



Installation Instructions

G-Series Rotator Seal Replacement

This sheet provides instructions on replacing the base unit seal with the new seal assembly. The seal assembly is a rubber seal with a steel reinforcement to reduce wear and maintenance. The following kits are available:

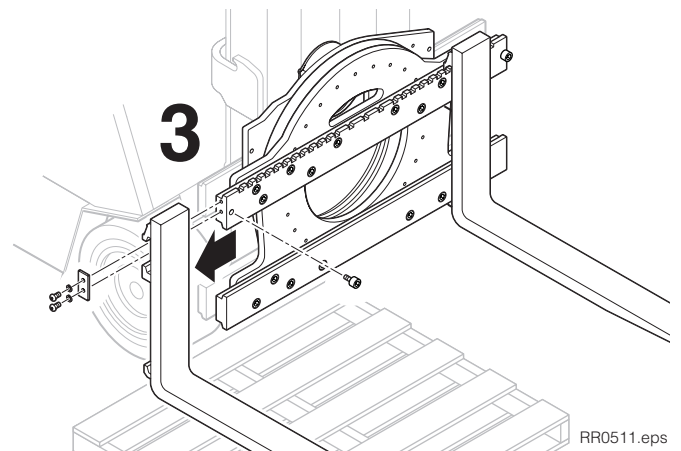
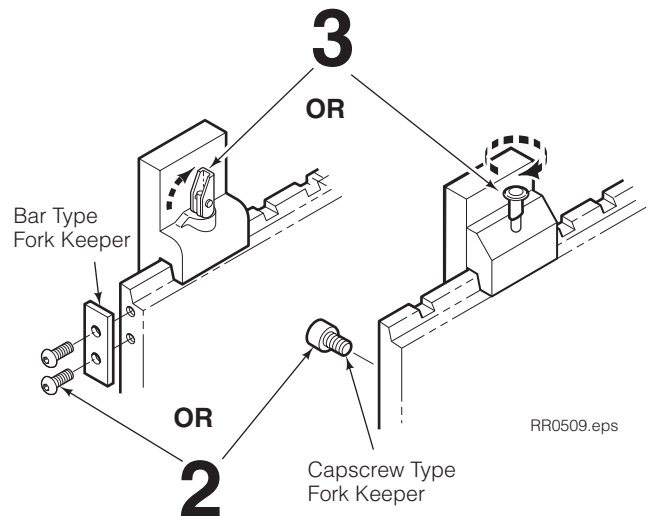
Rotator	Seal Kit Part Number
45G-65G	6083998
80G-100G	6083904

ATTACHMENT REMOVAL

- 1 Rotate the attachment to position the forks parallel to the ground.
- 2 Remove the fork keepers at each end of the top carriage bar. For reassembly, tighten the capscrews to a torque of:
Capscrew Type – 185-200 ft.-lbs. (250-270 Nm)
Bar Type – 60-65 ft.-lbs. (80-90 Nm)
Clean and dry the bar type capscrews and threaded holes. Apply Loctite 242 (blue) to capscrews.
- 3 Release the spring lock on the top of each fork. Remove the forks from the rotator.



WARNING: When installing or removing forks, rotate carriage to **horizontal position**. Use pallets or blocks to raise forks to installation height. Keep feet clear of forks when installing. **Fork keepers must be in place at all times during Rotator operation.**



cascade[®]
corporation

For Technical Support . . .

Call: 1-800-227-2233 Fax: 1-888-329-8207
Internet: www.cascorp.com
Write: Cascade Corporation, PO Box 20187, Portland, OR 97294

To Order Parts . . .

Call: 1-888-227-2233 Fax: 1-888-329-0234
Internet: www.cascorp.com
Write: Cascade Corporation, 2501 Sheridan Ave., Springfield, OH 45505

4 Disconnect the lower hooks.

Bolt On Hooks – Remove the lower mounting hooks. For reassembly, tighten the capscrews to a torque of:

Class II/III – 118-121 ft.-lbs. (160-165 Nm).

Class IV – 190-210 ft.-lbs. (260-280 Nm).

Clean and dry capscrews and threaded holes. Apply Loctite 242 (blue) to capscrews.

Quick Change Hooks – Pull out the locking pins, slide the hooks down and reinstall the pins in the lower holes. For reassembly, slide the hooks up and install the pins in the top holes.



WARNING: Before removing any hoses, relieve pressure in the hydraulic system. Turn the truck off, then open the truck auxiliary control valve(s) several times in both directions.

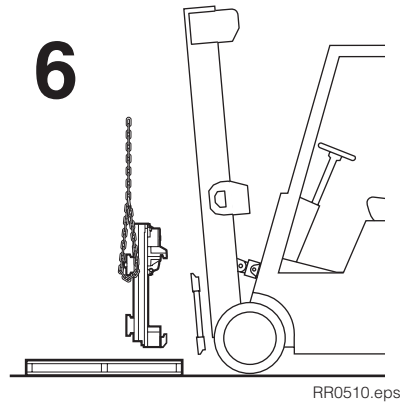
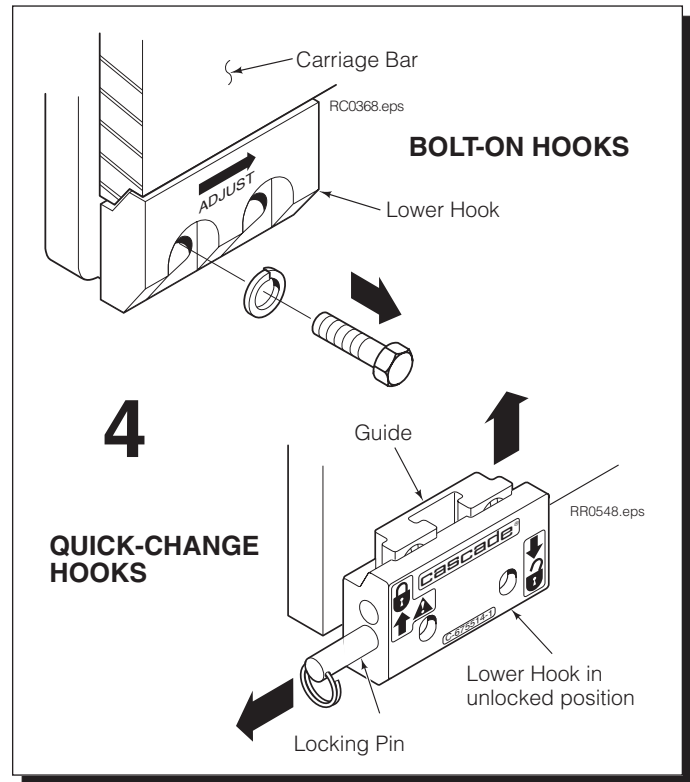
5 Disconnect the hydraulic hoses to the drive motor. Tag the hoses for reassembly.



WARNING: Check attachment weight (located on the nameplate) to make sure the overhead hoist is at least the rated capacity of the attachment.

6 Attach a suitable overhead hoist to the upper fork bar. Remove the rotator from the truck. Lay the rotator face down on a pallet with the drive group upward.

7 For installation, reverse the above procedures. Refer to installation instructions manual for complete installation procedure.



BASEPLATE REMOVAL AND INSTALLATION

1 Remove the attachment from the truck as described in section "Attachment Removal".

2 Remove the four capscrews fastening the drive group to the baseplate. For reassembly, tighten the capscrews to a torque of 77 ft.-lbs. (105 Nm). Remove the drive group.

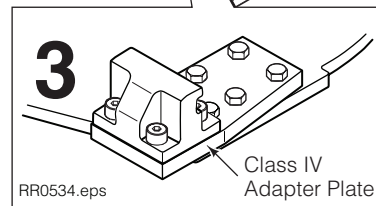
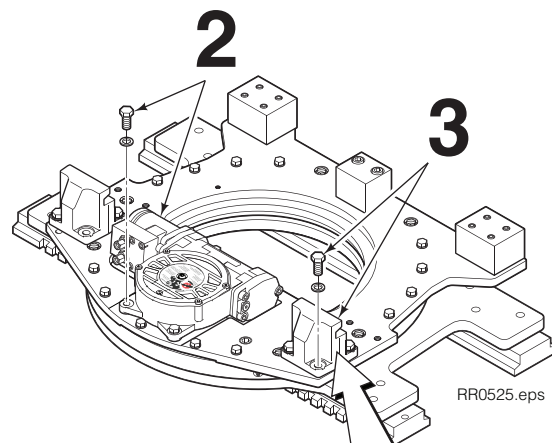
3 Remove upper mounting hooks and adapter plate (if included). For reassembly tighten the capscrews to the torque values below:

45G-100G CL II/III – 118-121 ft.-lbs. (160-165 Nm)


80G/100G CL IV Hook – 110-130 ft.-lbs. (150-175 Nm)

80G/100G CL IV Plate – 155-165 ft.-lbs. (210-220 Nm)

Clean and dry Class II/III upper mounting capscrews and threaded holes. Apply Loctite 242 (blue) to capscrews.



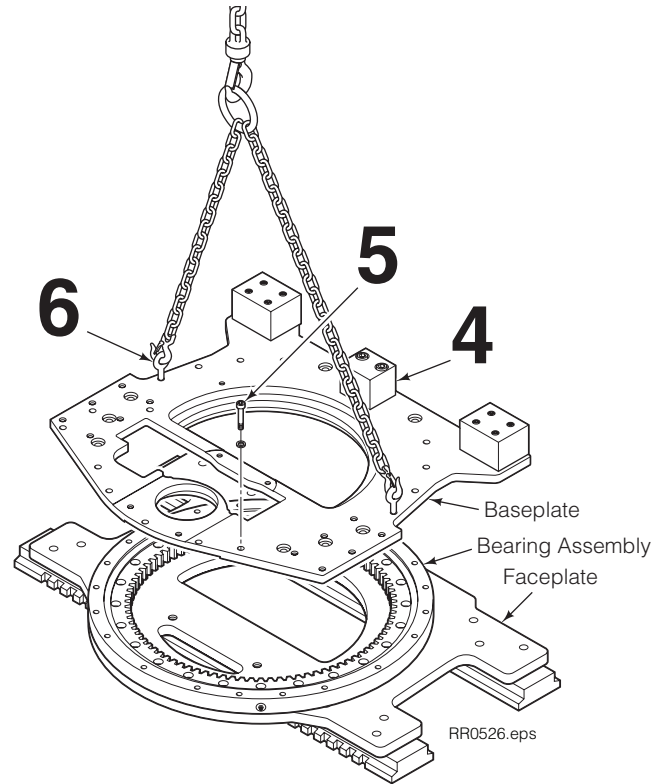
- 4 Remove the center spacer. For reassembly, clean and dry capscrews and threaded holes. Apply Loctite 242 (blue) to capscrews and tighten to 44-48 ft.-lbs. (60-65 Nm).
- 5 Remove the capscrews fastening the baseplate to the bearing assembly. For reassembly, tighten the capscrews using the following technique:


 **WARNING:** Install short capscrews in counterbored holes only. Use lockwashers if supplied in kit.

Baseplate-to-Bearing Assembly Capscrews –

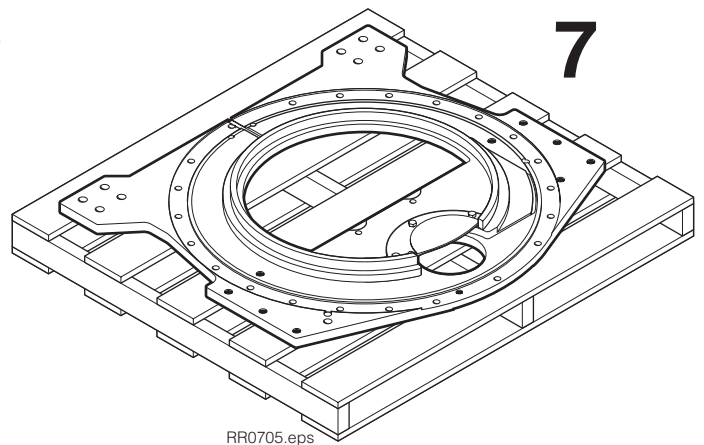
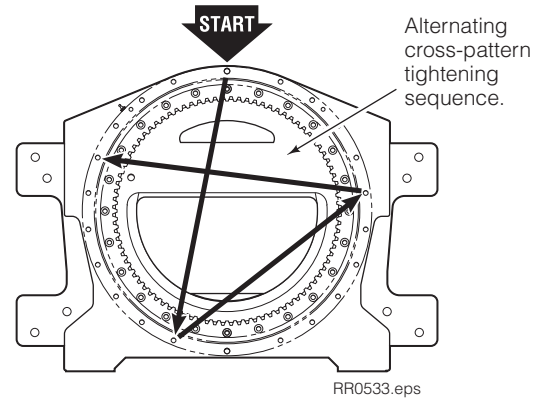
- A Clean and dry capscrews and threaded holes. Apply Loctite 242 (blue) to capscrews. Threads must be clean and dry for new Loctite to cure properly.
- B Tighten using the alternating cross-pattern to 40 ft.-lbs. (55 Nm).
- C Tighten using the alternating cross-pattern to the final torque value, then double-torque by backing off 1/2 turn and immediately retightening to the final torque value of 77 ft.-lbs. (105 Nm).

CAUTION: Do not reuse old capscrews or washers. Use new hardware kit when installing a bearing assembly.



 **WARNING:** Check attachment weight (located on the nameplate) to make sure the overhead hoist is at least the rated capacity of the attachment.

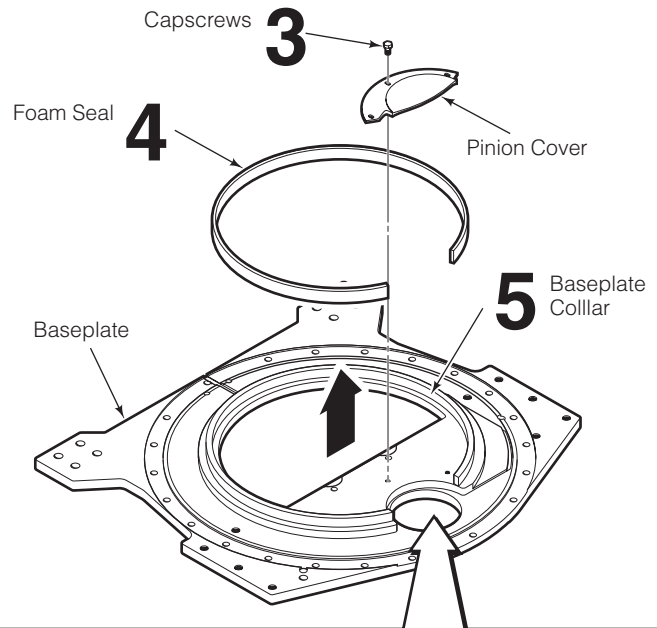
- 6 Attach two eyebolts to the baseplate as shown. Attach an overhead hoist and lift away the baseplate.
- 7 Place the baseplate on a pallet face up.
- 8 For reassembly, reverse the above procedures with the following exceptions:
 - After the drive group has been reinstalled, check the gearcase oil level. Oil must be up to the bottom of the fill plug hole. If necessary, fill with Cascade Gear Lube Part No. 656300 or equivalent SAE 90 wt. lube (AGMA 'mild' 6 EP Gear Lube).
 - Apply NLGI No. 0 Grease to the teeth of the bearing assembly ring gear.
 - After mounting the attachment on the lift truck, apply chassis grease to the bearing assembly grease fitting. Rotate the attachment slowly while applying grease.
 - Check faceplate/bearing assembly capscrews for an initial torque of 81 ft.-lbs. (110 Nm). Tighten capscrews 10 ft.-lbs. (14 Nm) above initial torque. If capscrews are loose, rotate or broken, replace all capscrews. See TB 183 or service manual 6073955.



BEARING SEAL REPLACEMENT

- 1 Remove the attachment from the truck as described in section "Attachment Removal".
- 2 Remove the baseplate from the attachment as described in section "Baseplate Removal and Installation".
- 3 Remove the three capscrews fastening the pinion cover to the baseplate, if equipped. For reassembly, tighten capscrews to 15 ft-lbs. (19 Nm).
- 4 Remove foam seal from the baseplate collar.

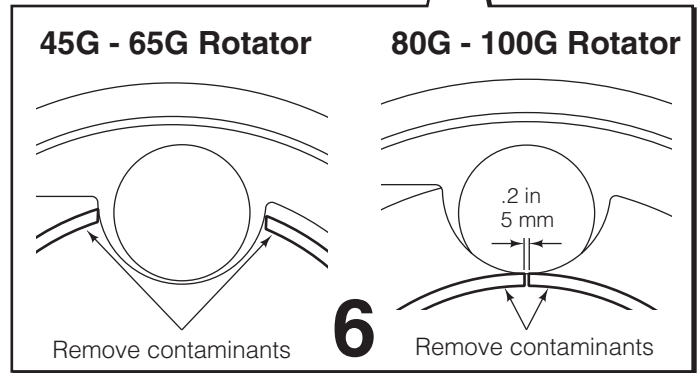
NOTE: For 80G-100G rotators, remove capscrew and plate.
- 5 Clean surfaces of grease or glue from the inside of the collar.



- 6 Prepare baseplate collar for welding as follows:

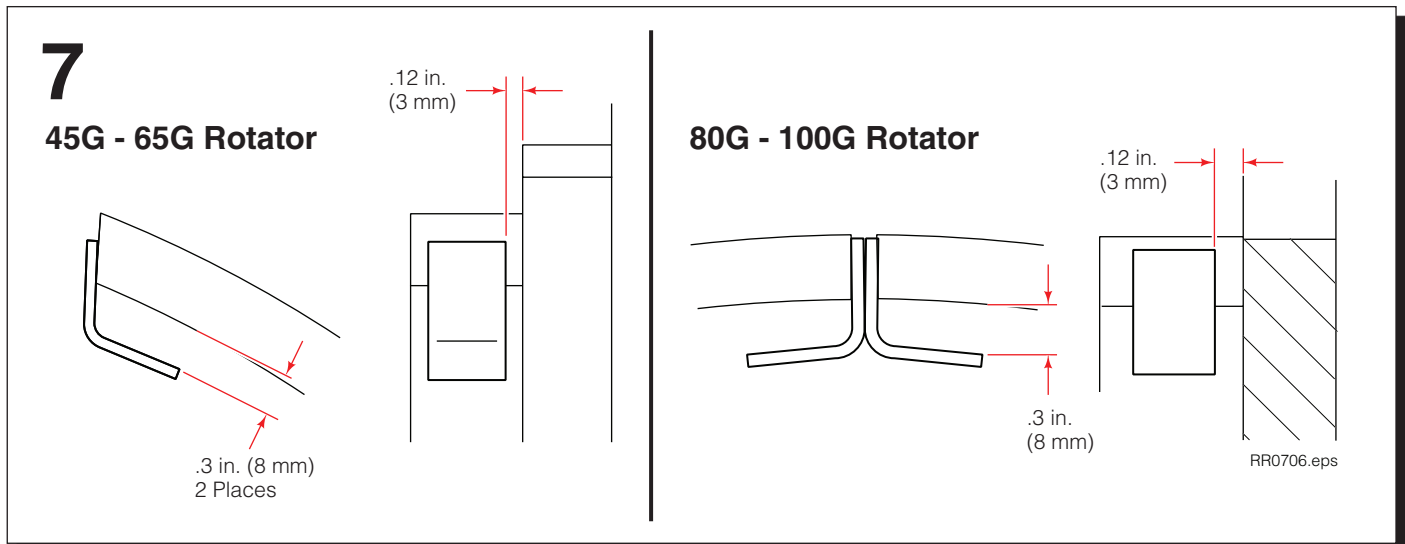
45G-65G – Remove paint, grease, and any other contaminants from the surface of the collar ends.

80G-100G – Grind a notch in the top of the baseplate collar .2 in (5 mm) wide as shown. Remove paint, grease and any other contaminants around ground area.



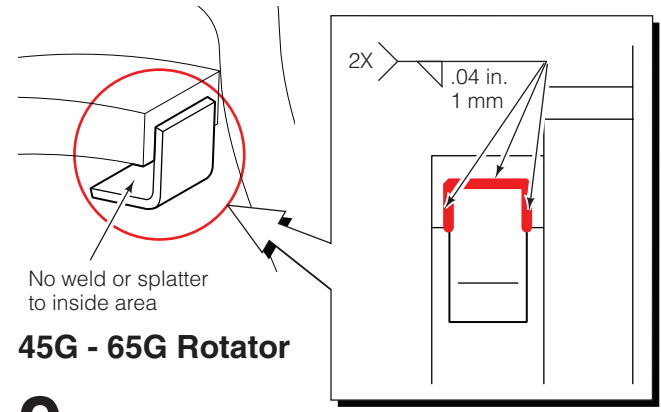
RR0705.eps

- 7 Position the angle plates on the baseplate collar to the dimensions as shown.

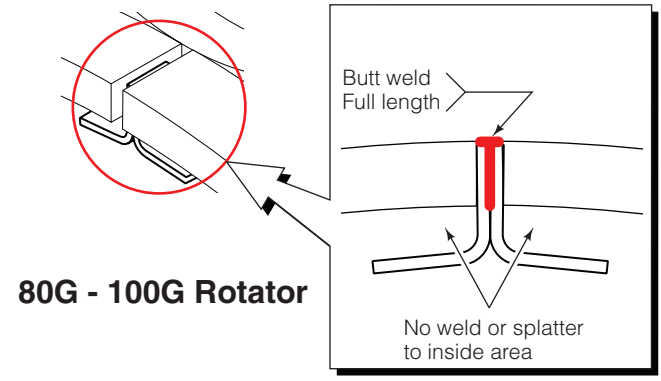


RR0706.eps

- 8 Preheat weld area to 70° F (21° C) minimum before welding.
- 9 Apply welds to the angle plate as shown. Overlap start position to eliminate arc craters. Use the following weld method:
 FCAW (Flux Core Arc Welding) is recommended. Weld using E70T-1 1/16 in. (1.5 mm) diameter wire with 100% CO₂ shielding gas. Apply fillet weld holding a close arc. So not oscillate or use a wash bead pattern. Let the welds slow cool covered with an insulation blanket.
- 10 Remove slag and inspect welds. The following defects are not allowed: undercut, overlap, stress cracks and porosity.
- 11 Clean the weld area and repaint. Do not spray paint in the area of the bearing pocket or any threaded holes.

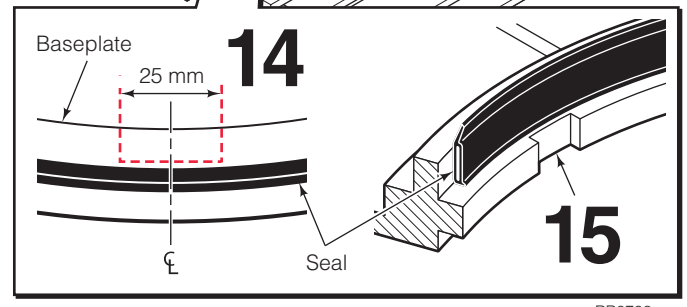
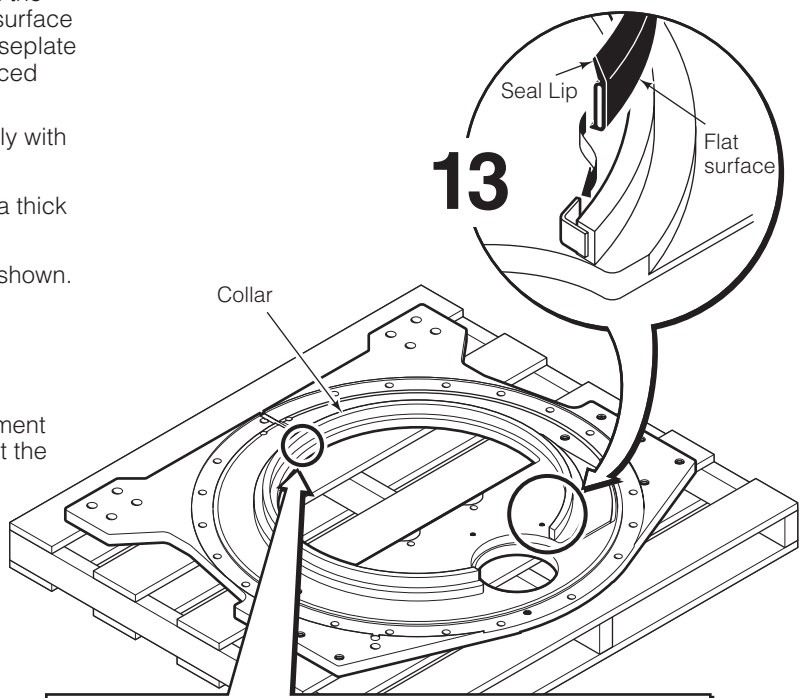


9



RR0707.eps

- 12 Apply a thin layer of Omnitask Multi-Purpose Grease (aluminum complex soap-based) to inside surface of the collar.
- 13 Insert the end of the lip seal into the angle plate on the baseplate collar. With firm pressure, work the flat surface of the seal assembly flush with the inside of the baseplate collar. Make sure the thin edge of the seal tip is faced upward, as shown. Trim the lip seal as needed.
NOTE: If required, tap the face of the seal assembly with a ball peen hammer to form the seal to the collar.
- 14 Mark the seal edge at the bottom of the plate with a thick marker and carefully remove the seal.
- 15 Cut a notch into the baseplate inside the collar as shown. Apply paint to the surface of the baseplate.
IMPORTANT: Do not cut notch below the seal.
- 16 Install the seal by repeating step 12 and 13.
- 17 For reassembly, reverse the procedures to 'Attachment Removal' and 'Baseplate Removal' sections except the following:
 - Apply NLGI No. 0 Grease to bearing assembly zerck fittings.



RR0708.eps

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 Parts Sales

2501 Sheridan Ave.
Springfield, OH 45505
Tel: 888-CASCADE (227-2233)
Fax: 888-329-0234

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

