

Let's say you own a Kinsler Three-piece manifold for a small block Chevrolet, but you want to use it on a special head with ports that are moved up .300" higher than your old heads. Simply elongate or reposition the bolt holes and slide the manifold up the head .300". This keeps the runner design in the manifold untouched for peak performance, and saves you a ton of time and work!

A nice touch is that every manifold is supplied with 1/4" dowel pin holes at each end, so the manifold can be positioned just right over the cylinder head ports, then a hole can be drilled in the head to match the dowel pin holes. To take care of the gap between the raised manifold and the valley plate, simply make an aluminum strip with a seal groove and bolt it to the lower edge of the manifold...or we can machine the strips. Up to a 3/8" gap can simply be filled with silicone.

C) Correct for core shift in your heads Since it is easy to move each manifold up or down, forward or rearward, perfect alignment can be obtained with cylinder heads that don't have the ports properly located. (This is a common problem, especially with production heads).

D) Sealing it up Both the manifold and the valley plate have grooves for sealing them to each other. The valley plate has sealing grooves on the bottom side at the front and rear for sealing it to the top of the engine block.

Simply squeeze silicone sealer into all the grooves and assemble. The valley plate also has a 10-32 bolt hole at the front and rear, giving the option of bolting it to the top of the engine block.



**Mating seal grooves**

2) Runner Design We constantly work with top engine developers to keep refining our runner designs. We change them whenever we find one that will work better. We can also make one to your specifications and make it work for you.

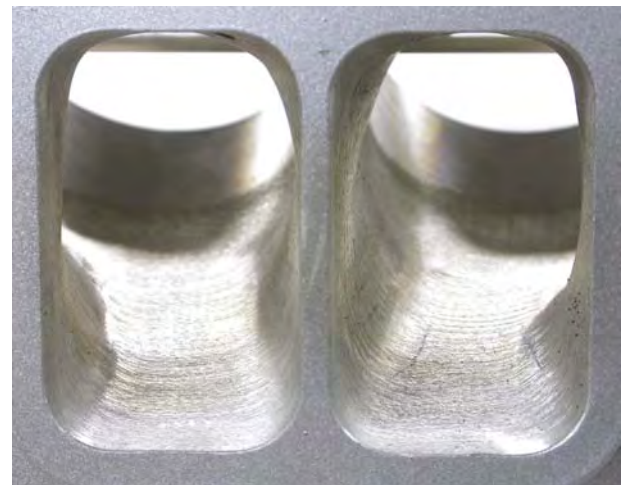
3) Precision Ports Even in the racing industry, most manifolds come with as-cast ports, and they are often not in the proper location. Every manifold we make has the ports machine-cut exactly to its print. To ensure precise location of the bolt holes to the ports, they are both cut while the manifold is in the same fixture.

4) Port Wall Angles We pay a lot of attention to the angle of the roof, floor, and the two walls as they meet the gasket face. If the wall angles in the manifold do not match those in the cylinder head, the air will not flow as well as it could.

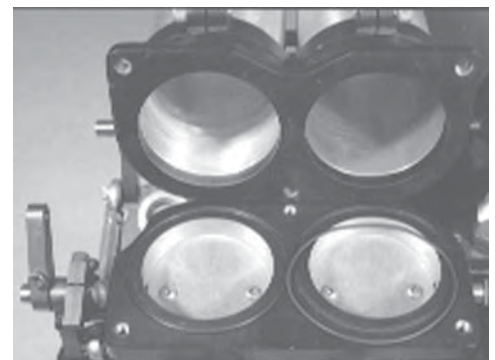
5) Blended Ports After the ports are milled in, they are very carefully hand blended to the runner in the casting for a totally smooth transition. Most top engine developers have found that further porting work does not give them a power increase.

6) Separate Ramtube Adapters hold the ramtubes to the manifold. The ramtubes are secured by pinch clamps for easy removal to service air filters, etc.

If you break a Pinch Clamp, you can simply install a new adapter.



**Small block Chevy port close-up**



**Manifold o-ring detail**

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