# **MODEL CBSA 20**





### **General Description**

The model CBSA20(C) is a spring applied, air released caliper brake which is used in stopping and holding applications of Industrial equipment. This brake has a unique design with an actuator located between the caliper arms. This allows the brake to have a compact physical size relative to it's torque capacity. The minimum release air pressure of this brake is 70 psi. The standard caliper brake requires a 1/2"thick disc but can also be used with 3/4" and 1" thick discs by changing shoes. The unit is assembled and ready for use as shipped.

## Installation

Before installing the unit, make sure the brake pads and disc are clean and free of grease or any other pollutant. Install the air line to the 1/4"NPT port of the brake. Apply 70 psi air pressure to the unit and slide the brake over the disc. The brake should be aligned to the center-line of the disc. Bolt the brake to a solid base using the 1/2"NC capscrews supplied with the unit. The tightening torque of these bolts is 64 ft-lb.

There are (2) adjustments to set: the cylinder travel and the spring compression. Loosen both the rod end locknuts and adjust the cylinder to obtain the 3/8" piston rod extension dimension as shown in the drawing. Be sure the backing plate is against the snap ring when checking this dimension. Tighten the locknuts to hold this adjustment. Loosen the set screws on the adjustment screws and extend them until both springs are at the 3-1/8" compressed height when clamping the disc.

#### Maintenance

As the linings wear, the 3/8" piston rod extension will grow. When it Is 9/16", the piston will run out of cylinder travel and the braking force will diminish. Adjust the piston extension back to 3/8" when the extension is about 1/2". Read just the spring compression to 3-1/8" as the lining wears. Tighten the locknuts and the set-screws after adjustment. Check the lining thickness periodically. If the lining is worn 3/16", it should be replaced. The original lining thickness is 5/8".

#### Lining Replacement

When the lining is worn 3/16", It should be replaced. Remove the air line from the cylinder. Loosen the locknuts and adjust the cylinder so the rod ends are all the way in with no threads showing. Remove the shoes and replace the linings. Reinstall the shoes and adjust the rod ends to obtain the 3/8" piston rod extension. Adjust the spring compression to 3-1/8". Tighten the setscrews and the locknuts.

ITEM	DESCRIPTION	PART NO.	Qty.
1.	Pin	5840	2
2.	Rod End (LH)	5839	1
3.	Locknut (LH)	5843	1
4.	Backing Plate	5956	1
5.	Snap Ring	4598	1
6.	Piston	5954	1
7.	O Ring*	2174-2	1
8.	Cylinder	5955	1
9.	Rod End (RH)	5838	1
10.	Locknut (RH)	1118-6	1
11.	O Ring*	5844	1
12.	Arm	5833	2
13.	Adjustment Screw	5902	4
14.	Set Screw	1441-3	4
15.	Spring Cap	5903	4
16.	Thrust Button	5927	4
17.	SprIng*	5834	2
18.	Base	4953	1
19.	Bushing	4959	2
20.	CapScrew	1584-7	2
21.	Capscrew	1584-1	32
22.	Pin	4954	2
23.	Shoe	4956	2
24.	Screw*	4955	8
25.	Friction Lining*	4957X 2	
26.	Hairpin	4958	4
	Repair Kit (includes* items)	5049K(C)	

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