



How to Remove a Blower Impeller

The purpose of this document is to explain how to safely and properly remove a blower impeller from a Tommy blower housing for service, inspection, or replacement. This process is the same for the cast aluminum and the welded steel (2.0) impellers. While the video displays the impeller coming apart with ease, it will take much more effort for an older impeller.

Tools Needed:

- ½" Impact socket
- 9/16" Impact socket
- 7/16" Impact socket
- 3/8" drive impact extensions
- 3" full thread 5/16th grade 8 bolts
- Dead Blow Rubber Mallet
- Puller set (if needed)
- Anti-seize lubricant
- Safety gloves
- Safety glasses
- Electric impact
- Socket Wrench
- Brake cleaner
- Kroil
- Scotch-Brite pad
- Pre-cleaning rags
- ¼" Quick-connect air fittings for blast gates



Procedure:

1. Preparation

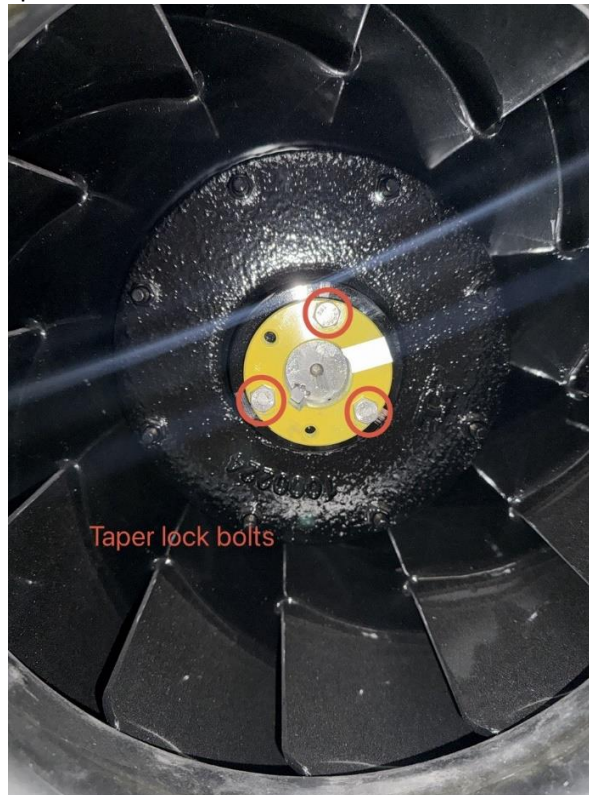
1. Spray every Tapper Lock with Kroil every night during closing, 3 days before removal
2. Lock out and tag out the motor you are working on. Be sure to Ensure power to the blower is fully disconnected before beginning.
 - **Lock out tag out procedures should only be performed by someone who is trained to perform this procedure and is qualified as it involves disconnecting 480V AC power.**
3. Be sure to Record a pre-removal video. This should show the blower ramp-up and ramp-down if operational before service. The video will serve as a performance baseline.

2. Access The Impeller

4. If you have blast gates, first isolate and remove the air lines from the air cylinders.
5. Remove the blast gate carefully, securing all bolts and hardware for reuse.
6. If you have inlet screens, remove them carefully, securing all bolts and hardware for reuse.

3. Taper Lock Removal

7. Identify the taper lock that secures the impeller to the shaft.
8. Use an electric impact with a ½" socket to remove all 3 taper lock bolts. No specific removal order is needed.



9. Apply anti-seize to the two 3" Grade 8 bolts before installing them into the taper lock to aid in keeping the bolts from seizing into the taper lock.

10. Install the two Grade 8 bolts into the taper lock.



11. Carefully tighten the Grade 8 bolts, alternating left to right, until the impeller pops loose.
12. Once the impeller is loose, grab the impeller from both sides and wiggle it back and forth until the taper lock releases from the motor shaft. You may need to use increased force to make this happen.

4. Remove The Impeller

13. Once the taper lock is off, slide the impeller straight off the shaft while supporting its weight.
14. Inspect the shaft and keyway for wear or debris. Using brake cleaner and a Scotch-Brite pad, clean the motor shaft.
15. Once the motor shaft is inspected and cleaned, you are ready to install the new impeller.



Tommy Car Wash Systems | 648 S. Pointe Ridge | Holland, MI 49423 | Tommycarwash.com/Support

Instructional Video:

<https://tommycarwash.sharepoint.com/:v:/s/SupportDept-ServiceandSupport/EdDnNvwnHv1Pjz3ds-nz6LoBadmTMDSx3AAYdp8O72kjKw?e=yROotS>