Valve plate maintenance - Valve restraints vary by model

IMPORTANT: Some kits will have a change in parts where they will no be longer needed, Some parts, including the valve keeper G will need to be reused if instructed to in service kit instructions. Take a close look at your valve plate before starting to ensure you replace them correctly.

15 Remove old gaskets, screws, valve flappers, keepers and restraints.





TOP: Assemble the new valve flapper H, restraint F* if there is one and keeper G re-use make sure the word "UP" is visible and all parts are square to each other.

Insert screw. Tighten down to 18 inch-lbs or just hand tighten. Do not over torque or screw will shear off causing damage to compressor internals. Repeat steps 16-17 for BOTTOM of plate.



Add O-ring J. seating it firmly into the groove with your finger. Repeat for Dual compressor.



Place valve plate onto the compressor rectangular shape facing up. Line up valve plates and head plate correctly with markings you made in Step 1.



Add the O-ring gasket E, seating it firmly into the groove with your finger. For Dual compressor repeat steps 19-20 before moving to the next steps



Put head plate on making sure to line up the markings made in step 1.



Insert all of the new screws: Single=4 Dual=8





guard back in place making sure

CAUTION: To avoid damage or injury, always try rotating fans by hand before connecting to power, slight suction should be felt at port. If no suction is detected, or you feel or hear a thump, do not connect to power. Review assembly procedures and retry test. We recommend that you test the capacitor and its wiring at this time. After repairing both pistons, turn compressor on and check that everything is working properly.



Brookwood Piston Service Kit Instructions

Instructions for both single and dual piston Brookwood compressors.

SERVICE KIT PARTS LIST

Single	Dual	Diagram	Description
4	8	Α	Head Screw
1	2	В	Cylinder Sleeve
1	2	С	Retainer Screw
1	2	D	Piston Cup
1	2	E	O-Ring Gasket
1	2	F	White Valve Restraint*
REU	ISE	G	Valve Keeper
2	4	н	Valve Flapper
2	4	1	Screw 6-32
1	2	J	0-Ring

*Valve restraints vary by model #. Take a good look at the compressor before starting to ensure you have the parts and replace them correctly.

RECOMMENDED TOOLS



Phillips head screwdriver

Torque wrench: T-20 (COM107 only) or T-25, 1/4" HEX, 5/32" allen T-handle

1/4" hex socket and nut driver

T-20 (COM107 only) or T-25 torx star drivers, or Phillips Torx bit

5/32" "T" handle allen wrench

Permanent marker

Hammer

1 flat head screwdrivers

Cordless drill with flathead drill bits

Clean rags

Shop vac or compressed air



CAUTION: Improper assembly or use of damaged parts may lead to premature failure and further damage to compressor.

WARNING: Unplug compressor before disassembly. Disconnect unions and remove compressor from the cabinet. Assemble all tools and check service kit parts

2100 NW 33rd St • Pompano Beach. FL 33069 • 1.844.432.4303 • vertexaguaticsolutions.com



Clean loose dirt from compressor exterior using rag,vacuum or air compressor. Using permanent marker, make line from head plate down to compressor frame (both sides for dual) to help reassemble the heads properly - if not done exactly, you may reverse the airflow.



Use screwdriver or cordless drill with a T-25 or flathead bit to remove screws A from head plate (single=4, dual=8)



Remove retainer screw C and piston cup D. Save piston retainer, you will reuse it! Make sure all old parts are out of the way so you don't contaminate the new parts.



Raise piston rod to its highest point by rotating compressor fan on either side and now add new piston sleeve.



Remove head plate and valve plates and set aside.



Use flathead screwdriver to push in tabs and remove fan guard from side of compressor.



Gently pry off the fan guard. Blowout both open ends of compressor in a circular motion with shop vac or air nozzle.



Push piston down to lowest point and remove cylinder sleeve B.



Remove retainer screw C using impact wrench w/ Philips Screw head or T-27 Torx star key. If it won't budge, heat screw center for 60 sec with torch.



Immediately attempt to remove screw until it breaks loose. If it does not loosen, repeat heat, then hammer.



Bottom view of retainer nipple on left and top view

of piston head nipple guide hole on right.

Use Phillips screw head or T-27 Tork star key - be sure to align the tab on bottom of retainer with hole in piston rod. Start the screw with a couple of turns so it grips the threads in the piston head. Make sure piston cup and retainer are aligned and even. Rotate plastic fan to draw piston head down evenly into sleeve.



Line up piston retainer on right with top view nipple marked on left side by circle to nipple guide hole on piston top.

After tightening all the way down back screw off one turn and try rotating retainer by hand - it should have very minimal movement. Tighten back to torque specs of 30 inch lbs.

14

PISTON HEAD AND RETAINER MUST LINE UP CORRECTLY!