A SHOPFLOOROPS FIELD BOOK

One Bad Lot. The Supplier Trail.

A field book for following a nonconforming lot from the receiving dock to a proven supplier fix.

8 STEPS · 11 TOOLS



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FIELD BOOK 02

Contents

8 STEPS · 11 TOOLS

01 **The Lot Arrives**
Receive and inspect

02 **Contain It**
Red tag and quality alert

03 **Decide and Tell**
Disposition and supplier notice

04 **Ask for the Fix**
The SCAR

05 **Find the Cause**
The supplier 8D

06 **Prove the Fix**
Verification

07 **Update the Record**
Part history and scorecard

08 **Audit the Source**
Supplier audit

The supplier, the part, the lot and the people in this book are a made-up example. The tool sidebars show ShopFloorOps tools, which I make and sell. Every chapter teaches the step itself, so you can use your own forms.

CHAPTER 1

The Lot Arrives

STEP 1 OF 8 | RECEIVE AND INSPECT

It's 6:50 on a Wednesday morning. A truck backs up to dock 3 with 4,000 flange bolts from Dunmore Fastener Co., lot 55102. The assembly cell is running short, and the shift lead is already asking when the bolts will be on the line.

Most plants treat receiving as a counting job. Count the boxes, match the packing slip, move the skid. That works until the day the lot is wrong. By then the skid has moved, and the only evidence is a number someone wrote on a slip.

Inspect before the skid moves

The receiving inspection report is where a bad lot first shows itself, so it is the first record in the trail. A good one captures the same things every time:

1. Part number, lot number and quantity, copied from the label and the packing slip, not from memory.
2. The supplier's name and the purchase order.
3. What you checked, how you checked it, and how many pieces you checked.
4. What you found, in numbers, not just pass or fail.
5. The decision (accept, hold or reject) and who made it.

Check more than the one thing

Start with the paperwork, because it is quick: the label, the packing slip and the purchase order should all agree on part number, lot number and quantity. Then look at the box and the parts: damage, mixed parts, wrong or missing markings, rust or contamination. Then measure the characteristics your control plan says to check at receiving. For FB-8120 that is the thread, checked with a go/no-go gage, plus a visual check of the head and the finish.

How many pieces, and what the count means

Receiving pulled 32 pieces from the lot, the sample this plant uses for a lot this size. Your own sample plan sets yours, so use it. A sample is a window into the lot, and a bigger window shows you more of it.

Six of the 32 would not accept the go gage. Six in 32 is nearly one in five, so this is not a handful of strays. It points at how the lot was made. A defect rate that high in the sample also means the lot almost certainly holds many more bad pieces than the sample caught. Do not extend the sample to talk yourself into an accept. The lot is not acceptable, and the count says so.

Decide before it leaves the dock

There are three outcomes at the dock. **Accept** when the sample meets your plan. **Reject** when it clearly does not. **Hold** when you need more information before you decide, such as a measurement you want to repeat or a question for engineering. A lot in doubt gets held, with a tag, in a marked place, until someone with the authority decides. Holding and tagging takes minutes. Moving a suspect lot costs a containment later.

Name who decides. If the person who checked the parts is not the person who can reject a lot, the report should say who gets the call and how fast.

The certificate does not replace the check

A certificate of conformance tells you what the supplier says about the lot. It is useful, because it names the lot and the material and shows what they claim. It does not tell you what is in the box. A lot can arrive with a perfect certificate and a bad thread. If you only read the certificate, you are inspecting the supplier's confidence, not the parts.

The mistake to avoid

Reading the paperwork and calling it inspection. The other common one: writing down only pass or fail. A report that says "fail" cannot be used to tell a supplier how bad it was. A report that says six of 32 can.

TOOL SIDEBAR

The tool: Receiving Inspection Report (QA-F-275)

Match the fields above against your copy of QA-F-275 and add whatever your own control plan requires.

ON THE FLOOR MONDAY

- Pull the last three receiving reports.
- Check each one for part, lot, sample size, method, result and decision.
- If the sample size or method is missing on any of them, add a field for it this week.

All 11 tools in this book: Supplier Trail Bundle

CHAPTER 2

Contain It

STEP 2 OF 8 | RED TAG AND QUALITY ALERT

It's 7:45. The thread result has been on the report for fifteen minutes, and a different question has taken over: where else are these bolts? The skid at dock 3 is safe. Two bins from the same lot are not. Receiving moved them to the assembly cell at 7:05, before the inspection started.

Containment answers that question. You draw a fence around every piece that could be bad, you mark it, and you tell everyone who might touch it.

Tag it, then log it

The red tag goes on the skid and on every container from the lot, at the dock and wherever else the lot is. A good tag says what it is, the lot, the date, who tagged it and why. The red tag log is the record of what was tagged, where, and why. Without the log, a tag is a piece of paper that can fall off, and you cannot prove the fence is complete.

Move tagged material to a marked hold area when you can. If it cannot move, tag it where it sits and say so on the log. Nobody but the person who owns the disposition releases a tag.

Tell the people downstream

A quality alert is a one-page notice to every department that could be affected: what the part is, what is wrong, which lots, and what to do if you have some. Here it went to the assembly cell, the stockroom and the shift leads on both shifts before 9:00. Put a photo on it if you can. People recognize a picture faster than a lot number.

Where the fence goes

Draw it wider than you think you need. In this case that meant four places:

1. The skid at the dock.
2. The two bins already at the assembly cell.
3. Any assemblies built from those bins since 7:05. There were none, because the lead had not opened them yet.
4. The previous lot from the same supplier, 55087, still in the stockroom. Receiving pulled 32 pieces and all 32 accepted the gage, so the problem did not start earlier.

Notice what the fourth item does. It is a check, not an assumption. You can narrow the fence once you have evidence, and you can widen it the moment you do not.

The mistake to avoid

Containing only what you can see. The skid at the dock is easy. The bins at the cell are the ones that cause the escape. Ask where else the lot has been since it arrived, not just where it sits now.

TOOL SIDEBAR

The tools: NCM Red Tag Log (QA-F-215) and Quality Alert Form (QA-F-200)

The red tag log records each tag and where it was applied, so you can prove the fence is complete. The quality alert tells downstream departments what to do. The tag numbers and names here are made up. Use your own tag numbering if you already have one.

ON THE FLOOR MONDAY

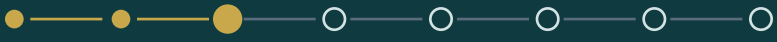
- Walk your dock and stockroom looking for tagged material.
- Check that every tag has a matching line on the red tag log.
- Pick one past alert and ask whether it told people what to do.

All 11 tools in this book: Supplier Trail Bundle

CHAPTER 3

Decide and Tell

STEP 3 OF 8 | DISPOSITION AND SUPPLIER NOTICE



By Wednesday afternoon the lot is tagged and the alert is out. Now two people want something from you. Production wants bolts by Thursday. And Dunmore doesn't know yet.

Choices for a bad lot

Disposition means deciding what happens to the nonconforming material. There are five choices, and each has a cost:

1. **Return it.** The supplier takes it back and replaces it. Clean, but the replacement takes time.
2. **Sort it.** Someone gages every piece, and only the conforming pieces are used. It works when the bad share is small enough that sorting is quicker than waiting. Someone must pay for the labor, and the supplier usually should.
3. **Rework it.** Fix the pieces so they conform. It needs an approved method and a recheck of every piece. For a rolled thread on a bolt it is rarely practical.
4. **Use it under a deviation waiver.** Engineering approves limited use of material that does not meet the requirement.
5. **Scrap it.** Right when the parts cannot be sorted or reworked, or sorting costs more than the parts are worth.

Who decides depends on your plant, but the choice that affects fit, form or function is never made by receiving alone. Engineering weighs in on use as is. Purchasing owns the conversation about who pays.

What a waiver is, and what it must carry

A deviation waiver is permission to use nonconforming material for a stated quantity, under stated conditions, until a stated date. It is not a way to make a problem go away. A useful waiver names the part, the lot, the exact nonconformance, the quantity, the conditions of use, the approver and the end date. A waiver with no end date turns into a standing exception.

Here the cell asked to use 600 of the bolts as they were. Engineering said no, because a bolt that will not accept the go gage may not thread into the mating part. The decision: Dunmore ships a sorted replacement lot by Thursday, and Receiving gages 600 pieces from lot 55102 tonight. Pieces that accept the gage conform and can be used. The rest stay tagged.

Sometimes the right use of a waiver form is to record a no. A written denial stops a verbal approval from drifting into practice.

Tell the supplier the same day

Call if you need to, but send a written notice the same day. It goes to the person who can act at the supplier, with a copy to your purchasing contact. It should say:

1. Part, lot and quantity.
2. What is wrong, in numbers: 6 of 32 reject, thread go gage.
3. What you have done so far: held, tagged and sorted.
4. What you need and by when: a marked, sorted replacement lot and a check of their own stock.
5. One name on your side, and when a SCAR will follow.

Keep it factual. The notice is not the place for blame. It is the record that says when they were told, what they were told and what you asked for.

The mistake to avoid

Telling the supplier by phone only. A call leaves no record, and their memory of it won't match yours. Follow every call with a written notice.

TOOL SIDEBAR

The tool: Deviation Waiver Form (QA-F-235)

If a waiver is granted, it carries a quantity and an end date, so it can't turn into a standing exception. Use your own approval chain.

ON THE FLOOR MONDAY

- Find your last deviation or waiver.
- Check that it has a quantity, a condition, an approver and an end date.
- If any has no end date, add one or close it.

All 11 tools in this book: Supplier Trail Bundle

CHAPTER 4

Ask for the Fix

STEP 4 OF 8 | THE SCAR

It's Thursday morning. The sorted replacement lot has arrived, and Dunmore's quality contact has answered your notice with one line: "We'll look into it." That is not a response. It is a promise with no date.

A supplier corrective action request, or SCAR, is the formal request that the supplier find the cause, fix it, and prove it. The notice said what happened. The SCAR says what you need back, and by when.

Write the problem so it can be answered

The problem statement is the first thing the supplier reads. If it is vague, the answer will be vague. Write down the plain facts: the part, the lot, the quantity, the requirement, what you found and how you found it. For this one: flange bolt FB-8120, lot 55102, 4,000 pieces received Wednesday. Thread go gage rejected 6 of 32 sampled. The previous lot, 55087, passed 32 of 32. No opinions, no adjectives.

What goes in it

1. **The facts,** copied from the receiving report and the red tag log.
2. **What you want back.** Containment at their end, the root cause, the corrective action, and proof it worked.
3. **Dates** for containment, for the cause and plan, and for verification.
4. **Owners.** One name on each side.
5. **How you will check.** Say now what proof you will accept.

Ask for the cause on all three legs, which the next chapter covers: why it was made, why their checks missed it, and why their system allowed it. Say so in the request, so the answer you get is the answer you need.

Dates and owners

In this case the supplier agreement asks for containment within one day and a written plan within 14 days. Your own supplier agreement sets the real numbers. On your side, one person owns the SCAR from issue to close. It is usually the supplier quality engineer or whoever holds the relationship. If nobody owns it, nobody chases it. For a full walkthrough, see the guide How to Write a SCAR.

Track it from day one

A SCAR that lives in an inbox ages quietly. Put every one on a tracker the day it is issued, so overdue ones are visible. Record the issue date, each due date, the owner and the status.

When the supplier goes quiet

On the due date with no response, send a short written reminder the same day. If it is still silent after a few more days, escalate to the next level on their side and tell your purchasing contact, who can raise it through the commercial relationship. Your supplier agreement says what steps are open to you. Do not invent consequences. State the date, state what is overdue, and ask for a new committed date in writing.

The mistake to avoid

Sending a SCAR that says "improve your quality." Vague requests get vague answers. The second mistake is issuing it and forgetting it. A SCAR is a clock, and somebody has to watch it.

TOOL SIDEBAR

The tools: SCAR Form (QA-F-394) and SCAR Tracker (QA-F-395)

QA-F-394 is a one-page SCAR with a scored section for reviewing the supplier's response. QA-F-395 tracks every SCAR through to verified close.

ON THE FLOOR MONDAY

- Open your supplier corrective action log.
- Find any request with no due date, or one past its date.
- Write to the supplier today and set a new date in writing.

All 11 tools in this book: Supplier Trail Bundle

CHAPTER 5

Find the Cause

STEP 5 OF 8 | THE SUPPLIER 8D



Dunmore's response arrives eleven days after the SCAR, inside the 14 days. It's an 8D report. The root cause reads: "Operator failed to verify thread on the run. Operator retrained."

On time is good. It is also not enough. A response that stops at the operator has found a person, not a cause.

Review it on three legs

Every escape is really three failures, and a good response answers all of them:

1. **Occurrence.** Why did the defect get made?
2. **Detection.** Why did their checks not catch it?
3. **System.** Why did the way they run the plant allow it?

Hold the response up against those three. Dunmore's first answer covered none of them. You wrote back with one question per leg, and the second response was the real one.

The second response named the real causes. The thread-rolling dies had run past their life limit, and the job had moved to a second press without its die counter being reset. In-process checks were first piece and last piece only, so a drift in the middle passed both. Moving a job to another machine was not treated as a process change, so nobody reviewed die life. Each leg now has something you can verify, and each leads to an action: a die-life limit tied to piece count, a periodic check inside the run, and a change notice before any job moves.

What else to check in the response

- **Containment.** Did they check their own stock and anything in transit, not just your lot?

- **Evidence.** Does the cause point to something that can be seen, such as a die log, a record or a photo, or is it an opinion?
- **Actions.** Does each cause have its own action, with an owner and a date?
- **Verification.** Does the response say how they will know the fix worked?

Push back in writing, and ask a question for each gap. A good supplier will answer. A supplier that cannot answer has told you something too.

The mistake to avoid

Accepting "operator error" or "retrain" as the whole answer. People work inside the system the supplier built. If retraining is the only action, ask the next why: what about the process made the mistake easy? Then ask for that to be fixed.

TOOL SIDEBAR

The tool: 8D Report (QA-F-355)

Many suppliers will send their own 8D format. Use your report as the checklist you review theirs against: the team, the problem facts, containment, the cause on all three legs, the corrective action, and how it will be verified. Field Book 1 covers the 8D from the inside.

ON THE FLOOR MONDAY

- Pull the last supplier response you accepted.
- Check whether the cause covers occurrence, detection and system.
- If it stops at retraining, reply this week and ask for the next why.

All 11 tools in this book: Supplier Trail Bundle

CHAPTER 6

Prove the Fix

STEP 6 OF 8 | VERIFICATION

Dunmore's plan is accepted: dies replaced on a piece count, a second in-process check every 500 pieces, and a change notice before any job moves machines. It is tempting to close the SCAR. Not yet. A plan tells you what the supplier intends. It does not tell you what will happen on the next lot.

Set the proof before the lots arrive

Write down what proof you will accept, so nobody grades their own homework afterward. For FB-8120 the team set three:

1. Zero thread gage rejects on the next five lots, each sampled at receiving with a sample of 32 or more.
2. Dunmore's in-process check records sent with each of those lots.
3. The die log entry for each lot, showing the counter was reset.

Each one is measurable and has a window. And the first is your own data, collected at your own dock, not a statement from the supplier. Five lots is this team's choice. Your own risk and volume decide the window. A part that ships once a quarter needs a different plan than one that ships weekly.

Tighten while you wait

Until the window closes, FB-8120 from Dunmore stays on tightened inspection. A bigger sample for five lots costs little next to another bad lot, and it is the only way to get the proof you asked for.

Keep score, and decide what a miss means

Keep a simple count on the tracker: lots received, lots clean, records received. After three lots the count stands at 3 of 5. Two lots later it reads 5 of 5, the records are attached, and the SCAR can close.

Decide in advance what happens if a lot fails inside the window. The rule here: the count stops, the SCAR goes back to the cause, and the supplier is asked what the fix missed. You do not restart the clock as though nothing happened.

The mistake to avoid

Closing the SCAR when the plan is approved. An approved plan is a statement of intent. Five clean lots are what happened. If one of the five fails, the SCAR goes back to the cause, not to the next lot.

TOOL SIDEBAR

The tool: Effectiveness Verification Tracker (QA-F-393)

The tracker records the proof criteria, the window and the results for each corrective action, and it works with any SCAR or 8D log. A column in your existing log works too, as long as nothing closes without evidence.

ON THE FLOOR MONDAY

- List every supplier corrective action closed in the last six months.
- Check that each has verification from your own receiving data.
- Reopen any that closed on the day the plan was approved.

All 11 tools in this book: Supplier Trail Bundle

CHAPTER 7

Update the Record

STEP 7 OF 8 | PART HISTORY AND SCORECARD

Five clean lots later, the SCAR is closed. One job is left, and it is the one that gets skipped: writing it down where it will count. If lot 55102 only lives in the SCAR file, the next buyer to look at Dunmore will see a clean supplier.

Two records, two questions

The **part history** answers a question about one part: how have its lots gone? The **supplier scorecard** answers a question about one supplier: how are they doing across everything they ship? A bad lot belongs in both.

On the part history, lot 55102 is a reject, six of 32, with the SCAR number and the tightened inspection noted, followed by five accepted lots. On the scorecard, the same lot shows up as a reject and as a SCAR, and the supplier's response time is recorded honestly. Dunmore answered inside its 14 days, and the scorecard should say that too.

What each record should hold

- **Part history:** lot number, date, quantity, sample size, result, decision, and a note linking any reject to its SCAR.
- **Scorecard:** lots received and lots rejected for the period, SCARs issued, whether responses came on time, and the result of any audit.

Record the good news as well as the bad. A supplier who fixes a problem and holds it should see that in the record, and the next review should be able to show it.

Let the record decide the next move

The records are not filing. They decide how much you inspect, who gets the next purchase order, and when an audit is due. Going back to normal inspection happens because the part history shows five clean lots, not because the SCAR closed.

The mistake to avoid

Letting the scorecard quietly forgive. A clean quarter should not erase a bad lot. The record has to show the reject, the response and the proven fix, in that order, so that anyone who reads it sees the whole trail.

TOOL SIDEBAR

The tools: Incoming Part History (QA-F-380) and Supplier Scorecard (QA-F-220)

The part history keeps lot-by-lot results for a part. The scorecard summarizes a supplier's quality and responsiveness over a period. The names and numbers here are made up. Your own periods and measures may differ.

ON THE FLOOR MONDAY

- Pick a supplier you haven't reviewed lately.
- Check that its last bad lot appears in both the part history and the scorecard.
- Add anything that's missing today.

All 11 tools in this book: Supplier Trail Bundle

CHAPTER 8

Audit the Source

STEP 8 OF 8 | SUPPLIER AUDIT

The fix is proven, but you have only seen it from your dock. You know five lots came in clean. You haven't seen the die log, the press, or how a job moves from one machine to another. For a serious or repeat problem, the last step is to go and see.

Audit the failure, not the questionnaire

A supplier audit is not a form sent in the mail. It is a visit, or a video walk with records, where you ask to see the thing that failed. For Dunmore the team wrote the audit questions straight from the SCAR cause:

1. How is die life tracked, and who resets the counter?
2. What happens when a job moves from one press to another?
3. What is checked inside a run, and how often?
4. Show me the last change record.

Ask to see evidence, not to be told

For each question, ask for the record or the thing itself: the die log, the last change record, the in-process check sheets for a recent run, the gage and its calibration, and the training record of the person doing the check. "We do that" is an answer. "Here is the record from last Tuesday" is evidence. Take notes on what you saw, not on what you were told.

Rate it and close the findings

Rate each answer against the requirement. A major finding is one where the system would let a defect reach you again, such as no die counter, or a change process nobody follows. A minor finding is a gap that does not threaten the product by itself. Write each one down, with the evidence, and give it an owner and a due date.

Findings go back where they came from. A major one opens a new SCAR on the tracker. A minor one gets a due date and a check. A clean audit goes on the scorecard with the date the next one is due.

How often to go back

Set the next visit by risk. A supplier with a major finding gets a follow-up visit once their response is in. One with a clean audit and a clean record can go longer. Your own audit plan and the supplier agreement set the real schedule.

Then close the trail

Pull the thread one last time. Lot 55102 and SCAR-014 should appear in every record they touched:

1. **Receiving report:** 6 of 32 reject.
2. **Red tag and alert:** lot held, departments told.
3. **Waiver and notice:** use denied, supplier told in writing.
4. **SCAR and tracker:** SCAR-014 issued with dates.
5. **8D:** cause on three legs, accepted after pushback.
6. **Verification:** five clean lots.
7. **Part history and scorecard:** reject, response, fix.
8. **Audit:** die log, change process and checks, seen on site.

Eight steps, one lot number. When an auditor or a customer asks how you handled a bad supplier lot, you hand them 55102 and they can follow it end to end.

The mistake to avoid

Auditing with a generic checklist and no failure in mind. Start from the lot that failed. Ask to see the thing that broke, and ask how the supplier would know if it broke again.

TOOL SIDEBAR

The tool: Supplier Audit Checklist (QA-F-396)

QA-F-396 is a 45-question supplier audit with a rating and findings. A major finding leads to a SCAR.

ON THE FLOOR MONDAY

- Pick one supplier with a recent SCAR.
- Write three audit questions from that SCAR's cause.
- Put the visit or the video walk on the calendar this month.

All 11 tools in this book: Supplier Trail Bundle

Monday Board

One action per step. Pick one and do it this week.

1. Pull your last three receiving reports and check that sample size and method are on each. ☐
2. Match every red tag in the building to a line on the red tag log. ☐
3. Check that every open deviation waiver has a quantity, a condition, an approver and an end date. ☐
4. Find any supplier corrective action with no due date or past its date, and reset it in writing. ☐
5. Read the last supplier response you accepted. If it stops at retraining, ask for the next why. ☐
6. Reopen any supplier corrective action that closed without verification from your own receiving data. ☐
7. Check that your last bad lot is in both the part history and the scorecard. ☐
8. Write three audit questions from your last SCAR's cause and book the visit. ☐