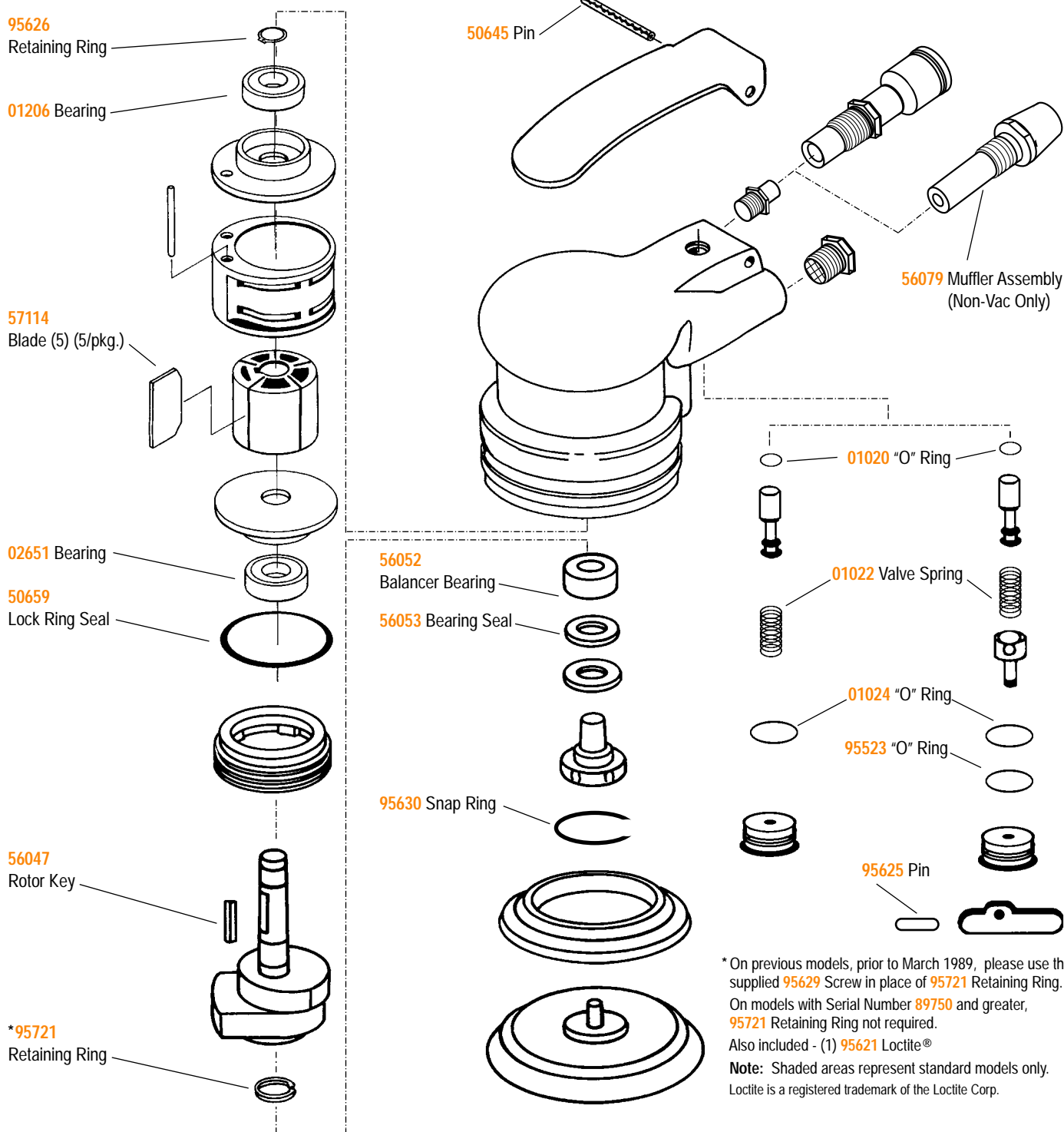


95524 Motor Tune-Up Kit

Refer to appropriate parts page for additional parts identification. Parts included in kit are identified by part number.



IMPORTANT:

The regular maintenance of any air tool will contribute to greater efficiency of tool and will prolong tool life. This kit contains replacement parts which are most susceptible to wear. An air tool may wear differently according to the application and operator. It is, therefore, recommended that while the tool is disassembled, all other parts not included in this kit be examined for excessive wear and be replaced as required.

NOTICE: Manufacturer's warranty is void if tool is disassembled before warranty expires.

See reverse side for Assembly/Disassembly Instructions.

Assembly/Disassembly Instructions for Lightweight Dynorbital® Random Orbital Sander

Please refer to parts page for additional parts identification.

A complete repair kit, part number **56077**, is available which includes special tools for correct disassembly/assembly of tool.

To Disassemble

1. Invert machine and secure in vise, using **57092** Collar (supplied in **56077** Repair Kit) or padded jaws.
2. Remove sanding pad with **50679** Open-End Wrench (supplied with sander).
3. Remove shroud or optional overskirt. Insert **56058** Lock Ring Tool (supplied with **56077** Repair Kit) into corresponding tabs of lock ring and unscrew. Motor may now be lifted out for service.
4. Remove **95626** Retaining Ring. Upper motor may now be disassembled.
5. **56039** Rear Bearing Plate with bearing is a "slip" fit on older machines and a "press" fit on newer machines. Remove the rear plate assembly by securing the **56050** Cylinder in a standard 2 inch bearing separator or use a standard bearing puller gripped on the cylinder inlet and exhaust area. Push the **56042/44** or **54623** Motor Shaft Balancer through the bearing.
6. Remove **56037** Front Plate and **02651** Front Motor Bearing, using a small (#2) arbor press. Support the edges of the front plate while pressing on the small end of the **56042/44** or **54623** Shaft Balancer. The **56037** Front Plate should separate from **02651** Front Motor Bearing.
 - a.) If during step 6, the **56037** Front Plate and **02651** Front Motor Bearing remain together, push **56081** Bearing Chuck (supplied with **56077** Repair Kit) with ridged side forward into bearing side of assembly until it locks.
 - b.) Push **95890** Taper Pin (supplied with **56077** Repair Kit) with narrow side forward into front plate side of assembly. Press bearing out using a small (#2) arbor press.
7. Remove **01206** Bearing from **56039** Rear Plate by using a bearing press tool.
8. Disassemble the balancer assembly as follows:
 - a.) Remove **95630** Snap Ring. Screw the threaded portion of the **56056** Bearing Puller (supplied with **56077** Repair Kit) into the **57069** Balancer Shaft. **Note:** Heat the outside of the motor shaft balancer to approximately 200°F and pull the assembly out using the slider weight.
 - b.) Press off **56052** Bearing and remove loose parts.
9. If during step 8, the **56052** Bearing remains in the motor shaft balancer it can be removed by heating the shaft balancer again and using either an inside bearing puller or a blind hole bearing puller.

To Reassemble

Important: Be certain parts are clean and in good repair before reassembling.

1. Assemble the balancer assembly as follows:
 - a.) Install **95630** Snap Ring onto **57069** Balancer Shaft. Install **95628** Shield with **convex face toward hex of balancer shaft**.
 - b.) Install **56053** Seal. **Note:** Be certain seal is pressed completely over the shaft step.
 - c.) Apply a slight amount #290 Loctite® (or equivalent) to inside diameter of **56052** Bearing and the outside diameter of the **57069** Balancer Shaft.
 - d.) Press fit **56052** Bearing with **seal side toward hex of balancer shaft up to shaft step**, using **56059** Bearing Press Tool (supplied with **56077** Repair Kit).
2. Place **56042/44** or **54623** Shaft Balancer in a soft jaw vise with large end up.
3. Apply a slight amount #271 Loctite® (or equivalent) in several places around the outside diameter of the **56052** Bearing and slide into the **6042/44** or **54623** Shaft until **56052** Bearing is firmly seated at bottom. Squeeze **95630** Snap Ring into groove to complete the assembly. Remove from vise.
4. Press **02651** Bearing onto **56042/44** or **54623** Shaft down to shoulder using **56059** Bearing Press Tool.
5. Place **56046** Lock Ring (with **50659** Lock Ring Seal in it) onto shaft with lock ring seal facing small end of shaft.
6. Press **56037** Front Bearing Plate onto **02651** Bearing and check for smooth rotation.
7. Place **56047** Rotor Key, Rotor, and Blades onto shaft. **Note:** Be certain rotor "floats" easily on the shaft. Because the design of this motor uses a "floating rotor", there is no need to set or adjust gap between the rotor and end plates.
8. Place **56050** Cylinder over rotor. The "short" line-up pin goes toward the **56037** Front Plate.
9. Place **56039** Rear Bearing Plate (with **01206** Rear Bearing pressed into place) over shaft and "long" end of line-up pin and press fit in place. **Note:** Older machines do not require press fitting.
10. Install **95626** Retaining Ring **concave side toward motor**. **Note:** Be certain retaining ring is completely pressed down into its groove on the shaft.
11. Secure motor housing in vise, using **57092** Collar or padded jaws. Slide motor assembly into secured housing. **Note:** Be certain line-up pin enters pin hole in the bottom of the housing.
12. Tighten **56046** Lock Ring with **56058** Lock Ring Tool to 28 N m (250 lb.-in). Attach shroud and weight-mated sanding pad.

Tool assembly is complete. Please allow 30 minutes for adhesives to cure before operating tool.

Note: Motor should operate at between 9,500 and 10,000 RPM at 6.2 bar (90 PSI). RPM should be checked with a reed tachometer. Before operating, we recommend that 2-3 drops of pneumatic tool oil be placed directly into the air inlet with throttle lever depressed.

