

I *INSTALLATION INSTRUCTIONS*

40D

Forward Bin Dumper

Manual Number 217666

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C ONTENTS

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This Manual provides instructions for installing Cascade 40D Forward Bin Dumpers.

Follow the suggested installation procedures for best results. If you have any questions or need more information, contact your nearest Cascade Service Department (see back cover).

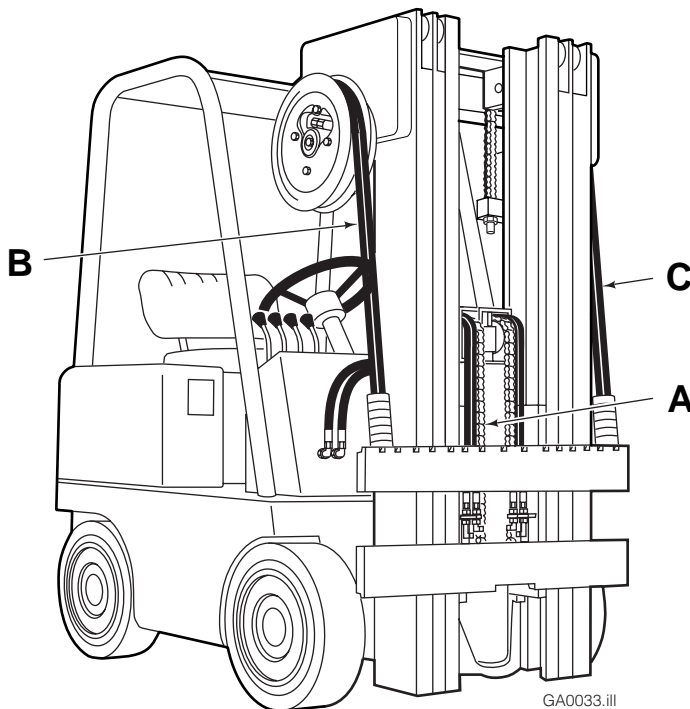
Read the **WARNING** Statements placed throughout this Manual to emphasize safety during Attachment installation.

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

R ECOMMENDED HYDRAULIC SUPPLY OPTIONS

40D Forward Bin Dumpers 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:

- Hoses and fittings for dump and sideshift (if equipped) functions should be at least No. 6 with 9/32 in. (7 mm) minimum I.D.



Non-Sideshifting

A Mast Single Internal Reeving.

OR

B RH THINLINE™ 2-Port Hose Reel Group.

Sideshifting

A Mast Double Internal Reeving.

OR

A and B

Mast Single Internal Reeving and RH THINLINE™ 2-Port Hose Reel Group.

OR

B and C

RH and LH THINLINE™ 2-Port Hose Reel Groups.

Solenoid Adaption

A and B

Mast Single Internal Reeving and RH Cable Reel Group.

OR

B RH 6-N-1 Cable/Hose Reel Group.

T RUCK 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

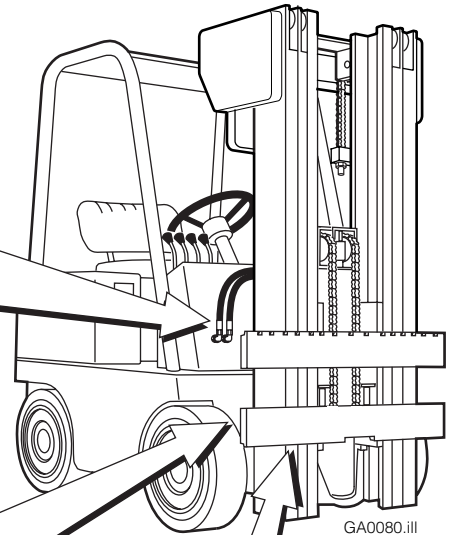
Truck Flow Volume ^①

	Min. ^②	Recommended	Max. ^③
40D	5 GPM (19 L/min.)	7.5 GPM (28 L/min.)	10 GPM (38 L/min.)

① Cascade 40D Bin Dumpers 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 slower than normal dumping speed.

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



Carriage Mount Dimension (A) ITA (ISO) ^①

	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)

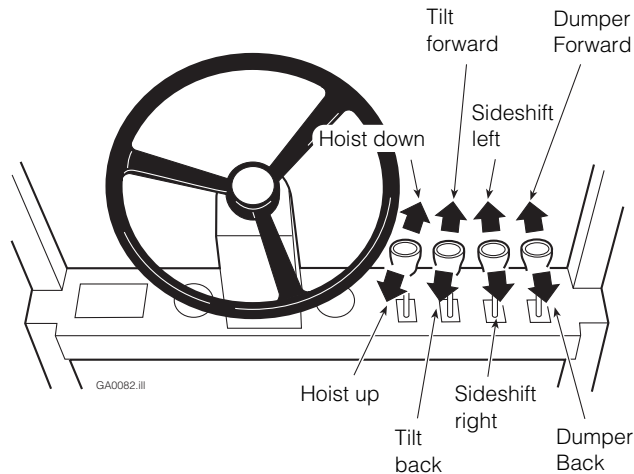
GA0028.iii ① Minimum carriage width required = 36 in. (914 mm).

Carriage

Clean carriage bars and inspect for damaged notches

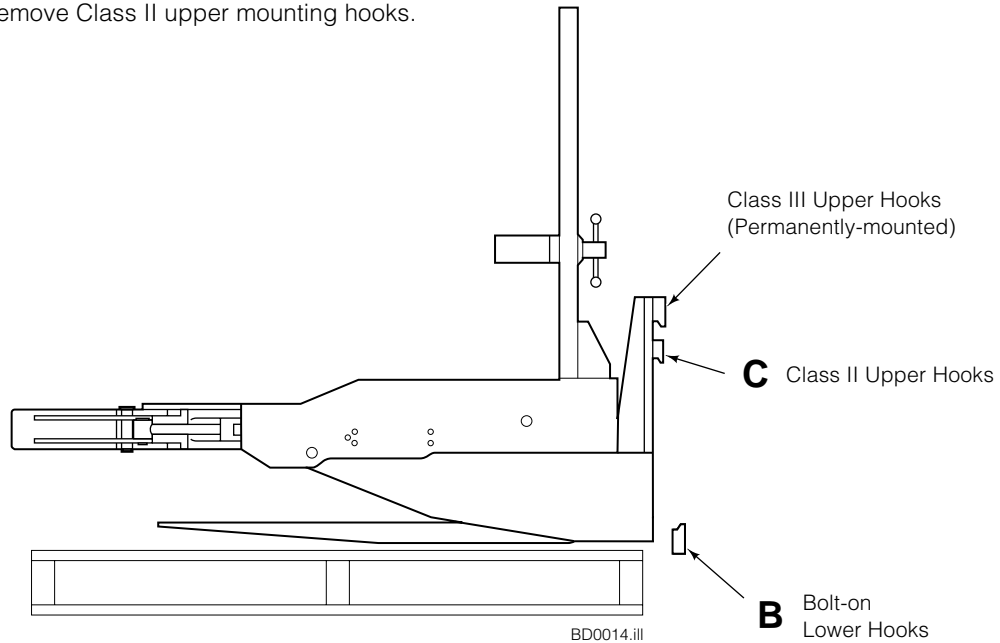
Auxiliary Valve Functions

Check for compliance with ANSI standards:



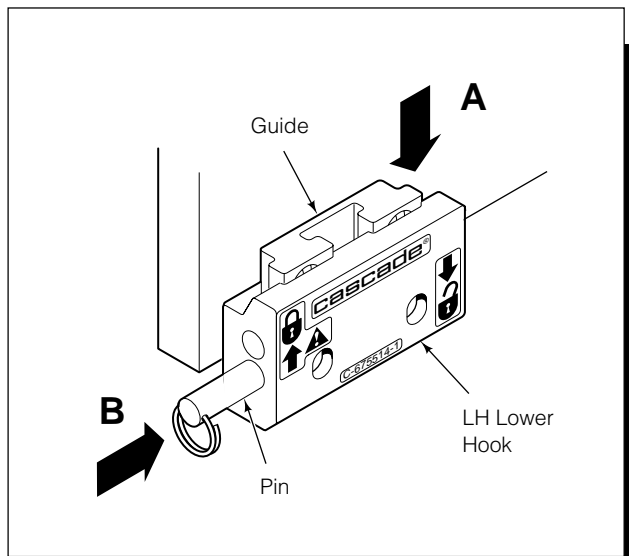
1 Prepare Attachment

- A** Remove banding.
- B** Remove bolt-on lower mounting hooks (if equipped).
- C Class III installation only –**
Remove Class II upper mounting hooks.

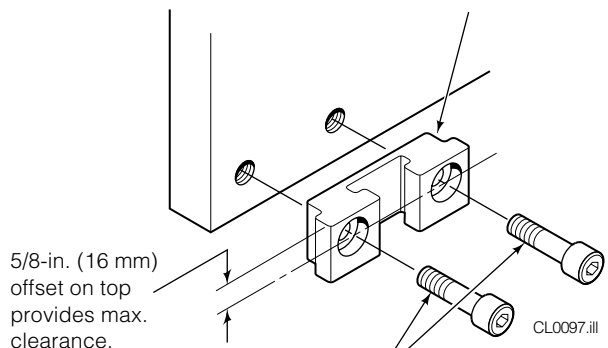


2 Unlock quick-change lower mounting hooks (if equipped)

- A** Remove pin and drop hooks into unlocked position.
- B** Reinstall pin in lower hole.



NOTE: Guides can be reversed to reduce hook-to-carriage clearance (See lower hook installation, Step 6).



3 Prepare Hoses

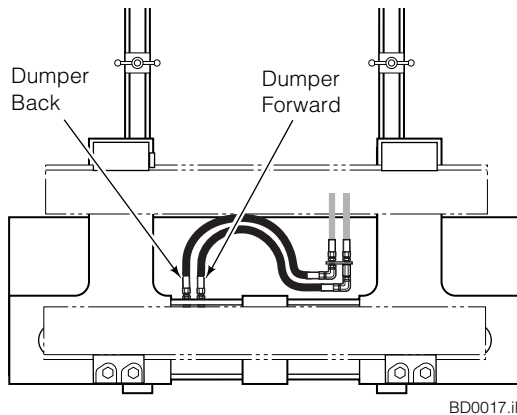
- A** Determine hose lengths required for hydraulic supply configuration of truck.
- B** Cut hoses to length, install end fittings or quick-disconnect kits.



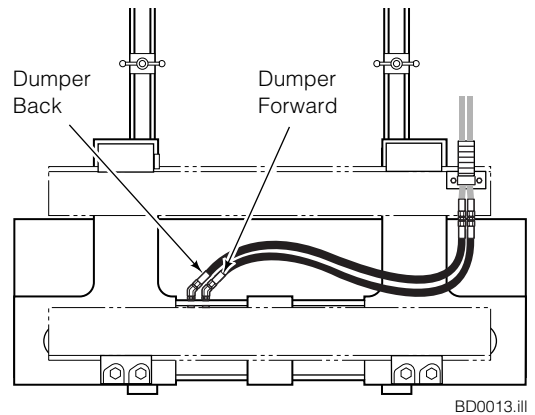
WARNING: Use No. 6 hoses with a minimum internal diameter of 9/32 in. (7 mm), working pressure rated at 3000 psi (20,700 kpa).

Plumb hoses to avoid pinching between upper and lower frames during dumper operation.

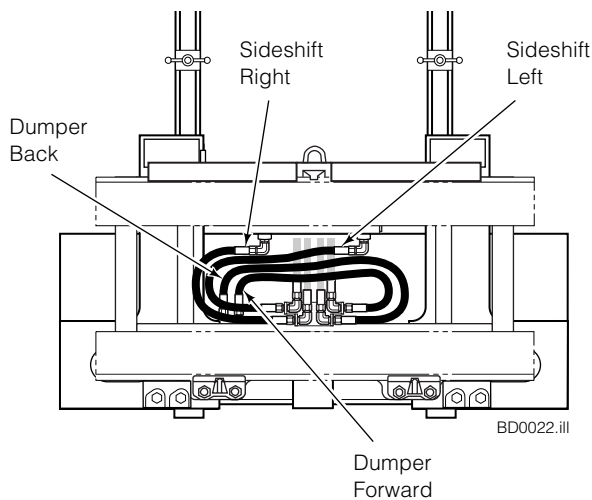
SINGLE INTERNAL HOSE REEVING – Non-sideshifting



HOSE REEL – Non-sideshifting

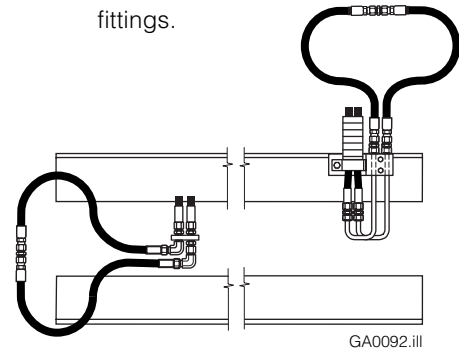


DOUBLE INTERNAL HOSE REEVING – Sideshifting



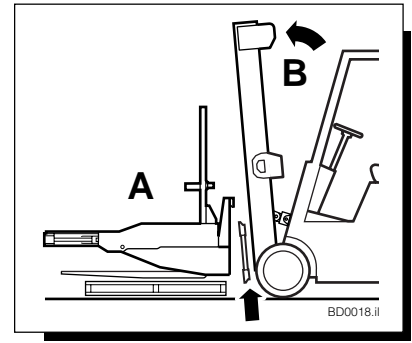
4 Flush hydraulic supply hoses

- A** Install hoses to hose terminals. Connect using union fittings.
- B** Operate auxiliary valves for 30 sec.
- C** Remove union fittings.

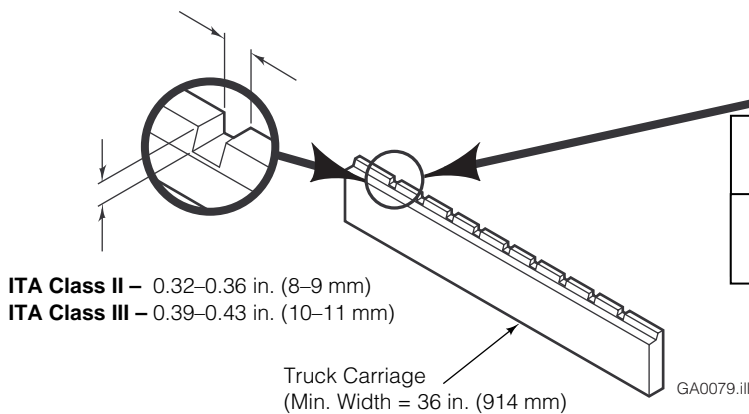


5 Mount Bin Dumper on truck

- A** Center truck behind Bin Dumper.
- B** Tilt mast forward and raise carriage into position.
- C** Engage top mounting hooks with carriage. Make sure locator tab on left hook engages with a notch on top carriage bar. If sideshifting, engage centering tab on sideshifter with center notch on truck carriage.
- D** Lift Bin Dumper 2 in. (5 cm) off pallet.

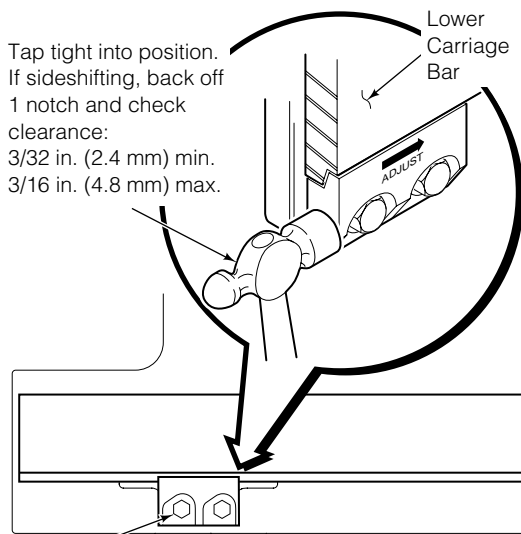


ITA Class II – 0.60–0.66 in. (15–17 mm)
 ITA Class III – 0.72–0.78 in. (18–20 mm)



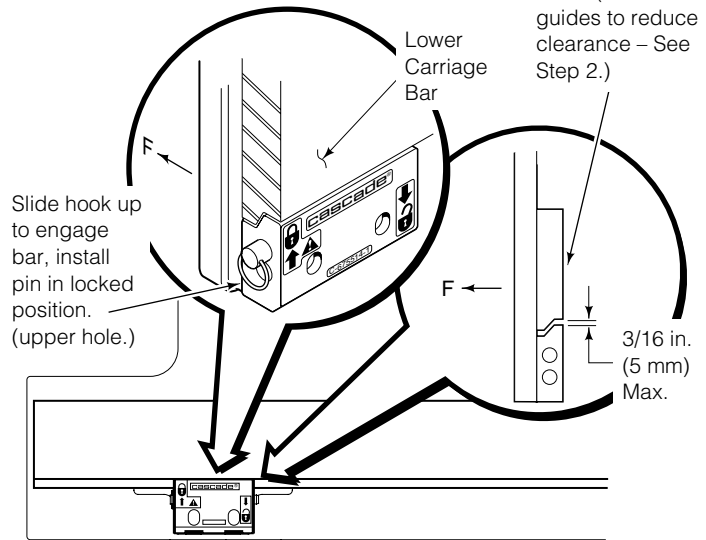
6 Install and engage lower hooks

BOLT-ON TYPE

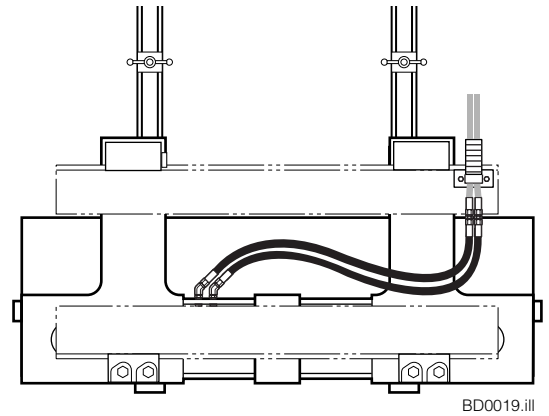
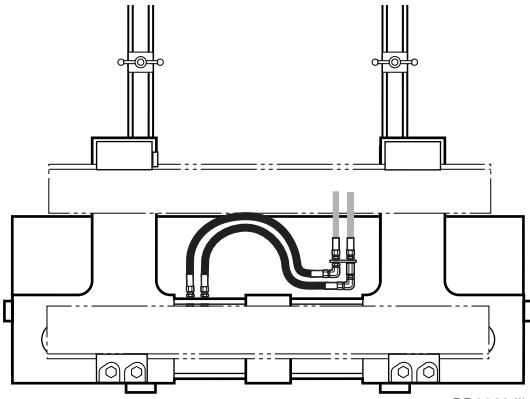


Tighten Capscrews:
Class II / III Mounting – 165 ft.-lbs. (225 Nm)

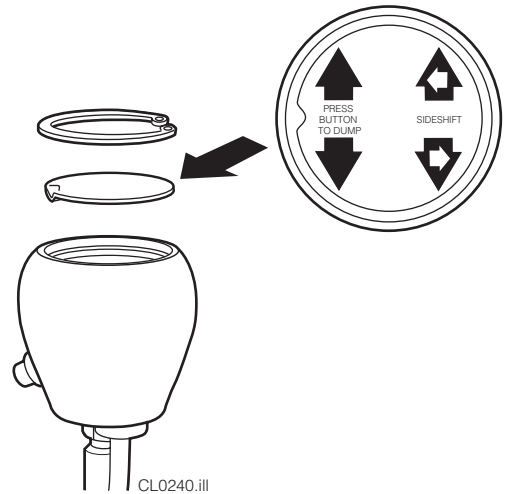
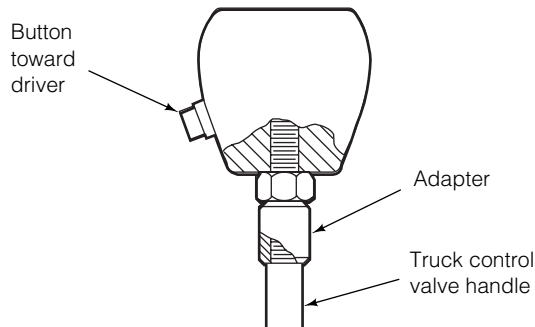
QUICK-CHANGE TYPE (Optional)



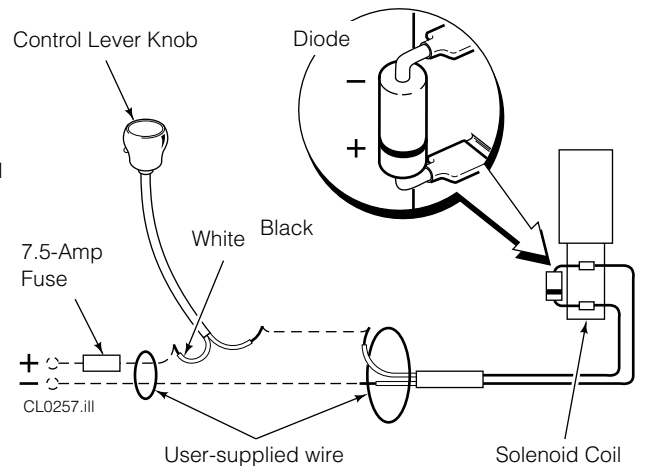
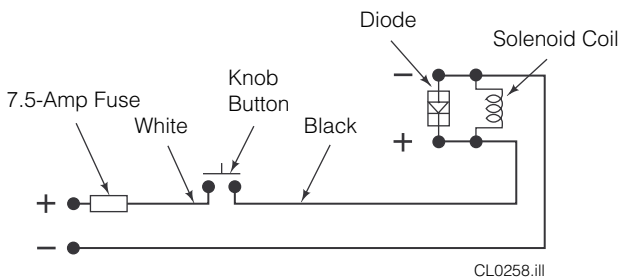
7 Connect hoses prepared in Step 3 to Attachment



8 Install solenoid control knob – (Solenoid equipped units)



9 Install wiring – (Solenoid equipped units)

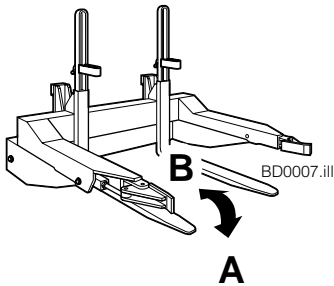


10 Cycle Attachment functions

- With no load, cycle dumper forward and back several times. Sideshift left and right several times (if equipped).
- Pick up and dump a maximum load, check for smooth operation.
- Check for operation in accordance with ITA (ISO) standards.
- Check for leaks at fittings, valve and cylinders.

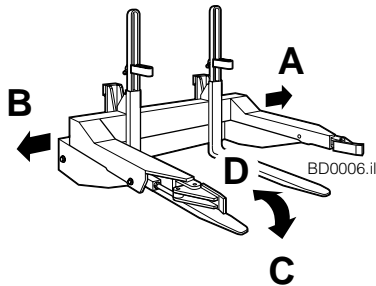
NON-SIDESHIFTING

- A** Dumper Forward
- B** Dumper Back
- C** (not used)
- D** (not used)



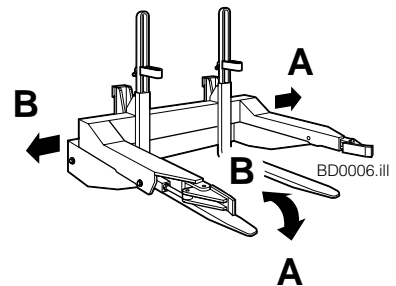
SIDESHIFTING

- A** Sideshift Left
- B** Sideshift Right
- C** Dumper Forward
- D** Dumper Back

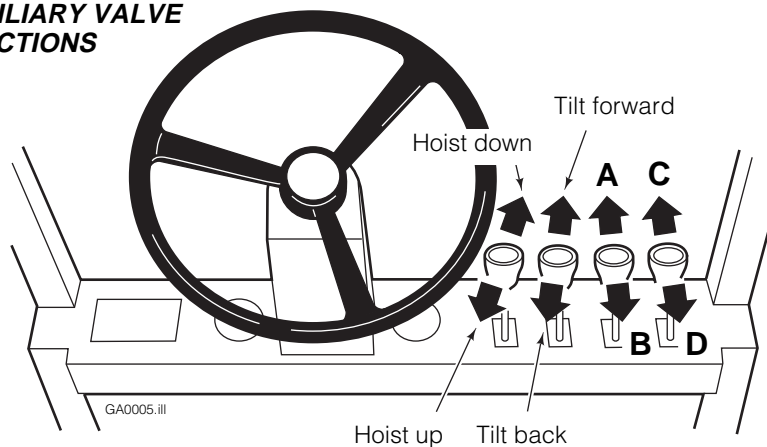


SIDESHIFTING WITH SOLENOID VALVE

- A** Sideshift Left
- A** Dumper Forward (press knob button)
- B** Sideshift Right
- B** Dumper Back (press knob button)



AUXILIARY VALVE FUNCTIONS



100-Hour Maintenance

Every time the lift truck is serviced or every 100 hours of truck operation, whichever comes first, complete the following maintenance on the Forward Bin Dumper:

- Check for loose or missing bolts, worn or damaged hoses and hydraulic leaks.
- Inspect front bin retainers ('foot') for damage.



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.

500-Hour Maintenance

After each 500 hours of truck operation, in addition to the 100-hour maintenance, perform the following procedures.

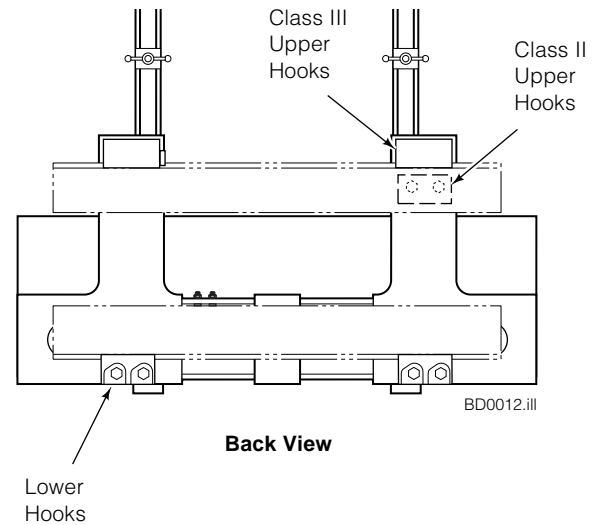
- Check the clearance between the lower mounting hooks and the truck lower carriage bar:

Quick-Change Hooks – 3/16 in. (5 mm) max.

Bolt-on Hooks – Tight against truck lower carriage bar or sideshifter unit.

If adjustment is necessary, refer to Installation, Step 6. Tighten lower hook capscrews to 165 ft.-lbs. (225 Nm).

- Tighten upper hook capscrews (Class II only) to 160 ft.-lbs. (215 Nm).
- Apply chassis grease to all grease fittings (8 total).
- Inspect the cylinder rod-end sliding bearing compartment (one per side) for lubrication. Apply chassis grease as required.

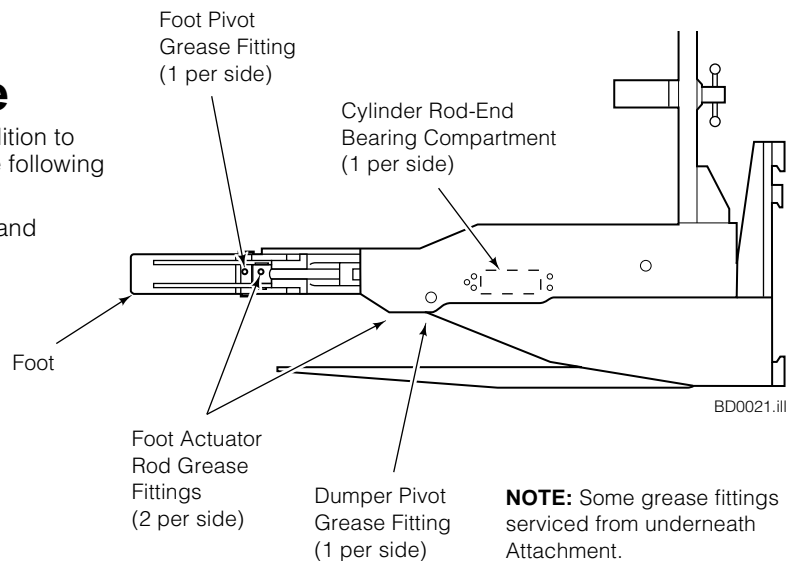


Back View

1000-Hour Maintenance

After each 1000 hours of truck operation, in addition to the 100 and 500-hour maintenance, perform the following procedures.

- Inspect all pivot pins and bushings for wear and replace as necessary (see Service Manual).



Left Side

NOTE: Some grease fittings serviced from underneath Attachment.

Do you have questions you need answered right now?

Call your nearest Cascade Service Department.
Visit us online at www.cascorp.com

AMERICAS

**Cascade Corporation
U.S. Headquarters**
2201 NE 201st
Fairview, OR 97024-9718
Tel: 800-CASCADE (227-2233)
Fax: 888-329-8207

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

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

EUROPE-AFRICA

**Cascade Italia S.R.L.
European Headquarters**
Via Dell'Artigianato 1
37050 Vago di Lavagno (VR)
Italy
Tel: 39-045-8989111
Fax: 39-045-8989160

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

ASIA-PACIFIC

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

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

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

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

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

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

**Sunstream Industries
Pte. Ltd.**
18 Tuas South Street 5
Singapore 637796
Tel: +65-6795-7555
Fax: +65-6863-1368

