

# Olson Kustom Works

(949)742-0613 Jesse@OKW-Inc.com

Thank you for your purchase from OKW. If you have any questions about your products feel free to call or email!

Your LSA adapter plates have been test fitted on a factory head at our location. Casting differences between head designs and foundry processes may cause a slight misalignment or raised edge in the ports. In a forced induction design this is not normally an issue. These spacers can be port matched or ported to fit any other modifications if needed. The mounting holes have been left large to accommodate slight difference in head castings. Be very careful to not port them through to the gasket groove.

A note on the appearance of the spacers. The phenolic version of the spacers may have small scratch marks on the surface due to the nature of the manual deburring and cleaning process after machining, as well as the production of the actual material. This wont affect the function in any way.

## Parts List:

- Adapter Plates or Thermal Spacer Plates (x2)
- LS1/2/6 Style Gaskets (Only Supplied With Billet Spacers)
- M6 Bolts (Only Supplied with LSA/LS9 Applications)
  - 90mm Bolts for 1" Spacers
  - 70mm Bolts for ½" Spacers
  - 60m Bolts for ¼" Spacers

To find bolt lengths for non LSA/LS9 applications, take the old bolt length, add 5mm for ¼" plates, 10mm for ½" plates, and 25mm for 1" plates. **Make sure the bolts don't bottom out in the head on NON-GM heads. Gm heads have through holes, most aftermarket heads are blind holes and the bolts will bottom out before getting tight if they are too long!!!**

## Install Instructions:

- 1: ON OLDER ADAPTER PLATES WITHOUT THE DOWEL HOLE, AND ALL SPACERS ONLY....With the blower and blower gaskets removed, grind the small steel locating dowel off the bottom of the blower. You can also use a punch and hammer to break it off, it's a hardened dowel so it's very brittle. This isn't used with the older adapters or spacers. Newer adapters have a clearance hole and don't need this dowel removed.
- 2: Reinstall the factory style blower case gaskets if you removed them for the last step. These use the BODY of an 1/8" rivet to hold them in place to the blower housing. If you carefully pry the gaskets off, you can reuse the rivets to hold the gasket back in place.
- 3: For phenolic spacers/adapters, put a small bead of silicon/RTV around the port opening. This is what seals the spacers/adapters to the heads. There is no gasket used on the phenolic versions on the head side. Some early versions have a small groove to serve as a guide. There may be small blemishes around the port opening, which is caused by these grooves, which is why they are being phased out, but do not effect performance. For the billet versions, apply a thin film of engine oil to the gasket face to allow the gasket to slip a little as the bolts are torqued down, or spray a thin layer of WD40 on the head surface, DO NOT DO THIS WITH THE PHENOLIC VERSIONS FOR OBVIOUS REASONS.
- 4: Install the supplied M6 bolt with washers into the blower housing BEFORE placing it on the engine if the blower housing has the small black plastic bolt retainers still in place. If this isn't possible, be very careful or use a magnet to hold the washer in place to keep from dropping it into the ports. Another option is the stuff the ports with paper towels or rags to catch any falling washers.
- 5: Place the adapters on the heads, and spray the surface of the adapter or spacer (where the blower sits) with WD40 or any other type of light lubricant. This will help the Supercharger gaskets to slide and compress rather than tear.
- 6: Apply a small amount of BLUE Loctite to the M6 bolt threads. Set the blower onto the adapter/spacers. The bolts wont line up with the holes in the plates yet. One side at a time, slide the adapter up the face of the head towards the valve cover rail, until the front and rear bolts drop in. Then look through the ports from the top of the blower and line up the ports on the blower with the ports on the spacers.
- 7: Start the M6 bolts a few threads on each side to make sure everything is located properly, and check the flow path through the ports for any issues.
- 8: Snug the M6 bolts down by hand, starting at the center one on each side, and working your way from the center out, alternating sides. Then torque them to 44 in-lbs, then a final pass of 89 in-lbs.