Induction

Atomic "Viper" Intake Manifold Kit

To take advantage of high flow rates of the DOHC Ford cylinder head, Atomic have produced an inlet manifold and fuel rail kit specifically designed for high performance atmospheric or turbo/blown applications.

The design of the "Viper" intake is based upon the factory FG Ford "Turbo" manifold design, which is radically different from the original Ford BA-BF induction system. Our manifolds feature extensive contour porting to rectify the factory flow imbalances - our modified runners have their lengths "tuned" to harness the naturally occurring 2nd and 3rd order resonant harmonics which assist in cylinder filling in the 2500- 7500 RPM range. Combined with an extensively modified plenum of only 2900cc, this configuration provides even flow to all runners (guaranteed to all be within 1%) at pressures up to 80 lbs boost. This translates to crisp response in NA or turbo engines as well as facilitating a manageable "reservoir" of boost pressure to feed the cylinders of force-fed engines.

It only takes a flow imbalance of 6% to change the AFR in a cylinder from 12.5:1 to 13.25:1, which explains why some engines exhibit engine damage to rods/pistons, yet AFR readings from the tailpipe mounted O2 sensor reads a "safe" value.

The manifold kit repositions the throttle body 110mm lower than a factory BA-BF manifold and our kit is no wider than standard. This is often a boon for engine swaps as it makes it easier to install ducting to the intake.

Included with each manifold is a billet dual feed fuel rail complete with AN fittings and a throttle body spacer to accept a BA-BF Drive-by-wire throttle body. A FG throttle body will bolt straight up without the spacer.

#306901
Atomic "Viper" intake kit suit BA-FG Ford DOHC 6 cyl engine