

# Changing Roots Blower Shaft Configuration

## RAM Series



### Notes:

- RAM models are designed to operate in counter-clockwise rotation or clockwise rotation.
- WHISPAIR models are designed to operate with only one shaft rotation direction to take full advantage of the WHISPAIR feature. Therefore, a WHISPAIR blower may be operated in the following combinations:
  - CCW Rotation: Bottom Shaft/Right side discharge or a Left Shaft/Bottom discharge
  - CCW Rotation: Top Shaft/Left side discharge or a Right Shaft/Top discharge**or**
  - CW Rotation: Bottom Shaft/Left side discharge or a Right Shaft/Bottom discharge
  - CW Rotation: Top Shaft/Right side discharge or a Left Shaft/Top discharge
- Referring to the diagram on the next page:
  - Group 1 Standard Arrangement: blower shaft configuration can be easily switched to any configuration in this group by moving the (2) lifting tabs, (2) breathers, (2) sight glasses, and feet.
  - Group 2 Non-Standard Arrangement: blower shaft configurations require disassembly and require authorization and additional parts.
  - Group 3 Bottom Drive Shaft: configurations cannot be switched to a Top shaft configuration. To convert to a horizontal configuration, additional parts are required.

The following steps shall be used as a guideline to switch configurations of a RAM, RAM-J, or RAM X model.

Step 1. Note the current location of the blower's lifting tabs, breather, and sight glasses. Use the diagram on the next page to help you locate these items.

**NOTE** You may want to temporarily move the lifting tabs to other bolt hole locations on the housing that will enable you to lift the blower with chains (or other means), remove the feet, and then install the feet in the new configuration location.

Step 2. Use chains (or some other means) to lift the blower by its lifting tabs so that you can remove the feet.

Step 3. Begin on the shaft side. Remove the bolt (where the feet will be moved to) and breather. Separate your bolts as you remove them so you know which bolts came from what location.

Step 4. Remove the bolt and breather from the non-shaft side.

Step 5. Remove the bolts holding the feet from both sides. Separate your bolts as you remove them so you know which bolts came from what location.

Step 6. Install the feet for the new configuration. Hand tighten the bolts at this time. Your shaft should now be in the new location.

Step 7. Remove the lifting tabs from the temporary location and install the tabs on the top of the blower.

Step 8. Install the bolts to the housing. Make sure you use the correct bolts for each location.

Step 9. With the blower on a flat, level surface, tighten the mounting feet bolts.

Step 10. Remove the sight glass from each side.

Step 11. Wrap the oil drain plug with tape. Install the sight glass in the bottom.

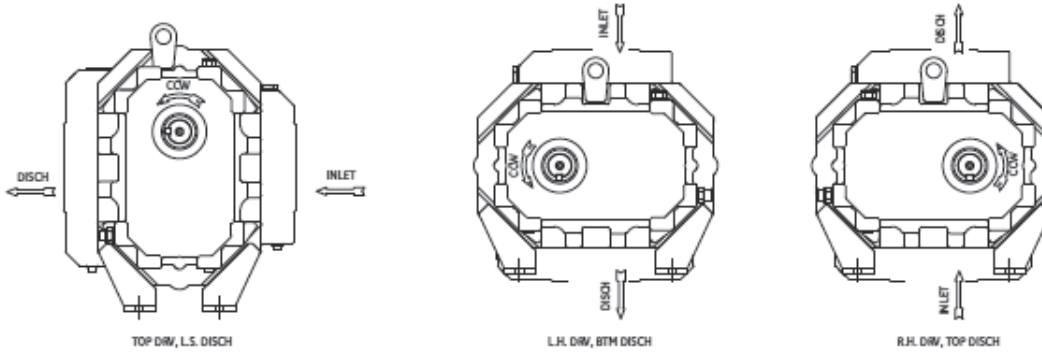
Step 12. Install the breathers on the top.

Step 13. Remove the screw holding the nameplate and flip it over so it is readable.

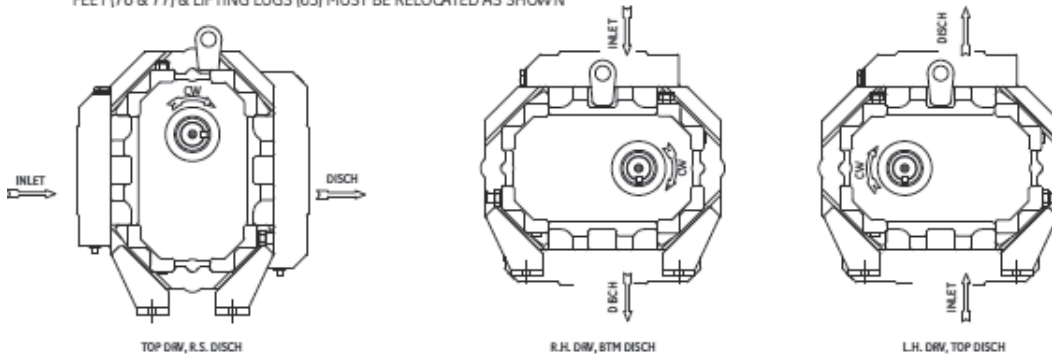
Step 14. Fill your blower with oil (if necessary). Complete lubrication instructions can be found in the manual.

### Blower Orientation Conversion - RAM WHISPAIR Units

1. STANDARD ARRANGEMENT [3-WAY UNIVERSAL]  
EXTERNAL SIGHT GLASSES [37] & BREATHERS [21] MUST BE RELOCATED AS SHOWN  
FEET [76 & 77] & LIFTING LUGS [63] MUST BE RELOCATED AS SHOWN.



2. NON-STANDARD ARRANGEMENT [3-WAY UNIVERSAL]  
CYLINDER [11] MUST BE UNBOLTED FROM HEADPLATES [1] AND DISCHARGE  
RELOCATION AS SHOWN. **MUST HAVE AUTHORIZATION FOR CONVERSION  
SO NOT TO VOID WARRANTY.**  
EXTERNAL SIGHT GLASSES [37] & BREATHERS [21] MUST BE RELOCATED ALSO.  
FEET [76 & 77] & LIFTING LUGS [63] MUST BE RELOCATED AS SHOWN



3. BOTTOM DRIVE SHAFT ARRANGEMENT "SPECIAL ORDER" [3-WAY UNIVERSAL]  
SPECIAL OGE OIL SLINGER REQUIRED FOR ASSEMBLY.  
MAY BE CONVERTED TO HORIZONTAL CONFIGURATION AS PREVIOUSLY SHOWN

