



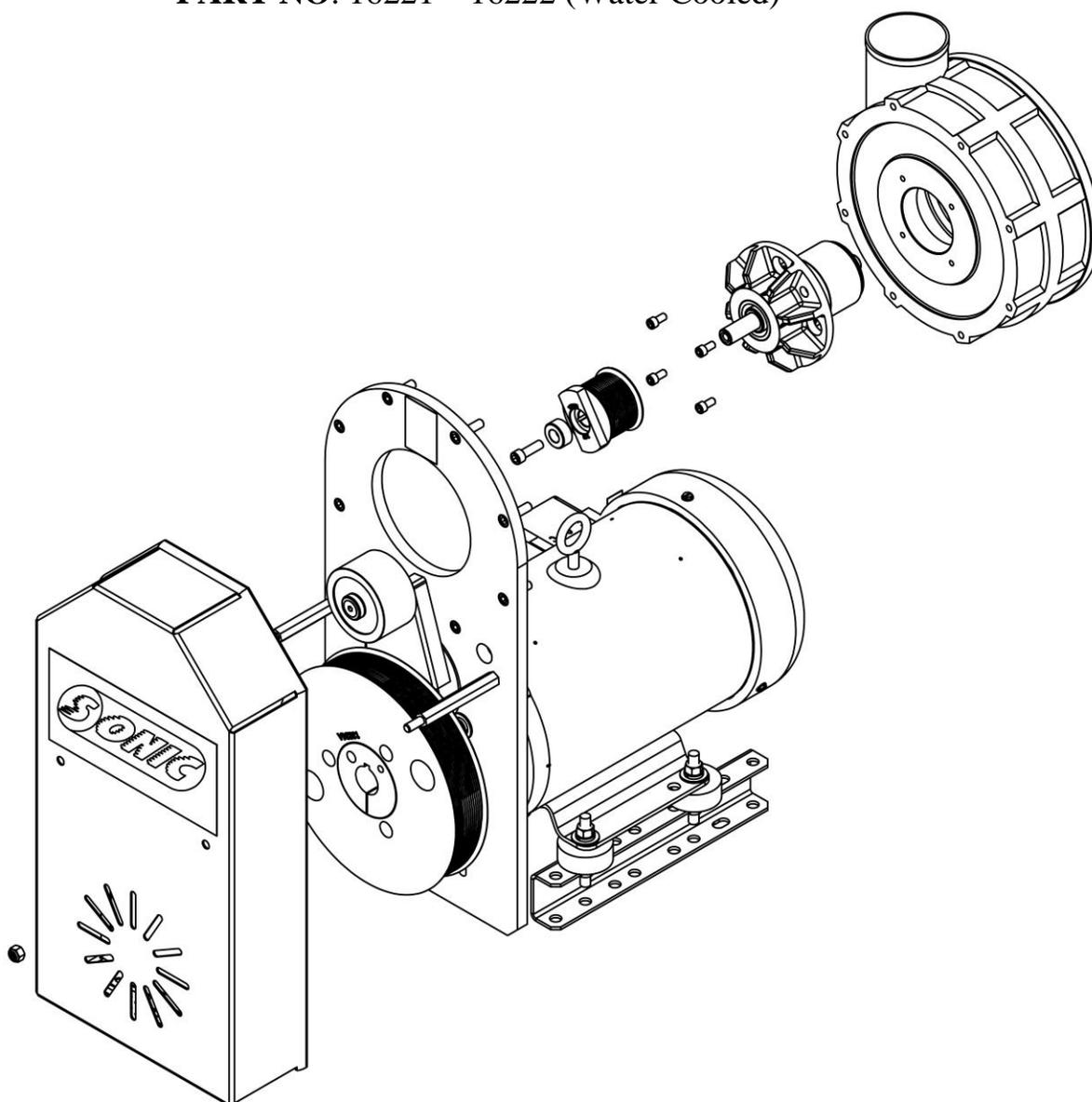
[www.sonicairsystems.com](http://www.sonicairsystems.com)

## **BEARING CARTRIDGE (BC) INSTALLATION QUICKGUIDE**

BLOWER MODELS: SONIC 70, 85, 100, 150, 200 & 300

**PART NO. 14452 – 14453 (Air Cooled “Standard”)**

**PART NO. 16221 – 16222 (Water Cooled)**



**Sonic Air Systems, Inc.  
1050 Beacon St  
Brea, CA 92821**

**Tel: 714-255-0124 Fax: 714-255-8366**

# IMPORTANT! – READ NOTES BELOW BEFORE PROCEEDING

## SAFETY FIRST

### ELECTRICAL

1. **ALWAYS** use qualified electrical and mechanical personnel for installation and maintenance of Sonic air blowers.
2. **ALWAYS** disconnect the electrical power at the motor starter, fuse box, or circuit breaker before working on the blower / motor.
3. **ALWAYS** use proper electrical installation, wiring, and controls consistent with local and national electrical codes. A lockable isolation switch should be provided.
4. Refer to the motor nameplate data for the proper power supply requirements. Be sure the junction box connections are tight and well insulated to prevent shorts and to assure maximum protection against moisture.



### MECHANICAL

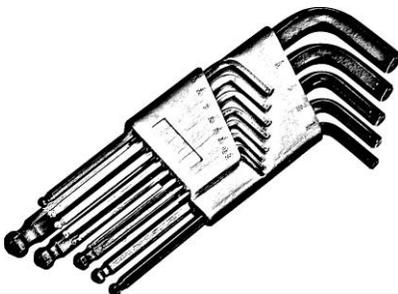
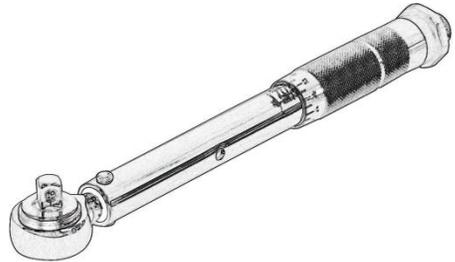
- **NEVER** run the Sonic Air blower without the belt guard installed.
- **NEVER** run the Sonic Air blower with the outlet open to atmosphere as this can cause the motor to overload.
- **NEVER** run the Sonic Air blower with the inlet open to atmosphere. Always connect your system piping, Sonic inlet filter, or Sonic Inlet safety screen to the blower inlet to prevent personal injury or damage to the blower.
- Keep tools, clothing and hands away from rotating or moving parts while the unit is running.
- Use safety glasses and hearing protection when working around the blower / motor and / or air knife assembly while the system is running.



## TORQUE SPECIFICATIONS

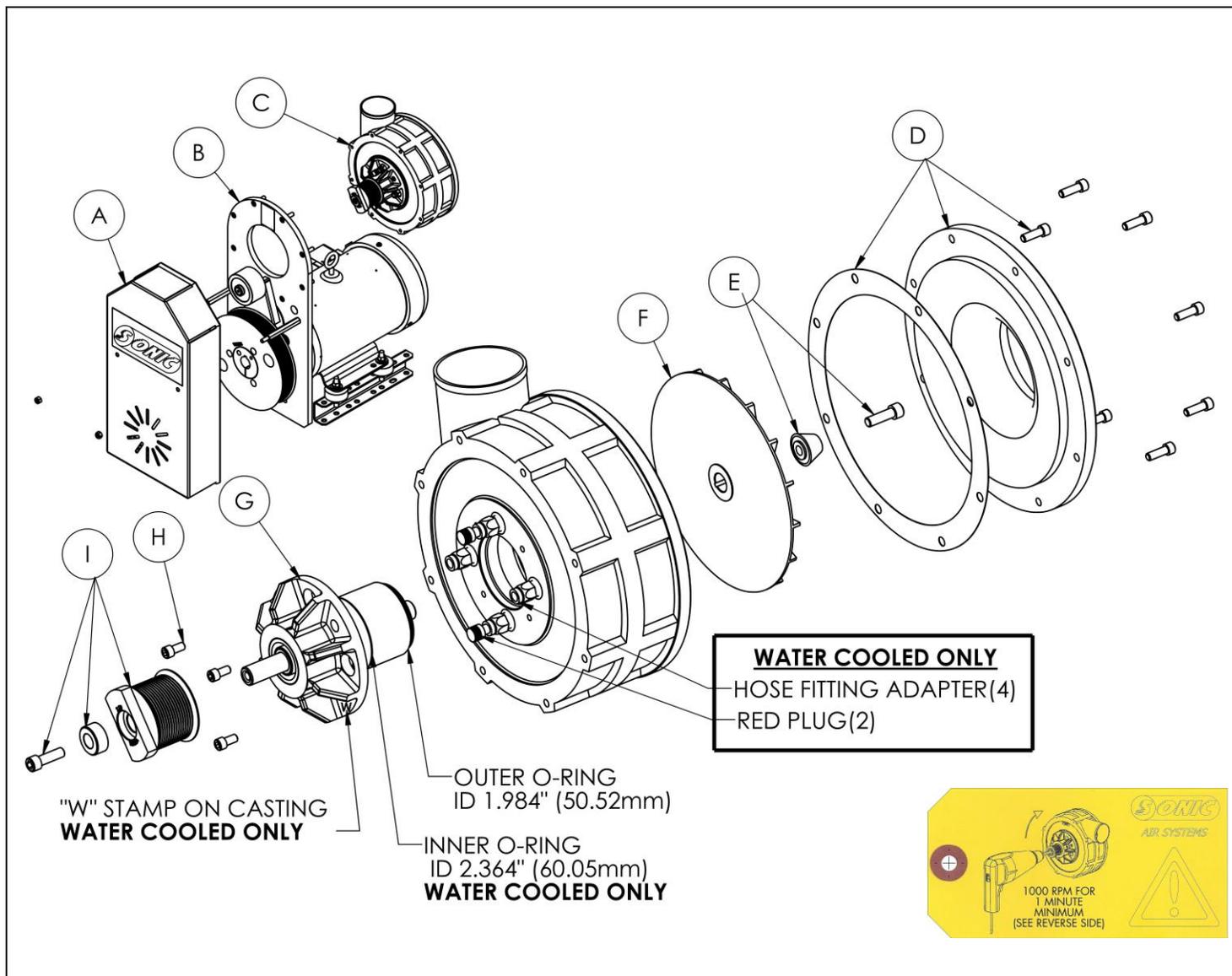
|                        | Sonic 70/85       | Sonic 100/150     |
|------------------------|-------------------|-------------------|
| Blower Mounting Screws | 25 ft-lbs / 34 Nm |                   |
| Blower Cover Screws    | 10 ft-lbs / 14 Nm | 25 ft-lbs / 34 Nm |
| Blower Impeller Screw  | 20 ft-lbs / 27 Nm |                   |
| Blower Pulley Screw    | 20 ft-lbs / 27 Nm |                   |

## TOOLS REQUIRED

|   |   |   |
|---|---|---|
|  |  |  |
| Wrench Set  | Allen Wrench Set  | Torque Wrench   |

## ITEMS INCLUDED

|                                      | Part No.    |              |               |              |
|--------------------------------------|-------------|--------------|---------------|--------------|
|                                      | Sonic 70/85 | Water Cooled | Sonic 100/150 | Water Cooled |
| Bearing Cartridge                    | 14452       | 16221        | 14453         | 16222        |
| Retainer – Impeller                  | 10766       |              |               |              |
| Retainer – Blower Pulley             | 15018       |              |               |              |
| Key – Blower                         | 10405       |              |               |              |
| Screw – 5/16-24 x 1” SHC Full Thread | 10769       |              |               |              |
| Shim – Blower Cover                  | 13547       |              |               | 10469        |
| Grease – 5g Packet                   | 16223       |              |               |              |



## REMOVAL

1. Remove Belt Guard (A)
2. Remove Drive Belt (not shown)
3. Remove Water Cooled Lines (Water Cooled Units ONLY)
4. Remove Blower Head (C) from Bracket (B)
5. Remove (8) Blower Cover screws, and paper Shim (D)
6. Remove Impeller Screw and Retainer (E)
7. Remove Impeller (F) from Blower Housing (C)
8. Remove (4) Screws (H) and B.C. from Blower Housing (C)
9. Remove Pulley Screw, Pulley Retainer and Blower Pulley (I)
10. Discard old Bearing Cartridge (G), Blower Pulley (I) and Impeller (F) if damaged

**Note: Heat Gun or Hot Water may be needed for easier removal**

## INSTALLATION

**Note: Bearing Cartridge Kit includes (1) O-Ring (Outer) for Standard Blowers & (2) O-Rings(Outer + Inner) for Water-Cooled Blowers**

11. Add Grease (included) to O-Ring(s) installed on Bearing Cartridge (G)
12. Reinstall remaining components in the reverse order of removal
13. Verify Torque Specifications listed on Page 2
14. Be aware of Bearing Cartridge Expiration Date on Run-In Tag (Yellow Card)
15. **NOTE: Impeller may rub unless Blower Pulley is properly installed and torque to specification**

Please e-mail [asksonic@sonicairstystems.com](mailto:asksonic@sonicairstystems.com) for the detailed Maintenance Manual