

# Not Those Jeeps Again! The Facts About 4.0L Cylinder Heads (/2004/10/not-those-jeeps-again-the-facts-about-4-0l-cylinder-heads/)

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The 4.0L came on the scene in 1987 and is still being used, however 2005 may be the end of the journey in domestic production. It'll be a bittersweet farewell: most who have it love it. This is an old school inline six with lots of torque and there are still many of them out on the road. Plenty of opportunity for you to see them.

This issue we are going to take a look at the cylinder heads for the 4.0L Jeep. There are four of them and you really cannot swap them around, so you had better know what you have and what fits where.

All years of 4.0L production used cast iron cylinder heads. In 1987-1990 the cylinder head casting number is 2686. The fastest VIP (Visual Identification Point) on this head is the mostly rectangular shaped intake ports (see Photo 1) that have an abnormal looking relief at the top for injector clearance. Note also that the intake ports are facing each other on the front two and rear two cylinders but the exhaust do it on the center two. The exhaust ports are a rounded "D" shape.

The 1991-1995 head castings (c/n 7120 and 33007119) appear identical to the 2686 until you get to the port side of the cylinder head. There, you'll discover the VIP to be the intake port which now has much smaller relief for the fuel injector and the exhaust ports now look like a squared off circle or a rounded off square depending on your perception (see Photo 2).

From 1996-1999, the Jeep 4.0L used head casting 0630. This cylinder head has two receiver holes for two dowel pins that were added to the block for cylinder head alignment (see Photo 3). The intake ports were changed once again, and there was a newly designed rocker cover and gasket on the scene, that will not retro back. Also, the move was made to lighter pressure beehive-shaped valve springs and a different profile cam.

The 1999-2005 cylinder head has casting number 0331, and includes the same two head dowel receiver holes. Surprise, surprise: the intake ports have changed once again. As seen in Photo 5 (above) they have gone back to that small relief at the top type port again, and the exhaust ports are the smallest that they have ever been. The interior of these ports are very rough "as cast" and are very easy to recognize. However the VIP on this head is the spark plug side of the cylinder head where there are four new bosses to mount the coil packs (Photo 6).

That should get you through the 4.0L Jeep heads and keep you out of the "do-over" column. Don't forget this is the kind of information that you can find when you utilize EngineDataSource.com. I encourage you to visit the site and take a tour.