E Light Electric Services Inc. Health Environmental, and Safety Program Section 22. Powered Industrial Trucks - Forklift

PURPOSE

To ensure the safety and health of our employees and others working around us and by reducing cost associated with accidents by providing a forklift policy and training outline. Safety is the E Light's top priority; we need to strive to protect each and every worker. This can only be done through strict compliance and training of our employees.

Only authorized employees are permitted to operate fork trucks, tractors, forklifts, and other material moving vehicles. If riding or operating this type of equipment is not your job, stay off. Compliance with all recognized safety practices for powered industrial trucks is mandatory.

It is your responsibility to report to your supervisor immediately any unusual condition or damage to your fork truck or to any company property.

SCOPE

The Forklift Safety Program applies to all employees (permanent, temporary, and contractors) who operate forklifts and other powered material handling equipment at our work locations.

PROGRAM RESPONSIBILITIES

Program Administrator

The Director of Education and Loss Prevention is the program administrator and will be responsible for reviewing, evaluating, and updating this program.

Supervisors

Supervisors are responsible for:

- Ensuring employees comply with this program.
- Only permitting employees who have been qualified through training and assessment to operate a forklift.
- Conducting operator evaluations and assessments.
- Ensuring that employees who are found to have insufficient skills or understanding of safe forklift operation receive retraining before continuing to operate.
- Observing forklift operations on their crew or projects and addressing any unsafe practices.
- Ensuring that all reported equipment defects are promptly addressed.
- Participating in forklift incident investigations.
- Reporting incidents to the Director of Education and Loss Prevention.

Forklift Operators

Operators are responsible for:

 Only operating the equipment for which they have been specifically trained and authorized. This training must be specific to make and model of equipment. Training must include observation of operation by a Competent Person and submittal of an E Light Training Observation Audit to the Safety Department. Employees that have received this certification will have the equipment by Make and Model appear on their training records when scanning their ID card QR Code.

- Operating in a safe manner, consistent with the requirements of this program.
- Conducting pre-shift inspections and documenting the inspection on the appropriate form.
- Reporting all equipment malfunctions and/or maintenance needs to their supervisor immediately.
- Wearing a seatbelt at all times while operating the equipment.
- Notifying their supervisor is they begin taking a medication that could affect their ability to safely operate a forklift.
- Assessing and evaluating jobsite hazards daily. Operators must complete a daily Job Hazard Analysis prior to operation.
- Know the rated capacity of the equipment and the total weight of the load to be lifted.
- Read the Operator's Manual prior to operating the equipment. Ask supervisor or trainer if they have any questions or if they do not understand information in the manual.

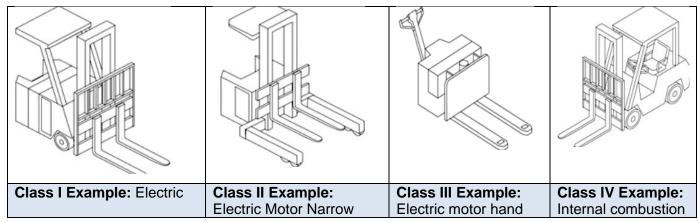
GENERAL INFORMATION

Forklift operating is vastly different than operating a motor vehicle, for example most forklifts are much heavier and utilize rear wheel steering. Which sets it apart from many other types of equipment that may be operated on a site.

Other differences can be identified such as length and height as well as a forklifts primary function is to lift things. This makes it different from a motor vehicle because there are many more controls and things to be attentive to, to ensure the safe operation of a forklift.

There are seven (7) classes of Powered Industrial Trucks (PIT's). The 7 classes consist of the following:

Forklift Classification Examples:



Motor Rider Truck	Aisle Truck	trucks or hand/rider trucks	engine truck (solid/cushion tires)
Class V Example: Internal Combustion Engine Truck (pneumatic tires)	Class VI Example: Electric and internal combustion engine tractors	Class VII Example: Rough terrain forklift trucks	

FORKLIFT OPERATION

In addition to safe operation practices and regulatory requirements covered in our training program, this section emphasizes specific areas of concern.

Pre-Operation Inspection

- 1. Inspections are to be completed at the start of your shift using a checklist. The checklist is to be submitted to your supervisor daily.
- 2. Unsafe forklifts are to be removed from service, and tagged with an out-of-service tag until they are repaired. Defects shall be reported immediately. Do not attempt to repair the defective item yourself. Forklifts shall not be operated if a fuel system or hydraulic leak is present.
- 3. Objects must not be placed over the overhead guard which impairs the operators' overhead vision.
- 4. Safety devices such as backup alarms, flashing lights, etc. shall not be disabled.
- 5. The operator shall check and document the condition of the following:

Brakes	Controls
Air filter	Seat belt and ROPS
Engine oil and coolant	Safety devices

Belts, fan and guards	Back up alarm	
Fuel tank cap	Manufacturer's placard	
Welds and structural components	Fork/attachment condition	
Boom condition and operation	Horn	
Tires/wheels	Mast	
Charging system	Lights	
Wiring	Windshield & Wipers	
Hydraulic system	Clutch	
Hydraulic oil level	Guards	
	Fire extinguisher	

Jobsite Hazards

Before operation, check work areas for:

- Muddy, slippery surfaces.
- Overhead and side clearances.
- Dust, smoke or fog which could impair vision.
- Weather conditions.
- Overhead Power Lines.
- Obstructions.
- Pedestrian and equipment traffic

- Open excavations.
- Rough terrain.

Operators are required to complete a Job Hazard Analysis for forklift operation at the beginning of each shift.

Mounting and Dismounting

1. Be alert for uneven, rocky, muddy or slick conditions, and take proper precautions.

- 2. Keep boots or shoes as free as possible of all grease, mud, ice, water, etc.
- 3. Use handholds and set points, keeping three points of contact at all times.
- 4. Keep both hands free. Do not try to carry anything while mounting and dismounting.
- 5. Face machinery while mounting or dismounting.
- 6. Do not jump when dismounting.

Machine Starting

- 1. Place controls in the Neutral/Hold/Locked position. Ensure brake is set.
- 2. Sound horn. (Once-Start, Twice-Move forward, three times-Reverse).
- 3. Start engine from the operator's seat.
- 4. After starting engine, check gauges and instruments to ensure everything is operating properly.
- 5. Follow manufacturer's recommended starting procedures. REFER TO THE OPERATOR'S MANUAL.
- 6. Never smoke or have an open flame around starting fluids.
- 7. Check braking system, transmission, steering, speed control, operation of boom, attachments, doors, etc.
- 8. Immediately report defects to your supervisor.

Operating Procedures

- 1. Use of a seatbelt is required.
- 2. No passengers are permitted to ride on forklifts.
- 3. Always use three points of contact when climbing onto or off a forklift.
- 4. The operator will never place his/her arms or legs between the uprights of the mast or outside the running lines of the forklift.
- 5. People are not to be lifted on the forks, on pallets, or on other material.
- 6. No horseplay.
- 7. Keep all parts of the body within the cab of the forklift.
- 8. Never operate the forklift without being in the driver's seat.
- 9. Fire doors, access to stairways, fire extinguishers and emergency exits must always be kept clear.
- 10. No person will be allowed to stand or pass under the elevated portion of any forklift, whether loaded or empty.
- 11. When ascending or descending grades in excess of 10 percent, loaded trucks will be driven with the load upgrade. Unloaded trucks will be operated on all grades with the load engaging means downgrade. On all grades, the load and load engaging means will be tilted back and raised only as far as necessary to clear the road surface.
- 12. The operator must always look in the direction of travel and keep a clear view of the path of travel.

13. The load must be carried as low as practical; typically 6-10" above the operating surface.

Loading/Stacking

- 1. Never exceed the rated capacity of the forklift.
- 2. A load backrest extension must be used whenever necessary to minimize the possibility of the load or part of the load from falling rearward.
- 3. Unbanded units or small objects must not extend above the load backrest.
- 4. Extreme care must be used when tilting the load forward or backward especially when high tiering. An elevated load will not be tilted forward except when the load is in a deposit position over a rack or stack of material.
- 5. Unsafe containers and pallets shall be removed from service.
- 6. The operator must always be aware of overhead hazards.
- 7. After removing an elevated load from a stack always lower the load before turning.
- 8. Ensure that your forks are long enough to adequately support your load.

Traveling

- 1. Never drive up to anyone standing in front of a bench or other fixed object.
- 2. Forklifts must always be operated at a safe speed based on site specific conditions such as the condition of the operating surface, stability of the load, vehicle and pedestrian traffic, slope, etc. which may warrant operating at a slower speed.
- 3. If the load being carried obstructs forward view, the operator must travel in reverse with the load trailing or use a spotter.
- 4. Operator must slow down at all intersections and sound the horn at blind intersections.
- 5. Never drive over loose objects.
- 6. Slow down on wet or slippery floors

Rigging Activity

Free Rigging refers to a method of lifting or securing loads without the use of standard, manufacturer-approved rigging attachments or equipment. This practice often involves using the forklift's own lifting components (like forks or the mast) for rigging purposes, instead of specialized rigging tools or attachments that are designed and certified for safe lifting and handling of loads.

Free rigging is strictly prohibited on all E Light jobs. For the safety of all employees, any rigging activity involving powered industrial trucks must follow manufacturer-approved practices. This includes using only authorized rigging methods, approved attachments, and ensuring any modifications or alterations are properly documented and approved.

Free Rigging and Equipment Modifications:

Free rigging involves using rigging practices that may not adhere to the manufacturer's guidelines, which can affect the forklift's capacity and overall safety. As per OSHA regulations (29 CFR 1910.178(a)(4)), any modification or addition that impacts the forklift's capacity and safe operation must not be performed by the customer or user without the prior written approval of the forklift manufacturer.

Modification and Approval Requirements:

If free rigging practices affect the capacity or safety of a forklift, written approval must be obtained from the forklift manufacturer. If no response, or a negative response, is received from the manufacturer, approval may be sought from a Qualified Registered Professional Engineer (QRPE). The QRPE will perform a safety analysis to ensure the modification does not compromise safety or structural integrity and may issue approval with necessary adjustments to the forklift's data plates.

Handling Off-Center Loads:

Per 29 CFR 1910.178(o)(1), only stable or safely arranged loads should be handled. Extra caution must be exercised when handling off-center loads, as they pose an increased risk of instability and unsafe operation.

Use of Approved Attachments:

In lieu of free rigging, employees are encouraged to use approved attachments for safe lifting. This eliminates the need for manufacturer or QRPE approval for modifications, as long as the attachment is certified for use with the forklift.

Prohibited Free Rigging on E Light Jobs:

Free rigging is prohibited on all E Light jobs. This includes any situation where rigging equipment or lifting methods deviate from the forklift manufacturer's guidelines. Any deviation from the manufacturer's specifications must be approved through proper channels, including obtaining written approval from the manufacturer or a QRPE. Failure to comply with this policy may result in disciplinary action and potential suspension of work activities.

Rigger Training Requirements:

To ensure safe rigging practices, E Light requires that all employees involved in rigging activities complete a documented rigger training program. The following requirements apply:

Documented Rigger Training:

Any employee who will be engaging in rigging activities, including those using forklifts, must complete formal rigger training. This training must be documented and include specific focus on safety guidelines, proper rigging techniques, and forklift capacity considerations.

Training Content:

The rigger training must cover, but is not limited to:

- Proper identification and use of rigging equipment.
- Best practices for load handling and stability.
- Rigging techniques in compliance with manufacturer guidelines.
- Safety procedures for managing off-center loads.
- Understanding the importance of manufacturer or QRPE approval when altering equipment.

Certification and Documentation:

Employees who successfully complete the rigger training will receive certification. The training records will be maintained by E Light in compliance with safety and regulatory standards. These

records will be made available for inspection upon request.

Housekeeping

The operating surface must be kept free of debris and loose objects.

Machine Shut-Down

- 1. Select appropriate area to park equipment.
- 2. Put the directional lever in neutral.
- 3. Set the parking brake.
- 4. Completely lower the forks.
- 5. Idle engine for 5 minutes for gradual cooling. This is especially important for turbocharged engines
- 6. Turn off the forklift.
- 7. After the engine is shut off, move all hydraulic levers. If any vehicle movement is detected, a problem MAY exist, and your supervisor should be advised immediately. DO NOT put the vehicle into service until the problem has been fixed.
- 8. Take the key and return it to its proper place.

Refueling

- 1. Refueling is not permitted while the engine is running.
- 2. Only refuel in designated areas.
- 3. Do not use open flames to check the fuel level. Verify the type of fuel the lift uses.
- 4. Do not smoke near or during refueling of the equipment.
- 5. Ensure proper environmental protective measures are taken to prevent spill avoid topping off the tank.
- 6. Ensure the gas cap is replaced prior to starting the engine.
- 7. Site-Specific Refueling Policy must be adhered to.

Pedestrian Safety

- 1. During employee orientation all employees are to be instructed about how to work safely in forklift operating areas.
- 2. Forklifts are to yield right of way to pedestrians whenever possible.
- 3. Pedestrians must always keep at least 10 feet away from forklifts unless the operator has parked the forklift.
- 4. Beware of tail swing. Keep pedestrians at least 10 feet away before you start to drive.
- 5. Approach blind intersections or turns carefully and sound your horn.
- 6. Check behind (both sides) before backing up.

Use of Attachments

1. Forklifts using attachments must have a capacity plate specific for that attachment.

- 2. The attachment must be correctly mounted on the forklift.
- 3. A personnel basket is an attachment.
- 4. Attachments must be manufacturer approved.

Use of Personnel Baskets

- 1. The preferred method for lifting personnel is to use an aerial lift, scissor lift, or other type of aerial work platform.
- 2. The basket must be constructed according to ANSI B56.1(e.g. with standard handrails and mid-rails, seven foot high screen back so personnel can't contact the various parts of the mast).
- 3. When using personnel baskets they must be:
 - a. Firmly attached to the carriage.
 - b. An operator must remain in the driver seat while employees are in the basket.
 - c. The forklift shall not travel from point to point with the work platform elevated at a height greater than 4 feet while workers are on the platform.

MAINTENANCE AND REPAIR

- Forklifts that are unsafe to operate shall be immediately removed from service. An out-ofservice tag shall be placed on the steering wheel until necessary repairs can be made to return the forklift to a safe operating condition. For rental equipment – The vendor shall be contacted so that repairs can be made.
- 2. Owned Equipment Maintain maintenance records for each forklift for the life of the machine. The mechanic shall review the operators' pre-operation inspection checklists daily.
- 3. E Light personnel shall not attempt to perform unauthorized and unqualified repairs on equipment.

E LIGHT FORKLIFT SAFETY POLICY

- 1. Only authorized, trained personnel are permitted to operate forklifts.
- 2. Before operating make a visual inspection of the entire forklift and look for possible problems. Check fluid levels.
- 3. The hydraulic fluid level should be checked with the boom fully lowered and retracted. Check for hydraulic leaks using a piece of cardboard rather than your bare hand.
- 4. Never move a load above the heads of other employees or over vehicle cabs.
- 5. Be aware of all obstructions and or people in front, behind, or on the sides of traveling vehicle. Operator shall sound the horn:
 - Once upon starting.
 - Twice prior to forward movement.
 - Three Times prior to reversing Never allow riders on a forklift.
- 6. Horseplay, racing, and stunt-driving is forbidden.
- 7. Seat belt must be worn at all times during operation unless wearing a seat belt would prove

hazardous (such as operating on a dock over water).

- 8. All warning labels must be on the machine and in a legible condition. Keep to the right on aisles and roadways.
- 9. Slow down, sound horn, and proceed with caution at cross aisles, intersections, and turns. Safeguard pedestrians at all times sound horn and allow the pedestrian plenty of clearance.
- 10. Always look to the rear before backing up. Travel forward when possible. If the load you are carrying obstructs your forward view, then travel with the load trailing. Always back down ramps or inclines. Keep your load as low as possible.
- 11. A safe distance, approximately three truck lengths, shall be maintained between moving vehicles.
- 12. Racing, stunt driving, or any other form of horseplay is absolutely forbidden, and could be grounds for disciplinary action up to and including termination.
- 13. Always keep hands, arms, and feet inside the running lines of your vehicle.
- 14. On a forklift, arms or legs shall not be placed between the uprights of the mast on a vertical mast forklift.
- 15. Any time you leave your vehicle, lower the load, shut the power off, set the brakes, and remove the key.
- 16. Be sure that your vehicle is in a safe position when it is parked.
- 17. Do not park on ramps. On forklifts, the forks shall be fully lowered, and controls neutralized.
- 18. The forklift must be properly shut down any time the operator must leave the cab. Do not operate any vehicle with wet or greasy hands or feet.
- 19. **Do not** let your vehicle **idle** for a long period of time **inside** a building. Avoid running over loose objects on the floor or roadway.
- 20. Avoid sudden or jerky starts or stops. Make allowance for the momentum of the load.
- 21. Loads must be secure to prevent shifting when emergency action is required.
- 22. Do not drive up to anyone standing in front of a bench or other fixed object. Tampering with the truck's governor or electrical system is strictly prohibited.
- 23. When placing loads, do not block aisles, electrical control panels, or fire protection equipment.
- 24. Do not attempt to turn your vehicle around on ramps or incline
- 25. Spinner knobs must not be attached to steering hand wheels of trucks not originally equipped with such.
- 26. While negotiating turns, speed shall be reduced to a safe level.
- 27. Other trucks traveling the same direction at intersections, blind spots, or other dangerous locations shall not be passed.
- 28. The operator will look in the direction of travel and keep alert.

- 29. A spotter will be used in congested areas or whenever the operator's vision is obstructed, and backward travel is not feasible or would prove hazardous. Spotters will remain a minimum of 10 ft. from the equipment while it is in use.
- 30. Spotters shall not place themselves in a position where they could be crushed or injured by the equipment or load.
- 31. Passengers shall not be permitted to ride on powered industrial trucks or towed equipment.
- 32. Extreme care shall be used when tilting the load forward or backward, particularly when high tiering.
- 33. An overhead guard shall be used as protection against falling objects. Make sure your industrial truck is compatible to the environment it is used in, i.e., flammable vapor areas or enclosed areas without ventilation.
- 34. Operators of material moving vehicles are required to run them at a safe speed at all times. Employees shall be instructed to watch out for equipment when walking through buildings, yards or construction areas. Employees shall not walk beside the equipment while it is in motion. Do not talk to the operator of a vehicle until he has stopped because he needs to keep his mind on what he is doing to avoid an accident.
- 35. Operators of material moving vehicles are instructed not to transport loads which are unstable or above the rated capacity of their vehicles. If you are helping to load them, cooperate with the operator by observing these rules.
- 36. Never use the forklift or similar vehicle as a work platform or allow yourself to be hoisted from one level to another unless a specially designed platform is provided, and you have been authorized to use the vehicle in this way.
- 37. If you are authorized to ride in a fork truck or other material-moving vehicle, do not allow any part of your body to hang over the edge. Do not jump off a vehicle in motion; wait until it stops. Do not ride in a material moving truck with unsecured loads.
- 38. Always come to a complete stop at blind corners and before entering doorways, unless a mirror provides the operator with clear vision around the corner.
- 39. Do not overload your power fork truck or endeavor to transport loads, which are above its rated capacity. Don't lift unstable loads. They should be re-piled, banded, or otherwise secured.
- 40. The operator's manual for each forklift shall be present on the lift at all times. Each forklift shall be used for its designed and intended purpose.
- 41. Telehandlers The manufacturers Load Chart must be referenced and adhered to for each lift.
- 42. Forklift trucks, with or without loads, should **travel with forks about six inches to eight inches above the floor**. Never attempt to lift or lower loads while traveling. The tilt control should be used to bring the center of gravity of the load closer to the drive wheels, as this keeps the load from spilling
- 43. Bridge plates between docks and trucks or freight cars must be sufficiently wide, strong, and securely anchored. Truck operators should drive over plates slowly. Do not get your truck too close to the edge of the loading dock.

- 44. Never butt loads with the forks or with the rear end of the truck.
- 45. Operators shall not block fire aisles, access to stairways, or fire equipment.
- 46. The operator's manual for each forklift shall be present on the lift at all times. Each forklift shall be used for its designed and intended purpose.
- 47. After driving a power truck into an elevator, turn the motor off and set the brakes.
- 48. Do not take a dive. Stay away from the edge of loading docks and open trenches. One little slip and you can be hurt or killed.
- 49. Never drive into a truck or trailer unless the brakes are firmly set and/or wheels chocked.
- 50. Any modifications which could affect the capacity, stability, or safe operation of the lift shall not be performed without written approval from the manufacturer. Only manufacturer-approved attachments may be used.
- 51. Forklift shall not be operated in atmospheres containing a hazardous concentration of acetylene, butadiene, ethylene oxide, hydrogen (or gases or vapors equivalent in hazard to hydrogen, such as manufactured gas), propylene oxide, acetaldehyde, cyclopropane, diethyl ether, ethylene, isoprene, or unsymmetrical dimethyl hydrazine (UDMH)
- 52. Ease into load so as not to damage goods, operator, or co-workers by unbalancing object causing it to overturn.
- 53. To maintain proper balance, load should be centered, and forks should be near the outside edges and all the way under the load. Do not attempt to lift a load with only one fork.
- 54. Load should be tilted back until it rests securely for traveling
- 55. Mount machine using grab rails and steps while facing machine, maintaining a three-point contact with steps and grab rails.
- 56. If traveling on ramp not designed for a forklift, you should back the load down in low gear. Also never turn sideways on an incline.
- 57. When parking machine, lower forks so they are flat on the ground and apply brake before leaving machine.
- 58. Report faulty truck performance to your supervisor immediately. Use a soapy solution to check for propane leaks.
- 59. Never attempt to change a liquid propane tank inside of a confined space

OPERATOR PRE-QUALIFICATION

All forklift operator candidates must meet the following basic requirements prior to starting initial or refresher training:

- Any employee operating a powered industrial truck (including forklift's and UTV's) on E Light property or an E Light project must have a valid US driver's license. The operator must carry their license on their person at all times. Any time an operator's driver's license is expired or suspended, the operator shall immediately notify their supervisor and E Light Safety.
- The employee must have no uncorrectable hearing loss that would impair the safe operation of the forklifts.

- The employee must have no physical limitations that would impair the safe operation of the forklifts.
- The employee must have no neurological disorders that affect balance or consciousness.
- The operator must not use any medication that affects perception, vision, or balance.

TRAINING AND EVALUATION

Operator training, evaluation, and certification shall be conducted by designated personnel who have the knowledge, training, and experience to train powered industrial truck operators and evaluate their proficiency. Training shall be documented using the Forklift Operator Evaluation Form. The training must include observation of safe operation by a competent person. This observation must be recorded on an E Light Training Observations audit which must be submitted to E Light Safety. An employee or contract labor employee will have a certification by make and model appear on their ID badge QR code if they have received and passed the observation Training.

In addition to these criteria, trainers must successfully pass E Light's forklift training module and be at least one of the following:

- E Light Supervisor.
- Qualified Third-Party trainer or manufacturer's representative.

Training shall be documented using the Forklift Operator Evaluation Form. The training must include observation of safe operation by a Competent Person. This observation must be recorded on an E Light Training Observations audit which must be submitted to E Light Safety. An employee or contract labor employee will have a certification by make and model appear on their ID badge QR code if they have received and passed the observation Training.

No employee shall be permitted to operate a lift prior to being trained, evaluated, and authorized by an E Light authorized trainer.

Training shall be specific to the type of forklift employees shall be permitted to operate.

Who is authorized to train?

In addition to these criteria, trainers must successfully pass E Light's forklift training module and be at least one of the following:

- E Light Supervisor
- Qualified trainer or manufacturer's representative

Evaluation

Operators will receive a formal and documented evaluation initially after training completion, and then at least once every three years.

RETRAINING/REFRESHER TRAINING

Operators will receive refresher training any time:

The operator is observed operating in an unsafe manner or not following this policy.

The operator is involved in a Near Miss or Incident.

An evaluation reveals that the operator is in need of refresher training.

When an Operator is assigned to a new type or model of forklift.

This retraining shall be limited to the forklift and only cover the topics that are different from the previously operated forklift (I.E. capacity ratings, safe operation, controls, hazards, etc.).

TRAINING OUTLINE

Training shall consist of a classroom portion and a hands-on practical application portion.

Classroom training shall cover the following:

- 1. OSHA 1910.178 training requirements
- 2. Operating instructions, warnings, and precautions
- 3. Differences between truck and automobile
- 4. Controls and instrumentation
- 5. Engine and motor operation
- 6. Steering and maneuvering
- 7. Visibility
- 8. Fork and attachment adaptation, operation and use limitations
- 9. Vehicle capacity
- 10. Vehicle stability
- 11. Vehicle inspection and maintenance
- 12. Operating limitations
- 13. Powered industrial truck classifications
- 14. Workplace related topics:
- 15. Hazardous locations
- 16. Ramps and sloped surfaces
- 17. Closed environments
- 18. Unique or hazardous environmental conditions
- 19. Rough terrain forklifts
- 20. Vehicle inspection and maintenance
- 21. Operator's Manual
- 22. Engine or motor operation
- 23. Front steering vs. rear steering
- 24.4-wheel steering and crab steering
- 25. Job site hazards
- 26. Controls and instrumentation

- 27. Visibility
- 28. Stability
- 29. Vehicle capacity
- 30. Operating limitations
- 31. Basic safety rules
- 32. Rules of operation
- 33. E Light Forklift Policy
- 34. Review / Written Examination

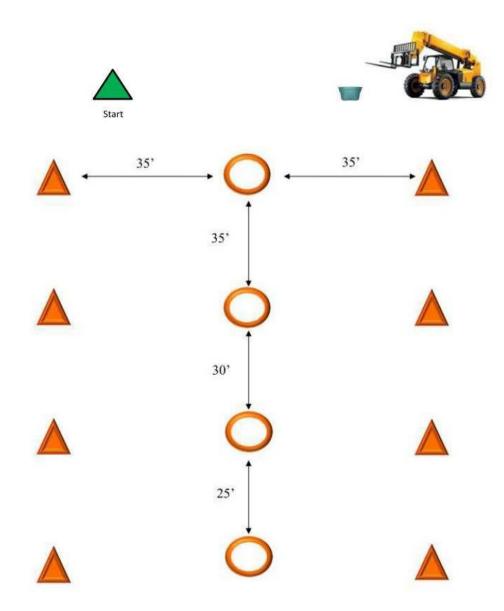
Employees must pass the written test with a score of **80%** or better before being allowed to take the hands-on field training. Employees will be given the opportunity to discuss any questions they missed on the written test.

Trainees will be provided with an opportunity to apply his/her theory knowledge to physical practice through hands-on experience with the operation of the forklift.

Field training will consist of:

- 1. Inspecting the equipment
- 2. Utilizing operator's manual and load chart
- 3. Guiding forks into a pallet
- 4. Picking and placing multiple pallets.
- 5. Utilizing a spotter
- 6. Ensuring the load is properly balanced before and throughout the lift.
- 7. Position of the load while traveling
- 8. Traveling and stopping the equipment without shifting the load.
- 9. A 150-gallon trough will be carried on a pallet.
- 10. Maneuvering the forklift in a figure 8 pattern in both forward and reverse direction with an obstructed view.
- 11. A piece of cardboard will be attached to the front of the lift, obstructing the operator's view.
- 12. Placing the load on the ground and backing out of the load
- 13. Identifying potential hazards
- 14. After completing an assessment of skills demonstrated, trainees will be presented with a certificate of completion. Training records shall be kept on-site, and copies submitted to E Light's Safety Coordinator.

HANDS ON TRAINING OBSTACLE COURSE EXAMPLE



1. PERFORMANCE EVALUATION FOR OPERATION OF FORKLIFT (Example)

	SATISFACTORY	UNSATISFACTORY
 Demonstrates knowledge of safe Working procedures. 		
 2. Demonstrates proper inspection Techniques checking: -Mast and forks. -For cracks and damage. -For loose or missing parts. -Tires and wheels. -For leaks. -Hoses and belts. -Fluid levels. -Operating controls. 		
 3. Demonstrate procedures for Starting forklift and testing Controls: Ensures park brake is set. Move levers and controls to neutral. Sounds horn-waits ten (10) seconds. Starts engine. Monitors instruments and gauges. Tests park brake. Tests service brake. Checks steering. 		
 4. Demonstrates proper procedures for placing forklift in motion: -Fasten seat belt. -Sounds horn and waits -Raises forks to travel height. -Selects proper direction of travel. -Releases parking brake. -Accelerates slowly & smoothly. 		
 Makes necessary fork adjustments for load to be handled. 		

SATISFACTORY

UNSATISFACTORY

 6. Demonstrates proper operational Procedures for: Positioning to lift. Inching. Lifting load. Traveling with load. Turning with load. Stopping with load. Changing direction safely. Positioning to lower. Lowering 	
 7. Demonstrates proper parking Procedures. -Selects safe area. -Sets parking brake. -Lowers forks to safe position -Places controls to NEUTRAL -Stops engine. 	

NOTE:

If an employee fails this test, the employee must be retrained and retake the test. If the employee does not pass the test the second time, they will not be permitted to operate a forklift for E Light Electric Services, Inc.

NOTE: This evaluation should be submitted using iAuditor and the Forklift Evaluation Template.

NOTE: <u>All projects shall have the OSHA Forklift Operations Poster displayed prominently in an area</u> where employees gather and on all communication boards for the project.

FORKLIFT SAFETY QUIZ - Example

- 1. Once you are trained you can operate any type of forklift.
 - a. True
 - b. False
- 2. Forklift training is important because
 - a. It is the law
 - b. It protects the workers
 - c. It reduces operating costs
 - d. All of the above
- 3. If an operator is involved in an accident or near miss, he/she must receive refresher training.
 - a. True
 - b. False
- 4. An operator must be evaluated at least every three years in order to continue to operate the forklift.
 - a. True
 - b. False
- 5. Federal OSHA requires the forklift to be inspected
 - a. Once a week
 - b. At the start of the day or shift
 - c. Once a month
 - d. Once a quarter
- 6. Pre-operation inspections can
 - a. Improve safety
 - b. Reduce down time
 - c. Reduce costs
 - d. All of the above

- 7. The major difference between automobiles and forklifts is
 - a. Forklift typically weigh more than automobiles
 - b. Forklifts use rear wheel steering
 - c. Forklifts do not carry passengers
 - d. All of the above
- 8. The operator's manual is required to be on the machine at all times.
 - a. True
 - b. False
- 9. A legible capacity plate is always to be mounted on the machine.
 - a. True
 - b. False
- 10. It is OK to add an attachment without the written approval of the manufacturer as long as you purchase or rent it from a reputable source.
 - a. True
 - b. False
- 11. All warning labels must be on the machine and in a legible condition.
 - a. True
 - b. False
- 12. The hydraulic fluid level should be checked with the boom fully lowered and retracted.
 - a. True
 - b. False
- 13. Check for hydraulic leaks using a piece of cardboard rather than your bare hand.
 - a. True
 - b. False
- 14. The primary sources of fuel for a forklift are:
 - a. Gasoline
 - b. Liquid propane
 - c. Diesel
 - d. All of the above
- 15. Liquid propane fuel is lighter than air.
 - a. True
 - b. False

- 16. When parking a LP powered forklift for an extended period of time always:
 - a. Shut off the service valve
 - b. Avoid high heat sources
 - c. Avoid parking in confined spaces
 - d. All of the above
- 17. When refueling a forklift, you should:
 - a. Have a fire extinguisher nearby
 - b. Do not smoke
 - c. Shut off the engine
 - d. All of the above
- 18. LP tanks can be replaced in confined spaces.
 - a. True
 - b. False
- 19. What will happen if the service valve on an LP tank is opened to quickly?
 - a. The fuel supply line could burst
 - b. The back-pressure check valve will close
 - c. The engine will not restart
 - d. The fuel supply valve will freeze open
- 20. The best way to check for propane leaks is
 - a. By smell
 - b. Use a soapy solution
 - c. Use a match or a lighter
 - d. Look real close
- 21. When fueling a gasoline or diesel forklift, always fill the tank completely full.
 - a. True
 - b. False
- 22. Checking the tightness of existing bolts with a torque wrench is not always reliable because of thread corrosion
 - a. True
 - b. False
- 23. Never replace a liquid or solid filled tire with and an air-filled tire.
 - a. True
 - b. False
- Hoisting a near capacity load on the end of one fork can damage the fork.

- a. True
- b. False
- 25. Front-end attachments have no effect on the capacity of the machine.
 - a. True
 - b. False
- 26. The operator is not required to wear a seat belt when:
 - a. Moving the forklift from one end of the yard to the other
 - b. Maneuvering the machine for repairs
 - c. Operating the machine inside a container or trailer
 - d. Using a seat belt would prove more hazardous than not wearing one
- 27. A horn is not required as long as you have a backup alarm.
 - a. True
 - b. False
- 28. Using the frame sway control is a good way to level the machine when you are boomed up high and you need to level the load in order to get out from under it.
 - a. True
 - b. False
- 29. When defects are noted during the pre-operation inspection, it is OK to continue to use the forklift until the job is completed.
 - a. True
 - b. False
- 30. The stability of the forklift is based on what principle?
 - a. Principle of gravity
 - b. Principle of stability
 - c. Principle of balance
 - d. Principle of momentum
- 31. The balancing point of the forklift is:
 - a. The counterbalance
 - b. The front wheels
 - c. The back wheels
 - d. The mast
- 32. Which is not one of the principle offsetting weights on an internal combustion engine forklift?
 - a. Counterweight
 - b. Forks and boom
 - c. Engine
 - d. Transmission

- 33. The point in a forklift around which all the weight is evenly distributed is
 - a. The weight of the load
 - b. The center of gravity
 - c. The balancing point
 - d. The stability pyramid
- 34. The center of gravity is always at the physical center of the load.
 - a. True
 - b. False
- 35. When a load is lifted, the center of gravity for the forklift does not change position.
 - a. True
 - b. False
- 36. When the boom is raised without telescoping out the machine becomes more stable front to back.
 - a. True
 - b. False
- 37. When you lower the boom or telescope out the capacity of the machine increases.
 - a. True
 - b. False
- 38. Leveling the machine is not necessary on loads well within the capacity of the machine.
 - a. True
 - b. False
- 39. Which of the following is not a dynamic condition?
 - a. Braking
 - b. Turning
 - c. The load
 - d. Booming down
- 40. What information is needed to use the load chart properly?
 - a. The weight of the load
 - b. The height of placement
 - c. The radius of placement
 - d. All of the above
- 41. The most accurate way to obtain the weight of the load is:

- a. Weigh it
- b. Bills of lading
- c. Approved calculations
- d. The internet
- 42. If the unit weight for plywood is 36 lbs per cubic foot and the load is 4 ft x 4 ft x 8 ft, approximately how much would it weigh?
 - a. 2,200 lbs
 - b. 3,400 lbs
 - c. 4,600 lbs
 - d. 5,800 lbs
- 43. When operating a lift truck, it is
 - a. The pedestrian's responsibility to watch out for you
 - b. Your responsibility to watch out for pedestrians
 - c. Management is responsible to keep pedestrians out of the work site
 - d. All of the above
- 44. The number one cause of death involving a forklift is tip over.
 - a. True
 - b. False
- 45. The number one cause of death involving a forklift is tipover.
 - a. Picking up a load that is too heavy
 - b. Driving on an incline
 - c. Going around a corner too fast without a load
 - d. Hitting an overhead obstruction
- 46. You should never turn a forklift with the load raised above travel height.
 - a. True
 - b. False
- 47. To best survive a tip over you should:
 - a. Wear your seat belt
 - b. Hang on tight
 - c. Lean forward and away from fall
 - d. All of the above
- 48. The minimum distance between the crane boom and a 50,000 volt power line is
 - a. 5 Feet
 - b. 10 feet
 - c. 15 feet
 - d. 20 feet

- 49. If the boom or load comes into contact with a live power line, what should those on the ground do?
 - a. Carefully walk up to the machine and help the operator off
 - b. Hook onto the machine and pull it out from the power lines
 - c. Keep all people away from the area surrounding the machine
 - d. Throw a rope to the operator so he can be drug away from the vehicle
- 50. All telescopic handlers are rated to lift personnel as long as you have an approved platform.
 - a. True
 - b. False
- 51. Railroad tracks or curbs should be crossed at an angle.
 - a. True
 - b. False
- 52. It is ok to leave your forklift running while out of eyesight of it as long as you have the emergency brake on, and the forks are lowered to the ground.
 - a. True
 - b. False
- 53. How many vehicle lengths is the minimum you should maintain between you and another vehicle?
 - a.1
 - b.2
 - c.3
 - d.4
- 54. Never drive a forklift up to anyone next to a fixed object.
 - a. True
 - b. False
- 55. If you pick up a load and you feel the back end of the forklift start to come up, then you are probably overloaded.
 - a. True
 - b. False
- 56. If while picking up a load and telescoping out you feel the back end of the forklift start to come up, then you should:
 - a. Telescope back in
 - b. Boom down quickly
 - c. Keep telescoping out but at a much slower rate
 - d. Put a few guys on the back of the lift to add counterweight

- 57. If you are handling hazardous materials, you must be trained in what they are, how to handle them and how to clean them up in case of a spill.
 - a. True
 - b. False
- 58. It is better to lean out to see around a load rather than have to travel in reverse.
 - a. True
 - b. False
- 59. When elevating personnel, only platforms built to OSHA/ANSI standards should be used.
 - a. True
 - b. False
- 60. The ______ is responsible for the safe operation of the forklift.
 - a. The supervisor
 - b. The employer
 - c. The operator
 - d. All of the above

FORKLIFT CERTIFICATION - Example

I certify that (....Print Employees Name) has been trained and evaluated as required by the New Powered Industrial Truck Operator Training Standard dated 12-1-1998. The above employee has been trained in the Safe Operation, Warnings and Limitations, Forklift Controls, Engine Operation, Steering and Maneuvering, Forks and Attachments, and Refueling Operations. The above employee has been observed operating the vehicle in a safe manner on this date,

Trainer (Print Name)	
Signature of Trainer	Date
Employee Name (Print Name)	
Signature of Employee	Date
Please attach training evaluation forms.	
COMMENTS:	

New hired employees must be trained before the employee may operate a Power Industrial Fork Truck. All employees that operate a Forklift / Power Industrial Fork Truck must receive training and evaluation prior to operation, as outlined by 29CFR 19