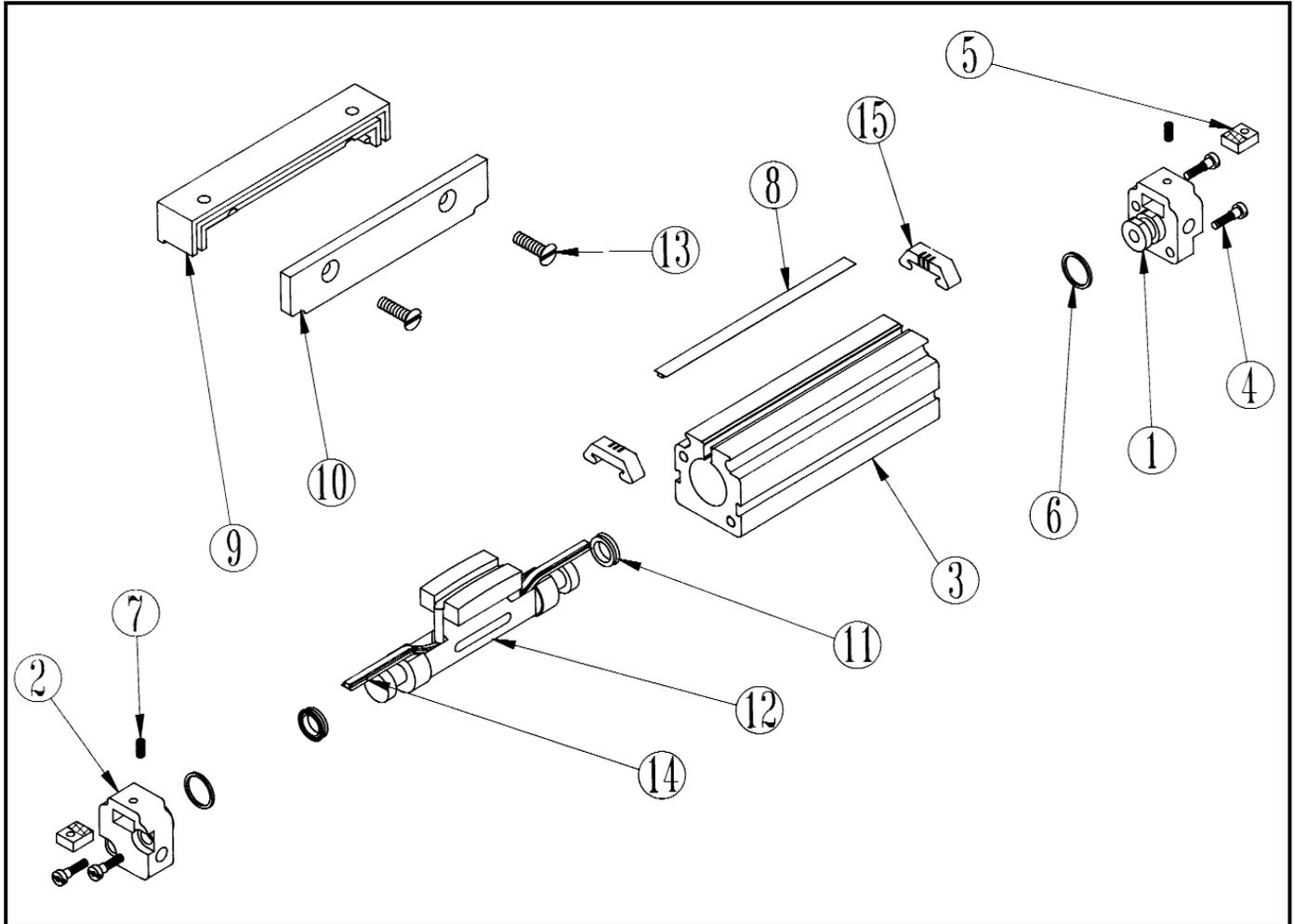




### 1/2" Band Cylinder® (Metric)

BCM100-050 Models: 4905-0001

**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	4905-1001	Head Molded - Right	1	9	4905-1011	Carrier Molded	1
2	4905-1004	Head Molded - Left	1	10	0905-1012	Cap, Carrier Molded	1
3	0905-1016	Tube, Machined (specify stroke)	1	11.*	0905-1015	U-Cup	2
4	0907-1001	Tapped Head Screw	4	12	0905-1010	Piston-Bracket, Molded	1
5	0905-1008	Band Wedge	2	13	0905-1018	Flat Head, Slotted Screw	2
6.*	0905-1005	O-Ring	2	14.*	0905-9001	Sealing Band (specify stroke)	1
7	0905-1007	Set Screw	2	15.*	0905-1033	Shock Absorbing Pad	2
8.*	0905-9003	Dust Band (specify stroke)	1				

\* Included in Repair Kit 0905-9033.

# Model BCM100-050 Maintenance, Assembly and Disassembly Instructions

## MAINTENANCE

1. The Band Cylinder<sup>®</sup> 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 Multiherm<sup>®</sup> 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 BCM100-050 Band Cylinder<sup>®</sup> models, use a standard screwdriver.

**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<sup>®</sup> from machinery.
2. Loosen two (2) Set Screws (#7) and remove Band Wedge (#5).
3. Remove the four (4) Cap Screws (#4) to free Cylinder Heads (#1, #2).
4. Remove two (2) Slotted Head Screws (#13) to free the Carrier Bracket (#9, #10).
5. Slide Piston and Bracket Assembly (#12) to end of tube.
6. Remove Top Dust Band (#8) by lifting one end and drawing it back across the entire length of the cylinder.
7. Remove the Inner Sealing Band (#14) 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<sup>®</sup> GREASE.**

NOTE: Not SAE grade 30 weight non-detergent oil.

2. Insert new Inner Sealing Band (#14) 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 (#12), with new U-Cups (#11) in place, into the tube, passing the Inner Sealing Band through the Piston and Bracket Assembly.
  4. Push the Piston (#12) along the cylinder tube to force the Inner Sealing Band into the sealing position.
  5. Install the Top Dust Band (#8) 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 (#9, #10) using (2) Slotted Head Screws (#13).
  7. Adjust clearance between the Carrier Bracket (#9, #10) and the Cylinder Tube (#3) by tightening the two Slotted Screws (#13) evenly to the desired tension.
  8. Install the Cylinder Heads (#1, #2) with new O-Rings (#6) in place and tighten the four (4) Cap Screws (#4) to hold each end in place.
  9. Install the Band Wedge (#5) in each Head Assembly by inserting the narrowest part of the wedge towards the cylinder between the Inner Sealing Band (#14) and the Top Dust Band (#8). Then tighten the two (2) Set Screws (#7) to lock the Band Wedge in place.
  10. Install the two (2) Shock Absorbing Pads (#15) using Loctite<sup>®</sup> #495 Adhesive or equivalent.
  11. Run the Carrier Bracket back and forth along the full stroke to make certain that the cylinder is properly assembled before applying air.
  12. Remount the cylinder on the machinery it was taken from.

Loctite<sup>®</sup> is a registered trademark of Loctite Corporation, 999 North Mountain Road, Newington, Connecticut 06111

Magnalube-G<sup>®</sup> is a registered trademark of Carleton-Stuart Corporation, 13-02 44th Avenue, Long Island City, New York 11101



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