

## Main Air Blower Wheel Replacement On 6458T\_ Models

**NOTICE P1:** "Remove electrical power from the machine" means use the necessary safety procedure for your location. In the USA, this is the OSHA lockout/tagout (LOTO) procedure. More local requirements can also apply.

The two methods to replace the blower wheel are: 1) from below, through the dryer housing or 2) from above. Replacement from below is simpler and the method explained in this document.

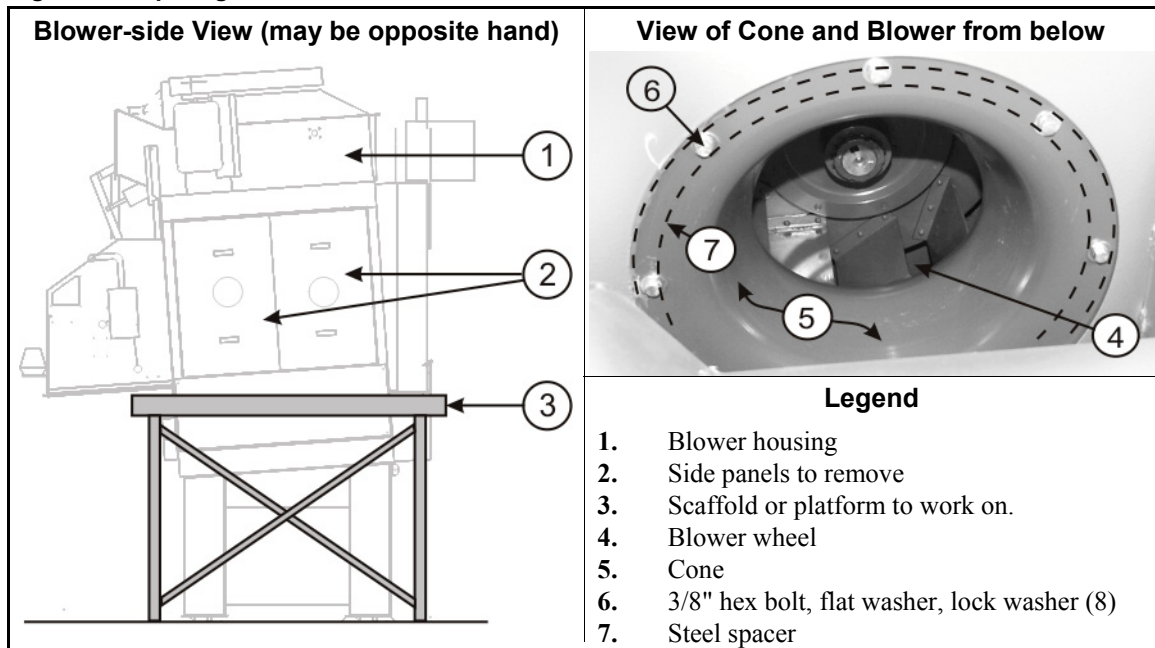
### 1. Resources Needed

- Two maintenance personnel to handle the 70 Lbs (32 Kg) blower wheel overhead
- A sturdy scaffold or platform to work at the level of the dryer housing (see [Figure 1](#))
- Dryer service manual MAP6458DBE (see the Blower Installation..." document)
- Replacement blower wheel from Milnor
- Tools such as a cold chisel and hammer to loosen/tighten the bearing lock nut
- Tools to remove, install, and torque 3/8" hex head bolts
- Two 3/8" x 16 x 3.5", full thread, high strength, hex head bolts to use as jack bolts
- A 2x4 wood stud to use for blocking

### 2. Preparations

1. Familiarize yourself with the blower assembly (see the service manual).
2. Set up the scaffold or platform against the blower side of the dryer as shown in [Figure 1](#).
3. **Remove electrical power from the machine (see Notice P1).** Allow the machine to cool.
4. Remove the two access panels on the blower side of the dryer housing.

**Figure 1: Preparing for the Work**



### 3. Remove the old blower wheel.

1. Refer to [Figure 1](#). From inside the dryer housing, remove the cone (item 5) and spacer (item 7) by removing the eight bolts, flat washers, and lock washers (item 6). **Retain the bolts and washers.** With these components removed, the blower can be removed through the air passage in the dryer housing.
2. Find a location inside the dryer housing to place the 2x4 blocking. The blocking will help with installation of the new blower wheel. You will use the 2x4 as a post to hold the new blower wheel in place temporarily. Measure the needed length and cut the 2x4.



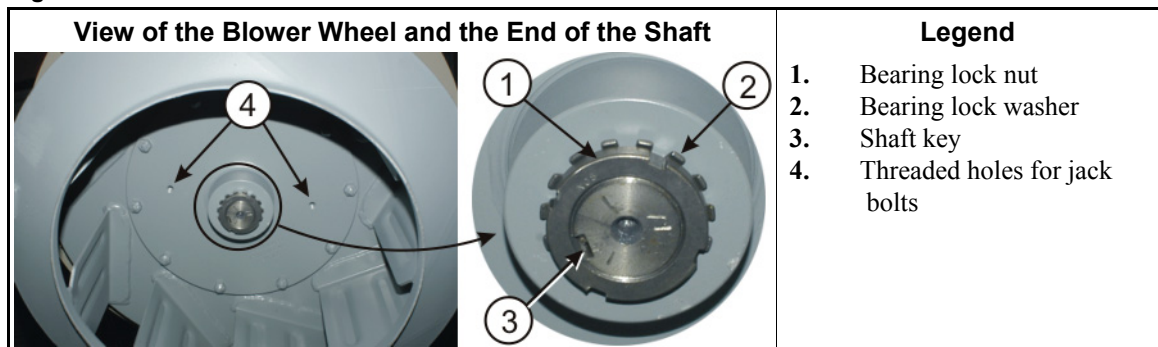
**CAUTION [1]: Crush hazards**—In the following steps, you will handle the blower wheel overhead, inside the dryer housing. The blower wheel weighs about 70 Lbs (32 Kg). The blower wheel may fall as soon as the bearing lock nut is removed.

- Plan your work.
  - Use two personnel who are physically suited to the task.
3. Refer to [Figure 2](#). The blower wheel is held on the shaft by a bearing lock nut (item 1), a bearing lock washer (item 2), a shaft key (item 3), and a tight fit on the shaft taper. Bend the tab on the lock washer away from the groove in the lock nut. Loosen, **but do not remove** the lock nut. Tap a groove on the lock nut with a hammer and cold chisel to loosen it.
  4. Refer to [Figure 2](#). Two threaded holes on the blower wheel hub (item 4) will accept the 3/8" jack bolts. Insert both bolts until they stop against the top of the blower housing. With the bearing lock nut still attached, alternately tighten the jack bolts to push the wheel off of the shaft taper.

**Tip:** The blower wheel may be very tight on the taper, especially after lengthy use. Too much torque on the jack bolts can break the bolts or damage the blower housing. If you cannot coax the blower wheel loose with reasonable force, use shorter jack bolts and filler material between the end of each bolt and the top of blower housing to reduce the distance the bolts must span. For the filler material use steel plate over wood blocking.

5. When the blower wheel is held on the shaft by the lock nut alone, support the weight of the blower wheel. While supporting the blower wheel, remove the lock nut and lock washer. Carefully maneuver the old blower wheel off of the shaft and out of the dryer housing. The shaft key may fall out when the blower wheel is removed. **Retain all attachment hardware.**

**Figure 2: Blower Wheel Attachment to Shaft**



### 4. Install the new blower wheel.

1. If the shaft key came off of the shaft, replace it. It should fit tightly in the groove on the shaft.

2. Put the 2x4 blocking within reach. Carefully maneuver the new blower wheel into position and onto the shaft. While supporting the weight of the blower wheel, wedge the 2x4 blocking under the blower wheel to hold it in place temporarily.
3. Replace the bearing lock washer and lock nut on the shaft. When the lock nut is reliably on the shaft, remove the 2x4 blocking.
4. Tighten the lock nut to tighten the blower wheel on the shaft taper. Use a hammer and cold chisel to tighten the lock nut. When the face of the lock nut is flush with the end of the shaft, the blower wheel is sufficiently tight.
5. Bend a tab on the lock washer into a groove on the lock nut to lock it in place.
6. Place the cone and spacer in position on the air opening below the blower wheel. The top of the cone fits into the bottom opening in the blower wheel with **very little play**. Move the cone around until it seats into the blower wheel. While holding the fully seated cone in place, loosely install the attachment bolts, flat washers, and lock washers.
7. The bolt holes in the cone permit some sideways movement of the cone. Move the cone around to feel the fit inside the blower wheel. By feel, try to center the cone in the blower wheel. Tighten the bolts to 31 foot-pounds (42 Nm) in an alternating pattern.
8. Apply machine power. With the dryer side panels still removed, stand clear of the machine and use the manual controls to run the main blower. Check for abnormal vibration or noise.

**Tip:** If the blower wheel rubs against the cone, you will probably hear a metallic rubbing sound. This is normally not serious and the noise should dissipate after the machine is in operation for a while and the cone wears down. If the noise is objectionable, remove electrical power from the machine (see Notice P1) and adjust the cone position as explained above.

9. If any unusual noise or vibration persists, consult Milnor Technical Support.
10. Replace the side panels and return the dryer to operation.

— End of BIPD6M06 —