

ZeroState

lockout/tagout, from procedure to periodic inspection

How to find and follow a machine-specific lockout/tagout procedure, record the annual periodic inspection, and export the documents your team needs on the floor.

Version 1.0

User Guide · for end users

Screens captured July 2026

ShieldSphere's ZeroState module holds your lockout/tagout program: a documented, machine-specific procedure for every piece of equipment with stored energy. Each procedure lists the energy sources to isolate, the ordered steps to bring the machine to zero state and return it to service, the authorized employees and required PPE, and the annual periodic inspection 29 CFR 1910.147 requires.

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1 What ZeroState does

ZeroState is where your lockout/tagout program lives - a documented, machine-specific procedure for every piece of equipment that can hurt someone with stored energy, kept current and inspected on schedule.

The name is the goal: a machine at *zero state* is one with every energy source isolated and verified, safe to work on. Each procedure carries the whole story:

1. The **energy sources** that must be isolated - electrical, hydraulic, pneumatic, and more.
2. The ordered **steps** to bring the machine to zero state and to return it to service.
3. The **authorized employees**, required PPE, and the person who reviewed it.
4. The annual **periodic inspection** that OSHA 1910.147(c)(6) requires, tracked so it never lapses.

THIS IS A LIFE-SAFETY DOCUMENT

A lockout/tagout procedure is only as good as the person following every step. Read the whole procedure before you start, isolate and verify every energy source it lists, and never skip a step because the machine "looks off".

BUILDING PROCEDURES IS AN ADMIN TASK

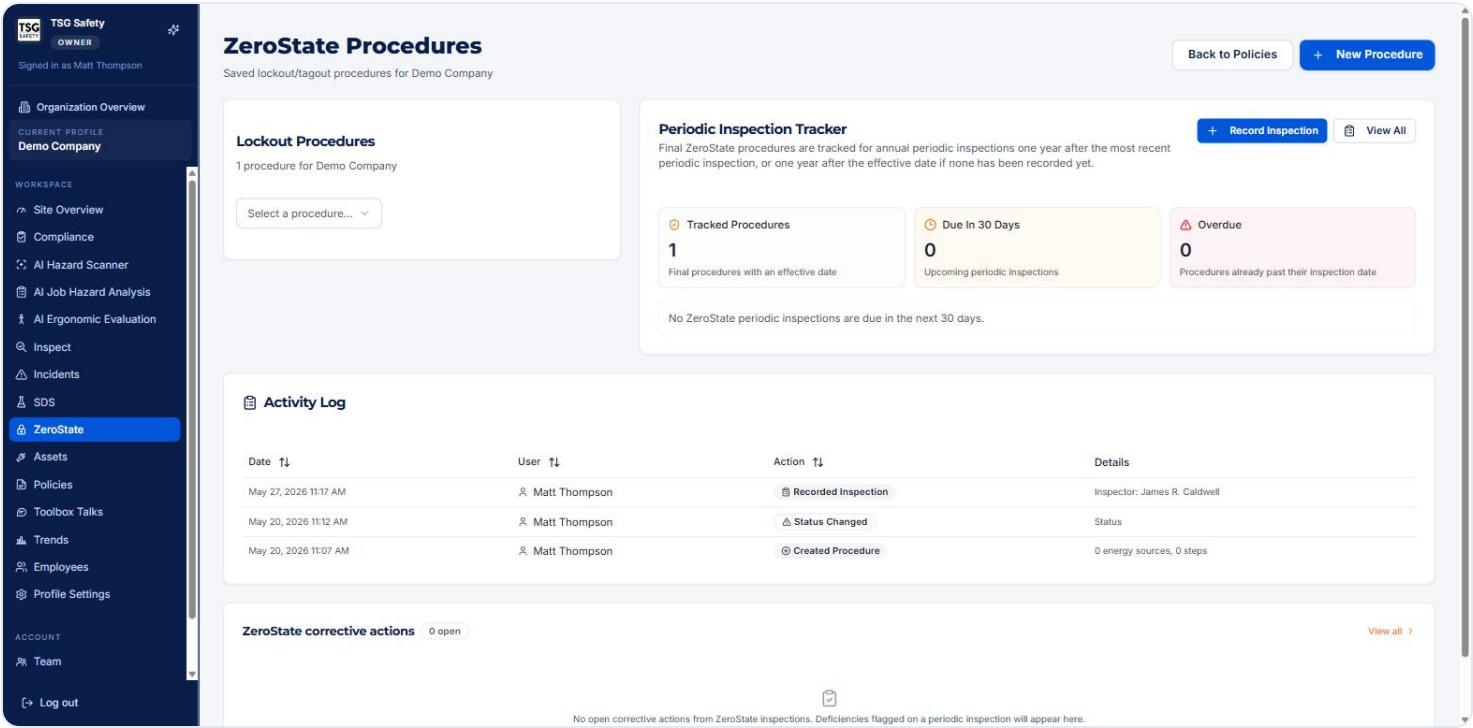
This guide covers finding, following and inspecting procedures. Creating and publishing them - the procedure builder - is covered in the companion **ZeroState Administrator Guide**.

2 Words you'll see

TERM	WHAT IT MEANS
Lockout/tagout (LOTO)	Isolating a machine's energy so it cannot start while someone works on it, and tagging it so no one re-energizes it.
Energy source	A form of stored or supply energy - electrical, hydraulic, pneumatic, thermal, gravity - that must be isolated.
Isolation point	The exact place you isolate a source - a breaker, a valve - and the lockout device used there.
Zero state	The machine with all energy isolated and verified - safe to service.
Authorized employee	A person trained and named on the procedure to perform the lockout.
Periodic inspection	The annual review of the procedure that OSHA 1910.147(c)(6) requires.
Final	A published, in-force procedure. Only final procedures can be inspected.

3 The ZeroState home screen

Click **ZeroState** in the left sidebar. The home screen is your program at a glance for the current site.



ZeroState home. Pick a procedure on the left, watch the **Periodic Inspection Tracker** for what's due, and read the **Activity Log** for who did what and when.

AREA	WHAT IT SHOWS
Lockout Procedures	A selector for every saved procedure at this site.
Periodic Inspection Tracker	How many final procedures are tracked, how many inspections are due in 30 days, and how many are overdue.
Activity Log	A running history - procedures created, statuses changed, inspections recorded.
ZeroState corrective actions	Any deficiencies flagged on a periodic inspection, as assigned actions.

OVERDUE IS THE NUMBER THAT MATTERS

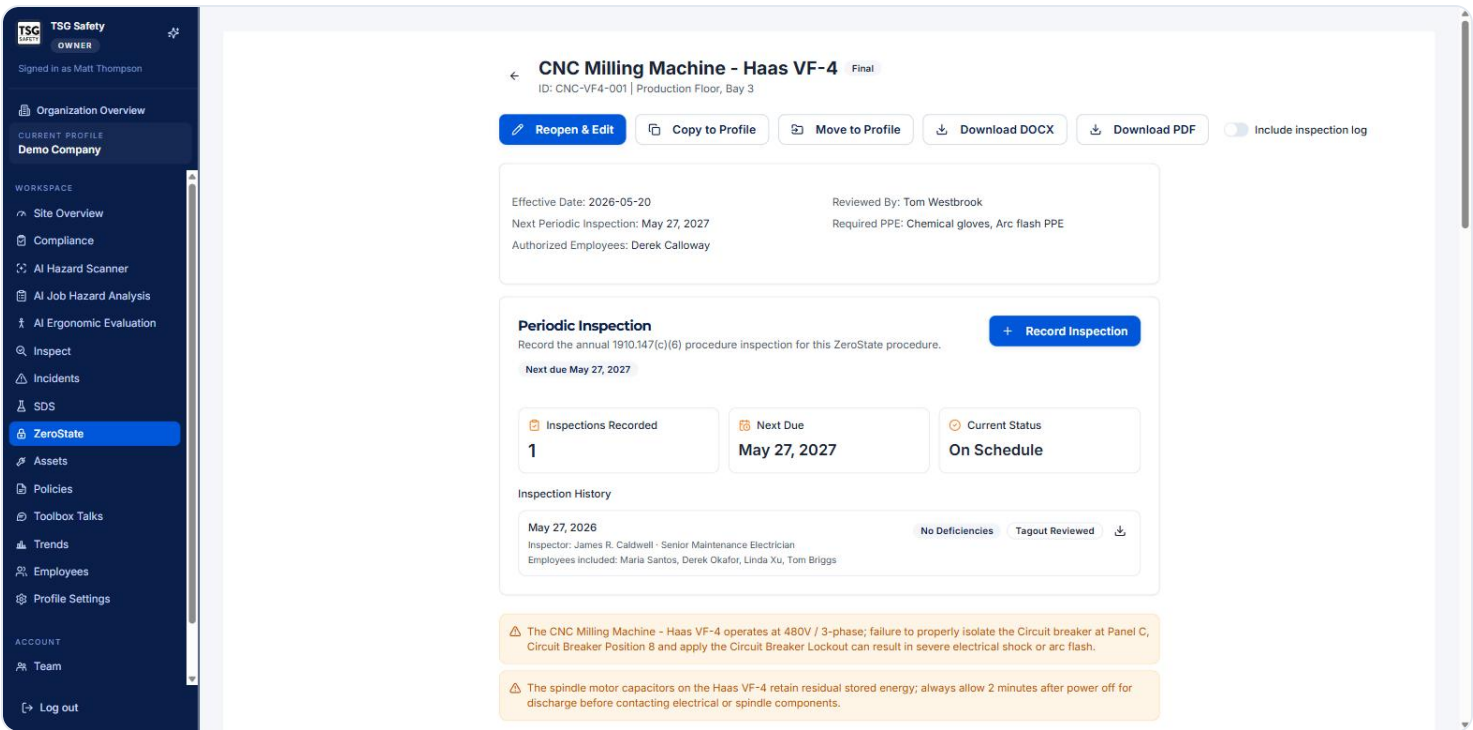
A red **Overdue** count means a procedure has missed its annual inspection - a direct 1910.147 finding waiting to happen. Clear it before anything else.

4 Find and follow a procedure

Everything an authorized employee needs to bring the machine to zero state, on one screen.

ZeroState → **Select a procedure**

Choose the machine from the **Lockout Procedures** selector. The procedure opens with its summary at the top - effective date, next periodic inspection, authorized employees, who reviewed it, and the required PPE.



Procedure detail. The summary and the **Periodic Inspection** tracker sit up top, with the full inspection history - inspector, deficiencies, tagout reviewed - below.

Scroll down for the parts you follow on the floor: the **energy sources** to isolate, each with its isolation point, and the numbered **procedure steps** - each with a verify note telling you how to confirm the step is done.

TSG Safety

OWNER

Signed in as Matt Thompson

Organization Overview

CURRENT PROFILE

Demo Company

WORKSPACE

Site Overview

Compliance

AI Hazard Scanner

AI Job Hazard Analysis

AI Ergonomic Evaluation

Inspect

Incidents

SDS

ZeroState

Assets

Policies

Toolbox Talks

Trends

Employees

Profile Settings

discharge before contacting electrical or spindle components.

ENERGY SOURCES (1)

Electrical 480V / 3-phase Panel C, Circuit Breaker Position 8 → Turn breaker to OFF and apply breaker lockout

PROCEDURE STEPS (9)

1 Notify all affected employees that lockout/tagout is being performed on the CNC Milling Machine - Haas VF-4 (Machine/Asset ID: CNC-VF4-001) located on the Production Floor, Bay 3, and that the machine will be unavailable for use until the procedure is complete.
Ensure production personnel in Production Floor, Bay 3 understand that the Haas VF-4 vertical machining center is being taken out of service for servicing or maintenance.

2 Review this machine-specific lockout/tagout procedure for the CNC Milling Machine - Haas VF-4 (CNC-VF4-001) before starting. Confirm all energy sources and isolation point types: Electrical — Isolation Point Type: Circuit breaker at Panel C, Circuit Breaker Position 8.
Verify that you understand the electrical energy source (480V / 3-phase) and its isolation point type (Circuit breaker) and location (Panel C, Circuit Breaker Position 8) before proceeding.

3 Perform the normal shutdown of the CNC Milling Machine - Haas VF-4 using the machine controls on the machine control panel on the front right side. Stop all machining operations, stop spindle rotation, and stop axis motion using the standard operator controls, then place the machine in a powered-down state using the normal stop or power-off sequence.

Verify: Confirm that the CNC Milling Machine - Haas VF-4 has stopped all motion and that the machine control panel indicates the machine is powered down.

Ensure the spindle has come to a complete stop and all axis movement has ceased before proceeding to isolation.

4 Isolate all energy sources for the CNC Milling Machine - Haas VF-4. For the Electrical energy source (480V / 3-phase), go to Panel C, Circuit Breaker Position 8 and use the Isolation Point Type: Circuit breaker. Perform the

Energy sources and steps. Isolate every source listed, and work the steps in order - the italic verify notes are how you prove each one before moving on.

5 Record a periodic inspection

OSHA wants each procedure inspected once a year. This is where you log it so the tracker resets.

ZeroState → **Record Inspection**

Click **Record Inspection** on the home screen (or on a procedure), pick the **finalized procedure**, and complete the annual 1910.147(c)(6) record - the inspector, the employees included, whether the tagout was reviewed, and any deficiencies found.

The screenshot displays the ZeroState Procedures web application. On the left is a dark sidebar with navigation links: TSC Safety, Organization Overview, CURRENT PROFILE (Demo Company), WORKSPACE (Site Overview, Compliance, AI Hazard Scanner, AI Job Hazard Analysis, AI Ergonomic Evaluation, Inspect, Incidents, SDS, ZeroState), Assets, Policies, Toolbox Talks, Trends, Employees, Profile Settings, ACCOUNT (Team), and Log out. The main content area is titled 'ZeroState Procedures' and includes a sub-header 'Saved lockout/tagout procedures for Demo Company'. It features three main sections: 'Lockout Procedures' (1 procedure), 'Periodic Inspection Tracker' (with buttons for 'Record Inspection' and 'View All'), and 'Activity Log'. The 'Periodic Inspection Tracker' shows three metrics: 'Tracked Procedures' (1), 'Due In 30 Days' (0), and 'Overdue' (0). A modal window titled 'Record Periodic Inspection' is open, prompting the user to 'Select a finalized procedure and complete the annual 1910.147(c)(6) inspection record.' The modal includes a 'Procedure' dropdown and a note: 'Only finalized procedures are available for periodic inspections.' The 'Activity Log' table below shows three entries with columns for Date, User, Action, and Details.

Date	User	Action	Details
May 27, 2026 11:17 AM	Matt Thompson	Recorded Inspection	Inspector: James R. Caldwell
May 20, 2026 11:12 AM	Matt Thompson	Status Changed	Status
May 20, 2026 11:07 AM	Matt Thompson	Created Procedure	0 energy sources, 0 steps

At the bottom, there is a section for 'ZeroState corrective actions' showing 0 open items and a 'View all' link. A footer note states: 'No open corrective actions from ZeroState inspections. Deficiencies flagged on a periodic inspection will appear here.'

Record Periodic Inspection. Only **finalized** procedures appear here - a draft cannot be the subject of an official inspection.

DEFICIENCIES BECOME WORK

Anything you flag as a deficiency on the inspection shows up under **ZeroState corrective actions** on the home screen, with an owner and a due date - so a failed inspection turns into a tracked fix, not a note in a binder.

6 Export and share

From any procedure, the buttons across the top turn it into a document for the floor or the file:

Download PDF

The full procedure, ready to print and post at the machine.

Download DOCX

The same procedure as an editable Word file, for when you need to drop it into a larger document.

The **Include inspection log** toggle adds the periodic-inspection history to the exported document - useful when an auditor wants to see not just the procedure but its inspection record.

7 Troubleshooting

SYMPTOM	CAUSE AND FIX
A procedure is not in the Record Inspection list	Only finalized procedures can be inspected. A draft must be published first (see the Administrator Guide).
The Overdue count is red	A procedure has passed its annual inspection date. Record the periodic inspection to clear it.
I need to change a step or energy source	Use Reopen & Edit on the procedure - an admin task covered in the Administrator Guide.
The procedure is for the wrong site	Use Copy to Profile or Move to Profile on the procedure.
An auditor wants the inspection record too	Turn on Include inspection log before downloading the PDF or DOCX.