

Wrench-Time Self-Audit

The Chapter 1 follow-a-crew exercise, formalized for ongoing quarterly use. The number you track over time to prove the installation is working.

Companion to: *Fix the System*, Chapter 8. **Prerequisite:** read Chapter 1 (*The Wednesday Crew That Did Nothing*) and do the first follow-a-crew audit using that chapter's companion *Field Audit Sheet*. **Who uses it:** a designated observer. Usually the maintenance manager or a trusted supervisor. The same observer over time produces the most consistent series. **Cadence:** once per quarter per crew. Same day-of-week, same shift pattern if possible.

Why repeat the measurement

One wrench-time measurement gives you a baseline. Two measurements, three months apart, give you a trend. Four quarterly measurements give you a twelve-month arc of your installation.

You cannot manage what you do not measure. You cannot prove an installation worked without a number that moved. The quarterly wrench-time audit is the proof.

Audit protocol

Before the audit day

- ☐ Pick a normal Wednesday (or whatever day is most representative — avoid shutdown days, start-up days, and audit-visit days).
- ☐ Pick a crew. Rotate crews across quarters if you have more than one — get a read on the plant, not just one crew.
- ☐ Tell the crew lead you are doing the audit. Be straight. Do not pretend.
- ☐ Pull last audit's number for reference. Write it on your clipboard.

During the audit

Use the same time-stamped log method from the Chapter 1 *Field Audit Sheet*. Every activity change, a new row. Mark (Y) for "on asset" only when a crew member has hands physically on an asset doing maintenance work.

This worksheet focuses on the END-OF-DAY rubric — do the timestamped logging on the Chapter 1 field audit sheet, then bring your results here.

After the audit — rubric scoring

Beyond just the wrench-time percentage, score the crew on four execution-stage disciplines:

Rubric — Execution stage quality

Dimension 1 — Pre-Job Briefing

Observed: did the crew conduct a pre-job briefing at the asset before starting?

Score	What you observed
3 — Installed	Crew lead ran a 4-item briefing (scope, lockout, assignment, questions) at the asset, taking 3-7 minutes.
2 — Partial	Briefing happened but was rushed (<2 min), skipped one of the four items, or was conducted in the shop rather than at the asset.
1 — Theater	Crew "discussed the job" informally en route but no structured briefing occurred.
0 — Absent	No briefing of any kind; crew arrived at asset and began work.

Your score: _____

Dimension 2 — Lockout Verification

Observed: for any lockout events, was the isolation verified (tested) beyond just hanging the lock?

Score	What you observed
3 — Muscle memory	Every lockout event was verified with a tested meter or an attempted start button, AND the verification was logged on the work order.
2 — Performed but not logged	Verification happened physically, but the log entry was missing or added later from memory.
1 — Lock hung, no verification	Lock was hung per procedure, but no active verification was performed.
0 — No lockout required	Job did not require lockout. Record separately — do not score on this dimension.

Your score: _____ (or N/A)

Dimension 3 — Live Data Capture

Observed: when did close-out data get recorded?

Score	What you observed

3 — At the asset	Technician recorded parts consumed, failure codes, readings, and deviations directly on the asset-side tablet/form/clipboard during the work.
2 — At the job site	Recorded right after completing the work, but before leaving the job area.
1 — At the shop	Recorded at end of shift from memory, at the shop computer.
0 — Not recorded	Close-out was "Repaired. RTO." or equivalent empty text.

Your score: _____

Dimension 4 — Kit Integrity

Observed: did the crew arrive at an asset with a complete kit?

Score	What you observed
3 — Complete kit	All parts, procedure, and safety items present and correct on arrival. No trips back.
2 — Kit complete after one adjustment	One item had to be fetched or substituted; the rest was in place.
1 — Kit incomplete	Multiple trips back to the crib or multiple substitutions required.
0 — No kit	Crew arrived without a staged kit; parts were gathered during the job.

Your score: _____

Wrench-time calculation (summary)

From the field-audit timestamped log:

- **Total paid labor hours (crew x shift + OT):** _____
- **Total on-asset hours (Sum minutes x mechanics / 60 for rows marked (Y)):** _____
- **Wrench time %:** (on-asset / paid) x 100 = _____ %

Your tier:

- Below 35%: Tier 1 — trouble
- 35-55%: Tier 2 — recovering
- 55-65%: Tier 3 — decent
- Above 65%: Tier 4 — world class

Quarterly trend

Quarter	Date	Crew	Wrench Time	Briefing	Lockout	Live Data	Kit	Notes
Baseline								
Q1								
Q2								
Q3								
Q4								

What the scores tell you

If wrench time moved but the rubric dimensions didn't: measurement error, or a short-term adjustment that won't hold.

If rubric dimensions improved but wrench time didn't: the execution-stage installations are working, but an upstream stage (plan, schedule, identify) is still eating the gain. Go back to Chapters 5-7 and audit the upstream.

If both moved: the cycle is reintegrating. Expect the next quarter to move again. Keep going.

If neither moved: the installations are announced but not installed. Walk the floor.

From Fix the System by Ivan Getov. Companion to Chapter 8: Execute. getov.xyz/toolkit/fix-the-system/ch08/wrench-time-audit. Free. No email required.