

	Standard Operating Procedure Powered Industrial Equipment Procedure	SOP Number F-509	Revision 2
		Effective Date 07/28/23	Page Page 1 of 10
Written by/ Date <i>K. Bunnings 06/12/23</i>	Reviewed by/ Date <i>[Signature] 06-14-23</i>	Approved by/ Date <i>Paul Ruel 06-20-23</i>	
Title: Quality Assurance Director	Title: Warehouse Manager	Title: QA Compliance Supervisor	

1.0 Purpose

The purpose of this procedure is to provide safe practices and guidelines for the operation, maintenance, and inspection of all (PIE) Powered Industrial Equipment (Forklifts, Reach Trucks, Scissor Lifts, Electric Pallet Jacks, Turret, Cherry Pickers).

2.0 Scope

This procedure applies to all employees who operate or intend to operate (PIE) Powered Industrial Equipment. Contractors or outside personnel shall ensure their employees operate the equipment in compliance with safe work practices and standards, are properly trained and certified, and follow the guidelines prescribed in this procedure. Contractors failing to adhere to applicable safe work practices and standards will be asked to terminate their work until their program is brought into compliance.

3.0 Responsibility

3.1 Safety Director

3.1.1 Establish, maintain, and update the Program.

3.1.2 Coordinate and conduct all Power Industrial Equipment training and re/certification.

3.1.3 Maintain training documentation.

3.2 Facilities Management

3.2.1 Service and/or repair equipment in a timely manner.

- 3.2.2 Contact outside vendor for repair as needed.
- 3.2.3 Ensure equipment is not put back in service until necessary repairs have been made and is in safe operating condition.
- 3.2.4 Maintain maintenance records for each forklift. Records shall be kept for the life of the equipment.

3.3 Managers and Supervisors

- 3.3.1 Ensure all PIE operators in the department follow all rules and procedures prescribed in this procedure.
- 3.3.2 Do not allow anyone to operate the equipment without completing training administered by Ion Labs Inc.'s Safety Director or Safety Coordinator.
- 3.3.3 Submit Work/Repair Request to Warehouse Manager or Facilities Management for servicing and repair.
- 3.3.4 Do not allow anyone to operate malfunctioned equipment. If there is a condition affecting the equipment's safety or operation do the following:
 - 3.3.4.1 Immediately notify the Warehouse Manager and Facility Manager.
 - 3.3.4.2 Ensure lock out tag is placed on the equipment's steering wheel and remove the key. Give key to Warehouse Manager to ensure equipment remains inoperable.
- 3.3.5 Report all forklift incidents/accidents to Safety Director or Safety Coordinator immediately.

3.4 Ion Labs Inc. Certified Powered Industrial Equipment Operators

- 3.4.1 Do not operate the forklift without completing the Ion Labs Inc.'s Power Equipment Operators course.
- 3.4.2 Perform pre-operation inspection and fill out the inspection checklist F-509 F-1 prior to operation and turn in Daily Pre-Shift Inspection checklist to designated location.
- 3.4.3 Place a lock out tag on forklift's steering wheel if there is any condition affecting the safety or operation of the equipment and per SOP G-105 Lockout/Tagout Devices.
- 3.4.4 Do not operate equipment or remove lock out tag until the safety concern has been corrected.
- 3.4.5 Report any deficiencies or issues with the equipment immediately to the appropriate personnel for repair/servicing. Do not tamper with the equipment or make any modification to the equipment.
- 3.4.6 Do not use malfunctioning equipment.
- 3.4.7 Maintain good housekeeping and do not abuse the equipment.
- 3.4.8 Operators are prohibited from wearing earplugs, earbuds, or hearing devices not prescribed by a doctor.
- 3.4.9 Do not speed and always use blind spot safety mirrors when turning corners.
- 3.4.10 Always use vehicle safety equipment (e.g. horn, lights, back-up indicator) well in advance of pedestrians and blind spot corners.
- 3.4.11 Check battery water levels.
- 3.4.12 Follow all rules and procedures pertaining to this procedure.
- 3.4.13 Report all forklift incidents/accidents to their Supervisor immediately.

3.4.13.1 Failure to report an accident, malfunctioning equipment, property damage or a near miss will result in discipline up to termination and at the sole discretion of the CEO.

3.5 Document Control

3.5.1 Maintain forklift daily pre-shift inspection checklists. Checklists should be maintained per SOP C-502 Record Storage, Retention, and Destruction.

4.0 Definitions

4.1 **PIE** – Powered Industrial Equipment; commonly called forklifts or lift trucks, are used in many industries, primarily to move materials. They can be used to move, raise, lower, or remove large objects or a number of smaller objects on pallets or in boxes, crates, or other containers (Forklift, Reach truck, Electric Pallet Jack, Scissor lift, Cherry Picker, Turret)

4.2 **PQV** – Process Quality Verification

5.0 References

5.1 C-502, SOP, Record Storage, Retention, and Destruction

5.2 G-105, SOP, Lockout/Tagout Procedure

5.3 A-106, SOP, Documentation Guidelines for cGMP Records

5.4 F-509-F1, Form, Forklift Pre-Shift Inspection Checklist

6.0 Training

6.1 Employees must satisfactorily complete training and be certified by the Safety Director or Safety Coordinator before being authorized to operate any PIE.

6.1.1 Employees who received PIE operator training through a prior employer must

complete internal training prior to operating any PIE.

6.1.2 Employees who were trained or certified on a different type of forklift than the type they are assigned to use are required to complete training on the “new” equipment. The training only needs to include the practical and operator’s performance evaluation, unless the Safety Director determines that the lecture portion also needs to be included.

6.1.3 Operator training, evaluation, and certification shall be conducted by designated personnel who have the knowledge, training and experience to train PIE operators and evaluate their proficiency. This requirement can be met by attending a forklift train-the-trainer course.

6.2 Training will be provided by the Warehouse Manager, Safety Director, or Safety Coordinator. A department can request training for an employee by contacting the Warehouse Manager.

6.3 Initial and refresher training will be provided and determined by the Safety Director. Training will consist of classroom lecture, demonstrations by the trainer, trainee hands-on equipment operation or practices, and trainer evaluation of the trainee’s performance. Upon successful completion of training, employees will be certified by the trainer and be issued a certification card.

6.4 Certification cards issued by the Safety Director must be carried with the operator whenever operating any PIE.

6.5 The Safety Director will update the certification records.

6.6 Operators must be recertified at least once every three years.

7.0 Procedure

7.1 Pre-Operation Inspection

7.1.1 The Operator shall inspect PIE and complete form F-509-F1 Forklift Pre-Shift Inspection Checklist prior to operating equipment. The checklist shall be turned into designated location.

7.2 Inspection Checklist

7.2.1 All PIEs are to be inspected at the start of each shift. Using form F-509-F1 Forklift Daily Pre-Shift Inspection Checklist, indicate the Model being inspected and inspect the following areas:

7.2.1.1 Forks, Backrest, and Carriage

7.2.1.2 Mast, Chain, and Hydraulic Lines

7.2.1.3 Tires, Wheels, and Bearings

7.2.1.4 Overhead Guard

7.2.1.5 Leaks Under Forklift

7.2.1.6 Horn and/or Backup Alarm

7.2.1.7 Lights

7.2.1.8 Gauges and Instruments

7.2.1.9 All Brakes

7.2.1.10 Hydraulic Controls: Lift, Tilt, and Side Shift

7.2.1.11 Steering

7.2.1.12 Battery Water Level

7.2.1.13 Battery Connections (corrosion)

7.2.1.14 Seat Belts (Sit-Down Unit Only)

7.2.1.15 Initials and Date of Employee performing the Inspection

7.2.1.16 Harness Inspection (Scissor and Cherry Picker only)

7.2.2 Attention shall be given to proper functioning of the tires, horn, lights, controls, brakes, steering mechanism, cooling system, and the lift system.

7.2.3 Any safety defects shall be noted on the inspection checklist and immediately reported for repair. Place lock-out tag on the forklift's steering wheel AND REMOVE KEY. Give defective PIE ignition key to the Warehouse Manager. The tag shall not be removed and the equipment shall not be placed back in service until the safety issue has been corrected.

7.2.4 Inspection checklists shall be maintained per SOP C-502 Record Storage, Retention, and Destruction.

7.3 Carrying Loads

7.3.1 Do not exceed the equipment's rated load capacity.

7.3.2 Loads should be safely arranged, stable, and centered. Forks should be spread as wide apart as possible and locked in place. Loads of excessive width, length or height shall be balanced, braced, and secured as to prevent tipping/falling.

7.3.3 When carrying a load downgrade travel with the load trailing, and the load first when traveling upgrade. Tilt forks slightly upward.

7.4 Operating Procedures

7.4.1 Only authorized and currently certified personnel may operate the PIE.

7.4.2 Before operating forklift, inspect the equipment thoroughly using the Forklift Pre-Operation Inspection checklist.

7.4.3 Operator must wear seatbelt at all times.

- 7.4.4 Passengers are not permitted to ride in or on PIE.
- 7.4.5 Lounging, meddling, or horseplay on or around the forklift is not permitted.
- 7.4.6 Do not allow anyone to stand or walk on/underneath the forks.
- 7.4.7 Do not elevate anyone with the forklift.
- 7.4.8 Do not drive up to anyone standing in front of a fixed object such that the person could be caught between the equipment and object.
- 7.4.9 Keep all parts of body within the confine of the equipment.
- 7.4.10 The overhead guard and load backrest must be in place for protection against falling objects.
- 7.4.11 Operate the forklift with care and only for the purpose intended. Before starting or backing, look and be sure others are clear.
- 7.4.12 Do not operate the equipment on floors or surfaces that will not safely support the weight of the equipment.
- 7.4.13 Never operate the forklift without being in the driver's seat.
- 7.4.14 When leaving the equipment unattended, fully lower the forks/load, engage parking brake, turn off engine, and remove the key.
- 7.4.15 When parking on an incline, the wheels must be blocked/chocked. Do not block walkway, roadway, or emergency access area.

7.5 Traveling

- 7.5.1 When traveling with or without a load, the forks shall be retracted back and raised as high as necessary to clear the road surface, but no higher than 6 inches from the ground.

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- 7.5.2 Do not speed and yield to pedestrians at all times.
- 7.5.3 Adjust speed according to conditions of the road. Keep the forklift under control at all times to safely stop in an emergency.
- 7.5.4 Look in the direction of travel and keep a clear view of the path of travel.
- 7.5.5 Avoid running over loose objects in the roadway.
- 7.5.6 Maintain a safe distance, approximately three truck lengths, from the vehicle ahead.
- 7.5.7 Sound the horn when approaching workers, intersecting, aisles, blind corners, or swinging doors.
- 7.5.8 Slow down and sound horn at cross aisles and other locations where vision is obstructed. If load being carried obstructs forward view, the driver shall travel with the load trailing.
- 7.5.9 Do not pass another vehicle traveling in the same direction particularly at intersections, blind spots, or other dangerous locations.
- 7.5.10 Avoid quick starts and sudden stops and turns.
- 7.5.11 Never turn sideways on an incline. This can cause the equipment to tip over.

8.0 Maintenance

- 8.1 Repair should only be made by authorized personnel.
- 8.2 If there is a condition affecting the safety or operation of the vehicle, the operator shall place an out of service or “do not operate” tag on the forklift’s steering wheel to warn other personnel from operating the equipment. The tag shall not be removed and the equipment shall not be put back in service until the repair has been made.

- 8.3 Work Request will be submitted with Facilities Management for servicing or repair. Facilities Management will contact an outside vendor to complete the repair, if needed.
- 8.4 Unless power is necessary for testing and repair, power sources shall be disconnected and stored energy shall be discharged before working on the primary electrical system.
- 8.5 All replacement parts shall be equivalent in safety to the originals.
- 8.6 The equipment shall not be altered or modified, unless approved by the manufacturer.
- 8.7 Repairs to the fuel and ignition system which involve fire hazards shall only be done in locations safe for such repairs.
- 8.8 Employees shall not work or walk underneath elevated portion of the equipment.

9.0 Documentation

- 9.1 A PQV check must be performed for each completed forklift pre-shift inspection checklist page as outlined in SOP A-106 Documentation Guidelines for cGMP Records.
- 9.2 Documents will be maintained following SOP C-502 Record Storage, Retention, and Destruction.

10.0 Revision History

Revision	Date	Description of Changes	CCR #	By
0	05/11/20	New	N/A	K. Patton
1	03/07/22	Updated header, responsibilities.	CC-22-0092	J. Murphy
2	06/12/23	Updated format and logo. Added section for documentation requirements. Updated responsibilities section.	CC-23-0283	K. Burris



Forklift Pre-Shift Inspection Checklist

Form: F-509-F1

CCR No. CC-23-0283

Revision: 3

- Forklift Model:** Crown (Sit-Down) #1 Crown (Sit-Down) #2 Crown (Sit-Down) #3 Crown (Stand-Up)
- Crown (Sit-Down) Blending Swing Reach Crown Swing Reach Crown #2 Crown Reach
- Cherry Picker Raymond Crown (Clamp Truck)

Place a ✓ in the appropriate box or mark as N/A if not applicable

Inspected By: Date:	Monday		Tuesday		Wednesday		Thursday		Friday		Saturday		Sunday	
	OK	Repair	OK	Repair	OK	Repair	OK	Repair	OK	Repair	OK	Repair	OK	Repair
Items Inspected														
Forks, Backrest, Carriage														
Mast, Chain, Hydraulic Lines														
Tires, Wheel, Bearings														
Overhead Guard														
Leaks under Forklift														
Horn and/or Backup Alarm														
Lights														
Gauges and Instruments														
All Brakes														
Hydraulic Controls: Lift, Tilt, Side Shift														
Steering														
Battery Water Level														
Battery Connections														
Seat Belts (Sit-Down Unit Only)														

Note: If forklift does not pass inspection for any reason, place an out-of-service tag on the unit and contact a manager.