

Crankshaft - No bobweight milling for thickness. All bobweights .005" of each other for thickness and all within .005" of centrality.

Bobweights radiused and polished on edges. No change in oil passages.

Timing pinion reversed to give more engagement on key.

Balance factor 42% established by balancing using cylinder and rod assembly and pair of bobweights. 50% is good top limit for high revs.

To rework an early shaft reduce thickness of bobweight to .590" and establish 1/4" radius at thrust face and then face edge of bobweight to centralize it.

Piston 11.9 CR after rough edge removed from valve pockets.

Valve drop clearance .270" inlet minimum. Exhaust .210" minimum,

TH 6 camshaft with 1" radius tappet standard except drilling and milling for lightness, and oil feed removed.

Camshaft timing .225" - .230" inlet valve lift at top center.

Exhaust .170" - .180"

Cam lift at tappet .350" - .352"

Same for inlet and exhaust

Rocker ratio 1.1:1

Titanium valve adjuster lock nuts could be smaller hex. Valve nimonic 80. Valve stems tipped with delpha.

Latest type Wikam springs with inner stronger than previous. Outer spring length 1-1/4" valve on seat.

Inner spring rests on recessed surface, .030". The top of inner spring is 1/16" below top of outer spring.

Assembled inner spring is affectively 1/32" shorter than assembled outer spring, and is 1-7/32" assembled length. Inner spring is approx. 13lbs. stronger than previous inner spring. Total spring load is approx. 213lbs. at full lift. Total lift at valve is .385" - .389".

Diameter of passage connecting rocker bearings with return line to oil cooler is larger (how much?)

Rockers of improved strength to be made.

Pushrods standard, but inspected for straightness and with polished top cups.

Ends of adjustment screws have actual 1/4" radius only. Diameter of end standard. Specials have 3/8" radius but must be accurately positioned.

Valve seat inserts .005" - .007" interference. Alloy #4??

Top edge of 45° valve seat .010" above chord, inlet only.

Exhaust seat on spherical surface. Width of seats .040" - .055". Inlet ports opened out at horizontal diameter from 1.080".

Internal diameter of valve seat 1.450". Diameter of proving cutter 1.437".

Center spark plug relocated so center line of plug passes through centre of sphere.

Standard cylinder blocks run on test bed 1 hr. at 7,500 on standard engine. Then bored .040" and run for 1 hr. in racing engine, then honed .001".

Clearance at bottom of piston skirt .004" - .0045".

Head gasket copper .048" thick. Clearance of cam bearings should be .00125" - .0020".

Timing gears lightened by drilling before hardening. Width reduced like "C"

Range. Special generator of continuous wire construction reduced outward and timed for correct phasing of pulse.

Chain sprockets radiused and chain line checked with secondary sprocket pulled against needle thrust (use dummy cover).

Oil pump specially built run in, and blow off valve set to give 80 - 90 psi.

End float of gears .001".

Oil line from tank to pump increased to 5/16" minimum.

Metal feed pipe in tank I.D. 9/32". Bead on O.D. oil junction pipes at crankcase.

Inlet cylinder head adaptors 1.080" bore. Carburetor manifold (1/2" gap between metal pipes) tapers from 1.080" - 1.187" bore at carburetor flange. 1-3/16" G.P.

Length of inlet pipe 3-5/8" from flange to flange. Two 1/32" insulating washers between cylinder head and adaptor.

Valve clearance .006" and .008".

Contact breaker has no timing adjustment. Point gap .013" - .015".