

Port Alignment Gets The Most From Gasket Matching

In a recent newsletter we discussed how to gasket match the ports on your heads and intake manifold. While this can improve the airflow potential and horsepower of your

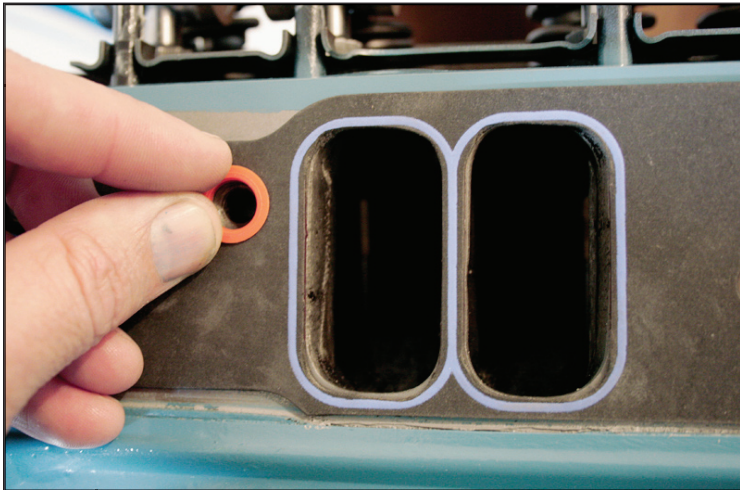
engine it will all be worthless if you don't pay attention to lining those ports up.

Without proper port alignment the ports will have airflow stacking

up against the ledges of the head ports where they overlap into the mouth of the intake port. This not only blocks the intake charge but also introduces unwanted turbulence

into the air stream.

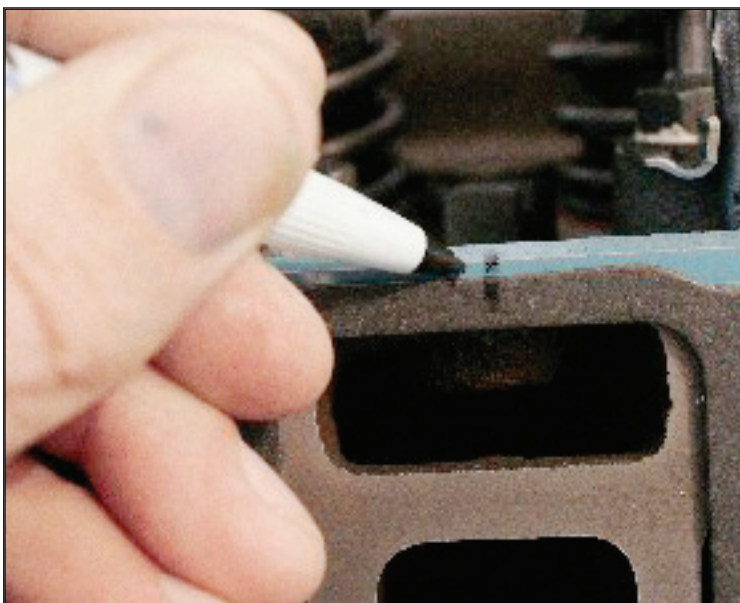
There's no voodoo science to port alignment. It simply requires attention to some details. Follow along as we demonstrate.



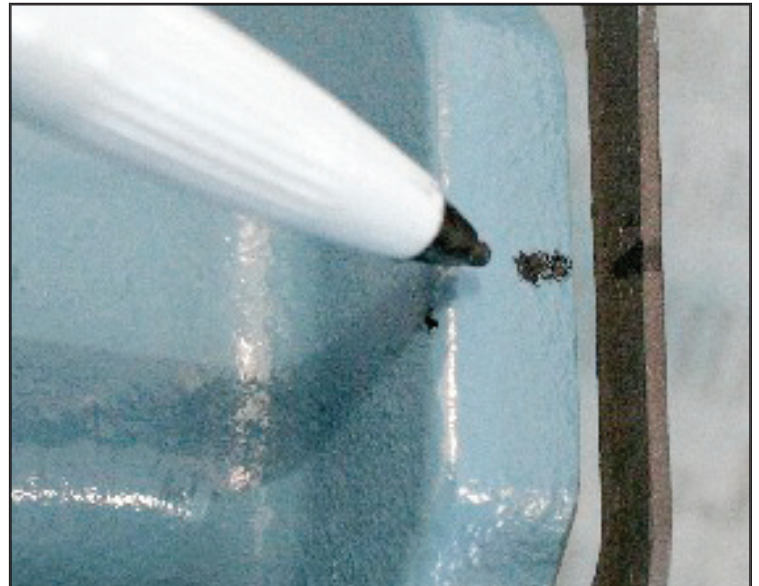
1 - Your gasket kit should have the orange plastic tabs that allow you to mount the gasket to the head intake port face by pressing them into the bolt holes. Use these on both ends to locate the gasket like you did when you marked it for porting.



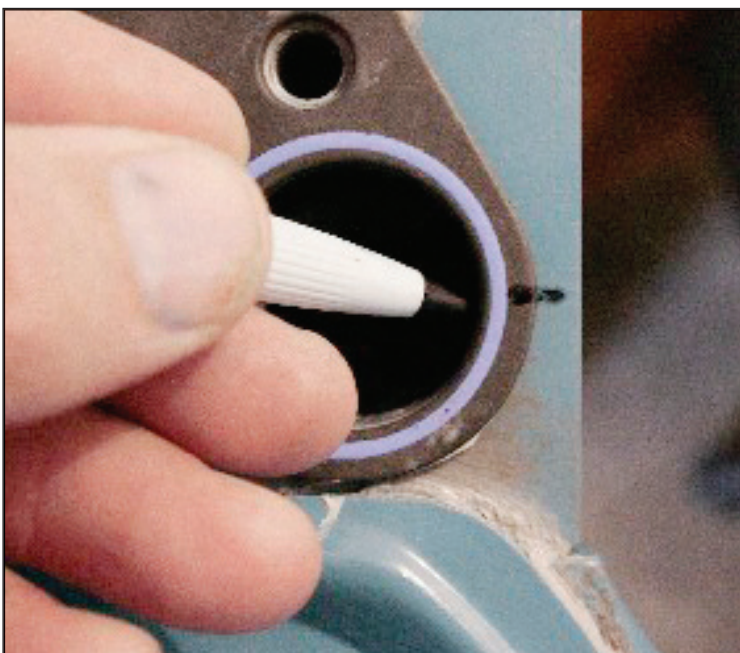
4 - Remove the plastic tabs and gasket from the head and transfer it to the intake manifold. Alignment of the gasket should match your marks from when you ported the intake.



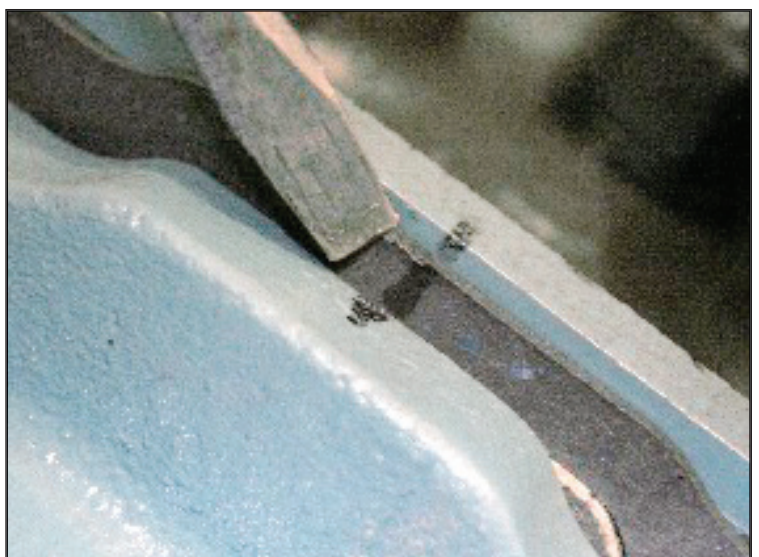
2 - At the top, center of the gasket, above the exhaust crossover area, make a mark across the gasket and onto the head. Use an indelible marker or a paint pen to do this. I used a Sharpie for this.



5 - Now that the gasket is attached to the intake manifold, locate the marks on the gasket. Use your marker to create a matching mark on the intake. Remember to do every mark for an accurate line up.



3 - Place additional marks on each end of the gasket. A minimum of three marks should be made to ensure the proper alignment. These must be placed so that you're aligning it top to bottom and front to back.



6 - Now that all our parts are marked all we have to do is bolt it up and align the dots. With marks on the front, back and middle we should have a very accurate alignment both top to bottom and front to back.

Story and Photos By Chris Ritter