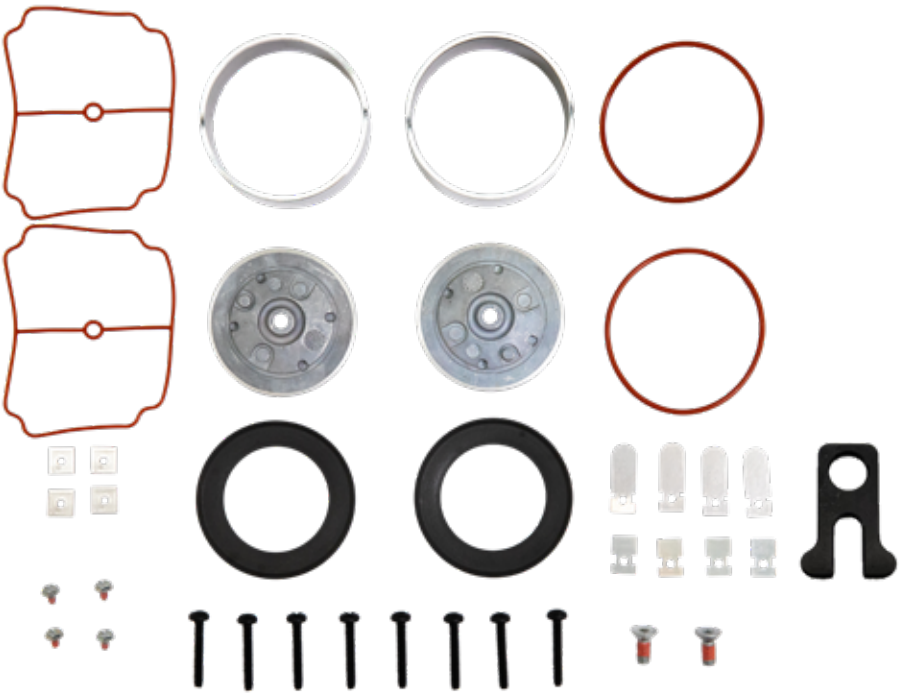
AIRMAX®

SilentAir™ T50 (RP50) T75 (RP75)

MAINTENANCE KIT MANUAL

Item #510541



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IMPORTANT INFORMATION:

Please read these instructions thoroughly before use. Failure to follow instructions may result in equipment damage or failure, losses, injury or death.

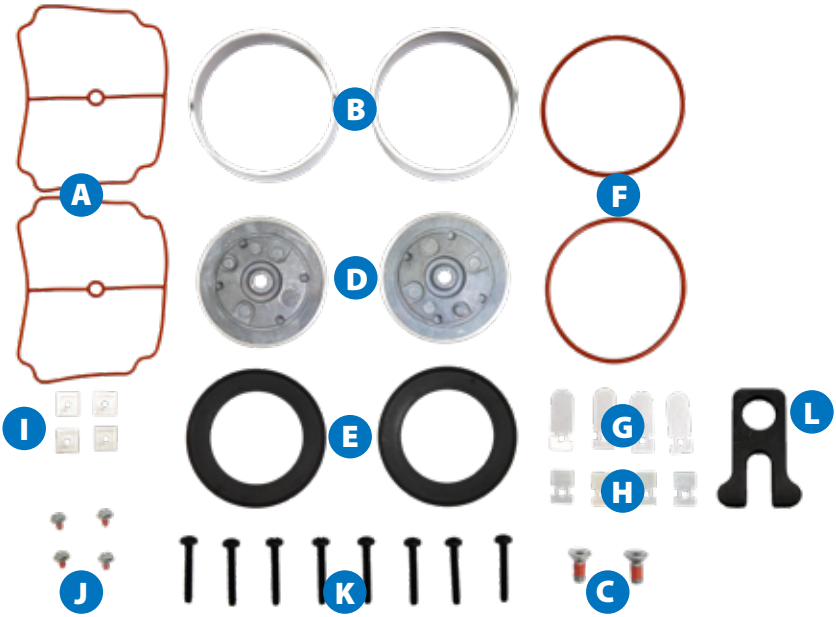
⚠ WARNING: ⚠

To reduce the risk of electric shock or injury:

- ALWAYS unplug the compressor from power source and remove pressure from airlines before installing the maintenance kit.

IMPORTANT: Airmax is not responsible for equipment damage or failure, losses, injury or death resulting from failure to follow safety precautions, misuse or abuse of equipment.

PRODUCT CONTENTS:



What's Included:

- A 2 Head O-Rings
- B 2 Cylinder Sleeves
- C 2 Piston Retainer Plate Screws (T27 Torx Head)
- D 2 Piston Cup Retainer Plates
- E 2 Piston Cups
- F 2 Cylinder O-Rings
- G 4 Leaf Valves
- H 4 Leaf Valve Backers
- I 4 Leaf Valve Retainer Washers
- J 4 Leaf Valve Screws
- K 8 Head Screws (T25 Torx Head)
- L Leaf Valve Alignment Tool

INSTALLATION INSTRUCTIONS:

Tools Required:

- Crescent/Adjustable End Wrench
- ¼" Drive Ratchet
- 5/32" Socket
- T25 Torx Socket
- T27 Torx Socket
- 7/16" Socket
- ¼" Drive Torque Wrench (1 - 120 in-lb) for reassembly
- ¼" Nut Driver
- #2 Flat Head Screwdriver
- Pick Tool
- Anti-Seize
- Heat Source (optional)

Step 1

Using an adjustable end wrench, loosen the stainless quick connect fitting and disconnect the manifold flex tube (Fig. 1).

For all PondSeries® (PS) systems use a 5/32" Allen wrench to remove the two compressor manifold screws and set the manifold assembly aside (Fig. 2).

For PS 10, 20 and 40 systems remove the 7/16" nuts on the underside of the cabinet and remove the compressor.

For PS 60 and all LakeSeries® (LS) systems remove the four 7/16" nuts and washers from the mounting brackets and remove the compressor from the cabinet (Fig. 3).


Fig. 1


Fig. 2


Fig. 3

Step 2

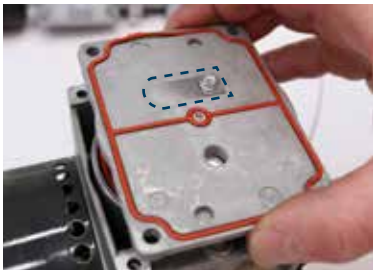
Using a T25 Torx wrench, remove the 8 head screws, then rest the capacitor and mounting bracket on your work surface. The head screws can be discarded.

Step 3

Carefully separate the head cover plate from the valve plates using a #2 flathead screwdriver. Note the position of the air filter in relation to the capacitor. This positioning will be important during reinstallation.

Step 4

Remove the two valve plates noting the orientation of the leaf valves in relation to the capacitor. This positioning will also be important during reassembly. Next, discard the head o-rings and cylinder o-rings from each valve plate (a pick tool may be necessary for o-ring removal). Set the valve plates aside.



Step 5

Using a T27 Torx wrench, remove the set screws on the piston retainer plate for each cylinder. Screws are installed with threadlock, so heating briefly with a torch may be necessary to loosen the threadlock.

Step 6

Remove and discard the piston cylinder sleeves, piston retainer plates and worn piston cups.

Step 7

Using the tip of your Allen wrench, depress each of the four fan guard tabs and remove the fan guard from one end of the compressor (Fig. 4). Rotate the fan slowly by hand until one piston reaches top dead center (TDC) (Fig. 5).

Fig. 4

Fig. 5

Step 8

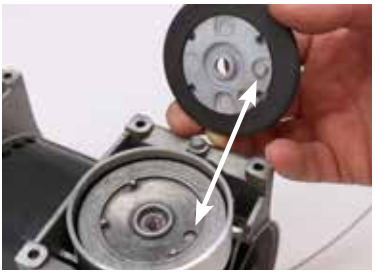
Place one of the new piston cylinder sleeves over the piston making sure that it rests evenly on the compressor body.

Step 9

Next, place a new piston retainer plate into one of the new piston cups making sure that the lip of the piston cup is facing up.

Step 10

Rest the piston cup and retainer plate on top of the piston cylinder sleeve so that the locating boss is aligned with the top rod pilot of the piston; alignment of the locating boss is crucial to a proper installation. Ensure that the piston cup lip sits evenly on the cylinder sleeve before moving on to the next step.



Step 11

Using a T27 Torx wrench, slowly thread in a new piston retainer plate screw until it makes contact with the retainer plate, then continue tightening until the piston cup is drawn down to the cylinder. Then use a torque wrench to secure properly **(Recommended Torque: 100 in lb)**.

Step 12

Hold the piston cylinder sleeve in place while rotating the fan until the second piston reaches TDC. REPEAT steps 8-11 for the second cylinder.

Step 13

Using a 1/4" nut driver, remove the top and bottom leaf valve screws from one of the valve plates. Discard leaf valve screws, retainer washers, valve backers and valves. Again, heating with a torch for 10-20 seconds may be necessary to loosen threadlock.

Step 14

On one valve plate, install the bottom leaf valve first, followed by the valve backer and then the retainer washer, making sure the word **UP** is visible on the washer (Fig. 6). Thread the new screw in partway by hand, then slide the valve alignment tool into position with the smooth side up. Secure in place with a 1/4" torque driver or nut driver **(Recommended Torque: 15-20 in lb)** (Fig. 7).

Fig. 6

Fig. 7

Step 15

REPEAT the process from step 14 for the top leaf valves.

Step 16

REPEAT steps 13-15 on the second valve plate.

Step 17

Install the cylinder o-rings on the bottom of each valve plate, making sure the o-ring sits evenly in the groove.

Step 18

Place each valve plate on the piston cylinder sleeve making sure that the top leaf valves are positioned appropriately in relation to the capacitor side of the compressor. Ensure that the valve plates sit evenly on the compressor body. An incorrect seat could indicate an incorrect cylinder sleeve installation.

Step 19

Install the head cover o-rings making sure they sit evenly in the groove.

Step 20

Reinstall the head cover plate ensuring the air filter is positioned appropriately in relation to the capacitor side of the compressor (Fig 8). Then install capacitor and 8 new head cover screws. You can add anti-seize to each screw for ease of removal during future maintenance. We recommend going back and forth between screws in a **W pattern** to ensure the screws are evenly secured **(Recommended Torque: 47-50 in lb)** (Fig. 9).

Fig. 8

Fig. 9

Step 21

Turn the fan by hand to ensure that pistons move freely before reinstalling the fan guard.

Step 22

For PS systems,reinstall the compressor, apply anti-seize to the manifold mounting screws, and secure the manifold in place using a 5/32" Allen wrench. **(Recommended Torque: 45-50 in lb)** (Fig. 10).

For LS systems, reinstall the compressor in the. Next, attach the stainless quick connect fitting and tighten using an adjustable end wrench to ensure the flare is fully seated (Fig. 11).

Fig. 10

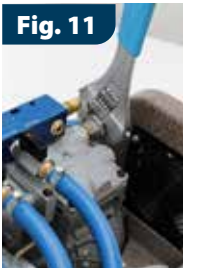


Fig. 11

Changing the Air Filter:

Changing the air filter should be done every 3-6 months

To replace the air filter, hold the base of the air filter canister and turn the top counterclockwise to remove the air filter cap. Replace the old air filter element with a new one. Note: To prevent unnecessary debris intake, we recommend reinstalling the filter cap with the inlet hole facing down.

NOTES

THANK YOU FOR CHOOSING:

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