3L5Y WORKSHEET

PROBLEM TITLE	REFERENCE NO.	CUSTOMER	PART NAME AND NUMBER
	PRR or 8D no.		

DATE OPENED	TEAM	OWNER	STATUS
	Who took part		☐ Open ☐ Closed

(0) PROBLEM AND CONTAINMENT

The defect as the customer saw it, with no cause in it, and what protects the customer meanwhile.

PROBLEM STATEMENT

Who found what, where and when, e.g. “On 12 March the assembly plant found 2 of 1,800 brackets from lot 0310 with the plate off at weld W3”

FOUND BY / WHERE	WHEN	HOW MANY, OUT OF HOW MANY

LOTS, SERIAL NUMBERS OR DATE CODES AFFECTED	EVIDENCE OF THE DEFECT
	Photos, measurements, returned parts

CONTAINMENT	CLEAN POINT
Stock held and sorted at the customer, in transit and in the plant; what the sort found	First lot, serial number or date known to be good

(1) LEG 1 · SPECIFIC: WHY WAS THE DEFECT MADE?

Answer each why with something measured or recorded. Stop at a condition the plant can change.

WHY 1 — WHY WAS THE DEFECT MADE?	HOW DO WE KNOW?
The direct cause, as observed on the parts	Measurement, record or part in hand
WHY 2 — WHY DID THAT HAPPEN?	**HOW DO WE KNOW?**
WHY 3 — WHY DID THAT HAPPEN?	**HOW DO WE KNOW?**
WHY 4 — WHY DID THAT HAPPEN?	**HOW DO WE KNOW?**
WHY 5 — WHY DID THAT HAPPEN?	**HOW DO WE KNOW?**
Stop earlier if the answer is already something you can change; go on if it is not	

ROOT CAUSE OF LEG 1

A condition of the process that can be changed — not a person

PROOF: HOW THE DEFECT WAS SWITCHED ON AND OFF	SWITCHED ON AND OFF?
Cause brought back and the defect returned; cause removed and the defect went. Parts and numbers	☐ Yes ☐ No ☐ Not yet

2 LEG 2 · DETECTION: WHY DID IT REACH THE CUSTOMER?

Every check from the operation to the dock: did it exist, was it done, could it see this defect?

WHY 1 — WHY WAS THE DEFECT NOT CAUGHT?	HOW DO WE KNOW?
The check that should have found it, and what it did instead	Control plan, inspection record, gauge study
WHY 2 — WHY DID THAT HAPPEN?	**HOW DO WE KNOW?**
WHY 3 — WHY DID THAT HAPPEN?	**HOW DO WE KNOW?**
WHY 4 — WHY DID THAT HAPPEN?	**HOW DO WE KNOW?**
WHY 5 — WHY DID THAT HAPPEN?	**HOW DO WE KNOW?**

ROOT CAUSE OF LEG 2

A control that is missing, cannot see the defect or can be bypassed — not an inspector

3 LEG 3 · SYSTEMIC: WHY DID THE SYSTEM ALLOW IT?

Start from the root causes of legs 1 and 2. Which document or procedure should have foreseen them?

STARTING POINT

The root cause of leg 1 — and of leg 2, if a control existed and failed

WHY 1 — WHY WAS THAT POSSIBLE?	HOW DO WE KNOW?
The PFMEA line, control plan entry or procedure that should have covered it	Document and revision
WHY 2 — WHY DID THAT HAPPEN?	**HOW DO WE KNOW?**
WHY 3 — WHY DID THAT HAPPEN?	**HOW DO WE KNOW?**
WHY 4 — WHY DID THAT HAPPEN?	**HOW DO WE KNOW?**
WHY 5 — WHY DID THAT HAPPEN?	**HOW DO WE KNOW?**

ROOT CAUSE OF LEG 3

A procedure or document that will be revised: PFMEA, control plan, launch, change or maintenance process

4 CORRECTIVE ACTIONS

At least one per root cause, each with an owner, a date and a way to verify it.

CORRECTIVE ACTIONS

#	LEG	CORRECTIVE ACTION	OWNER	DUE DATE	STATUS
1					
2					
3					
4					
5					
6					

HOW THE EFFECT IS VERIFIED

The defect's measure before and after the actions, and over what period

DEFECT GONE?

☐ Yes ☐ No ☐ Too early to tell

5 LESSONS LEARNED AND READ-ACROSS

What the three legs taught, and where else the same gap can be open: similar parts, lines and plants.

DOCUMENTS UPDATED

PFMEA, control plan, work instructions, maintenance plan — with revision

LESSONS LEARNED

Written so that someone who never saw this defect can act on them

READ-ACROSS: WHERE ELSE CAN THIS HAPPEN?

Similar parts, machines, lines, plants, suppliers — and who checks each by when

READ-ACROSS COMPLETE?

☐ Yes ☐ No ☐ In progress

REVIEWED BY

DATE CLOSED