



INSTALLATION INSTRUCTIONS

and PERIODIC MAINTENANCE

H-Series

***Swing Frame Paper
Roll Clamps***

Manual Number 6095756-R2

**cascade[®]
corporation**

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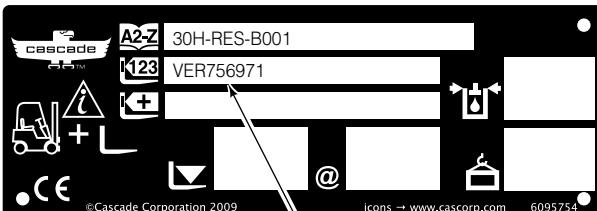
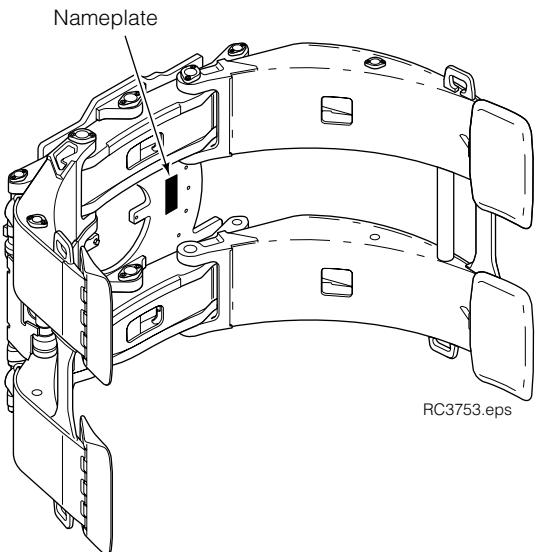
INTRODUCTION

This manual provides installation instructions and periodic maintenance requirements for the Cascade H-Series Swing Frame Paper Roll Clamps.

In any communication about the attachment refer to the product catalog and serial numbers stamped on the nameplate. If the nameplate is missing, the numbers can be found stamped on the front of the faceplate top or side.

IMPORTANT: Supply input fittings are JIC.

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



SPECIAL DEFINITIONS

The statements shown appear throughout this manual where special emphasis is required. Read all WARNINGS and CAUTIONS before proceedings with any work. Statements labeled IMPORTANT and NOTE are special information that is useful when servicing the attachment.



WARNING – A statement preceded by a 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 damaged.

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.

Weighted Emission Sound Pressure Level - Weighted emission sound pressure level (L_{pA}) does not exceed 70 dB(A).

Measured Value of Whole Body Vibration - Measured value of whole body vibration (m/s^2) does not exceed 0,5 m/s^2 .

Measured Value of Hand-Arm Vibration - Measured value of hand-arm vibration (m/s^2) does not exceed 2,5 m/s^2 .

RECOMMENDED HYDRAULIC SUPPLY

H-Series Swing Frame Paper Roll Clamps will require one of the hydraulic arrangements shown. Refer to *Cascade Hose and Cable Reel Selection Guide*, Part No. 212199, to select the correct hose reel for the mast and truck. The hose and fitting requirements are:

- **Rotate Function** – Hoses and fittings should be No. 8 with 13/32 in. (10 mm) minimum ID.
- **Clamp & Swing Functions** – Hoses and fittings should be No. 8 with 13/32 in. (10 mm) minimum ID, except for internal reeving arrangements where hoses and fittings may be No. 6 minimum with 9/32 in. (7 mm) minimum ID.

CAUTION: Rotate function supply circuit back pressure exceeding 500 psi (35 bar) and a maximum flow rate of 15 GPM (54 L/min.) can result in excessive oil heating, reduced attachment performance and shortened hydraulic system life. Check for restrictions such as numerous fittings and fitting/hose sizes less than No. 8.

A and B

RH THINLINE™ 2-Port Hose Reel Group and
LH THINLINE™ 4-port Hose Reel Group

OR

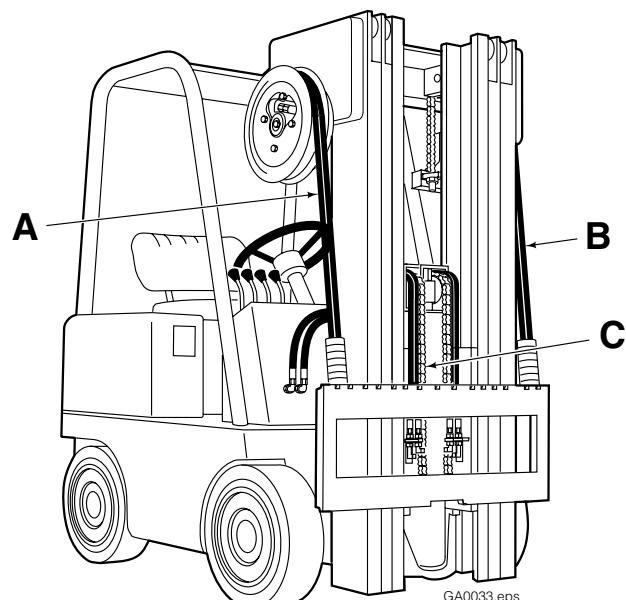
A,B and C

RH and LH THINLINE™ 2-port Hose Reel Groups and
Mast Single Internal Hose Reeing Group

OR

A and C

RH THINLINE™ 2-Port Hose Reel Group and
Mast Double Internal Hose Reeing Group



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TRUCK REQUIREMENTS



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.

Truck Relief Setting

2000 psi (140 bar) Recommended
2300 psi (160 bar) Maximum

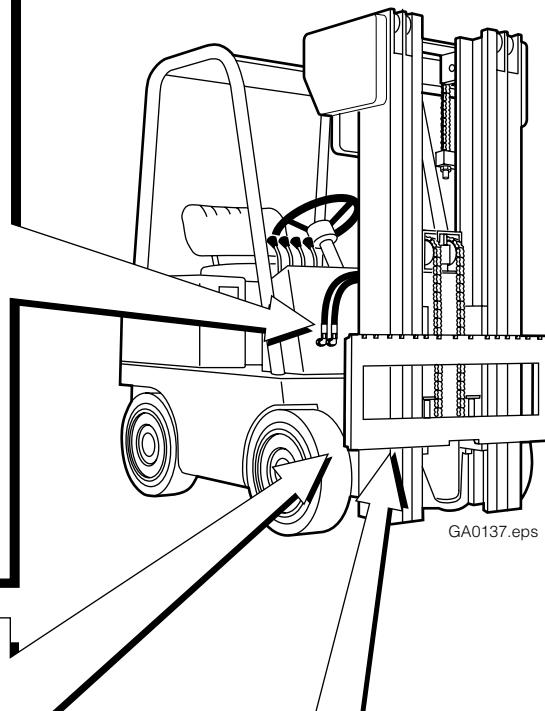
Truck Flow Volume ^①

22H-33H	Min. ^②	Recommended	Max. ^③
Rotate/Clamp	5 GPM (18 L/min.)	10 GPM (37 L/min.)	15 GPM (56 L/min.)
Swing	1 GPM (4 L/min.)	2 GPM (7.5 L/min.)	3 GPM (12 L/min.)

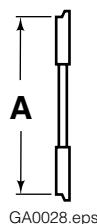
① Cascade H-Series Swing Frame Paper Roll Clamps are compatible with SAE 10W petroleum base hydraulic fluid meeting Mil. Spec. MIL-0-5606 or MIL-0-2104B. Use of synthetic or aqueous base hydraulic fluid is not recommended. If fire resistant hydraulic fluid is required, special seals must be used. Contact Cascade.

② Flow less than recommended will result in rotate speed less than 2 RPM.

③ Flow greater than maximum can result in excessive heating, reduced system performance and short hydraulic system life.



Carriage Mount Dimension (A) ITA (ISO)



	Minimum	Maximum
Class II	14.94 in. (380.0 mm)	15.00 in. (381.0 mm)
Class III	18.68 in. (474.5 mm)	18.74 in. (476.0 mm)
Class IV	23.44 in. (595.5 mm)	23.50 in. (597.0 mm)

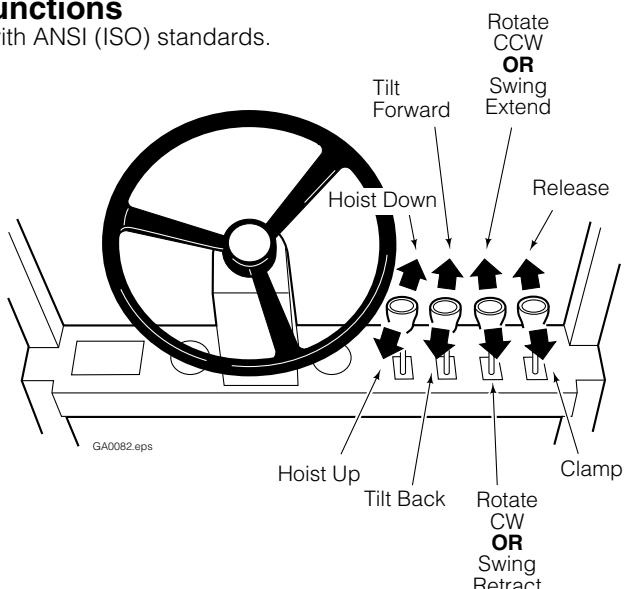
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Carriage

Clean and inspect carriage bars for damage and smoothness. Repair any protruding welds or damaged notches.

Auxiliary Valve Functions

Check for compliance with ANSI (ISO) standards.



INSTALLATION

Swing Control Valve Installation

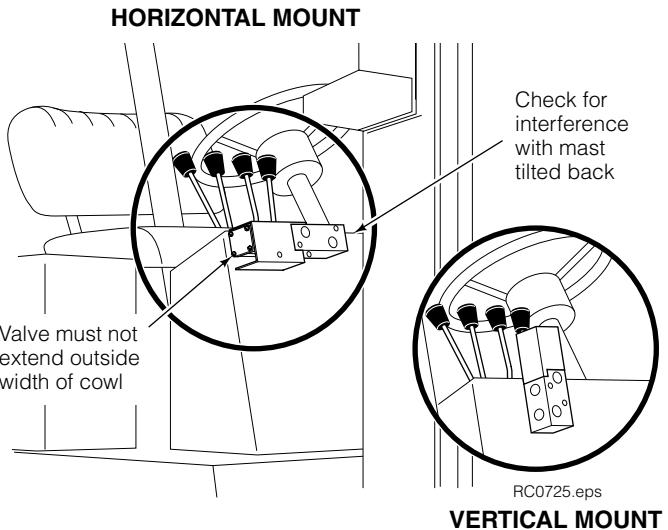
Follow the steps shown to install a Swing Frame Paper Roll Clamp. Read and understand all WARNING statements. If you don't understand a procedure, ask your supervisor or call the nearest Cascade Service Department for assistance.

NOTE: Swing Frame Clamps require a solenoid-operated control valve group to convert a two function auxiliary control valve to three function operation.

For hose reel information, refer to Installation Instructions 673835 for THINLINE™ 2-Port Hose Reels and Installation Instructions 675395 for THINLINE™ 2-Port Hose Reels (for masts without internal reeving). Control valve groups for different voltages are listed in the table shown.

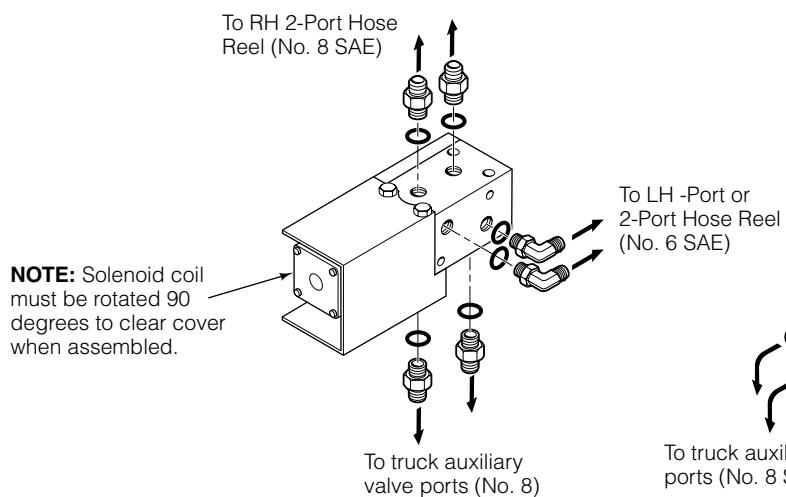
Control Valve Group		
With Knob Part Number	With Low Profile Switch Part Number	Truck Voltage
674924	6014883	12V
674925	6014885	24V
674926	6014886	36V
674927	6014887	48V

- 1** Determine an appropriate mounting location for the control valve on the truck cowl. The valve can be mounted horizontally or vertically. The valve must not extend outside the width of the cowl or interfere with the truck mast.

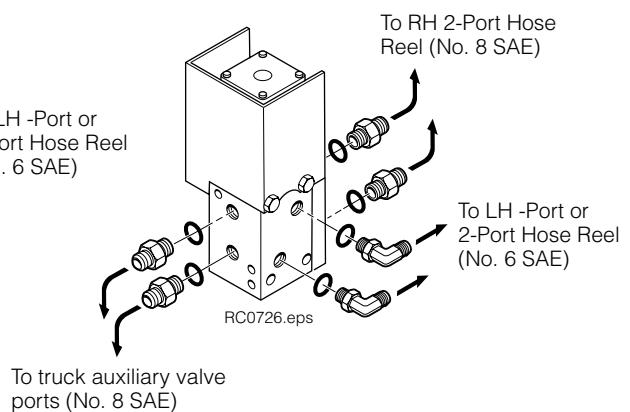


- 2** Assemble the solenoid valve, fittings, cover and subplate. Position the assembly on the truck cowl noting any clearance problems.

HORIZONTAL MOUNT



VERTICAL MOUNT

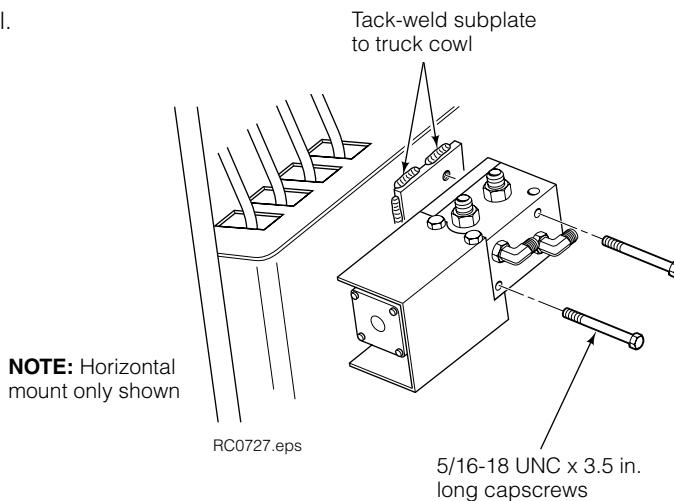


INSTALLATION

Swing Control Valve Installation

3

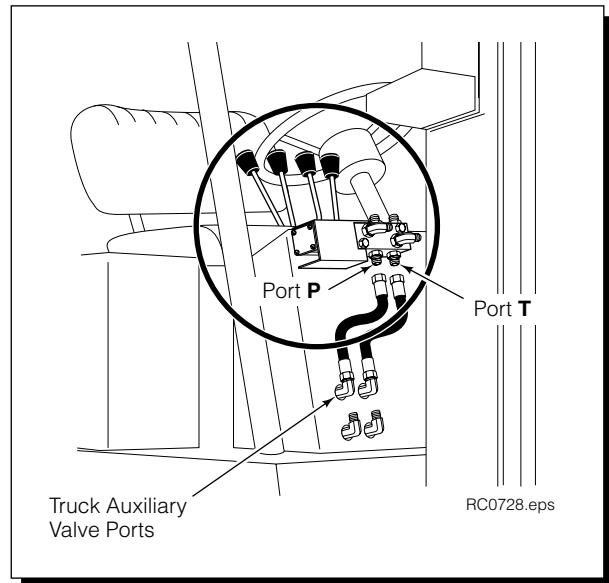
Mark the mounting location on the truck cowl. Grind and clean the area in preparation for welding. Tack-weld the subplate to the cowl and mount the valve to the subplate with the capscrews supplied in the kit.



4

Measure and assemble two hoses (user-supplied) to run from the solenoid valve **P** and **T** ports to the **truck valve** ports. Install the hoses.

IMPORTANT: Proceed to step 7 if lift truck is equipped with mast internal hose reeving.

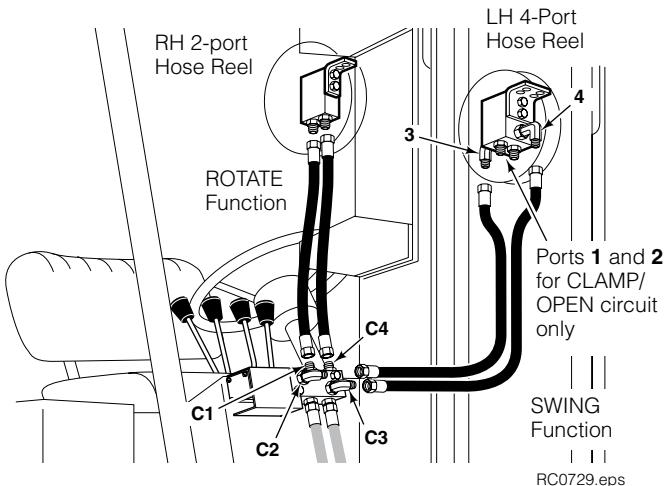


Installation with RH 2-Port and LH 4-Port Hose Reels

5

Rotate Function – Measure and assemble two hoses (user-supplied) to run from the control valve **C1** and **C4** ports to the **RH hose reel**. Install hoses.

Swing Function – Measure and assemble two hoses (user-supplied) to run from the control valve **C2** and **C3** ports to the **LH 4-port hose reel 3 and 4** ports. Install hoses.



INSTALLATION

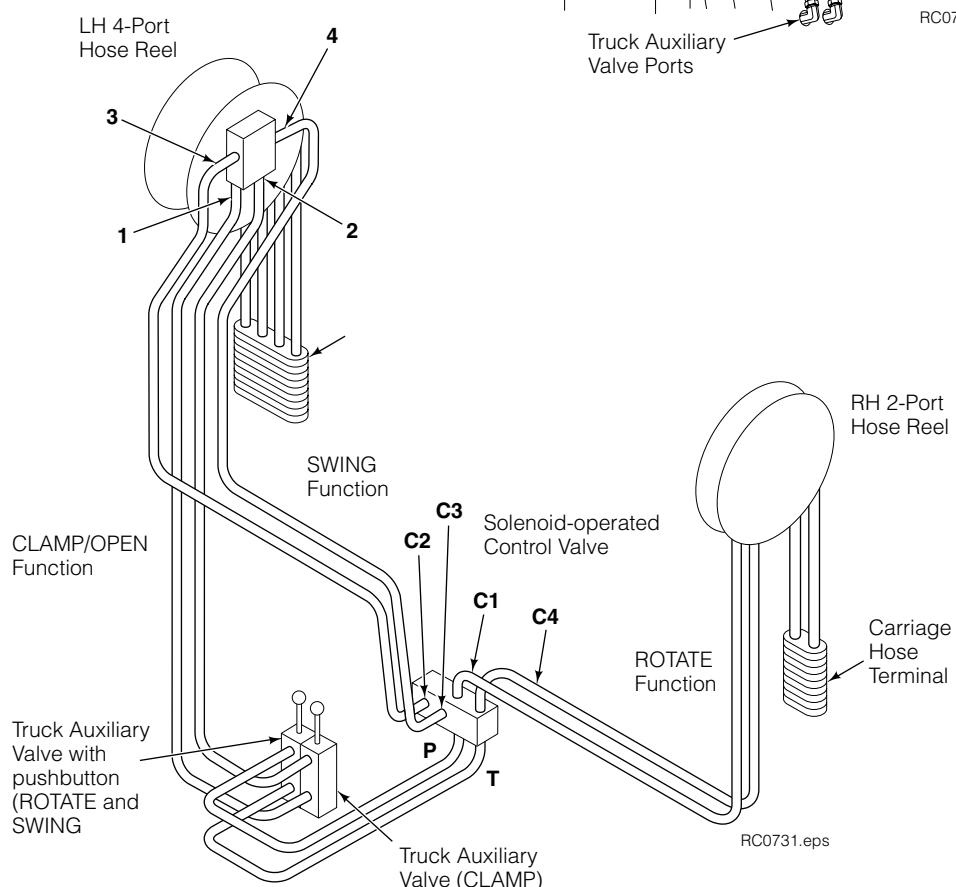
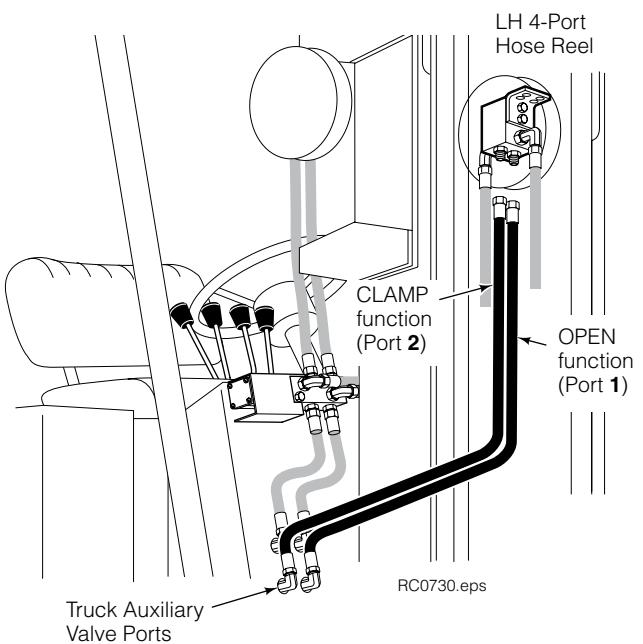
Installation with RH 2-Port and LH 4-Port Hose Reels (Continued)

6

Clamp Function – Measure and assemble two hoses (user-supplied) to run from the **truck valve** ports to the **LH 4-port hose reel 1 and 2 ports**. Install hoses.



WARNING: The hose operating the OPEN function must connect to **Port 1** on the 4-port hose reel.



INSTALLATION

Swing Control Valve Installation

Installation with RH and LH 2-Port Hose Reels and Internal Hose Reeving

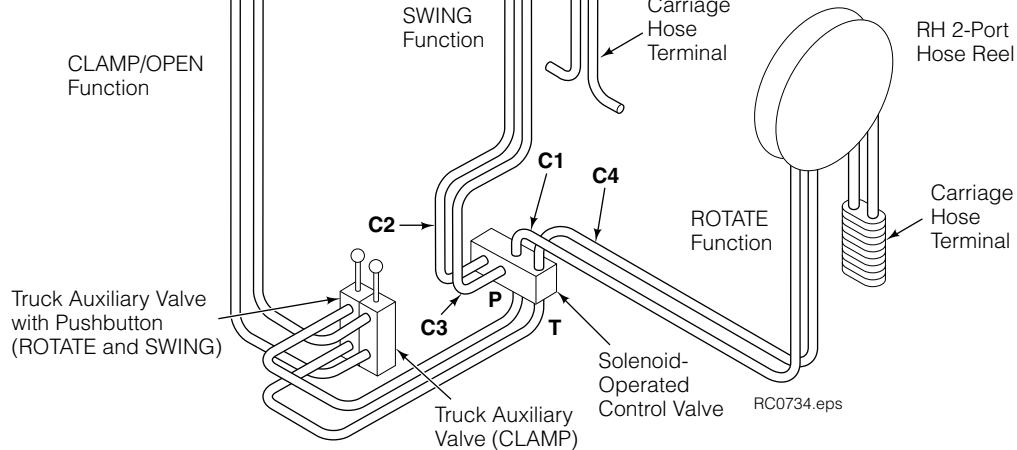
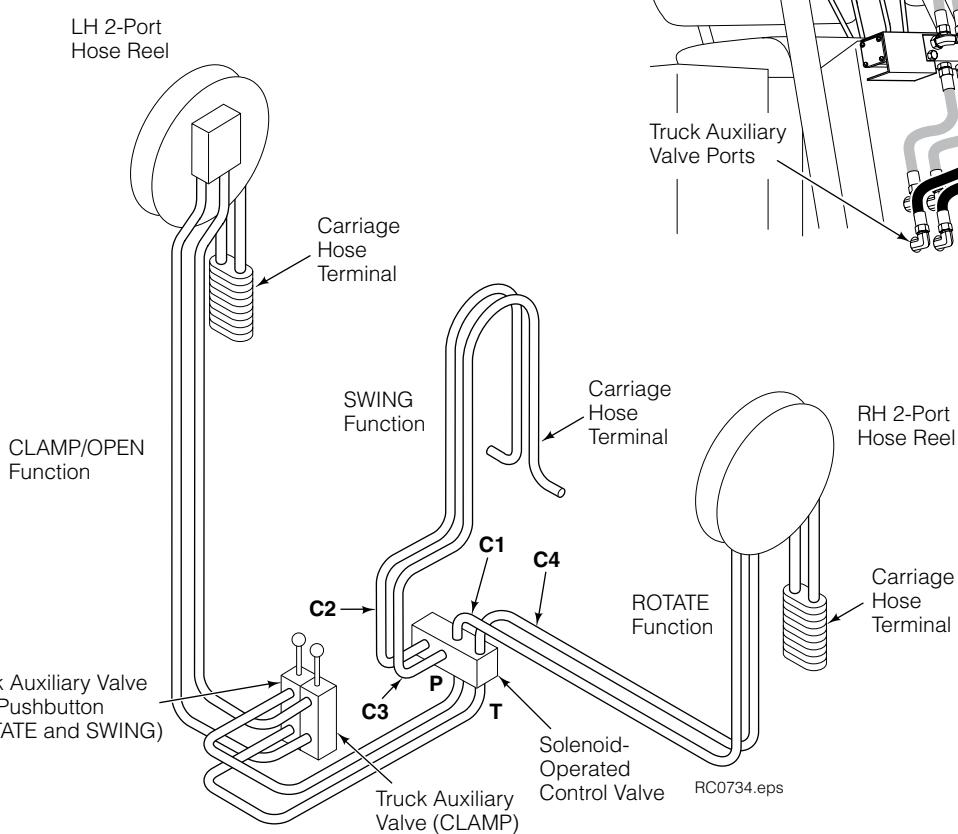
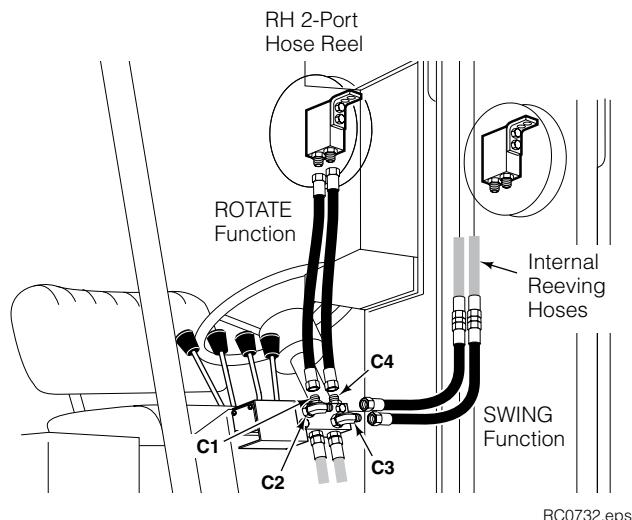
7

Rotate Function – Measure and assemble two hoses (user-supplied) to run from the control valve **C1** and **C4** ports to the **RH hose reel**. Install hoses.

Swing Function – Measure and assemble two hoses (user-supplied) to run from the control valve **C2** and **C3** ports to the **internal hose reeving hoses**. Install hoses.

8

Clamp Function – Measure and assemble two hoses (user-supplied) to run from the **truck valve** ports to the **LH 2-port hose reel**. Install hoses.



INSTALLATION

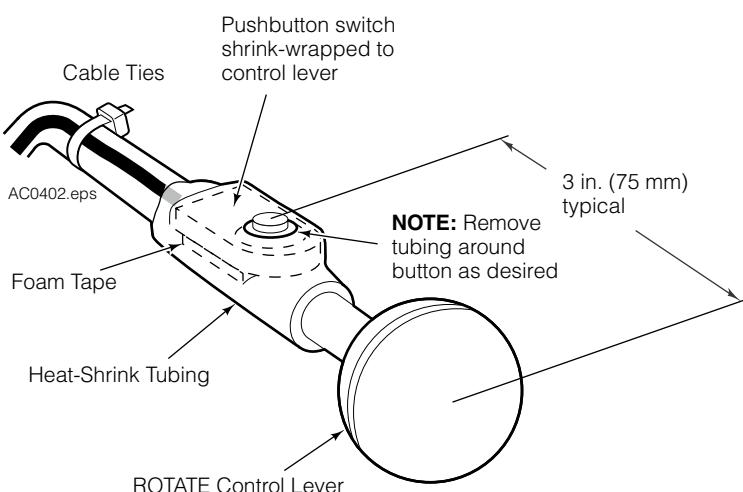
9

Locate the auxiliary valve lever that operates the hydraulic hoses connected to the solenoid control valve **P** and **T** ports. Install a new knob with pushbutton, or shrink-wrap low profile switch onto the control lever.

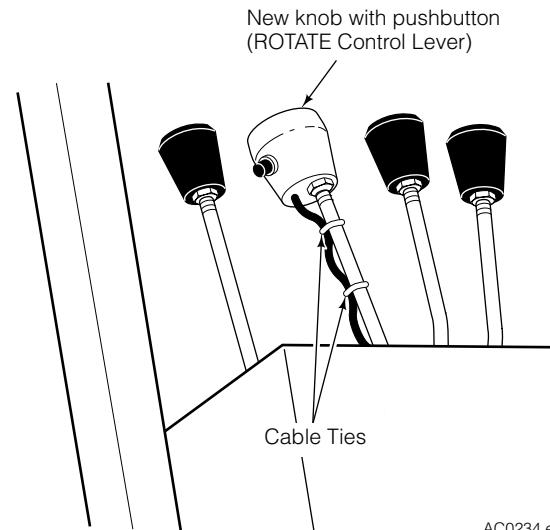
IMPORTANT: Lever should control the ROTATE function per ANSI (ISO) standard. When the pushbutton is depressed, the lever should activate the SWING function.

CAUTION: Secure cable with cable ties to avoid pinching at truck cowl during handle movement.

LOW PROFILE SWITCH ON CONTROL LEVER



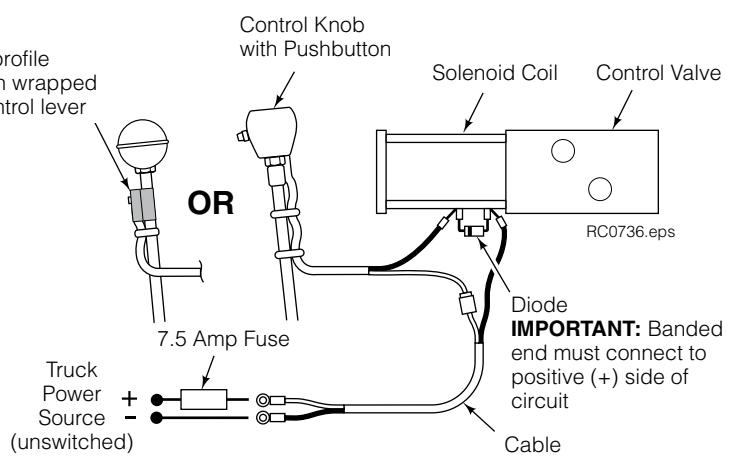
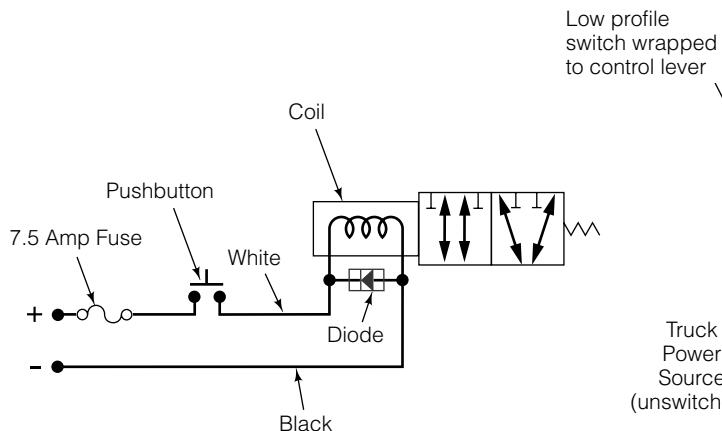
SOLENOID KNOB WITH PUSHBUTTON



10

Connect the wiring from the pushbutton and control valve terminals to the truck electrical system as shown.

IMPORTANT: Fuse must be connected to an unswitched positive terminal – control valve must be able to energize with truck key in off position.



INSTALLATION

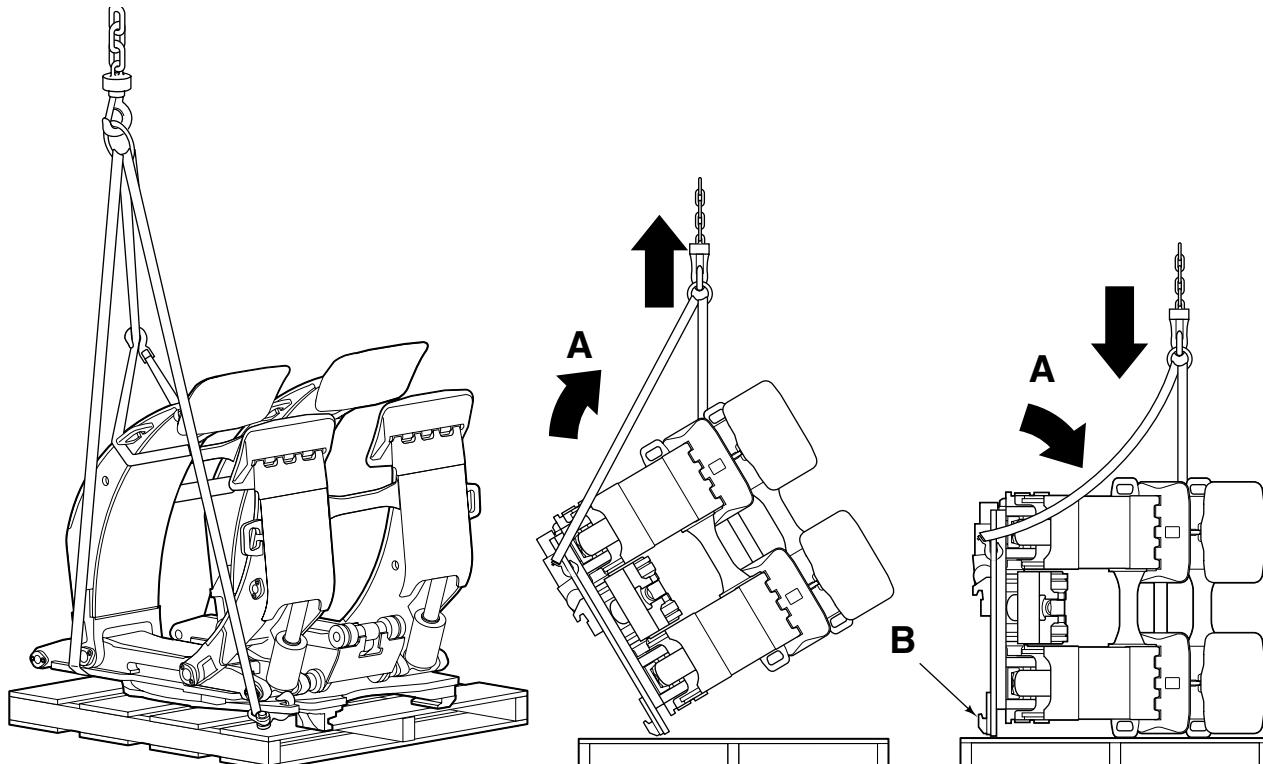
Attachment Installation

1 Attach overhead hoist

- A Remove banding, set the attachment upright on pallet.
- B If equipped, remove bolt-on lower mounting hooks.



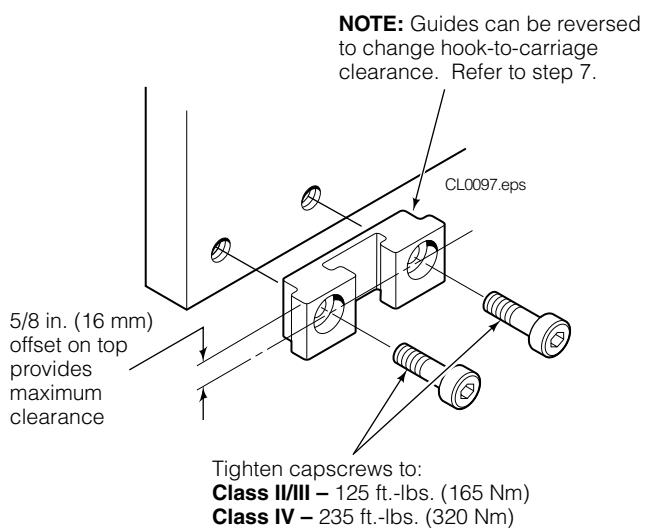
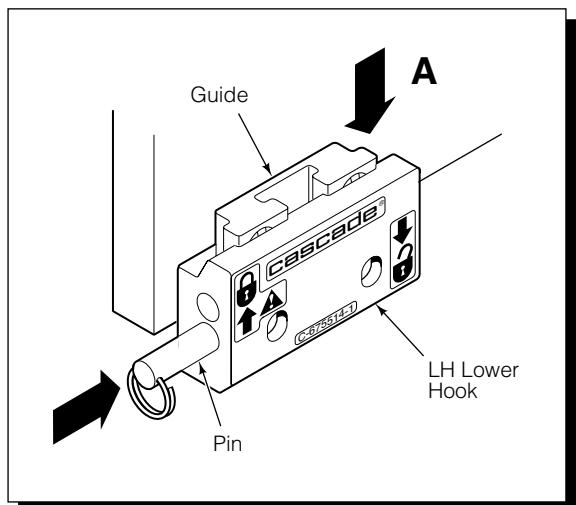
WARNING: Verify that the overhead hoist and chains or straps are rated for the weight of the attachment. Refer to nameplate for attachment weight.



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2 Unlock quick-change lower mounting hooks (if equipped)

- A Move hooks into unlocked position (pin in lower hole).



INSTALLATION

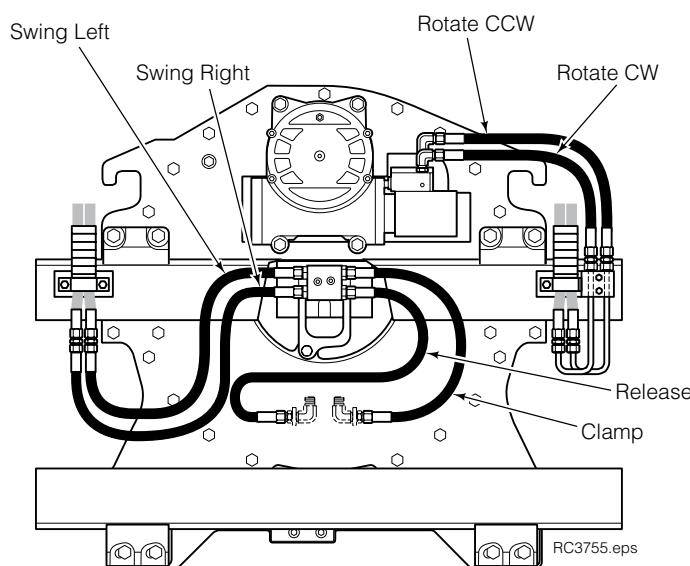
3 Prepare hoses

- A Position truck carriage behind the attachment.
- B Determine hose lengths required.
- C Cut hoses to length, install end fittings.

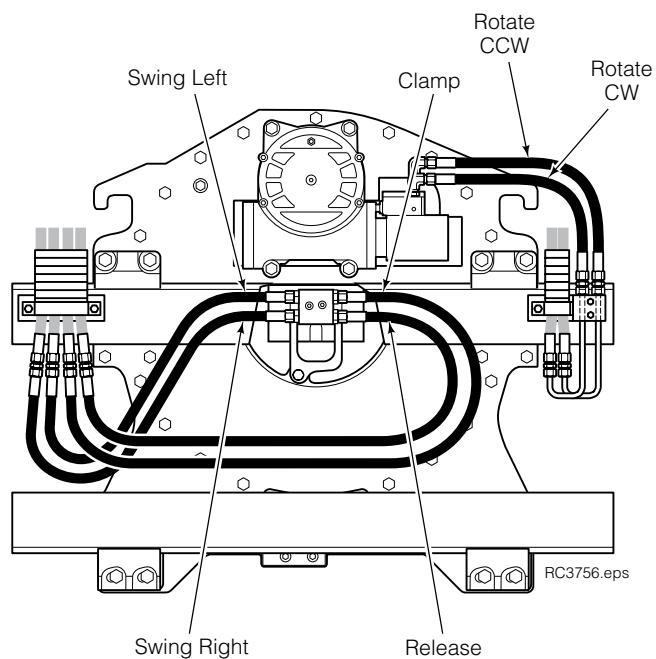
CAUTION: Rotate function supply circuit back pressure exceeding 500 psi (35 bar) and a maximum flow rate of 15 GPM (54 L/min.) can result in excessive oil heating, reduced attachment performance and shortened hydraulic system life. Check for restrictions such as numerous fittings and fitting/hose sizes less than No. 8.

CAUTION: Hoses should be 2300 psi (160 bar) working pressure rated for all attachment functions.

INSTALLATION USING RH & LH 2-PORT THINLINE™ HOSE REELS, SINGLE IHR:



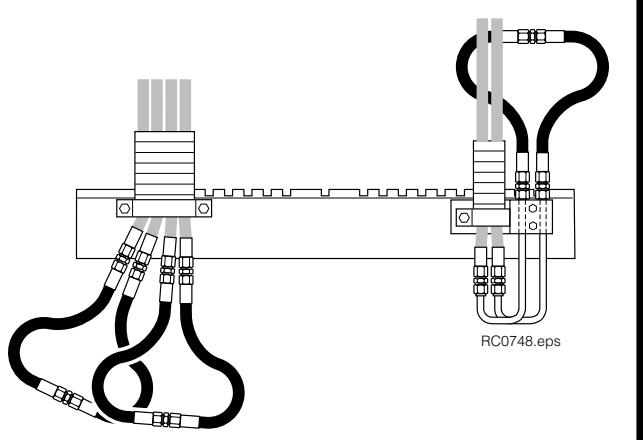
INSTALLATION USING RH 2-PORT HOSE REEL and LH 4-PORT HOSE REEL:



WARNING: Hose connecting revolving connection OPEN port to 4-port hose reel must be connected to outer-most hose on reel only.

4 Flush hydraulic supply hoses

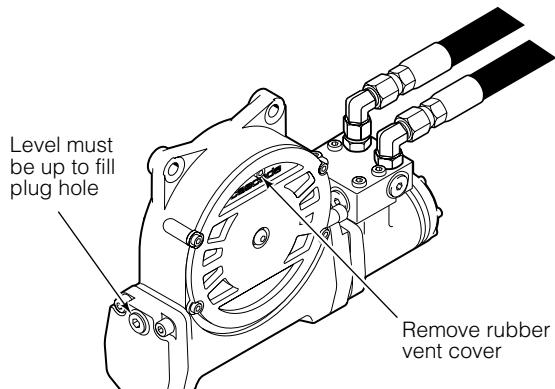
- A Install hoses as shown below.
- B Operate auxiliary valves for 30 seconds.
- C Remove union fittings.
- D Install hoses to revolving connection fittings as shown in step 3, above.



INSTALLATION

Attachment Installation

5 Check lubricant level and remove rubber vent cover



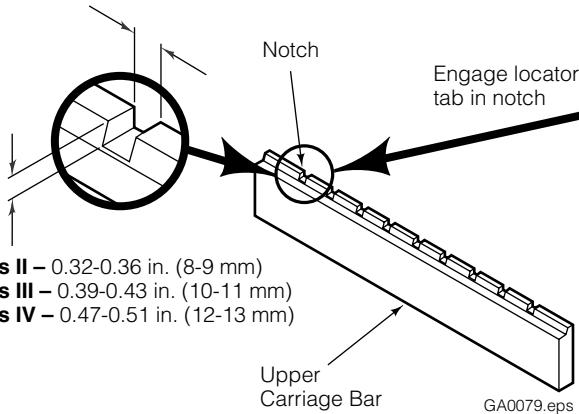
If necessary, fill gearbox with Cascade Gear Lube 656300 or equivalent SAE 90 wt. gear lube (AGMA 'mild' 6EP Gear Oil).

6 Mount attachment on truck carriage

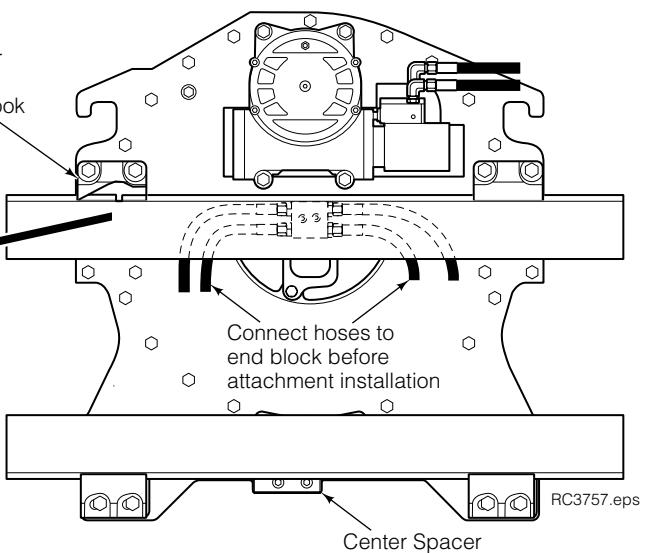
- A** Center truck behind attachment.
- B** Tilt forward and raise carriage into position.
- C** Engage top mounting hooks with carriage.
Make sure left hook engages closest notch on top carriage bar
- D** Lift attachment 2 in. (5 cm) off pallet.

Class II – 0.60-0.66 in. (15-17 mm)
Class III – 0.72-0.78 in. (18-20 mm)
Class IV – 0.72-0.78 in. (18-20 mm)

Class II – 0.32-0.36 in. (8-9 mm)
Class III – 0.39-0.43 in. (10-11 mm)
Class IV – 0.47-0.51 in. (12-13 mm)



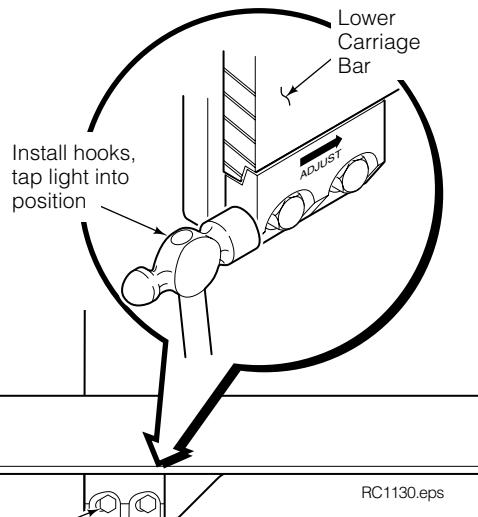
Carriage Bar and Upper Mounting Hook



INSTALLATION

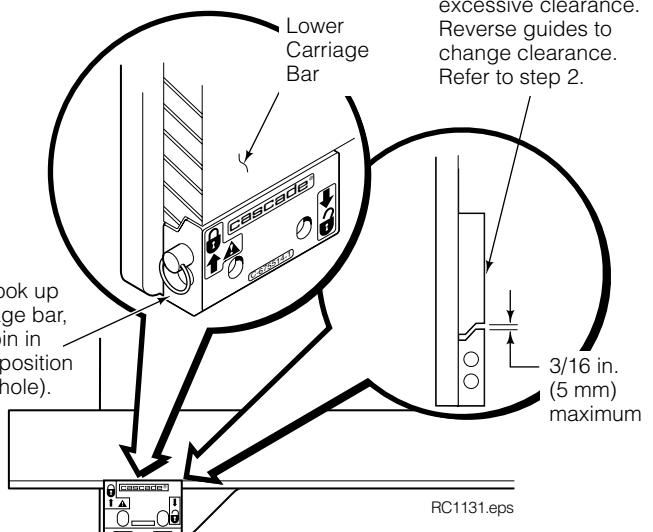
7 Install and engage lower hooks

BOLT-ON TYPE



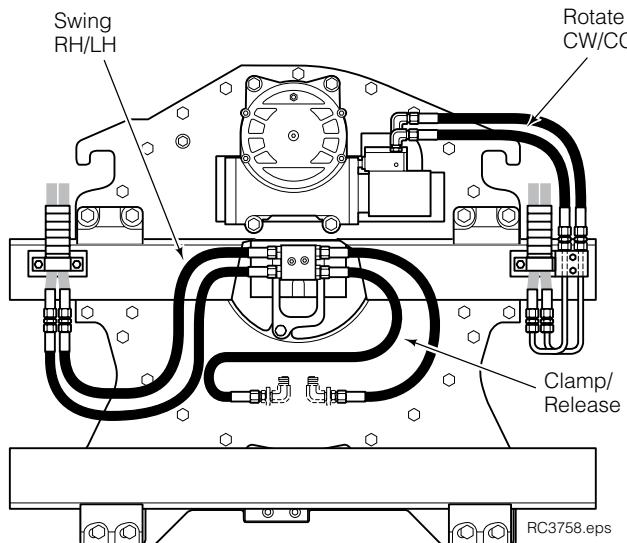
Tighten capscrews:
Class II/III – 125 ft.-lbs. (165 Nm)
Class IV – 195 ft.-lbs. (265 Nm)

QUICK-CHANGE TYPE

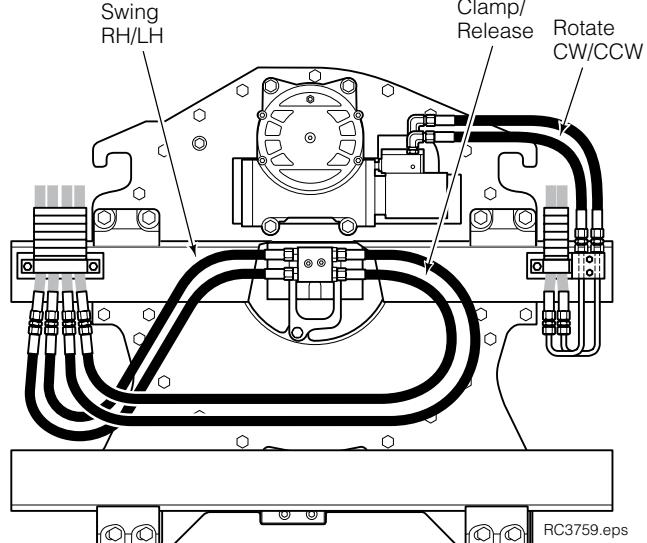


8 Connect hoses to hose terminal fittings as shown in step 3

INSTALLATION USING Rh & LH 2-PORT THINLINE™ HOSE REELS, SINGLE IHR:



INSTALLATION USING RH 2-PORT HOSE REEL and LH 4-PORT HOSE REEL:



INSTALLATION

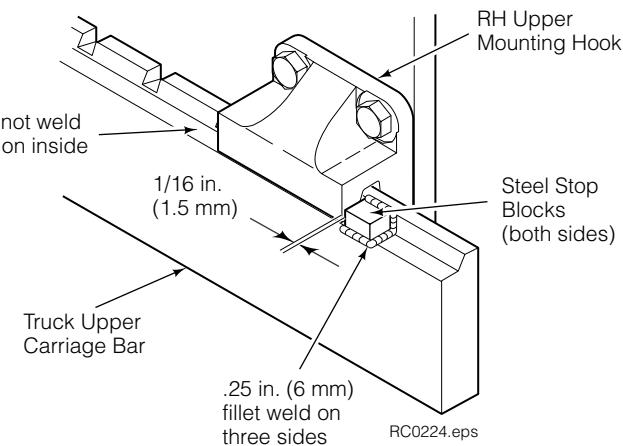
Attachment Installation

9

Install stop block kit

- Preheat each stop block and carriage bar weld area to 325° F (180° C).
- Use AWS E-7018 low hydrogen rod and weld a .25 in. (6 mm) fillet full length on three side of each stop block.

NOTE: Do not weld stop block on inside



10

180° Stop Valve Adjustment (if equipped/required)



WARNING: Make sure all personnel are clear of attachment during adjustment.

A Loosen the jam nut on the stop valve adjustment screws and turn the screws OUT (counterclockwise) until a groove marking the maximum-out position is visible. Adjustment screws should be adjusted equally.

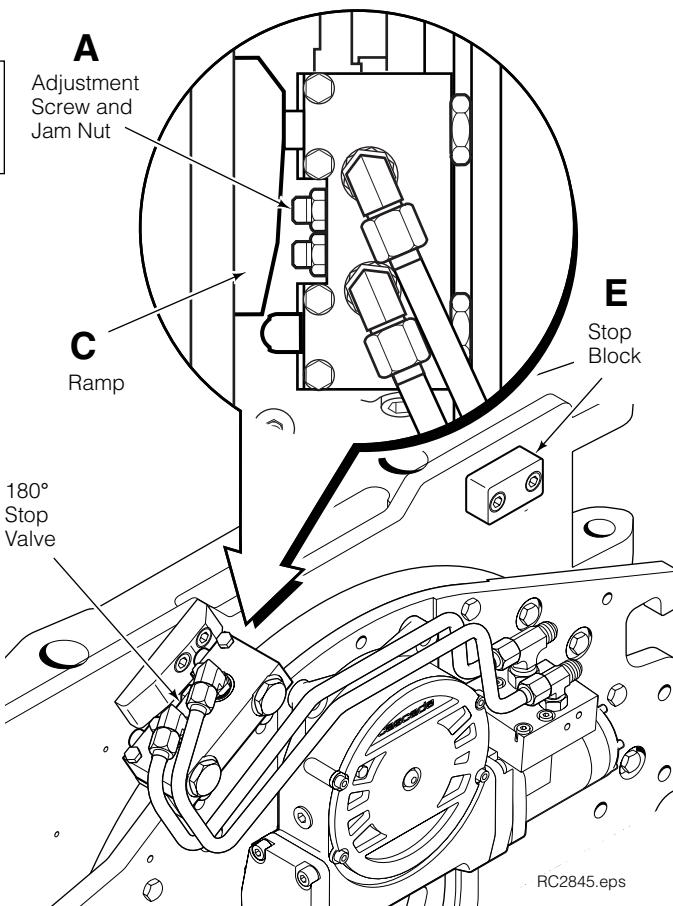
IMPORTANT: Backing the adjustment screws out past the groove will cause hydraulic leakage.

B Using a load that: A) is the heaviest to be lifted, or B) requires maximum motor torque, rotate the attachment back and forth to the stops at full speed for 1–2 minutes before making adjustments. Observe whether the attachment fully completes its rotation slowly into the hard stop.

C If rotation does not continue into the hard stop, rotate the stop valve off the ramp and turn the adjustment screw IN (clockwise) one-eighth turn. Test for complete rotation slowly into the hard stop.

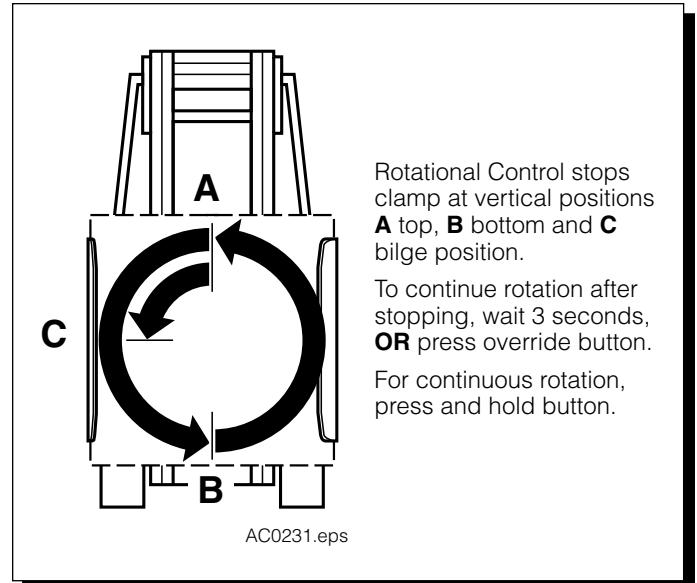
D Repeat Step C until the attachment fully completes its rotation slowly into the hard stop. Tighten the jam nut on the adjustment screw.

E Check the torque on the stop block capscrews and tighten to 80 ft.-lbs. (110 Nm) if necessary.



11 Electronic Rotational Control (ERC) Stop Adjustment (if equipped/required)

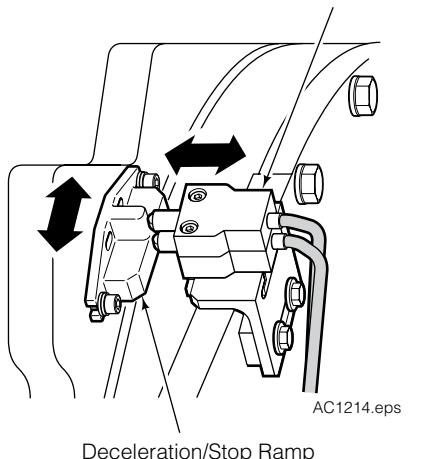
- A** Rotate the attachment in each direction to verify it stops in vertical and horizontal (bilge) position.
- If rotation does not stop at vertical or bilge position, refer to troubleshooting section in the service manual.
 - If attachment stops in vertical and horizontal (bilge) positions, proceed to Step B.
 - If rotation does not stop at exact vertical or bilge positions, limit switches may be adjusted as described in Step D.
- B** Wait 3 seconds to rotate attachment again, verifying it again stops in the vertical or horizontal (bilge) positions.
- C** Press and hold override pushbutton and verify that the attachment will rotate continuously without stopping.
- If continuous rotation does not occur when holding pushbutton, refer to troubleshooting section in the service manual.
- D** Inspect limit switch end rollers for full engagement on deceleration ramps and stop capscrews. If required, adjust limit switch position and/or stop capscrew to precisely locate stop position within ± 0.5 in. (13 mm).



Rotational Control stops clamp at vertical positions **A** top, **B** bottom and **C** bilge position.

To continue rotation after stopping, wait 3 seconds, **OR** press override button.

For continuous rotation, press and hold button.



INSTALLATION

Attachment Installation

12

Cycle Attachment Functions

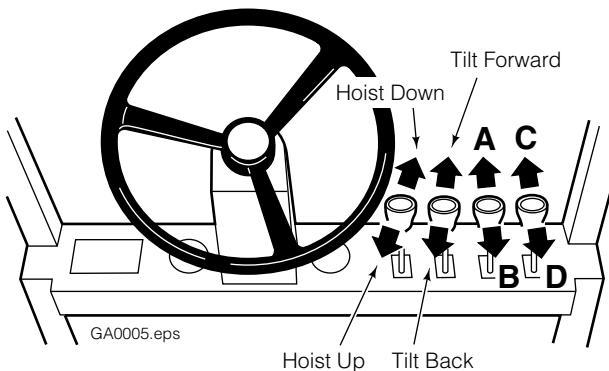


WARNING: Make sure all personnel are clear of the attachment during testing.

- With no load, cycle all functions several times.
- Check functions for operation in accordance with ANSI (ISO) standards.
- Clamp and rotate a maximum load, check for smoothness and normal rotation.
- Check for leaks at fittings, revolving connection and cylinder rod ends.

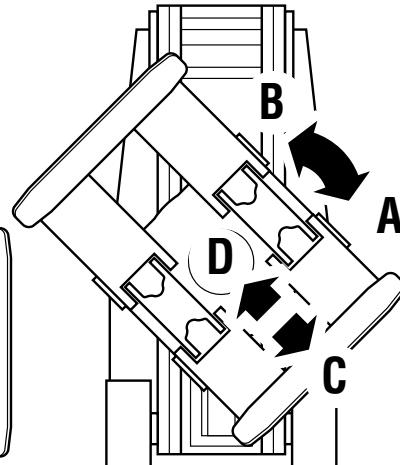
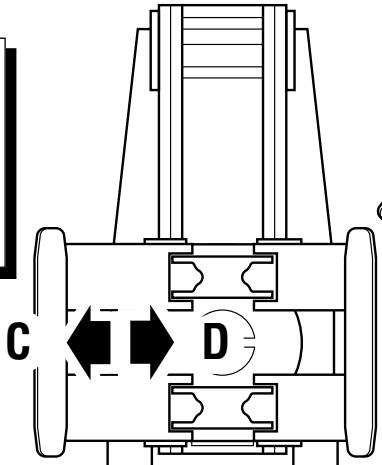


WARNING: Truck control handle and attachment function activation shown here conforms to ANSI/ITSDF B56.1 (ISO 3691) recommended practices. Failure to follow these practices may lead to serious bodily injury or property damage. End user, dealer and OEMs should review any deviation from the practices for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



LONG ARM
(Vertical & horizontal positions only)

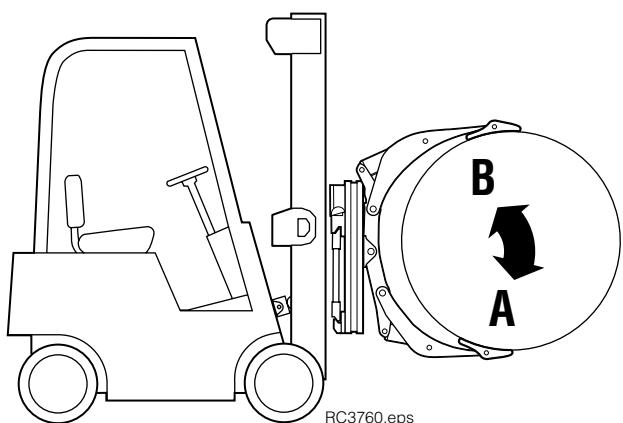
C Release
D Clamp



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ROTATE
(Driver's view)
A Counterclockwise (CCW)
B Clockwise (CW)

SHORT ARM
(45-degree position only)
C Open
D Close



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SWING
(Bilge handling shown)
A Push Button - Extend
B Push Button - Retract

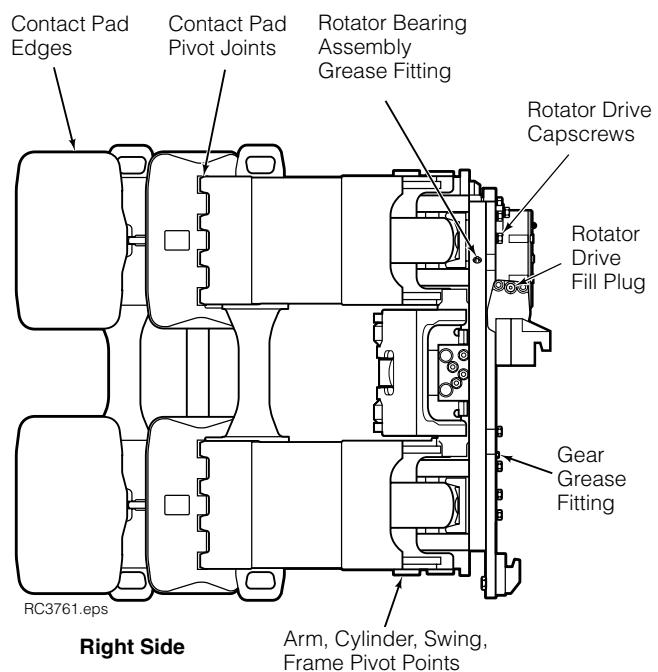
PERIODIC MAINTENANCE

NOTE: If swing components require service, refer to H-Series Swing Frame Paper Roll Clamp Service Manual Supplement 6844788. If arms, clamp cylinders and rotation related components require service, refer to H-Series Fixed Frame Pivot Arm Paper Roll Clamp Service Manual 6078255.

Daily

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

- Check for loose or missing bolts, worn or damaged hoses, and hydraulic leaks.
- Check the edges of the contact pads for wear or sharp nicks that could damage or tear paper rolls. Grind the edges smooth.
- Check the contact pad pivot joints for wear. Repair or replace as necessary.
- Check that load handling hydraulic system is functioning properly. Clamp Force Indicators 830141, 832442 and 200645 are available for this test.
- Check decals and nameplate for legibility.



1000-Hour Maintenance

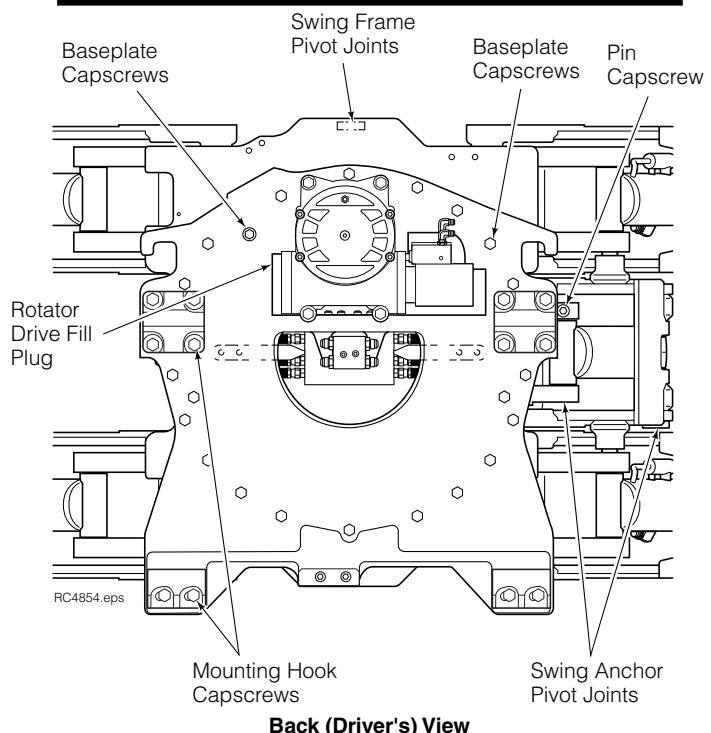
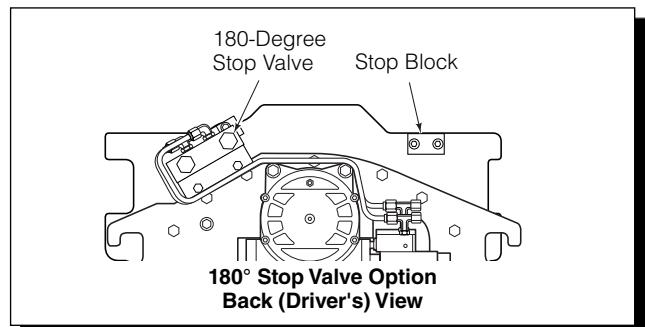
After each 1000 hours of truck operation, in addition to the daily inspection, perform the following maintenance procedures:

- Check the torque on the stop block capscrews. Tighten to 80 ft.-lbs. (110 Nm), if necessary.
- Check sample of baseplate capscrews for proper torque value. See Technical Bulletin TB183 for checking and replacement procedures.
- Check sample of bearing capscrews for proper torque value. See Technical Bulletin TB183 for checking and replacement procedures.



WARNING: A sampling of faceplate and baseplate bearing assembly capscrews must be checked for proper torque at 500 hours (see TB183), and all capscrews checked at every 2000 hours. Failure to keep the capscrews tightened can result in attachment damage and serious injury.

- Tighten mounting hook capscrews:
Class II/III – 125 ft.-lbs. (165 Nm)
Class IV – 195 ft.-lbs. (265 Nm)
- Tighten rotator drive capscrews to 65 ft.-lbs. (88 Nm).
- Lubricate rotator bearing assembly with EP-2 grease (Whitmore 'Omnitask' or equivalent). Rotate clamp in 90 degree increments and grease in each position.
- Check rotator drive gearcase lubricant level. Lubricant should be up to bottom of fill plug hole. If necessary, fill with Cascade Rotator Drive Lubricant, Part No. 656300, or SAE 90 wt. gear lube (AGMA 'mild' 6 EP Gear Oil). Replace plug.



1000-Hour Maintenance

(continued)

- Inspect all arm, frame and cylinder pivot bushings for wear. Replace if necessary.
- Inspect all load bearing structural welds on arms, swing frame pivots, arm pivots and cylinder pivot areas for visual cracks. Replace components as required.

2000-Hour Maintenance

After each 2000 hours of truck operation, in addition to the daily inspection and 1000-hour maintenance, perform the following maintenance procedures:

- Check **all** rotation bearing capscrews for proper torque value. See Technical Bulletin TB183 for checking and replacement procedures.
- Inspect all arm and cylinder pivot pins for wear. Replace if necessary.

4000-Hour Maintenance

After each 4000 hours of truck operation, in addition to the daily inspection, 1000 and 2000-hour maintenance, perform the following maintenance procedures:

- Due to normal mechanical wear and component service life, cylinder seals should be replaced to maintain performance and safe operation. Refer to H-Series Fixed Frame Pivot Arm Paper Roll Clamp Service Manual 6078255, Section 4.4, for cylinder service.

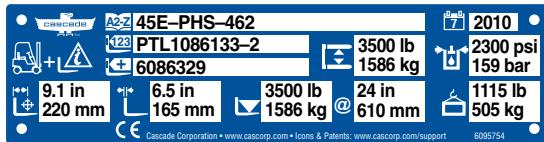


WARNING: After completing any service procedure, always test the attachment through five complete cycles. First test the attachment empty, then test with a load to make sure the attachment operates correctly before returning it to the job.

 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 NIMIKYLTI KUVAKKEET
 FR PLAQUE ICÔNES

 GA IDENTIFICACIÓN ICONAS
 HU NEVtáBLÁN IKONOK
 IS NAFNAKILTÁTKN
 IT ICONE DELLA TARGA
 JA 銘板アイコン
 KO 평판 아이콘
 LT NOMINALUS PIKTOGRAMOS
 LV AR NOSAKUMU, IKONAS
 MT NAMEPLATE ICOANE
 NL NAAMBORD ICONEN

 NO NAVNEPLATE-IKONER
 PL NAMEPLATE ICOANE
 PT IDENTIFICAÇÃO ÍCONES
 RO ICONOS DE PLACA
 RU TABLICHKU ZNAKHOV
 SK MENOVKA ICONS
 SL TABLICA IKONE
 SV NAMNSKYLLEN IKONER
 TR BILGI ETİKETİ SIMGELERİ
 ZH 铭牌图标



 EN MODEL
 BG МОДЕЛ
 CS MODEL
 DA MODEL
 DE MODEL
 EL MONTELO
 ES MODELO
 ET MUDEL
 FI MALLI
 FR MODÈLE
 GA DÉANAMH AGUS AIMH
 HU MODELL
 IS MÓDEL
 IT MODELLO
 JA モデル
 KO 모델
 LT MODELIS
 LV MODELIS

 MD MUDELL
 NL MODEL
 NO MODELL
 PL MODEL
 PT MODELO
 RO MODEL

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



 EN SERIAL NUMBER
 BG СЕРИЕН НОМЕР
 CS SERIOVÉ ČÍSLO
 DA SERIENNUMMER
 DE SERIENNUMBER
 EL ΣΕΙΡΙΑΚΟΣ ΑΡΙΘΜΟΣ
 ES NÚMERO DE SERIE
 ET SEERIANUMBER
 FI SARJANUMERO
 FR NUMERO DE SERIE
 GA SRAITHUIMHIR
 HU GYÁRI SZÁM
 IS RAÐNÚMER
 IT NUMERO DI SERIE
 JA シリアル番号
 KO 일련 번호
 LT SERIJINIS NUMERIS
 LV SERIJAS NUMURS

 MT NUMRU TAS-SERJE
 NL SERIENUMMER
 NO SERIENNUMMER
 PL NUMER SERWYNY
 PT NÚMERO DE SÉRIE
 RO NUMAR DE SERIE

 RU СЕРИЙНЫЙ НОМЕР
 SK SÉRIOVÉ ČÍSLO
 SL SERIUSA ŠTEVILKA
 SV SERIENNUMBER
 TR SERI NUMARASI
 ZH 序列号



 EN ADDITIONAL INFORMATION
 BG ДОПЪЛНИТЕЛНА ИНФОРМАЦИЯ
 CS DOPLNKOВÉ INFORMACE
 DA YDERLIGERE OPLYSNINGER
 DE ZUSÄTZLICHE INFORMATIONEN
 EL ΠΡΟΣΩΠΕΤΕΣ ΠΛΗΡΟΦΟΡΙΕΣ
 ES INFORMACIÓN ADICIONAL
 ET LISAINFO
 FI LISÄTIEDOT
 FR INFORMATIONS SUPPLÉMENTAIRES
 GA TUIILLEADH FAISNEISE
 HU KIEGÉSZÍTŐ INFORMÁCIÓ
 IS VIÐBÓTARTÆKI
 IT INFORMAZIONI AGGIUNTIVE
 JA 追加情報
 KO 추가 장비
 LT PAPILDOMA INFORMACIJA
 LV PAPILDU INFORMĀCIJA

 MT INFORMAZJONI ADDIZZJONALI
 NL AANVULLENDE INFORMATIE
 NO NOTILLEGGSUTSTYR
 PL INFORMACJE DODATKOWE
 PT INFORMAÇÕES ADICIONAIS
 RO INFORMAȚII SUPLIMENTARE

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



 EN MAXIMUM CAPACITY
 BG МАКСИМАЛЕН КАПАСИТЕТ
 CS MAXIMálnI NOSNOST
 DA MAKS. KAPACITET
 DE MAXIMALKAPAZITÄT
 EL ΜΕΓΙΣΤΗ ΧΩΡΗΤΙΚΟΤΗΤΑ
 ES CAPACIDAD MÁXIMA
 ET MÄKSIMAALNE JÜDULUS
 FI MÄKSIMÄÄRÄ KAPASITEETTI
 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 MAXIMĀLĀ CELTSPĒJA

 MD KAPACITÀ MASSIMA
 NL MAXIMAAL LAADVERMOGEN
 NO MAXIMAL KAPASITET
 PL UDZWIG MAKSYMALNY
 PT CAPACIDADE MÁXIMA
 RO CAPACITATE MAXIMĂ

 RU МАКСИМАЛЬНАЯ ГРУЗОПОДЪЕМНОСТЬ
 SK MAXIMALNA NOSNOST
 SL NAJVEČJA ZMOGLJIVOST MEDZI VIDLICAMI
 SV MAXIMAL KAPACITET MELLAN GAFFLAR
 TR CATALLAR ARASI YÜK MERKEZİNDEKİ
 ZH 最大承载能力



 EN @ LOAD CENTER
 BG В ЦЕНТР ПОДАЧИ НА ГАТОВАРВАНЕ
 CS STŘED NÁKLADU
 DA VED LASTCENTRUM
 DE @ LASTSCHWERPUNKT
 EL ΣΤΟ ΚΕΝΤΡΟ ΒΑΡΟΥΣ
 ES @ CENTRO DE CARGA
 ET @ KOORMUSE RASKUSKESE
 FI @ PAINOPISTEESSÄ
 FR AU CENTRE DE CHARGE
 GA @ LÓDPHOINTE
 HU @ TEHER KÖZEPÉ
 IS @ HLEÐSLUMIÐJA
 IT @ BARICENTRO DEL CARICO
 JA @ 負荷の中心
 KO @ 부중 중심
 LT TIES KROVINIO CENTRU
 LV KRAVAS CENTRĀ

 MT @ CENTRU TAT-TAGHBIJA
 NL BI LASTZWAARTEPUNT
 NO VED LASTEPUNKT
 PL @ ŚRODEK CIEŻKOŚCI ŁADUNKU
 PT @ CENTRO DE CARGA
 RO LA CENTRUL DE GREUTATE

 RU В ЦЕНТРЕ НАГРУЗКИ
 SK V TÄZISKU NÁKLADU
 SL NAJVEČJA ZMOGLJIVOST MEDZI VIDLICAMI
 SV VID LASTENS MITTPUNKT
 TR MAKİSÜM KAPASİTET
 ZH 载荷中心



 EN MAXIMUM OPERATING PRESSURE
 BG МАКСИМАЛНО РАБОТНО НАПРІЖАНЕ
 CS MAXIMÁLNÍ PROVOZNÍ TLAK
 DA MAKSIMAL DRIFTSTRYK
 DE MAXIMALER BETRIEBSDRUCK
 EL ΜΕΓΙΣΤΗ ΠΙΕΣΗ ΛΕΙΤΟΥΡΓΙΑΣ
 ES PRESIÓN DE FUNCIONAMIENTO MÁXIMA
 ET MAKSIMAALNE TOOROKH
 FI MAKSIMITOIMINTAPAINENE
 FR PRESSION DE SERVICE MAXIMALE
 GA UASBRÚ OIBRIUCHÁIN
 HU MAXIMÁLIS Üzemnyomás
 IS HÁMARKS VINNUPRÝSTINGUR
 IT PRESSIONE MASSIMA DI ESERCIZIO
 JA 最大運転圧力
 KO 최대 작동 압력

 MT PIÝ TAL-ATTACHMENT
 NL MASSA VAN VOORZETAPPARAAT
 NO MASSE FOR TILLEGGSUTSTYR
 PL MASA OSPRZETU
 PT PESO DO ACCESÓRIO
 RO MASA ECHIPAMENTULUI ATAȘAT

 RU MACCA HABECHOGO ОБОРУДОВАНИЯ
 SK HOMOTNOSŤ PRÍDAVNÉHO ZARIADENIA
 SL MASA PRIKLUČKA
 SV AGGREGATETS VIKT
 TR EK DONANIM AGIRLIĞI
 ZH 属具质量



 EN LOST LOAD CENTER DISTANCE
 BG РАЗСТОЯНИЕ ОТ ЦЕНТРА ВАГИ НА ЗАГУБА НА ГАТОВАРВАНЕ
 CS VZDÁLENOST POSUNUTÉHO STŘEDU NÁKLADU
 DA REDUCERT LASTCENTERAFSTAND
 DE VERLORENER ABSTAND ZUM LASTMITTELPOINT
 EL ΑΠΟΣΤΑΣΗ ΑΠΟΔΕΣΘΕΩΤΟΣ ΚΕΝΤΡΟΥ ΒΑΡΟΥΣ
 ES DISTANCIA A CENTRO DE CARGA PERDIDA
 ET KOORMUSE RASKUSKEMLE MUUTUS
 FI KAPASITEETIHUKA KESKIPESTEEN ETÄISYYS
 FR DISTANCE CENTRE DE CHARGE PERDUE

 GA FAD LÓDPHOINTE CAILLTE
 HU ELVESZETT TEHERKÖZEPONT-TÁVOLSÁG
 IS FJARLÆGÐ GLATABS HLEÐSLUMIÐU
 IT SPESSEZZO EFFETTIVO
 JA 质量中心消失
 KO 손실 히중 중심 거리
 LT ATITOLUSIO APROKROS CENTRO ATSTUMAS
 LV ZAUDĒTS ATTĀLUMS LĪdz SLOZDES CENTRAM
 MT DİSTANZA MÍC-CENTRU TAT-TAGHBIJA MITLUFA
 NL VERLOREN AFSTAND TOT LASTZWAARTEPUNT

 NO NOT TAP LASTEPUNKTAVSTAND
 PL WIELKOŚĆ PRZESUNIECIA SRODKA CIEŻKOŚCI ŁADUNKU
 PT DISTÂNCIA DO CENTRO DE CARGA PERDIDA
 RO DISTANȚA LA CENTRUL DE GREUTATE ALCARCINII
<img alt="Icon: NOT TAP LASTEPUNKTAVSTAND" data-bbox="755 852 775



(EN) CENTER OF GRAVITY TO MOUNT FACE DISTANCE
 (BG) ЦЕНТРУ НА ТЕЖЕСТИ ОТ МОНТАЖНАТА ЧЕЛНА ПОВЪРХНИЯ
 (CS) VZDÁLENOST STŘEDU NÁKLADU K ČELU RÁMУ
 (DA) AFSTANDEN MELLEM TYNGDEPUNKT OG MONTERINGSFLADEN
 (DE) ABSTAND ZWISCHEN SCHWERPUNKT UND MONTAGEFLÄCHE
 (EL) ΑΠΟΣΤΑΣΗ ΚΕΝΤΡΟΥ ΒΑΡΟΥΣ ΑΠΟ ΤΗΝ ΠΡΟΣΟΥΗ ΒΑΣΗΣ
 (ES) DISTANCIA DE CENTRO DE GRAVEDAD A CARA DE MONTAJE
 (ET) RASKUSKESKME KAUGUS EESMISEST KINNITUSPINNAST
 (FI) PAINOPISTEEN ETÄISYYS KINNITYSPINNASTA
 (FR) DISTANCE CENTRE DE GRAVITÉ-FACE DE MONTAGE

(GA) FAD IDIR AN MEÁCHANLÁR AGUS AN ÉADAN FEISTE
 (HU) SÚLYPONT - SZERELŐFELÜLET TÁVOLSÁG
 (IS) MÍBJA ÝNGDARAFLS TIL AB HLÁÐA ÚR LÍKAMSFJARLÆÐ
 (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 JĘGOS CENTRO IKI PAGRINDO PRIEKINES PUSĖS
 (LV) ATTALUMS NO SMAGUMA CENTRA LĪDZ UZSTĀDIŠANAS VIRSMAI
 (MT) ČENTRU TA' GRAVITÀ SAD-DISTANZA MOUNT FACE
 (NL) AFSTAND TUSSEN ZWAARTEPUNT EN MONTAGEVLAK

(NO) AVSTAND TYNGDEPUNKT TIL MONTERINGSFLATE
 (PL) ODLEGŁOŚĆ OD ŚRODKA CIĘZKOŚCI DO CZOLE ZAWIESZENIA
 (PT) DISTÂNCIA DO CENTRO DE GRÂVIDADE À SUPERFÍCIE DE MONTAGEM
 (RO) DISTANȚA DE LA CENTRUL DE GREUTATE LA SUPRAFAȚA DE MONTARE
 (RU) ПАСТОРНІНЕ ОТ ЦЕНТРА ТЯЖЕСТИ ДО УСТАНОВОЧНОЙ ПОВЕРХНОСТИ
 (SK) VZDIALENOSŤ ŤAŽISKA OD ČELNEJ STRANY UCHYTNENIA
 (SI) 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) VALMISTAMISASTA
 (FI) VALMISTUSVUOSI
 (FR) ANNÉE DE FABRICATION
 (GA) BLAIN DÉANTUSAICHTA
 (HU) AGYARTAS ÉVE

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

(MT) SENA TA' MANIFATTURA
 (NL) BOUWJAAR
 (NO) PRODUKSJONSÅR
 (PL) ROK PRODUKCJI
 (PT) ANO DE FABRICO
 (RO) ANUL DE FABRICATIE

(RU) ГОД ИЗГОТОВЛЕНИЯ
 (SK) ROK VÝROBY
 (SD) 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) КАПАЦИТЕТЪТ НА СЪЕДИНЕНИЕТО ПОДВИГАЧ И ПРИСТАВКА МОЖЕ ДА БЪДЕ ПО-МАЛЪК ОТ ДАДЕНИЯ КАПАЦИТЕТ НА ПРИСТАВКАТА. ВИЖТЕ ТАБЕЛКАТА НА ПОДВИГАЧА.
 (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 TILBEHØR 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 AUF STAPLER UND ANBAUGERÄT KANN GERINGER SEIN ALS DIE ANGEGBENE NENNTRAGFÄHIGKEIT. SIEHE TYPENSCHILD. DIE TRAGFÄHIGKEIT DER STAPLER-ANBAUGERÄT-KOMBINATION MUSS DAMIT ÜBEREINSTIMMEN.
 (EL) Η ΧΩΡΤΙΚΟΤΗΤΑ ΤΟΥ ΟΧΗΜΑΤΟΣ ΚΑΙ ΣΥΝΔΑΣΜΟΥ ΕΞΑΡΤΗΜΑΝΕΑΝΕΧΕΤΑΙ ΝΑ ΕΙΝΑΙ ΧΑΜΗΑΤΟΡΗ ΑΠΟ ΤΗ ΧΩΡΤΙΚΟΤΗΤΑ ΤΟΥ ΕΞΑΡΤΗΜΑΤΟΣ ΣΤΟ ΠΑΡΑΔΕΙΓΜΑ. ΣΥΜΒΟΛΥΕΥΤΕΙ ΤΗΝ ΕΤΙΚΕΤΑ ΤΟΥ ΟΧΗΜΑΤΟΣ. Η ΙΚΑΝΟΤΗΤΑ ΤΟΥ ΟΧΗΜΑΤΟΣ ΚΑΙ ΤΟΥ ΣΥΝΔΑΣΜΟΥ 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 JÖUDLUS VÖIB OLLA VÄIKSEM KUI TÖÖSEADME NÄIDATUD JÖUDLUS. VAADAKE LAADURI ANDMEPLAATI. LAADUR JA TÖÖSEADE PEAVAD OLEMA ÜKSEISEGA VASTAVU.
 (FI) TRUKKI- JA LISALAITEHDISTELMÄN KAPASITEETTI VOI OLLA PIENEMPI KUIN LISALAITTEEN ILMIOITETTU KAPASITEETTI. KS. TRUKIN ARVOKILPI. TRUKIN JA LISALAITTEEN YHDISTELMAN NOSTOKKYÄÄ NOUTAUTETTAVA.
 (FR) LA CAPACITÉ DE LA COMBINAISON CHARIOT/ACCESOIRE PEUT S'AVERER INFÉRIEURE A CELLE INDIQUEE POUR L'ACCESOIRE. SE REPORTER A LA PLAQUE SIGNALIQUE DU CHARIOT. RESPECTER LA CAPACITÉ DU CHARIOT ET DE L'ACCESOIRE COMBINÉS.
 (GA) D'FHÉADFAIDH NIOS LÚ CUMAIS A BHEITH AG AN TRUCAIL AGUS FEISTEAS NÁ AN CUMAS FEISTIS A THAISPEÁNTAR. FÉACH AR AIMCHHLÁR NA TRUCAILE. CLOÍFEAR LE CUMAS NA TRUCALE AGUS AN CHOMHCHEANGAL FEISTIS.
 (HU) A TARGONCA ÉS A TARZOZÉK KOMBINÁCIÓ KAPACITÁSA LEHET, HOGY KEVESEBB, MINT AZ ÁBRÁZOLT TARZOZÉK KAPACITÁSA. LÁSD A TARGONCA ADATTABLÁN. A TARGONCA ÉS SZERÉLK KOMBINÁCIÓ TEHERBÍRÁSÁNAK ELEGET KELL TENNIE ENNEK.
 (IS) GETA VÖRUBÍLS OG VİDHENGİS VİBBÓTAR GETUR VERID MINNI EN GETA VİDHENGİS ER SÝND. RÁDFÆRID YKKUR VIÐ NAFNAKILTÍ VÖRUBÍLSINS. ÞAÐ Á AD FYLGJA GETU VÖRUBÍLSINS OG VİDHENGİS VİBBÓTTINI.
 (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. SKAUTYKITE INFORMACIJĄ KRAUTUVO INFORMACINĖJE PLOKŠTELĖJE. BŪTINA NEVIRŠYTI KRAUTUVO IR PRIEDO DERINIO GALIOS.
 (LV) AUTOIEKRĀVĒJA UN PIEDERUMA KOPĒJĀ CELTSPĒJA VAR BŪT MAZĀKA PAR NORĀDĪTO PIEDERUMA CELTSPĒJU. SKATĪT AUTOIEKRĀVĒJA TEHNISKO DATU PLĀKSŅI. IR JĀVĒRO AUTOIEKRĀVĒJA UN UZKARES IEKĀRTAS KOPĒJĀ CELTSPĒJA.
 (MT) IL-KAPAÇITÀ TAT-TRAKK U TAT-TAGHMIR IMQABBAD MIEGHU TISTA' TKUN INQAS MILL-KAPAÇITÀ MURJA TAT-TAGHMIR IMQABBAD MIEGHU. İÇÇEKKA L-PJANÇA TAL-ISEM TAT-TRAKK. IL-KAPAÇITÀ TAT-TRAKK FLIMKJEN MA' DIK TAT-TAGHMIR IMQABBAD MIEGHU TRID TIĜI SSODISDATA.
 (NL) HET DRAAGVERMOGEN VAN DE COMBINATIE VAN HEFTRUCK EN VOORZETAPPARAAT KAN LAGER ZIJN DAN HET VERMELDE DRAAGVERMOGEN VAN HET VOORZETAPPARAAT. KIJK OP HET TYPE LATJAE VAN DE HEFTRUCK. MET DE CAPACITEIT VAN DE COMBINATIE VAN TRUCK EN VOORZETAPPARAAT WORDT REKENING GEHOUDEN.
 (NO) TOTAL KOMBINERT KAPASITET FOR GAFFELTRUCK OG TILBEHØR KAN VÆRE MINDRE ENN ANGITT KAPASITET FOR TILBEHØRET. SE GAFFELTRUCKENS NAVNEPLATE. DEN TOTALE KAPASITETEN FOR GAFFELTRUCK OG TILLEGGSUTSTYR KOMBINERT MÅ OVERHOLDES.
 (PL) UDŽWIG ZESPOŁU WÓZKA I OSPRZĘTU MOŻE BYĆ MNIEJSZY NIŻ POKAZANY UDŽWIG OSPRZĘTU. PATRZ TABLICZKA ZNAMIONOWA WÓZKA. NALEŻY PRZESTRZEGAĆ DOPUSZCZALNEGO UDŽWIGU 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 RESPEITADO.
 (RO) CAPACITATEA VEHICULULUI SI A COMBINATIEI DISPOZITIVELOR DE PRINDERE POATE FI MAI MICĂ DECÂT CAPACITATEA DISPOZITIVELOR DE PRINDERE INDICATĂ. CONSULTAȚI PLĂCUTA CU CARACTERISTICILE TEHNICE ALE STIVUTORULUI. CAPACITATEA COMBINATIEI STIVUTOR - ECHIPAMENTE ATAȘATE TREBUIE RESPECTată.
 (RU) СОВМЕСТНАЯ ГРУЗОПОДЪЕМНОСТЬ АВТОПОГРУЗЧИКА И НАВЕСНОГО УСТРОЙСТВА МОЖЕТ БЫТЬ НИЖЕ УКАЗАННОЙ ГРУЗОПОДЪЕМНОСТИ НАВЕСНОГО УСТРОЙСТВА. СМ. ТАБЛИЧКУ ТЕХНИЧЕСКИХ ДАННЫХ. НЕОБХОДИМО СОБЛЮДАТЬ КОМБИНИРОВАННУЮ ГРУЗОПОДЪЕМНОСТЬ АВТОПОГРУЗЧИКА И НАВЕСНОГО ОБОРУДОВАНИЯ.
 (SK) NOSNOST VOZÍKA A PŘÍDAVNÝM ZAŘÍZENÍM MÔŽE BYŤ MENŠIA AKO UVEDENÁ NOSNOST PŘÍDAVNÉHO ZAŘÍZENÍ. BLÍŽŠIE INFORMÁCIE UVEDENÉ NA TYPOVOM ŠTÍTKU VOZÍKA. NOSNOST VOZÍKA S PŘÍDAVNÝM ZAŘÍZENÍM BUDÉ PODRŽANÁ.
 (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 ÅN ANGIVEN KAPACITET. LÄS GAFFELTRUCKENS TYPSKYLT. KAPACITETEN FÖR KOMBINATIONEN GAFFELTRUCK OCH AGGREGAT SKA FÖLJAS.
 (TR) ARAÇ KAPASITESI VE DONANIM KOMBINASYONU, GÖSTERİLEN DONANIM KAPASITESİNDEKİ DÜŞÜK OLABİLİR. ARAÇ BİLGİ ETİKETİNE BAŞVURUN. ARAÇ KAPASITESİ VE DONANIM KOMBINASYONU 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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