

pinto ponies

motor with a 3.81-inch cylinder bore, and comes .005 oversize to allow the rings to be select-fitted to each cylinder. On the .030-over Ford motor with its 3.811 bore, the ring set is still slightly over, so there's plenty of material remaining to correctly gap them. End gaps on the rings will run .014 on the top and .011-.012 on the second ring, and are measured in each bore using a torque plate to simulate cylinder head distortion. An additional benefit of these rings is that, since the set is for a V8, there are enough rings left over for your next teardown or to replace a ring that you may have "overgapped."

A 4R 308 Reed roller cam that specs out at 274 degrees duration with .568-inch lift replaced the mechanical grind used in Stage Two. Since an OHC engine has no lifters, Ken had to design a special roller cam follower; it's now available from Gap Engines under part No. MOE-6564-A.

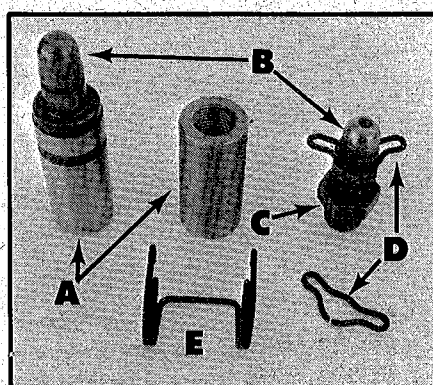
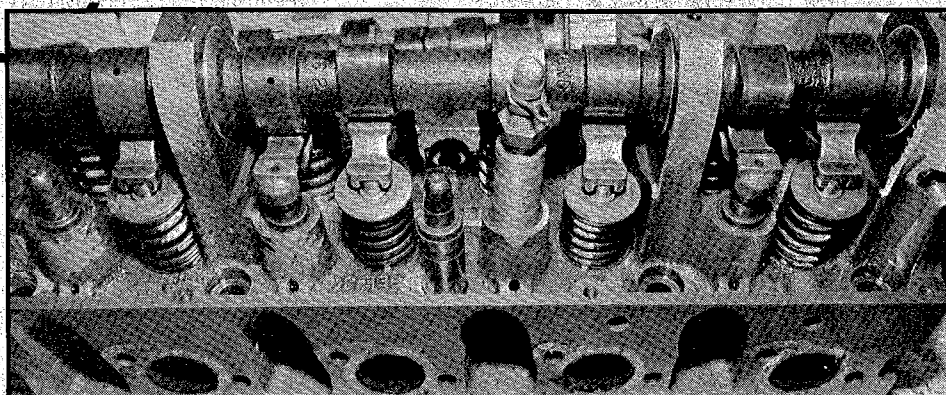
Naturally, the cylinder head was fully reworked. Skladanek Racing Heads ported and polished it, reworked the exhaust port and installed oversize Manley valves originally intended for a small-block Chevy application. The 1.60-inch exhausts (part No. 11543) were installed as is, but the 1.937 diameter intakes (part No. 11592) were cut down to 1.800 inches. It was not necessary to cut the valve stems to a different length. The same Reed valve springs used in Stage Two were run here, but with Reed single-groove keepers and titanium retainers.

To obtain all-out top-end power, the Offy dual-port intake was replaced with a brand-new single-plane C-series 2-barrel intake (part No. 6222-C) mounting an 0-4412 Holley 500-cfm carburetor jetted three stages richer than stock. At this point in time, no one makes a race-type single-plane 4-barrel intake for the 2.3.

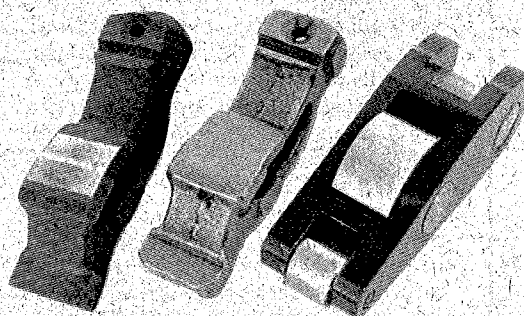
With all these mods, you'd think the oiling system would be in for some serious rework, but that's not the case. Other than the usual deburring and clean-up of the engine's internal oiling passages, the only oil mods were the replacement of the stock oil pump relief spring with a Gap Engines 80 psi spring (part No. MOE-6670-A) to ensure adequate top-end oiling and the installation of a windage tray (part No. MOE-6687-A) to keep oil from splashing on the crank at high rpm.

After this radical rework, the engine

To convert to mechanical camshaft, stock non-adjustable cam follower was removed and stud boss milled .200 inch to accept pressed-in plug threaded for Pinto 2000cc rocker ball stud assembly.

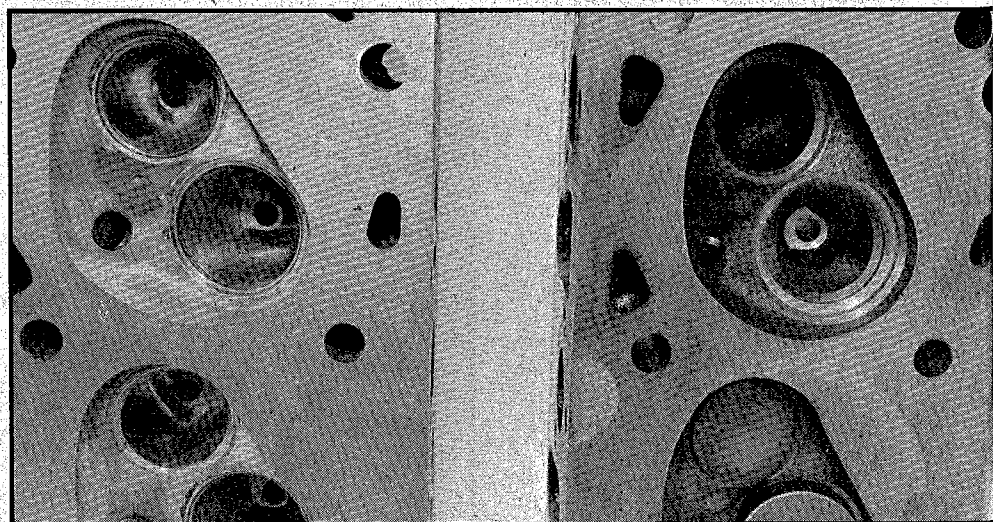


Parts needed for adjustable follower conversion: custom Ken Moe-designed adapter plug (A), DIFZ-6A527-A ball stud assembly (B), DIFZ-6A529-A nut (C), DIFZ-6K532-A small clip (D) and DIFZ-6K524-A large clip (E). All these parts will be supplied in kit form by Gap Engines under part No. MOE-6565-A.



"Cam followers" replace the lifter, pushrod and rocker arm in an overhead cam engine. From left to right we have stock follower used in Baseline and Stage One tests, Tufftrided stock follower needed for Stage Two and special Ken Moe-designed Stage Three roller follower for use with roller camshafts.

Fully ported and polished Stage Three head (left) features oversize valves and reworked exhaust port.



was no longer streetable. There was virtually no power below 3500 rpm, and it wasn't until about 4300 rpm that horsepower and torque exceeded the Stage Two figures. But it went up like a rocket from there—literally, the sky's the limit with an overhead cam engine and roller cam, with rpm limited only

by the dyno operator's guts. So far, that's been 7500 rpm, where 264 hp were produced, over 2½ times the stock output—and the curve showed no signs of tapering off. Peak torque was not reached until 5000 rpm, when over 202 ft.-lbs. were developed, nearly double the stock output.