

GOLDENROD



CORPORATION

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Troubleshooting and Re-Building Guide For Any Model 1260 Multi-Bladder Expandable Ledge Air Shaft

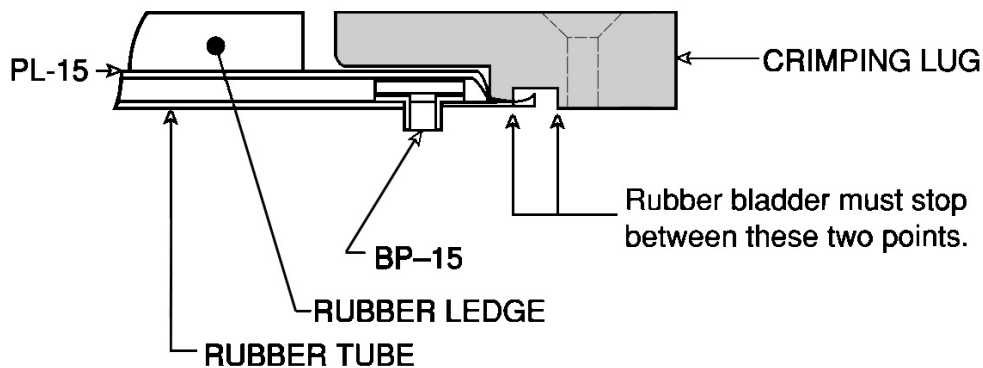
*Notes: All factory components are metric; please use metric tooling. Please use safety glasses.

A. Check the air valve for leaks.

Inflate the shaft and put some soapy water on the valve. If bubbles form, remove and check the O-ring on the underside; if faulty, replace the air valve (AV-PD14). In the case of Internal Valves, water can be put into the inflation and deflation ports and checked for air bubbles. If the internal valve leaks, the journal must be removed. **REMEMBER TO MARK THE JOURNAL AND BODY SO THAT THE JOURNAL CAN BE REPLACED IN EXACTLY THE SAME POSITION.** The piston assembly will then be visible. Behind the piston are the air valves. **Be sure not to shoot the piston across the room.** Inflate the air valves individually to check for leaks. Remove and clean, or replace any faulty valves. Dry all metal parts before re-assembly.

B. Check the crimping lugs for leaks.

There are two styles of crimping lugs, one-piece and two-piece. They both serve the same function: they mechanically seal the air from leaking out of the bladder. Inflate the shaft, put soapy water on the crimping lugs, and look for bubbles. You can put the shaft into a bucket of water if you prefer (make sure to later blow the water out of ledge slots). The following drawing shows how the crimping lugs work.



C. Leaking Bladder.

If the air valves and the crimping lugs are not leaking, the last possibility is a hole in the bladder material. Inflate the shaft and determine which bladders are not holding air. Replace the bladders that do not inflate. **If you are experiencing problems with bladders breaking, the most possible cause is insufficient air pressure. The shafts must be operated between 85-100 PSI.** We suggest using our inflation gun with Integral air pressure gauge. If they are not operated in this range the springs can fatigue and break, or the bladders will over-flex and rupture. When replacing or rebuilding the shaft, look for broken springs that indicate insufficient air pressure.

Replacement of Components, Any 1260 Model Air Shaft.

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A. Air Valve Replacement.

Socket size for removal of standard air valves:

Model	Description	Size
PD-14	Standard-Push to deflate valve	12mm
GD-29	Large-Push to deflate valve.	17mm
TR-17	Tire valve stem style	11mm
VI-145	Standard for internal valves	11mm

Remove air valve, inspect O-ring for damage or contamination that may prevent a possible air seal. Replace or re-install the air valve. **Do not use pipe tape**, all air valves have O-rings. Air valves should be **“hand tight plus ½ turn.”**

*Note: *Do not over-tighten the air valve.* Too much force on the air valve will cause the O-ring to distort or tear and will prevent a good air seal.

B. Air Bladder Replacement.

GOLDENROD 1260 airshafts use two different air bladders, 15mm wide and 20mm wide, Part No. RT-15 and RT-20 respectively. They are identical except for their width.

Removal of Rubber Bladder

1. Remove crimping lugs, CL, from both ends of the shaft by removing the 6mm screw.
2. Remove the Rubber Expander Ledges, RL or Rubber ledge. Slide a screw driver under the rubber ledge and use another to push the ledge out of the expansion slot.
3. Working from the air valve end of the shaft, remove the white plastic protector tape PL-15 or PL-20.
4. Remove the Rubber Bladder, RT-15 or RT-20, make sure to lift the small brass air connector, BP-15, located inside the bladder out of the air bushing.
5. Remove the Bp-15 from within the Rubber Bladder using scissors or a knife. Save the Bp-15 so that it can be installed into the new bladder.

Installation of New Rubber Bladder

1. Cut new lengths of Rubber Bladder and Plastic Protective Tape approximately 4 inches longer than the expansion area to facilitate re-assembly.
2. Punch a small hole 0.120", approximately 0.5 inches from the end of the bladder. This hole is for the installation of the BP-15 air connector. Hole punch tools are available from GOLDENROD, (Model HP-1). *NOTE: When Spare Bladder lengths are ordered from Goldenrod, we will typically supply them with the BP-15 air connector already in the proper position.*
3. To install the BP-15, place a paper clip into the through-hole of the air connector. Push the BP-15 into the Air Bladder so that the nipple of the BP-15 seats into the previously punched hole. The through hole of the BP-15 must be aligned with the length of the rubber bladder. The paper clip ensures that the hole will be properly oriented to allow air to enter the bladder. Remove the paper clip. A straight dental tool works well in place of a paper clip.
4. Starting from the air valve side, slide the new rubber bladder into the expansion slot. Push the BP-15 into the air bushing hole to ensure proper seating.
5. Slide the Plastic Protective Tape into the expansion slot on top of the rubber bladder. Line up the end of the plastic tape with the end of the rubber bladder installed into the shaft. Allow the excess plastic to hang out of the slot **on the side away from the air valve.**
6. Check to make sure that the BP-15 is still properly seated into the air bushing hole with the plastic tape on it. **Cut the rubber bladder just short of the 6mm crimping lug screw hole.** The end of the rubber bladder **MUST** end between the two crimp points as shown on page 1. Install the crimping lug with the 6mm screw. Excess force is not necessary to form a tight air seal.
**Note: It is important to install the bladder assembly and crimping lug on the air valve side before installing the rubber ledge to ensure a tight air seal.*
7. Check to see that the deflation springs are installed on the rubber ledge.
8. Slide the rubber ledge with springs into the expansion slot; if necessary, compress the springs with your fingers to get them to slide into the slot. Occasionally pull on the plastic tape to ease proper rubber ledge installation. After rubber ledge is in place, pull the plastic tape firmly to remove any excess tape.
9. Cut the rubber bladder and plastic tape just short of the 6mm crimping lug screw hole. The end of the rubber bladder must end between the two crimp points as shown on page 1. Install the crimping lug with the 6mm screw. Extreme force is not necessary to form a tight air seal.
10. **Reminder: Many operational difficulties can be averted if proper inflation pressure of 85-90 PSI is applied.**