

Qty: 1 Part #: 337-108-502-0 Modify to Part #: 337-108-520-0 S/N: DD018146 Date Due: 29-Apr-2019 Date Created: 22-Mar-2019 Model Ref: T448AK

Detail Inspection UBS: (N/A) DWI: (N/A) New NCT + NCT Tree NDT FAI Info Images Save

RQF36 SMFISP FINAL INSPECTION ADSMMD00 SMALL/MEDIUM CELL

Training: [Dropdown]

Equip. Code: [Dropdown]

Log-On

Sequence

13	SMLAT4	✓
14	SMLAT4	✓
15	SM-BEN	✓
16	SM-BEN	✓
17	SMFISP	✓
18	SM-WLD	✓
19	SM-WLD	✓
20	SM-BAL	✓
21	LFPIPE	✓
22	SM-BEN	✓
23	SMFISP	✓
24	SM-BEN	✓
25	SM-BEN	✓
26	SMFISP	✓

Sequence Notes: ***Sequence Notes are intended as a means of communicating non-technical sequence specific information.***

Created By & Date: AARON DUERK 26-Mar-2019 15:59:41 PM Remove Repair 003 from findings. Damage was minor and locally blended.

Unique ID: 1362378

Final Inspection

Ref. Figure(s): N/A

VERIFY WARNING LABEL HAS BEEN APPLIED TO THE OUTSIDE OF BAG.

(1) Visually inspect part for any obvious damage.

(2) Verify legibility of part markings.

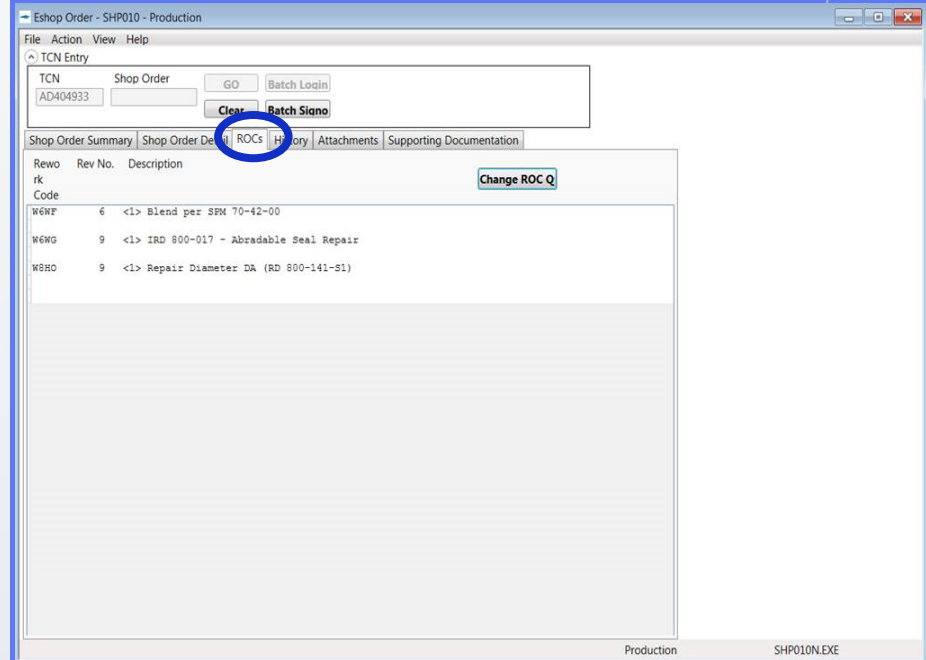
(3) Verify that the inspection documentation and all routing operations are complete and

Management Seq. Notes

Production SHP010N.EXE

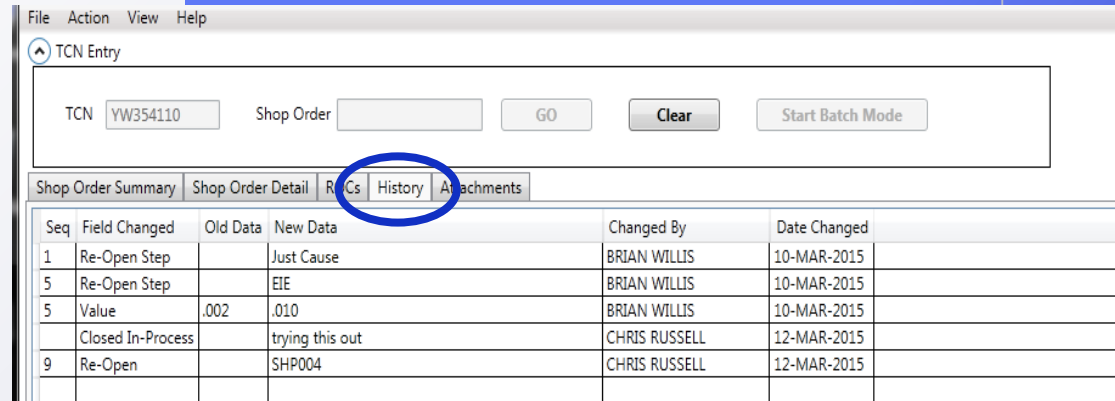
ROCs

- ▶ Repair codes called out by inspectors for how operators/technicians must repair part. Details the work scope for the part.



History

- ▶ Indicates changes or corrections made to the Router. For example, if a machinist enters the wrong dimension and s/he makes corrections, changes appear in the history tab.



File Action View Help

TCN Entry

TCN Shop Order

Shop Order Summary Shop Order Detail **History** Attachments

Seq	Field Changed	Old Data	New Data	Changed By	Date Changed
1	Re-Open Step		Just Cause	BRIAN WILLIS	10-MAR-2015
5	Re-Open Step		EIE	BRIAN WILLIS	10-MAR-2015
5	Value	.002	.010	BRIAN WILLIS	10-MAR-2015
	Closed In-Process		trying this out	CHRIS RUSSELL	12-MAR-2015
9	Re-Open		SHP004	CHRIS RUSSELL	12-MAR-2015

Attachments

- ▶ Pertinent customer information and inspection / technician provided documentation concerning the part.

Eshop Order - SHP010 - Production

File Action View Help

TCN Entry

TCN: AD404933 Shop Order: [] GO Batch Login

Clear Batch Sign

Shop Order Summary Shop Order Detail ROCs History Attachments Supporting Documentation

View Attachments For Current: Shop Order - ROC72 TCN (View Only) Attach to Current S/O View Delete

Shop Order	Shop Order Description	Seq	Attachment	Doc Name	Remarks	Modified By	Date
RQ5PH	SEAL COMPRESSOR STATIONARY AIR	10	AD404933.pdf	AD404933		LONTINA RICHARDSON	16-Mar-2019

Production SHP010N.EXE

Attachment Tips

- ▶ Documents added to the Attachments section may include Original Purchase Order, CMM Report, Outside Vendor Report, Scanned Emails and any important information about the part.



Attachment Tips

- ▶ Machinists & Inspectors: Use CMM Report to verify measurements are accurate before cutting the part. The CMM Report should match your corresponding measurement. Always check CMM Reports for dimensional callouts, not just the average, but the highs and lows made by the CMM Department. If your measurement does not match the CMM Report, see an engineer.

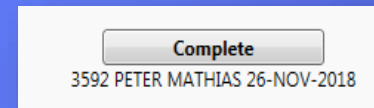


8. Signing off a Router



Electronic Signature

- ▶ Your electronic signature is an acknowledgement that you have completely finished a job sequence.
- ▶ The Router is a legal document and your signature is a legally binding contract with our customers and our government oversight agencies. You should only sign when you have done everything that the Router has directed you to perform. If you are unable to comply with a Router, you should immediately notify your manager, inspector or engineer.



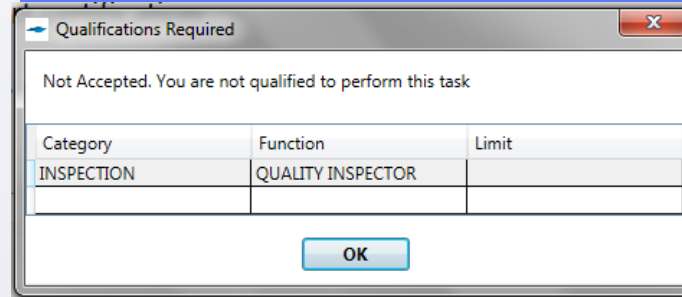
"

**You are not
qualified!**



Not Qualified!

- ▶ If you do not have an approved qualification, you will not be able to sign the item off.
- ▶ A window will pop up advising you which qualification is required to sign off that item.
- ▶ If this qualification is incorrect, please contact your Quality Department.



Sign-Off Required

Three Step Process



Training Plans

Document learned skills.
May be a training record...must be documentation that can be used as objective evidence during an audit.

Qualifications

Allow eShop Order login and sign off.

eShop Order

Work centers containing qualifications assigned to sequences.

Qualifications Database

- ▶ Houses all qualifications assigned to an employee.
- ▶ Qualifications allow employees to log in and log out of eShop order.

Location	Current	Cell	Emp.	Emp. Name	Category	Function	Limitations	Status
Standard Aero	SACS OPS1	Small/Medium	3250	HUN PECH	PROCESSES	STRIP AND	N/A	APPROVED
Standard Aero	SACS OPS1	Composites	3248	PATRICK MITCHELL	PROCESSES	STRIP AND	N/A	APPROVED
Standard Aero	SACS OPS1	Small/Medium	3239	DONALD KLING	PROCESSES	STRIP AND	N/A	APPROVED
Standard Aero	SACS OPS1	LPT Shroud	3227	GREGG BELL	PROCESSES	STRIP AND	N/A	APPROVED
Standard Aero	SACS OPS1	Repair	3213	JOSEPH WEBB	PROCESSES	STRIP AND	N/A	APPROVED
Standard Aero	SACS OPS1	Thermal Spray	3208	SAVELY VA	PROCESSES	STRIP AND	N/A	APPROVED
Standard Aero	SACS OPS1	Thermal Spray	3205	SONITA TIM	PROCESSES	STRIP AND	N/A	APPROVED
Standard Aero	SACS OPS1	Small/Medium	3202	CHANH THI NEANG	PROCESSES	STRIP AND	N/A	APPROVED
Standard Aero	SACS OPS1	LPT Shroud	3199	BENNY SWAIN	PROCESSES	STRIP AND	N/A	APPROVED
Standard Aero	SACS OPS1	LPT Shroud	3195	THOMAS STEWART	PROCESSES	STRIP AND	N/A	APPROVED
Standard Aero	SACS OPS1	Composites	3192	JOHN STATT	PROCESSES	STRIP AND	N/A	APPROVED
Standard Aero	SACS OPS1	Thermal Spray	3184	RIET SOK	PROCESSES	STRIP AND	N/A	APPROVED
Standard Aero	SACS OPS1	Support Cell	3169	BRENDA SEARS	PROCESSES	SUPPLIER	ENGINEER	APPROVED
Standard Aero	SACS OPS1	LM Cell	3164	RHONDA	PROCESSES	WELDING	TORCH	APPROVED
Standard Aero	SACS OPS1	LM Cell	3164	RHONDA	PROCESSES	STRIP AND	N/A	APPROVED
Standard Aero	SACS OPS1	Central Quality	3160	JOSEPH REED	PROCESSES	STRIP AND	N/A	APPROVED
Standard Aero	SACS OPS1	NDI	3159	DAVID REED	PROCESSES	FP	LEVEL 2 (NAS)	APPROVED
Standard Aero	SACS OPS1	Dabber Weld	3153	MARIN RAN	PROCESSES	STRIP AND	N/A	APPROVED
Standard Aero	SACS OPS1	Assembly	3150	SAMROSS PHUONG	PROCESSES	STRIP AND	N/A	APPROVED
Standard Aero	SACS OPS1	Small/Medium	3149	LOY PHUONG	PROCESSES	STRIP AND	N/A	APPROVED
Standard Aero	SACS OPS1	Thermal Spray	3148	RATHANA PHOU	PROCESSES	STRIP AND	N/A	APPROVED
Standard Aero	SACS OPS1	Thermal Spray	3146	CEYUO TDF	PROCESSES	STRIP AND	N/A	APPROVED

9. Part Protection



Use blue foam to protect sensitive areas, such as dovetails, seal teeth and thermal spray.



Use proper part handling procedures. In the sample, masker is using two hands to lift small/medium part.

Carefully place part on shelf and place Packet underneath or on top of Part.

To prevent damage, make sure there is space between parts when placed on shelf.



For large parts, use proper hoisting procedures to place part on skid.

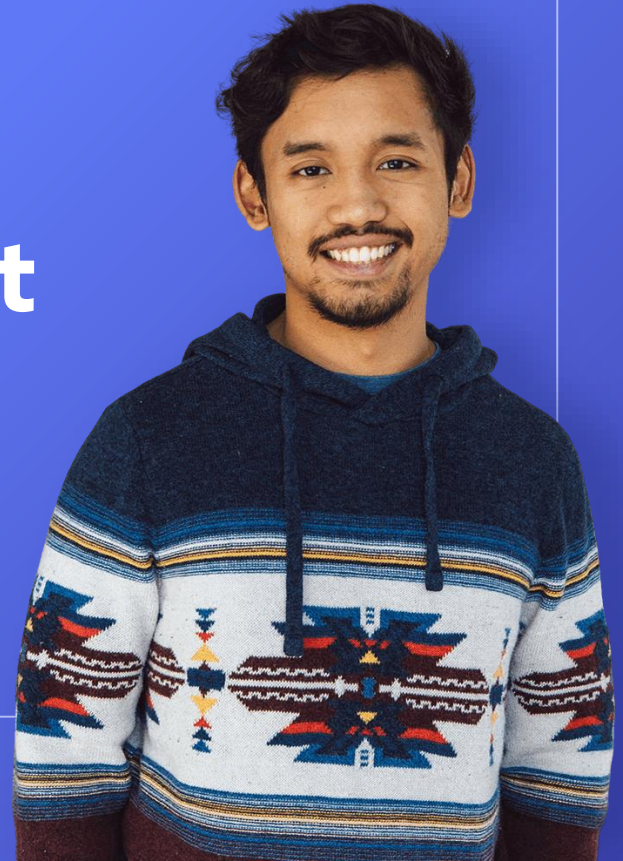


Use Pallet Jack to transfer parts to the proper location.



Remember blue foam to protect the part!

10. Transferring the Part



1

Use a Pallet Jack or Cart to prepare part(s) to be moved.



2

Locate the next available job sequence on the **Sticker** to determine where the part should go next. Completed **Work Centers** have a checkmark or one-line through.

Sample: SM-LAT =
Small Medium Lathe

AD403822		RR0E8		1 of 1		
QTY	ROC	Desc	Seq	W/C	Seq	W/C
1	W/WI	Fltgear 002 - Helicopter	2	SM-LAT		
1	W/WI	Fltgear 002 - Helicopter	3	SM-LAT		
			4	SM-LAT		
			5	SM-LAT		
			6	SM-LAT		
			7	SM-LAT		
			8	SM-LAT		
			9	SM-LAT		
			10	SM-LAT		
			11	SM-LAT		
			12	SM-LAT		
			13	SM-LAT		
			14	SM-LAT		
			15	SM-LAT		

T TRANSFER GEARBOX BRG SUPPORT
 PI PMS P/N AD1897 REV 21 QTY 1
 O OEM P/N 335-305-000-0 S/N TAG AD40
 M MODIFY TO TSN N/A
 TC TON AD403822 CUSTOM RR0E8
 GE GENERATED BY AARON DUERK STANDARD AERO LIM
 CU CUSTOMER TSSAL
 RE REMVD FROM E/I ADAPTOR ASSY S/N TAG AD
 EN ENGINE MODEL CFM56-7B
 E/I E/I SHOP ORDER RPW8C KIT ID SMALL

3

Find the **Work Center** that does not have a checkmark or one-line through. This is the **Work Center** where the part will be moving to next.

4

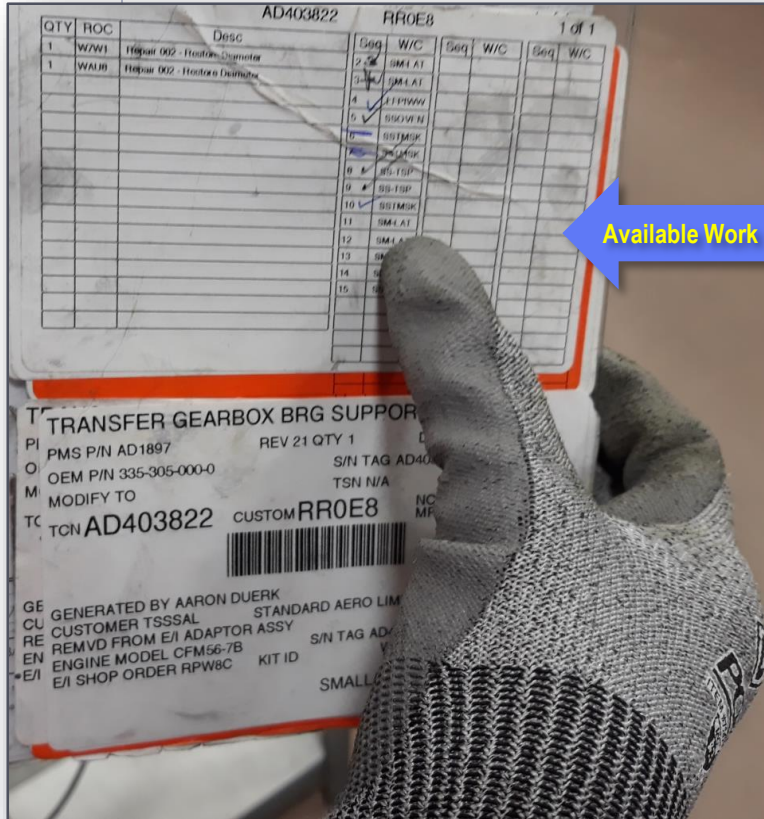
Using the Pallet Jack or Cart, take part(s) to the **Gateway Station** based on **Work Center**.



Sample: SM-LAT =
Small Medium Lathe

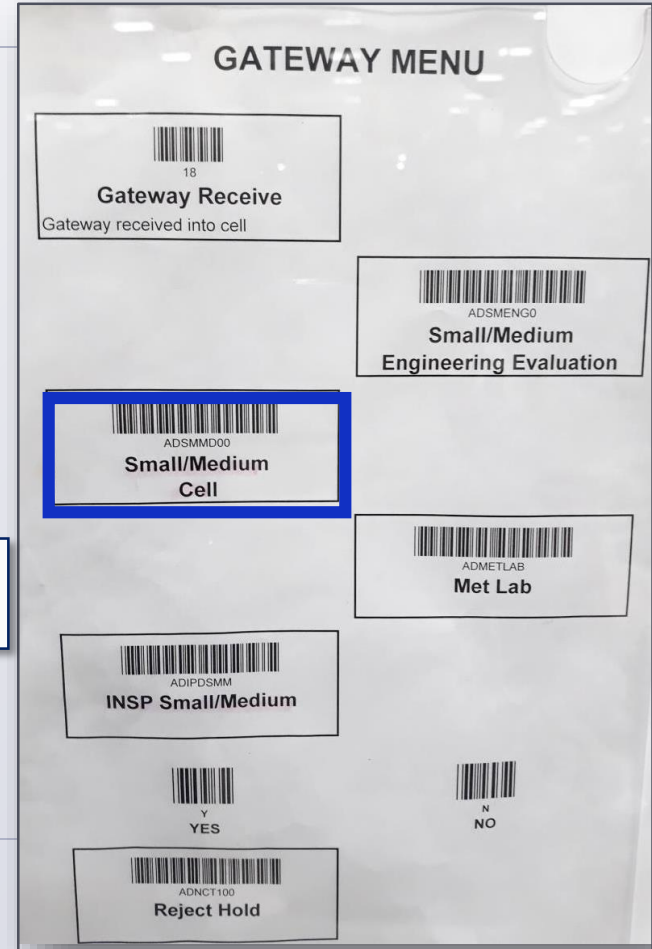
5

After locating the proper **Gateway Station**, verify available **Work Center** column on the **Sticker** matches **Gateway Menu**.



Available Work Center

Sample: SM-LAT =
 Small Medium Lathe



9

Scan the **Sticker Barcode**.

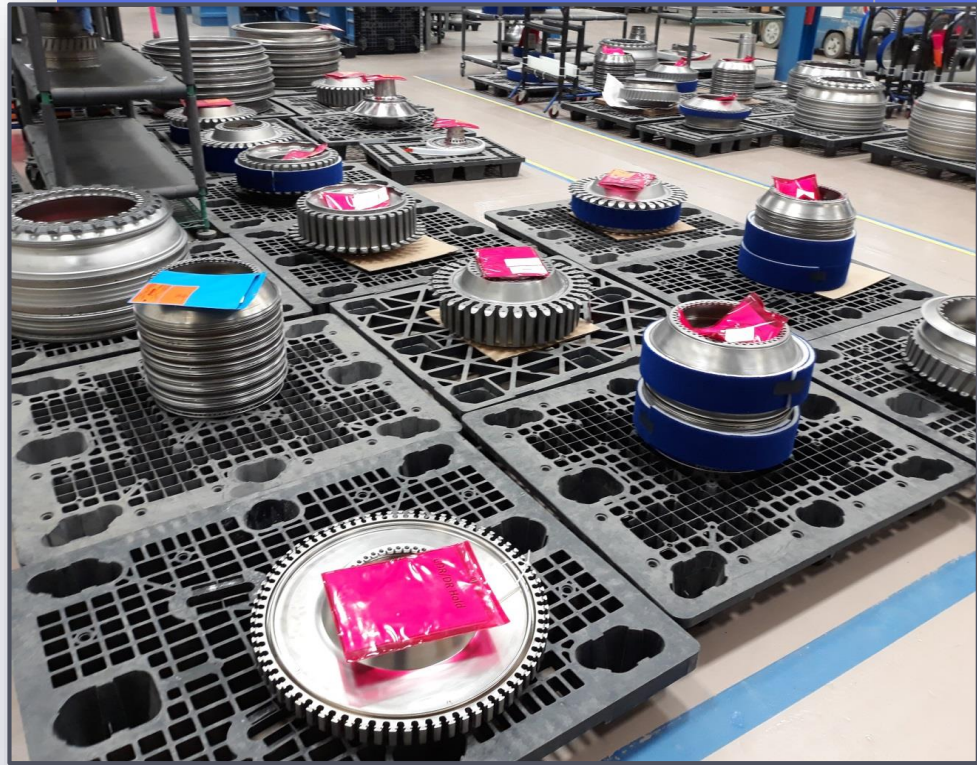
10

Follow proper protocol for dropping off a part(s). For example, since the next available **Work Center** is **SM-LAT**, part will be placed on **SM-LAT** shelf.



Part Handling Reminder

- ▶ Always place **one** part per skid.
- ▶ Absolutely:
 - ~ No metal to metal contact!
 - ~ No stacking parts!



Part Handling Tips

- ▶ Using the Gateway Station to transfer a part does not mean you have successfully logged out of the job.
- ▶ If you complete the job and forget to log out, this hurts your utilization and efficiency, which are metrics used to determine how long it takes to repair a part, how quickly you are moving through the repair process, and how many parts you have completed in total.

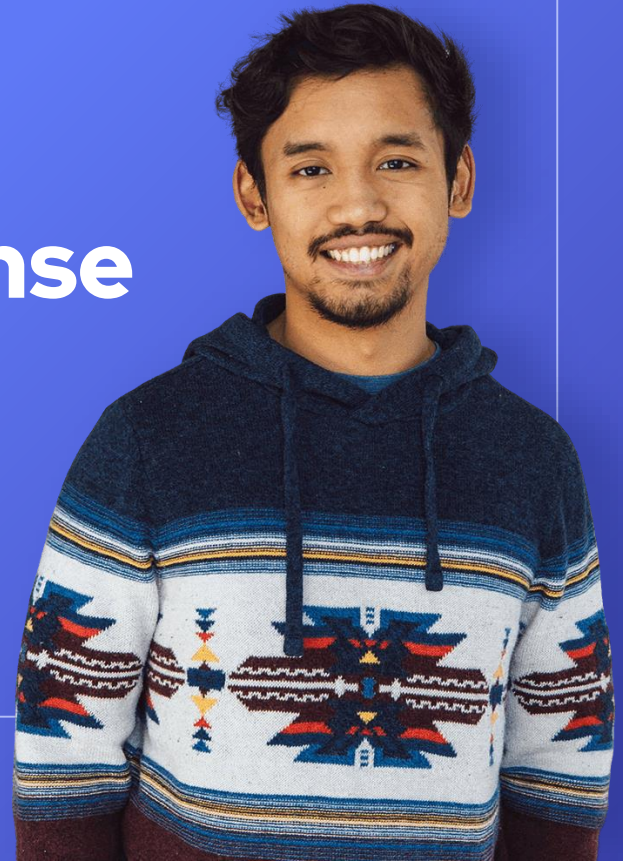


"

Handle Parts
with care!



11. Understanding Expense Barcode Menu



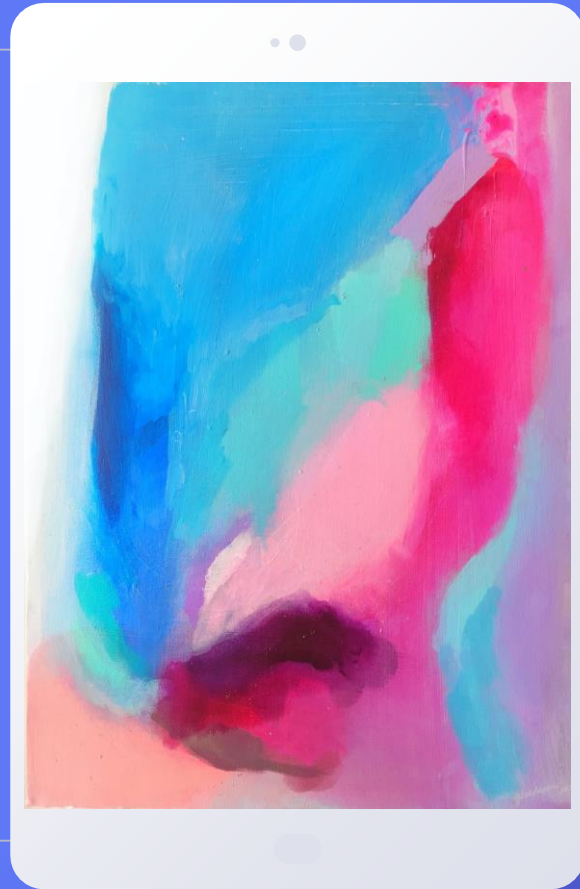
Logging out of jobs

- ▶ **Clock out:** You are at the end of your shift and are physically leaving the building.
- ▶ **Log on to a different job:** You have logged on to another Router / job sequence.
- ▶ **Log on to Expense Barcode Menu:** You are attending a meeting, training session, Continuous Improvement course, etc. Use the Expense Barcode Menu sheet located at every Gateway Station to log on to the appropriate category.



Expense Barcode Menu

- ▶ Use the Expense Barcode Menu located at every Gateway Station to accurately track the hours that you are not logged in to a job.
- ▶ Always Scan appropriate category on Expense Barcode Menu when logging out of job.
- ▶ *If you log on to a category on the Expense Barcode Menu, remember to log back on the job in eShop.*



Expense Barcode Categories

Category	Scan If You Are:
Material Handling	Moving parts, and/or waiting between sequences.
Continuous Improvement	In a CI Meeting, Kaizen Event, Participating in CI Presentations, CI Facilitation, shadow boarding & cell organization.
Non-Production	Starting your day.
Maintenance	Calibrating tools/equipment, doing blast media change-outs, general equipment maintenance.
Quality	Doing second source validation, BOM updates, PMS routings, Manual Updates, S/O Updates, raise custom S/O.
Meetings	Attending Bi-weekly Cell meetings, Safety Meetings, CAR Meetings, Stand-up Meetings.
Indirect Technicians	Engaging in Acting Cell Leader Activities, Back-up Cell Leader Activities, Timesheet Maintenance.
Tooling	Tooling maintenance & cleaning.
Training	Enrolled in Internal/External Courses, Continuation Training, Apprenticeship Program.
Team Building	Teambuilding, trading places, and/or taking the EOC Survey.
Repair Development	Involved in new repair development tooling, trials, and project meetings.
Production Planning	Kitting, Production Planning, Part Tracking, and/or Inducting and Completing.
5S/Housekeeping	Applying lean principles to shop floor.

Glossary



Router Sticker concepts

Part Name

Description and name of the part.

Rev Number

How many times the Router has been revised by the engineer..

Quantity

The total number of parts received.

PMS Part Number

The number that engineers use that have associated ROCs. The Router is associated with that number and reflect engine type.

Due Date

Expected due date.

OEM P/N

The part number that's located on the part.

Router Sticker concepts

Serial number

Located on the part.

Tag Number

Internal number identified for the part if a serial number is not known.

Modify To

If customer agrees to change to part number, that number is added to the Sticker.

TSN

Time Since New reflects the number of hours the part has been running.

CSN

Cycle Since New reflects the number of times the part has been installed in the aircraft during take off and landing.

TCN

Task Control Number reflects the number assigned to the shop order.

Router Sticker concepts

Shop Order

Unique code to log into the Router to access the work instructions and work sequences. If a custom shop order have an N it means NCT.

Remove From

Description of the part itself what it was and whether or not the part has been on an higher assembly.

Barcode

Scan to access the Router.

Engine Model

Provides the engine type.

Generated by

Customer name/information.

Parent Cell & Creation Date

Cell that owns the part and the date that the Router was created.

Router Sticker concepts

Router

Database that holds work directions for each job sequence or operation. Routers must be followed to ensure consistency among products repaired and to ensure we are in compliance with regulatory requirements.

Cycle 1

Incoming clean from receiving thru incoming inspection.

Sequences

Each operation divided by work centers.

Cycle 2

Repair process.

Work Center

The physical location of where the work is supposed to be done and the associated qualifications.

Check Mark

Signify that the operation has been completed without having to open up the Router itself.

eShop concepts

Router/Shop Order

Database that holds work directions for each job sequence or operation.

Barcode

Scan the Router Sticker barcode to access Shop Order(Router).

Images

As soon as you are in the Router, the Sequence Images automatically displays. Toggle to Shop Order and you will see all images associated with the Router.

Sequence Notes

Useful notes to relay additional information for the operation by engineering and inspection.

Work Directions

Detailed directions on how to do the job.

Electronic Signature

Electronic signature is an acknowledgement that you have completely finished a job sequence.

eShop concepts

Handover

Used to leave detailed instruction for the next operator or technicians about an incomplete sequence.

NCT/Engineering Eval

Used to log nonconformances found on part during repair.

Batch log in

Feature that allows you to log onto multiple jobs if you have numerous parts.

Not Qualified

Error message prompting technician that they cannot sign off a job.

Gateway

Transfer Parts through the shop.

Qualifications

Provides access to log on and sign off eShop Order

Thanks!

Any questions?

You can email us at

talya.flowers@standardaero.com or

douglas.marine@standardaero.com

