



Be sure to see all our Supercharger Parts, Services, and Upgrades at

www.superchargerupgrades.com

Powerdyne Impeller Shimming Instructions

- 1) Remove the single nut that is on the end of the impeller shaft. This is all that holds the impeller on. The impeller housing stays on the supercharger for this test.
- 2) Reach into the intake opening with your fingers and pull the impeller up until it hits the housing. You want between .004 and .006" clearance between the impeller and the housing on a Powerdyne (all models).

If you can move the impeller more than .006", then add shims beneath it using the following process:

- 3) Make an index mark on the outside of your supercharger housing so when you put it back on, you know which way to clock the outlet.
- 4) Remove the small bolts around the outside of the housing that holds it on, and remove the housing.
- 5) Slide the impeller up and off the shaft. If it is stuck, warm the impeller with a propane torch to expand it – this will make it slide off easier.
- 6) Add a shim or two in some combination to bring the impeller up, and slide the impeller back on. The shims are added above the heavy washer that you will find underneath the impeller, so they will be trapped between the heavy washer and the impeller.
- 7) Put the housing back on the case and hold it in place with just one or two of the attaching bolts.
- 8) Pull up on the impeller through the intake opening as you did before in Step 2. Check to see if you have shimmed the impeller too much or too little. Repeat this test until you have between .004" and .006" between the impeller and the housing. Then you may re-install the impeller hold-down nut on the Impeller shaft (you can do this without removing the housing). We recommend a drop of Loctite blue on the threads. Torque the nut to 25 lb ft.
- 9) "Clock" your scroll into the right position by lining up the index mark you made in step 1, and tighten all the small bolts to keep it in place.
- 10) You are all done! Put the supercharger back on the car and enjoy it. You may need to re-tune your engine to provide more fuel for the increase in air that it is about to receive.



The shims are added beneath your impeller as shown.