

Snow Blower Impeller Kit™ - Critical Install Tips

Even though we have tried to make our kit documentation as complete and easy to follow as possible, we cannot stress enough the following tips to help insure your installation is successful.

1. Prior to installation, inspect the walls of the chamber 360 deg. around the inside to check for obstructions. Many times carriage bolts are used to attach the discharge chute to the snow blower and the carriage bolt heads stick out into the chamber.
2. On many machines, there is a metal lip protruding into the chamber where the discharge chute attaches. While both/either of these only stick out 1/8" or less, if the rubber paddles are fitted so they are tight to the chamber walls, they will hit these protrusions on the way by and tear the rubber paddles.
3. Lastly, many impeller chambers are not uniformly round, meaning that the gap between the impeller blade and the impeller chamber wall varies as the blade rotates. **It is critical** that you mount the kit so that the rubber paddles are fitted to the spot in the impeller chamber where the gap is the **SMALLEST**. If you fit the kit where the gap is the largest, the rubber paddles will hit the spot where the gap is the smallest and either stops your impeller from rotating, or break off from the force. (Depending on how much HP & Torque your machine has).

A couple of points:

- inspect impeller chamber wall for any obstructions
- check the gap size all the way around the impeller chamber
- inspect the metal brace on the underside of the impellers to see if it will impact the placement of the mounting bolts and plan accordingly to accommodate it. See diagram in kit documentation.
- Make sure you install the kit on the top, flat surface of the impeller blade so it can "push" the snow up and out of the chute as opposed to pulling the snow if mounted on the bottom of the blade.
- fit the rubber to the point where the gap is the smallest (if not uniform throughout)
- fit the rubber so that they pass by any obstruction without hitting anything.
- after a kit is installed on each impeller blade, (unplug spark plug first for safety) hard rotate the impeller 360 deg. around the impeller chamber to make sure it travels unobstructed and adjust fit as necessary
- Do the same for each impeller blade.
- Once you are sure that all of the installed kits on each impeller blade rotate unobstructed 360 deg. around the impeller chamber, reattach the spark plug and run the impeller under power.
- Shut it off and visually check each paddle to make sure all is good.

Remember, you are not trying to eliminate the gap completely. Fitting the rubber paddles so they are tight up against the chamber walls is not recommended due to irregularities and lack of uniformity in the impeller chamber wall. Keep in mind that ANY reduction in the gap will provide dramatic improvements in operational efficiency. If all looks good after you test under power, you should have no problems unless you hit something solid like ice or rocks. Even if you have installed your snow blower impeller kit successfully, always remember that even though this SBR rubber is tough (see durometer info in kit documentation), rubber is NOT as hard or tough as rocks/ice and will wear over time through normal use. It is impossible to predict how long the rubber paddles will last so keeping spares on hand is not a bad idea. We sell both 1/4" & 3/8" spare SBR rubber paddles should you need them. Please visit our website at www.snowblowerimpellerkit.com for more information.