

0PERATOR'S GUIDE

Series 4

***Non-Sideshifting/Sideshifting/
Revolving Clamps, Turnafork,TM
TurnaloadTM***

Manual Number 229604

cascade^T

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WARNING: Rated capacity of the truck/attachment combination is a responsibility of the original truck manufacturer and may be less than shown on the attachment nameplate. Consult the truck nameplate.

WARNING: Do not operate this attachment unless you are a trained and authorized lift truck driver.

CAUTION: This Guide shows load-handling procedures for most products. Ask your company or organization about any special procedures for the loads you may be handling.

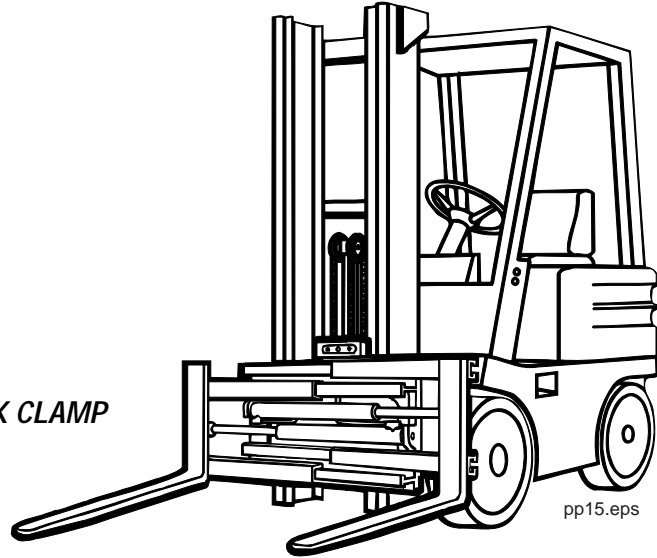
INTRODUCTION

Series 4 Clamps - Cascade Series 4 Clamps are multiple function attachments designed to handle a wide variety of loads.

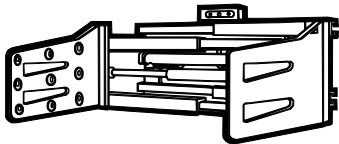
About this Guide – This Guide is prepared to simplify your understanding about efficient and safe Clamp use and operation. Please read the Guide thoroughly before operating the attachment. Be sure you know and understand all operating procedures and safety precautions. If you have any questions, or don't understand a procedure, ask your supervisor.

Emphasize Safety! Most accidents are caused by operator carelessness or misjudgement. You must watch for hazardous situations and correct them.

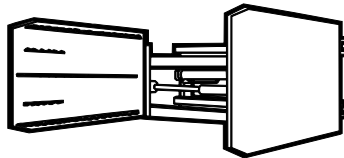
FORK CLAMP



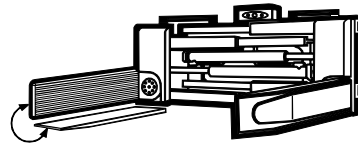
COTTON/BALE CLAMP



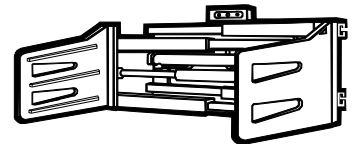
WOOL CLAMP



™ TURNAFORK



**GENERAL-PURPOSE
BALE CLAMP**



S SAFETY RULES

Industrial Lift Trucks

No riders



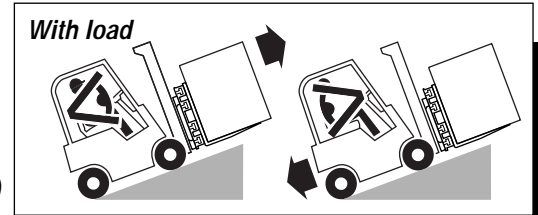
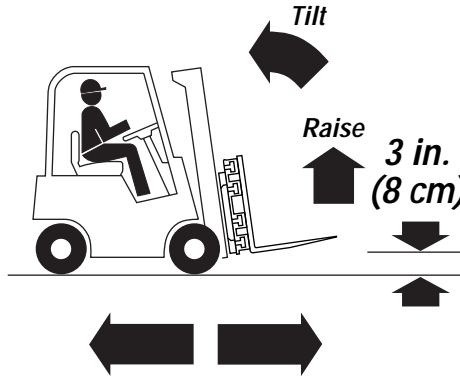
No reaching through mast



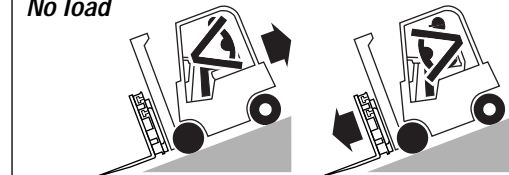
No standing under load



CL0018.iii



No load

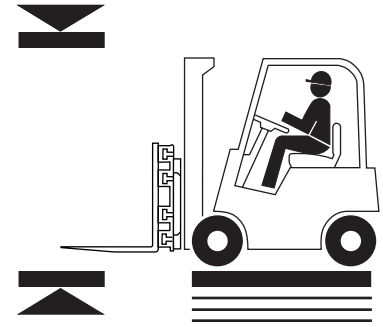




No parking on ramp



No turning on ramp



Watch clearances

CL0019.iii

TRAFFIC



Observe



Workers



Stops



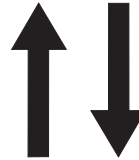
Wet floors



Bumps



Dips



Slow for two way traffic



Sound horn, slow at intersection



Sound horn, slow at corner

S **AFETY RULES**

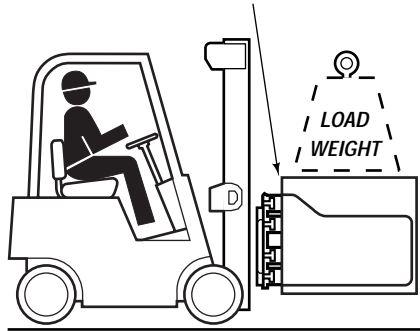
Handling Loads

Limit sideshifting with raised load.



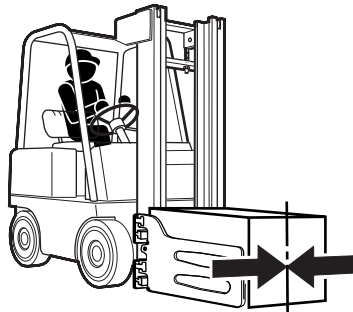
Limit truck movement with raised load.

Top of load must not extend above frame.



Load weight must not exceed combined truck/attachment capacity (see truck nameplate).

No unclamped loads on top.

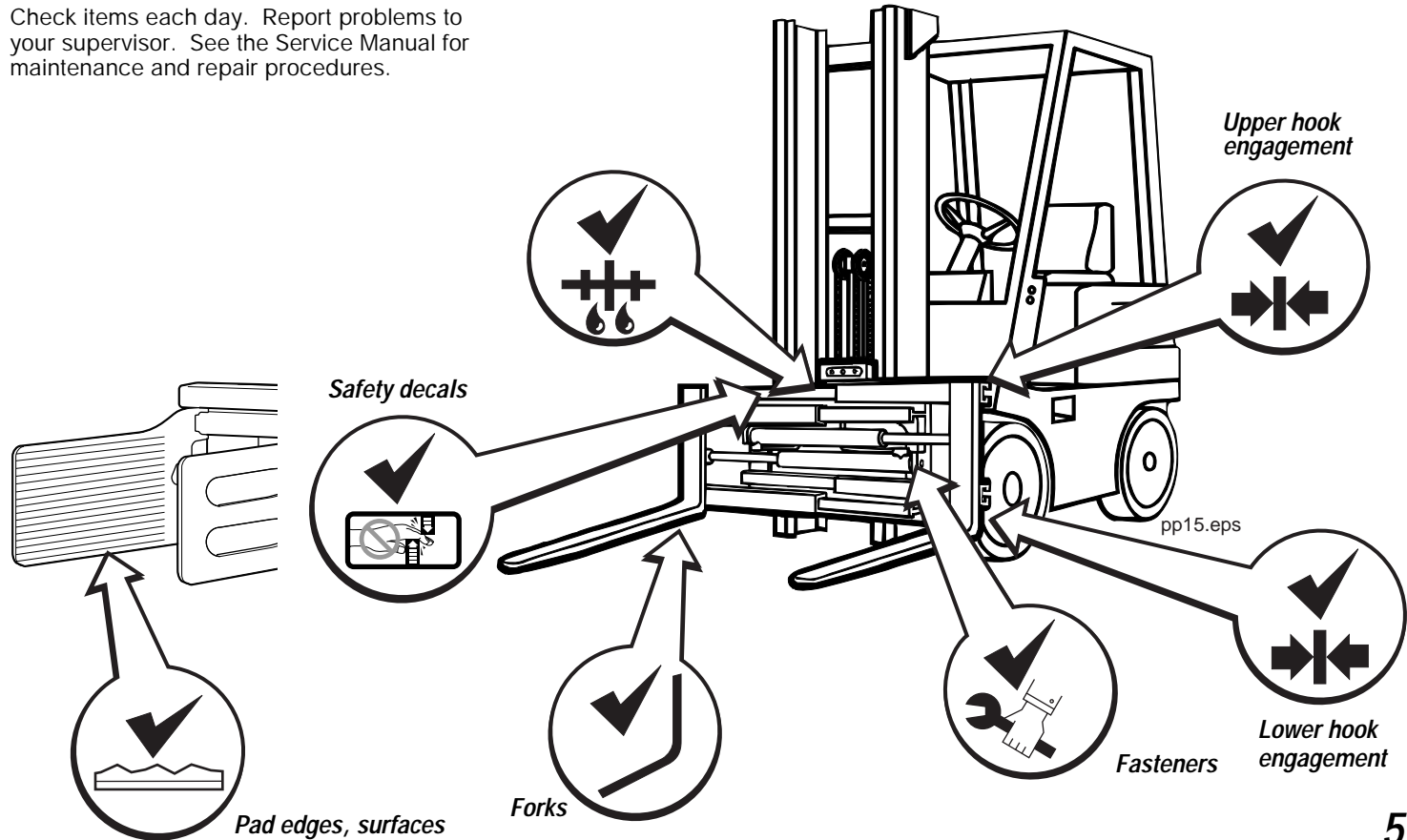


Center load prior to lifting and traveling.



DAILY INSPECTION

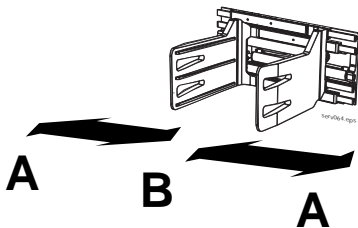
Check items each day. Report problems to your supervisor. See the Service Manual for maintenance and repair procedures.



ATTACHMENT OPERATION

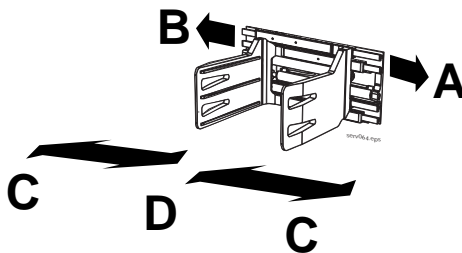
NON-SIDESHIFTING CLAMPS

- A** Open Arms
- B** Close Arms
- C** (not used)
- (not used)



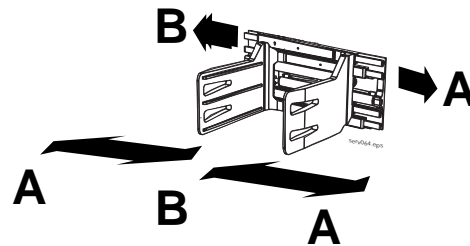
SIDESHIFTING CLAMPS

- A** Sideshift Left
- B** Sideshift Right
- C** Open Arms
- D** Close Arms

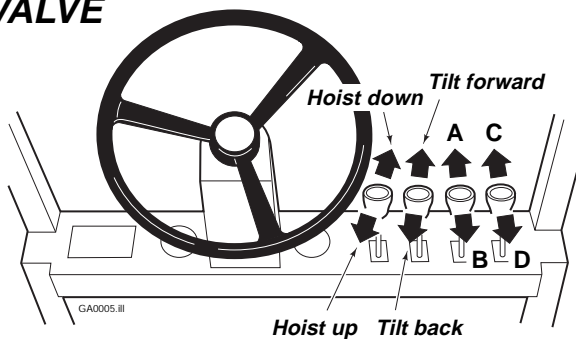


SIDESHIFTING WITH SOLENOID VALVE

- A** Sideshift Left
- A** Open Arms (Press knob button)
- B** Sideshift Right
- B** Close Arms (Press knob button)

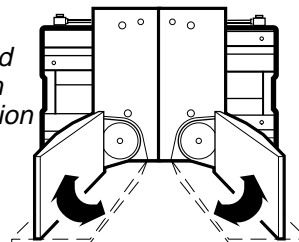


AUXILIARY VALVE FUNCTIONS



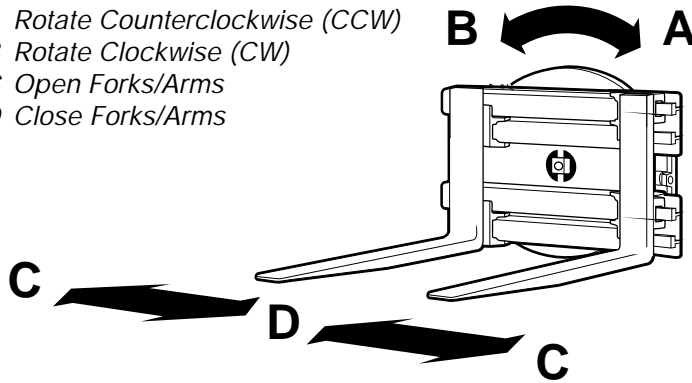
TURNAFORK™

Arms are actuated hydraulically from an auxiliary function fitted to your lift truck.

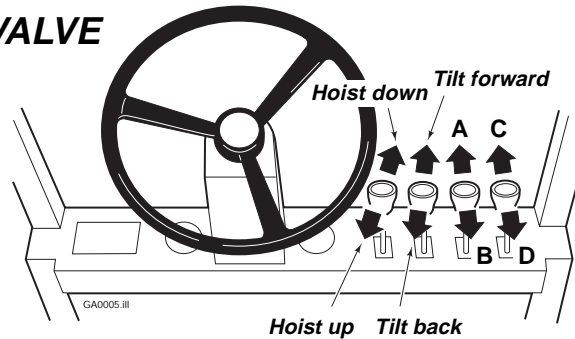


REVOLVING CLAMPS

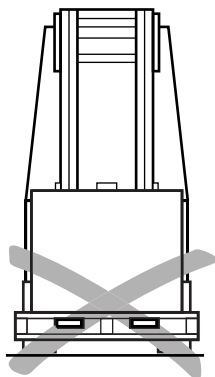
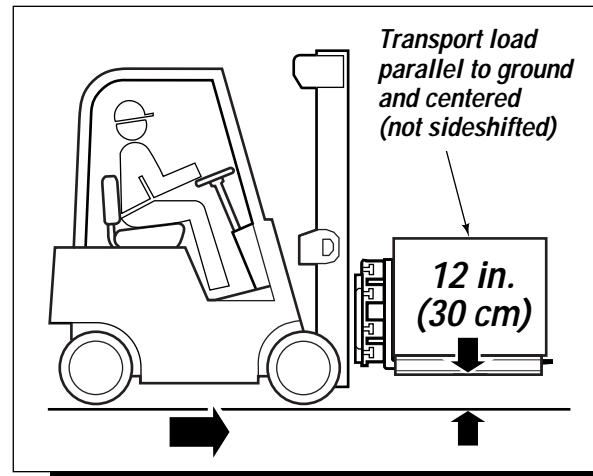
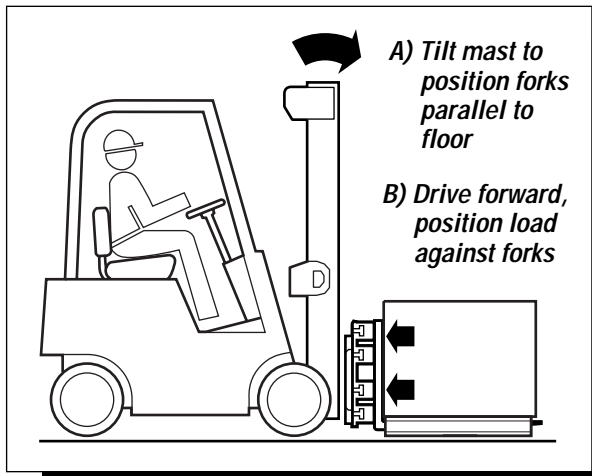
- A Rotate Counterclockwise (CCW)
- B Rotate Clockwise (CW)
- C Open Forks/Arms
- D Close Forks/Arms



AUXILIARY VALVE FUNCTIONS

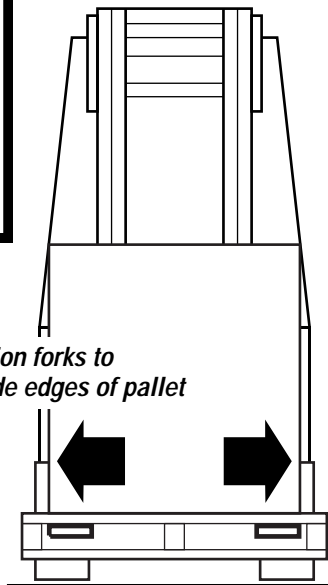


L OAD HANDLING – FORK CLAMPS

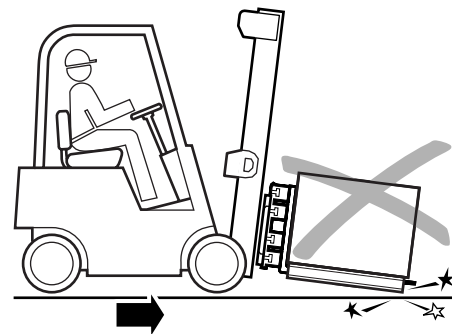


CL0028.iii

Position forks to outside edges of pallet

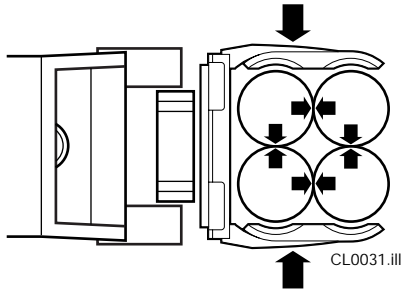


CL0029.iii



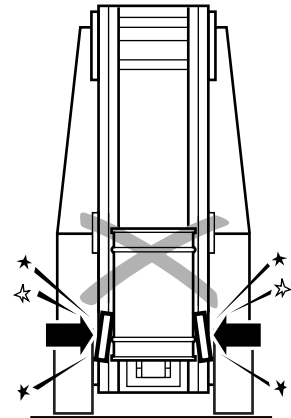
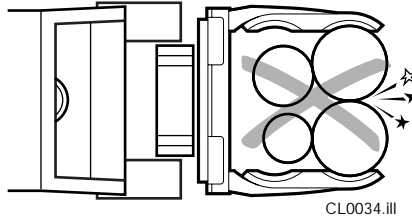
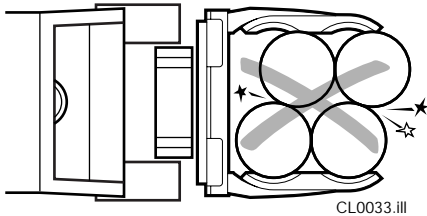
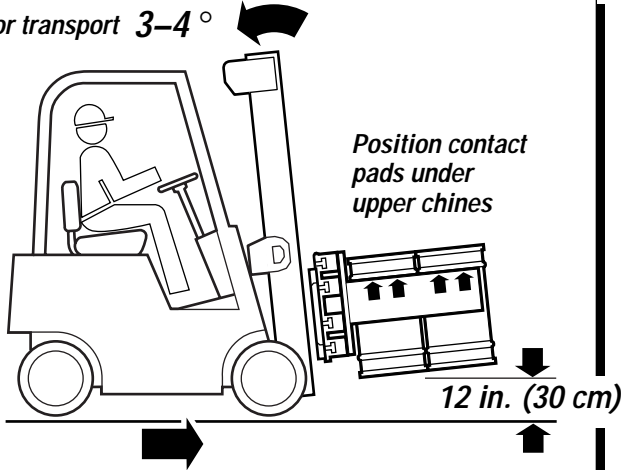
LOAD HANDLING – DRUM CLAMPS

A) Align drums squarely before clamping



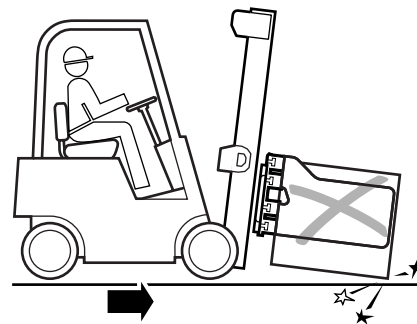
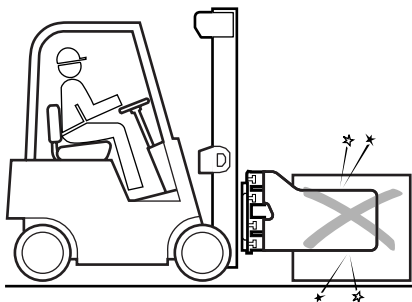
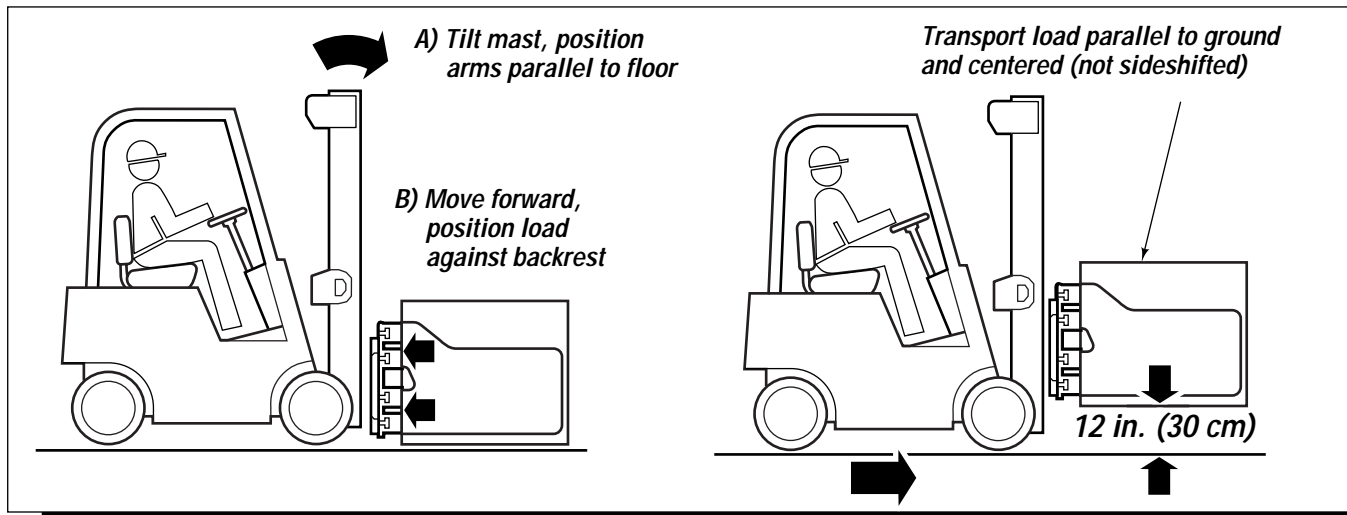
B) Use correct clamp pressure

Tilt back for transport 3–4°



L

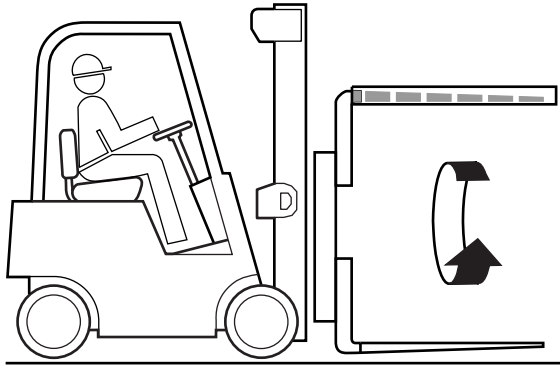
OAD HANDLING – MULTI-PURPOSE & BALE CLAMPS





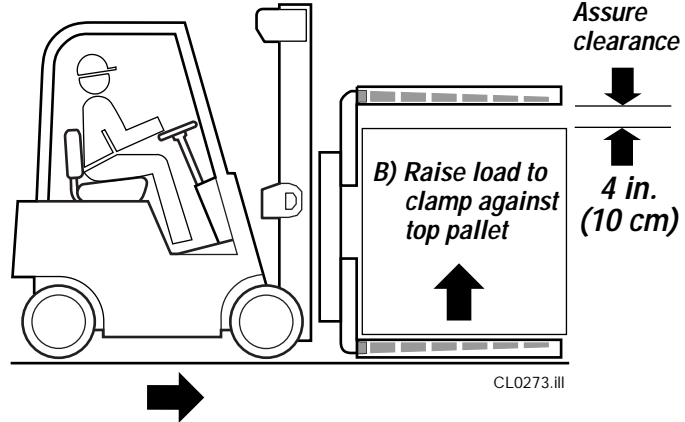
LOAD HANDLING – TURNALOAD™ CLAMP

Pick up empty pallet with top arm, rotate 180° to position pallet on top



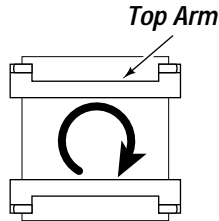
CL0271.III

A) Drive forward, pick up load

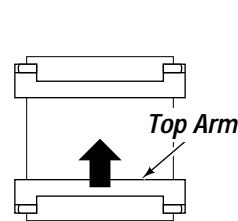


CL0273.III

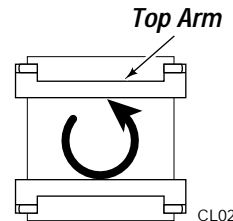
WARNING: If load is short and does not clamp firmly against top pallet, withdraw from load and reposition top arm as follows:



Rotate 180°



Adjust arm

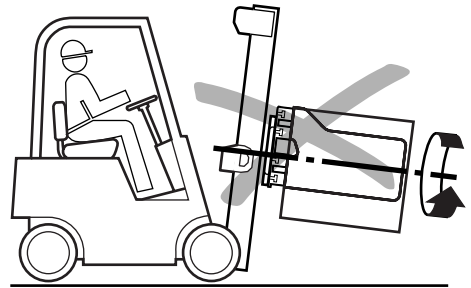
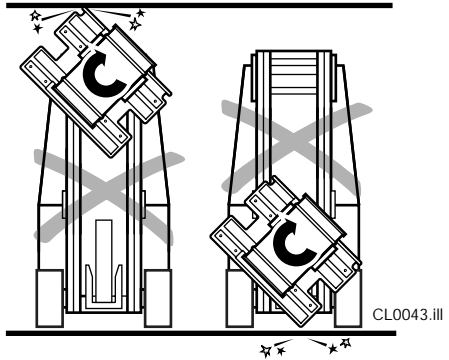
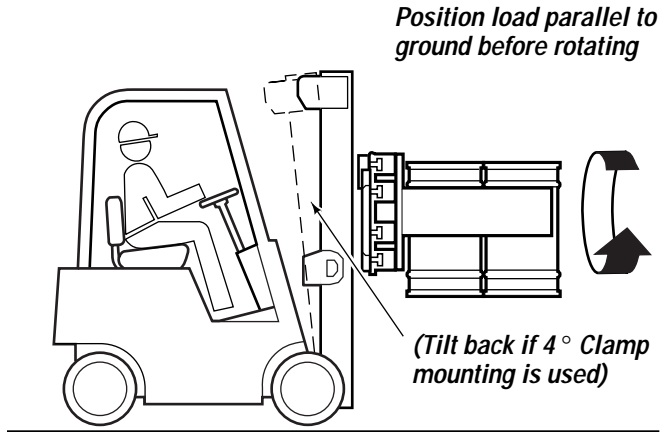
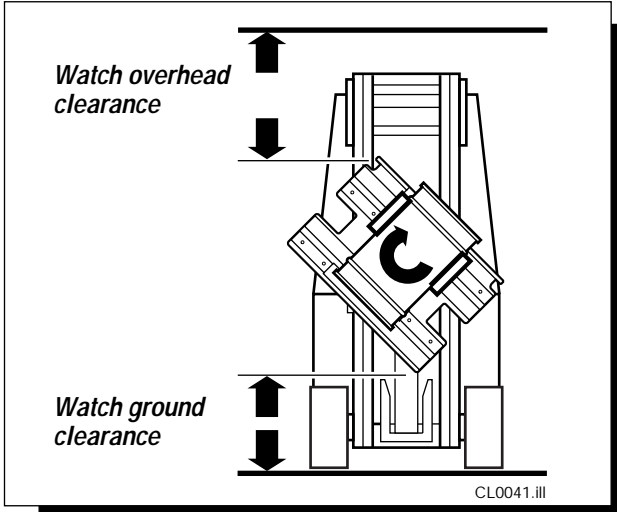


CL0221.III

Rotate 180° and reclamp

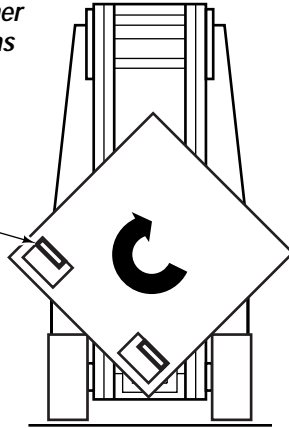
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OAD HANDLING – REVOLVING CLAMPS



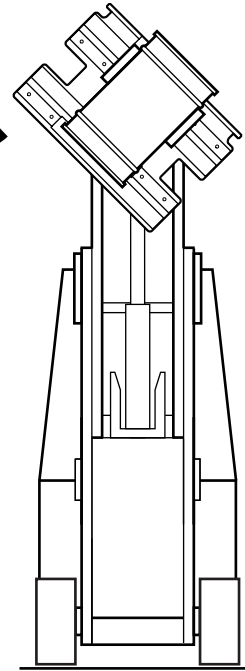
A) Make sure container or unitized load has captive fork slots before rotating

B) Position forks to outside edge of slots

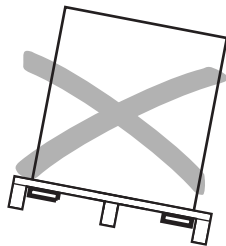


CL0045.iii

Rotate elevated loads slowly



CL0047.iii



CL0046.iii



SAFE OPERATION AND MAINTENANCE

OSHA Regulations – Industrial Trucks and Attachments (Specific Regulations from OSHA 1910.178)



WARNING: The safe operation and maintenance of industrial trucks is regulated by Occupational Safety and Health (OSHA) regulations 1910.178 and American National Standards Institute (ANSI) Safety Standard for Powered Industrial Trucks, ANSI B56.1-1969. When operating and maintaining industrial trucks equipped with attachments you should pay particular attention to the following sections of these regulations. You should be familiar with **all** sections of these regulations. **Ask your employer for the complete regulations.**

(a) General Requirement

- (4) Modifications and additions which affect capacity and safe operation shall not be performed by the customer or user without manufacturers prior written approval. Capacity, operation and maintenance instruction plates, tags or decals shall be changed accordingly.
- (5) If the truck is equipped with front-end attachments other than factory installed attachments, the user shall request that the truck be marked to identify the attachments and show the appropriate weight of the truck and attachment combination at maximum elevation with load laterally centered.
- (6) The user shall see that all nameplates and markings are in place and maintained in a legible condition.

(e) Safety Guards

- (2) If the type of load presents a hazard, the user shall equip fork trucks with a vertical load backrest extension in accordance with (a)(2) following.
 - (a)(2) All new powered industrial trucks acquired and used by an employer after February 15, 1972 shall meet the design and construction requirements for powered industrial trucks

established in the “American National Standard for Powered Industrial Trucks, Part II, ANSI B56.1-1969”, except for vehicles intended primarily for earth moving or over-the-road hauling.

(l) Operator Training

Only trained and authorized operators shall be permitted to operate a powered industrial truck. Methods shall be devised to train operators in the safe operation of powered industrial trucks.

(m) Truck Operations

- (1) Trucks shall not be driven up to anyone standing in front of a bench or other fixed object.
- (2) No person shall be allowed to stand or pass under the elevated portion of any truck, whether loaded or empty.
- (3) Unauthorized personnel shall not be permitted to ride on powered industrial trucks. A safe place to ride shall be provided where riding of trucks is authorized.
- (4) The employer shall prohibit arms or legs from being placed between the uprights of the mast or outside the running lines of the truck.
- (5i) When a powered industrial truck is left unattended, load engaging means shall be fully lowered, controls shall be neutralized, power shall be shut off and brakes set. Wheels shall be blocked if the truck is parked on an incline.
- (5ii) A powered industrial truck is unattended when the operator is 25 feet or more away from the vehicle which remains in his view, or whenever the operator leaves the vehicle and it is not in his view.
- (5iii) When the operator of an industrial truck is dismounted and within 25 feet of the truck still in his view, the load engaging means shall be fully lowered, controls neutralized and the brakes set to prevent movement.

- (6) A safe distance shall be maintained from the edge of ramps or platforms while on any elevated dock or platform or freight car. Trucks shall not be used for opening or closing freight doors.
- (10) A load backrest extension shall be used whenever necessary to minimize the possibility of the load or part of it from falling rearward.

(n) Traveling

- (4) The driver shall be required to slow down and sound the horn at cross isles and other locations where vision is obstructed. If the load being carried obstructs forward view, the driver shall be required to travel with the load trailing.
- (7i) When ascending or descending grades in excess of 10 percent, loaded trucks shall be driven with the load upgrade.
- (7iii) On all grades the load and load engaging means shall be tilted back if applicable, and raised only as far as necessary to clear the road surface.

(o) Loading

- (1) Only stable or safely arranged loads shall be handled. Caution shall be exercised when handling off-center loads which cannot be centered.
- (2) Only loads within the rated capacity of the truck shall be handled.
- (3) The long or high (including multiple-tiered) loads which may affect capacity shall be adjusted.
- (4) Trucks equipped with attachments shall be operated as partially loaded trucks when not handling a load.
- (5) A load engaging means shall be placed under the load as far as possible; the mast shall be carefully tilted backward to stabilize the load.

- (6) Extreme care shall be used when tilting the load forward or backward, particularly when high tiering. Tilting forward with load engaging means elevated shall be prohibited except to pick up a load. An elevated load shall not be tilted forward except when the load is in a deposit position over a rack or stack. When stacking or tiering, only enough backward tilt to stabilize the load shall be used.

(p) Operation of the Truck

- (1) If at any time a powered industrial truck is found to be in need of repair, defective, or in any way unsafe, the truck shall be taken out of service until it has been restored to safe operating condition.

(q) Maintenance of Industrial Trucks

- (1) Any power-operated industrial truck not in safe operating condition shall be removed from service. All repairs shall be made by authorized personnel.
- (5) All parts of any such industrial truck requiring replacement shall be replaced only by parts equivalent as to safety with those used in the original design.
- (6) Industrial trucks shall not be altered so that the relative positions of the various parts are different from what they were when originally received from the manufacturer, nor shall they be altered either by the addition of extra parts not provided by the manufacturer or by the elimination of any parts. Additional counter-weighting of fork trucks shall not be done unless approved by the truck manufacturer.
- (7) Industrial trucks shall be examined before being placed in service and shall not be placed in service if the examination shows any condition adversely affecting the safety of the vehicle. Such examinations shall be made at least daily. When industrial trucks are used on a round-the-clock basis, they shall be examined after each shift. Defects when found shall be immediately reported and corrected.

cascade^{Te}

**Do you have questions
you need answered right now?**

Toll Free Directline
1 800 777 650