Tolomatic™
EXCELLENCE IN MOTION

Parts Sheet

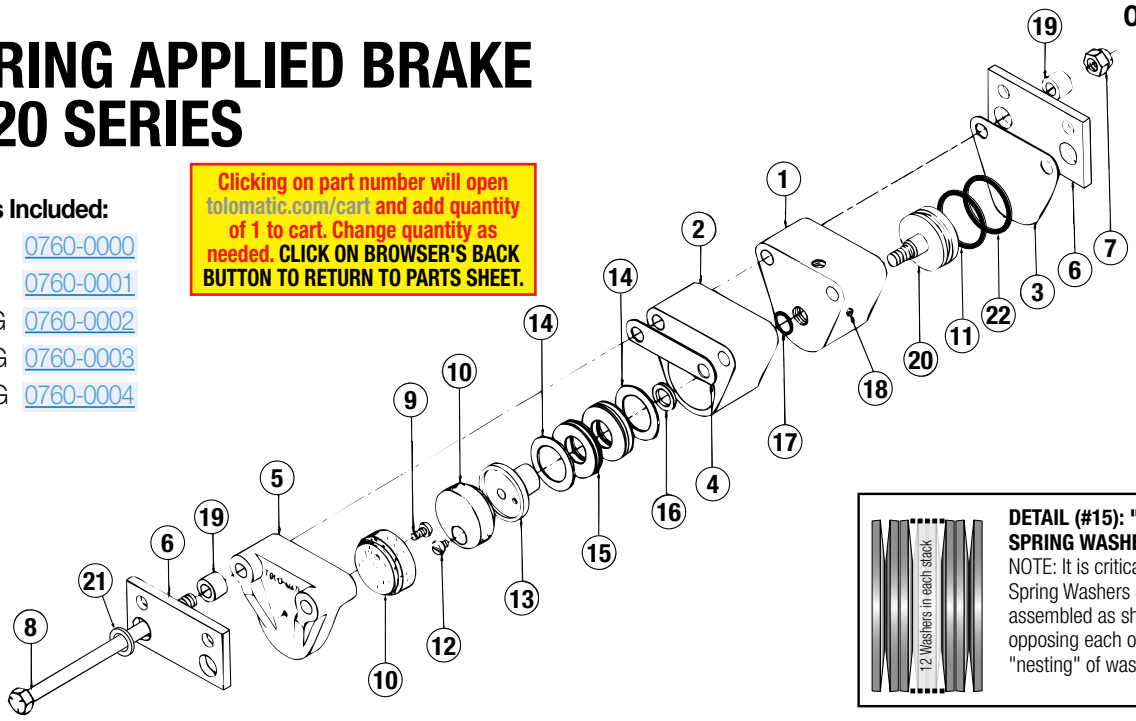
0701-0219_03

SPRING APPLIED BRAKE FS20 SERIES

Models Included:

FS20A	0760-0000
FS20B	0760-0001
FS20XG	0760-0002
FS20AG	0760-0003
FS20BG	0760-0004

Clicking on part number will open tolomatic.com/cart and add quantity of 1 to cart. Change quantity as needed. CLICK ON BROWSER'S BACK BUTTON TO RETURN TO PARTS SHEET.



DETAIL (#15): "B" BELLEVILLE SPRING WASHERS STACK
NOTE: It is critical that the Belleville Spring Washers Stack is re-assembled as shown with washers opposing each other and no "nesting" of washers

Click on Part No. to Add to Cart

ITEM	PART NO.	DESCRIPTION	FS20A	FS20B	FS20XG	FS20AG	FS20BG
1.	0760-1004	Live Side Housing	1	1	1	1	1
2.	0760-1022	Housing Spacer	1	1	1	1	1
3.	0760-1002	Cover Plate	1	1	1	1	1
4.	0743-1004	Spacer, .094" thick		1			1
	0743-1025	Spacer, .225" thick			1		
5.*	0724-1011	Dead Side Housing	1	1	1	1	1
6.	0760-1016	Floating Mounting Bracket	2	2	2	2	2
7.	0720-1008	Lock Nut	2	2	2	2	2
8.	0739-1006	Hex Head Bolt, Grade 8, 3/8-24x6.5"	2	2	2	2	2
9.	0720-1026	Pan Head Screw, 10-24x3/8	1	1	1	1	1
10.	0720-1024	Puck, Friction	2	2	2	2	2
11.	0720-1004	O-Ring, Buna-N	1	1			
	0760-1009	O-Ring, EPR			1	1	1
12.	0737-1024	Pan Head Screw, 10-24x1/4	1	1	1	1	1
13.	0740-1065	Spring Holder	1	1	1	1	1
14.	0740-1007	Thrust Washer	2	2	2	2	2
15.	0740-9012	Belleville Spring Washers	1	1	1	1	1
16.	0740-1014	Spacer Ring	1	1	1	1	1
17.	0741-1035	O-Ring, Buna-N,	1	1			
	0740-1069	O-Ring, EPR			1	1	1
18.	0720-1099	Bleeder Screw	2	2	2	2	2
19.	0743-1071	Spacer, Ring	4	4	4	4	4
20.	0740-1062	Piston	1	1	1	1	1
21.	0720-1011	Washer	2	2	2	2	2
22.	0740-1050	Back-Up Ring, Buna-N	1	1			
	0784-1008	Back-Up Ring, EPR			1	1	1

*Dead Side Housing is available only as Dead Side Housing Assembly 0724-9000. This sub-assembly also includes one Puck (0720-1024) and one Pan Head Screw (0720-1026).

NOTE: Items marked with capital letters are used only in models with those letter suffixes. Model number letter suffixes have the following meanings:

"A" indicates the brake is designed to work with a 5/32" (3.97mm) thick disc.
"B" indicates the brake is designed to work with a 1/4" (6.35mm) thick disc.
"FS" indicates spring applied brake.
"G" indicates the brake is built with EPR Seals and is DESIGNED TO BE OPERATED WITH AUTOMOTVE BRAKE FLUID ONLY. (In brakes without the **"G"** suffix, most petroleum-based, hydraulic fluids may be used).

WARNING: This caliper disc brake is under spring tension. Do not remove bolts without FIRST pressurizing cylinder to retract pistons. After disassembly, release pressure slowly. Do not attempt to retract the pistons by tightening the bolts on reassembly. USE HYDRAULIC PRESSURE INSTEAD.

1. When mounting the brake, connect the fluid pressure source to the brake. Bleed the brake by loosening the screws on the Bleeder Valves (#18). Then, pressurize the brake gradually up to 750 PSI. At this pressure, the pucks retract into the housing, creating the correct gap for the disc.

2. Slip the brake over the disc and align it so the puck faces are parallel with the disc. Proper clearance between the pucks and disc is .010" when new. Then, fasten the Mounting Brackets (#6) with 3/8" diameter screws to any fixed member. (See the mounting diagram below for dimensions).

3. To prevent excessive wear, be sure the disc does not rub against the pucks or housing when the piston is retracted.

4. The disc must be free of dirt and grease for maximum life and braking action.

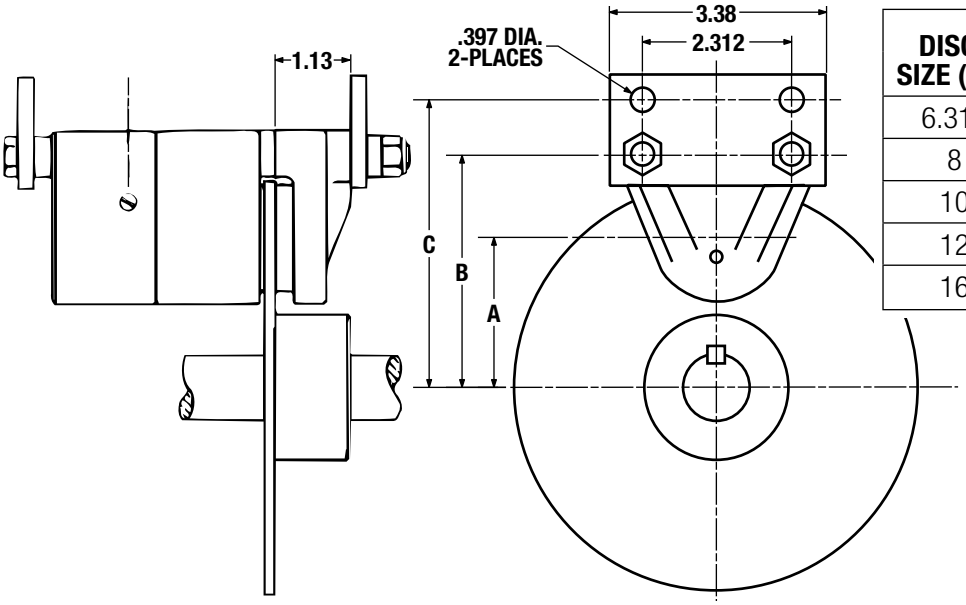
5. **DO NOT PRESSURIZE THIS UNIT ABOVE 1,500 PSI.**

6. Inspect the brake pucks frequently for signs of wear. The torque output will diminish over time with wear. Tolomatic recommends replacement of puck after 0.281" (7.14 mm) of total wear is observed.

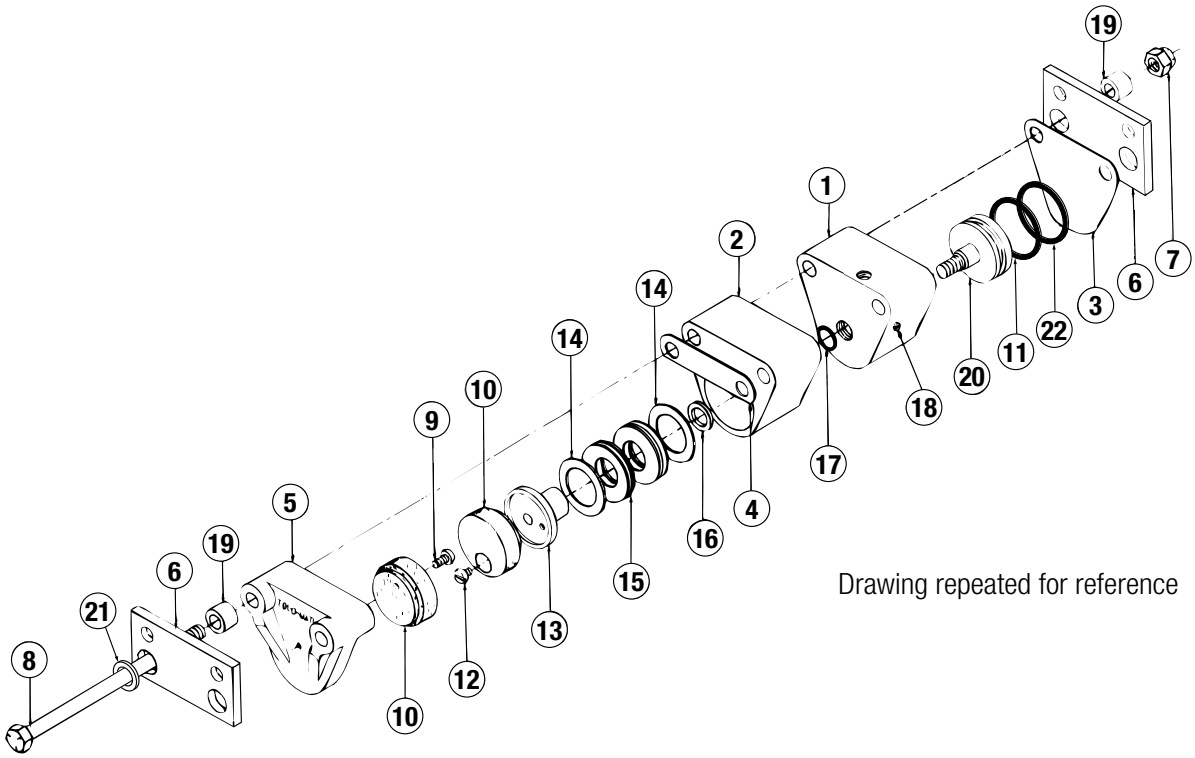
7. **WARNING:** Make certain that the hydraulic fluid being used is compatible with the seals in the brake. Brake models with a suffix **"G"** are provided with EPR seals for use with automotive brake fluid **ONLY**. All other models are equipped with Buna-N seals for use with mineral-base hydraulic fluids.

8. When plumbing the fluid system, use a minimum amount of pipe thread sealant on joints to prevent sealant contamination entering the system.

9. **Do not pressure bleed the brake with more than 5 PSI. Excessive pressure will cause the O-Ring on the bleeder to extrude, causing the possibility of the O-Ring being sheared off when tightened. Take care to see that the O-Ring is properly seated before tightening.**



DISC SIZE (in)	FS 20 SERIES		
	A	B	C
6.313	2.281	3.531	4.344
8	3.125	4.375	5.188
10	4.125	5.375	6.188
12	5.125	6.375	2.188
16	7.125	8.375	9.188



Drawing repeated for reference

FS20 ASSEMBLY

1. Install Brake Puck (#10) onto Dead Side Housing (#5) using a Pan Head Screw (#9) and tighten.

2. Lubricate and install Large 0-Ring (#11) and Back-Up Ring (#22) on Piston (#20).

Note: The Back-Up Ring must be on the non-pressure side of the piston with the concave surface of the Back-up Ring mating with the O-Ring.

3. Lubricate and install Small 0-Ring (#17) into the Live Side Housing (#1).

4. Slide the Live Side Housing (#1) with the flat side upward over the top of the piston threads. Be careful not to damage small O-Ring (#17) with threads when installing.

5. Slide the Spacer Ring (#16), Thrust Washer (#14), Belleville Spring Washers (#15) and a second Thrust Washer (#14) over the piston threads.

6. Using Loctite® 242 thread locker, screw Spring Holder (#13) onto piston threads and tighten.

DETAIL (#15): "B" BELLEVILLE SPRING WASHERS STACK
NOTE: It is critical that the Belleville Spring Washers Stack is re-assembled as shown with washers opposing each other and no "nesting" of washers

7. Install Brake Puck (#10) onto the Spring Holder (#13) with the Pan Head Screw (#12).

8. Slide Housing Spacer (#2) over the spring stack assembly.

9. Place Washers (#21) onto the Hex Head Bolts (#8). Over this, install the Floating Mounting Bracket Spacer Rings (#19), the Floating Mount Bracket (#6), Dead Side Housing (#5), Spacer (#4), Live Side Housing Assembly (#1), Cover Plate (#3), secondary Floating Mounting Bracket (#6) and Spacer Rings (#19). Tighten the whole assembly together with the Lock Nuts (#7).

10. Apply small amount of Loctite® 242 thread locker into the threads of the Live Side Housing (#1) and not on the threads of the brass portion of Bleeder (#18). Install bleeders into the housing. Do not apply any Thread Locker to the small steel portion of the bleeder.

11. Test for release pressure. Release pressure is the lowest pressure at which the test spacer can be removed from the brake pads without interference. While unit is at the nominal release pressure, check for visible fluid leaks and/or pressure loss.

Loctite® is a registered trademark of the Loctite Corporation, www.loctite.com.

Tolomatic™
EXCELLENCE IN MOTION
COMPANY WITH QUALITY SYSTEM CERTIFIED BY DNV = ISO 9001 =
3800 County Road 116, Hamel, MN 55340 USA
https://www.Tolomatic.com • Email: Help@Tolomatic.com
Phone: (763) 478-8000 • Toll Free: 1-800-328-2174

All brand and product names are trademarks or registered trademarks of their respective owners. Information in this document is believed accurate at time of printing. However, Tolomatic assumes no responsibility for its use or for any errors that may appear in this document. Tolomatic reserves the right to change the design or operation of the equipment described herein and any associated motion products without notice. Information in this document is subject to change without notice.

© 2026 Tolomatic 202610191606