



Technical Bulletin

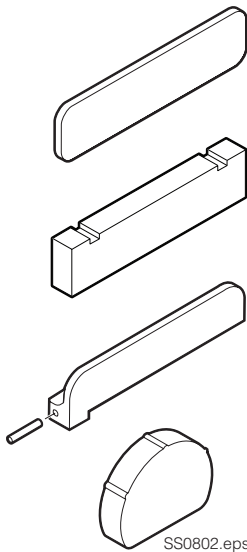
Applications for Bronze Bearings and Hooks

This sheet provides information on applications for bronze bearings and hooks. Cascade recommends bronze bearings and hooks under the following circumstances:

- **K-Series Fork Positioner** – Maximum fork length 60 in.
- Extended load centers – Rug poles.
- Long light loads – Baskets, parts bins, etc.
- Scooping loads – Full forward tilt.
- Gritty and abrasive environments.
- Cold storage applications.
- Extreme cold weather conditions.
- Any application where accelerated wear is experienced with standard composite bearings.

Lower hooks may experience accelerated wear when handling loads with an extended load center greater than 33 in. (849 mm) or long loads over 66 in. (1680 mm). Sideshifter applications using a rug pole, forks longer than 60 in. (1524 mm), fork extensions, booms and etc., should be monitored closely. Cascade also recommends that lower hooks and bearings in high wear applications be inspected on a daily basis.

Lower Bearings



Integral Sideshifter – 35C, 55C & 70C
Integral Sideshifting Fork Positioner – 55K & 70K

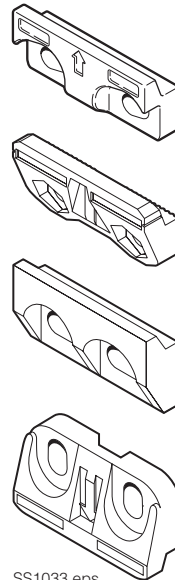
Sideshifter – 55D, 65D, 100D, 120D, 150D, 165D
Fork Positioner – 55C, 55F, 100C, 100F, 120C, 120F, 150C

Sideshifter – 55F, 65F, 120F, 150F
Fork Positioner – 55H, 55K, 65K, 100K, 120K, 150K

Sideshifter – 100D, 120D, 150D, 165D
Fork Positioner – 100C, 120C, 150C, 150H

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



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Lower Hooks

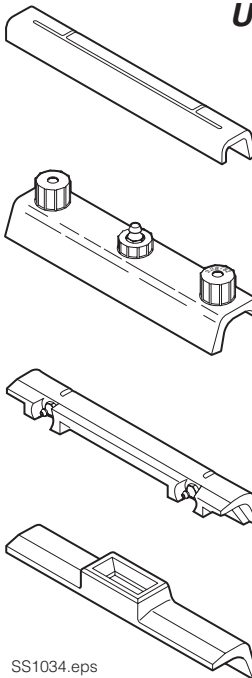
Multiple Load Handler – 20G, 22G, 25G, 28G, 32G, 36G, 50G, 55G FDS
12G, 15G, 25G, 36G, 46G FQS
25G, 36G, 45G FTS
25G FZS

Double-Wide Fork Positioner – 25A, 30A, 55D, 65D
Sideshifter – 55D, 55E, 55F, 60E, 65F, 100D, 100E, 100F, 120D, 120F, 150F
Fork Positioner – 55C, 55F, 55H, 55K, 65K, 100C, 100F, 100K, 120C, 120F, 120K, 150C

Push/Pull – 35E, 45E
Multiple Load Handler – 55E, 55F FDS

Integral Sideshifter – 35C, 55C, 70C
Integral Fork Positioner – 35K, 55K, 70K

Upper Bearings



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Integral Sideshifter – 35C, 55C, 70C
Integral Fork Positioner – 35K, 55K, 70K

Sideshifter – 55F, 65F, 100F, 120F, 150F
Fork Positioner – 55H, 55K, 65K, 100K, 120K, 150K

Double-Wide Fork Positioner – 25A
Multiple Load Handler – 20G, 36G, 50G FDS
25G, 30G, 36G, 45G FTS
36G, 46G FQS
25G FZS

Sideshifter – 55D, 55E, 100D, 120D, 150D, 165D
Double-Wide Sideshifter – 55D & 65D
Fork Positioner – 55C, 55F, 60E, 100C, 100E, 120C, 150C, 150H

Push/Pull – 35E, 45E
Multiple Load Handler – 22G, 25G, 28G, 32G, 55G FDS
12G, 15G FQS

Multiple Load Handler – 20G FDS



For Technical Support . . .

Call: 1-800-CASCADE (227-2233)

OR

Write: Cascade Corporation, PO Box 20187, Portland, OR 97294-0187

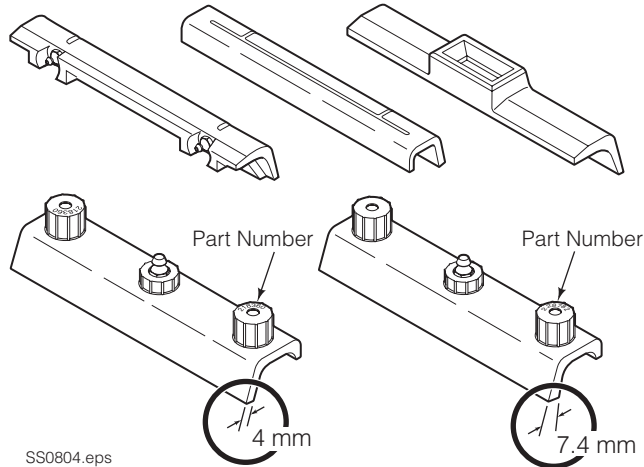
To Order Parts . . .

Call: 1-888-CASCADE (227-2233)

OR

Write: Cascade Corporation, 2501 Sheridan Ave., Springfield, OH 45505

Bronze Upper Bearings



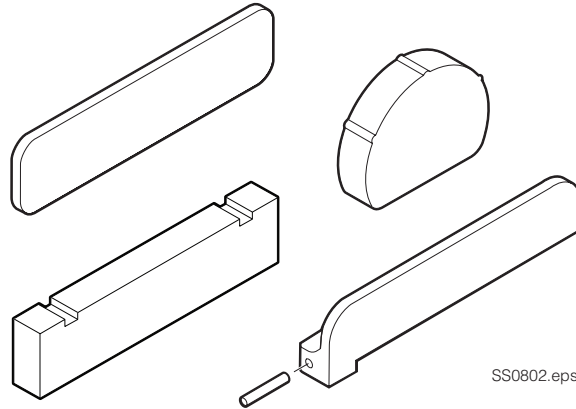
Individual Upper Bearings		
BRONZE BEARING PART NO.	COMPOSITE BEARING PART NO.	DESCRIPTION
204137	204187	55D, 55E Sideshifter 55C, 55F Fork Positioner
218363	218360	55F Sideshifter 55H Fork Positioner
390516	—	55D Double-Wide Sideshifter
804065	672018	60E, 100E Sideshifter 100D, 120D, 150D, 165D Sideshifter 55F, 100F, 120F Fork Positioner 60E, 100E Fork Positioner 100C, 120C, 150C Fork Positioner 150H Fork Positioner
3008086	—	65D Double-Wide Sideshifter
6000616	228782	55F Sideshifter 25A Fork Positioner ● 55H Fork Positioner 55K Fork Positioner Multiple Load Handler – 20G FDS (Center Sideshift Mount)
6052405	6051249	65F, 100F Sideshifter 30A Fork Positioner ● 65K, 100K Fork Positioner Multiple Load Handler – 25G FTS (Center Sideshift Mount) 25G FZS (Roller equipped) 25G FQS 30G FTS (Center Sideshift Mount) 36G FDS 36G FTS 45G FTS (Roller equipped)
6061184	671165	35E, 45E Push/Pull
6082297	6079936	120F, 150F Sideshifter 120K, 150K Fork Positioner Multiple Load Handler – 36G, 50G FDS 36G, 46G FQS

Individual Upper Bearings		
BRONZE BEARING PART NO.	COMPOSITE BEARING PART NO.	DESCRIPTION
6083333	6072992	Multiple Load Handler – 20G FDS (Top Sideshift Mount)
6135534	6127049	Multiple Load Handler – 22G, 25G, 28G, 32G FDS 12G, 15G FQS
6150571	—	Multiple Load Handler – 46G FQS 50G FDS
8509289	8508374	35C, 55C Integral Sideshifter 35K, 55K Integral Fork Positioner
8509291	8508375	70C Integral Sideshifter 70K Integral Fork Positioner

Upper Bearing Kits ♦		
BRONZE BEARING KITS PART NO.	COMPOSITE BEARING KITS PART NO.	DESCRIPTION
6033485	6020486	55F Sideshifter ■
6033486	6020486	55F Sideshifter ■ 55K Sideshifter
6058726	—	55C Integral Sideshifter 55K Integral Fork Positioner
6058728	—	70C Integral Sideshifter 70K Integral Fork Positioner

- Composite equivalent not recommended for this attachment's faceplate.
- Note the part number on top of the bearing mounting boss. There are two Cylinder/Anchor Plate designs used.
- ♦ Includes two bearings.

Bronze Lower Bearings



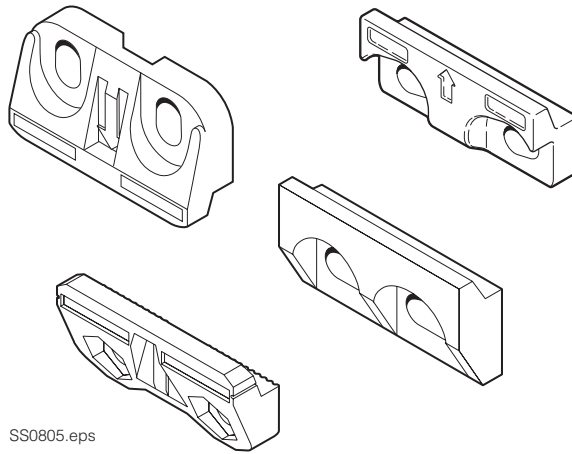
Individual Lower Bearings		
BRONZE BEARING PART NO.	COMPOSITE BEARING PART NO.	DESCRIPTION
225570 ◆	218361	55F Sideshifter 55H Fork Positioner 55K Fork Positioner
1017153 ■	676650 ■	100D, 120D, 150D & 165D Sideshifter 100C, 120C, 150C Fork Positioner 150H Fork Positioner
6058041 ◆	6057162	65F, 100F, 120F, 150F Sideshifter 65K, 100K, 120K, 150K Fork Positioner
6119170 ●	208350 ●	55D, 65D, 100D, 120D, 150D & 165D Sideshifter 55C, 100C, 120C, 150C Fork Positioner 55F, 100F, 120F Fork Positioner
8509290	8508376	35C, 55C Integral Sideshifter 35K, 55K Integral Fork Positioner
8509292	8508377	70C Integral Sideshifter 70K Integral Fork Positioner

- ◆ Includes roll pin
- Disk Bearing
- Rectangular Bearing

Lower Bearing Kits ▲		
BRONZE BEARING PART NO.	COMPOSITE BEARING PART NO.	DESCRIPTION
226842	—	55F Sideshifter 55K Fork Positioner
6058727	—	55C Integral Sideshifter 55K Integral Fork Positioner
6058729	—	70C Integral Sideshifter 70K Integral Fork Positioner

- Includes two lower bearings.

Bronze Lower Hooks



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Individual Lower Hooks		
BRONZE HOOK PART NO.	STANDARD HOOK PART NO.	DESCRIPTION
228166	204186	55D, 100D Sideshifter 55E, 60E, 100E Sideshifter 55F, 65F, 100F Sideshifter 55C, 100C □ Fork Positioner 55F, 100F Fork Positioner 55H Fork Positioner 55K, 65K, 100K Fork Positioner 25A, 30A Double-Wide Fork Positioner ● 55D & 65D Double-Wide Fork Positioner
6004736	—	120D Sideshifter
6034313	679360	35E, 45E Push/Pull - CL II
6086319	6066574	Multiple Load Handler – 12G, 15G FQS - CLII/III 20G FDS (Center Sideshift Mount) - CL II 20G FDS (Top Sideshift Mount) - CL II 22G, 25G, 28G, 32G FDS - CLII/III 36G, 50G FDS - CL III 25G, 30G FTS - CL II/III
6088083	6074547	Multiple Load Handler – 25G FQS CL III ✘ 25G FZS (Roller equipped) CL III 32G, 36G FDS CL III 36G FTS CL III ✘
6088086	6074859	Multiple Load Handler – 36G, 46G FQS CL IV 45G FTS (Roller equipped) CL IV 50G FDS CL IV
6117498	6004779	150D, 165D Sideshifter 100C, 120C, 150C Fork Positioner CL IV ▼ 100F, 120F Fork Positioner 100K, 120K Fork Positioner 150H Fork Positioner
6131485	675968	Multiple Load Handler – 55E FDS 55F FDS
6801474	6083157	120F, 150F Sideshifter 1120K, 150K Fork Positioner
8515168	850373	35C, 55C, 70C Integral Sideshifter 35K, 55K, 70K Integral Fork Positioner

- Composite equivalent not recommended for this attachment's faceplate.
- ✘ Roller and non-roller equipped.
- 100C CL III also uses bronze hook 677160 (no standard equivalent)
- ▼ Also uses bronze hook 678034 (no standard equivalent)

Lower Hook Kits ♦		
BRONZE HOOK KITS PART NO.	COMPOSITE HOOK KITS PART NO.	DESCRIPTION
228165	204182	55F, 65F, 100F Sideshifter 55E, 60E, 100E Sideshifter 55F, 100F Fork Positioner 55K, 65K, 100K Fork Positioner 55H Fork Positioner
6058722	6018267	35C, 55C, 70C Integral Sideshifter 35K, 55K, 70K Integral Fork Positioner
6065847	—	55C Integral Sideshifter (Safety Wire)
6084554	683178	45E Push/Pull - CLII
6088080	6071855	Multiple Load Handler – 22G, 25G FDS - CLIII 28G, 32G FDS - CLIII 12G, 15G FQS - CLIII 25G, 30G FTS - CLIII
6088081	6071856	Multiple Load Handler – 20G, 22G, 25G FDS - CLII 28G, 32G FDS - CLII 12G, 15G FQS - CLII 25G, 30G FTS - CLII
6088082	6074572	Multiple Load Handler – 36G FDS - CLIII 25G FQS - CLIII 36G FTS - CLIII 25G FZS - CLIII
6088085	6074868	Multiple Load Handler – 36G, 46G FQS - CLIV 45G FTS - CLIV 50G FDS - CLIV
6117382	6106244	100C Fork Positioner ○
6117499	6106245	100C, 120C, 150C Fork Positioner - CLIV ▲
6122469	6106285	100D Sideshifter
6131549	211173 ✓ OR 6118241 ■	Multiple Load Handler – 55E FDS 55F FDS
6134157	6106298	150D Sideshifter - CLIV

- ♦ Includes two lower hooks, capscrews, washers and nuts (if required).
- ✓ Capscrew in kit is 55 mm in length.
- Capscrew in kit is 30 mm in length.
- Also uses bronze hook group 677280 (no standard equivalent)
- ▲ Also uses bronze hook group 381517 (no standard equivalent)

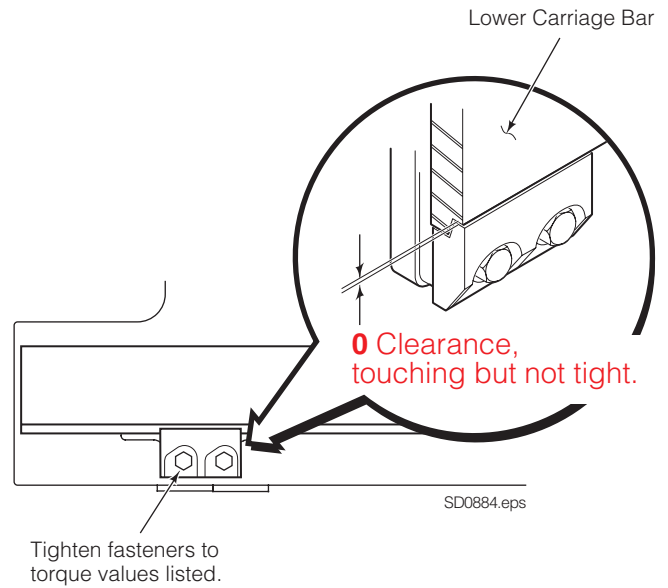
Installing Lower Hooks

Install bronze lower hooks with zero clearance against lower carriage bar. **Hooks should touch lower carriage bar, but not tight.** Tighten fasteners to:

- Class II** – 120 ft.-lbs. (160 Nm)
- Class III** – 165 ft.-lbs. (225 Nm)
- Class IV** – 190 ft.-lbs. (260 Nm)

NOTE: Standard iron hooks are installed as follows:

- Non-Sideshifting Units** – Tight against lower carriage bar.
- Sideshifting Units** – Clearance of 3/32 in. (2.5 mm) minimum and 3/16 in. (6 mm) maximum.



Do you have questions you need answered right now?

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