

FREE MANUFACTURING MAINTENANCE TEMPLATE

Preventive Maintenance Checklist

Use this 60-point checklist to manage PM scheduling, hazardous-energy control, baseline condition, mechanical and electrical servicing, fluid systems, safeguards, reliability checks, testing, records, and return-to-service approval.

Facility / area

PM date

Technician / reviewer

Asset / work order

Internal manufacturing preventive-maintenance template. Apply current manufacturer instructions, approved PM and energy-control procedures, equipment-specific risk assessments, and applicable legal requirements as controlling references.

1. PM programme, asset criticality, intervals, and schedule control

1

Confirm the asset ID, manufacturer, model, serial number, location, duty, and maintenance owner match the current asset register and PM work order.

PREVENTIVE PM

ASSET / WORK ORDER | Enter

PM DATE | Enter

APPROVAL | Enter

Execution tip: Start with asset criticality and the current PM plan. The interval should reflect manufacturer guidance, operating hours, duty, environment,...

2

Verify each maintainable asset has an approved preventive-maintenance strategy based on manufacturer guidance, risk, asset criticality, operating hours, duty cycle, environment, and failure history.

PREVENTIVE PM

Record / item	Current status	Owner	Evidence	Action
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Execution tip: Start with asset criticality and the current PM plan. The interval should reflect manufacturer guidance, operating hours, duty, environment,...

3

Check PM tasks define clear frequencies or triggers, acceptance criteria, required readings, tools, consumables, parts, competencies, and evidence expectations.

PREVENTIVE PM

Record / item	Current status	Owner	Evidence	Action
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Execution tip: Start with asset criticality and the current PM plan. The interval should reflect manufacturer guidance, operating hours, duty, environment,...

4

Review overdue PM, deferred maintenance, repeat breakdowns, safety-critical defects, temporary repairs, chronic alarms, and production constraints before confirming the schedule.

CRITICAL

PREVENTIVE PM

Record / item	Current status	Owner	Evidence	Action
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Execution tip: Start with asset criticality and the current PM plan. The interval should reflect manufacturer guidance, operating hours, duty, environment,...

5

Verify maintenance intervals are reviewed when equipment is modified, operating conditions change, failures recur, inspection results deteriorate, or manufacturer guidance is updated.

PREVENTIVE PM

Record / item	Current status	Owner	Evidence	Action
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Execution tip: Start with asset criticality and the current PM plan. The interval should reflect manufacturer guidance, operating hours, duty, environment,...

6

Confirm the PM calendar or CMMS prevents safety-critical tasks from being silently deferred and routes missed or overdue work to a named owner and escalation path.

CRITICAL

PREVENTIVE PM

Record / item	Current status	Owner	Evidence	Action
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Execution tip: Start with asset criticality and the current PM plan. The interval should reflect manufacturer guidance, operating hours, duty, environment,...

2. Work-order planning, safe isolation, permits, and job readiness

7 Confirm the PM work order identifies the exact equipment, task scope, planned date, estimated duration, responsible technician, and required verification or approval. PREVENTIVE PM

Record / item	Current status	Owner	Evidence	Action
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Execution tip: A planned PM task still requires safe energy control. Confirm the scope, hazards, parts, tools, permits, and equipment-specific isolation steps...

8 Identify electrical, mechanical, hydraulic, pneumatic, thermal, pressure, gravitational, spring, chemical, and other hazardous-energy sources affected by the PM task. CRITICAL PREVENTIVE PM

Record / item	Current status	Owner	Evidence	Action
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Execution tip: A planned PM task still requires safe energy control. Confirm the scope, hazards, parts, tools, permits, and equipment-specific isolation steps...

9 Verify the equipment-specific energy-control procedure accurately covers shutdown, isolation, lockout or tagout, stored-energy control, verification, and safe restart for the planned servicing work. CRITICAL PREVENTIVE PM

Record / item	Current status	Owner	Evidence	Action
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Execution tip: A planned PM task still requires safe energy control. Confirm the scope, hazards, parts, tools, permits, and equipment-specific isolation steps...

10 Confirm authorized employees apply required locks or tags and stored or residual energy is relieved, blocked, restrained, bled, grounded, or otherwise rendered safe before maintenance. CRITICAL PREVENTIVE PM

Compliant

Needs action

Critical

LIVE PHOTO | Add

Execution tip: A planned PM task still requires safe energy control. Confirm the scope, hazards, parts, tools, permits, and equipment-specific isolation steps...

11 Check required electrical, hot-work, confined-space, line-breaking, work-at-height, lifting, or other permits and barricades are available where the PM task creates those hazards. CRITICAL PREVENTIVE PM

Record / item	Current status	Owner	Evidence	Action
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Execution tip: A planned PM task still requires safe energy control. Confirm the scope, hazards, parts, tools, permits, and equipment-specific isolation steps...

12 Verify required approved parts, lubricants, filters, seals, fasteners, calibrated tools, manuals, drawings, schematics, and special equipment are available before the job starts. PREVENTIVE PM

Record / item	Current status	Owner	Evidence	Action
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Execution tip: A planned PM task still requires safe energy control. Confirm the scope, hazards, parts, tools, permits, and equipment-specific isolation steps...

3. Baseline inspection, condition readings, cleaning, and defect discovery

13

Inspect the equipment and surrounding area before maintenance for leakage, contamination, corrosion, overheating, damage, unusual wear, loose parts, unsafe access, or other abnormal conditions.

PREVENTIVE PM

Compliant

Needs action

Critical

LIVE PHOTO | Add

Execution tip: Capture the condition before servicing. Baseline readings and visible evidence help distinguish routine PM from developing failure and create a...

14

Record applicable baseline readings such as vibration, temperature, pressure, flow, current, voltage, speed, level, run time, cycle count, differential pressure, or alignment.

PREVENTIVE PM

Record / item	Current status	Owner	Evidence	Action
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Execution tip: Capture the condition before servicing. Baseline readings and visible evidence help distinguish routine PM from developing failure and create a...

15

Compare current readings with approved limits, previous PM results, condition-monitoring trends, and manufacturer guidance to identify deterioration requiring additional work.

PREVENTIVE PM

Record / item	Current status	Owner	Evidence	Action
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Execution tip: Capture the condition before servicing. Baseline readings and visible evidence help distinguish routine PM from developing failure and create a...

16

Clean accessible equipment surfaces, cooling paths, vents, filters, drip areas, sensors, guards, and inspection points as required without introducing contamination or damaging components.

PREVENTIVE PM

Compliant

Needs action

Critical

LIVE PHOTO | Add

Execution tip: Capture the condition before servicing. Baseline readings and visible evidence help distinguish routine PM from developing failure and create a...

17

Confirm defects discovered during PM are documented separately from the routine task, risk-assessed, and either corrected within the job or transferred to controlled follow-up work.

CRITICAL

PREVENTIVE PM

Record / item	Current status	Owner	Evidence	Action
---------------	----------------	-------	----------	--------

Execution tip: Capture the condition before servicing. Baseline readings and visible evidence help distinguish routine PM from developing failure and create a...

18

Verify any unsafe condition identified during PM triggers an appropriate stop-use, restriction, isolation, or escalation decision before the equipment is returned to service.

CRITICAL

PREVENTIVE PM

Record / item	Current status	Owner	Evidence	Action
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Execution tip: Capture the condition before servicing. Baseline readings and visible evidence help distinguish routine PM from developing failure and create a...

4. Mechanical drives, bearings, lubrication, alignment, fasteners, and wear

19

Inspect bearings, shafts, couplings, gears, sprockets, chains, belts, rollers, pulleys, slides, guides, seals, and other mechanical components for wear, looseness, damage, or misalignment.

PREVENTIVE PM

Compliant

Needs action

Critical

LIVE PHOTO | Add

Execution tip: Use specified tolerances instead of visual judgment alone. Compare lubrication, wear, alignment, tension, clearances, torque, and condition...

20

Verify every lubrication point receives the approved lubricant, grade, quantity, method, and interval and is not over-lubricated, contaminated, mixed, or left dry.

PREVENTIVE PM

Record / item	Current status	Owner	Evidence	Action
---------------	----------------	-------	----------	--------

Execution tip: Use specified tolerances instead of visual judgment alone. Compare lubrication, wear, alignment, tension, clearances, torque, and condition...

21

Check lubricant reservoirs, sight glasses, grease lines, automatic lubricators, breathers, filters, seals, and contamination controls are clean, serviceable, and at approved levels.

PREVENTIVE PM

Compliant

Needs action

Critical

LIVE PHOTO | Add

Execution tip: Use specified tolerances instead of visual judgment alone. Compare lubrication, wear, alignment, tension, clearances, torque, and condition...

22

Measure or verify alignment, belt or chain tension, backlash, runout, clearances, end play, bearing condition, and other applicable mechanical settings against defined limits.

PREVENTIVE PM

Record / item	Current status	Owner	Evidence	Action
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Execution tip: Use specified tolerances instead of visual judgment alone. Compare lubrication, wear, alignment, tension, clearances, torque, and condition...

23

Confirm anchors, structural bolts, critical fasteners, retaining devices, keys, locking hardware, and equipment mounts are secure and torqued or retained as specified.

CRITICAL

PREVENTIVE PM

Record / item	Current status	Owner	Evidence	Action
---------------	----------------	-------	----------	--------

Execution tip: Use specified tolerances instead of visual judgment alone. Compare lubrication, wear, alignment, tension, clearances, torque, and condition...

24

Review abnormal wear patterns, repeat component replacement, lubrication failures, or recurring misalignment for root-cause action rather than repeatedly restoring the same condition.

PREVENTIVE PM

Record / item	Current status	Owner	Evidence	Action
---------------	----------------	-------	----------	--------

Execution tip: Use specified tolerances instead of visual judgment alone. Compare lubrication, wear, alignment, tension, clearances, torque, and condition...

5. Electrical systems, motors, controls, panels, and protective devices

25

Inspect accessible electrical enclosures, conductors, insulation, cables, plugs, connectors, conduits, cable glands, strain relief, and terminals for damage, overheating, looseness, or contamination.

CRITICAL

PREVENTIVE PM

Compliant

Needs action

Critical

LIVE PHOTO | Add

Execution tip: Inspect electrical condition without defeating protection. Damaged conductors, overheating, repeated trips, loose terminals, blocked working...

26

Verify grounding and bonding connections remain intact where required and no protective earth conductor, pin, lug, or connection has been removed or bypassed.

CRITICAL

PREVENTIVE PM

Record / item	Current status	Owner	Evidence	Action
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Execution tip: Inspect electrical condition without defeating protection. Damaged conductors, overheating, repeated trips, loose terminals, blocked working...

27

Check motors, cooling fans, vents, terminal boxes, contactors, relays, overloads, fuses, breakers, disconnects, and control components for condition, cleanliness, heat damage, or abnormal operation.

CRITICAL

PREVENTIVE PM

Compliant

Needs action

Critical

LIVE PHOTO | Add

Execution tip: Inspect electrical condition without defeating protection. Damaged conductors, overheating, repeated trips, loose terminals, blocked working...

28

Review recurring trips, blown fuses, insulation issues, nuisance faults, arcing evidence, hot spots, or temporary electrical repairs and confirm underlying causes are addressed.

CRITICAL

PREVENTIVE PM

Record / item	Current status	Owner	Evidence	Action
---------------	----------------	-------	----------	--------

Execution tip: Inspect electrical condition without defeating protection. Damaged conductors, overheating, repeated trips, loose terminals, blocked working...

29

Verify electrical cabinets, dead fronts, junction-box covers, barriers, labels, doors, and fasteners are fully restored after PM and no tools, debris, or unused conductors remain inside.

CRITICAL

PREVENTIVE PM

Compliant

Needs action

Critical

LIVE PHOTO | Add

Execution tip: Inspect electrical condition without defeating protection. Damaged conductors, overheating, repeated trips, loose terminals, blocked working...

30

Confirm required electrical access and working space, equipment identification, ventilation, and panel surroundings are maintained clear for safe operation and maintenance.

PREVENTIVE PM

Compliant

Needs action

Critical

LIVE PHOTO | Add

Execution tip: Inspect electrical condition without defeating protection. Damaged conductors, overheating, repeated trips, loose terminals, blocked working...

6. Hydraulic, pneumatic, cooling, pressure, and utility-system PM

31

Inspect hydraulic and pneumatic hoses, tubes, fittings, cylinders, valves, manifolds, couplings, and connections for leakage, abrasion, blistering, cracking, damage, or insecure routing.

CRITICAL

PREVENTIVE PM

Compliant

Needs action

Critical

LIVE PHOTO | Add

Execution tip: Pressure and utility systems fail through leakage, contamination, blocked cooling, damaged hoses, incorrect pressure, and degraded protective...

32

Verify filters, strainers, breathers, reservoirs, coolers, heat exchangers, dryers, drains, fans, and fluid levels are serviced or replaced at the defined interval.

PREVENTIVE PM

Record / item	Current status	Owner	Evidence	Action
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Execution tip: Pressure and utility systems fail through leakage, contamination, blocked cooling, damaged hoses, incorrect pressure, and degraded protective...

33

Confirm hydraulic oils, coolants, compressed-air treatment fluids, and other service fluids use the approved specification, quantity, cleanliness level, and contamination-control method.

PREVENTIVE PM

Record / item	Current status	Owner	Evidence	Action
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Execution tip: Pressure and utility systems fail through leakage, contamination, blocked cooling, damaged hoses, incorrect pressure, and degraded protective...

34

Check pressure gauges, regulators, relief devices, accumulators, pressure switches, alarms, temperature controls, and protective devices are serviceable and set within approved limits.

CRITICAL

PREVENTIVE PM

Record / item	Current status	Owner	Evidence	Action
---------------	----------------	-------	----------	--------

Execution tip: Pressure and utility systems fail through leakage, contamination, blocked cooling, damaged hoses, incorrect pressure, and degraded protective...

35

Verify hoses and lines are supported and routed away from crushing, sharp edges, hot surfaces, moving parts, excessive bend, vibration, and foreseeable mechanical damage.

PREVENTIVE PM

Compliant

Needs action

Critical

LIVE PHOTO | Add

Execution tip: Pressure and utility systems fail through leakage, contamination, blocked cooling, damaged hoses, incorrect pressure, and degraded protective...

36

Investigate recurring leaks, pressure loss, repeated hose failures, temporary clamps, blocked cooling, or bypassed protections rather than treating them as routine PM observations.

CRITICAL

PREVENTIVE PM

Record / item	Current status	Owner	Evidence	Action
---------------	----------------	-------	----------	--------

Execution tip: Pressure and utility systems fail through leakage, contamination, blocked cooling, damaged hoses, incorrect pressure, and degraded protective...

7. Guards, interlocks, emergency stops, safety devices, and access controls

37

Confirm guards, covers, shields, barriers, access panels, fasteners, and protective enclosures removed for PM are correctly reinstalled before release.

CRITICAL

PREVENTIVE PM

Compliant

Needs action

Critical

LIVE PHOTO | Add

Execution tip: PM is not complete until every safeguard removed or disturbed for access is restored and, where appropriate, function-tested without exposing...

38

Verify point-of-operation guards, nip-point protection, rotating-part guards, and power-transmission safeguards remain secure, correctly positioned, and free from damage or unauthorized modification.

CRITICAL

PREVENTIVE PM

Compliant

Needs action

Critical

LIVE PHOTO | Add

Execution tip: PM is not complete until every safeguard removed or disturbed for access is restored and, where appropriate, function-tested without exposing...

39

Function-test emergency stops, interlocks, guard switches, light curtains, presence-sensing devices, limit switches, two-hand controls, and other safety devices where applicable and safe to test.

CRITICAL

PREVENTIVE PM

Record / item	Current status	Owner	Evidence	Action
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Execution tip: PM is not complete until every safeguard removed or disturbed for access is restored and, where appropriate, function-tested without exposing...

40

Confirm no jumper, bypass, defeated interlock, taped switch, missing guard, temporary wiring, or disabled safety logic remains after maintenance.

CRITICAL

PREVENTIVE PM

Compliant

Needs action

Critical

LIVE PHOTO | Add

Execution tip: PM is not complete until every safeguard removed or disturbed for access is restored and, where appropriate, function-tested without exposing...

41

Inspect ladders, platforms, handrails, steps, access doors, service clearances, maintenance lighting, and safe access points associated with routine PM tasks.

PREVENTIVE PM

Compliant

Needs action

Critical

LIVE PHOTO | Add

Execution tip: PM is not complete until every safeguard removed or disturbed for access is restored and, where appropriate, function-tested without exposing...

42

Record any safety-device failure or recurring safeguard defect as a priority corrective action and keep the equipment restricted or isolated until acceptable protection is restored.

CRITICAL

PREVENTIVE PM

Record / item	Current status	Owner	Evidence	Action
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Execution tip: PM is not complete until every safeguard removed or disturbed for access is restored and, where appropriate, function-tested without exposing...

8. Structures, housekeeping, corrosion, environment, and supporting components

43

Inspect frames, bases, welds, mounts, foundations, anchors, platforms, brackets, covers, and structural members for cracks, corrosion, deformation, looseness, or impact damage.

CRITICAL

PREVENTIVE PM

Compliant

Needs action

Critical

LIVE PHOTO | Add

Execution tip: Preventive maintenance includes the condition around the machine. Poor housekeeping, moisture, corrosion, blocked ventilation, damaged...

44

Verify drains, drip trays, sumps, containment, housekeeping, and waste-removal arrangements prevent accumulated oil, coolant, debris, dust, water, or combustible material around equipment.

PREVENTIVE PM

Compliant

Needs action

Critical

LIVE PHOTO | Add

Execution tip: Preventive maintenance includes the condition around the machine. Poor housekeeping, moisture, corrosion, blocked ventilation, damaged...

45

Check cooling-air paths, ventilation openings, heat sinks, fans, louvers, and environmental controls are clean and unobstructed.

PREVENTIVE PM

Compliant

Needs action

Critical

LIVE PHOTO | Add

Execution tip: Preventive maintenance includes the condition around the machine. Poor housekeeping, moisture, corrosion, blocked ventilation, damaged...

46

Inspect seals, gaskets, covers, enclosures, weather protection, corrosion coatings, and ingress-control features for deterioration appropriate to the operating environment.

PREVENTIVE PM

Compliant

Needs action

Critical

LIVE PHOTO | Add

Execution tip: Preventive maintenance includes the condition around the machine. Poor housekeeping, moisture, corrosion, blocked ventilation, damaged...

47

Confirm sensors, switches, indicators, labels, signs, lubrication points, inspection windows, and maintenance access points remain identifiable and accessible.

PREVENTIVE PM

Compliant

Needs action

Critical

LIVE PHOTO | Add

Execution tip: Preventive maintenance includes the condition around the machine. Poor housekeeping, moisture, corrosion, blocked ventilation, damaged...

48

Verify environmental conditions such as excessive dust, moisture, heat, vibration, chemical exposure, or washdown are considered when setting PM frequency and component protection.

PREVENTIVE PM

Record / item	Current status	Owner	Evidence	Action
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Execution tip: Preventive maintenance includes the condition around the machine. Poor housekeeping, moisture, corrosion, blocked ventilation, damaged...

9. Condition monitoring, calibration, spares, and reliability improvement

49

Review available condition-monitoring data such as vibration, thermography, oil analysis, ultrasound, motor-current analysis, pressure, temperature, or performance trends for developing faults.

PREVENTIVE PM

Record / item	Current status	Owner	Evidence	Action
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Execution tip: Use PM data to improve the maintenance strategy. Trends, calibration results, consumed spares, failure modes, and inspection findings should...

50

Verify instruments, sensors, torque tools, test equipment, protective devices, and monitoring devices used for PM are within applicable calibration or verification status.

PREVENTIVE PM

Record / item	Current status	Owner	Evidence	Action
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Execution tip: Use PM data to improve the maintenance strategy. Trends, calibration results, consumed spares, failure modes, and inspection findings should...

51

Confirm critical spare parts and replacements are correct for the equipment, traceable where needed, stored to prevent deterioration, and not replaced with unauthorized substitutes.

PREVENTIVE PM

Record / item	Current status	Owner	Evidence	Action
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Execution tip: Use PM data to improve the maintenance strategy. Trends, calibration results, consumed spares, failure modes, and inspection findings should...

52

Check parts consumed during PM, premature wear, repeated adjustments, abnormal contamination, and defect history are analyzed for reliability improvement opportunities.

PREVENTIVE PM

Record / item	Current status	Owner	Evidence	Action
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Execution tip: Use PM data to improve the maintenance strategy. Trends, calibration results, consumed spares, failure modes, and inspection findings should...

53

Verify recurring maintenance findings trigger review of task content, interval, operating practice, component selection, lubrication strategy, design, training, or condition-monitoring needs.

PREVENTIVE PM

Record / item	Current status	Owner	Evidence	Action
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Execution tip: Use PM data to improve the maintenance strategy. Trends, calibration results, consumed spares, failure modes, and inspection findings should...

54

Confirm approved changes to PM tasks, intervals, parts, settings, or maintenance strategy are documented, version-controlled, and communicated before the next scheduled cycle.

PREVENTIVE PM

Record / item	Current status	Owner	Evidence	Action
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Execution tip: Use PM data to improve the maintenance strategy. Trends, calibration results, consumed spares, failure modes, and inspection findings should...

10. Post-maintenance testing, work-order closure, backlog, CAPA, and sign-off

55

Confirm tools, rags, temporary supports, waste, removed parts, jumpers, hoses, cables, and maintenance materials are cleared and the equipment is fully reassembled before restart.

CRITICAL

PREVENTIVE PM

Compliant

Needs action

Critical

LIVE PHOTO | Add

Execution tip: Close PM only after the equipment is fully reassembled, safeguards are restored, test results are acceptable, work records are complete, and...

56

Verify lockout or tagout removal, employee notification, area clearance, restart, and return of energy follow the approved energy-control and operating procedure.

CRITICAL

PREVENTIVE PM

Record / item	Current status	Owner	Evidence	Action
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Execution tip: Close PM only after the equipment is fully reassembled, safeguards are restored, test results are acceptable, work records are complete, and...

57

Function-test the equipment through applicable operating modes and confirm no abnormal noise, vibration, leakage, temperature, alarms, control faults, or safety-device failures remain.

CRITICAL

PREVENTIVE PM

Record / item	Current status	Owner	Evidence	Action
---------------	----------------	-------	----------	--------

Execution tip: Close PM only after the equipment is fully reassembled, safeguards are restored, test results are acceptable, work records are complete, and...

58

Record work completed, parts and consumables used, measurements, settings, defects found, technician, date, verification evidence, and any changes to the next PM requirement.

PREVENTIVE PM

Record / item	Current status	Owner	Evidence	Action
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Execution tip: Close PM only after the equipment is fully reassembled, safeguards are restored, test results are acceptable, work records are complete, and...

59

Assign unresolved defects, repeat failures, overdue work, or reliability improvements to a named owner with risk level, due date, interim control, evidence requirement, and escalation path.

PREVENTIVE PM

Record / item	Current status	Owner	Evidence	Action
---------------	----------------	-------	----------	--------

Execution tip: Close PM only after the equipment is fully reassembled, safeguards are restored, test results are acceptable, work records are complete, and...

60

Record final PM status, unresolved critical risks, return-to-service approval, next planned maintenance date or trigger, technician, reviewer, date, and sign-off.

CRITICAL

PREVENTIVE PM

FINAL STATUS | Enter

REVIEWER | Enter

APPROVAL | Enter

Execution tip: Close PM only after the equipment is fully reassembled, safeguards are restored, test results are acceptable, work records are complete, and...