A SHOPFLOOROPS FIELD BOOK

One Complaint: The Complaint-to-Closure Trail

A field book for following a customer complaint from the first email to a proven fix.

8 STEPS · 10 TOOLS



CHRIS MARTIN

FIELD BOOK 01

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8 STEPS · 10 TOOLS

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The plant, the part and the complaint 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 Complaint Arrives

STEP 1 OF 8 | THE COMPLAINT LOG



It's 7:40 on a Tuesday morning. An email lands in the quality inbox. A customer found scratches across the finish on 14 of the 200 housings you shipped last week. They want an answer by Friday.

Most plants treat this as one problem. Call the shipping department, check the stock, send an apology. By Friday the email is answered and everyone moves on.

Look at what that single email has set off. The complaint record itself. A containment and corrective action report. A root cause analysis. A risk document that missed this. A control plan that didn't catch it. A work instruction that needs to change. An audit that should have seen it. And a check weeks from now to prove the fix held.

That is eight steps from one email. This book follows one complaint through every step, one chapter per step, with the tools that go with each.

Why the first record matters most

Every document after this one will lean on what you write in the first ten minutes. If the first record says "customer unhappy with finish," the root cause team will spend a week guessing. If it says "14 of 200, scratches on the top face, lot 2417, received Oct 6, found at their incoming inspection," they start with facts.

A good complaint record answers six questions the same way every time:

1. What part and what lot?
2. How many were shipped, and how many are affected?
3. What exactly did the customer see?

4 When was it received and when was it found?

5 What does the customer expect, and by when?

6 Who owns the answer?

Give the complaint a number at the top. In this book it's RMA-031. Every record that follows will carry that number, and it becomes the thread you pull to see the whole trail.

The mistake to avoid

Logging the complaint after the fix. By then the log is a history report instead of a starting point, and the details of what the customer actually saw are already blurred. Log it first, even if the entry is rough. You can improve an entry. You can't recover a detail nobody wrote down.

TOOL SIDEBAR

The tool: RMA Customer Complaint Log (QA-F-370)

This is the ShopFloorOps version of the complaint log, which I make and sell. It carries the six fields above, a complaint number that later records point back to, and status columns so you can see which complaints are still open. Any spreadsheet that captures the same six fields and assigns a number will do the job. Use your own form if you have one.

ON THE FLOOR MONDAY

- Pull your last three customer complaints.
- For each one, check whether the part, lot, quantity, what the customer saw, and the due date are written in one place.
- If any live only in an email, move them into your log today.

All 10 tools in this book: Complaint-to-Closure Trail Bundle

CHAPTER 2

Contain It

STEP 2 OF 8 | THE 8D REPORT, STEPS D1 TO D3



It's 9:15, ninety minutes after the email. Before the customer wants a root cause, they want to know one thing: is any more bad product headed their way?

Containment is the answer to that question. It isn't the fix. It's a fence. You build it around every part that could be affected, you check everything inside it, and you prove that what ships next is clean.

Open the 8D now, not later

The 8D report is the corrective action record that will carry this complaint to closure. Open it the same morning, with RMA-031 at the top. The first three steps happen fast:

1. **D1, the team.** Who owns it, and who actually touches the part. Put the person who packs the housings on the team, not just the people who sign the report.
2. **D2, the problem.** Copy the facts from the complaint log: 14 of 200, scratches on the top face, lot 2417. Add what you see yourself once a sample comes back.
3. **D3, containment.** Where the fence goes and what you found inside it.

Where the fence goes

Draw the boundary wider than you think you need. A good containment covers four places:

1. Parts at the customer, including what's still in their stock.
2. Parts in transit.
3. Finished goods in your building.

4 Work in process that will become finished goods.

In this case, the plant sorted 400 housings in finished goods and found 11 with the same scratches. All 11 came from totes packed after September 28. The customer let a sort team check the remaining 186 pieces of lot 2417 at their dock. They found 3 more.

That date matters. A pattern like "only parts packed after a certain day" is the first real clue, and you only get it if containment records where each bad part came from.

The clean break

The first shipment after containment needs a mark the customer can see: a label, a dot, a note on the packing slip. That's how they know where suspect material ends and certified material begins. Write the break point into the 8D: which lot, which date, how it's marked.

The mistake to avoid

Calling the sort the fix. A 100% sort catches bad parts. It does nothing to stop the next one from being made. If the 8D stalls after D3, you've paid for inspection forever and fixed nothing. Containment buys time for the root cause. It doesn't replace it.

TOOL SIDEBAR

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

The ShopFloorOps 8D walks D1 through D8 on one form, with containment results, the clean break point, and the complaint number carried over from the log. Any 8D format works if it records the team, the problem facts, where the fence went, and what was found inside it.

ON THE FLOOR MONDAY

- Open your oldest open corrective action.
- Check that D3 covers all four places: customer, transit, finished goods and work in process.
- If the clean break point isn't written down, write it today.

All 10 tools in this book: Complaint-to-Closure Trail Bundle

CHAPTER 3

Find the Cause

STEP 3 OF 8 | 5 WHY AND FISHBONE, STEP D4

By Thursday the sort is running and the customer has stopped calling every hour. Now comes the part most plants rush: why did this happen?

The fastest answer is usually wrong. "Operator handled the parts roughly" closes a report, but it doesn't explain why 14 parts were scratched in the same place on the same face, all packed after the same date. This is D4 of the 8D, and it deserves more than a guess.

Start wide with the fishbone

A fishbone diagram lists every possible cause before you fall for one. Sort the ideas under the six usual headings: man, machine, method, material, measurement, and environment. Don't argue yet. Just list.

For the scratched housings, the team listed machining burrs, contact on the wash rack, handling at final inspection, the pack method, the totes, and damage in shipping. Then they checked each one against the evidence. Final inspection records were clean, so the scratches happened after inspection. That cut the list in half before lunch.

Then go deep with three legs

A plain 5 Why asks why the problem happened. A three-legged 5 Why asks three separate questions, because every escape is really three failures:

1. **Occurrence.** Why did the defect happen?
2. **Detection.** Why didn't we catch it?
3. **System.** Why did the way we manage the plant allow it?

Here's how the three legs played out:

Occurrence. The housings were scratched because they rubbed against each other in transit. They rubbed because the totes had no dividers. The totes had no dividers because a new tote design arrived from the packaging supplier on September 28.

Detection. Final inspection happens before packing. Nothing checks the parts after they go into the tote, so damage from packing or shipping can't be seen by anyone in the plant.

System. The tote change was handled as a purchasing decision, not a process change. Nobody filed a change request, so nobody asked what the new tote would do to the part.

Now you have three causes, and each needs its own action. Fix only the first, and the next change to packaging, labels or carriers will slip through the same gap.

The mistake to avoid

Ending at "operator error" or "retrain." People make mistakes inside the system you give them. If retraining is your only action, ask one more why: what about the process made the mistake easy? Then fix that.

TOOL SIDEBAR

The tools: 3-Legged 5 Why Analysis (QA-F-310) and Fishbone Diagram (QA-F-365)

The ShopFloorOps 5 Why runs the occurrence, detection and system legs side by side, and the fishbone sorts causes into the six headings. A whiteboard works too. What matters is that each why is backed by evidence and each leg ends in something you can change.

ON THE FLOOR MONDAY

- Pull one closed corrective action.
- Check whether it answers all three legs: occurrence, detection and system.
- If it stops at "retrain operator," ask the next why with the team this week.

All 10 tools in this book: Complaint-to-Closure Trail Bundle

CHAPTER 4

Fix the Risk

STEP 4 OF 8 | THE PROCESS FMEA

Here's an uncomfortable question for every complaint: was this failure on your PFMEA? For the scratched housings, the answer was no. Not because the team missed it, but because packing wasn't on the PFMEA at all.

The process FMEA is the plant's list of what can go wrong at each step, how bad it would be, and what stops it. A complaint is a test of that list. Every escape tells you one of two things: the failure mode was there and the controls didn't work, or the failure mode was never there.

In 8D terms, this chapter and the next three are D5 through D7: choosing the corrective action, putting it in place, and locking it in so it can't happen again.

Find where the PFMEA went quiet

Walk the process in order, from receiving to the truck, and hold the PFMEA next to it. In this plant, the PFMEA ended at final inspection. Packing, labeling and staging for shipment weren't listed. As far as the PFMEA knew, the part stopped existing once it passed inspection.

That's common, and it's exactly where complaints hide. Steps after the last inspection can damage a good part, and nothing downstream will catch it.

Add the step, then rate it honestly

The team added a packing step with a failure mode of parts contacting each other in the tote. They rated it the way it really ran, not the way they wished it ran:

1. **Severity 5.** A cosmetic defect the customer rejects at incoming inspection.

2. **Occurrence 6.** It was already happening with the new totes.
3. **Detection 8.** Nothing after final inspection could catch it.

You don't multiply those three numbers. The current AIAG and VDA method uses an Action Priority table instead. You look up severity, occurrence and detection together, and it returns High, Medium or Low. Severity 5, occurrence 6 and detection 8 come back **Medium**.

Why not multiply? The old risk priority number could give the same score to very different situations. A rare failure with a safety effect could score the same as a minor defect that happens every day. Action Priority looks at severity first, then occurrence, then detection, so a serious failure can't hide behind a low multiplied score.

Here is what the three levels ask of the team. High means act, or write down why the current controls are enough. Medium means you should act or justify. Low means you may. Medium is not a pass. This team acted because a customer was already holding 14 bad housings, and an occurrence rating of 6 says it keeps happening.

After the fixes in the next two chapters, divider totes and a check at packout, the team expected occurrence to drop to 2 and detection to 4. That lookup returns **Low**. Those new ratings only count once the controls are in place and working.

Some customers and older procedures still ask for RPN. Use whatever your customer requires. If you aren't sure, ask which one they expect.

Ask what else is missing

Don't stop at the one line that failed. If packing was missing, what else was? Labeling, staging and returnable dunnage all sat in the same blind spot. A reverse PFMEA, where you stand at each station and compare what's happening with what's written, finds these gaps faster than a meeting does.

The mistake to avoid

Changing the ratings without changing anything on the floor. If occurrence drops from 6 to 2 on paper but the totes are the same, the PFMEA is now wrong in a more dangerous way. Ratings follow actions, never the other way around.

The opposite mistake is reading a Medium as "no action needed." The table tells you where to look first. It doesn't tell you what the customer will accept.

TOOL SIDEBAR

The tool: Process FMEA (QA-F-340)

The ShopFloorOps PFMEA lists each step with its failure modes, ratings, current controls and actions, and flags high-risk rows. The Reverse PFMEA Audit Checklist (QA-F-345) is the floor walk that checks it against reality. Any PFMEA works if it covers every step from receiving to shipping.

ON THE FLOOR MONDAY

- Find the last step on your PFMEA.
- Walk the floor from that step to the shipping dock.
- List every step you pass that isn't on the PFMEA.

All 10 tools in this book: Complaint-to-Closure Trail Bundle

CHAPTER 5

Lock It In

STEP 5 OF 8 | THE CONTROL PLAN

The PFMEA says what can go wrong. The control plan says what you check, how often, and what happens when the check fails. If the PFMEA changed, the control plan has to change with it, or the new risk exists only on paper.

Trace every row

A good control plan row traces back to a PFMEA row. When the team added packing to the PFMEA, they added a matching row here:

STEP	Pack housings for shipment
CHARACTERISTIC	Divider tote, one part per pocket, top face up
METHOD	Visual check against the posted photo
FREQUENCY	Every tote
WHO	Packout operator
REACTION PLAN	Stop, repack the tote, notify the lead, log it

Each column answers a question someone on the floor will actually ask. What am I checking? How? How often? What do I do if it's wrong?

The reaction plan is the control

Weak control plans usually share the same gap: a check with no reaction plan, or one that just says "notify supervisor." That isn't a plan. Write the steps: stop, contain what's suspect, fix it, and record what happened. If the operator has to guess, you don't have a control.

Control the inputs too

The root cause started with a supplier changing the tote. So the team added a second row: incoming totes are checked for dividers at receiving, and the packaging spec sent to the supplier now names the divider design. That closes the system leg from Chapter 3. The next tote change can't arrive unnoticed.

The mistake to avoid

Writing "100% visual" and calling it done. A visual check with no defined criteria, no example of good and bad, and no reaction plan catches whatever the operator happens to notice on a busy day. Say what good looks like, and what happens when it isn't.

TOOL SIDEBAR

The tool: Control Plan (QA-F-350)

The ShopFloorOps control plan follows the familiar AIAG layout, with each row tied to a process step, the method, sample size and frequency, and a reaction plan for every row. Any control plan works if every reaction plan tells the operator exactly what to do.

ON THE FLOOR MONDAY

- Pick five rows from one control plan.
- Read each reaction plan out loud.
- If any says only "notify supervisor," rewrite it as steps this week.

All 10 tools in this book: Complaint-to-Closure Trail Bundle

CHAPTER 6

Change the Work

STEP 6 OF 8 | THE WORK INSTRUCTION

Everything so far lives in the quality office: the log, the 8D, the PFMEA, the control plan. The operator at packout will never read any of them. What they will read, if it's at the station and easy to follow, is the work instruction.

This is where the fix either reaches the floor or doesn't.

Write it for the person doing the job

The new packout instruction for the housings fit on one page. A photo of a correctly packed tote: one part per pocket, top face up. A photo of what wrong looks like: two parts touching. The check from the control plan, written as a step: confirm the tote has dividers before the first part goes in. And what to do if it doesn't.

Short sentences, real photos from your own station, and the key check marked so it stands out. If one step needs a paragraph to explain, the step is probably too complicated.

Release it like a change

A new work instruction is a process change, and the system leg of this root cause was a change that skipped the process. Don't repeat the same miss. Release the instruction through a change record:

1. What changed, and which complaint or corrective action it came from.
2. Who reviewed and approved it.
3. Who was trained and signed off, and on what date.
4. When the old version came off the floor.

The training sign-off matters most. The new instruction takes effect when the people doing the job have been shown it, not

when it's saved in a folder.

The mistake to avoid

Updating the file and leaving the old copy at the station. Every plant has a laminated instruction from three revisions ago taped to a machine somewhere. Pulling the old copy is a step in the release, not a nice extra. Walk to the station and check.

TOOL SIDEBAR

The tool: Work Instruction & Change Release (QA-F-390)

The ShopFloorOps version pairs a step-by-step instruction with a change-release record, training sign-off and a release dashboard. A standalone instruction version (QA-F-391) covers the instruction alone. Any format works if it shows the change, the approval, and who was trained before release.

ON THE FLOOR MONDAY

- Walk to one station and read the instruction posted there.
- Check its revision against the current one in your system.
- If they don't match, pull the old one today.

All 10 tools in this book: Complaint-to-Closure Trail Bundle

CHAPTER 7

Check the Floor

STEP 7 OF 8 | THE LAYERED PROCESS AUDIT

Two weeks after the fix, the totes are right, the instruction is posted, and the operators are signed off. Here's the question that decides whether the complaint comes back: will anyone check that it's still done this way three months from now?

Layered process audits answer that. They're short, frequent checks of the process itself, done by people at different levels of the plant. They aren't another inspection of parts. They check that the controls you just put in place are still being followed.

Add the question from the complaint

Every corrective action should leave at least one question behind on the LPA. For the housings, the team added this one:

> *"At packout, are parts in divider totes, one part per pocket, top face up?"*

Yes or no, answered in thirty seconds by anyone standing at the station.

Spread it across the layers

- **Layer 1, the supervisor:** every shift or every day.
- **Layer 2, the department manager:** weekly.
- **Layer 3, the plant manager or staff:** monthly.

Different layers notice different things. A supervisor sees the station every day and stops seeing it. A plant manager walking through once a month sees it fresh. And when the plant manager asks the question, the floor learns that the fix matters.

A no is the point

When an answer is no, fix it on the spot and log it. Then watch the pattern. One no is a slip. The same no three weeks running means the control isn't working, and that goes back to the root cause. It's not a reason to stop asking.

The mistake to avoid

Audits that always come back yes. If every question has been a yes for a year, either the process is perfect or nobody is really looking. Rotate in questions from recent complaints, retire the ones that never fail, and track whether the audits are actually getting done on schedule.

TOOL SIDEBAR

The tools: LPA Schedule & Compliance Dashboard (QA-F-392) and Layered Process Audit (QA-F-205)

The dashboard schedules audits by layer and tracks completion and findings. The LPA form is the audit itself. A clipboard and a simple log work too, as long as you can see which audits were missed and which questions keep failing.

ON THE FLOOR MONDAY

- Pick your last three customer complaints.
- Check whether each one left a question on your LPA.
- Add one question this week for any that didn't.

All 10 tools in this book: Complaint-to-Closure Trail Bundle

CHAPTER 8

Prove It Worked

STEP 8 OF 8 | THE EFFECTIVENESS CHECK, STEP D8

Three weeks after the email, every action in the 8D is done. It's tempting to close it. Not yet. Done means the actions happened. Closed means you've proven they worked.

Decide what proof looks like up front

Write the effectiveness check before the actions finish, so nobody grades their own homework afterward. For the housings, the team wrote it into the 8D the day they chose the corrective action:

1. Zero scratch rejects at the customer's incoming inspection for the next 10 shipments.
2. The LPA packout question answered yes at least 95% of the time over the same period.
3. One look at a tote on the customer's dock, to see the parts as they arrive.

Each one is measurable, has a time frame, and uses evidence from outside the quality office. The customer's incoming data counts for more than your own opinion of the fix.

Then close the trail

Ten shipments later, there were no rejects, LPA compliance was 97%, and the dock check showed parts arriving clean. Now the 8D can close. D8 is recognizing the team, including the packout operator who first said the new totes felt different.

Close the complaint log entry too, with the closed date and the 8D number. Then pull the thread one last time. RMA-031 should appear on every record it touched:

1. **Complaint log:** what the customer saw.

2 **8D:** the team, containment and closure.

3 **5 Why and fishbone:** why it happened, why it escaped, why the system allowed it.

4 **PFMEA:** packing added and rated.

5 **Control plan:** the tote check at packout and at receiving.

6 **Work instruction:** the new packout steps, released and trained.

7 **LPA:** the packout question, asked at every layer.

8 **Effectiveness check:** ten clean shipments.

Eight steps, one number. When an auditor or a customer asks how you handled it, you hand them RMA-031 and they can follow it end to end.

The mistake to avoid

Closing on the day the fix goes in. A corrective action closed before anyone knows whether it worked is the one most likely to come back. Give it time and real data. If the check fails, the 8D goes back to D4. That isn't the team failing. It's the system working.

TOOL SIDEBAR

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

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

ON THE FLOOR MONDAY

- List every corrective action closed in the last six months.
- Check that each one has a written effectiveness check with evidence.
- Reopen any that closed on the day the fix went in.

All 10 tools in this book: Complaint-to-Closure Trail Bundle