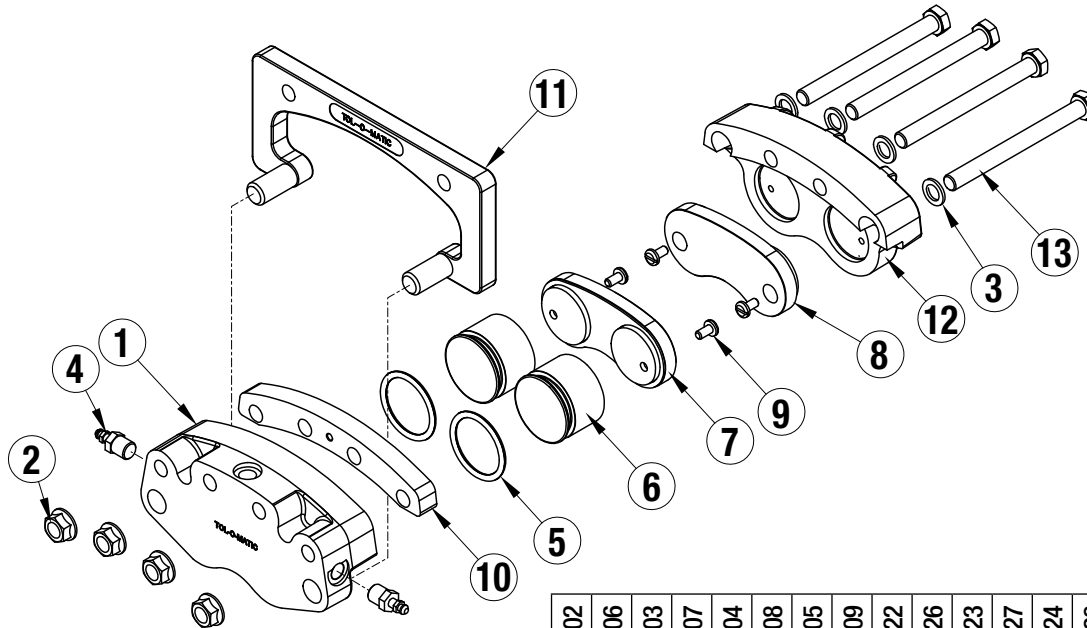


HYDRAULIC BRAKE H220SI SERIES DUCTILE IRON

Models Included:

H220SACI	0733-0402
H220SACIG	0733-0406
H220SBCI	0733-0403
H220SBCIG	0733-0407
H220SLCI	0733-0404
H220SLCIG	0733-0408
H220SECI	0733-0405
H220SECIG	0733-0409
H220SAFCI	0733-0422
H220SAFCIG	0733-0426
H220SBFCI	0733-0423
H220SBFCIG	0733-0427
H220SLFCI	0733-0424
H220SLFCIG	0733-0428
H220SEFCI	0733-0425
H220SEFCIG	0733-0429

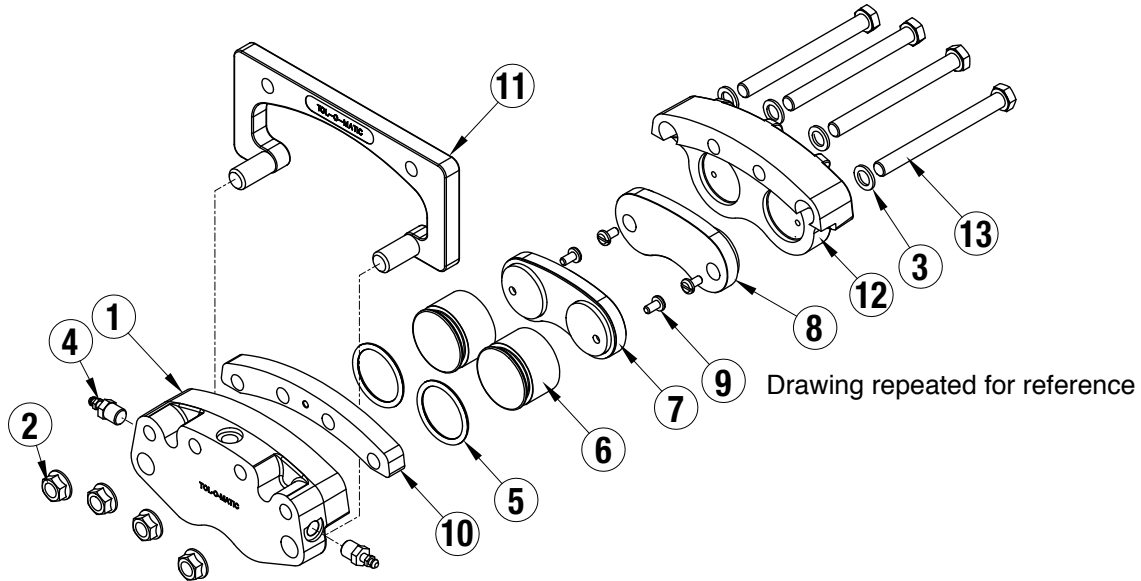


ITEM	PART NO.	DESCRIPTION	0733-0402	0733-0406	0733-0403	0733-0407	0733-0404	0733-0408	0733-0405	0733-0409	0733-0422	0733-0426	0733-0423	0733-0427	0733-0424	0733-0428	0733-0425	0733-0429
1.	0733-1084	Live Side Housing	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
2.	0720-1008	Lock Nut	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
3.	0720-1007	Washer	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
4.	0740-1002	Bleeder Valve	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
5.	0720-1004	O-Ring, Buna-N	2		2		2		2		2		2		2		2	
	0760-1009	O-Ring, EPR		2		2		2		2		2		2		2		2
6.	0740-1035	Piston	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
7.	0740-1081	Segmented Puck	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
8.	0740-1033	Segmented Puck	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
9.	0720-1026	Pan Head Screw	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
10.	0733-1063	"A" Spacer	1	1							1	1						
	0733-1075	"B" Spacer			1	1							1	1				
	0733-1011	"L" Spacer					1	1							1	1		
	0733-1074	"E" Spacer							1	1							1	1
11.	0734-9001	Floating Bracket									1	1	1	1	1	1	1	1
12.	0740-1037	Dead Side Housing	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
13.	0733-1098	Hex Head Bolt, 4.00"	4	4	4	4	4	4			4	4	4	4	4	4		
	0720-1105	Hex Head Bolt, 4.50"							4	4							4	4

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.
- "C" indicates the brake has bleeder fittings.
- "D" indicates the brake has double live sides.
- "E" indicates the brake is designed to work with a 1/2" (12.7mm) thick disc.
- "F" indicates floating mount bracket.

- "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).
- "I" indicates the brake is made of cast iron.
- "L" indicates the brake is designed to work with a 3/8" (9.53mm) thick disc.
- "O" indicates the brake is designed to work with a 1.25" (31.8mm) thick disc.

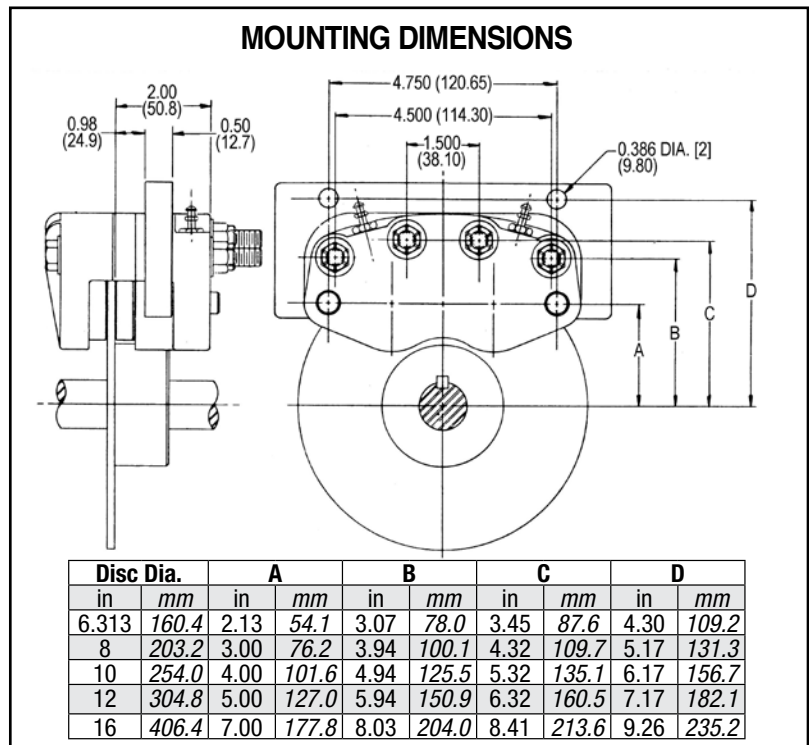


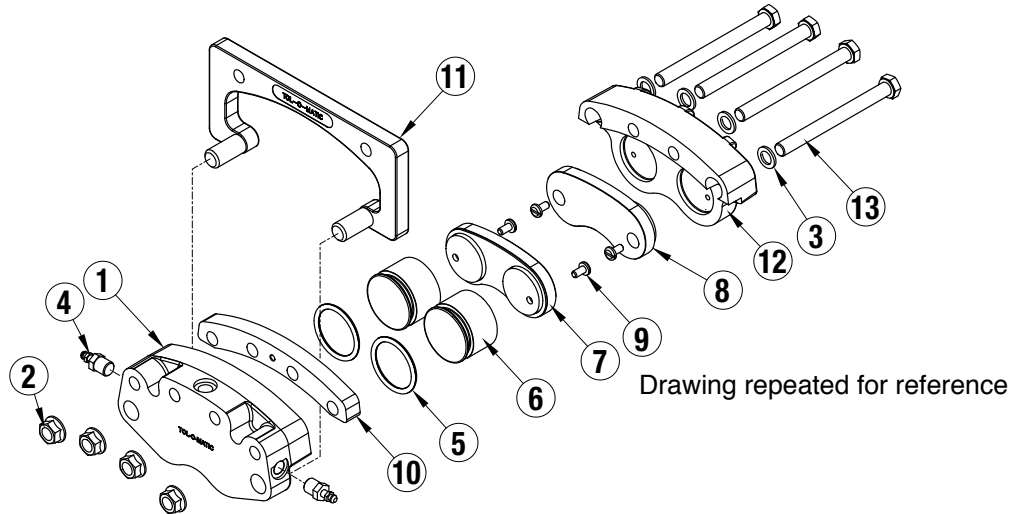
INSTALLATION

1. The H220SI brake can be mounted using the Floating Mount Bracket (#11) (Models with F in suffix). If model is not supplied with floating bracket, the brake can be mounted using the four thru bolts (#13). Torque these bolts to 480 in-lbs (54.2 Nm). When mounting brake in this fashion, the disc must be free to float on its shaft equivalent to the thickness of the dead side segmented puck. Mount the brake using the Floating Mount (#11) and two Grade 8 bolts. Torque the bolts to 480 in-lbs (54.2 Nm)
2. When mounting the brake, care must be taken to ensure that the puck faces are parallel to the disc. The proper clearance between the puck faces and disc ranges from a minimum of 0.010-inch to a maximum of 0.030-inch when new.
3. The H220SI brake may be operated hydraulically up to 1,500 PSI (103.4 bar). Make certain that the hydraulic fluid being used is compatible with the seals in a particular model. Models with the letter suffix "G" are equipped with EPR seals which are ONLY compatible with AUTOMOTIVE BRAKE FLUID. All other models are equipped with Buna-N seals which are compatible with most petroleum-based hydraulic fluids.
4. Pressure in the brake must be relieved when the brake is not in service. DO NOT OPERATE the brake with master cylinders which have a residual pressure relief valve. The residual pressure will cause drag and excess heat, resulting in reduced puck life.
5. Mount the brake in such a position that one Bleeder Valve (#4) is at the highest point on the brake. Improper bleeding will cause poor braking performance.

MAINTENANCE

1. To replace the Brake Pucks (#7 & #8), remove Bolts (#13) and lift off the Dead Side Housing (#12). This will expose the Pucks. Remove Screw (#9), saving it for reuse. The Puck will then be free and may be easily replaced.
2. Reinstall Screws (#9), coating the threads with Blue Loctite® 242 through the new Pucks (#7 & #8) into the Pistons (#6) and the Dead Side Housing (#12). Reinstall the Bolts (#13), Washers (#3) and Lock Nuts (#2) and torque to 480 in-lbs (54.2 Nm).



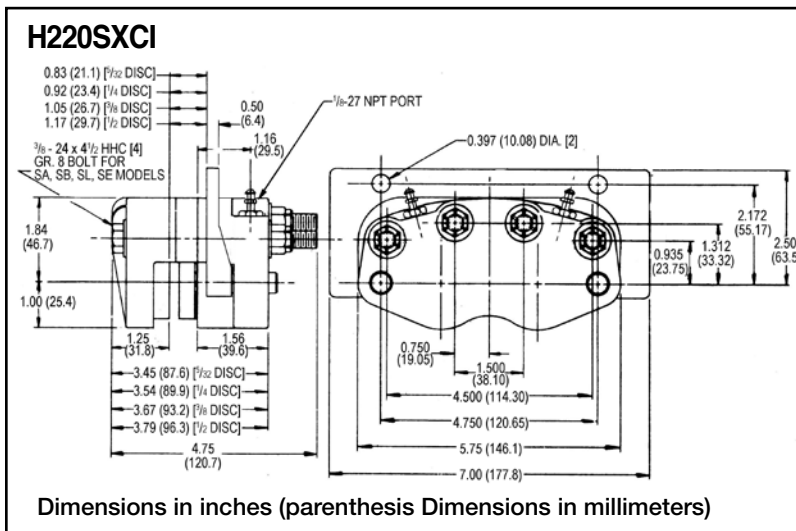


TO REASSEMBLE

1. Insert Segmented Puck (#8) into Dead Side Housing (#12). Insert and tighten Pan Head Screws (#9) through the Segmented Puck and into the Dead Side Housing.
2. Insert Bolts (#13) and Washers (#3) into the Dead Side Housing (#12). When completed, lay the Dead Side Housing onto the work surface with the threaded bolts pointing upward.
3. Slide Spacer (#10) over the threads of the bolts on the dead side housing.
4. Lubricate O-Rings (#5) and bores of Live Side Housing (#1) with a good Buna-N O-Ring grease, such as Lubriplate 105. (If

brake has EPR seals, indicated with a “G” in the model number, use a good EPR O-Ring grease, such as Dow Corning #55.) Place O-Rings onto the Pistons (#6).

5. Insert Pistons (#6) into the piston bores of the Live Side Housing (#1), being careful not to damage O-Rings (#5).
6. Align holes in Pistons (#6) to Segmented Puck (#7) and attach with Pan Head Screws (#9) into Pistons.
7. Apply small amount of Blue Loctite 242 into the threads of the Live Side Housing (#1) and not on the threads of the brass portion of Bleeder (#4). Install Bleeders into the Housing. Do not apply any thread locker to the small steel portion of the Bleeder.



8. Lay the dead side and live side assemblies on the bench and install the live side over the Bolts (#13) of the Dead Side Housing (#12).
9. Install the Lock Nuts (#2). Torque nuts to 480 lbs (54.2 Nm).
10. If Floating Mount Bracket (#11) is present (indicated with an “F” in the model number) apply Never-Seize to the pins on the Mounting Bracket Assembly.
11. Slide the Mounting Bracket Assembly (#11) into the Live Side Housing (#1). (See drawing for orientation.)

12. See INSTALLATION to finish mounting.

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NOTE: "X" designates spacer option

MAXIMUM BRAKE OPERATING PRESSURE IS 1500 PSI (103.4 Bar).



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