



★ IMPORTANT ★ TUNNEL RAM

Installation and Ongoing Care

To ensure your Tunnel Ram is fitted correctly and remains efficient, follow the care and installation instructions below. Make sure you dummy fit the intake when it arrives.

PREPARATION

- All block machining must be finalised before dummy fitting the heads and intake. Do not dummy fit onto a block that is not yet in its final machined state, as this will move your reference points.
- It is crucial that you always check Port Alignment, this **MUST** be checked before final fitment of the Tunnel Ram. For the closest port alignment and matching port sizing, we need your heads (or an accurate file/template of them) at the time of manufacture. Without them, ports are made 0.040" smaller to compensate for datum points and port variances.
- Shim all 4 corners of the Tunnel Ram until port height is correct. This indicates your gasket thickness.
- We also offer different alloy gasket thicknesses if required.

■ Nitrous (NOS) set ups used in conjunction with BAIN Racing Tunnel Rams are used at the owners risk. BAIN Racing takes no responsibility for cracks or breaks. If you choose to run NOS at your own risk we strongly recommend running at least 1 burst panel with adequate area to help protect the manifold under Nitrous backfires.

BOLT HOLE ADJUSTMENT

- If any bolt holes need adjusting to line up, they must be **filed, not drilled**. Only ever move the wall of the hole over until the bolt fits, don't open the hole out all round.
- All our intakes are built with 0.005" clearance, and they will move slightly when welded. Because of this, some adjustment should be expected when dummies up before final fitment.
- Keep bolt holes as small as they need to be. This helps stop the manifold from cracking and moving, and it means that once it's done, you can remove and refit the manifold and the ports will line up perfectly every time.

FINAL INSTALLATION

- We strongly recommend a "dummy" fit with all our Tunnel Rams (DO NOT rush this process). Do the "dummy" fit with the above shim method and ensure all bolts start. Make sure the belly of the Tunnel Ram does not bottom out, a minimum 0.005" clearance is needed.
- For the final fitment, start all bolts then work from the centre bolts in a clockwise direction, spiraling out towards the end of the Tunnel Ram.

HEADS RUNNING O-RINGS

- If your heads run O-rings, the manifold will sit on the high side. When dummy fitting, measure how much drop is needed to bring the manifold down to the correct port height.
- We also have a calculator on our website to help you work this out.

HEADS RUNNING GASKETS - SHIM METHOD

- If running gaskets, use the shim method in each corner by fitting 0.040"-0.120" shims between the head face and the intake.
- Shim until the floor of the manifold lines up with the floor of the port. This gap is your required gasket thickness.

CHEVY INTAKES - DISTRIBUTOR FLANGE HEIGHT

- Before fitting, check the height of the distributor flange with no gasket in place.
- In most cases the distributor should sit down onto the flange with metal-to-metal contact (no gasket). This is normal and leaves the correct amount of crush once the gasket is added.
- If the distributor won't seat without the gasket, or sits noticeably high or low, contact BAIN Racing before final fitment.

For any questions please contact BAIN Racing.

IMPORTANT

Always check Tunnel Ram bolts and welds for fatigue and loosening under vibration.