



ABACO MACHINES OPERATION MANUAL SWING ARM FORKLIFT BOOM



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1. GENERAL

The Abaco Swing Arm Forklift Boom AFJS-25 attachments are fitted to industrial trucks and are used for lifting a variety of loads.

The Boom is extendable with pin positions to lock the Boom.

A locking safety chain is supplied to prevent the Boom from moving off the fork arms.

The Boom is painted in a "Safety Yellow" finish.

Manufactured strictly in accordance with AS 2359.1, the Abaco Forklift Boom can lift loads in accordance with the "Safe Working Load Limits" riveted to the Forklift Boom.

The use of the Abaco Swing Arm Forklift Boom AFJS-25 is restricted to the purpose for which it has been designed. Abaco Machines is **not** liable if this restriction is breached.

The Abaco Swing Arm Forklift Boom AFJS-25 is to be used ONLY on 2000kg to 5000kg capacity forklift trucks.

NEVER exceed the W.L.L. riveted to the arm of the Boom.

NOTE: Different locking angle positions and extension arm points have different Working Load Limits.

2. ATTACHMENT TO FORKLIFT TRUCK

Before installation of the attachment onto a forklift truck, be sure that the fork arms are suited and set to the correct width.

1. To install the Boom, engage the forklift arms into the slippers.
2. With the fork arms firmly against the rear of the attachment, loop the provided safety chain around the carriage or tower.
3. Slot the safety chain into the housing on the Boom, and make sure the Boom is locked in.

3. OPERATION

Preliminary Safety Checks

IMPORTANT: Understand that the different locking angle positions and extension arm points of the Swing Arm Boom have different Working Load Limits.

A "Competent Person" shall check the following:

1. That all locating pins are correctly positioned and are in safe working order and safely clipped.
2. That the Boom's hook assembly, if fitted, is correctly fitted and in safe working order.

3. That the safety chains are in good condition.
4. That the shackle securing the swivel hook is correctly installed and tightened.

The **operator** shall check that the Boom has been correctly fitted in accordance with these instructions and the relevant Truck Operators' Manual.

The Operator shall consult the load tables provided and ensure that the industrial truck or Boom attachment lift capacity is not exceeded.

Ensure that the pivot bolt at the base of the Fork Lift Boom is tight. If it is loose, immediately tighten it before use.

Ensure that the Red Lift Lever is in good working condition before use and that the pin lifts up and locks easily.

Ensure that the roller is in good working condition. Inspect the roller regularly for cracks and damage. If it is damaged, discontinue use immediately.

General Operating and Safety Procedures

To extend the Boom, remove the safety clip and withdraw the locking pin. Select the desired extension, and then reinsert the locking pin through the outer and inner Boom sections.

Reinsert the safety clip.

Handling suspended loads by a Boom can introduce dynamic loads affecting stability.

Sudden stops, starts and turns can cause the load to swing and create a hazard.

Forklift Booms can alter load centers and reduce the load capacity. The type of load to be handled in addition to the operating conditions must be considered when determining the actual working capacity for each application. Do not exceed the forklift or Boom ratings.

WARNING: The W.L.L. noted on the AFJS-25 Boom is a structural rating of the Boom only and makes no claim to the suitability of the forklift truck. The actual load may be restricted to the suitability of the forklift truck.

Actual lift truck capacities must be obtained from the lift truck manufacturer.

Abaco Machines' Booms shall not be modified in any way which affects the operation or performance.

4. CHANGING ARM POSITIONS ON THE SWING ARM FORKLIFT BOOM

When the Swing Arm Boom is locked in position off center, always test the load before lifting to ensure that the forklift will be capable of lifting the load and not tip over.

Never lift more than the **Working Load Limit** riveted on the Forklift Boom.

Ensure that the Abaco Swing Arm Forklift Boom is not carrying any load before swinging the arm.

1. Lower the Abaco Swing Arm Forklift Boom to the ground.
There are 5 locking points on the Abaco Forklift Boom. Before unlocking and moving the points, ensure that there is no load on the Forklift Boom.
2. Lift the Red Lever at the base of the Boom and lock it into the desired position.
3. Ensure that the pin has locked the Boom in place and the arm cannot move.

5. RISK CONTROL MEASURES

When handling loads, the following Risk Control Measures are to be observed by the operator to ensure that all identified hazards relative to using this equipment are eliminated or controlled.

1. The forklift operator requires a suitable forklift truck license to cover both the forklift truck being operated and the Boom that has been lifted. Training in the safe use of the attachments and the use of the lifting booms, slings and chains for lifting shall be undertaken before using.
2. Authorized personnel must perform the following pre-checks prior to the use of the forklift truck and corrective action taken where applicable:
 - Nameplate and markings regarding the forklift truck and the Boom's capacities are to be read and acknowledged.
 - Condition of the lift and tilt systems on the forklift truck must be checked.
 - Inspect all tires for wear, condition, and pressure.
 - Liquid levels of battery, oils, cooling water and fuel are to be checked.
 - All steering and brake controls, warning devices, and lights are to be checked for effective operation.
3. Gain assurance from a responsible person that the load may be handled safely with an attachment and that the person has provided all of the information necessary to ensure that the risks are eliminated or controlled.
4. Do not exceed the rating capacity of the forklift truck to handle the load.
5. The forklift truck shall be used on a hard level surface. The area in which the Boom is to be used must have been accessed as suitable for the task to be undertaken. There should be suitable clear space to safely use the Boom and system developed for handling the load.
6. While lifting in an area subject to passing traffic, barriers or warning signs shall be used to prevent any interference.
7. Maneuver slowly and cautiously when the load is elevated.

8. Always keep people clear and away from loads being lifted and transported.
9. Always ensure that the forklift operator has full visibility of the path and any obstacles before the forklift truck is operated.
10. Transport the load with the Boom positioned as low as practical.
11. The mast, if adjustable, shall be set at vertical or tilted back.
12. **Never** drag a load horizontally across the ground.
13. The operator shall check that the Boom is securely attached.
14. The operator shall stay with the forklift at all times.
15. The operator shall keep hands and feet clear of controls other than the controls in use.
16. The operator shall keep clear of overhead obstructions and in particular **MAINTAIN RELEVANT CLEARANCE OF ELECTRICAL CONDUCTORS.**
17. Before any load is hoisted by the Boom, the operator shall lift the Boom unloaded to the required working height to confirm that all systems are functioning correctly.
18. Ensure that safety features are provided, visible, and working effectively.
19. Ensure that there has been no unauthorized interference or alterations to the plant that may cause risk.
20. Ensure that regular maintenance, testing and inspections are carried out and recorded in accordance with the relevant forklift truck manuals and these instructions, and that corrective action was taken where applicable.
21. Ensure that the instructions of Abaco Machines are followed.
22. If any of the equipment becomes unsafe, stop all usage until the risk is eliminated or controlled.

WARNING: Failure to observe the above **Risk Control Measures** may result in **Serious Injury or Death.**

6. MAINTENANCE

Regular maintenance including testing, inspection and cleaning should be carried out on the Boom to reduce the risk of potential hazards. The Boom should be visually inspected before each shift to ensure that all components are functioning correctly and are undamaged. If components are considered worn or damaged, or if safety charts or labels are damaged, seek a professional for advice. Periodic testing may be required if any damage is noted as this could be an indication of abuse or overloading. Regular cleaning makes identification of damage easier. Keep maintenance records to ensure safety checks are carried out.

7. WORKING LOADS

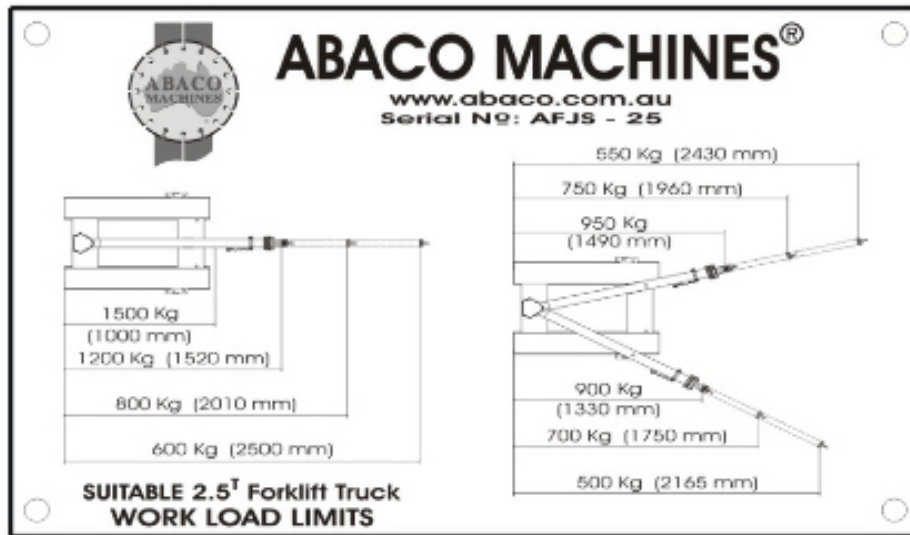


Fig. 7.1

The Working Load Limits Table (refer fig. 7.1) must be legible and clearly visible. If damage occurs, contact Abaco Machines for replacements.

8. COMPLIANCE AND CONFORMITY CERTIFICATION



9. TERMS OF TRADE, CONDITIONS OF SALE, AND WARRANTY

1. Abaco Machines' products are to be used only as indicated. Misuse or misapplication may cause failure resulting in possible property or bodily injury.
2. It is the obligation of the user to ensure that Abaco Machines' products are used in accordance with appropriate codes and system requirements.
3. All liability for Abaco Machines products' performance is disclaimed and the warranty will be void if any of the following exist:
 - 3.1. The product is used beyond the published or stated Working Load Limit. **NOTE: ALL** ratings are for static conditions and do not account for dynamic loading such as wind, water or seismic loads.
 - 3.2. The product is not properly installed per published or stated instructions.
 - 3.3. The loading to the product is not vertical.
 - 3.4. The product is deformed or stressed in any way during fitting or installation.
 - 3.5. The product is used in a corrosive environment.
4. All Safety Regulations required by the user must be observed.
5. Abaco Machines' products at the time of dispatch are warranted to be free of defects in material or workmanship. **NO OTHER WARRANTY EXPRESSED OR IMPLIED SHALL EXIST IN CONNECTION WITH THE SALE OR USE OF ABACO MACHINES' PRODUCTS.** Claims for errors, shortages, defects, or nonconformities ascertainable upon inspection must be made in writing within eight (8) days after buyer's receipt of products. Products claimed nonconforming or defective must upon Abaco Machines' request promptly be returned for inspection. Claims not made as provided above and within the applicable time period will be barred. Abaco Machines shall in no event be responsible if the products have not been used in accordance with the specifications and/or recommended procedures. Abaco Machines will, at its option, either repair or replace nonconforming or defective products for which it is responsible or return to the buyer their purchase price. The foregoing states the buyer's exclusive remedy for any breach of Abaco Machines' warranty and for any claims, whether sounding in contracts, tort or negligence for loss or injury caused by the sale or use of any product. Without limiting the generality of the foregoing, Abaco Machines shall in no way be responsible for any loss of business or profits, downtime or delay, labor, repair or material cost or any similar or dissimilar consequential loss or damage incurred by the Buyer.
6. Examine goods immediately upon receipt and advise any damage or shortage to carriers and ourselves within eight (8) days, otherwise no claim will be considered.
7. Abaco Machines reserves the right to alter specifications, designs, and prices without notification.

10. RISK CONTROL MEASURES & RISK ASSESSMENT FOR IDENTIFIED HAZARDS

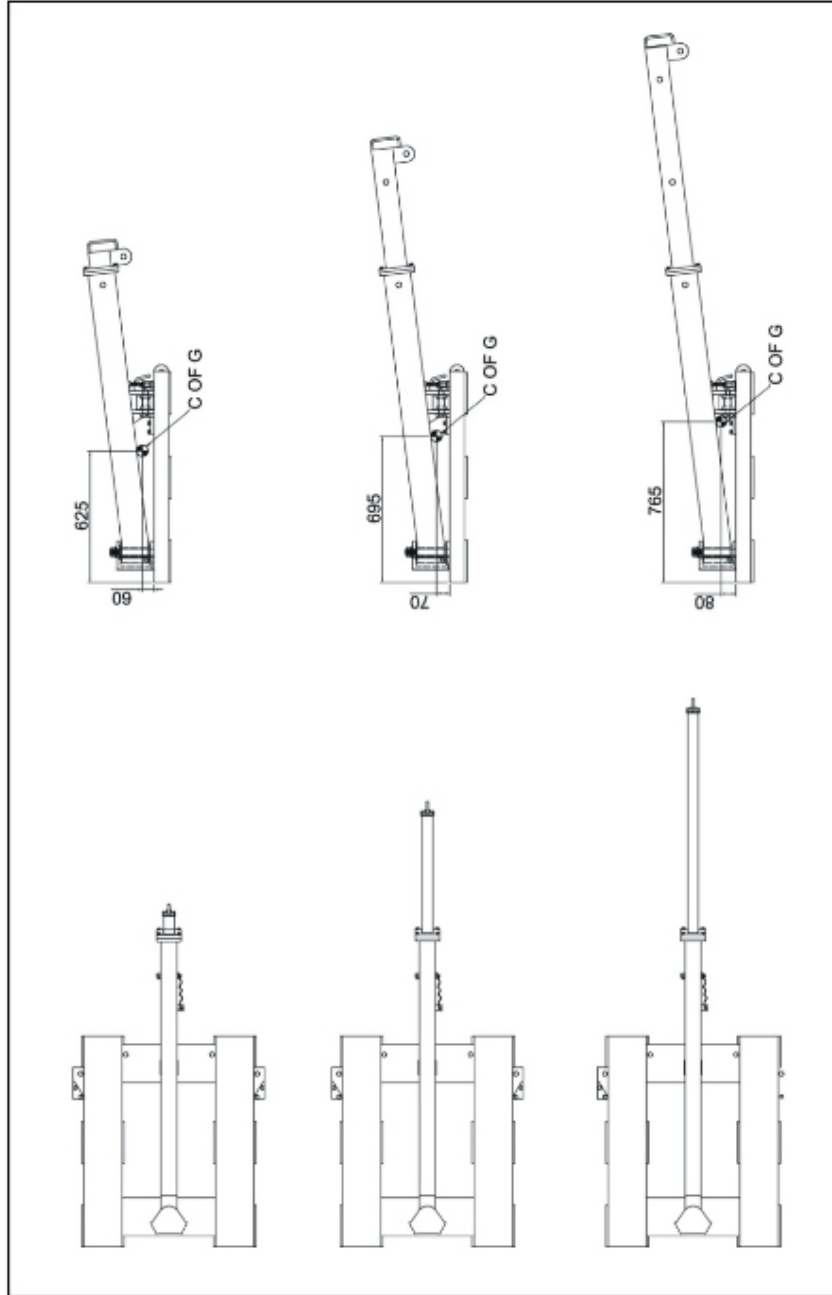
EQUIPMENT TYPE & DESCRIPTION: ABACO SWING ARM FORKLIFT BOOM AFJS-25

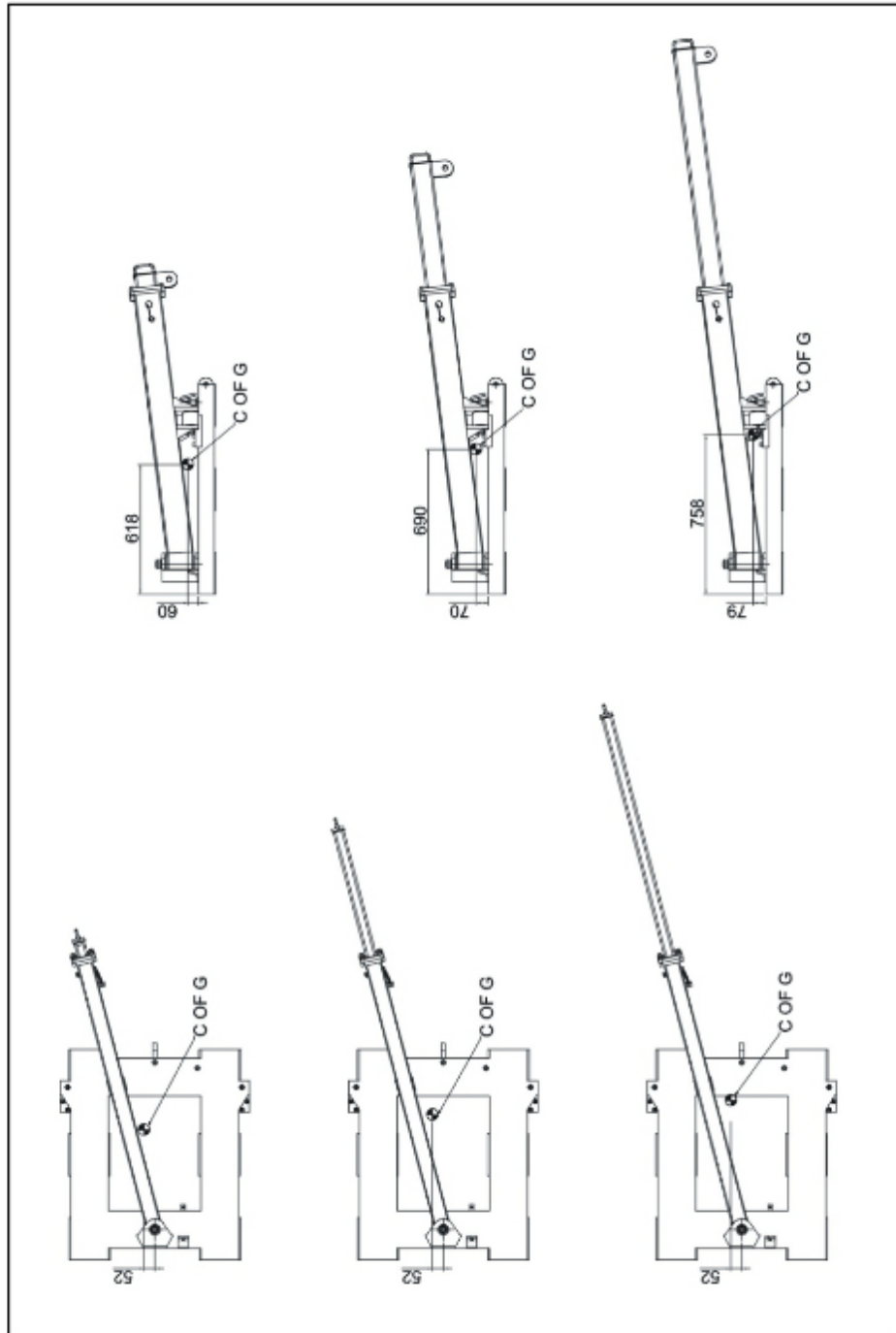
Operation	Hazards Identified	Risk Assessment	Risk Control Measures in Place	Risk Control In Place (Date)
1. Forklift Operational Safety Pre-Checks	a) Unsafe use of forklift resulting in boom/load shifting, falling, striking pedestrians, and/or objects.	*Serious Risk to Operator *Serious Risk to Pedestrian	<ul style="list-style-type: none"> ■ Pre-operational inspection is carried out before each shift. ■ The forklift is taken out of service if any risk or malfunctions are found. These are reported and recorded for assessment by a competent person. ■ The operational areas are assessed for hazards prior to and during the work shift. ■ The forklift is left in a safe condition after each shift. ■ Inspections, maintenance and repairs are carried out in accordance with the relevant Forklift Operating Manuals. ■ If more than 25 persons are employed at the workplace, a person certified in First Aid is on site. 	
2. Forklift Boom Operational Safety Pre-Checks	a) Boom/load shifting, falling, striking pedestrians and/or objects	*Moderate Risk to Operator *Serious Risk to Pedestrian	<ul style="list-style-type: none"> ■ Inspections, maintenance and repairs are carried out in accordance with the Instruction Manual. ■ All pre-checks listed in the Instruction Manual are carried out before each shift. ■ The Boom is fitted securely to the lifting apparatus according to the Instruction Manual. ■ All instructions for the use of the Boom as laid out in the Instruction Manual are followed. ■ The use of the Boom is limited to those situations for which it is specifically designed. 	
3. Lifting & Lowering the Boom & the Load	a) Unsafe/Incompetent Operator	*Serious Risk to Operator *Serious Risk to Pedestrian	<ul style="list-style-type: none"> ■ Only certified and trained operations use the equipment. 	

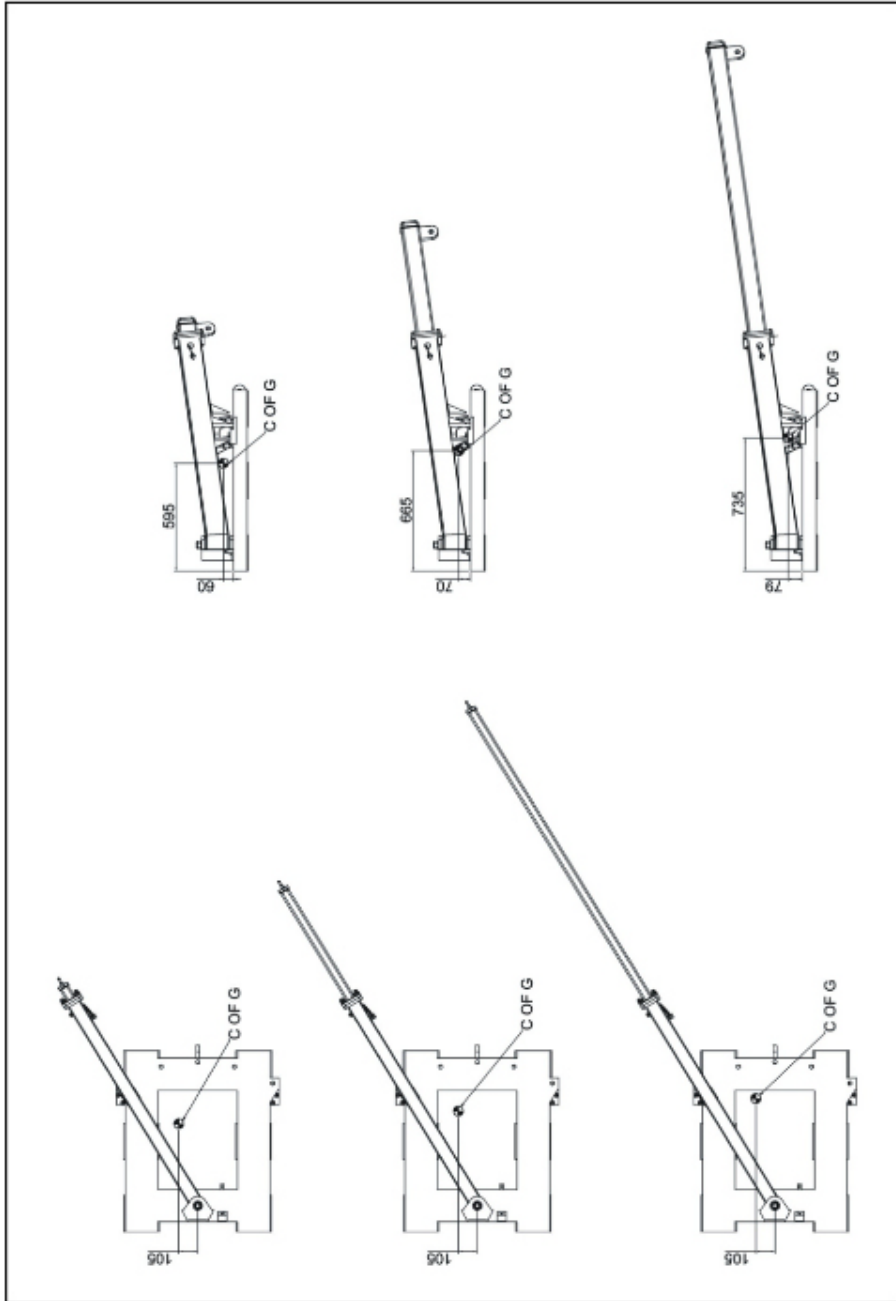
Operation	Hazards Identified	Risk Assessment	Risk Control Measures in Place	Risk Control In Place (Date)
3. Lifting & Lowering the Boom & the Load	b) Item falling from height	*Moderate Risk to Operator *Serious Risk to Pedestrian	<ul style="list-style-type: none"> ■ The Boom is fitted securely to the lifting apparatus. ■ All safety chains, locking pins, & safety clips are installed correctly. ■ Barriers/Warning Signs in areas subject to passing traffic are installed. ■ The Boom/load is raised no higher than necessary. ■ The forklift mast, if adjustable, is tilted back. ■ The Boom is not dragged along the ground. ■ The Boom is transported as low as possible. 	
	c) Load is too heavy and/or unbalanced, the forklift is overturning	*Serious Risk to Operator *Serious Risk to Pedestrian	<ul style="list-style-type: none"> ■ All Risk Control measures in 3(b) above are in place. ■ The operator is aware of the weight of the Boom and load. ■ The operator gains assurance from a responsible person that the load may be handled safely. ■ The operator is trained in the use of lifting booms, slings, & chains for lifting loads. ■ The rating capacity of the forklift to handle the load is not exceeded. ■ The forklift is used only on a hard, level surface. ■ The Boom is raised, unloaded, to working height to confirm all systems are functioning. 	
	d) Forklift/Boom/load striking pedestrians	*Serious Risk to Pedestrian	<ul style="list-style-type: none"> ■ All Risk Control Measures in 3 (b) above are in place. ■ A suitable clear space between barriers is left to safely use the attachment. ■ The Inner Boom is extended no further than necessary. 	
	e) Forklift mast striking overhead fittings	*Serious Risk to Operator *Serious Risk to Pedestrian	<ul style="list-style-type: none"> ■ Work areas are assessed to ensure NO overhead fittings can be contacted by the mast, the Boom, or the load. ■ Forklift is kept clear of any overhead obstructions, especially ELECTRICAL conductors. 	

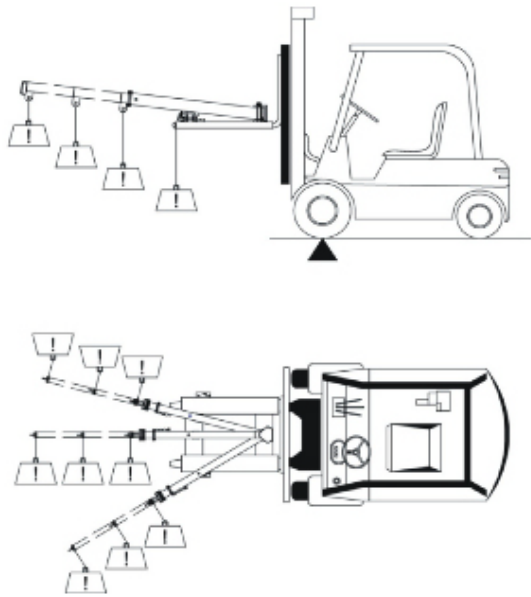
Operation	Hazards Identified	Risk Assessment	Risk Control Measures in Place	Risk Control In Place(Date)
4. Transporting Loads with the Boom around the Workplace or Site	<p>a) Load shifting or falling.</p> <p>b) Forklift/boom striking pedestrians.</p> <p>c) Operator is exposed to fixed/moving components.</p> <p>d) Forklift/Boom striking obstacles</p> <p>e) Forklift/Boom falling from raised areas.</p>	<p>*Moderate Risk to Operator</p> <p>*Serious Risk to Pedestrians</p> <p>*Serious Risk to Pedestrians</p> <p>*Serious Risk to Operator</p> <p>*Serious Risk to Operator</p> <p>*Serious Risk to Operator</p> <p>*Serious Risk to Operator</p> <p>*Serious Risk to Pedestrians</p>	<p>■All Risk Control Measures in 3 (b) and 3(c) above are in place.</p> <p>■The operator checks that the load is secured to the Boom and is prevented from swinging.</p> <p>■All Risk Control Measures in 3 (d) above are in place.</p> <p>■A system is developed for handling the loads around the workplace site.</p> <p>■Convex mirrors are placed at aisle corners in areas used by the forklifts.</p> <p>■All safety equipment on the forklift MUST be functioning before use (i.e. Reversing Beepers)</p> <p>■Maneuver slowly and cautiously when the loads are elevated.</p> <p>■The operator must stay with the forklift controls at all times while it is in operation.</p> <p>■The operator must keep hands/feet within the forklift cab while it is in operation.</p> <p>■All Risk Control Measures in 3 (e), 4 (b), and 4 © above are in place.</p> <p>■All Risk Control Measures in 4 (b) and 4 (c) above are in place.</p> <p>■All safety railings are placed in raised areas such as ramps, loading docks, etc.</p>	
5. Storage of Boom	<p>a) Boom becoming damaged.</p> <p>b) Boom is in the way of normal site operations.</p>	<p>*Moderate Risk to Operator</p> <p>*Serious Risk to Pedestrians</p> <p>*Moderate Risk to Pedestrians</p>	<p>■Regular maintenance, inspection and testing according to the Instruction manual are carried out.</p> <p>■The Boom is stored in a dry area and away from any corrosive chemicals.</p> <p>■The Boom is stored in an area which will not interfere with the normal running of the workplace/site.</p>	

11. CENTER OF GRAVITY

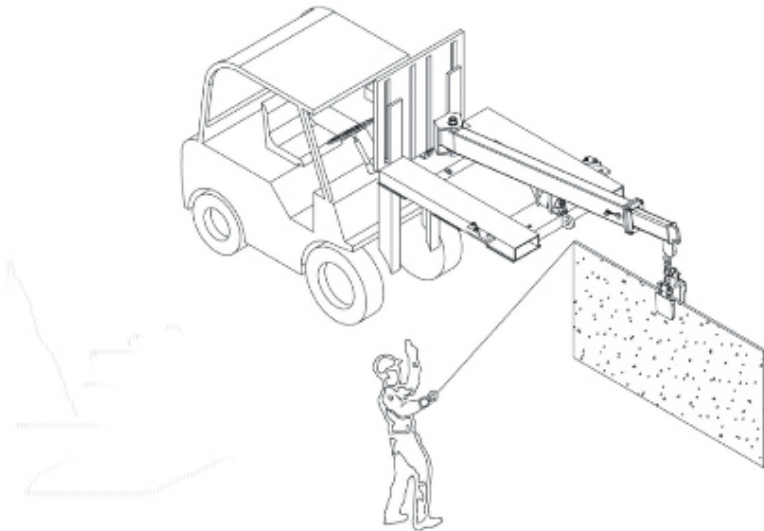








**WARNING!!! ACTUAL LOAD
MAY BE RESTRICTED BY
REFERRING TO THE CAPACITY
OF THE FORKLIFT.**



**All personnel must stand
clear of the load while it is
being lifted or moved.**

WARRANTY CERTIFICATE

In order to validate the warranty, it is mandatory to return the attached warranty certificate, duly completed within eight (8) days after purchase.

PERIOD

The warranty starts from the date of purchase, the date on the distributor's invoice. The warranty is valid for a period of six (6) months.

WARRANTY

This warranty is limited to the replacement of parts recognized as defective by Abaco, excluding worn components and consumables.

The manufacturer is not responsible for any direct or indirect, material or immaterial damages caused to persons or property by failure of the machine or the non-operation of the machine.

WARRANTY CONDITIONS

To benefit from the warranty, it is mandatory to return the Warranty Certificate attached below, duly completed, to Abaco within eight (8) days after purchase.

In case of failure of the machine during the warranty period, our After-Sales Service Department will inform you of the appropriate method of dealing with your claim and advise you of your nearest approved service center.

EXCLUSIONS

The warranty does not apply for damages or failures caused by:

- Incorrect use, misuse, error in transportation, handling, or maintenance.
- Use of non-genuine parts or accessories.
- Use of incorrect specifications i.e. Weight of the Load

