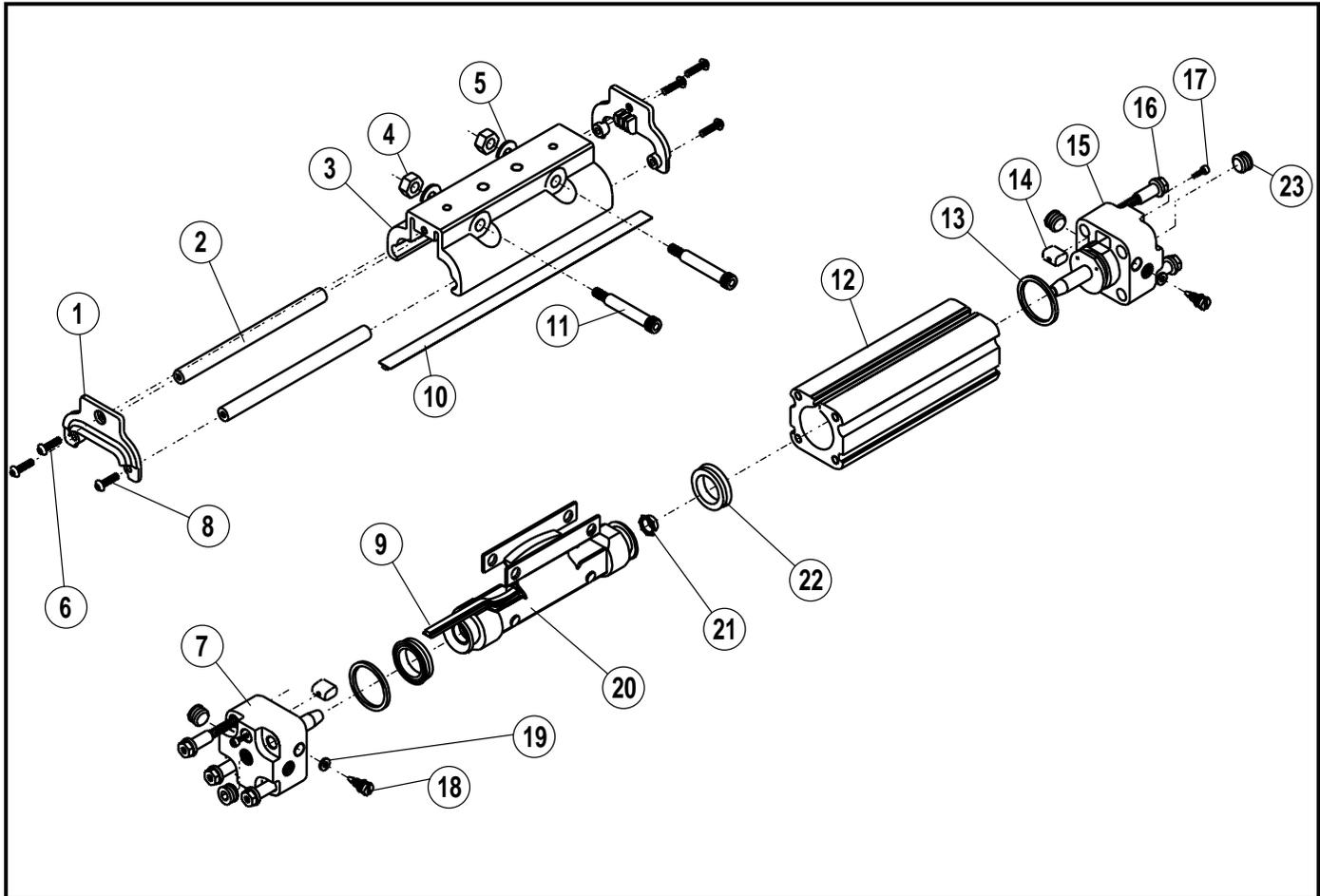




### 1" Band Cylinder® (Metric)

BCM100-1P (Multi-ported, tapered head) 4910-0006  
 BCMM100-1P (Multi-ported, parallel head) 5910-0006

**Discontinued Product  
 Style or Size. Parts  
 Sheet is for use only  
 with Repair Kits**



#### List of Parts

ITEM	PART NO.	DESCRIPTION	QUANTITY	ITEM	PART NO.	DESCRIPTION	QUANTITY
1.*	0910-1167	Carrier End Cap	2	13.*	0910-1160	O-Ring	2
2.*	4910-1170	Bearing Rod	2	14.**	4910-1343	Band Clamp	2
3.	4910-1180	Carrier Bracket	1	15.	4510-9021	Right Head Assy., Multi-port, Tapered	1
4.	4910-1288	Self-Locking Nut	2		5510-9011	Right Head Assy., Multi-port, parallel	1
5.	0810-1221	Washer	2	16.	4910-1344	Tapped Screw	8
6.	4910-1003	Button Head Screw	2	17.**	4915-1004	Socket Head Cap Screw	2
7.	4510-9022	Left Head Assy., Multi-port, Tapered	1	18.**	0910-1177	Cushion Needle	2
	5510-9012	Left Head Assy., Multi-port, Parallel	1	19.*,**	0910-1178	O-Ring	2
8.	4910-1172	Button Head Screw	4	20.	4910-9013	Piston Bracket Assembly	1
9.*	0910-9016	Sealing Band (specify stroke)	1	21.*	0910-1184	Cushion Seal	2
10.*	0910-9017	Dust Band (specify stroke)	1	22.*	0910-1206	U-Cup	2
11.	4910-1287	Socket Head Shoulder Screw	2	23.**	4910-1002	Pipe Plug, Tapered	4
12.	4910-1174	Cylinder Tube (specify stroke)	1		5910-1004	Pipe Plug, Parallel	2

\* Included in Repair Kit 4910-9033. \*\* Included in Head Assembly, 4510-9021, 4510-9022, 5510-9011 and 5510-9012.  
 For models ordered prior to September 1, 1991, please consult part sheet 0910-0225

# Model BCM100-100 and BCMM100-100

## Maintenance, Assembly and Disassembly Instructions

### MAINTENANCE

1. The Band Cylinder should be kept as clean as possible around the bands and Carrier Bracket.
2. Always use air that is adequately lubricated. Tol-O-Matic recommends that a 5 to 10 weight non-detergent, petroleum oil be used. For FDA requirements, we recommend that Multitherm® PG-1 or equivalent be used. For dry air applications, please consult Tol-O-Matic, Inc., toll free at 1-800-328-2174.

### CARRIER BRACKET ADJUSTMENT

The tracking tension on the Carrier Bracket may be adjusted by tightening or loosening the two screws and nuts on the bracket. To tighten or loosen the screws on the BC100-100 Band Cylinder models, use a 3/8" open end wrench and an Allen wrench.

**CAUTION:** Make certain not to overtighten the Carrier Bracket adjustment screws. It is possible to tighten them enough to keep the Carrier and Piston from moving. Tightening the Carrier Bracket directly affects the cylinder's break away. In other words, the tighter the adjustment the higher the breakaway.

### DISASSEMBLY

1. Remove Band Cylinder from machinery.
2. Loosen Socket Head Cap Screw (#17).
3. Remove the four (4) Cap Screws (#16) to free Cylinder Heads (#7, #15).
4. Remove three (3) Button Head Screws (#6, #8) and Screws (#4, #11) to free the Carrier Bracket (#3), End Caps (#1) and Bearing Rods (#2).
5. Slide Piston and Bracket Assembly (#20) to end of tube.
6. Remove Top Dust Band (#10) by lifting one end and drawing it back across the entire length of the cylinder.
7. Remove the Inner Sealing Band (#9) by passing a screwdriver or similar tool through the slot in the cylinder tube to dislodge the band from the tube. (Take care in doing this step to make certain that NO SCRATCHES ARE MADE in the tube bore or slot).

### ASSEMBLY

1. Thoroughly clean all components, particularly the tube bore slot and bands. CAREFULLY LUBRICATE THE TUBE AND ALL RUBBER PARTS INCLUDING THE RUBBER ON BOTH THE INSIDE AND OUTSIDE BAND WITH MAGNALUBE® GREASE. NOTE: Not SAE grade 30 weight non-detergent oil.
2. Insert new Inner Sealing Band (#9) into the cylinder tube (with the rubber portion facing up into the slot), centering the band along its entire length.

**CAUTION:** The metal edges of the band are very sharp. Exercise caution to avoid injury either to yourself or the band and tube when inserting both the inner and outer bands.

3. Insert the Piston and Bracket Assembly (#20), with new U-Cups (#22) and Cushion Seals (#21) in place, into the tube, passing the Inner Sealing Band through the Piston and Bracket Assembly.
4. Push the Piston (#20) along the cylinder tube to force the Inner Sealing Band into the sealing position.
5. Install the Top Dust Band (#10) with the rubber sealing portion facing down into the slot and centering the band along its entire length. While doing this, make certain to thread the band through the Piston and Bracket Assembly.
6. Install the Carrier Bracket (#3), Bearing Rods (#2) and End Caps (#1) using screws (#6, #8) and (#11) using OmniFIT® #1730 on the Bearing Rod Screws (#6).
7. Adjust clearance between the Carrier Bracket (#3) and the Cylinder Tube (#12) by tightening the two Locknuts (#4) evenly to the desired tension.
8. Trim band 1/8" shorter than the thickness of the Head Assembly (#7, #15). Use head a gauge. Strip rubber off steel band flush to the tube using razor blade.
9. Install the Cylinder Heads (#7, #15) with new O-Rings (#13) in place and tighten the four (4) Cap Screws (#16) to hold each end in place. Position bands above and below Band Clamp (#14). Tighten Socket Head Cap Screw (#17) to lock band into place.
10. Run the Carrier Bracket back and forth along the full stroke to make certain that the cylinder is properly assembled before applying air.
11. Remount the cylinder on the machinery it was taken from.



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