TB 281 November 2004

Technical Bulletin

Hydraulic Schematics for Connecting Multiple Cascade Hydraulic Accessories

The schematics in this Bulletin show the preferred method of connecting multiple Cascade Hydraulic accessories together for best performance. The Accessories covered are:

Two Function Pressure and Control Valve
Provides auxiliary pressure and flow control to the attachment. Used with the Low Pressure Tank line kit. See pages 2, 3, 4, 5, 6.

Three Function Pressure and Control Valve
Provides auxiliary pressure and flow control to the attachment. Used with the Low Pressure Tank line kit. See page 7.

Three Position Pressure Relief Valve
Allows clamping force to vary from load to load using the minimum require hydraulic pressure setting. Used with the Low Pressure Tank line kit. See pages 2, 5, 6, 7.

3N2 Valve
Provides control of three attachment functions (typically Clamp, Swing, Rotate) with the use of two truck function levers. A Priority Flow Control Valve is used to provide a switching signal to the 3N2 Valve. Used with the Low Pressure Tank line kit. See pages 3, 4, 5, 6, 7.

Low Pressure Tank Line
Hose and hardware to install a hydraulic line directly into an existing low pressure tank line hose. Single and Dual line kits are available. See pages 2, 3, 4, 5, 6, 7.

Clamp Open Guard
Prevents accidental opening of the a clamp prior to the load being properly lowered. See pages 4 and 6.

NOTE: This information should not be interpreted as the basis for warranty claims unless so designated.

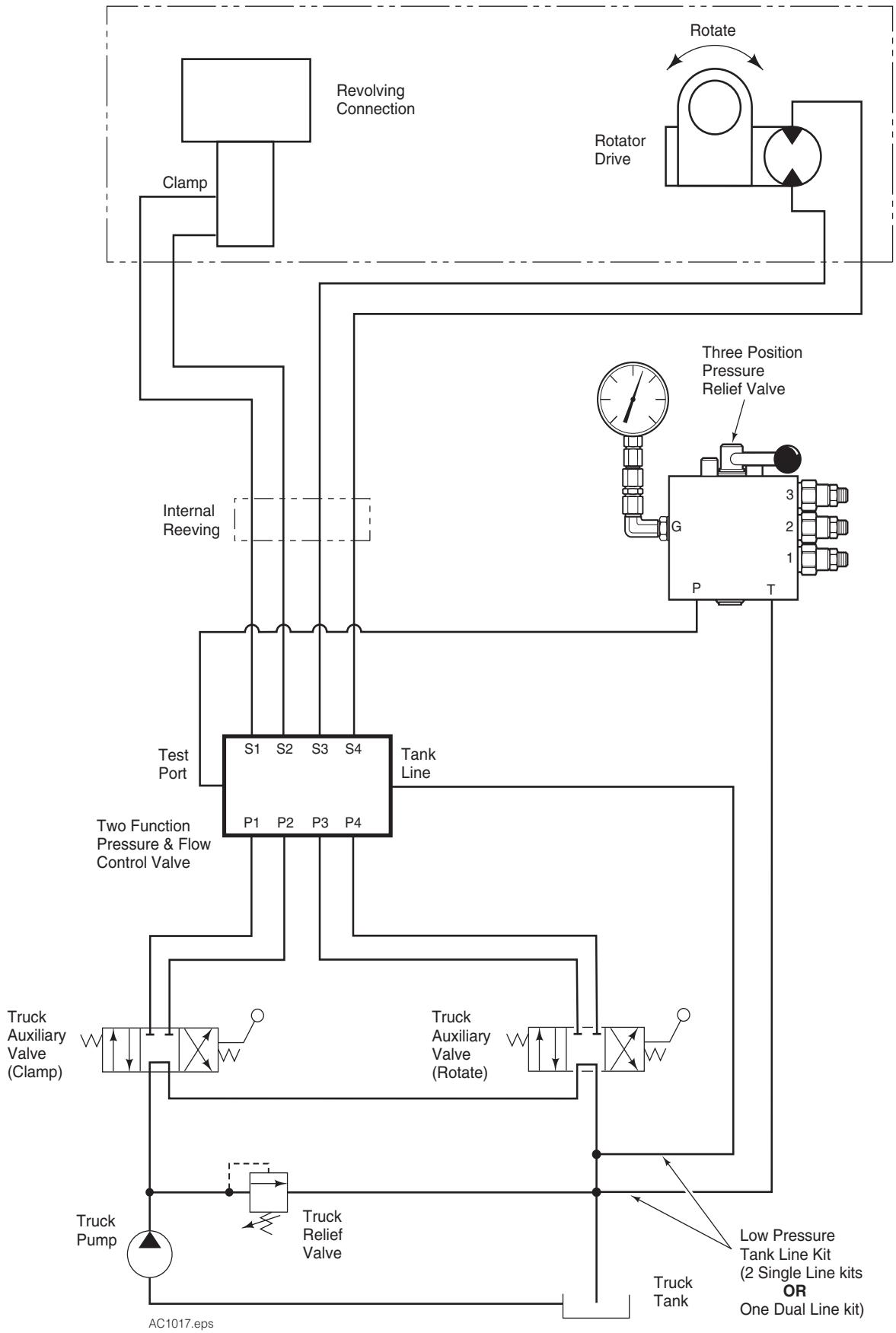
cascade® corporation

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

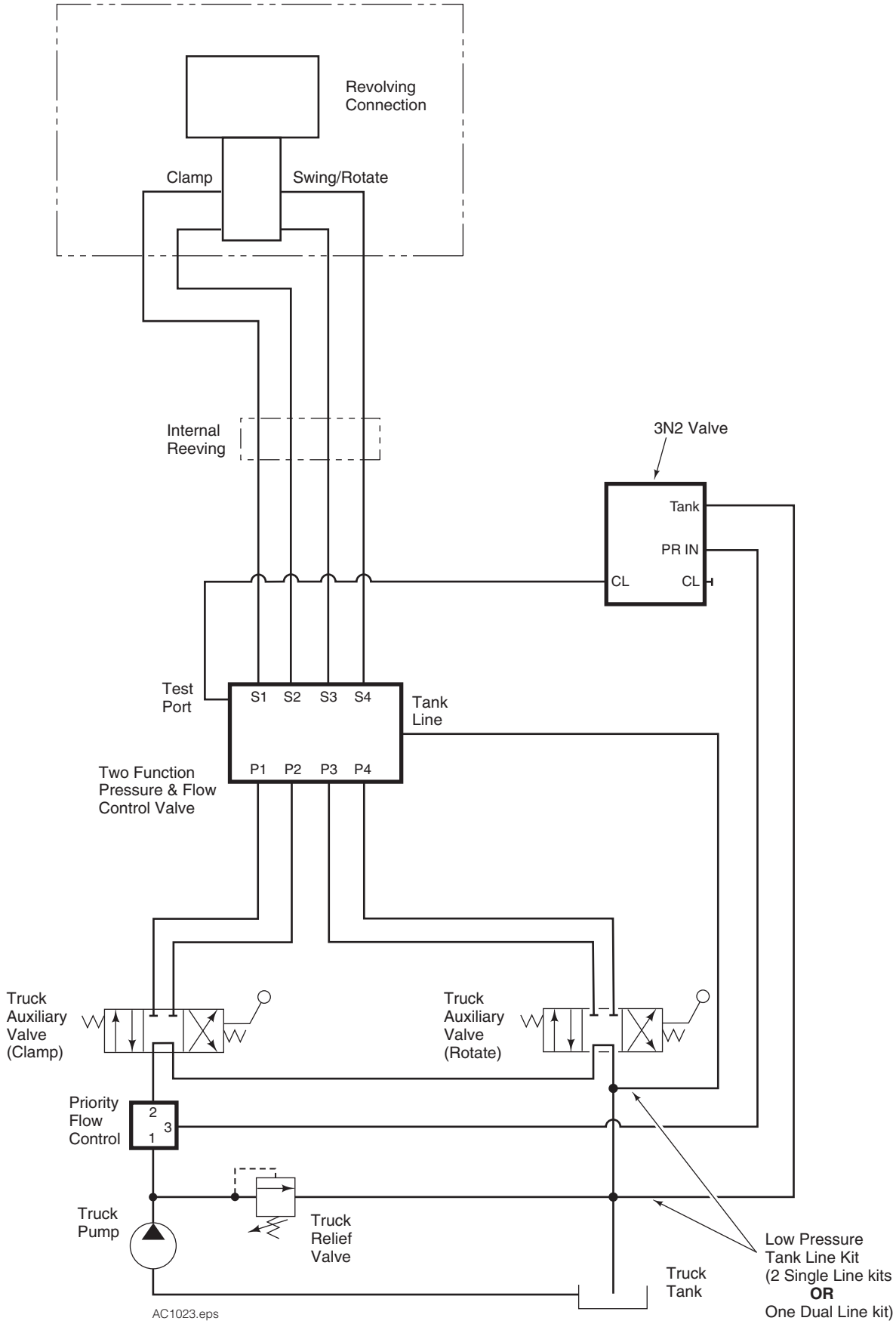
Hydraulic Schematic

Attachment Equipped with
Two Function Pressure and Flow Control Valve
& Three Position Relief Valve



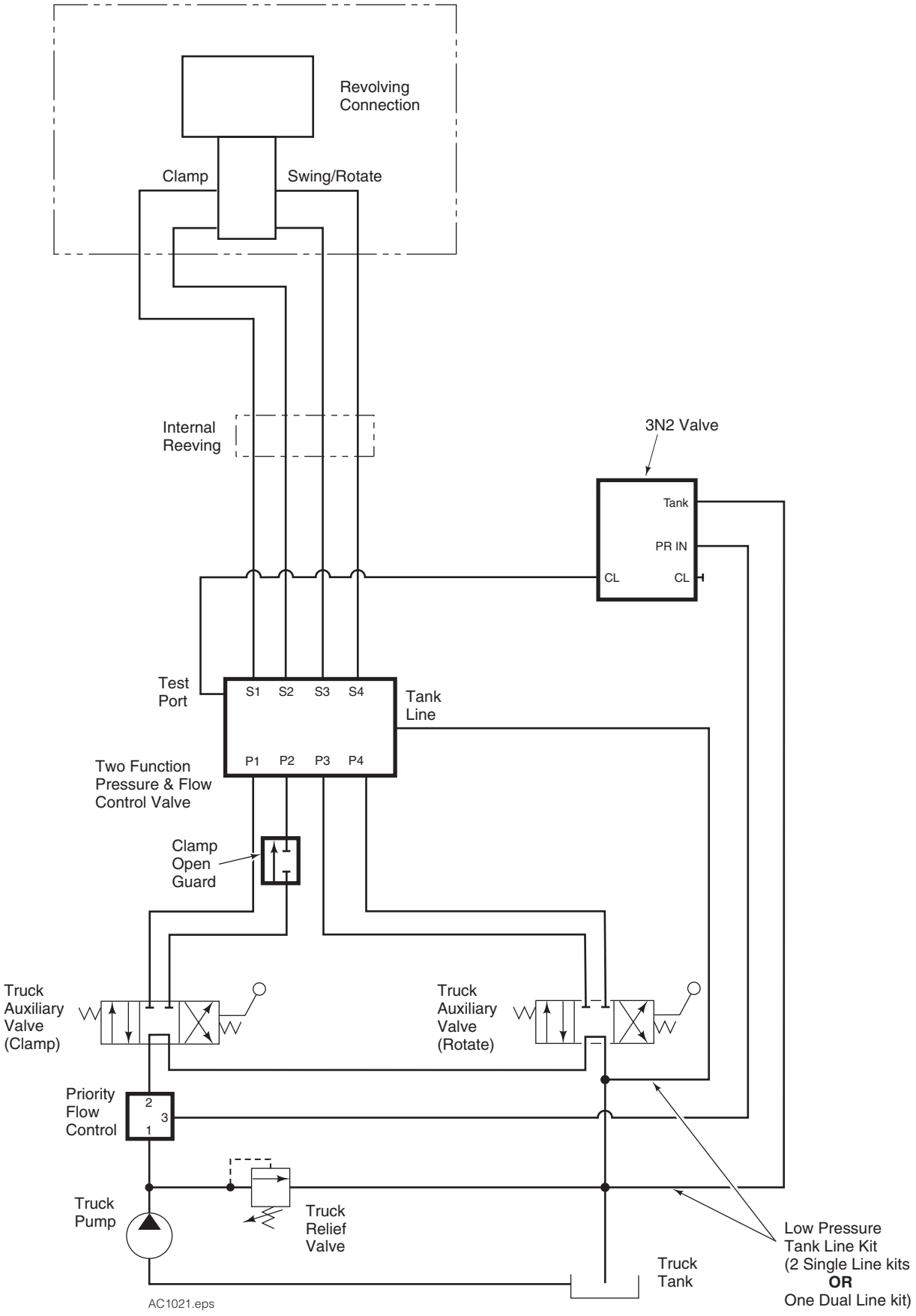
Hydraulic Schematic

FX Swing Frame Roll Clamp Equipped with
Two Function Pressure and Flow Control Valve



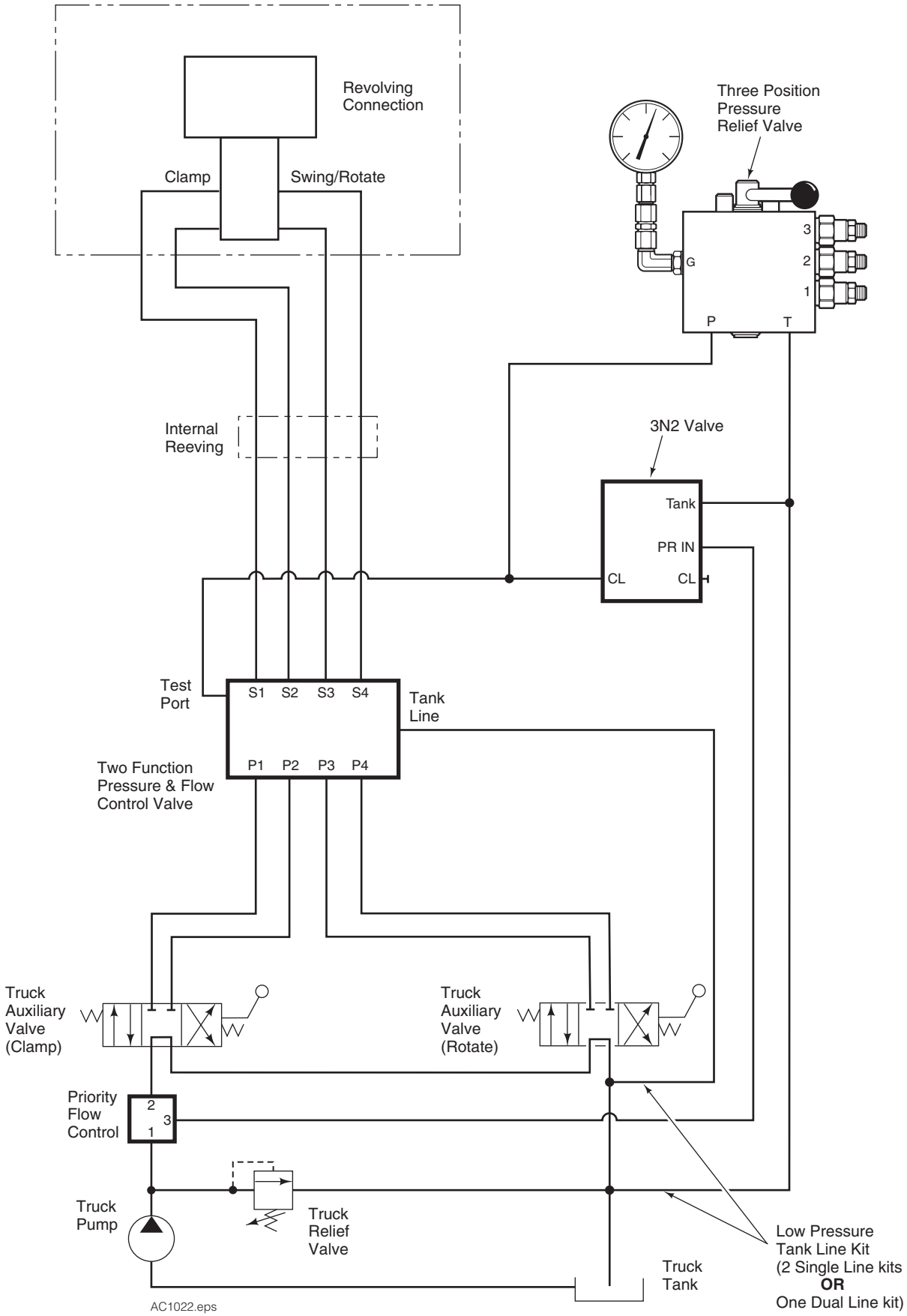
Hydraulic Schematic

FX Swing Frame Roll Clamp Equipped with
Two Function Pressure and Flow Control Valve
and Clamp Open Guard



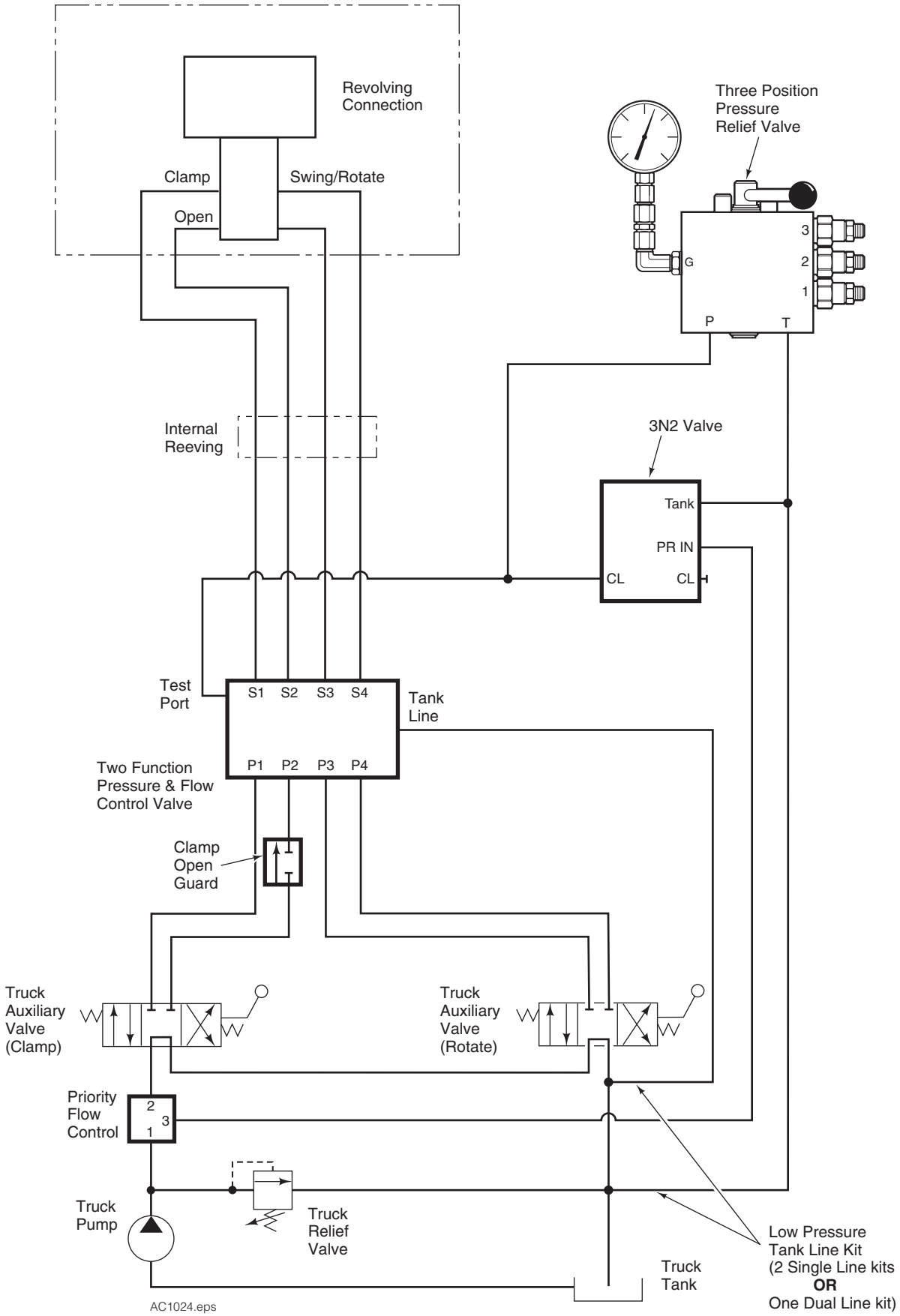
Hydraulic Schematic

FX Swing Frame Roll Clamp Equipped with
Two Function Pressure and Flow Control Valve
& Three Position Relief Valve



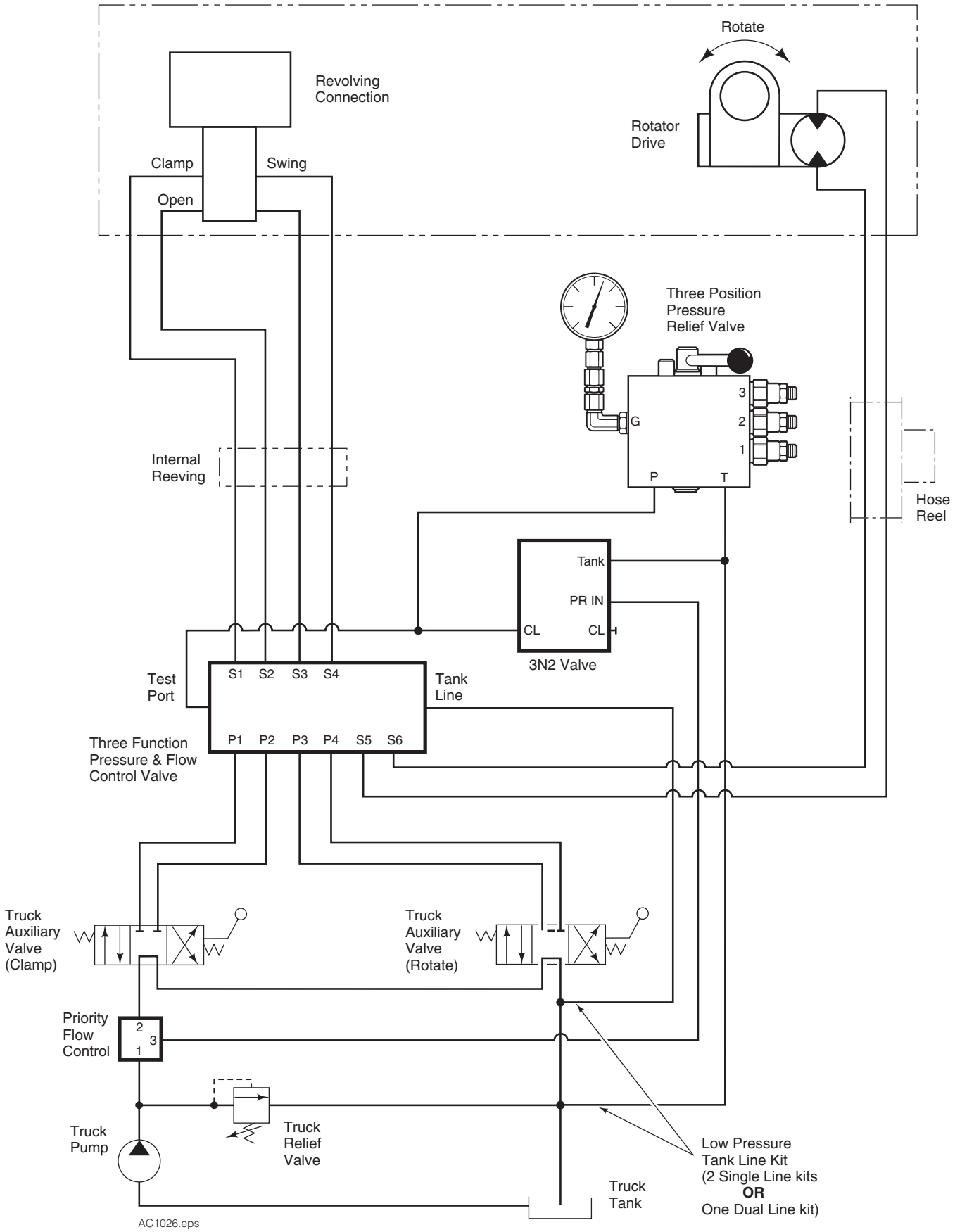
Hydraulic Schematic

FX Swing Frame Roll Clamp Equipped with
Two Function Pressure and Flow Control Valve,
Three Position Relief Valve & Clamp Open Guard



Hydraulic Schematic

Swing Frame Roll Clamp Equipped with
Three Function Pressure and Flow Control Valve
& Three Position Relief Valve



Do you have questions you need answered right now? Call your nearest Cascade Service Department.
Visit us online at www.cascorp.com

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 GmbH
Dahlener Strasse 570
41239 Mönchengladbach
Germany
Tel: 02166-68230
FAX: 02166-682323

Cascade Finland
A. Petreliuksenkatu 3
01370 Vantaa
Finland
Tel: 09-8361925
FAX: 09-8361935

Cascade N.V.
Benelux Sales and Service
Damsluisweg 56
PO Box 3009
1300 El Almere
The Netherlands
Tel: 036-5492950
FAX: 036-5492974

Cascade (UK) Ltd.
Unit 5, Eden Close
Hellaby Lane Ind. Estate
Heellaby,
Rotherham S66 8RW
England
Tel: 01709-704500
FAX: 01709-704501

Sales Scotland
Macade Systems Ltd.
18 Melford Road
Righead Ind. Estate
Bellshill ML4 3LR
Scotland
Tel: 01698-845777
FAX: 01698-845888

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

Cascade Scandinavia AB
Hammarvägen 10
PO Box 124
S-56723 Vaggeryd
Sweden
Tel: 039-336950
FAX: 039-336959

Cascade France
S.A.R.L. MHP
1D Rue De Charaintru
BP 18,
91360 Epinay-Sur-Orge
France
Tel: 01-6454-7500
FAX: 01-6454-7501

Cascade Hispania S.A.
Carrer 5, Sector C
Zona Franca Duanera
Poligono de la Zona Franca
08040 Barcelona
Spain
Tel: 93-264-07-30
FAX: 93-264-07-31

Sales Italy
Via Ponzano 11
50047 Prato
Italy
Tel: 0574-571726
FAX: 0574-571726
Mobile Phone: 0337-673029

Sales Portugal FAG
Santos Lda
Rua do Mercado
Lte 6, Loja 2-Tires
2785-630
S. Domingos De Rana
Portugal
Tel: 214-448-083
FAX: 214-458-098

Sales Switzerland
Fahrzeugbedarf
8810, Horgen
Switzerland
Tel: 01-7279797
FAX: 01-7279798

Sales Poland
Targowa 35/61
03-728 Warszawa
Tel: 022-619 00 49
FAX: 022-619 00 49
Mobile Phone: 0501-27 29 55

Sales Russia
EMCG Material Handling
Equipment
Moscow
Tel: 095-795-2400
FAX: 095-795-2475
Email: emcg@dol.ru

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

© Cascade Corporation 2004

11-2004 Part No. 6049624