

OPERATOR'S GUIDE

C, D & E-Series Carton Clamps

Manual Number 210273-R4

**cascade[®]
corporation**

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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.

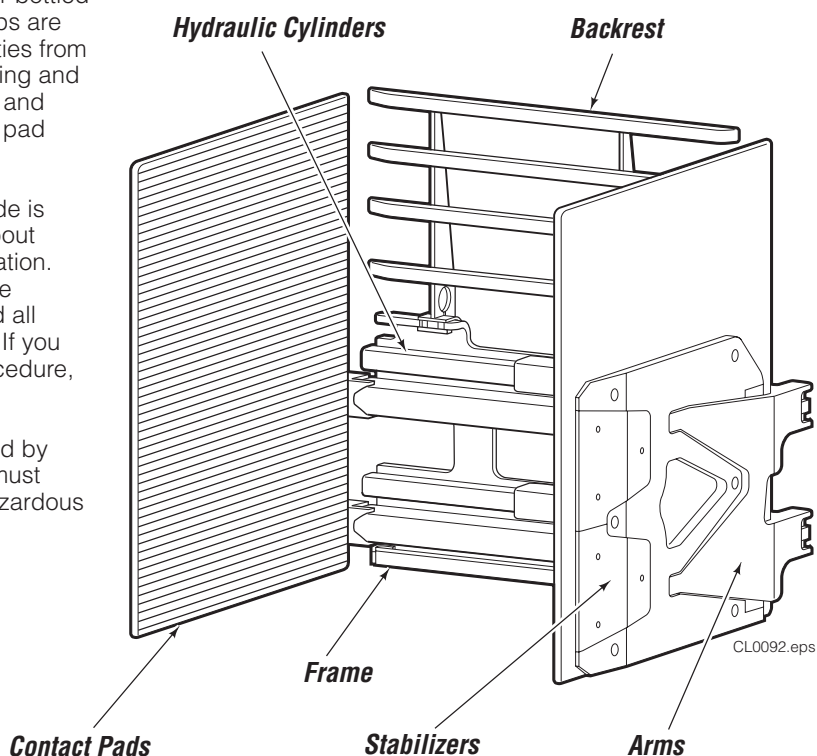
CAUTION: This guide shows load handling procedures for most products. Ask your company or organization about any special procedures for the loads you may be handling.

I NTRODUCTION

C, D & E-Series Carton Clamps – Cascade Carton Clamps are designed to handle unitized carton loads of a wide variety of products such as canned or bottled goods, soft case goods and appliances. Clamps are available in various pad sizes and load capacities from 1,500 to 7,000 lbs. for transport, stacking, loading and unloading. Carton Clamps can be sideshifting and can have grooved aluminum or rubber contact pad surfaces.

About this Guide – The information in this guide is intended to simplify operator understanding about effective and safe Carton Clamp use and operation. Read this 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 poorly maintained equipment and hazardous situations and correct them.



S SAFETY RULES

Industrial Lift Trucks

No riders



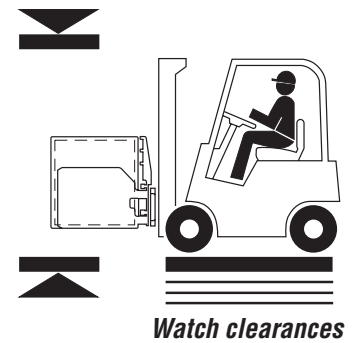
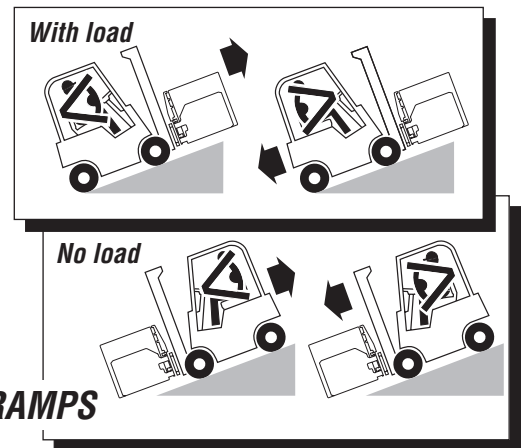
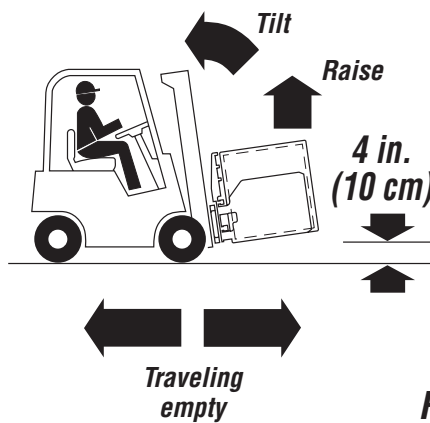
No reaching through mast



No standing under load

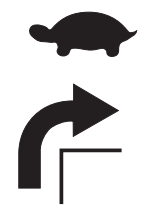
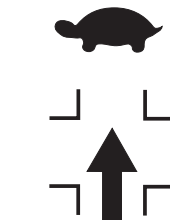
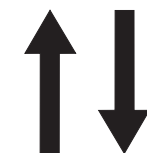


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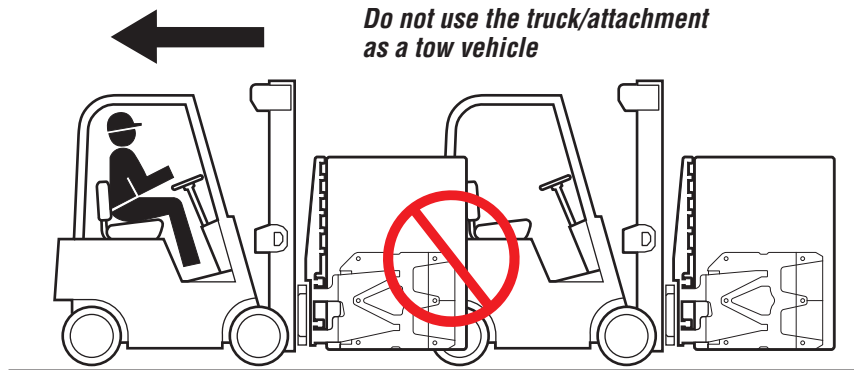
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TRAFFIC



S SAFETY RULES

Industrial Lift Trucks

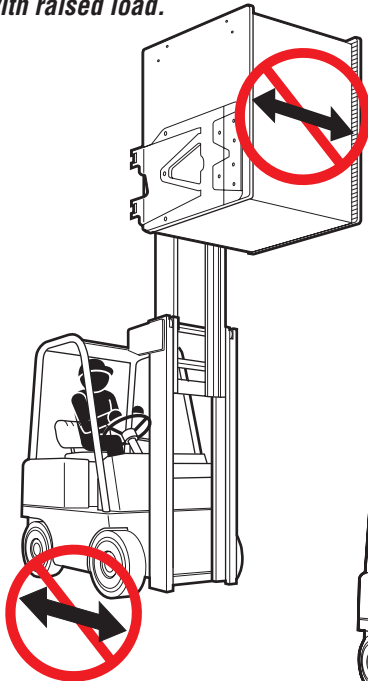


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S SAFETY RULES

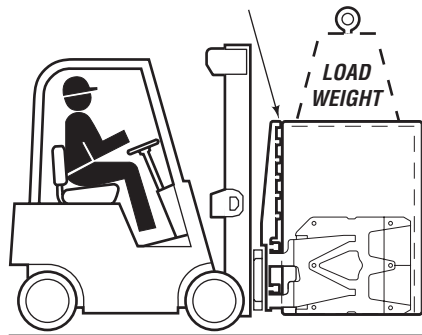
Handling Loads

Limit sideshifting with raised load.

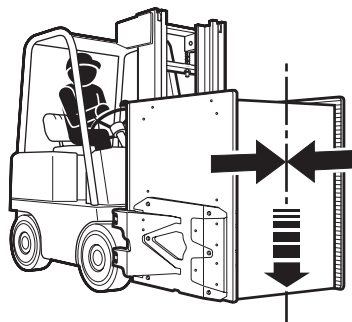


Limit truck movement with raised load.

Top of load must not extend above backrest.



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



Center load prior to lifting and traveling.

Check for slipping loads (see Load Troubleshooting, pgs 9-10).

No unclamped loads on top.



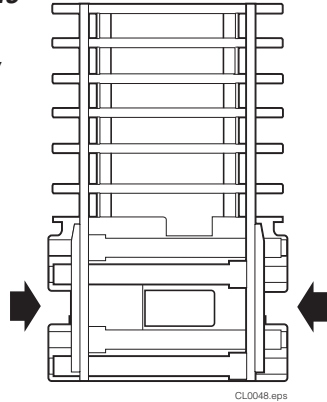
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S SAFETY RULES

Handling Loads

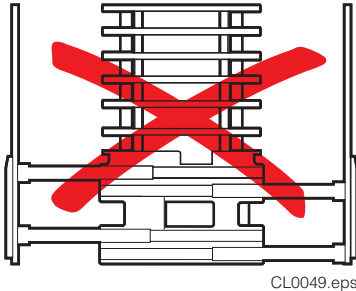
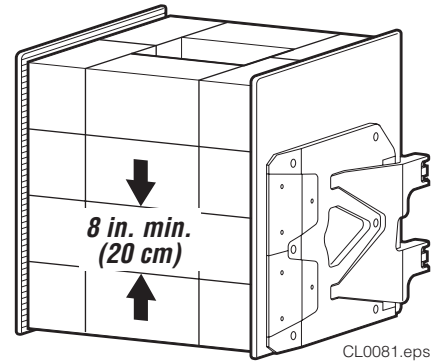
KEEP CLAMP ARMS INSIDE FRAME:

- Traveling empty
- Going into trailers empty
- Backing out of trailers empty

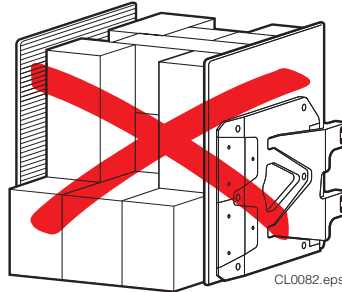


STACK LOADS PROPERLY:

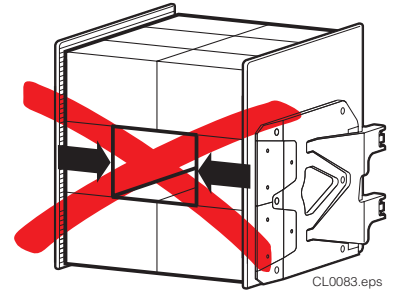
- Square all cartons
- All cartons clamped
- All tiers same dimension



No extended arms without load



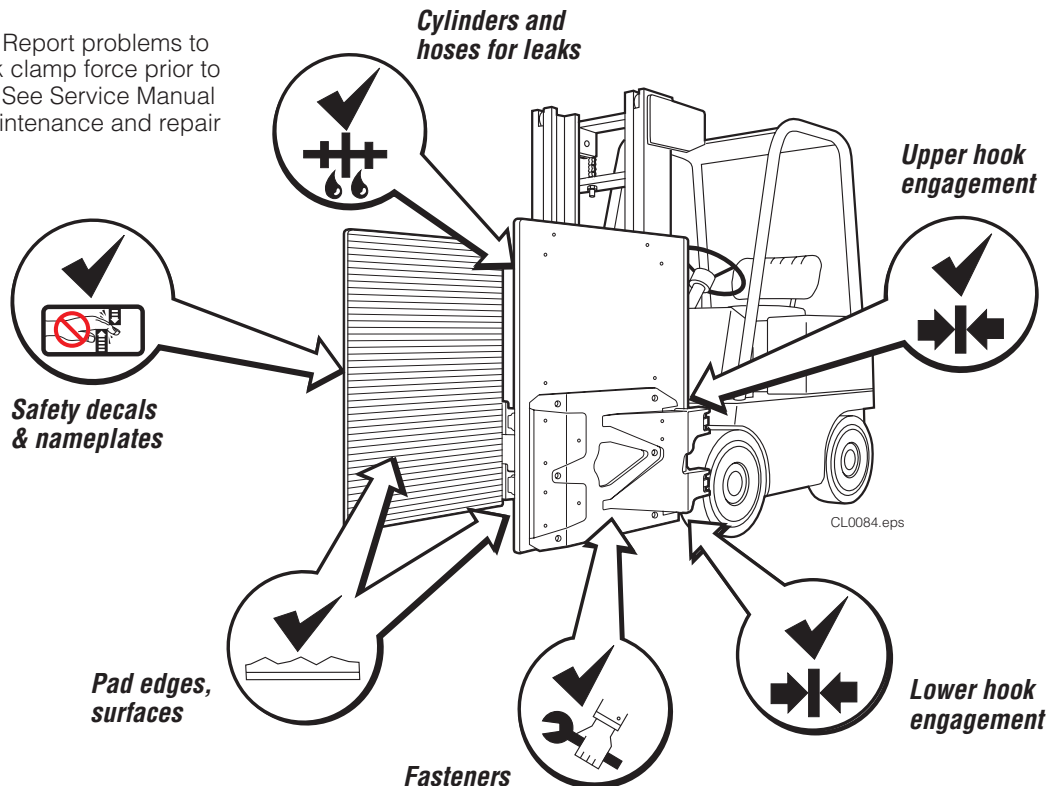
No loose cartons



No voids in load

D DAILY INSPECTION

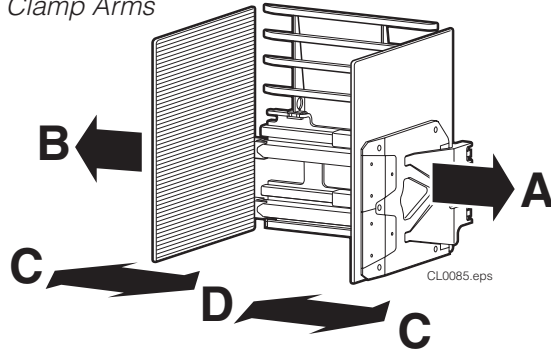
Check items each day. Report problems to your supervisor. Check clamp force prior to each operational shift. See Service Manual for troubleshooting, maintenance and repair procedures.



C LAMP OPERATION

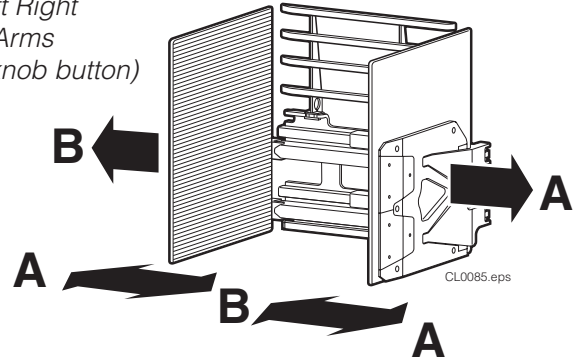
CLAMP/SIDESHIFT

- A** Sideshift Left
- B** Sideshift Right
- C** Release Arms
- D** Clamp Arms



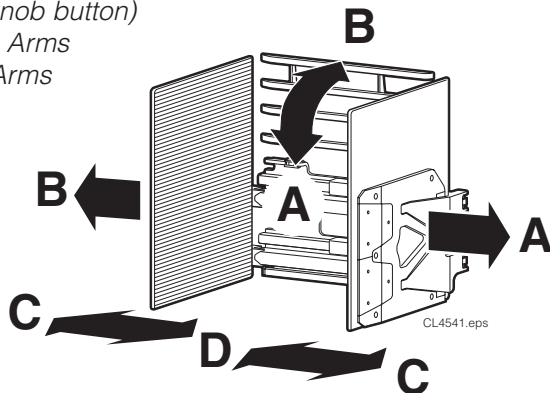
SIDESHIFTING WITH SOLENOID VALVE

- A** Sideshift Left
- A** Release Arms
(Press knob button)
- B** Sideshift Right
- B** Clamp Arms
(Press knob button)



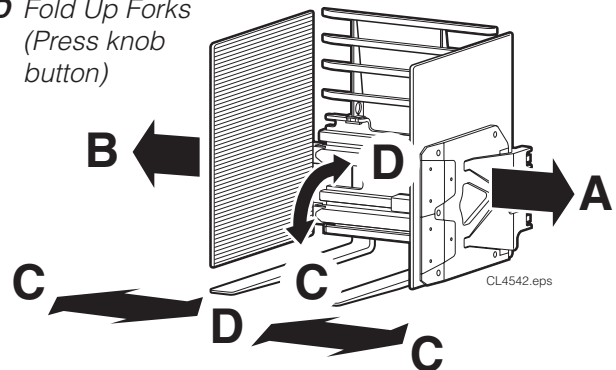
SIDESHIFTING WITH TIPPING

- A** Sideshift Left
- A** Tip Forward
(Press knob button)
- B** Sideshift Right
- B** Tip Back
(Press knob button)
- C** Release Arms
- D** Clamp Arms

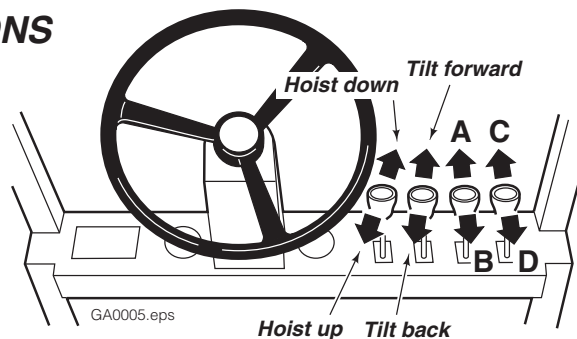


SIDESHIFTING WITH FOLD UP FORKS

- A** Sideshift Left
- B** Sideshift Right
- C** Release Arms
- C** Unfold Forks
(Press knob button)
- D** Clamp Arms
- D** Fold Up Forks
(Press knob button)



AUXILIARY VALVE FUNCTIONS

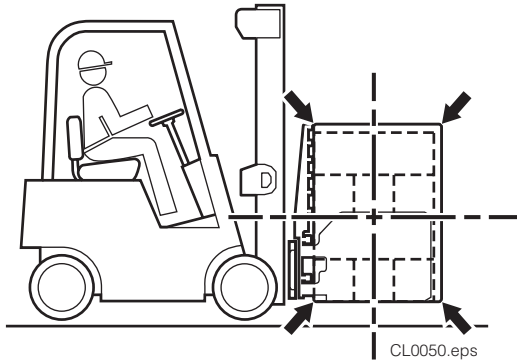


LOAD HANDLING

Basics

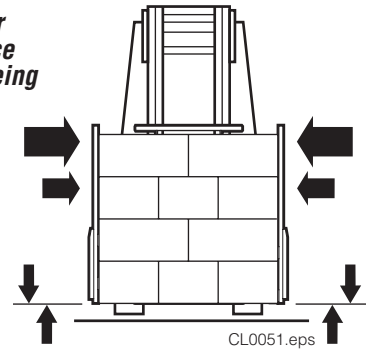
CLAMPING LOADS

A) Clamp load squarely between pads

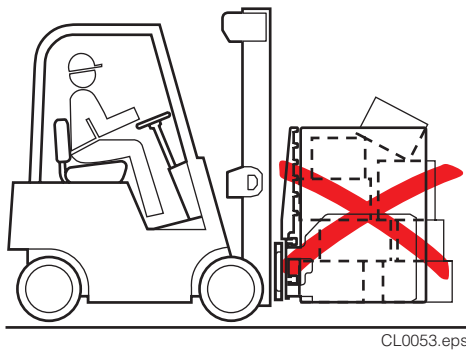


B) Pads must cover full cube of load

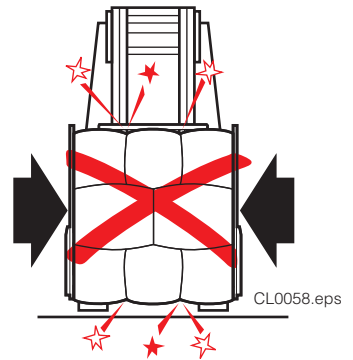
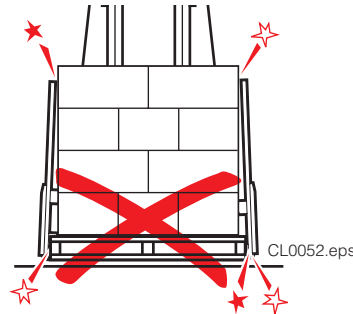
A) Use proper clamp force for load being handled



B) Align bottom of load or pallet with bottom of pad edges



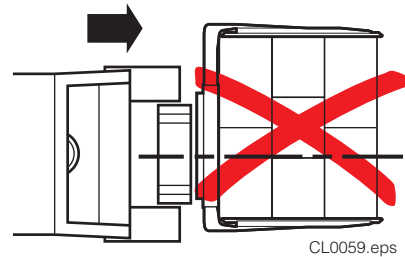
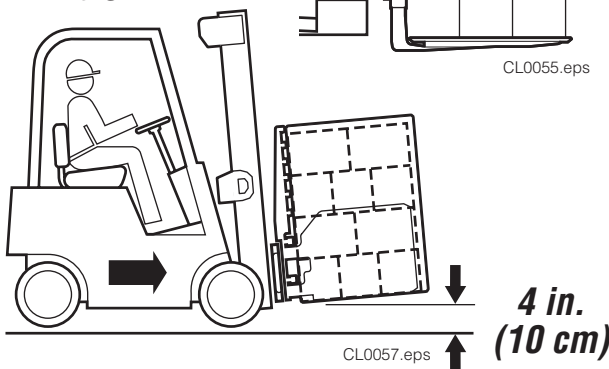
CAUTION: Avoid load/pad damage by assuring pallet is same size as load



CARRYING LOADS

Center load, tilt back, raise clear of floor

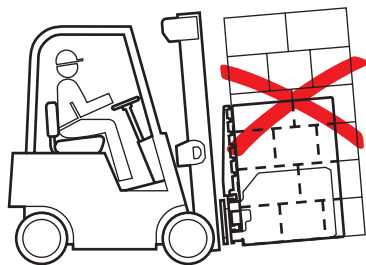
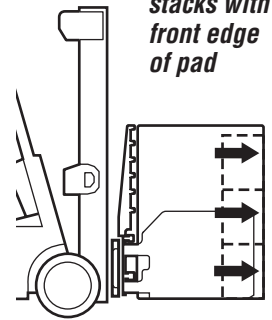
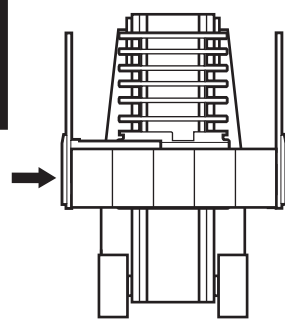
Tilt 3-4°



SKIMMING LOADS

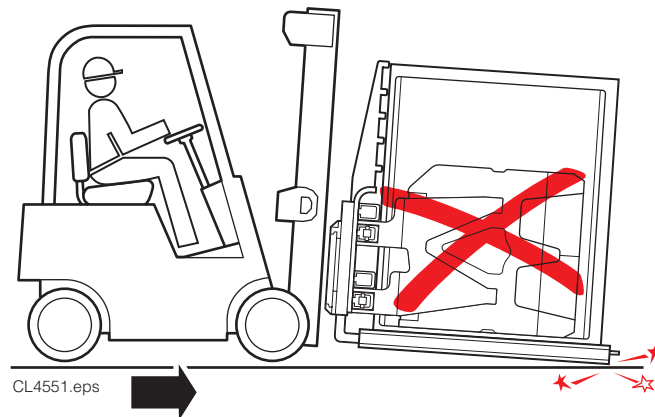
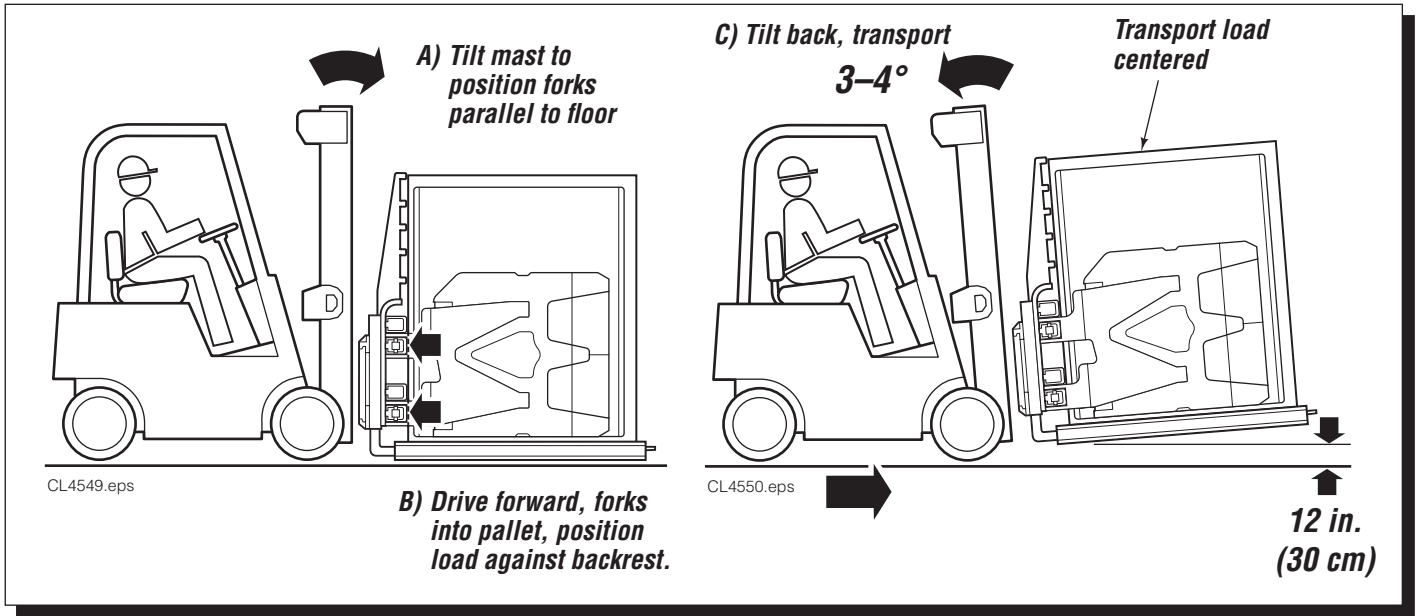
A) Use lower clamp pressure

B) Align single stacks with front edge of pad



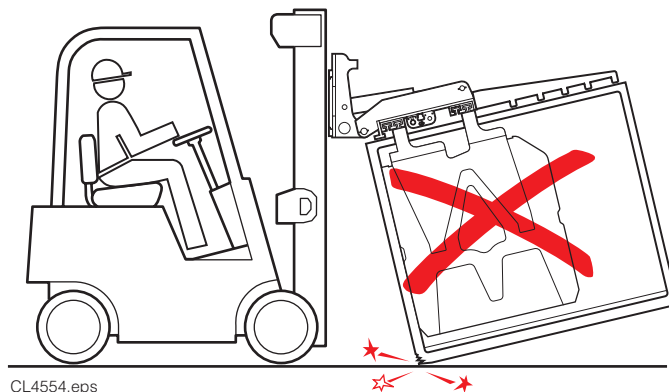
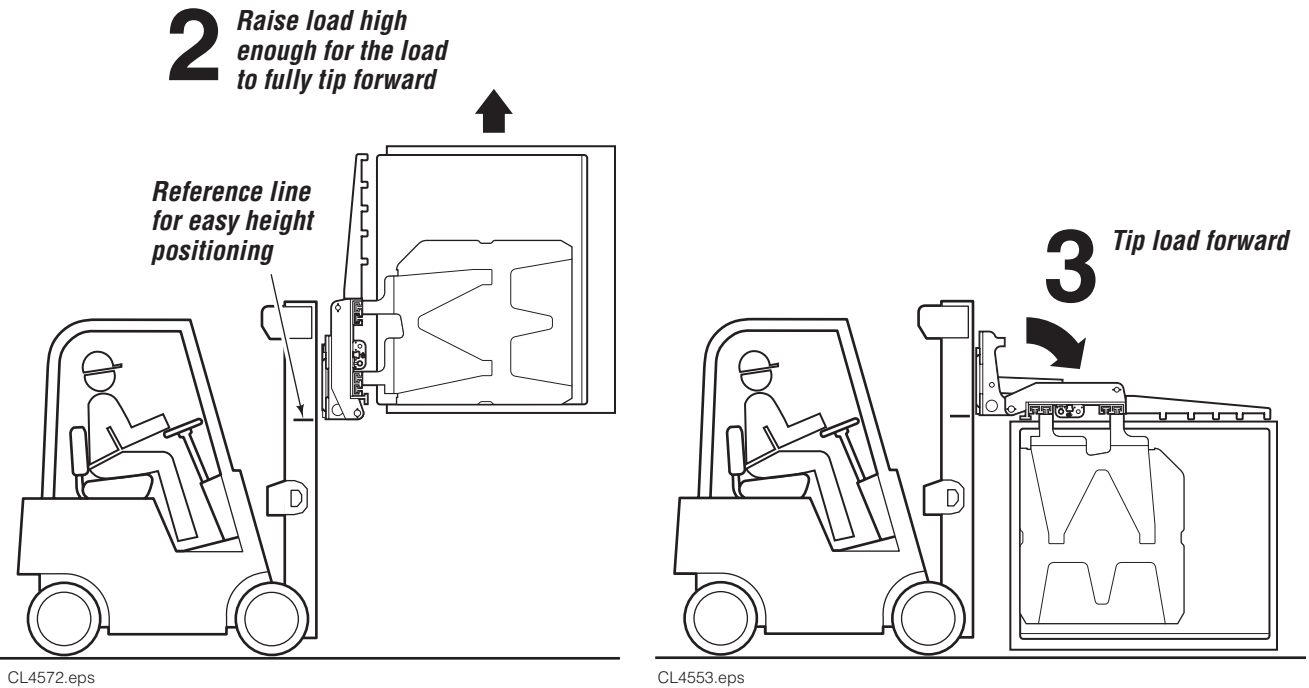
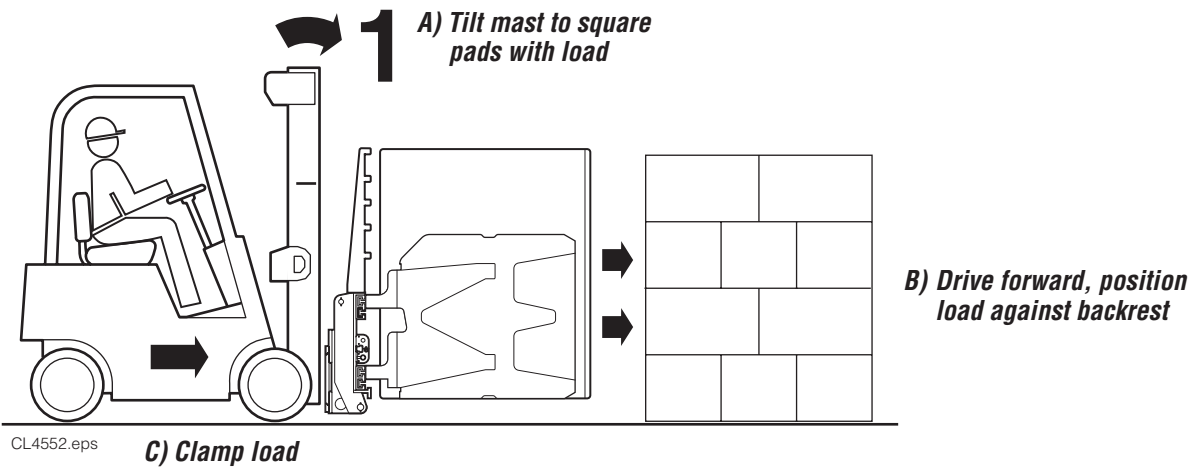
LOAD HANDLING

Fold-Up Forks

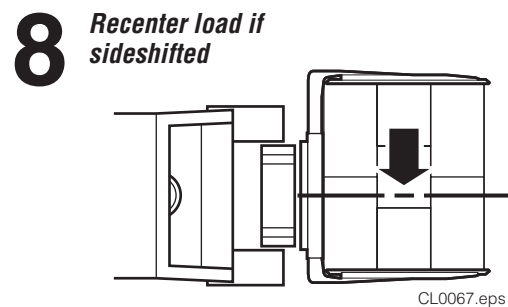
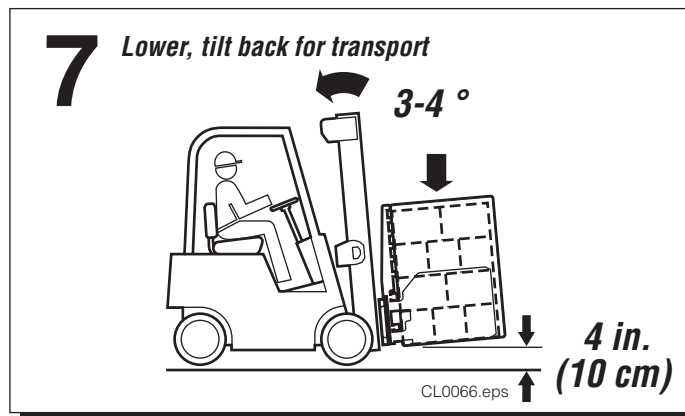
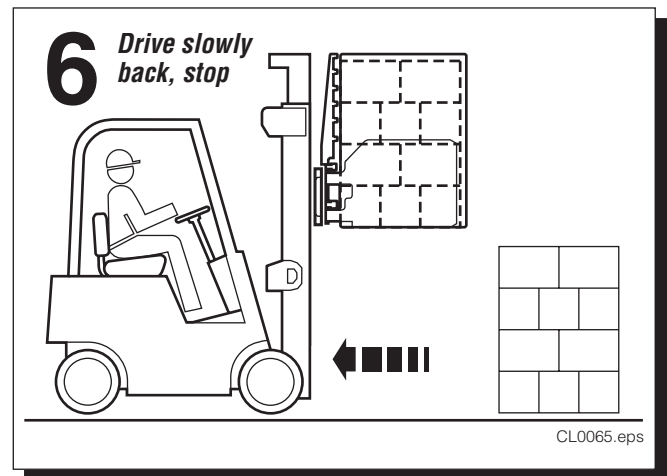
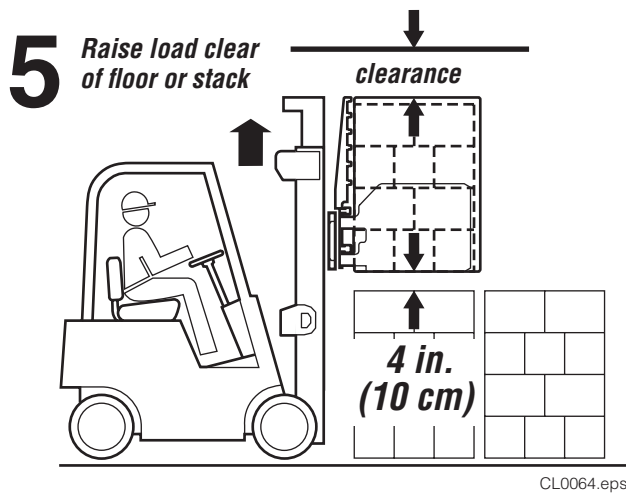
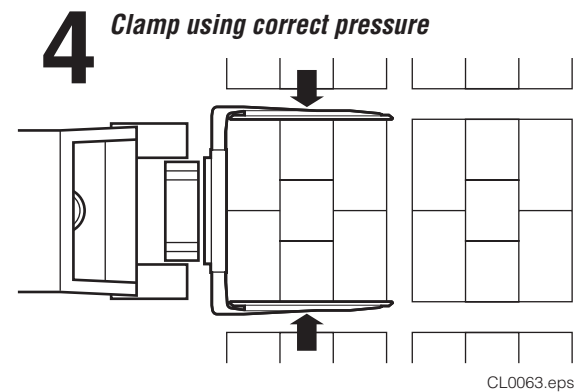
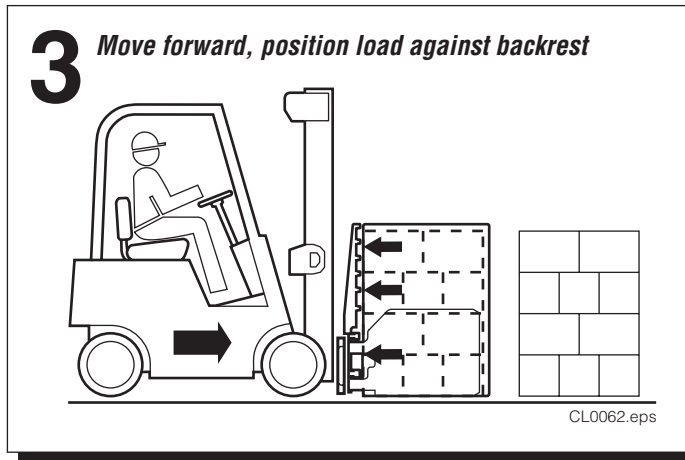
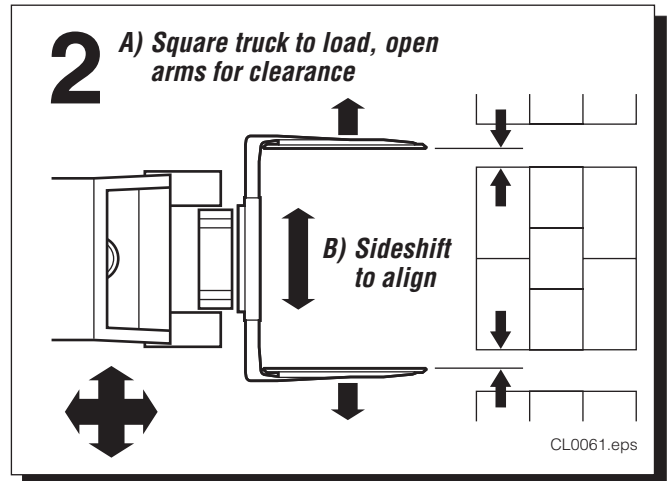
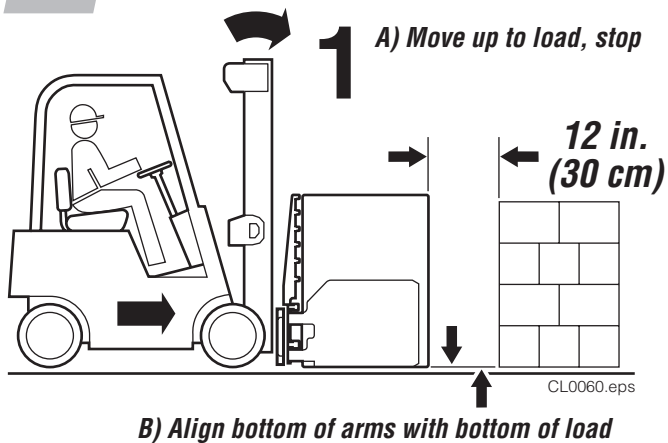


LOAD HANDLING

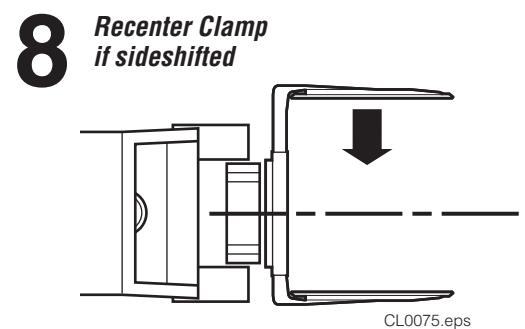
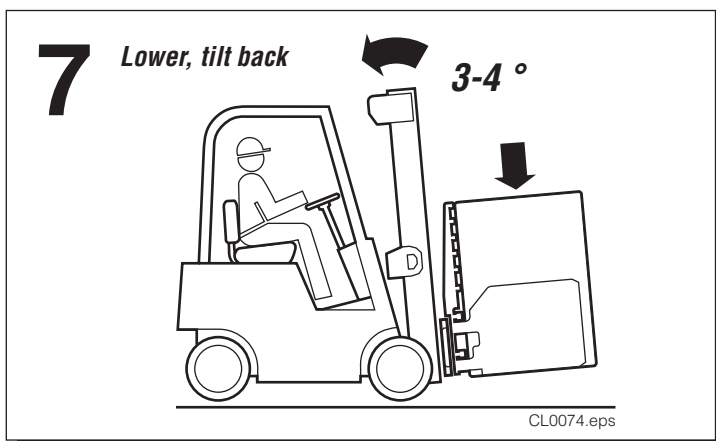
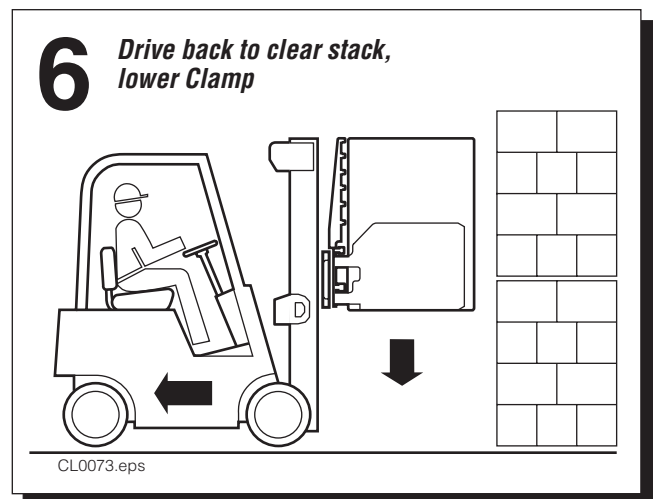
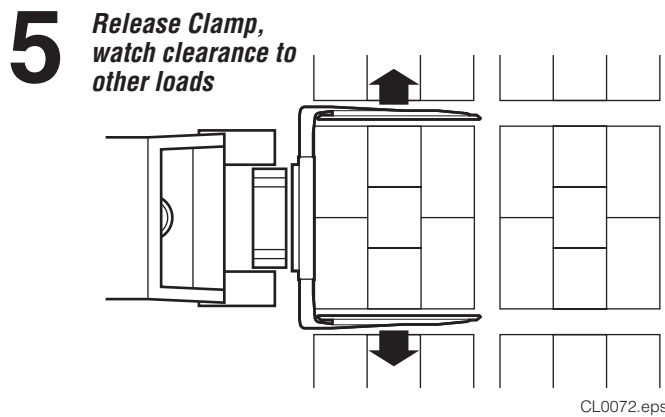
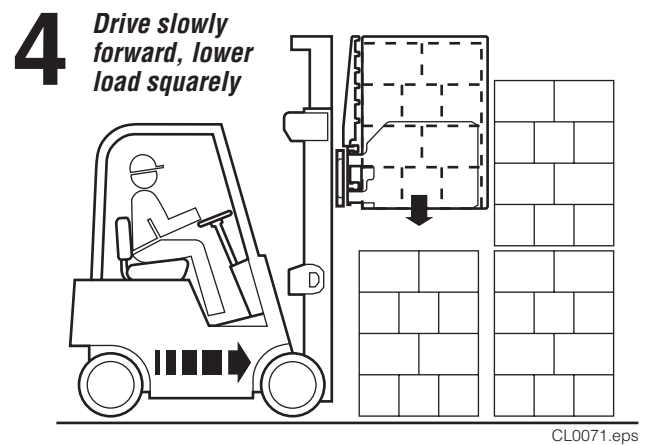
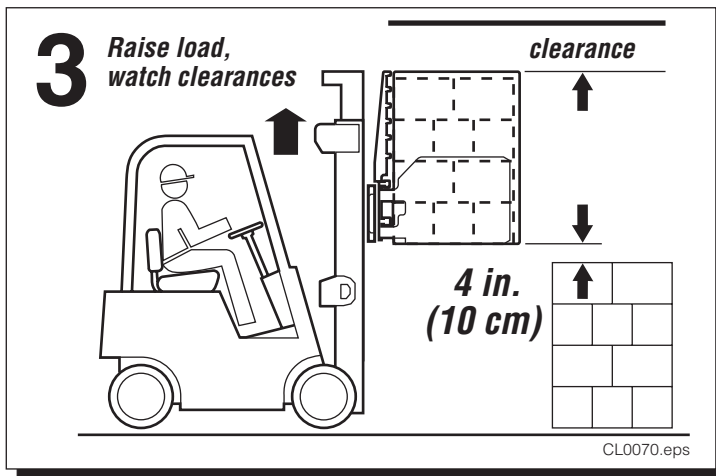
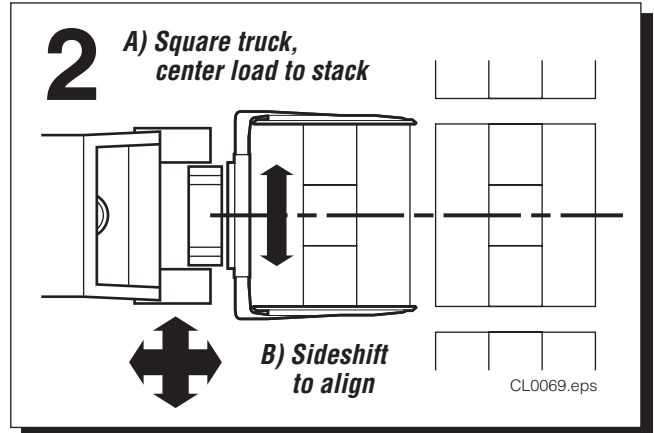
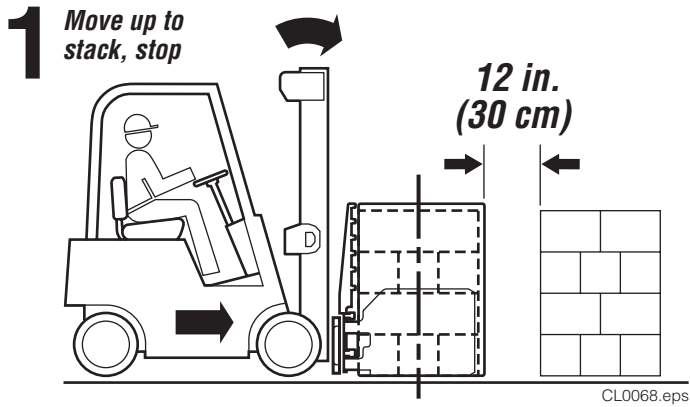
Tipping

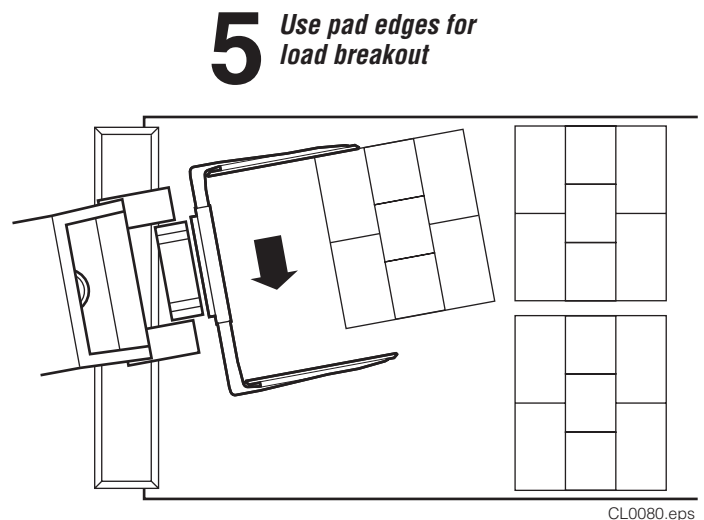
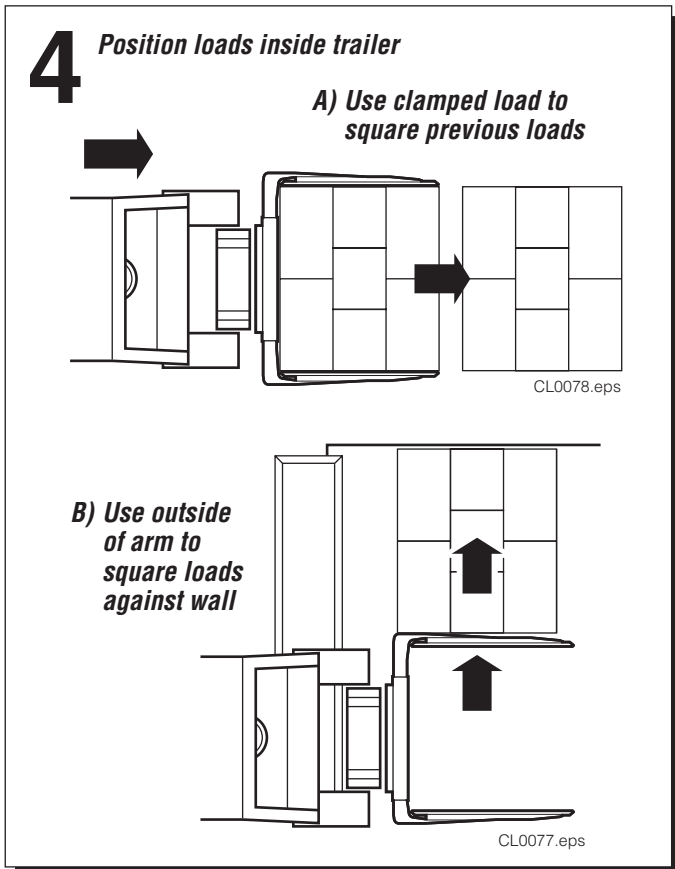
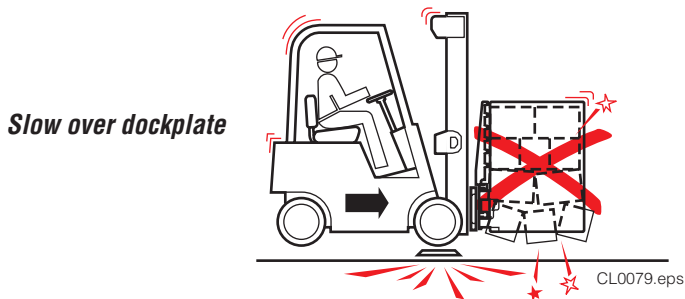
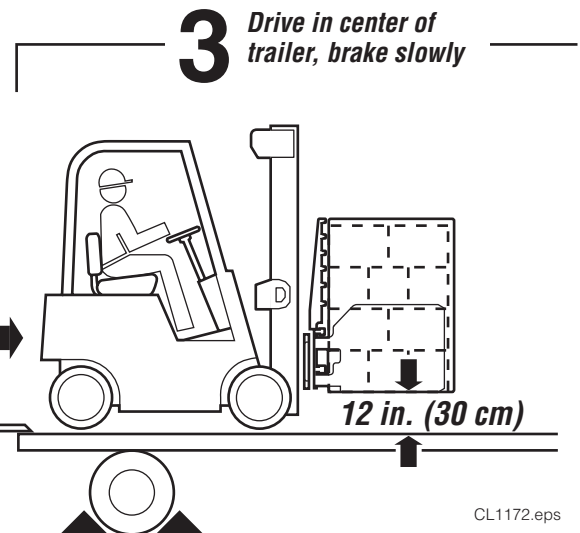
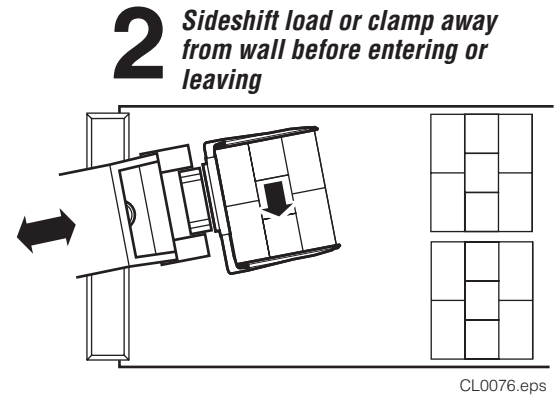
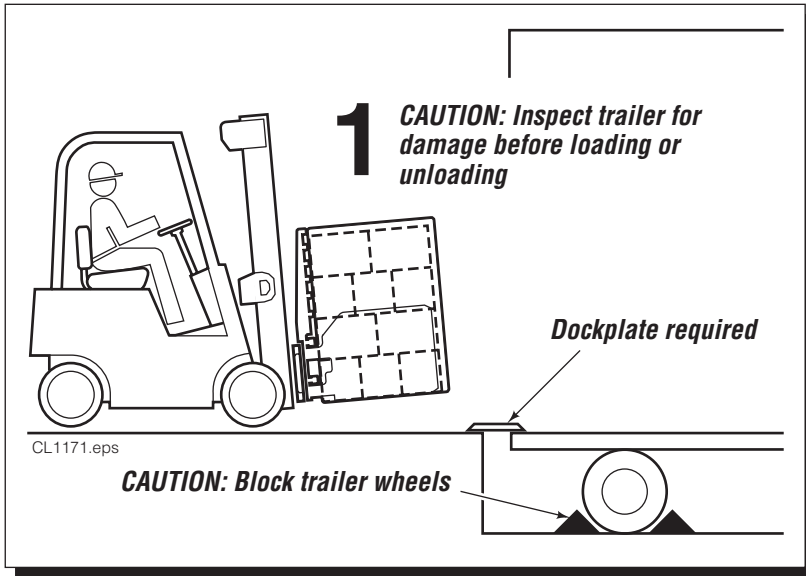


PICKING UP LOADS



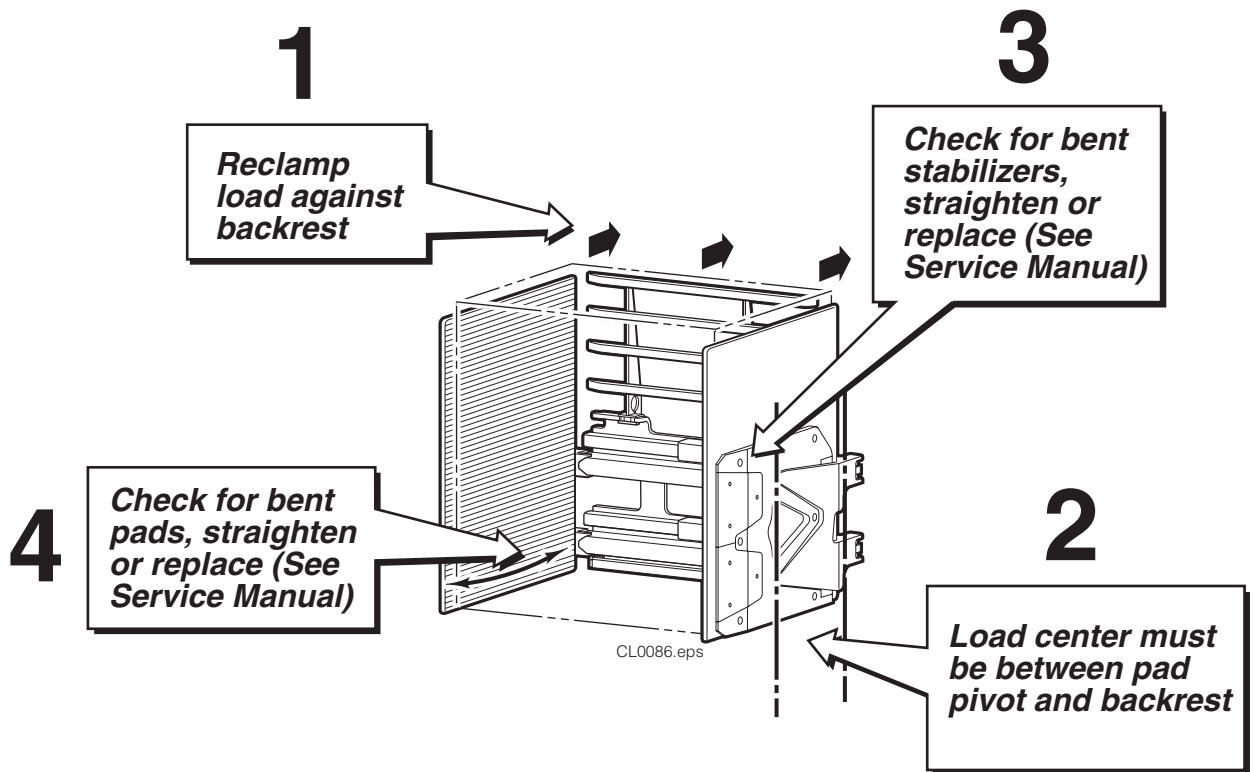
S TACKING LOADS



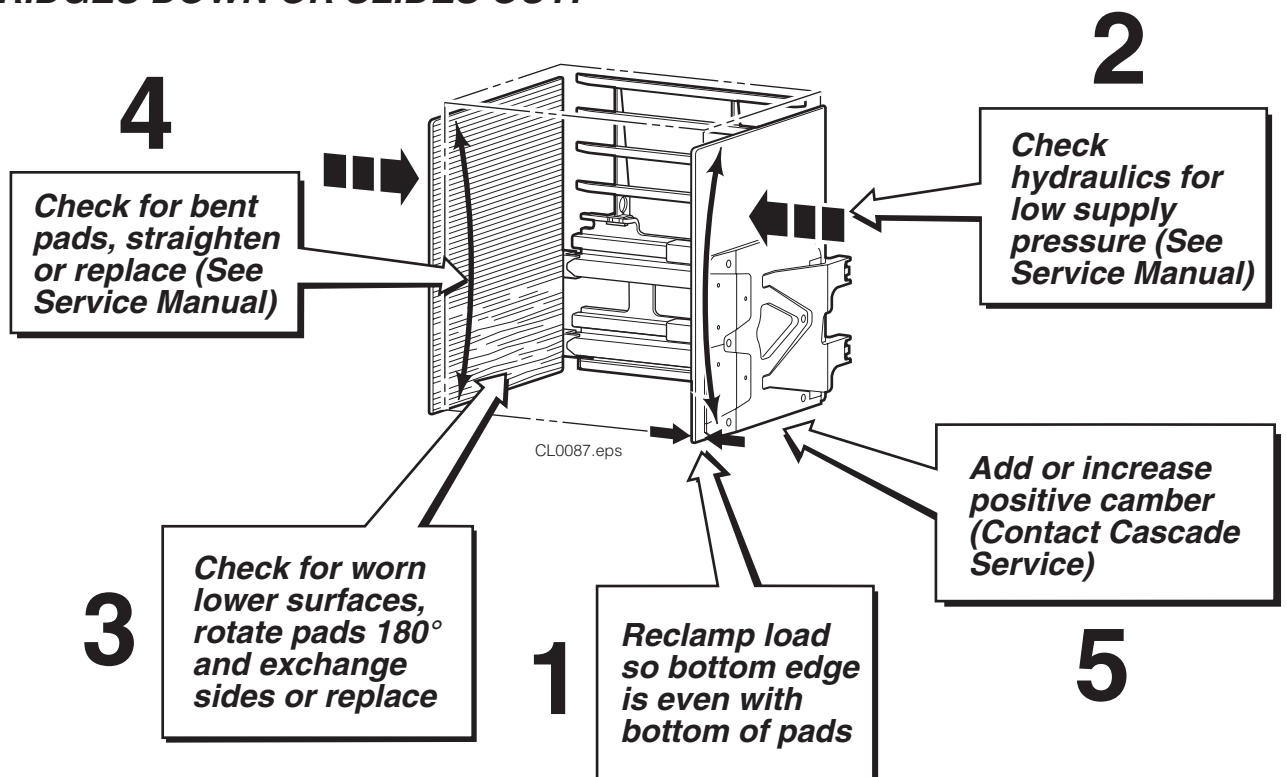


LOAD TROUBLESHOOTING

IF FRONT STACK OF LOAD TILTS OUT:

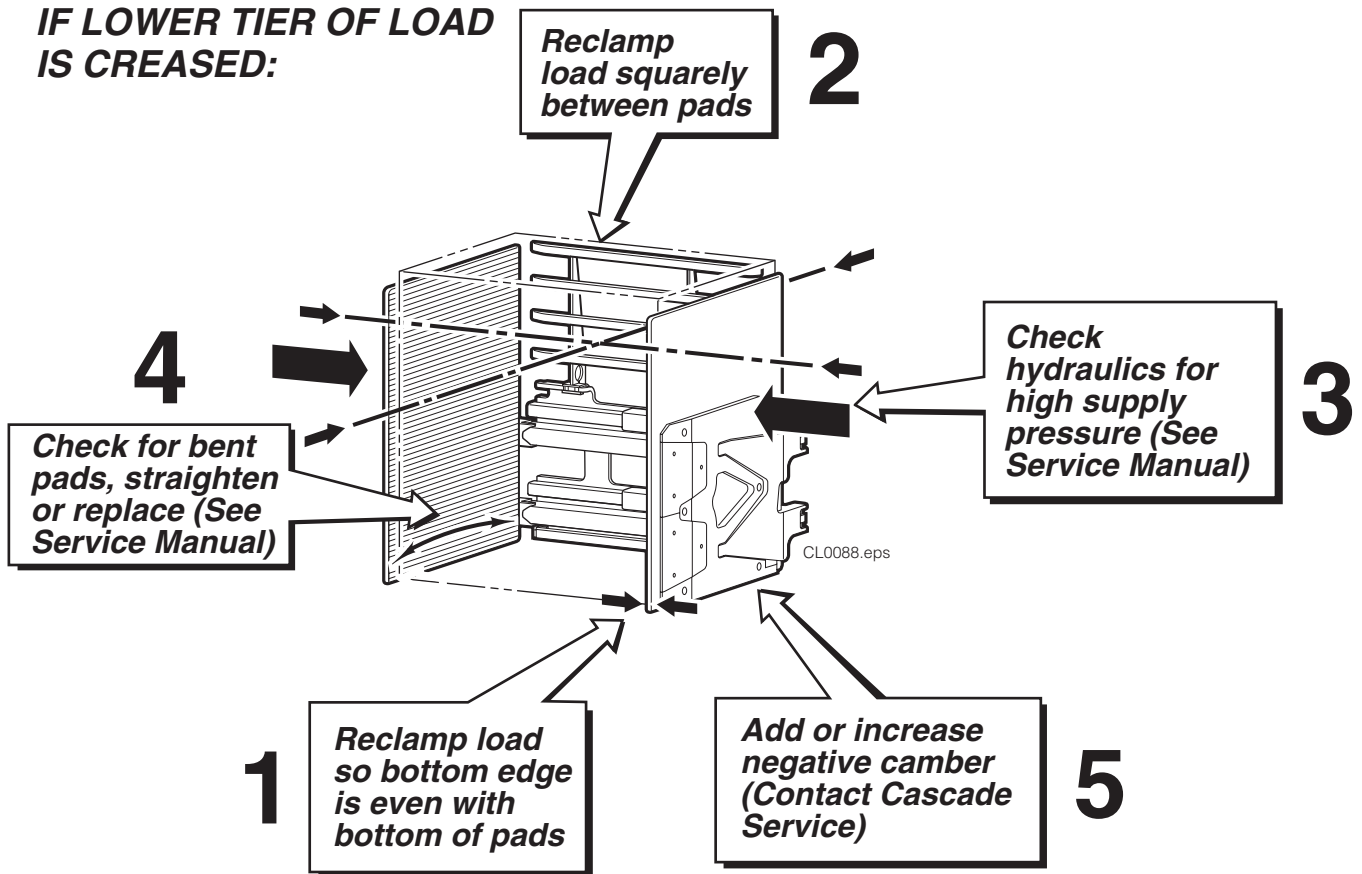


IF LOWER TIER OF LOAD BRIDGES DOWN OR SLIDES OUT:



LOAD TROUBLESHOOTING

IF LOWER TIER OF LOAD IS CREASED:





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. 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 manufacturer's 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, ANSI B56.1", except for vehicles intended primarily for earth moving or over-the-road hauling.

(i) 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.

Do you have questions you need answered right now?

Call your nearest Cascade Service Department.

Visit us online at www.cascorp.com

AMERICAS

**Cascade Corporation
U.S. Headquarters**

2201 NE 201st
Fairview, OR 97024-9718
Tel: 800-CASCADE (227-2233)
Fax: 888-329-8207

Cascade Canada Inc.

5570 Timberlea Blvd.
Mississauga, Ontario
Canada L4W-4M6
Tel: 905-629-7777
Fax: 905-629-7785

Cascade do Brasil

Rua João Guerra, 134
Macuco, Santos - SP
Brasil 11015-130
Tel: 55-13-2105-8800
Fax: 55-13-2105-8899

EUROPE-AFRICA

**Cascade Italia S.R.L.
European Headquarters**

Via Dell'Artigianato 1
37030 Vago di Lavagno (VR)
Italy
Tel: 39-045-8989111
Fax: 39-045-8989160

Cascade (Africa) Pty. Ltd.

PO Box 625, Isando 1600
60A Steel Road
Sparton, Kempton Park
South Africa
Tel: 27-11-975-9240
Fax: 27-11-394-1147

ASIA-PACIFIC

Cascade Japan Ltd.

2-23, 2-Chome,
Kukuchi Nishimachi
Amagasaki, Hyogo
Japan, 661-0978
Tel: 81-6-6420-9771
Fax: 81-6-6420-9777

Cascade Korea

121B 9L Namdong Ind.
Complex, 691-8 Gojan-Dong
Namdong-Ku
Inchon, Korea
Tel: +82-32-821-2051
Fax: +82-32-821-2055

Cascade-Xiamen

No. 668 Yangguang Rd.
Xinyang Industrial Zone
Haicang, Xiamen City
Fujian Province
P.R. China 361026
Tel: 86-592-651-2500
Fax: 86-592-651-2571

**Cascade India Material
Handling Private Limited**

No 34, Global Trade Centre
1/1 Rambaugh Colony
Lal Bahadur Shastri Road,
Navi Peth, Pune 411 030
(Maharashtra) India
Phone: +91 020 2432 5490
Fax: +91 020 2433 0881

Cascade Australia Pty. Ltd.

1445 Ipswich Road
Rocklea, QLD 4107
Australia
Tel: 1-800-227-223
Fax: +61 7 3373-7333

Cascade New Zealand

15 Ra Ora Drive
East Tamaki, Auckland
New Zealand
Tel: +64-9-273-9136
Fax: +64-9-273-9137

**Sunstream Industries
Pte. Ltd.**

18 Tuas South Street 5
Singapore 637796
Tel: +65-6795-7555
Fax: +65-6863-1368

