

SUPER SIX MOTORSPORTS

PRODUCT COMPARISON

It's really hard to make accurate product comparisons. Cylinder head comparisons are very tough because everybody uses different flow benches, some are calibrated, some are not, some use different bore size adapters, inlet and exhaust tubes, etc, but one thing is certain, there are visual comparisons that very clearly show the differences in products, and these visual clues can let smart buyers make informed decisions. You can intentionally port cylinder heads to make impressive flow numbers, but that doesn't mean the heads will make power, we'll show you why as you read on.

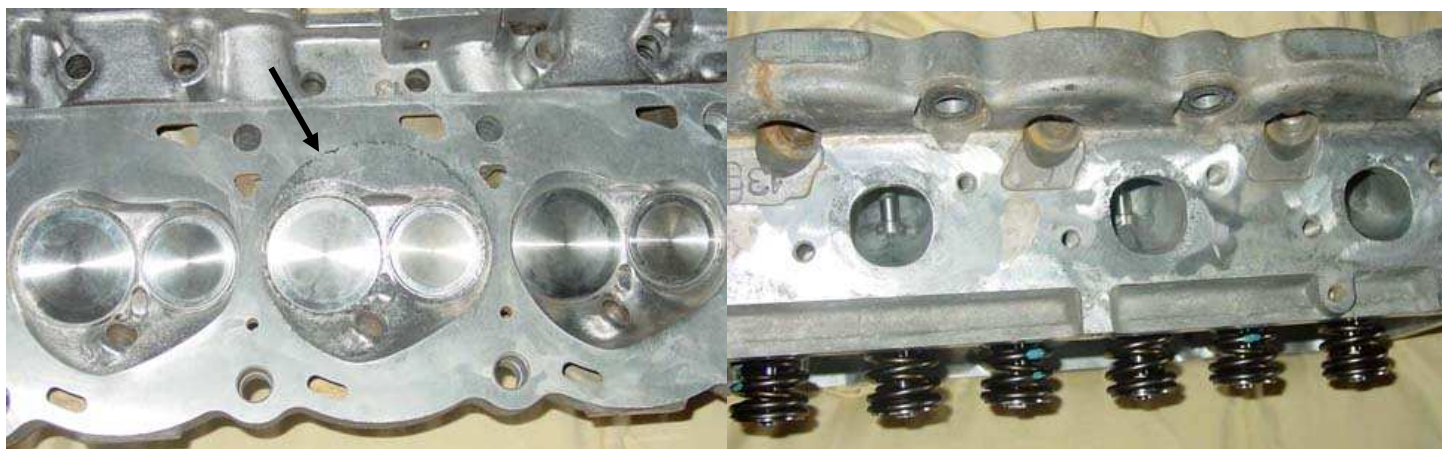
Lets compare Super Six Motorsports Stage 3 cylinder heads (\$1650) to "Brand D" (\$2260) below.

Super Six Motorsports cylinder head decks are precisely machined for ideal head gasket retention. Our exhaust ports are machined to precise shape and size and hand finished so that all ports are equal. Our heads are properly cleaned and detailed, you deserve the best in workmanship, why settle for less?



Brand D, as delivered, note the presence of corrosion in the cylinder head deck surface of the middle combustion chamber at the head gasket ring. That's a blown head gasket in the making!

Brand D again. Notice corrosion around exhaust port gasket areas, rust in spark plug holes, nonuniform size and shape of exhaust ports. Why would you pay for an undetailed head with poor workmanship.



We retain the stock shape and location of the intake ports. Why is this important? Because the gaskets use O-rings, you cannot have the ports edging past the boundaries of the O-rings in the gasket. It makes the gasket prone to leaks and results in poor port alignment. Intake gasket leaks can cause a wide array of varying engine problems and catastrophic engine damage, especially in applications running nitrous, superchargers, or turbos. Poor port alignment kills power, regardless of the cylinder head flow rate.



Brand D shown below. The port shape and the port location have been enlarged into square shapes, note how the new square shape and size exceeds the gasket's O-ring. While the added size of the port could show increase cylinder head flow rates on a flow bench, in actuality, when assembled with the gasket and the intake manifold, the square ports compromise airflow because of port mismatch and blockage by the lower intake gasket, which will drastically reduce power. Note overall level of poor workmanship.



Lets look at pistons. Super Six Motorsports pistons are forged and machined to our specifications by Wiseco. Our stroker pistons offer several unique features, the most important being our off-set pin design. Off-set pins provide several important benefits, the most important being the off-set pin position minimizes side loads on the thrust side of the cylinder walls.

Our stroker pistons use our unique off-set pin location, proven through years of V6 engine development effort to reduce side loads on the piston skirts. We also employ thick crowns for power adder applications.



Brand D pistons, although manufactured by Wiseco like ours, are NOT manufactured to our specifications. This piston, which was removed from a Brand D engine that failed prematurely after only a short period of naturally aspirated street use, clearly shows the accelerated skirt wear on the Brand D piston design without an offset pin. Proof that all pistons are not created equal!



Our stud mount rocker arms are the best you can buy for your V6. Ours are built to our specs by CompCams, and you won't find them in the CompCams catalog. Ours are designed in 1.7 ratio, they are simple to install and they require no cylinder head machining. Just install them using the studs, shims, and guide plates provided for perfect rocker arm geometry. Others are trying to copy our design, but as you can see below, they just don't understand proper rocker arm geometry.

Our rockers include studs, lock nuts, guide plates and Teflon anti-friction inserts and are designed to achieve perfect geometry with bolt-on simplicity. No modifications of the pedestal are required. This means that the rocker arms follow the canted angle of the valves.



Brand D's copy of our stud mount rocker setup requires the pedestals to be machined flat and employs crude welded guide plates without anti-friction inserts. Unfortunately, machining of the pedestals harms the geometry because the rocker arms now run perpendicular and not at the proper canted angle.



Although you might find other sources that offer similar products, these product comparisons should show why we think our products are superior to the others. We innovate and develop products on our own V6 racecars and our products are years of proven development and continuous improvement.