Leverless Bead Lifter Kit 85607471

For use with COATS 50/70X, GTS and APX Series Tire Changers

This is a supplement to your operating manual and covers the installation and use of the COATS® Leverless Bead Lifter. If you do not have your original operating manual, please call **COATS at 1-800-688-6359** to request an additional copy.

User Instructions *with Parts Identification*

READ these instructions before placing unit in service. KEEP these and other materials delivered with the unit in a binder near the machine for ease of reference by supervisors and operators.

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HENNESSY INDUSTRIES INC. Manufacturer of AMMCO®, COATS® and BADA® Automotive Service Equipment and Tools.

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Qualifying Test For Machine Compatibility

1. Push down on mount/demount tool while pulling up on table top. Record distance — top of clamp to bottom of mount/demount tool.

2. Now, pull up on mount/demount tool while pushing down on table top. Record distance — top of clamp to bottom of mount/demount tool.

3. Subtract step 1 distance from step 2 distance. If distance is greater than 3/8-inch then machine is not compatible.

Note: If the machine is not compatible, please contact COATS® at 1-800-688-9240 for the Certified Service Partner nearest you.

Leverless Bead Lifter Installation

⚠ CAUTION

Always DISCONNECT THE ELECTRICAL POWER before servicing equipment. This prevents electrical shock or accidental movement of the systems operated by the electrical power.

⚠ CAUTION

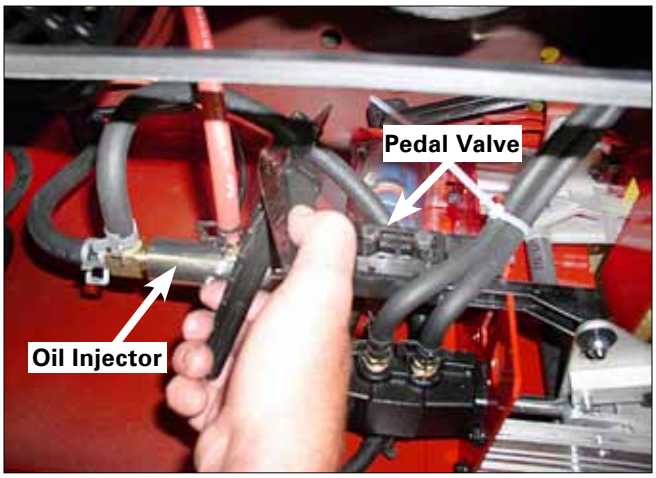
Always DISCONNECT AIR SUPPLY before servicing equipment. This prevents accidental movement of systems operated by compressed air which may result in personal injury. BLEED THE AIR SYSTEM by actuating all the valves.

50/70x Series Installation

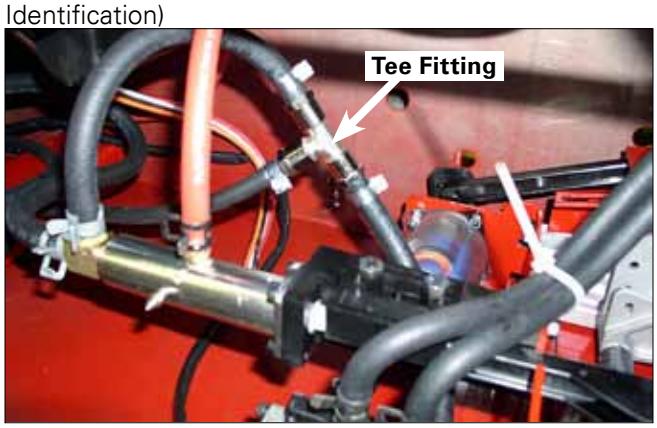
1. Disconnect the electrical power and air supply from the machine; empty all residual air.

2. Remove side panel from chassis.

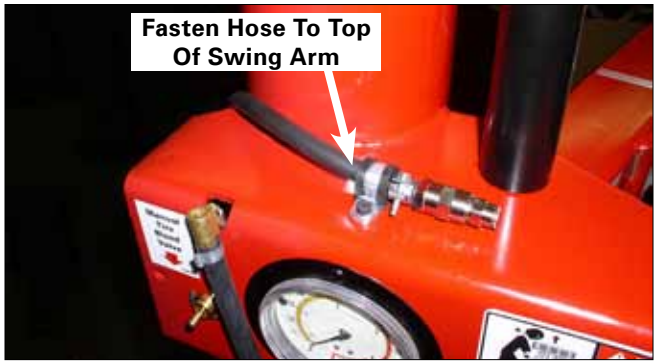
3. Locate and cut rubber hose that is between the pedal valve and oil injector.



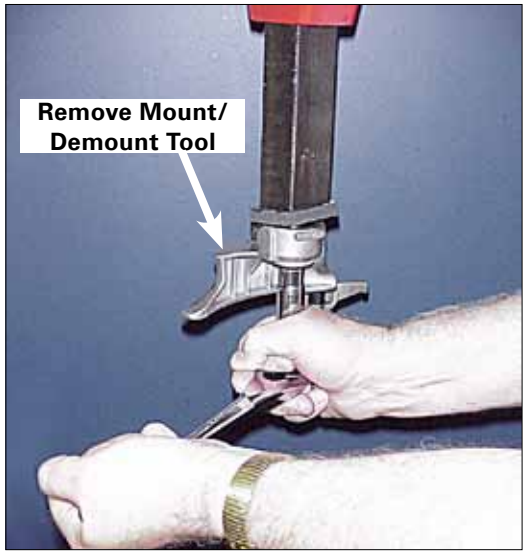
4. Route hose through 1-inch hole in rear of chassis. Build up tee assembly using parts 64, 65, and 60. Place hose clamps on hoses; then connect to tee. Place hose clamp on opposite end of hose and connect quick connector assembly using parts 85 thru 89. (See Parts Identification)



5. Route kit hose up the back of the tower. Install cushion hose clamp around air hose near the fitting. Then, fasten clamp/hose assembly to top of swing arm using supplied bolt (or use a self-supplied 1/4-inch self-tapping screw).



6. Lock the vertical slide shaft and then remove the mount/demount tool, Duckhead® roller mount and rubber cushion.



7. Hold vertical slide shaft down, release lock handle and remove shaft assembly out the top. Note orientation of flat on the end of shaft.

Note: On units equipped with shoulder screw, use shim for plastic mount/demount head vertical bar lock.

8. Remove spring, install spring from kit and place shaft assembly back into swing arm. Reassemble with shaft flat in same orientation.

9. Lock shaft.

10. Assemble washer set on screw, small washer first with mating bevels together. Attach leverless bead lifter assembly to vertical shaft; hand-tight only.

11. Connect coil air hose from leverless bead lifter to the fitting installed on top of swing arm bracket (from step 5).

12. Re-connect air supply to machine. Inspect and correct leaks if found.

13. Be sure to perform the steps for the Leverless Bead Lifter Adjustment Procedure.

APX Series Installation

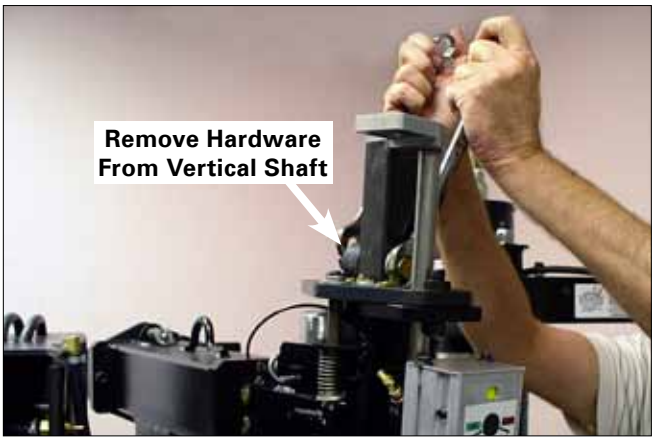
1. Tilt tower forward and rotate slide shaft control to the DOWN position. Do not lock.

2. Disconnect power and air; empty all residual air.

3. Remove the mount/demount tool and rubber bumper.

4. Remove the screw from top of vertical slide cap.

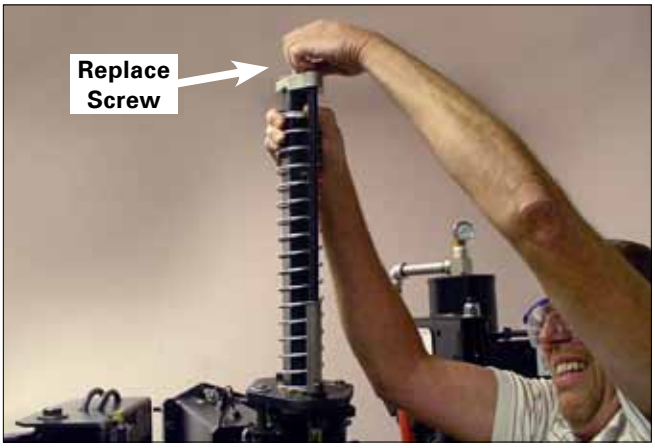
5. Remove rubber stop and hardware from vertical shaft.



6. Slide vertical shaft out the top and rotate it 180 degrees; then re-insert the vertical shaft.

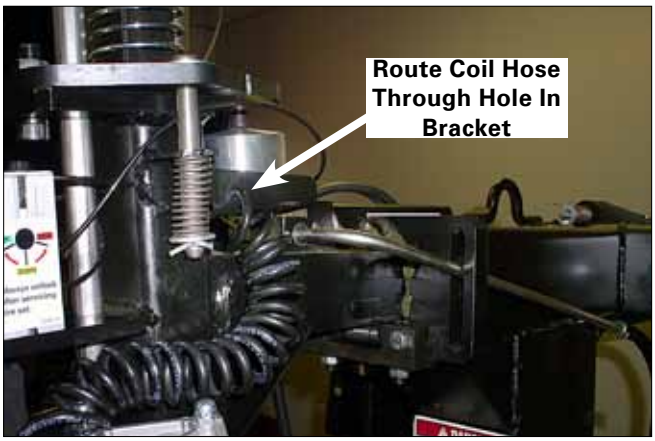
7. Place spring over top of vertical shaft.

8. Replace screw (from step 5) in top cap.

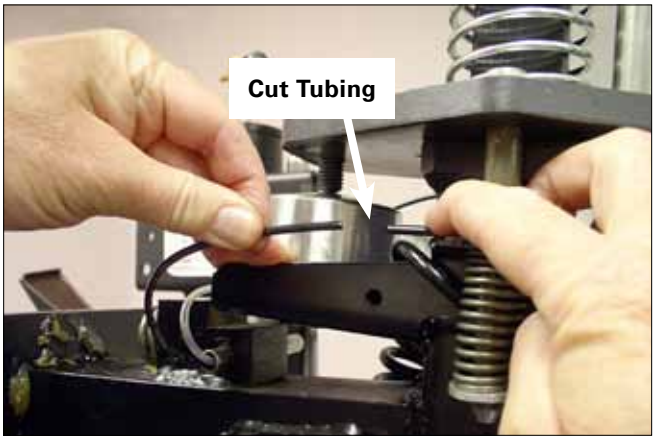


9. Install Leverless bead lifter to the shaft following the 50/70 series installation step 10.

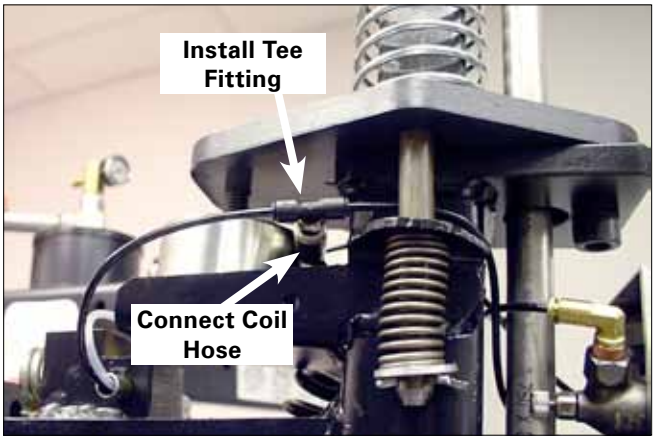
10. Place air coil hose through hole in tower bracket.



11. Cut 1/8-inch tube as shown.



12. Assemble (2) cut ends to tee supplied with kit and push-connect coil hose to tee fitting.



13. Re-connect air supply to machine. Inspect and correct leaks if found.

14. Be sure to perform the steps for the Leverless Bead Lifter Adjustment Procedure on page X.

GTS Series Installation

1. Remove the Mount/Demount Tool and rubber cushion.

2. Remove shaft assembly out the top.
Note orientation of flat on the end of shaft.

3. Remove cover from shaft lock.
Note: The cover can't be used with the Leverless Bead Lifter, so you may discard the cover.

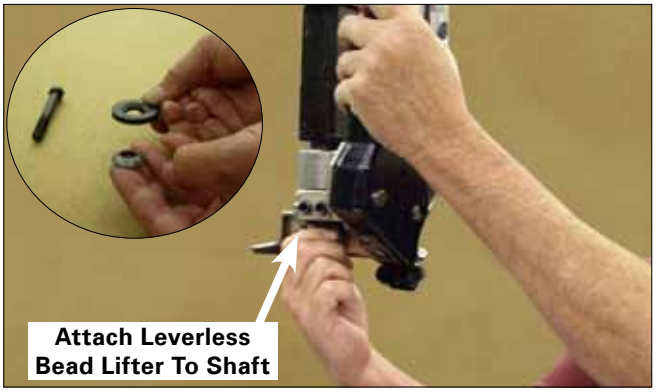
4. Remove Spring (8182028) and install Spring (83031235) from kit.

5. Place Shaft Assembly back into Swing Arm.

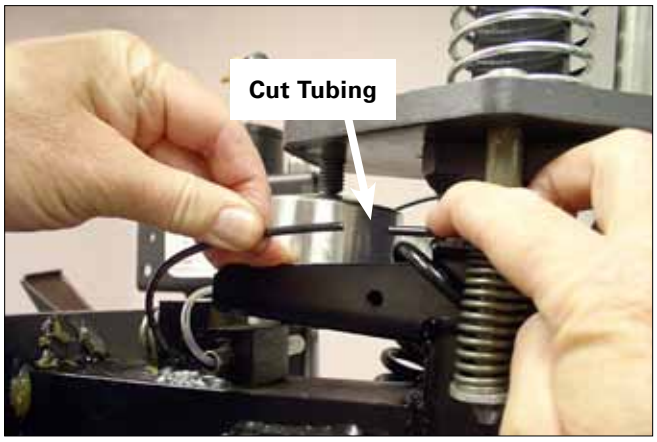
6. Reassemble with shaft flat in same orientation.

7. Assemble washer set on Screw (8107715), small Washer (84395805) first with mating bevels together.

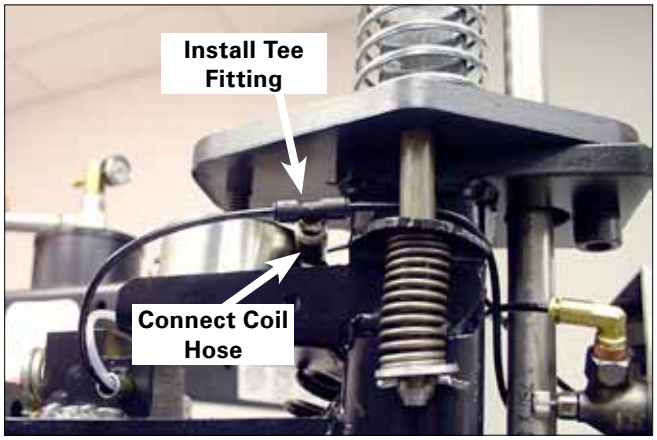
8. Attach Leverless Bead Lifter Assembly to vertical shaft; hand-tight Only!



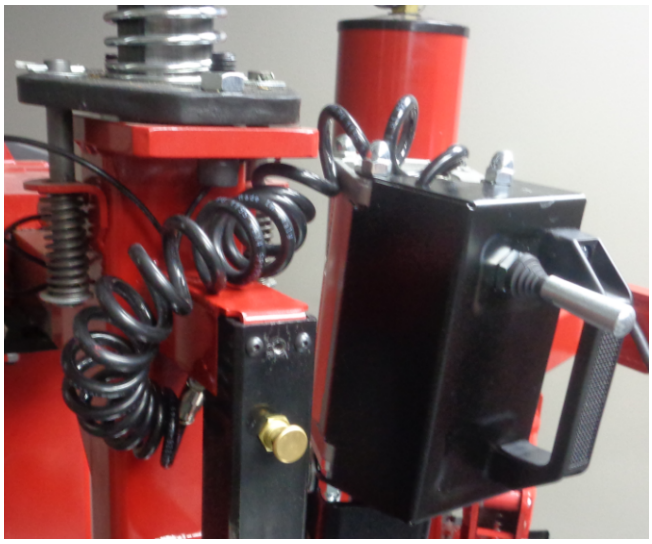
9. Cut the 1/8" Hose as shown.



10. Assemble 2 cut ends to the Tee Fitting (8000643) supplied with the kit. Push-connect Coil Hose (8099053) to Tee Fitting.



11. Route Coil Hose as shown.



12. Reconnect Air Supply to Machine.

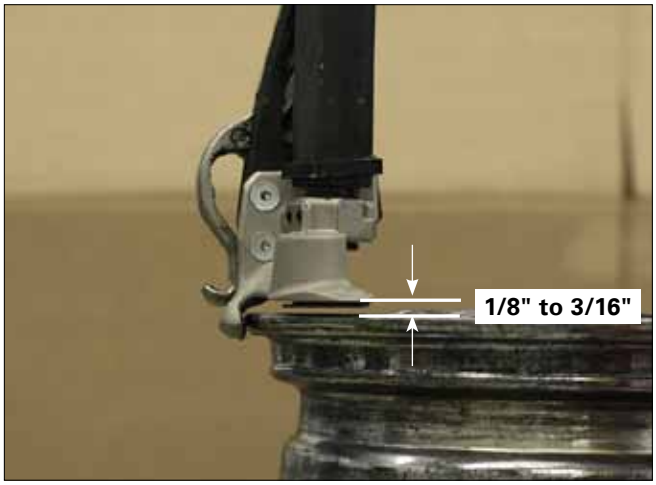
13. Inspect for leaks and correct if found.

14. Be sure to perform the Leverless Bead Lifter Adjustment Procedure on page (7).

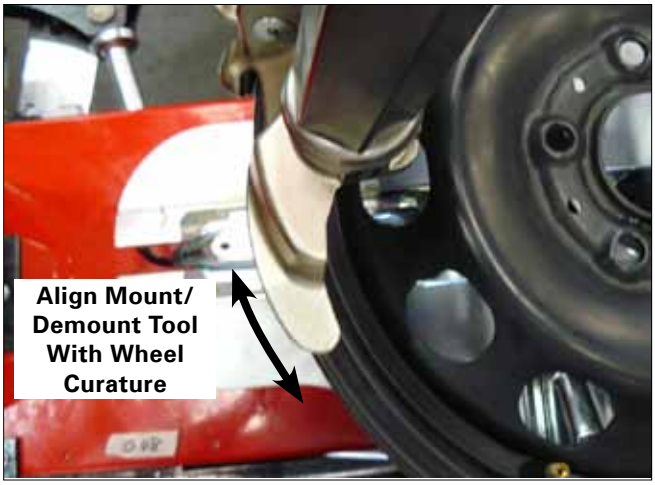
Leverless Bead Lifter Adjustment Procedure

1. Use a 17-inch diameter wheel for adjustments. This covers the normal range of 14 to 21-inch wheels.

2. Set mount/demount tool to 1/8 to 3/16-inch above wheel.



3. Align mount/demount tool to match curvature of wheel.



4. Snug (2) set screws in mount/demount tool making sure mount/demount tool to wheel relationship doesn't change.

5. Loosen (2) set screws on adapter 1/4 turn.

6. Tighten screw holding leverless bead lifter assembly to vertical shaft; torque to 20-26 ft-lbs.

7. Tighten set screws (2) on mount/demount tool.

Leverless Bead Lifter Operation

This accessory is normally used in the servicing of single piece automotive and most light truck tire/wheel assemblies.

Demounting

Follow tire changer operating instructions provided for demounting a standard wheel assembly, except:

1. After deflating and bead loosening, clamp the wheel to the table top. Position leverless arm until mount/demount tool plastic contacts wheel.

2. Tighten swing arm adjustment screw until it contacts arm.

3. Lubricate leverless bead lifter tool (figure 1).

Figure 1 - Apply lubricant to Bead Lifter Tool

Note: To aid bead lubrication, lower leverless tool slightly to move bead away from wheel.

4. Position valve stem approximately as shown (figure 2) to prevent damage to TPMS (Tire Pressure Monitoring System) sensor.

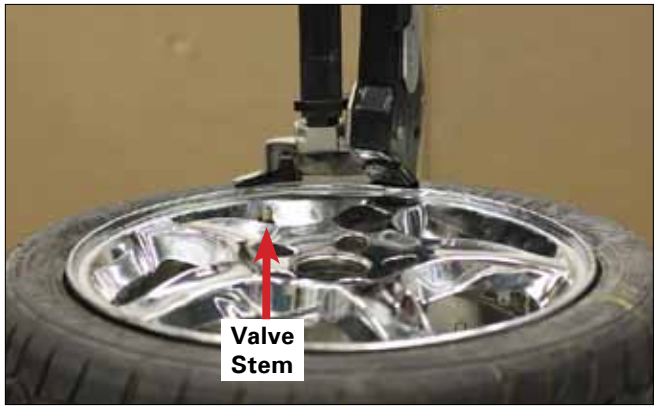


Figure 2 - Position Valve Stem By the Bead Lifter Tool

5. Push control handle down to lower leverless tool under tire bead while pulling leverless handle to hold leverless bead lifter against the wheel.

Note: If leverless tool does not hook under tire bead, reverse rotation. Re-position valve stem while pushing bead opposite leverless bead lifter into drop center.

Figure 4 - Leverless Tool Hooked Under Tire Bead

6. Push lifter control up, retracting leverless tool.

Note: Use helper arms if equipped.

7. Depress the table top pedal to rotate wheel. The bead lifter tool will guide the bead up and over the edge of the wheel. Continue rotation until the upper bead is demounted.

8. Next, position valve stem by the bead lifter tool, as shown in step 4 (figure 2).

9. Now repeat step 5, to position tool for lower bead removal (figure 5).

Figure 5 - Bead Lifter Tool Hooked Under Tire Bead

10. While holding tire up in the drop center, lift tire to hook the bead on leverless tool, push control handle up to lift bead over rim (figure 6).

Figure 6 - Push Control Handle Up To Lift Bead Over Rim

11. Depress the table top pedal to rotate wheel. The bead lifter tool will guide the bead up and over the edge of the wheel. Continue rotation until the lower bead is demounted.

Tire Mounting

12. Lubricate tire beads liberally with tire manufacturer's approved rubber lubricate.

13. Place tire over wheel and move swing arm into position making sure the valve stem is at the 9 o'clock position in front of bead lock. Position tire so that lower bead is above the rear extension of the bead lifter tool and below the front knob (figure 7).

Figure 7 - Position Tire Against Bead Lifter Tool

14. Depress table top pedal and rotate wheel to mount lower bead. Use drop center of wheel by forcing down on tire just ahead of the mounting tool, and follow as tire rotates Rotate table top until lower bead is mounted.

15. For top bead installation, rotate table top until the valve stem on wheel is just in front of where the bead crosses the rim (figure 8). Be sure the tire is on top of the mount/demount head tail.

Figure 8 - Position Valve Stem In Front Of Bead Lock

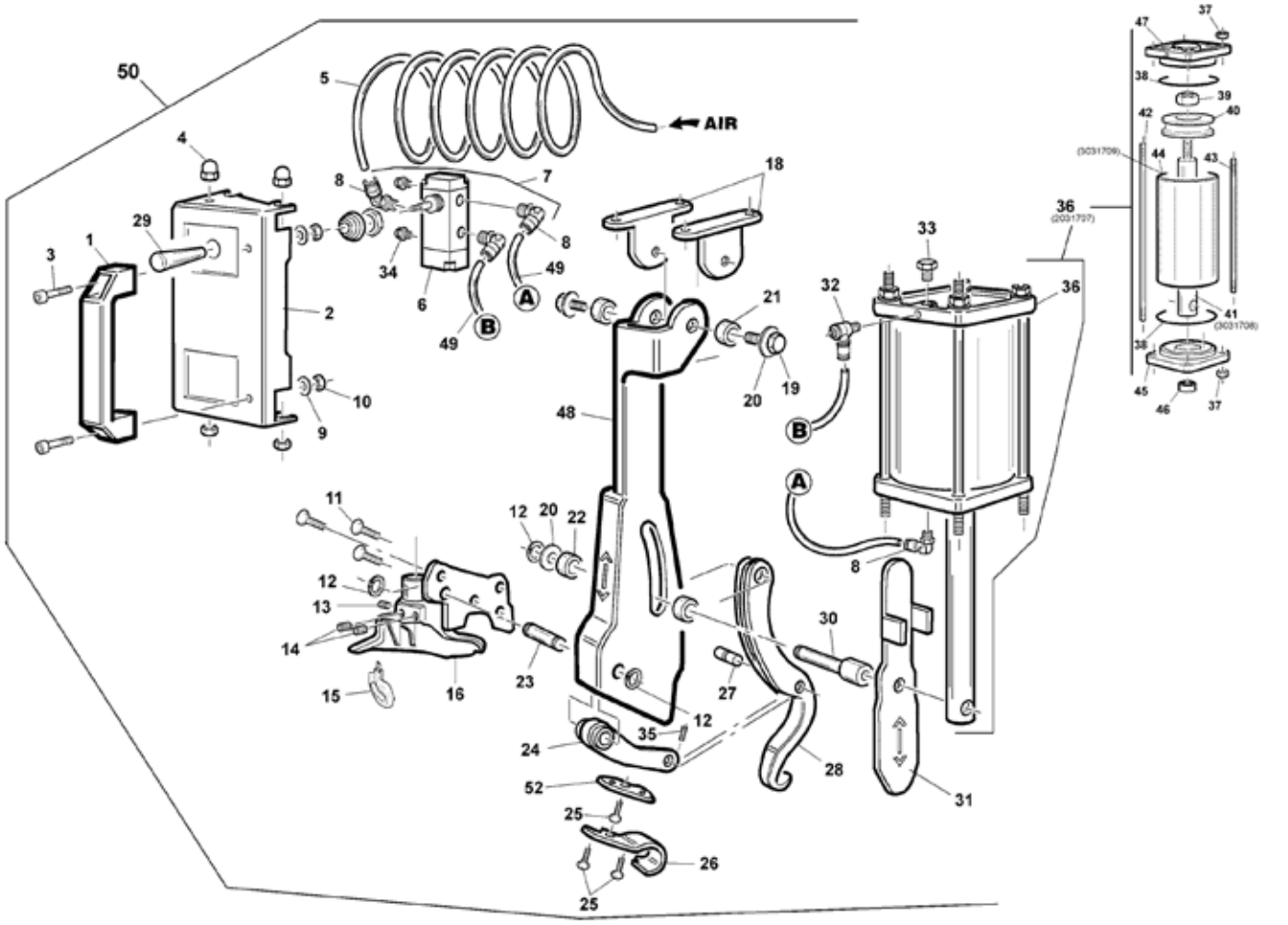
16. Slightly lower leverless tool to push bead down; hold opposite side of tire down into drop-center.

17. Depress table top pedal and rotate tire until bead is mounted. Be careful to ensure bead stays in the rim drop center in the area ahead of the bead lifter tool.

18. Inflate, unclamp per standard instructions.

Parts Identification

Leverless Bead Lifter



Item No	Part No.	Description
1	84297851	Handle
2	87019215	Valve Box
3	84399954	8 x 20 Screw
4	84395374	M8 Nut
5	83030571	6 x 4 Spiral Hose, L=1500
6	84198285	5-way Valve
7	82006996	Valve
8	84198618	1/8" Union
9	84399829	8 (8, 4 x 16 x 1,5) Washer
10	84399900	M8 Self-locking Nut
11	84393957	10 x 12 Screw
12	84399864	D.12 Seeger Ring
13	84395530	12 x 2 Screw
14	84393346	Screw
15	89233409	Back Slide Bootie, Kit Pkg
16	83033830	Touchless Mounting Tool
18	83019202	Connection Plate
19	84399434	12 x 20 Screw
20	84398637	ID 12 x 21 x 2, 5 Washer
21	83017334	12/18/8, 2 Bush

Item No	Part No.	Description
22	83017302	12/18/6, 5 Ferrule
23	83019212	Tool Pin
24	83019214	Connection Rod
25	84393753	5 x 8 Screw
26	89233409	Front Slide Bootie, Kit Pkg
27	83019210	Pin
28	83019213	Touchless Tool
29	83010284	D.14 x 45 M5 Control Handle
30	83019211	Cylinder Pin
31	83019561	Support Plate
32	84194004	MR 41 6 M6 Union
33	84199161	1/8" Plug
34	84199610	1/8" Silencer
35	84399957	6 x 8 Screw
36	82031707	Cylinder Unit
37	84399976	Nut M8
38	84298822	O-ring D.68, 26 x 3, 53
39	84399865	Self-locking Nut M12
40	84198856	D.75 Piston
41	83031708	Cylinder Shaft

Item No	Part No.	Description
42	83019208	8 x 1, 25 x 180 Special Screw
43	83019204	M8 X 1, 25 x 164 Special Screw
44	83031709	Cylinder Liner L=125
45	83015024	Flange
46	83199601	Scraper
47	83019467	D.75 SO Side Hole M6 Back Flange
48	87019199	Tool Holder
49	83019959	6 x 6 Hose L=240
51	84396878	12 x 25 x 0, 5 Steel Shim
52	83031595	Threaded Tab
53	8099053	1/4" Hose L=7.5 Ft
54	83031235	Spring
55	8106301	1/4-20 Screw
58	8182044	Hose Clamp
59	85606362	1/4" Clamp
60	8000378	1/4" Barb
63	85606363	3/8" Clamp

Item No	Part No.	Description
64	8101898	3/8" Barb
65	8000643	Tee
67	84395804	2 x 35 x 5, G Type 14, Washer
68	84395805	2 x 21 x 4, C Type 10, Washer
69	8107715	3/8-16 UNC Screw, L=1.25"
*85	84199461	Adapter
*86	84194089	1/8" Union
*87	84194088	Quick Union
*88	84198993	1/8" Quick Union
*89	84199026	Union
90	85000045	Tee
91	84198172	Union

*Not Shown

70X Series

APX Series