

# Daily Blower Inspection

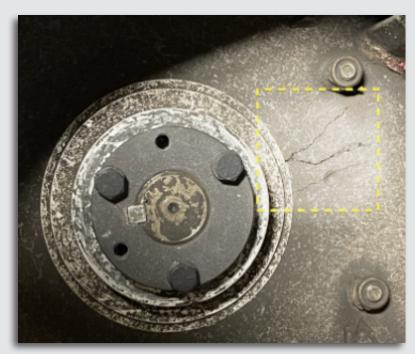


A daily blower inspection should be performed <u>every day.</u> This can be performed before open or after closing.

#### **Steps:**

- 1. Engage a Wash Stop.
- 2. Stage a ladder in front of blowers with the bay gun.
- 3. Pressure wash the center hub where the impeller attaches to the electric motor's drive shaft and the blower impeller.
- 4. Using a flashlight, visually inspect the center hub of the impeller through the blower intake.
  - If Blast Gate is present, use an appropriate tool to move the gate so that the taper lock is visible.
  - Carefully inspect for cracks in the center of the impeller. An example of a cracked impeller is pictured below.
  - Immediately stop using any blower that has a cracked impeller or shows signs of damage. Turn off the blower disconnect and install a lock out tag out on the damaged blower.
- 5. Repeat for each of the blowers.





**Cracked Blower Impeller** 



# Weekly Blower Inspection



Operations

A weekly blower inspection should be performed <u>every week.</u> The power will need to be cut to each blower during this process.

## **Steps:**

- 1. Engage a Wash Stop.
- 2. Stage a ladder in front of blowers with the bay gun.
- 3. Pressure wash the center hub where the impeller attaches to the electric motor's drive shaft and the blower impeller.
- 4. Turning all blower disconnects to OFF.
- 5. After **turning off all the physical switches to your blowers** confirm that the blowers do not turn on when the function is switched to manual in the iPad HMI. If they can be turned on, please double check the disconnects for the blowers that do turn on if necessary.
- 6. When all blowers have been confirmed to be off, physically power on **one** blower by switching the disconnect to **ON. While standing outside the blower room**, manually turn on the blower from the iPad.
- 7. After the blower is ramped to full speed, you will be looking and listening for the following (be sure to stand outside the arches and not below the blowers at this point):
  - Irregular shaking or excessive vibrations
    - If you do see this, confirm mounting hardware isn't shaking loose and the housing & nozzle are firmly tightened
  - Excessive noise levels
    - Listen to see if the impeller sounds unbalanced and if it is scraping the housing.
    - Irregular bearing noise such as knocking, whirring, whining, or clunking.
  - Confirm blowers are rotating in proper direction. (Please reference the chart on page 3.)
  - Be prepared to listen for odd deceleration speeds when turning blowers off. Should not be instant and gradual.
  - 8. After you have finished your inspection of the blower, switch the blower to off in the iPad and turn the blower back off on the disconnect.
  - Finally, repeat steps three through five for each blower in your wash. If you find any irregularities detailed above, please contact equipment support and apply a lock out tag out on the disconnect for suspect blower.



## Weekly Blower Inspection



Operations

## **Steps:**

- 7. With all disconnects still turned off. You will now perform a physical inspection. Push a Wash Stop in.
- 8. After turning off all the physical switches to your blowers confirm that the blowers do not turn on when the function is switched to manual in the iPad HMI. If they can be turned on, please double check the disconnects for the blowers that do turn on if necessary.
- 9. Stage a ladder safely and securely onto the belt under the first arch and the first blower.
- 10. Climb the ladder and rotate the impeller counterclockwise and clockwise with a PVC tube. Entering from the nozzle of the blower. Now listen and feel for any discrepancies to ensure free and smooth rotations.
- 11. Now inspect impeller balancing hardware. Confirm no nuts, washers, bolts are loose and/or missing. Number of balancing hardware varies per blower.
- 12. Thoroughly inspect all visible parts interior and exterior for cracks, chips, and marring.
- 13. Repeat steps ten through twelve for each of the remaining blowers. If you find any irregularities detailed above, <u>please contact equipment support and apply a lock</u> <u>out tag out on disconnect for suspect blower.</u>





Weekly Blower Inspection

Marketing

Operations

#### **Blower Layout**

Arch #	Blower #	Angle Direction	Angle Degree	Distance: Center to Plate Edge
1 2	1	F/B	78.3	6 1/2"
		L/R	87.2	Impeller: Clockwise
	2	F/B	87.4	36 1/2"
		L/R	81.8	Impeller: Counter Clockwise
	3	F/B	79.0	8"
	3	L/R	86.0	Impeller: Counter Clockwise
	4	F/B	78.2	12 3/4"
		L/R	92.1	Impeller: Clockwise
	5	F/B	85.8	41 3/4"
		L/R	94.5	Impeller: Clockwise
3	6	F/B	85.7	41"
		L/R	77.4	Impeller: Counter Clockwise
	7	F/B	78.0	13 1/4"
		L/R	93.9	Impeller: Counter Clockwise
	8	F/B	79.0	6 1/2"
		L/R	87.5	Impeller: Clockwise
	9	F/B	85.0	36 3/4"
		L/R	91.9	Impeller: Clockwise
	10	F/B	84.5	60"
		L/R	67.9	Impeller: Counter Clockwise
	11	F/B	86.0	33 1/2"
		L/R	86.0	Impeller: Counter Clockwise
	12	F/B	76.7	6 3/4"
		L/R	87.0	Impeller: Counter Clockwise
	13	F/B	77.7	13"
		L/R	91.0	Impeller: Clockwise
	14	F/B	82.8	40 3/4"
		L/R	98.3	Impeller: Clockwise
6	15	F/B	104.8	10 3/4"
		L/R	84.0	Impeller: Clockwise
	16	F/B	104.6	9 1/4"
		L/R	89.6	Impeller: Counter Clockwise
7	17	F/B	78.5	10 1/4"
		L/R	85.1	Impeller: Counter Clockwise
	18	F/B	74.7	10 3/4"
		L/R	89.9	Impeller: Clockwise

#### Notes:

\*Top spreader bar should be placed left of center on Arch #1. Subsequent spreader bars should alternate.

\*Distance measured from center line the edge of the blower motor mount plate, closest edge to center line.

\*Width of motor plate is 17", if needed to determine center of blower.

\*FB : Blower angle from front to back, measured on blower intake (exit side of blower).

\*LR : Blower angle from left to right, measured on left side of blower nozzle.

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