



# Parts Manual

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Model 45D Fork Positioner

Serial Number 45D-FPB-112R0

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**cascade**<sup>®</sup>  
corporation

**For Technical Assistance call:** 800-227-2233, Fax: 888-329-8207

**To Order Parts call:** 888-227-2233, Fax: 888-329-0234

**OR**

**Write:** Cascade Corporation, P.O. Box 20187, Portland, OR 97220

**Internet:** [www.cascorp.com](http://www.cascorp.com)

# Safety Decals



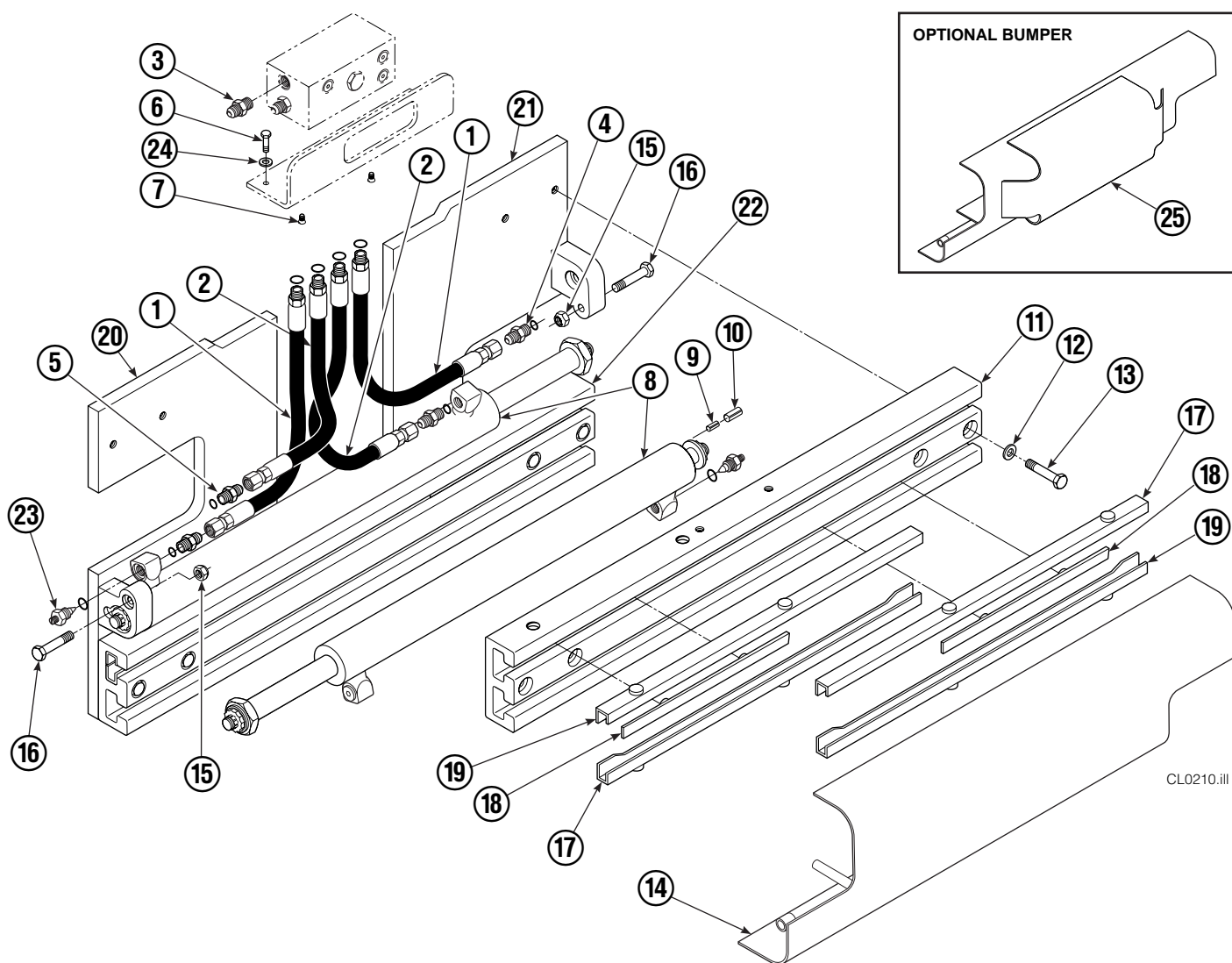
| REF | QTY | PART NO. | DESCRIPTION             |
|-----|-----|----------|-------------------------|
| 1   | 1   | 679150   | No Step Decal           |
| 2   | 2   | 665595   | No Hand Hold Decal      |
| 3   | 1   | 679059   | Quick Change Hook Decal |

# Publications



| PART NO. | DESCRIPTION                     |
|----------|---------------------------------|
| 669224   | Service Manual                  |
| 672944   | Operators Guide                 |
| 668987   | Installation Instructions       |
| 680664   | Servicing Cascade Cylinders-VHS |
| 679929   | Tool Catalog                    |
| 673964   | Literature Index Order Form     |

# Base Unit Group



CL0210.ill

| 35D |     |          |                        |     |     |          |                         |
|-----|-----|----------|------------------------|-----|-----|----------|-------------------------|
| REF | QTY | PART NO. | DESCRIPTION            | REF | QTY | PART NO. | DESCRIPTION             |
|     |     | 680641   | Base Unit Group        | 13  | 8   | 667909   | Capscrew                |
| 1   | 2   | 210438   | Hose, 22.00 in.        | 14  | 1   | 667908   | Bumper                  |
| 2   | 2   | 210437   | Hose, 17.25 in.        | 15  | 2   | 665707   | Nut, 1/2 in. ID         |
| 3   | 1   | 601377   | Fitting, 8-8           | 16  | 2   | 633523   | Capscrew, 1/2 NC x 2.50 |
| 4   | 2   | 686369   | Fitting                | 17  | 4   | 668910   | Bearing                 |
| 5   | 2   | 611288   | Fitting, 6-8           | 18  | 4   | 667663   | Bearing                 |
| 6   | 2   | 671222   | Capscrew, 3/8 NC x .75 | 19  | 4   | 668911   | Bearing                 |
| 7   | 2   | 4750     | Capscrew, 3/8 NC x .75 | 20  | 1   | 680623   | Mounting Plate - RH     |
| 8   | 2   | 667911   | Cylinder ▲             | 21  | 1   | 680624   | Mounting Plate - LH     |
| 9   | 2   | 7861     | Roll Pin - Inner       | 22  | 1   | 674166   | Frame - Lower           |
| 10  | 2   | 7962     | Roll Pin - Outer       | 23  | 2   | 667609   | Restrictor Cartridge ●  |
| 11  | 1   | 667904   | Frame - Upper          | 24  | 2   | 6230     | Washer                  |
| 12  | 8   | 667910   | Washer                 | 25  | 1   | 671519   | Optional Bumper         |

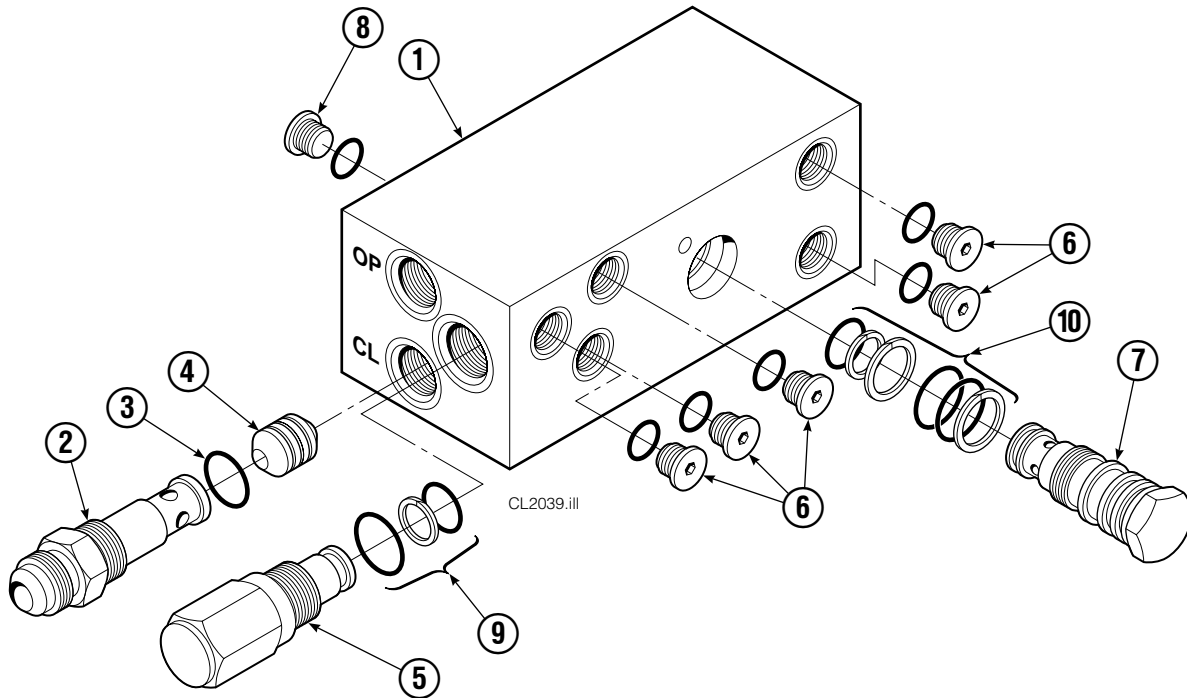
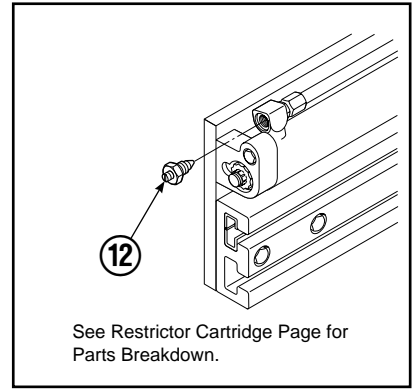
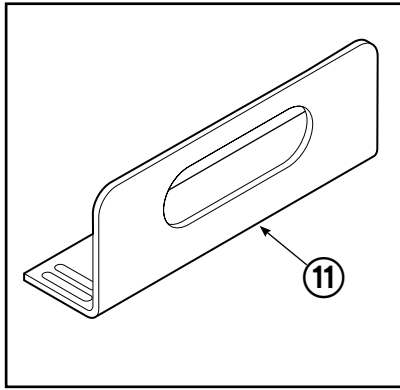
▲ See Cylinder page for parts breakdown.

● Not included in Base Unit Group.

See Restrictor Cartridge page for parts breakdown.

Reference: SK-5301, Common Parts Group 680838.

# Check Valve



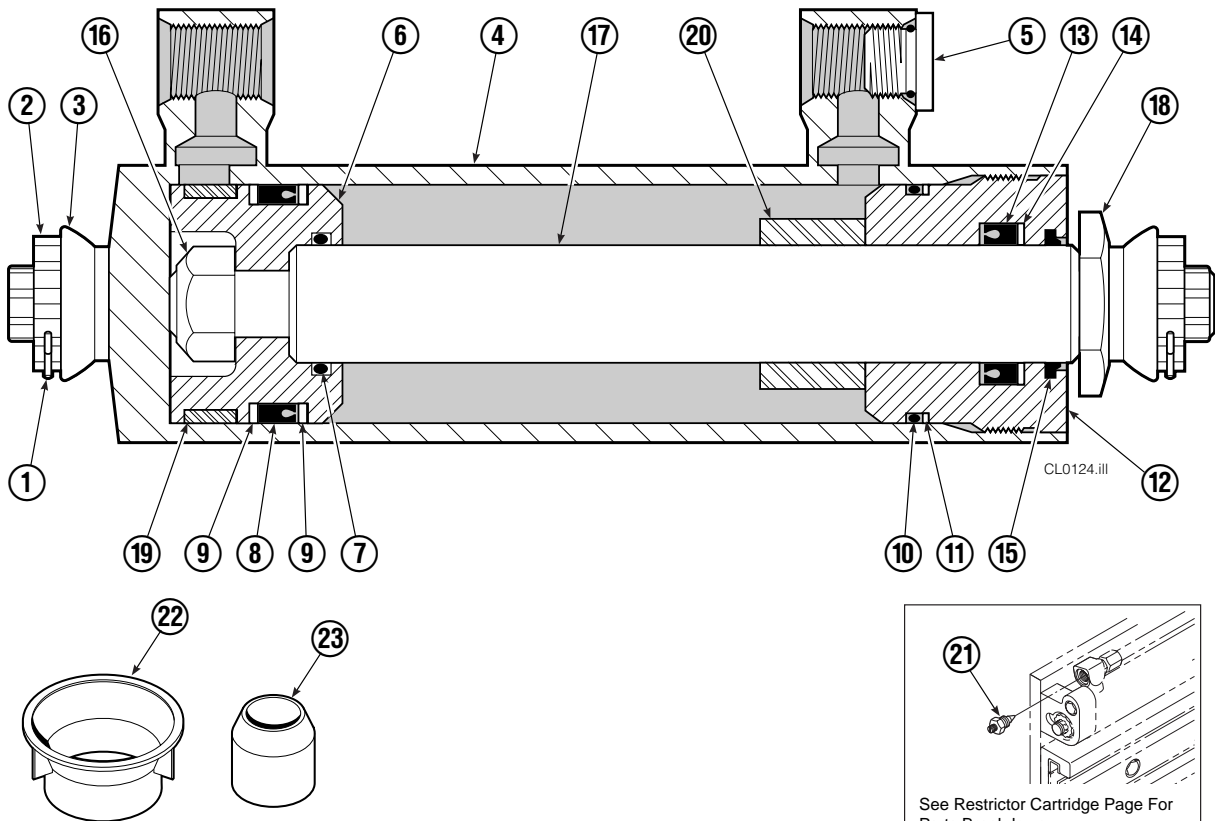
| 35D |     |          |                 |     |     |          |                        |
|-----|-----|----------|-----------------|-----|-----|----------|------------------------|
| REF | QTY | PART NO. | DESCRIPTION     | REF | QTY | PART NO. | DESCRIPTION            |
|     |     | 364527   | Valve Group ■   | 7   | 1   | 678270   | Check Valve - V.P.O.   |
|     |     | 363873   | Check Valve ▲   | 8   | 1   | 604510   | Fitting, 6             |
| 1   | 1   | 667468   | Valve Body      | 9   | 1   | 667510   | Service Kit            |
| 2   | 1   | 667470   | Special Fitting | 10  | 1   | 661347   | Service Kit            |
| 3   | 1   | 2841     | O-Ring          | 11  | 1   | 669999   | Bracket                |
| 4   | 1   | 667471   | Spool           | 12  | 2   | 667609   | Restrictor Cartridge ● |
| 5   | 1   | 679890   | Relief Valve    |     |     | 668864   | Valve Service Kit      |
| 6   | 5   | 609455   | Fitting         |     |     | 667510   | Seal Kit               |

▲ Contains items 1-10 only.

■ Includes Check Valve 363873 and items 11 & 12.

● See Restrictor Cartridge page for parts breakdown.

# Cylinder



| 45D |     |          |                         |
|-----|-----|----------|-------------------------|
| REF | QTY | PART NO. | DESCRIPTION             |
|     |     | 667911   | Cylinder Assembly       |
| 1   | 2   | 6510     | Cotter Pin ■            |
| 2   | 2   | 667624   | Nut Retainer ■          |
| 3   | 2   | 667625   | Nut ■                   |
| 4   | 1   | 553758   | Shell                   |
| 5   | 1   | 602580   | Fitting                 |
| 6   | 1   | 670891   | Piston                  |
| 7   | 1   | 2716     | O-Ring ▲                |
| 8   | 1   | 662454   | Seal ▲                  |
| 9   | 2   | 638249   | Nylon Ring ▲            |
| 10  | 1   | 2787     | O-Ring ▲                |
| 11  | 1   | 615130   | Back-Up Ring ▲          |
| 12  | 1   | 667917   | Retainer                |
| 13  | 1   | 662448   | Seal ▲                  |
| 14  | 1   | 638243   | Nylon Ring ▲            |
| 15  | 1   | 636853   | Wiper ▲                 |
| 16  | 1   | 667623   | Nut                     |
| 17  | 1   | 667914   | Rod                     |
| 18  | 1   | 667626   | Washer                  |
| 19  | 1   | 660761   | Bearing                 |
| 20  | 1   | —        | Spacer                  |
| 21  | 1   | 667609   | Restrictor Cartridge ●  |
| 22  | 1   | 671049   | Seal Loader, Piston ▲   |
| 23  | 1   | 671052   | Seal Loader, Retainer ▲ |
|     |     | 667995   | Service Kit             |

▲ Included in Service Kit 667995.

■ Included in Nut Service Kit 668926.

● Not included in Cylinder Assembly.

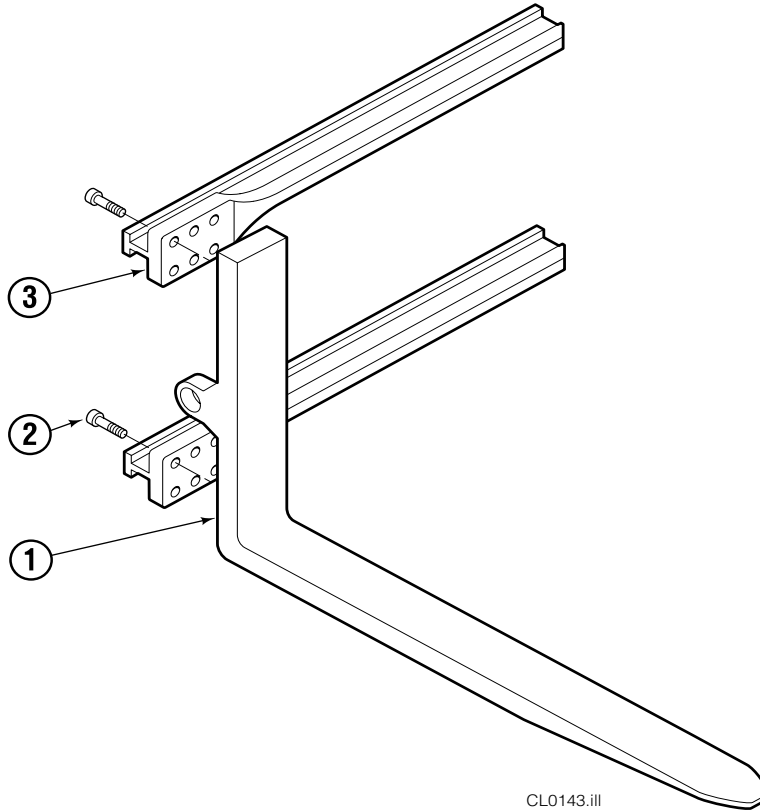
Reference: S-7662.

# Restrictor Cartridge



| REF | QTY | PART NO. | DESCRIPTION          |
|-----|-----|----------|----------------------|
|     |     | 667609   | Restrictor Cartridge |
| 1   | 1   | 2701     | O-Ring               |
| 2   | 1   | 667611   | Plunger              |
| 3   | 1   | 2841     | O-Ring               |
| 4   | 1   | 667610   | Plug - Special       |
| 5   | 1   | 5716     | Jam Nut              |

# Bolt-On Pallet Forks



| <b>ARM CAPSCREW EXTENSION TOOL</b><br>Required for proper torquing of capscrews     |         |        |
|---|---------|--------|
|  | 35D/50D | 667699 |

| <b>45D</b> |     |          |                     |
|------------|-----|----------|---------------------|
| REF        | QTY | PART NO. | DESCRIPTION         |
|            |     | 385512   | Pallet Fork Group ▲ |
| 1          | 1   | 385509   | Pallet Fork – LH    |
| 1          | 1   | 385511   | Pallet Fork – RH    |
| 2          | 24  | 607103   | Capscrew            |
| 3          | 4   | 667905   | Arm Bar             |

▲ Includes items 1 & 2 only.

# Mounting Plates with Bolt-On Upper Hooks

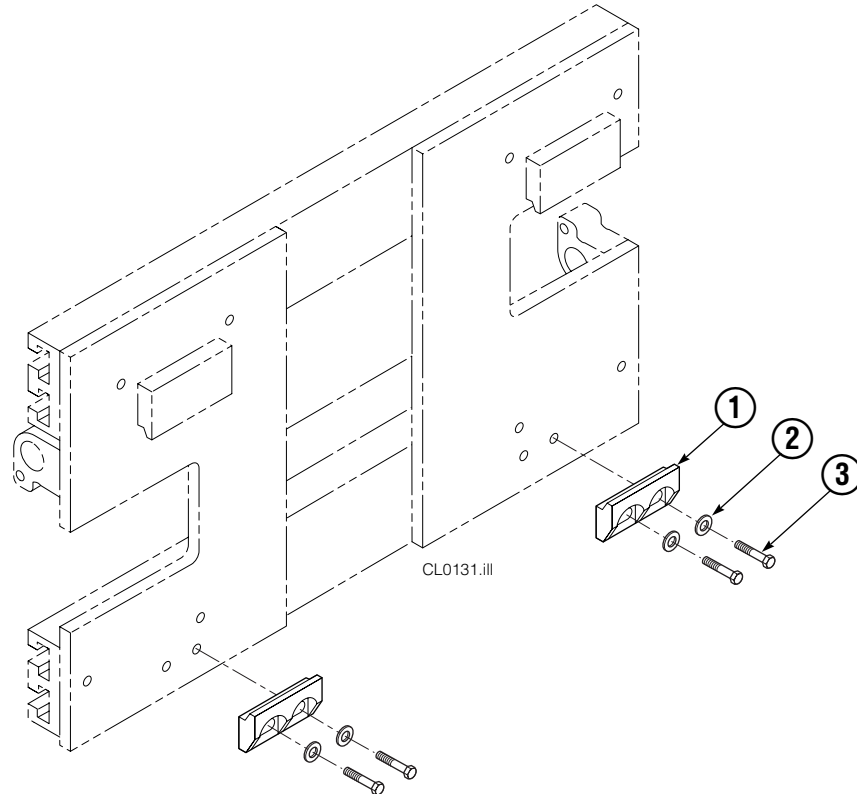


| REF | QTY | PART NO. | DESCRIPTION                  |
|-----|-----|----------|------------------------------|
| 1   | 1   | 680624   | Mounting Plate Assembly-LH ● |
| 2   | 1   | 680623   | Mounting Plate Assembly-RH ■ |
| 3   | 1   | 6002330  | Upper Hook-LH                |
| 4   | 1   | 210491   | Upper Hook-RH                |
| 5   | 4   | 768577   | Capscrew, M20 x 35           |

● Includes items 3 and 5.

■ Includes items 4 and 5.

# Bolt-On Mounting Group



| Class II |     |          |                              |
|----------|-----|----------|------------------------------|
| REF      | QTY | PART NO. | DESCRIPTION                  |
|          |     | 678934   | Lower Hook Group             |
| 1        | 2   | 675968   | Lower Hook                   |
| 2        | 4   | 667225   | Washer, 5/8 in. ID           |
| 3        | 4   | 667369   | Capscrew, 5/8 NC x 1.25 GR 5 |

Reference: S-3197.

**Do you have questions you need answered right now?** Call your nearest Cascade Parts Department.

**Cascade Corporation**

2501 Sheridan Avenue  
Springfield, OH 45505  
Tel: 888-CASCADE (227-2233)  
FAX: 888-329-0234  
www.cascorp.com

**Cascade Canada Inc.**

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

**Cascade GmbH**

D-41199 Monchengladbach  
Klosterhofweg 52  
Germany  
Tel: 49-216-668230  
FAX: 49-216-6682323

**Cascade Finland**

Albert Petreliuksenkatu 3  
01370 Vantaa  
Finland  
Tel: 358-9-836-1925  
FAX: 358-9-836-1935

**Cascade N.V.  
European Headquarters**

P.O. Box 3009  
1300 El Almere  
Damsluisweg 56  
1332 ED Almere  
The Netherlands  
Tel: 31-36-5492911  
FAX: 31-36-5492964

**Cascade N.V.  
Benelux Sales and Service**

P.O. Box 3009  
1300 El Almere  
Damsluisweg 56  
1332 ED Almere  
The Netherlands  
Tel: 31-36-5492950  
FAX: 31-36-5492974

**Cascade (UK) Ltd.**

15, Orgreave Crescent  
Dore House Industrial Estate  
Handsworth  
Sheffield S13 9NQ  
England  
Tel: 742-697524  
FAX: 742-695121

**Cascade Scandinavia AB**

Box 124  
Hammarvägen 10  
567 23 Vaggeryd  
Sweden  
Tel: 42-0-393-36950  
FAX: 46-0-393-36959

**Cascade Norway**

Østerliveien 37A  
1153 Oslo  
Norway  
Tel: 47-22-743160  
FAX: 47-22-743157

**Cascade France S.A.R.L.**

1D Rue De Charaintru  
BP 18, 91360 Epinay-Sur-Orge  
Morangis Cedex, France  
Tel: 33-1- 64547500  
FAX: 33-1-64547501

**Cascade Hispania S.A.**

Carrer 5 Sector C  
Zona Franca Duanera  
Poligono de la Zon Franca  
08040 Barcelona, Spain  
Office No. 256  
Tel: 93-264-07-30  
FAX: 93-264-07-31

**Cascade Japan Ltd.**

5-5-41,  
Torikai Kami  
Settsu, Osaka  
Japan, 566  
Tel: 81-726-53-3490  
FAX: 81-726-53-3497

**Cascade Korea**

108B, Namdong Ind Complex  
658-3 Gojan-Dong  
Namdong-Gu  
Inchon, 405-310 Korea  
Tel: 82-32-821-2051  
FAX: 82-32-821-2055

**Cascade Australia**

1445 Ipswich Road  
Rocklea, QLD 4106  
Australia  
Tel: 1-800227-223  
FAX: (07) 3373-7333

**Cascade New Zealand**

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

**Cascade (Africa) Pty. Ltd.**

P.O. Box 625, Isando 1600  
60A Steel Road  
Sparton, Kempton Park  
South Africa  
Tel: 27-11-975-9240  
FAX: 27-11-394-1147

**Cascade-Xiamen**

No. 668 Yangguant Rd.  
Xinyang Industry Zone  
Haicant, Xiamen City  
Fujian Province  
P.R. China 361026  
Tel: 86-592-651-2500  
FAX: 86-592-651-2571

**Cascade (Singapore)  
Trading Co.**

Four Seasons Park  
Autumn Block - Apt. 1802  
12 Cuscaden Walk  
Singapore  
Tel: 65-834-1935  
FAX: 65-834-1936

