# CYLINDER HEADS



## INTRODUCTION

One of the most important parts of any engine assembly is the cylinder head. It holds the key to making power. It also offers the opportunity to make more horsepower. Camshafts, headers, and carburetion can only go so far making horsepower without the cylinder head. However, cylinder heads can be expensive; but this may be one place in the engine where spending the extra money is worth it.

There are basically two different cylinder heads that have been used on the production 'A' engines from 1964-1990, a small port 273-318 and a big port 340-360. There have been only three different valve combinations used in these heads: one for the 273 and 318 with 1.78" intake and 1.50" exhaust; one for the 1968-1971 340 with 2.02" intake and 1.60" exhaust; and one for the 360, the 1972-1973 340 and some 318 high performance with 1.88" intake and 1.60" exhaust. For a port size comparison, see Figure 3-31.

The 1964-1965 273 cylinder head had the intake manifold bolt holes drilled at a different angle from all the rest of the 'A' engine heads. The 1970, 340-6 Bbl. T/A had the pushrod holes relocated because of the completely different valve gear used with these heads (See Figure 3-32). These T/A heads are no longer available.

The earlier 340 cylinder head is no longer available. Instead, the 360 cylinder head is used and finish machined to the 340's standard specifications. These heads are identical to the early 340 heads in terms of port size and shape, valve sizes and combustion chamber volume.

The 1987-1991 swirl port heads can represent a performance gain. They have more potential. Refer to P4529268 and P4529269.

The 1975-1991 318 and 360 both use new "emission" cylinder heads. The earlier castings have been superseded by these newer heads. However, the new 318 and 360 heads represent a power loss compared to the older heads in their stock form. But, with simple modifications they can be made to perform as well as the earlier heads.

The W-2 and W-5 heads will out-perform any of the production heads.

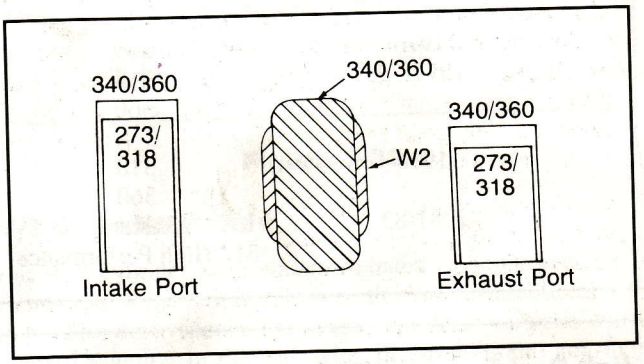


**Figure 3-31**

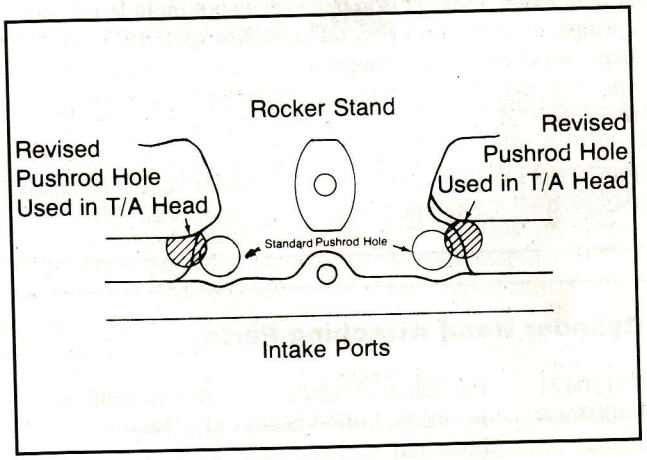


**Figure 3-32**