

# **USER MANUAL**

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**Z-Series**

***Fork Positioner***

***Manual Number 6985320-R1***

**cascade<sup>®</sup>  
corporation**

Cascade is a Registered Trademark of Cascade Corporation

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## INTRODUCTION

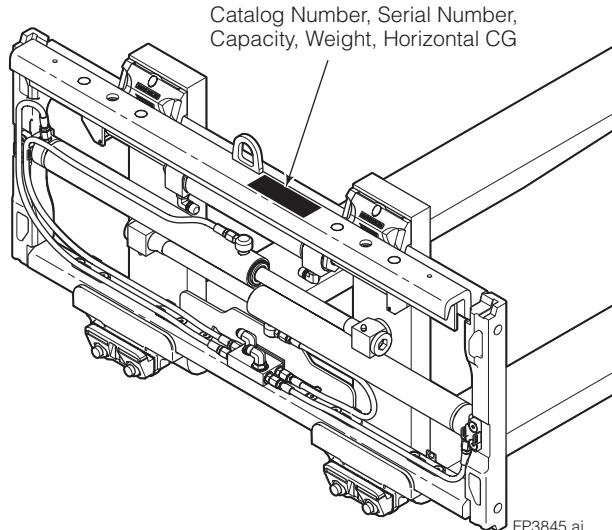
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This user manual is for the Cascade Z-Series Fork Positioner. Contents include an Operator Guide, Installation Instructions, Periodic Maintenance and Recommended Spare Parts.

**NOTE:** All specifications are shown in US and (Metric) units where applicable. All fasteners have a torque value range of  $\pm 10\%$  of stated value.

**IMPORTANT:** All hoses and fittings on these attachments are JIC.

**IMPORTANT:** Field alterations may impair performance or capability and could result in loss of warranty. Consult Cascade for any required modifications.



Back (Driver's) View

# INTRODUCTION

## Special Definitions

The statements shown appear throughout this manual where special emphasis is required. Read all **WARNINGS** and **CAUTIONS** before proceeding with any work. Statements labeled **IMPORTANT** and **NOTE** are provided as additional information of special significance or to make the job easier.



**WARNING** – A statement preceded by **WARNING** is information that should be acted upon to prevent **bodily injury**. A **WARNING** is always inside a ruled box.

**CAUTION** – A statement preceded by **CAUTION** is information that should be acted upon to prevent machine damage.

**IMPORTANT** – A statement preceded by **IMPORTANT** is information that possesses special significance.

**NOTE** – A statement preceded by **NOTE** is information that is handy to know and may make the job easier.

## Warnings



**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.

## Terminology

**ITO (In to Out)** – Maximum fork positioning range, measured from the inside edge of each fork in the closed position to the outside edge of each fork in the full open position.

**Zero Close** – Fork positioner closed position, with inside surfaces of forks touching.

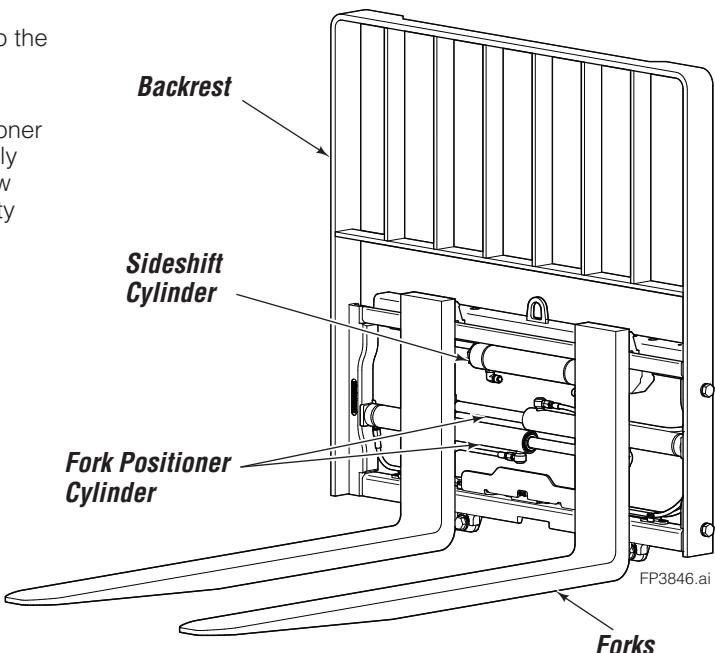
**Full Out** – Fork positioner open position, with forks at maximum opening range.

## OPERATION

This Section contains operating instructions for the Cascade Z-Series Fork Positioner. It will help you avoid common errors which often cause damage to the equipment or product being handled.

This information is intended to simplify operator understanding about effective and safe Fork Positioner use and operation. Read this information 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 misjudgment. You must watch for poorly maintained equipment and hazardous situations and correct them.



# OPERATION

## Safety Rules – Industrial Lift Trucks

*No riders*



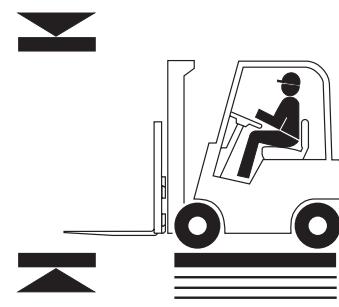
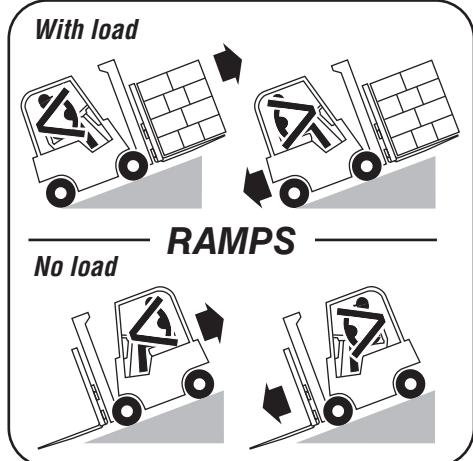
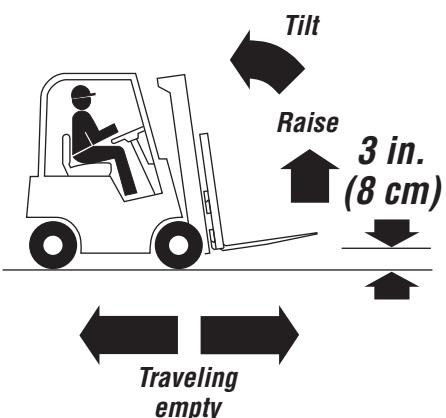
*No reaching through mast*



*No standing under load*



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### TRAFFIC



*Observe*



*Wet floors*



*Workers*



*Stops*



*Slow for  
two-way traffic*



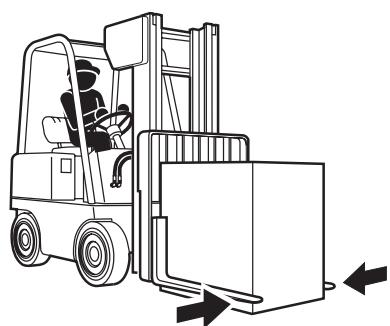
*Sound horn,  
slow at intersection*



*Sound horn,  
slow at corner*

# OPERATION

## Safety Rules – Handling Loads



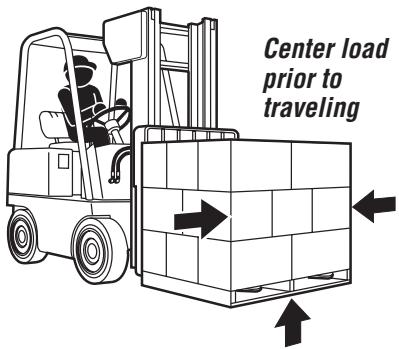
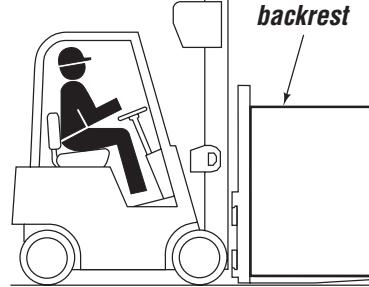
*Limit mast tilting  
with raised load*



*Limit sideshifting  
with raised load*



*Top of load should  
not extend above  
backrest*

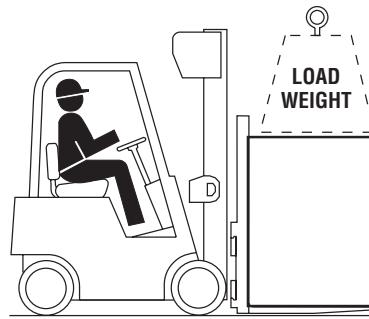


*Center load  
prior to  
traveling*



*Raise load prior  
to sideshifting*

*Limit truck movement  
with raised load*



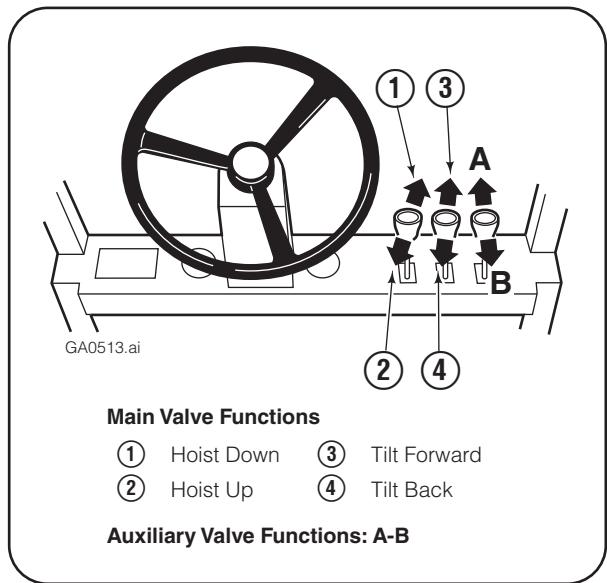
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*Load weight must not exceed combined  
truck/attachment capacity (see truck  
nameplate).*

*Total fork capacity (LH + RH fork) must be  
greater than load weight. Check capacity  
stamp on forks.*

# OPERATION

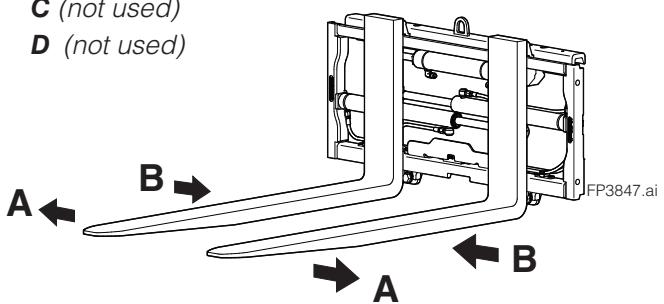
## Attachment Operation



**WARNING:** Truck control handle and attachment function activation shown here conforms to ANSI B56.1 (ISO 3691) recommended practices. Failure to follow these practices may lead to serious bodily injury or property damage. End user, dealer and OEMs should review any deviation from the practices for safe operation.

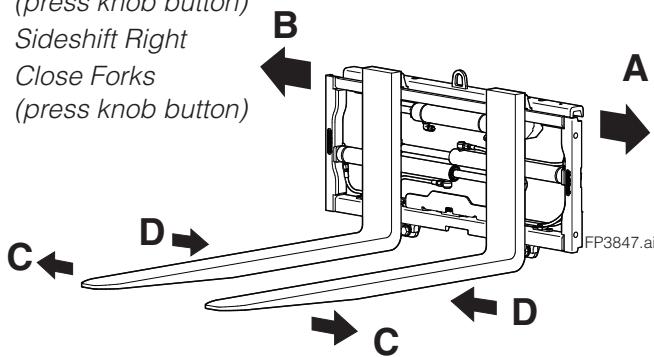
### FORK POSITIONING

- A** Open Forks
- B** Close Forks
- C** (not used)
- D** (not used)



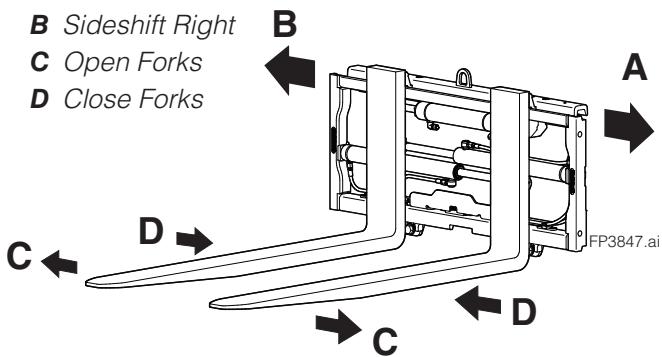
### SIDESHIFTING & FORK POSITIONING WITH SOLENOID VALVE OR RF VALVE

- A** Sideshift Left
- A** Open Forks  
(press knob button)
- B** Sideshift Right
- B** Close Forks  
(press knob button)



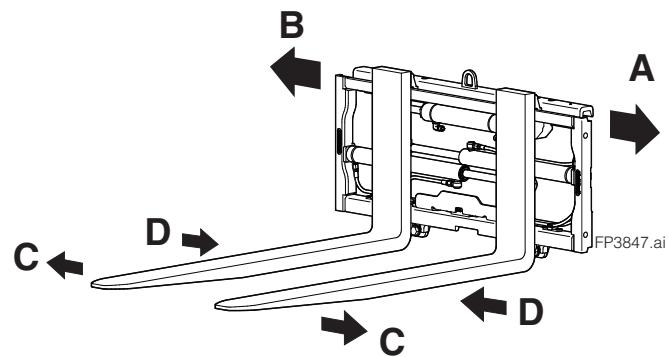
### SIDESHIFTING & FORK POSITIONING

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



### SIDESHIFTING & FORK POSITIONING WITH SEQUENCE VALVE

- A** Sideshift Left, then Open Forks
- B** Sideshift Right, then Close Forks



# SAFE OPERATION AND MAINTENANCE

## OSHA Regulations – Industrial Trucks and Attachments



**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 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", 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.

# INSTALLATION

## Recommended Hydraulic Supply

### Truck Relief Setting

2250 psi (155 bar, 15.5 MPa) Recommended  
3500 psi (240 bar, 24.0 MPa) Maximum

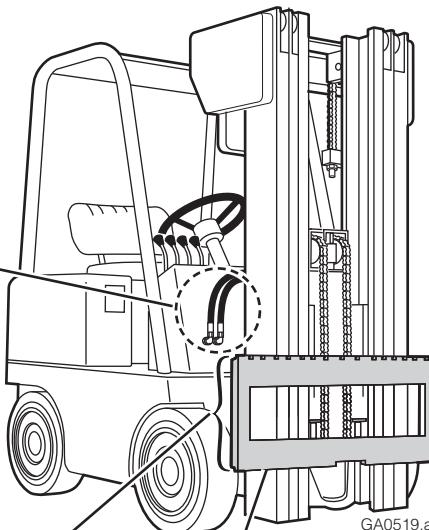
### Truck Flow Volume <sup>①</sup>

	Min. <sup>②</sup>	Recommended	Max. <sup>③</sup>
25Z, 30Z	1 GPM (4 L/min.)	2 GPM (8 L/min.)	3 GPM (12 L/min.)

- ① Cascade Fork Positioners are compatible with SAE 10W petroleum base hydraulic fluid meeting Mil. Spec. MIL-0-5606 or MIL-0-2104B. Use of synthetic or aqueous base hydraulic fluid is not recommended. If fire resistant hydraulic fluid is required, special seals must be used. Contact Cascade.
- ② Flow less than recommended will result in slow fork positioning speed.
- ③ Flow greater than maximum can result in excessive heating, reduced system performance and short hydraulic system life.



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



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### Carriage Mount Dimension (A) ISO

	Minimum	Maximum
Class II	380,0 mm	381,0 mm
Class III	476,0 mm	476,0 mm

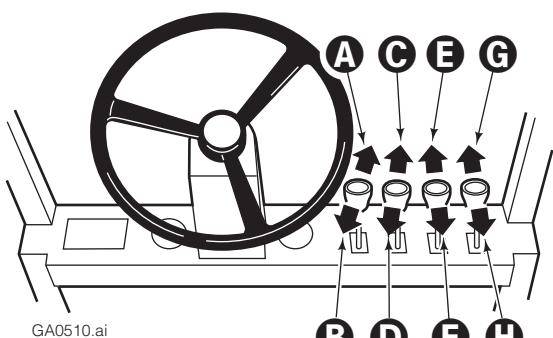
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### Carriage

Clean carriage bars and inspect carriage bars. Make sure the bars are parallel and that ends are flush. Repair any damaged notches.

## Auxiliary Valve Functions

Check for compliance with ANSI (ISO) standards:



### Main Functions

<b>A</b>	Hoist Down
<b>B</b>	Hoist Up

<b>C</b>	Tilt Forward
<b>D</b>	Tilt Back

### Auxiliary Functions – Sideshifting Fork Positioner

<b>E</b>	Sideshift Left
<b>F</b>	Sideshift Right

<b>G</b>	Open Forks
<b>H</b>	Close Forks

### Auxiliary Functions – Solenoid Equipped

<b>E</b>	Open Forks (press knob button)
<b>F</b>	Close Forks (press knob button)



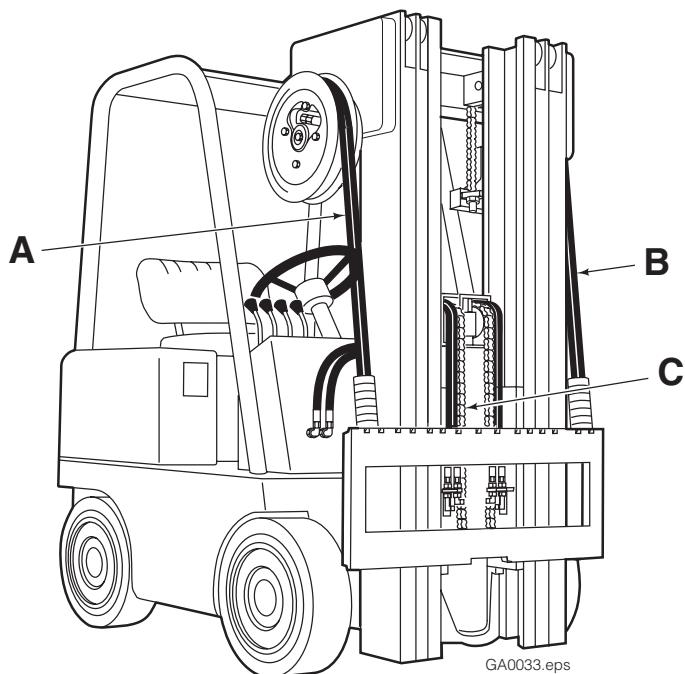
**WARNING:** Truck control handle and attachment function activation shown here conforms to ANSI B56.1 (ISO 3691) recommended practices. Failure to follow these practices may lead to serious bodily injury or property damage. End user, dealer and OEMs should review any deviation from the practices for safe operation.

# INSTALLATION

## Truck Requirements

The Z-Series Fork Positioner can be operated with any of the hydraulic supply arrangements shown below. Refer to *Cascade Hose & Cable Reel Selection Guide*, Part No. 212199, to select the correct hose reel for the mast and truck. Hose and fitting requirements are as follows:

- All hoses and fittings for FORK POSITION and SIDESHIFT functions should be a least No. 6 hose and No. 6 Fittings with .18 in. (5 mm) minimum ID.



### Non-Sideshifting Fork Positioner

**C** Mast Single Internal Reeving

### Sideshifting Fork Positioner

**C** Mast Double Internal Reeving

**OR**

**A and B**

RH and LH THINLINE™ 2-port hose reel groups

### Sideshifting Fork Positioner with Sequence Valve

**C** Mast Single Internal Reeving

### Sideshifting Fork Positioner with Solenoid or RF Control

**C** Mast Single Internal Reeving

# INSTALLATION

## Attachment Installation

Follow the steps shown to install the attachment on the truck. Read and understand all **WARNING** and **CAUTION** statements. If a procedure is not understood, ask a supervisor, or call the nearest Cascade Service Department for assistance.

### 1

#### Attach overhead hoist

##### Attachments without forks installed –

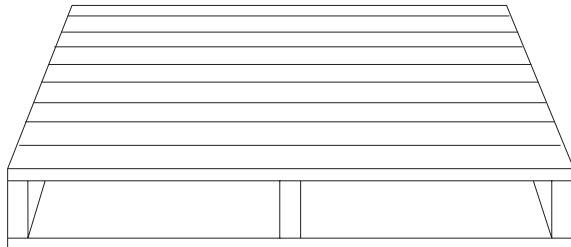
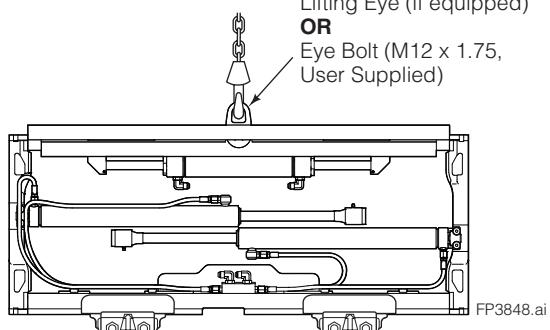
Before lifting, secure fork position cylinders with cable ties to prevent excess movement.



**WARNING:** Verify that the overhead hoist and chains or straps are rated for the weight of the attachment. Refer to nameplate for attachment weight.

Lifting Eye (if equipped)  
OR

Eye Bolt (M12 x 1.75,  
User Supplied)

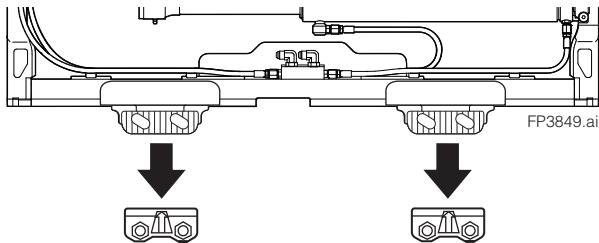


### 2

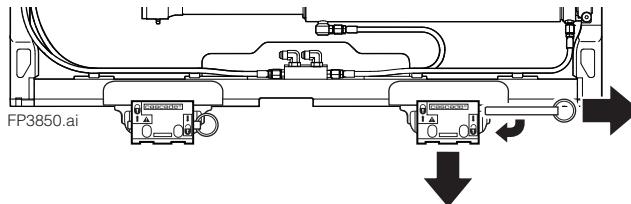
#### Remove or unlock lower hooks

- Bolt-On type** – Remove bolt-on lower mounting hooks.
- Quick-disconnect type** – Remove pin. Move hook into unlocked position. Reinstall pin in lower hole.

##### BOLT-ON HOOKS



##### QUICK-DISCONNECT HOOKS



# INSTALLATION

## Attachment Installation

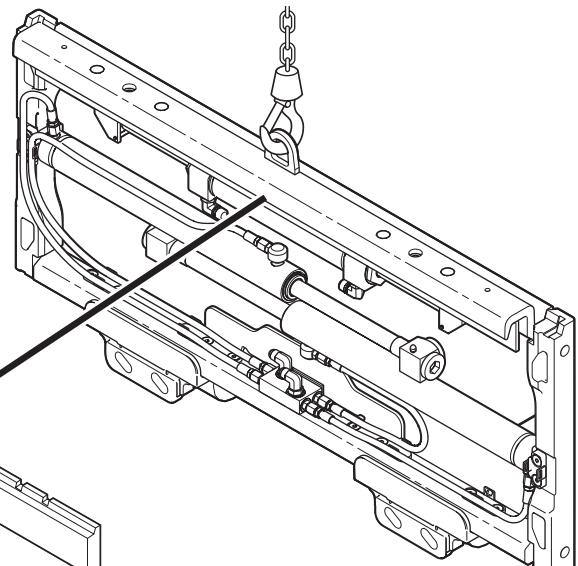
### 3 Mount attachment on truck carriage

IT A Class II – .60-.66 in. (15-17 mm)  
IT A Class III – .72-.78 in. (18-20 mm)

IT A Class II – .32-.36 in. (8-9 mm)  
IT A Class III – .39-.43 in. (10-11 mm)

Engage locator tab  
on sideshifter with  
center notch

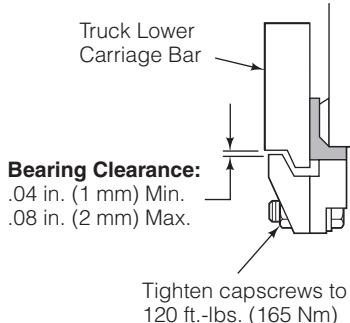
Truck Upper  
Carriage Bar



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### 4 Install lower hooks

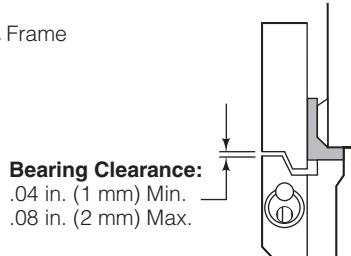
#### BOLT-ON HOOKS



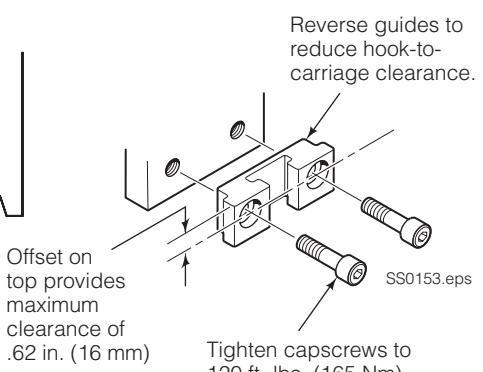
Bearing Clearance:  
.04 in. (1 mm) Min.  
.08 in. (2 mm) Max.

Tighten capscrews to  
120 ft.-lbs. (165 Nm)

#### QUICK-DISCONNECT HOOKS



Bearing Clearance:  
.04 in. (1 mm) Min.  
.08 in. (2 mm) Max.

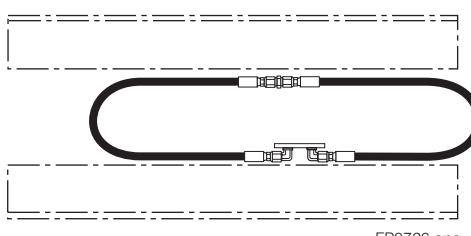


Reverse guides to  
reduce hook-to-  
carriage clearance.  
Offset on  
top provides  
maximum  
clearance of  
.62 in. (16 mm)  
Tighten capscrews to  
120 ft.-lbs. (165 Nm)

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### 5 Flush hydraulic supply hoses

- A Install hoses using union fittings.
- B Operate auxiliary valves for 30 seconds.
- C Remove union fittings.



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# INSTALLATION

## Attachment Installation

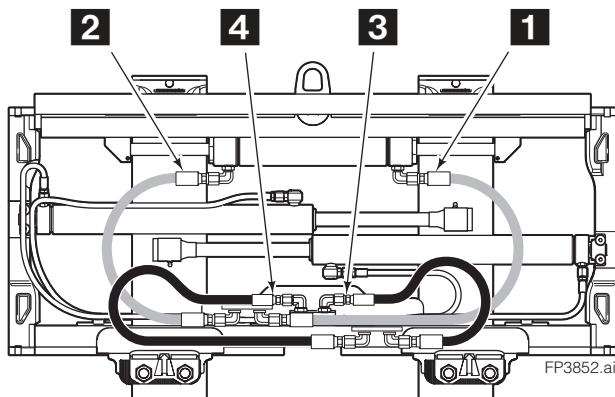
### 6

#### Install hoses

**CAUTION:** Allow for 4 in. (100 mm) movement in each direction for sideshifting ('rolling' hose arrangement recommended).

#### STANDARD

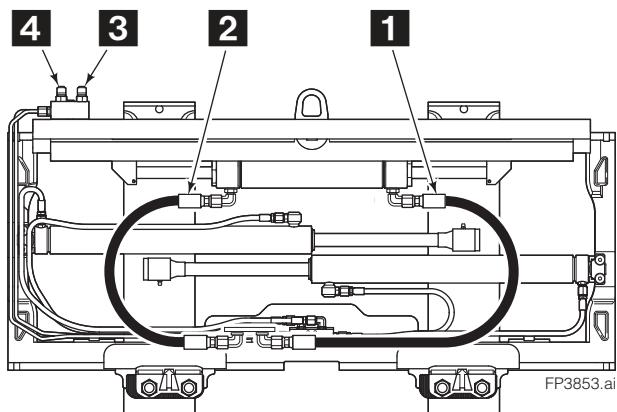
##### Dual Internal Hose Reeling Termination



- 1 Sideshift Left
- 2 Sideshift Right
- 3 Open
- 4 Close

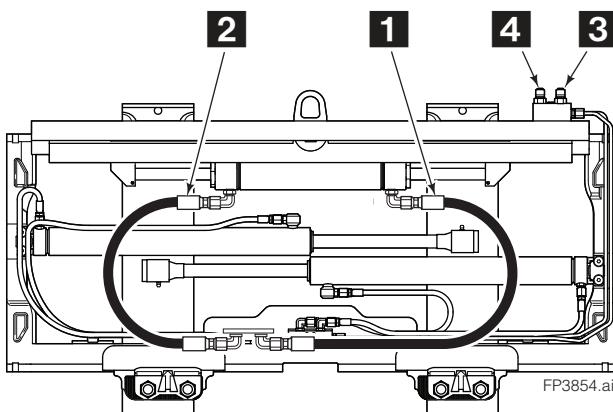
#### HIGH TERMINATION

##### Fork Position Top Termination, Left Sideshift Internal Reeling Termination



- 1 Sideshift Left
- 2 Sideshift Right

##### Fork Position Top Termination, Right Sideshift Internal Reeling Termination



- 3 Open
- 4 Close

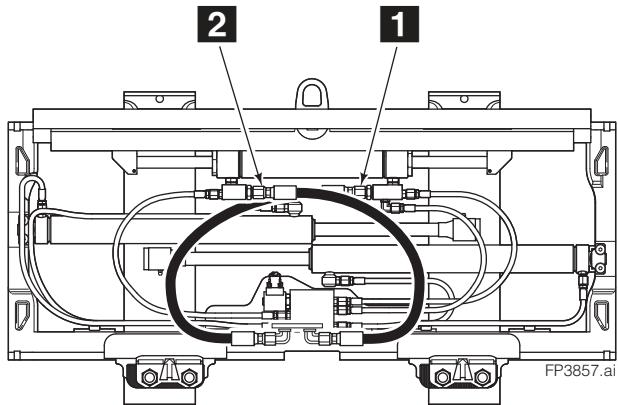
# INSTALLATION

## Attachment Installation

### 6 Install hoses (continued)

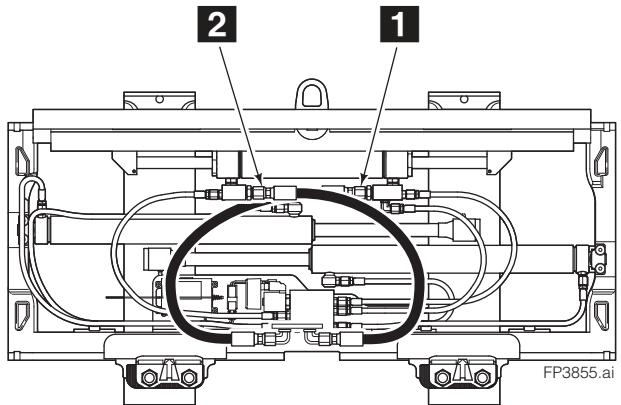
#### SOLENOID EQUIPPED

##### Single Internal Hose Reaving Termination



#### RADIO FREQUENCY EQUIPPED

##### Single Internal Hose Reaving Termination

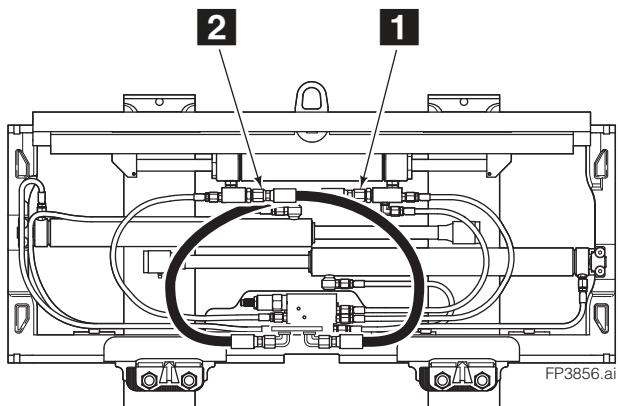


1 Sideshift Left OR Open

2 Sideshift Right OR Close

#### SEQUENCE VALVE EQUIPPED

##### Single Internal Hose Reaving Termination



1 Open Forks then Sideshift Left

2 Close Fork then Sideshift Right

# INSTALLATION

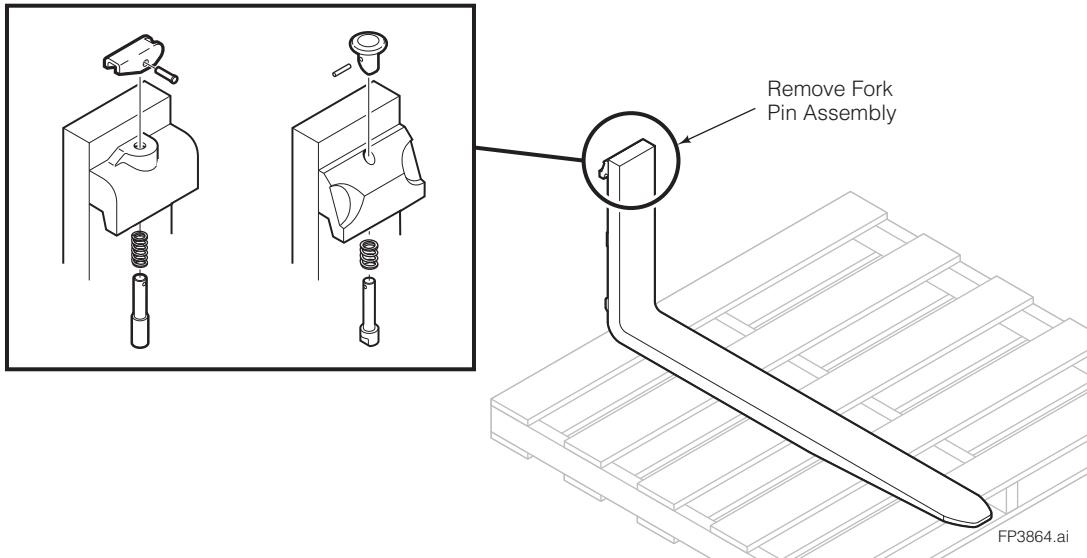
## Attachment Installation

### 7 Prepare Forks

#### REMOVE FORK LOCKING PINS (IF EQUIPPED)



**WARNING:** Remove locking pins from forks. Make sure that forks slide freely on carriage bars.



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#### LUG INSTALLATION (IF REQUIRED)

If the attachment is supplied without forks, lugs are provided. They must be welded onto forks using the following procedures:

**IMPORTANT:** Remove plug, half rings and dust cover from the fork lug prior to welding.

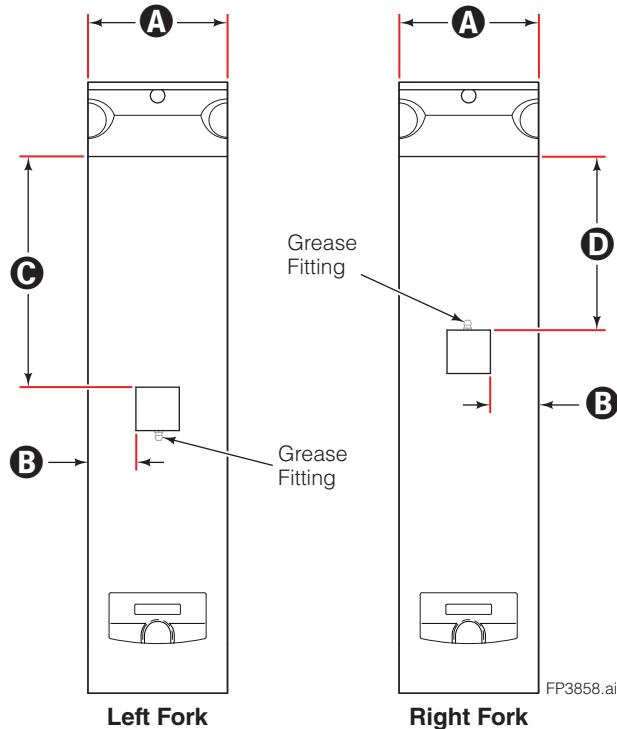
#### Fork Preparation

- A** Clean all surfaces to be welded. Remove paint, oil, grease and other contaminants.
- B** Position the lug referring to dimension **B** and **C**. Mark the position on the fork. Refer to table on the following page.

**IMPORTANT:** Note orientation of the grease fitting on the lug.

- C** Tack weld the lugs. Recheck dimensions.

*Procedure continued on the following page*



Left Fork

Right Fork

Back (Driver's) View

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# INSTALLATION

## Attachment Installation

### 7 Prepare Forks (Continued)

#### LUG INSTALLATION (IF REQUIRED) (CONTINUED)

Model	Fork Width Dimension 'A' ■	Lug Spacing Dimension 'B'	Left Fork Lug Spacing Dimension 'C'	Right Fork Lug Spacing Dimension 'D'	Fillet Weld Size 'E'
25Z	4 in. (100 mm) ◆	<b>Zero Close ITO:</b> 0.8 in. $\pm 0.06$ in. (20.5 mm $\pm 1.5$ mm)	8.0 in. $\pm 0.06$ in. (202 mm $\pm 1.5$ mm)	6.0 in. $\pm 0.06$ in. (152 mm $\pm 1.5$ mm)	0.28 in. (7 mm)
		<b>Full Out ITO:</b> 1.7 in. $\pm 0.06$ in. (42 mm $\pm 1.5$ mm)			
	5 in. 122 mm	1.7 in. $\pm 0.06$ in. (42 mm $\pm 1.5$ mm)	8.0 in. $\pm 0.06$ in. (202 mm $\pm 1.5$ mm)	6.0 in. $\pm 0.06$ in. (152 mm $\pm 1.5$ mm)	0.28 in. (7 mm)
30Z	4 in. (100 mm) ◆	<b>Zero Close ITO:</b> 0.8 in. $\pm 0.06$ in. (20.5 mm $\pm 1.5$ mm)	9.7 $\pm 0.06$ in. (247 mm $\pm 1.5$ mm)	7.8 in. $\pm 0.06$ in. (197 mm $\pm 1.5$ mm)	0.28 in. (7 mm)
		<b>Full Out ITO:</b> 1.7 in. $\pm 0.06$ in. (42 mm $\pm 1.5$ mm)			
	5 in. 122 mm	1.65 in. $\pm 0.06$ in. (42 mm $\pm 1.5$ mm)	9.7 $\pm 0.06$ in. (247 mm $\pm 1.5$ mm)	7.8 in. $\pm 0.06$ in. (197 mm $\pm 1.5$ mm)	0.28 in. (7 mm)

◆ 4 in. (100 mm) Wide Fork Range Options:

**Zero Close ITO Range:** 0 in. (0 mm) minimum and maximum = Frame Width - 2.75 in. (or 70 mm)

**Full Out ITO Range:** 1.75 in. (45 mm) minimum and maximum = Frame Width - 1.00 in. (or 25 mm)

■ For additional fork sizes, contact Cascade.

#### Welding Specifications

**A** Preheat weld area, full fork width and 6 in. (150 mm) above and below lug, to 400° F (204° C) minimum, 500° F (260° C) maximum before welding. Maximum interpass temperature should not exceed 600° F (315° C).

**B** Finish weld lug to fork. Apply weld to the fork weld prep area. Use the following weld method:

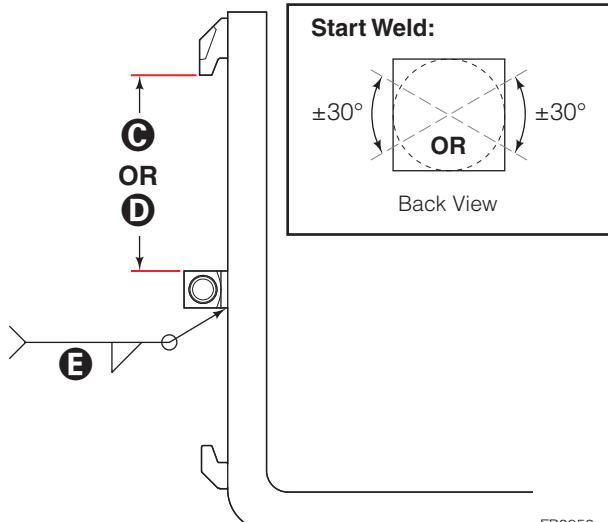
Attach ground clamp to the fork upright. Weld using FCAW (Flux Core Arc Welding). AWS E70T-1 electrode, 0.0625 in. (1.6 mm) diameter with 100% CO<sub>2</sub> or 75% Ar/25% CO<sub>2</sub> @ 30-45 CFH. Follow electrode manufacturer's recommendation for shielding gas, gas cfh (cubic feet per hour) setting and welding amp setting. Apply weld holding a close arc. Do not oscillate or use a wash bead pattern.

**NOTE:** For an alternative electrode use Metal-Cor E70C-6M 0.0625 in. (1.6 mm) diameter wire.

Slow cool, by covering with insulating blanket, to 150° F (65° C.)

**C** Inspect welds. No undercut, overlap, cracks of any kind (including crater crackers) or porosity.

**D** Clean weld area and repaint.



FP3859.ai

# INSTALLATION

## Attachment Installation

### 8

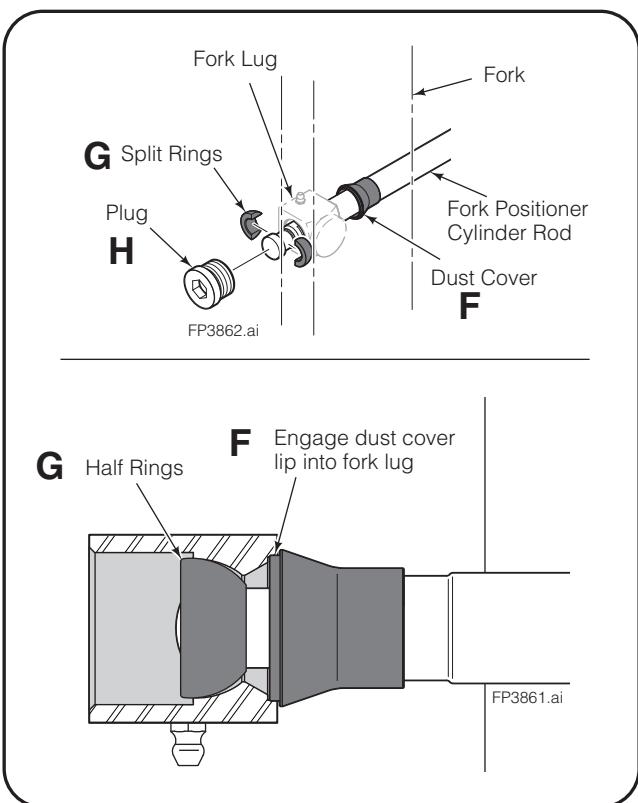
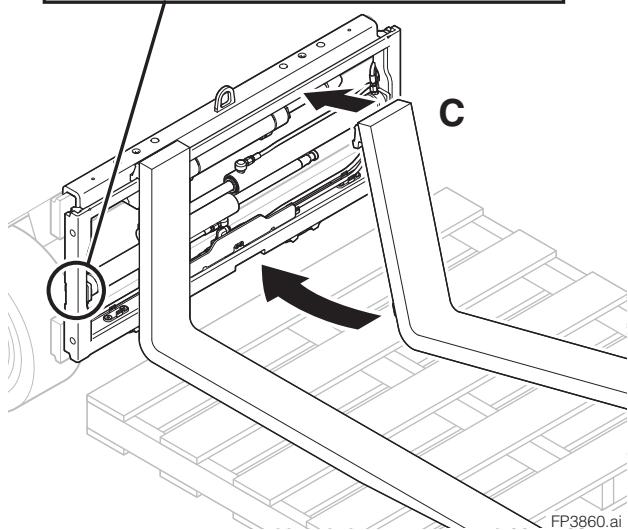
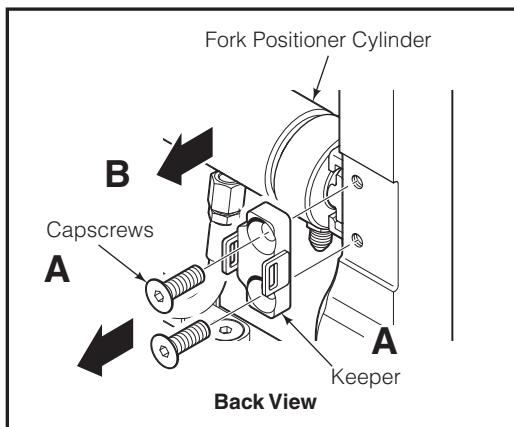
#### Install Forks (if required)



**WARNING:** Fork size may limit the capacity of the attachment. Verify fork rating/capacity.

**CAUTION:** Carefully review this procedure. Failure to install correctly may cause permanent damage to fork position cylinders.

- A** Remove capscrews and keepers retaining the cylinders to frame.
- B** Carefully move cylinders back (toward the truck). Make sure hoses do not kink or become damaged.
- IMPORTANT:** The fork lug should clear the cylinder for installation.
- C** Install forks using a pallet or blocks. Keep feet clear of forks.
- D** Slide the forks to outermost position to allow cylinder reinstallation.
- E** Reinstall cylinders into frame and secure with keeper and capscrews. Tighten capscrews to 14 ft.-lbs. (19 Nm).
- F** With dust cover installed on fork positioner rod as shown, slide the fork so that the rod passes through the fork lug.
- G** Apply general purpose moly grease to half rings, and install onto rod as shown. Slide the fork so that the half-rings fully seat into the fork lug.
- NOTE:** Half-rings should remain in position when being seated into lug.
- H** Install plug and tighten plug to 120 ft.-lbs. (165 Nm).
- J** Reposition dust cover to engage lip into fork lug cutout.
- K** Apply general purpose moly grease to joint using grease fitting.

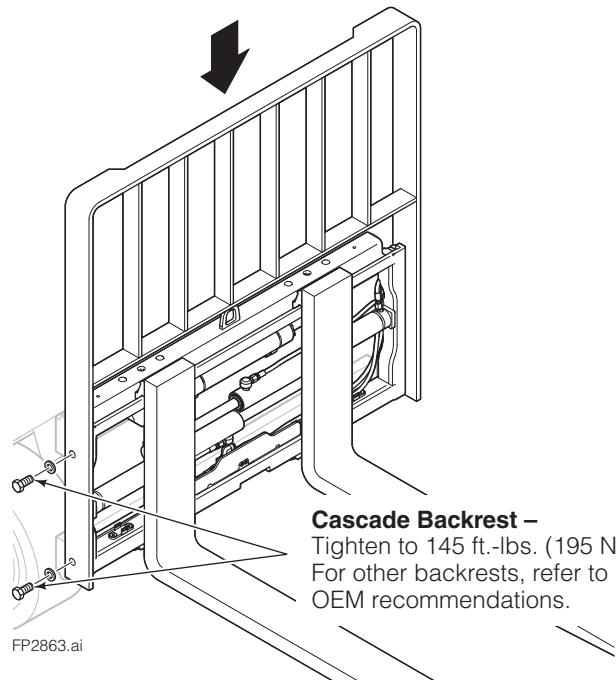


# **INSTALLATION**

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**9**

**Install backrest (if equipped)**



**Cascade Backrest –**

Tighten to 145 ft.-lbs. (195 Nm).  
For other backrests, refer to  
OEM recommendations.

# INSTALLATION

## Attachment Installation

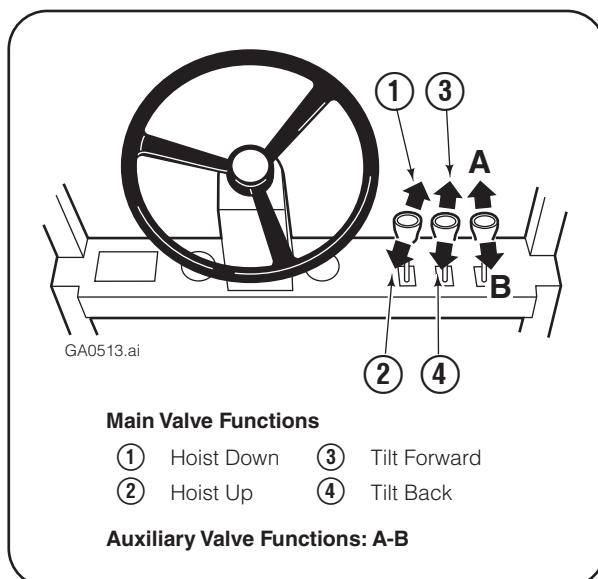
### 10

#### Cycle attachment functions

- With no load, open and close forks several times. Sideshift (if equipped) left and right. Check for smoothness and equal movement.
- Check for operation in accordance to ANSI (ISO) standards.
- Check for leaks at fittings, valve and cylinders.
- Check for rolling hose supplying fork position are not pinched.

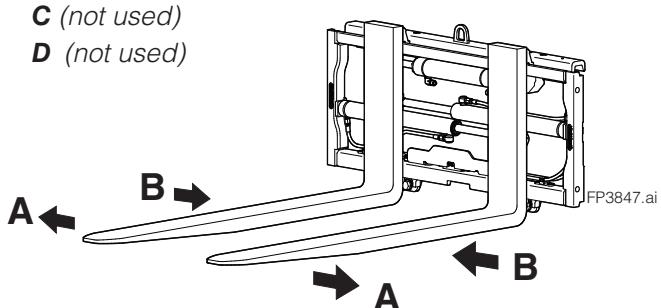


**WARNING:** Make sure all personnel are clear of the attachment during testing.



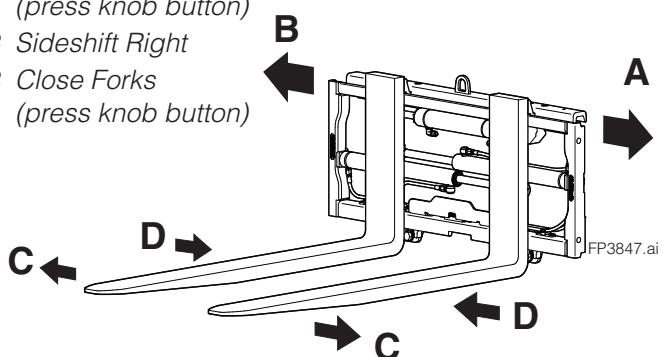
#### FORK POSITIONING

- A** Open Forks  
**B** Close Forks  
**C** (not used)  
**D** (not used)



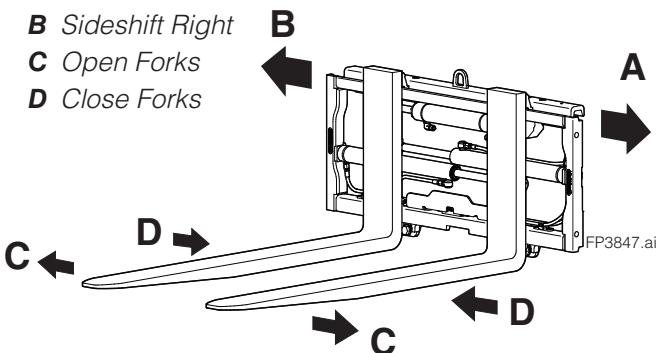
#### SIDESHIFTING & FORK POSITIONING WITH SOLENOID VALVE OR RF VALVE

- A** Sideshift Left  
**B** Open Forks  
(press knob button)  
**C** Sideshift Right  
**D** Close Forks  
(press knob button)



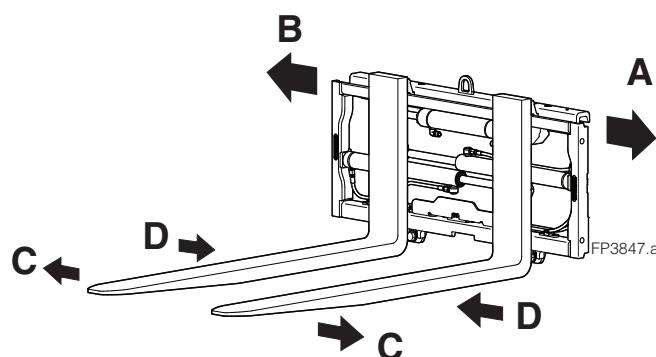
#### SIDESHIFTING & FORK POSITIONING

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



#### SIDESHIFTING & FORK POSITIONING WITH SEQUENCE VALVE

- A** Sideshift Left, then Open Forks  
**B** Sideshift Right, then Close Forks



**WARNING:** Truck control handle and attachment function activation shown here conforms to ANSI B56.1 (ISO 3691) recommended practices. Failure to follow these practices may lead to serious bodily injury or property damage. End user, dealer and OEMs should review any deviation from the practices for safe operation.

# INSTALLATION

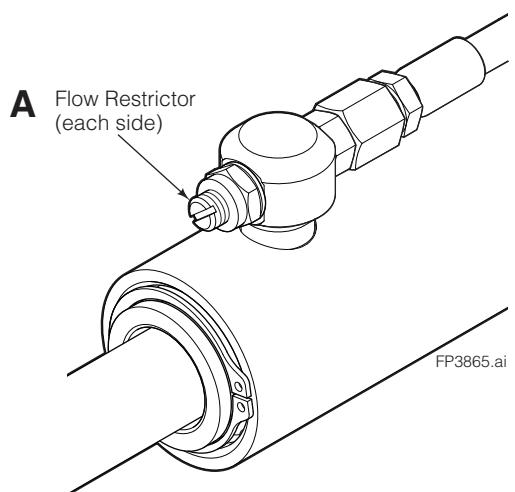
## Attachment Installation

### 11

#### Adjust forks for equal movement (if required)

**NOTE:** Attachment is Factory-adjusted for equal fork movement when operated at recommended pressure and flow rate.

- A** Locate flow restrictors at each end. Loosen jam nuts and screw both flow restrictors in until they bottom. Screw each restrictor out (CCW) three (3) turns.
- B** Open forks fully, then close. Look for unequal fork movement.
- C** On faster fork (one that bottoms first), screw flow restrictor in (CW) 1/2 turn.
- D** Repeat Steps **B** and **C** until fork movement is equal. Tighten jam nuts.

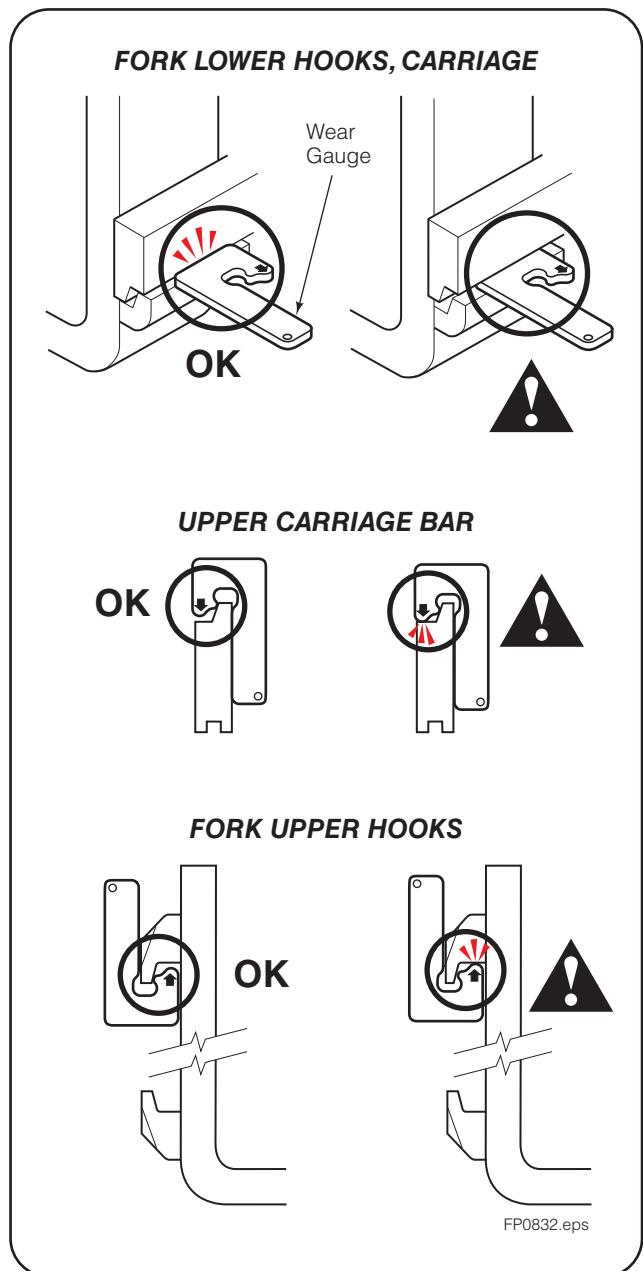


### 12

#### Inspect fork hooks, carriage bar clearance

**NOTE:** Use go/no-go Wear Gauge Part No. 209560 (Class II) or 209561 (Class III).

- A** Inspect the fork lower hooks and carriage bar. If the gauge fits between the carriage bar and lower hook, repair or replacement is needed.
- B** Inspect the upper carriage bar. If the gauge arrow touches the carriage bar, repair or replacement is needed.
- C** Inspect the fork upper hooks. If the gauge arrow touches the hook, repair or replacement is needed.



# PERIODIC MAINTENANCE

## Daily

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

- Check the following:
  - Loose or missing hardware,
  - Worn or damaged hosing,
  - Hydraulic Leaks
- Check decals and nameplate for legibility.

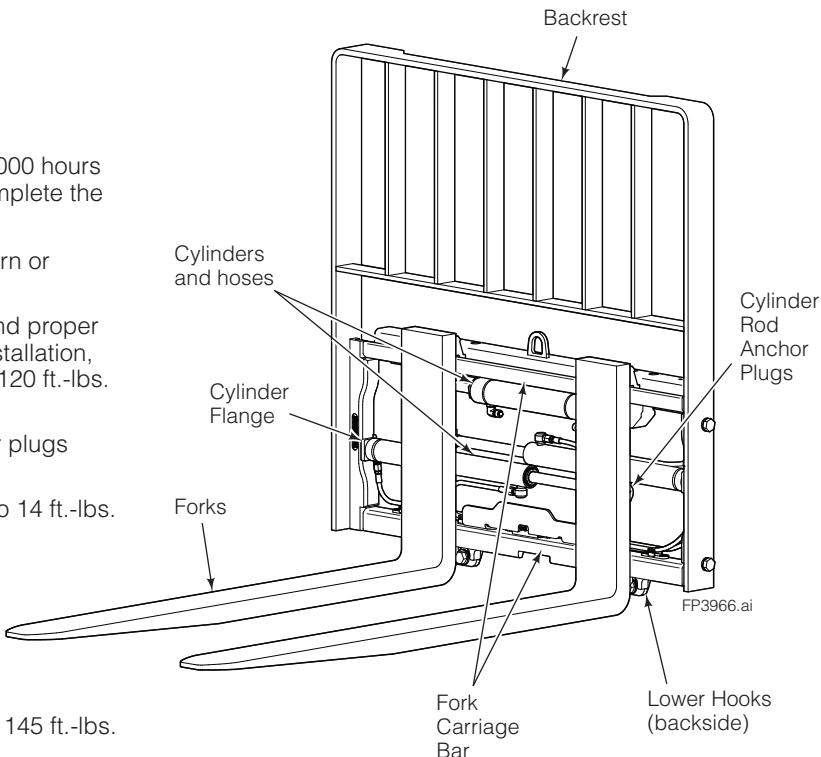


**WARNING:** After completing any service procedure, always test each function through five complete cycles. First test with no load, then test with a load to make sure the attachment operates correctly before returning it to the job.

## 1000-Hour

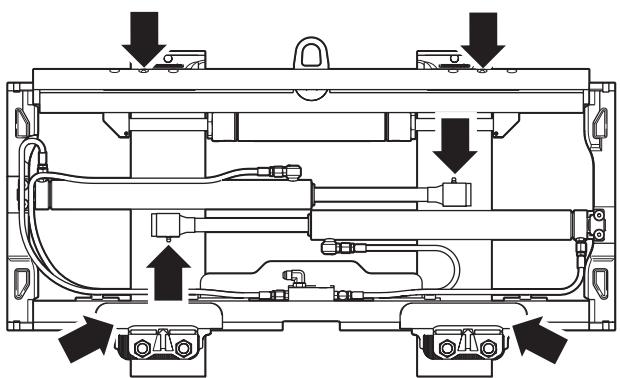
Every time the lift truck is serviced or every 1000 hours of truck operation, whichever comes first, complete the following maintenance procedures:

- Check for loose or missing capscrews, worn or damaged hoses, and hydraulic leaks.
- Inspect sideshifter lower hooks for wear and proper clearance. Adjust if necessary, refer to Installation, Step 4. Tighten lower hook capscrews to 120 ft.-lbs. (165 Nm)
- Tighten fork positioner cylinder rod anchor plugs 120 ft.-lbs. (165 Nm)
- Tighten fork positioner flange capscrews to 14 ft.-lbs. (19 Nm)



- Tighten backrest capscrews (Cascade) to 145 ft.-lbs. (195 Nm).
- Apply general purpose chassis grease to the sideshifter upper bearing grease fittings and sideshifter lower bearings. Apply moly grease for the fork carrier grease fittings.
- Inspect Sideshifter upper and lower bearings for wear. If any bearing is worn to less than .09 in. (2.5 mm) thickness replace the entire bearing set (see Service Manual for repair procedures).

### Lubrication Points



# **PERIODIC MAINTENANCE**

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## **2000-Hour**

After 2000 hours of truck operation, in addition to the Daily and 1000-Hour Maintenance, forks in use shall be inspected at intervals of not more than 12 months (for single shift operations) or whenever any defect or permanent deformation is detected. Severe applications will require more frequent inspection.

Fork inspection shall be carried out by trained personnel to detect any damage that might impair safe use. Any fork that is defective shall be removed from service. Reference ANSI B56.1-2005 (ISO 5057).

Inspect for the following defects:

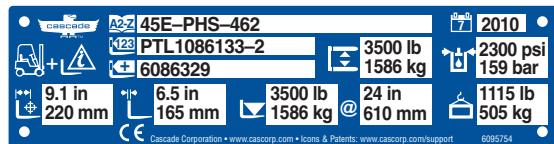
- Surface cracks
- Straightness of blade and shank
- Fork angle
- Difference in height of fork tips
- Wear on fork blade and shank
- Wear on fork hooks
- Legibility of marking

**NOTE:** Fork Safety Kit 3014162 contains wear calipers, inspection sheets and safety poster. Also available is fork hook & carriage wear gauge 209560 (Class II) and 209561 (Class III).

**EN** NAMEPLATE ICONS  
**BG** ТАБЕЛКА С ИМЕ ИКОНИ  
**CS** JMENOVKA IKONY  
**DA** NAVNESKILT IKONER  
**DE** TYPENSCHILD SYMBOLE  
**EL** ONOMAΣΤΙΚΗΣ ΕΙΚΟΝΙΔΙΑ  
**ES** PLACA DE ICONOS  
**ET** NIMEPLAADILE IKOONID  
**FI** NIIMIKYLTTI KUVAKKEET  
**FR** PLAQUE ICÔNES

**GA** IDENTIFICACIÓN ICONAS  
**HU** NEVΤABLÁN IKONOK  
**IS** NAFNAKSLTÁKN  
**IT** ICONE DELLA TARGA  
**JA** 銘板アイコン  
**KO** 명판 아이콘  
**LT** NOMINALUS PIKTOKRAMOS  
**LV** AR NOSAUKUMU, IKONAS  
**MT** NAMEPLATE ICOANE  
**NL** NAAMBORD ICONEN

**NO** NAVNEPLATE-IKONER  
**PL** NAMEPLATE ICOANE  
**PT** IDENTIFICAÇÃO ÍCONES  
**RO** ICONOS DE PLACA  
**RU** ТАБЛИЧКУ ЗНАКОВ  
**SK** MENOVKA ICONS  
**SL** TABLICA IKONE  
**SV** NAMNSKYLTEN IKONER  
**TR** BİLGİ ETİKETİ SIMGELERI  
**ZH** 铭牌图标



**EN** MODEL  
**BG** МОДЕЛ  
**CS** MODEL  
**DA** MODEL  
**DE** MODELL  
**EL** ΜΟΝΤΕΛΟ

**ES** MODELO  
**ET** MUDEL  
**FI** MALLI  
**FR** MODÈLE  
**GA** DEANAMH AGUS AIMH  
**HU** MODELL

**IS** MÓDEL  
**IT** MODELLO  
**JA** モデル  
**KO** 모델  
**LT** MODELIS  
**LV** MODELIS

**MT** MUDELL  
**NL** MODEL  
**NO** MODELL  
**PL** MODEL  
**PT** MODELO  
**RO** MODEL

**RU** МОДЕЛЬ  
**SK** MODEL  
**SL** MODEL  
**SV** MODEL  
**TR** MODEL  
**ZH** 型号



**EN** SERIAL NUMBER  
**BG** СЕРИЕН НОМЕР  
**CS** SÉRIOVÉ ČÍSLO  
**DA** SERIENUMMER  
**DE** SERIENNUMMER  
**EL** ΣΕΙΡΙΑΚΟΣ ΑΡΙΘΜΟΣ

**ES** NÚMERO DE SERIE  
**ET** SEERIANUMBER  
**FI** SARJANUMERO  
**FR** NUMERO DE SERIE  
**GA** SRAITHUIMHIR  
**HU** GYÁRI SZÁM

**IS** RAÐNÚMÉR  
**IT** NUMERO DI SERIE  
**JA** シリアル番号  
**KO** 일련 번호  
**LT** SERIJINIS NUMERIS  
**LV** SĒRIJAS NUMURS

**MT** NUMRU TAS-SERJE  
**NL** SERIENUMMER  
**NO** SERIENNUMBER  
**PL** NUMER SERYJNY  
**PT** NÚMERO DE SÉRIE  
**RO** NUMĂR DE SERIE

**RU** СЕРИЙНЫЙ НОМЕР  
**SK** SÉRIOVÉ ČÍSLO  
**SL** SERIJSKA ŠTEVILKA  
**SV** SERIENUMMER  
**TR** SERI NUMARASI  
**ZH** 序列号



**EN** ADDITIONAL INFORMATION  
**BG** ДОПЪЛНИТЕЛНА ИНФОРМАЦИЯ  
**CS** DOPLNKOVÉ INFORMACE  
**DA** YDERLIGERE OPLYSNINGER  
**DE** ZUSÄTZLICHE INFORMATIONEN  
**EL** ΠΡΟΣΩΠΕΤΕΣ ΠΛΗΡΟΦΟΡΙΕΣ

**ES** INFORMACIÓN ADICIONAL  
**ET** LISAINFO  
**FI** LISÄTIE TOJA  
**FR** INFORMATIONS SUPPLÉMENTAIRES  
**GA** TUILLADH FAISNÉISE  
**HU** KIEGÉSZÍTŐ INFORMÁCIÓ

**IS** VIBÓTARTÆKI  
**IT** INFORMAZIONI AGGIUNTIVE  
**JA** 追加情報  
**KO** 추가 장비  
**LT** PAPILDAMA INFORMACIJA  
**LV** PAPILDU INFORMĀCIJA

**MT** INFORMAZJONI ADDIZZJONALI  
**NL** AANVULLENDE INFORMATIE  
**NO** TILLEGGUTSTYR  
**PL** INFORMACJE DODATKOWE  
**PT** INFORMAÇÕES ADICIONAIS  
**RO** INFORMATII SUPLIMENTARE

**RU** ДОПОЛНИТЕЛЬНАЯ ИНФОРМАЦИЯ  
**SK** DALŠIE INFORMÁCIE  
**SL** DODATNE INFORMACIJE  
**SV** YTTERLIGARE INFORMATION  
**TR** İLAVE EKİPMAN  
**ZH** 其它信息



**EN** MAXIMUM CAPACITY  
**BG** МАКСИМАЛЕН КАПАЦИТЕТ  
**CS** MAXIMÁLNÍ NOSNOST  
**DA** MÅKS. KAPACITET  
**DE** MAXIMALKAPAZITÄT  
**EL** ΜΕΓΙΣΤΗ ΧΩΡΙΚΟΤΗΤΑ

**ES** CAPACIDAD MÁXIMA  
**ET** MAKSIMAALNE JOURDLUS  
**FI** MAKSIMIKAPASITEETTI  
**FR** CAPACITE MAXIMUM  
**GA** UASCHUMAS  
**HU** MAXIMÁLIS KAPACITÁS

**IS** HÁMARKS GETA  
**IT** PORTATA MASSIMA  
**JA** 最大容量  
**KO** 최대 용량  
**LT** MAKSIMALI GALIA  
**LV** MAKSIMĀLĀ CELTSPĒJA

**MT** KAPAČITÀ MASSIMA  
**NL** MAXIMAAL LAADVERMOGEN  
**NO** MAKSIMAL KAPASITET  
**PL** UDŽWIG MAKSYMALNY  
**PT** CAPACIDADE MÁXIMA  
**RO** CAPACITATE MAXIMĂ

**RU** МАКСИМАЛЬНАЯ ГРУЗОПОДЪЕМНОСТЬ  
**SK** MAXIMALNA NOSNOST  
**SL** NAJVEČJA ZMOGLJIVOST  
**SV** MAXIMAL KAPACITET  
**TR** MAKSUMUM KAPASITE  
**ZH** 最大承载能力



**EN** MAXIMUM CAPACITY BETWEEN FORKS  
**BG** МАКСИМАЛНА ТОВАРОПОДЪЕМНОСТ МЕЖДУ ВИЛЦИТЕ  
**CS** MAXIMÁLNÍ NOSNOST MEZI VIDLICAMI  
**DA** MAKSIMAL KAPACITET MELLEM GAFLERNE  
**DE** MAXIMALE TRAGFÄHIGKEIT ZWISCHEN DEN GABELN  
**EL** ΜΕΓΙΣΤΗ ΙΚΑΝΟΤΗΤΑ ΑΝΑΜΕΣΑ ΣΤΙΣ ΠΕΡΟΝΕΣ

**ES** CAPACIDAD MÁXIMA ENTRE HORQUILLAS  
**ET** KAHVLI TE VAHELLE MAX. TÖSTEVOIME

**FI** MAKSIMINOSTOKYKY HAARUKOIDEN VÄLISÄ  
**FR** CAPACITÉ MAXIMALE ENTRE LES FOURCHES  
**GA** UASCHUMAS IDIR NA GBHAIL  
**HU** MAXIMUM TEHERBÍRAS VILLAK KÖZÖTT  
**IS** HÁMARKS GETA MILLI GAFLA  
**IT** PORTATA MASSIMA TRA LE FORCHE  
**JA** フォーク間の最大容量  
**KO** 포크 간 최대 용량

**LT** MAKSIMALI GALIA TARP ŠAKIU  
**LV** MAKSIMĀLĀ CELTSPĒJA STĀRP DAKŠĀM  
**MT** KAPACITÀ MASSIMA BEJN IL-FRIEKET  
**NL** MAXIMUMCAPACITEIT TUSSEN VOREKEN  
**NO** MAKSIMAL KAPASITET MELLOM GAFLENE  
**PL** MAKSYMALNY UDZWIG POMIĘDZY WIDLAMI  
**PT** CAPACIDADE MAXIMA ENTRE GARFOS  
**RO** CAPACITATEA MAXIMĂ ÎNTRE FURCI

**RU** МАКСИМАЛЬНАЯ ГРУЗОПОДЪЕМНОСТЬ МЕЖДУ ВИЛАМИ  
**SK** MAXIMÁLNA NOSNOSŤ MEDZI VIDLICAMI  
**SL** NAJVEČJA ZMOGLJIVOST MED VILICAMI  
**SV** MAXIMAL KAPACITET MELLAN GAFFLAR  
**TR** ÇATALLAR ARASI YÜK MERKEZİNDEKİ  
**ZH** 最大承载能力



**EN** @ LOAD CENTER  
**BG** В ЦЕНТР ПАРА НА НАТОВАРВАНЕ  
**CS** STŘED NÁKLADU  
**DA** VED LASTCENTRUM  
**DE** @ LASTSCHWERPUNKT  
**EL** ΣΤΟ ΚΕΝΤΡΟ ΒΑΡΟΥΣ

**ES** @ CENTRO DE CARGA  
**ET** @ KOORMUSE RASKUSKESE  
**FI** @ ALCENTRE DE CHARGE  
**FR** @ LÖDPHOINTE  
**GA** @ TEHER KÖZEPE

**IS** @ HLEDSLUMIÐJA  
**IT** @ BARICENTRO DEL CARICO  
**JA** 负荷の中心  
**KO** 하중 중심  
**LT** TIES KROVINIO CENTRU  
**LV** KRAVAS CENTRĀ

**MT** @ CENTRU TAT-TAGħBIJA  
**NL** BIJ LASTZWAARTEPUNT  
**NO** VED LASTEPUNKT  
**PL** @ ŚRODEK CIĘŻKOŚCI ŁADUNKU  
**PT** @ CENTRO DE CARGA  
**RO** LA CENTRUL DE GREUTATE

**RU** В ЦЕНТРЕ НАГРУЗКИ  
**SK** V ČĀZISKU NÁKLADU  
**SL** @ SREDIŠČE OBREMENITVE  
**SV** VID LASTENS MITTPUNKT  
**TR** MAKSUMUM KAPASITE  
**ZH** 载荷中心



**EN** MAXIMUM OPERATING PRESSURE  
**BG** МАКСИМАЛНО РАБОТНО НАЛЯГАНЕ  
**CS** MAXIMÁLNÍ PROVOZNÍ TLAK  
**DA** MAKSIMAL DRIFTSTRYK  
**DE** MAXIMALER BETRIEBSDRUCK  
**EL** ΜΕΓΙΣΤΗ ΠΙΣΣΗ ΛΕΙΤΟΥΡΓΙΑΣ  
**ES** PRESIÓN DE FUNCIONAMIENTO MÁXIMA  
**ET** MAKSIMAALNE TÖÖRÖHK

**FI** MAKSIMITOIMINTAPAINTE  
**FR** PRESSION DE SERVICE MAXIMALE  
**GA** UASBHUR OIBRÍUCHÁIN  
**HU** MAXIMÁLIS ÜZEMI NYOMÁS  
**IS** HÁMARKS VINNUJU-RYSTRINGUR  
**IT** PRESSIONE MASSIMA DI ESERCIZIO  
**JA** 最大運転圧力  
**KO** 최대 작동 압력

**LT** MAKSIMALUS EKSPORTACINIS SLEĢIS  
**LV** MAKSIMĀLĀS DARBA SPIEDIENS  
**MT** PRESSJON MASSIMA TAL-OPERAT  
**NL** MAXIMUM WERDKRUK  
**NO** MAKSIMALT DRIFTSTRYKK  
**PL** MAKSYMALNE CIĘŚNIENIE ROBOCZE  
**PT** PRESSÃO MÁXIMA DE FUNCIONAMENTO  
**RO** PRESIUNEALA DE LUCRU MAXIMĂ

**RU** МАКСИМАЛЬНОЕ РАБОЧЕЕ ДАВЛЕНИЕ  
**SK** MAXIMÁLY PREVÁDKOVÝ TLAK  
**SL** NAJVEČJI DELOVNI TLAK  
**SV** MAXIMAL ARBETSTRYCK  
**TR** MAKSUMUM ISLETME BASINCI  
**ZH** 最大工作压力



**EN** MASS OF ATTACHMENT  
**BG** МАСА НА ПРИСТАВКА  
**CS** HMOTNOST PŘÍDAVNÉHO ZAŘÍZENÍ  
**DA** UDSTYRS VÆGT  
**DE** ANBAUGERÄTGEWICHT  
**EL** ΜΑΖΑ ΣΥΝΔΕΔΕΜΟΥ ΕΞΟΠΛΙΣΜΟΥ

**ES** PESO DEL ACCESORIO  
**ET** TÖÖSEADEMASS  
**FI** LISÄLAITTEEN PAINO  
**FR** MASSE DE L'ACCESSOIRE  
**GA** MAIS AN FHÉISTIS  
**HU** A SZERELÉK TÖMEGE

**IS** FJÖLDI TENGINGA  
**IT** MASSA DELL'ATTREZZATURA  
**JA** 装備総量  
**KO** 부착 크기  
**LT** PRIEDO MASĘ  
**LV** UZKARES IEKĀRTAS MASSA

**MT** PIŽ TAL-ATTACHMENT  
**NL** MASSA VAN VOORZETAPPARAT  
**NO** MASSE FOR TILLEGGUTSTYR  
**PL** MASA OSPRZETU  
**PT** PESO DO ACESSÓRIO  
**RO** MASA ECHIPAMENTULUI ATASAT

**RU** МАССА НАВЕЧНОГО ОБОРУДОВАНИЯ  
**SK** HMOTNOST PRIDAVNÉHO ZARIADENIA  
**SL** MASA PRIKLJUČKA  
**SV** AGGREGATETS VIKT  
**TR** EK DONANIM AĞIRLIĞI  
**ZH** 装具质量



**EN** LOST LOAD CENTER DISTANCE  
**BG** РАЗСТОЯНИЕ ОТ ЦЕНТР ПАРА НА НАТОВАРВАНЕ  
**CS** VZDÁLENOST POSUNUTÉHO STŘEDU NÁKLADU  
**DA** REDUCERET LASTCENTERAFSTAND  
**DE** VERLORENER ABSTAND ZUM LASTMITTELPOINT  
**EL** ΑΠΟΣΤΑΣΗ ΑΠΟΔΕΣΘΕΤΟΣ ΚΕΝΤΡΟΥ ΒΑΡΟΥΣ  
**ES** DISTANCIA A CENTRO DE CARGA PERDIDA  
**ET** KOORMUSE RASKUSKEKME MUTUTUS  
**FI** KAPASITEETIHUKAAN KESKIPESTEE ENÄTYSYYS  
**FR** DISTANCE CENTRE DE CHARGE PERDUE

**GA** FAD LÖDPHOINTE CAILLTE  
**HU** ELVESZETT TEHERKÖZEPONT-TÁVOLSÁG  
**IS** FJARLÉGB GLATABS HLEDSLUMIÐU  
**IT** SPRESSORE EFFETTIVO  
**JA** 荷重中心消失  
**KO** 순식 하중 중심 거리  
**LT** ATITOLUSI APKROVOS CENTRO ATSTUMAS  
**LV** ZAUDĒTS ATTĀLUMS LIZD SŁODZES CENTRAM  
**MT** DISTANZA MIC-CENTRU TAT-TAGħBIJA MITLUFA  
**ND** VERLOREN AFSTAND TOT LASTZWAARTEPUNT

**NO** TAPT LASTEPUNKTAVSTAND  
**PL** WIELKOŚĆ PRZESUNIECIA ŚRODKA CIĘŻKOŚCI ŁADUNKU  
**PT** DISTÂNCIA DO CENTRO DE CARGA PERDIDA  
**RO** DISTANȚA LA CENTRUL DE GREUTEAT AL SARCINII  
**RU** ПОТЕРЯННОЕ РАССТОЯНИЕ ОТ ЦЕНТРА НАГРУЗКИ  
**SK** ÚBYTOVKY VYLOŽENIA ČĀZSKA S PRÍDAVNÝM ZARIADENÍM  
**SL** ZARDALJA DO PREMAKNJENEGA SREDIŠČA OBREMENITVE  
**SV** FÖRLORLAT LASTMITTPUNKTSAVSTÅND  
**TR** KAYIP YÜK MERKEZ MESAFESİ  
**ZH** 荷载损耗中心距离



(EN) CENTER OF GRAVITY TO MOUNT FACE DISTANCE  
 (BG) ЦЕНТЪР НА ТЕКЕСТА СТРИМО РАСТОЯНИЕТО ОТ МОНТАЖНАТА ЧЕПНА ПОВЪРХНИНА  
 (CS) VZDÁLENOST STŘEDU NÁKLADU K ČELU RÁMU  
 (DA) AFSTANDEN MELLEM TYNGDEPUNKT OG MONTERINGSFLADEN  
 (DE) ABSTAND ZWISCHEN SCHWERPUNKT UND MONTAGEFLÄCHE  
 (EL) ΑΠΟΣΤΑΣΗ ΚΕΝΤΡΟΥ ΒΑΡΟΥΣ ΑΠΟ ΤΗΝ ΠΡΟΣΟΨΗ ΒΑΣΗΣ  
 (ES) DISTANCIA DE CENTRO DE GRAVEDAD A CARA DE MONTAJE  
 (ET) RASKUSKESKME KAUGUS EESMISEST KINNITUSPINNAST  
 (FI) PAINOPISTEEN ETÄISYYS KIINNITYSPINNASTA  
 (FR) DISTANCE CENTRE DE GRAVITÉ-FACE DE MONTAGE

(GA) FAD IDIR AN MEÁCHANLÁR AGUS AN ÉADAN FEISTE  
 (HU) SULYPONT -SZERELŐFELÜLET TÁVOLSAГ  
 (IS) MIÐJA ÝNGDARAFS TIL AÐ HLÁÐA ÚR LÍKAMSFJARLÆGÐ  
 (IT) CENTRO DI GRAVITÀ DAL PIANO DI AGGANCIO  
 (JA) マウント面への重心  
 (KO) 장착 면 거리에 대한 중력 중심  
 (LT) ATSTUMAS NUO SUNKIO JEGOS CENTRO IKI PAGRINDO PRIEKINES PUŠĖS  
 (LV) ATTĀLUMS NO SMAGUMA CENTRA LĪdz UZSTĀŠANAS VIRSMAI  
 (MT) CENTRU TA' GRAVITÀ SAD-DISTANZA MOUNT FACE  
 (NL) AFSTAND TUSSEN ZWAARTEPUNT EN MONTAGEVLAK

(NO) AVSTAND TYNGDEPUNKT TIL MONTERINGSFLATE  
 (PL) ODLEGŁOŚĆ OD ŚRODKA CIĘŻKOŚCI DO CZOLE ZAWIESZENIA  
 (PT) DISTÂNCIA DO CENTRO DE GRAVIDADE À SUPERFÍCIE DE MONTAGEM  
 (RO) DISTANȚA DE LA CENTRUL DE GREUTATE LA SUPRAFAȚA DE MONTARE  
 (RU) РАССТОЯНИЕ ОТ ЦЕНТРА ТЯЖЕСТИ ДО УСТАНОВОЧНОЙ ПОВЕРХНОСТИ  
 (SK) VZDÁLENOSŤ TÁŽSKA OD CELNEJ STRANY UCHYTNIA  
 (SL) RAZDALJA TEŽIŠČA OD SPREDNJE MONTAŽNE STRANI  
 (SV) AVSTÅND TYNGDPUNKT TILL MONTERINGSYTA  
 (TR) AĞIRLIK MERKEZİ İLE FORK YÜZÜ ARASI MESAFE  
 (ZH) 重心到安装面的距离



(EN) YEAR OF MANUFACTURE  
 (BG) ГОДИНА НА ПРОИЗВОДСТВО  
 (CS) ROK VÝROBY  
 (DA) PRODUKTIONSSÅR  
 (DE) JAHR DER HERSTELLUNG  
 (EL) ΕΤΟΣ ΚΑΤΑΣΚΕΥΗΣ

(ES) AÑO DE FABRICACIÓN  
 (ET) VALMISTAMISAASTA  
 (FI) VALMISTUSVUOSI  
 (FR) ANNÉE DE FABRICATION  
 (GA) BLAIN DEANTÚSAICHTA  
 (HU) A GYÁRTÁS ÉVE

(IS) FRAMLEIÐSLUÁR  
 (IT) ANNO DI FABBRICAZIONE  
 (JA) 製造年度  
 (KO) 제조년  
 (LT) PAGAMINIMO METAI  
 (LV) RAZOŠANAS GADS

(MT) SENĀ TA' MANIFATTURA  
 (ND) BOUWJAAR  
 (NO) PRODUKSJONSÅR  
 (PL) ROK PRODUKCJI  
 (PT) ANO DE FABRICO  
 (RO) ANUL DE FABRICAȚIE

(RU) ГОД ИЗГОТОВЛЕНИЯ  
 (SK) ROK VÝROBY  
 (SL) LETO IzDELAVE  
 (SV) TILLVERKNINGSÅR  
 (TR) ÜRETİM YILI  
 (ZH) 制造年份



(EN) CAPACITY OF TRUCK AND ATTACHMENT COMBINATION MAY BE LESS THAN ATTACHMENT CAPACITY SHOWN. CONSULT TRUCK NAMEPLATE. THE CAPACITY OF THE TRUCK AND ATTACHMENT COMBINATION SHALL BE COMPLIED WITH.  
 (BG) КАПАЦИТЕТ НА СЪБЛЮДЕНИЕТО ПОВДИГАЧА И ПРИСТАВКА МОЖЕ ДА БЪДЕ ПО-МАЛЪК ОТ ДАДЕНИЯ КАПАЦИТЕТ НА ПРИСТАВКАТА. ВИЖТЕ ТАБЕЛКАТА НА ПОВДИГАЧА. ТОВАРОПОДОМНОСТАТА НА КАРДА И КОМБИНАЦИЯТА ОТ ПРИСТАВКИ ТРЯБВА ДА СЪТЪВЕТСТВАТ.  
 (CS) NOSNOST KOMBINACE VOZÍKU Š PŘÍDAVNÝM ZAŘÍZENÍM MŮže BYT MENší NEž UVEDENÁ NOSNOST PŘÍDAVNÉHO ZAŘÍZENÍ. PROHLÉDNĚTE SI ŠTÍTEK VOZÍKU. NOSNOST KOMBINACE VOZÍKU A PŘÍDAVNÉHO ZAŘÍZENÍ NESMÍ BYT PREKROČENA.  
 (DA) DEN SAMLEDE KAPACITET FOR TRUCKEN OG DET PÅMONTEREDE TILBEHØRET KAN VÆRE MINDRE END DEN VISTE KAPACITET FOR TILBEHØRET. SE TRUCKENS NAVNEPLADE. KOMBINATIONEN AF TRUCKENS KAPACITET OG TILBEHØRET SKAL OVERHOLDES.  
 (DE) DIE TRAGKRAFT DER KOMBINATION AUS STAPLER UND ANBAUGERÄT KANN GERINGER SEIN ALS DIE ANGEGBENE NENNTRAGFÄHIGKEIT. SIEHE TYPENSCHILD. DIE TRAGFAHIGKEIT DER STAPLER-ANBAUGERÄT-KOMBINATION MUSS DAMIT ÜBEREINSTIMMEN.  
 (EL) Η ΧΩΡΗΤΙΚΟΤΗΤΑ ΤΟΥ ΟΧΗΜΑΤΟΣ ΚΑΙ ΣΥΝΔΥΑΣΜΟΥ ΕΞΑΡΤΗΜΑΤΩΝ ΕΝΔΕΧΕΤΑΙ ΝΑ ΕΙΝΑΙ ΧΑΜΗΛΟΤΕΡΗ ΑΠΟ ΤΗ ΧΩΡΗΤΙΚΟΤΗΤΑ ΤΟΥ ΕΞΑΡΤΗΜΑΤΟΣ ΣΤΟ ΠΑΡΑΔΕΙΓΜΑ. ΣΥΜΒΟΥΛΕΥΤΕΙΤΕ ΤΗΝ ΕΤΙΚΕΤΑ ΟΧΗΜΑΤΟΣ. Η ΙΚΑΝΟΤΗΤΑ ΤΟΥ ΟΧΗΜΑΤΟΣ ΚΑΙ ΤΟΥ ΣΥΝΔΕΔΕΜΕΝΟΥ ΕΞΟΠΛΙΣΜΟΥ ΠΡΕΠΕΙ ΝΑ ΕΙΝΑΙ ΣΥΜΒΑΤΕΣ.  
 (ES) LA CAPACIDAD COMBINADA DE CARRETILLA Y ACCESORIO PUEDE SER MENOR QUE LA CAPACIDAD DEL ACCESORIO INDICADA. CONSULTE LA PLACA DE CARACTERÍSTICAS DE LA CARRETILLA. DEBE CUMPLIRSE LA CAPACIDAD COMBINADA DE CARRETILLA Y ACCESORIO.  
 (ET) LAADURI JA TÖÖSEADME KOMBINATSIOONI JÕUDLUS VÔIB OLLA VÄIKSEM KUI TÖÖSEADME NÄIDATUD JÕUDLUS. VAADAKE LAADURI ANDMEPLAATI. LAADUR JA TÖÖSEADE PEAVAD OLEMA ÜKSTEISEGA VASTAVUSES.  
 (FI) TRUKKI- JA LISÄLAITEYHDISTELEMÄN KAPASITEETTI VOI OLLA PIENEMPI KUIN LISÄLAITTEEN ILMOITETTU KAPASITEETTI. KS. TRUKIN ARVOKILPI. TRUKIN JA LISÄLAITTEEN YHDISTELEMÄN NOSTOKYKYÄ NON NOUDATTETTAVA.  
 (FR) LA CAPACITE DE LA COMBINAISON CHARIOT/ACCESOIRE PEUT S'AVERVER INFERIEURE A CELLE INDIQUEE POUR L'ACCESOIRE. SE REPORTER A LA PLAQUE SIGNEALETIQUE DU CHARIOT. RESPECTER LA CAPACITÉ DU CHARIOT ET DE L'ACCESOIRE COMBINÉS.  
 (GA) D'FHÉADFHADH NIOS LÚ CUMAIS A BHÉITH AG AN TRUCAIL AGUS FEISTEAS NÁ AN CUMAS FEISTIS A THAISPEÁNTAR. FÉACH AR AIMCHLÁR NA TRUCAILE. CLOÍFEAR LE CUMAS NA TRUCAILE AGUS AN CHOMHCHEANGAL FEISTIS.  
 (HU) A TARGONCA ÉS A TARTOZÉK KOMBINÁCIÓ KAPACITÁSA LEHET, HOGY KEVESEBB, MINT AZ ÁBRÁZOLT TARTOZÉK KAPACITÁSA. LÁSD A TARGONCA ADATTÁBLÁN. A TARGONCA ÉS SZERELÉK KOMBINÁCIÓ TEHERBÍRÁSÁNAK ELEGET KELL TENNIE ENNEK.  
 (IS) GETA VÖRÜBILS OG VIDHENGISVÖRÚBOTAR GETUR VERIB MINNI EN GETA VIDHENGIS ER SÝND. RÁDFÆRID YKKUR VID NAFNASKILTI VÖRÜBÍLSINS. ÞAÐ Á AD FYLGJA GETU VÖRÜBÍLSINS OG VIDHENGISVÖRÚBOTINN.  
 (IT) LA PORTATA DELLA COMBINAZIONE CARRELLO/ATTREZZATURE PUÒ ESSERE INFERIORE RISPETTO ALLA PORTATA DELLE ATTREZZATURE DICHIARATA. CONSULTARE LA TARGHETTA DEL CARRELLO. DEVE ESSERE RISPETTATA LA PORTATA DELLA COMBINAZIONE CARRELLO ELEVATORE/ATTREZZATURA.  
 (JA) フォークリフトの能力と装備の組み合わせは示されている装備の能力より低い場合があります。 フォークリフトのネームプレートを相談。 トラックの容量と装備の組み合わせとは実施済み。 .  
 (KO) 트럭 및 부착 결합물의 용량은 표시된 부착물 용량보다 적을 수 있습니다. 트럭 명판을 참조하십시오. 트럭 및 부착물 결합의 용량을 준수해야 합니다.  
 (LT) KRAUTUVO IR PRIEDO DERINIO GALINGUMAS GALI BŪTI MAŽESNIS NEGU NURODYTAS PRIEDO GALINGUMAS. SKAITYKITE INFORMACIJĄ KRAUTUVO INFORMACINĖJE PLOKŠTELĖJE. BŪTINA NEVIRŠYTI KRAUTUVO IR PRIEDO DERINIO GALIOS.  
 (LV) AUTOIEKRĀVĒJA UN PIEDERUMA KOPĒJĀ CELTSPĒJĀ VAR BŪT MAZĀKA PAR NORĀDĪTO PIEDERUMA CELTSPĒJU. SKAĀT AUTOIEKRĀVĒJA TEHNISKO DATU PLĀKSNI. IR JĀIĒVERO AUTOIEKRĀVĒJA UN UZKARES IEKĀRTAS KOPĒJĀ CELTSPĒJĀ.  
 (MT) IL-KAPAÇITÀ TAT-TAGHMIR IMQABBAD MIEGHU TISTA' TKUN INQAS MILL-KAPAÇITÀ MURJA TAT-TAGHMIR IMQABBAD MIEGHU. IČEKKJA L-PJANÇA TAL-ISEM TAT-TRAKK. IL-KAPAÇITÀ TAT-TRAKK FLIMKIN MA' DIK TAT-TAGHMIR IMQABBAD MIEGHU TRID TIĜI SSODISFATA.  
 (NL) HET DRAAGVERMOGEN VAN DE COMBINATIE VAN HEFTRUCK EN VOORZETAPPARAAT KAN LAGER ZIJN DAN HET VERMELDE DRAAGVERMOGEN VAN HET VOORZETAPPARAAT. KIJK OP HET TYPEP LAATJE VEN DE HEFTRUCK. MET DE CAPACITEIT VAN DE COMBINATIE VAN TRUCK EN VOORZETAPPARAAT WORDT REKENING GEHOUDEN.  
 (NO) TOTAL KOMBINERT KAPASITET FOR GAFFELTRUCK OG TILLEGGSUTSTYR KOMBINERT MÅ OVERHOLDES.  
 (PL) UDZWIG ZESPOŁU WÓZKA I OSPRZĘTU MOŻE BYĆ MIEJSZY NIŽ POKAZANY UDZWIG OSPRZĘTU. PATRZ TABLICZKA ZNAMIONOWA WÓZKA. NALEŻY PRZESTRZEGAĆ DOPUSZCZALNEGO UDZWIGU ZESPOŁU WÓZKA I OSPRZĘTU.  
 (PT) A CAPACIDADE DA COMBINAÇÃO DO EMPILHADOR E DO ACESSÓRIO PODE SER INFERIOR À CAPACIDADE DO ACESSÓRIO APRESENTADA. CONSULTE A CHAPA DE ESPECIFICAÇÕES DO EMPILHADOR. CAPACIDADE DO CAMINHÃO E COMBINAÇÃO DE PENHORA DEVE SER RESPEITADA.  
 (RO) CAPACITATEA VEHICULULUI SI A COMBINATIEI DISPOZITIVELOR DE PRINDERE POATE FI MAI MICĂ DECĂT CAPACITATEA DISPOZITIVELOR DE PRINDERE INDICATĂ. CONSULTAȚI PLĂCUȚA CU CARACTERISTICILE TEHNICE ALE STIVUITORULUI. CAPACITATEA COMBINATIEI STIVUITOR - ECHIPAMENTE ATAȘATE TREBUIE RESPECTată.  
 (RU) СОВМЕСТНАЯ ГРУЗОПОДЪЕМНОСТЬ АВТОПОГРУЗЧИКА И НАВЕСНОГО УСТРОЙСТВА МОЖЕТЬ БЫТЬ НИЖЕ УКАЗАННОЙ ГРУЗОПОДЪЕМНОСТИ НАВЕСНОГО УСТРОЙСТВА. СМ. ТАБЛИЧКУ ТЕХНИЧЕСКИХ ДАННЫХ. НЕОБХОДИМО СОБЛЮДАТЬ КОМБИНИРОВАННУЮ ГРУЗОПОДЪЕМНОСТЬ АВТОПОГРУЗЧИКА И НАВЕСНОГО ОБОРУДОВАНИЯ.  
 (SK) NOSNOSŤ VOZÍKA A PŘÍDAVNÉHO ZARIadenia MÔže BYT MENšIA AKO UVEDENÁ NOSNOSŤ PŘÍDAVNÉHO ZARIadenia. BLÍZšIE INFORMÁCIE UVEDENÉ NA TYPOVOM ŠTÍTKU VOZÍKA. NOSNOSŤ VOZÍKA A PŘÍDAVNÉHO ZARIadenia MÔže BYT MENšIA AKO UVEDENÁ NOSNOST PŘÍDAVNÉHO ZARIadenia. BLÍZšIE INFORMÁCIE UVEDENÉ NA TYPOVOM ŠTÍTKU VOZÍKA.  
 (SL) ZMOGLJIVOST KOMBINACIJE VILIČARJA IN OPREME JE LAHKO MANJŠA OD PRIKAZANE ZMOGLJIVosti OPREME. UPOŠTEVAJTE NAPISNO PLOŠČICO VILIČARJA. UPOŠTEVATI JE POTREBNO ZMOGLJIVOST KOMBINACIJE VILIČARJA IN OPREME.  
 (SV) KAPACITETEN FÖR KOMBINATIONEN GAFFELTRUCK OCH AGGREGAT KAN VARA MINDRE ÄN ANGIVEN KAPACITET. LÄS GAFFELTRUCKENS TYPSKYLT. KAPACITETEN FÖR KOMBINATIONEN GAFFELTRUCK OCH AGGREGAT SKA FÖLJAS.  
 (TR) ARAÇ KAPASITESI VE DONANIM KOMBİNASYONU, GÖSTERİLEN DONANIM KAPASITESİNDEKİ DÜŞÜK OLABİLİR. ARAÇ BİLGİ ETİKETİNE BAŞVURUN. ARAÇ KAPASITESİ VE DONANIM KOMBİNASYONU UYUMLU OLMALIDIR.  
 (ZH) 叉车与叉车属具的综合承载能力可能小于显示的叉车属具承载能力。请参考叉车铭牌。应符合叉车与叉车属具的综合承载能力。

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