

I-44 SPEEDWAY - Cast Iron Head Engine

Only V-8 engines with a minimum displacement of 350.0 cubic inches and a maximum displacement of 365.0 inches are permitted. The maximum compression ratio is 11 to 1.

Cast Iron Head Engine - ENGINE BLOCK Block must be a factory production cast iron block with external measurements identical to the standard production engine. Angle milling of block is prohibited. All engine block markings must remain. No aluminum engine blocks permitted. The maximum cylinder bore is 4.080 inches.

Cast Iron Head Engine - CRANKSHAFT and HARMONIC BALANCER Only cast iron or forged steel crankshafts are permitted. Titanium crankshafts are prohibited. Crankshafts with journal sizes less than 1.980 inches or undersized journals less than original factory specifications are prohibited. Minimum crankshaft weight is 45 lbs. lightweight, knife-edge, and undercut counterweight, crankshafts are prohibited. Steel type balancer only - aluminum balancers are prohibited. Must be stock stroke.

Cast Iron Head Engine - PISTONS AND RODS

Any flat top piston may be used. Valve reliefs may be cut into pistons. No part of the piston may protrude above the top of the block. Only magnetic steel connecting rods are permitted. Titanium rods are prohibited.

Cast Iron Head Engine - OIL PANS

Steel oil pan only. Oil pan must be equipped with a 4 inch plug for inspection. The plug must be directly in line with a rod journal. Engines equipped with a windage tray must provide a hole in the tray, in line with the plug.

Cast Iron Head Engine - CYLINDER HEADS

Only the following I-44 Speedway stock type approved cylinder heads may be used:
Manufacturer Cylinder head Intake Runner Volume Measured in cc's

GENERAL MOTORS

Part # 14011058 187 cc's

Part # 10134392 187 cc's Cast # 14011034 187 cc's

CHRYSLER CORP.

P249769 198 cc's

P452946 198 cc's

FORD

M-6049-N351 197 cc's

M-6049-E351 197 cc's

These I-44 Speedway Aftermarket Heads maybe used:

GENERAL MOTORS

Dart 10320010 or 10310010

World Products - 011250 or 011150

RHS 12319 or 12320

EQ CC200BA

Bowtie - 034

FORD

World Products - 053040 or E351 or Roush 200

RHS 35302

SVO N351 or N352

Cylinder heads must remain stock. All cylinder head markings must remain. Angle milling, chemical treating, acid dipping, acid flowing, abrasive blasting, bowl cutting, addition of material to the ports or combustion chamber, or other alterations to the original, as cast, head is prohibited. Valves, rocker studs, head bolts, and spark plugs may not be relocated. No polishing or grinding of ports or runners is permitted (combustion chamber may be polished). The cylinder head to block surface may only be machined a maximum of 0.050 inches from OEM. Minimum combustion chamber size shall be 62.0 CC's for all models. A three-angle valve job may be done as long as no machining marks are more than 1/8 inch above the head of the valve. The maximum valve sizes, as measured across the face, are as follows:

Manufacturer Intake Exhaust

GENERAL MOTORS 2.020 inches 1.600 inches

CHRYSLER CORP. 2.020 inches 1.625 inches

FORD "CLEVELAND" 2.046 inches 1.656 inches FORD "WINDSOR" 2.020 inches 1.600 inches

Use of titanium valves is prohibited. The maximum allowable spring diameter is 1.57 inches.

Cast Iron Head Engine - CAMSHAFT, VALVE LIFTERS, & ROCKER ARMS Any steel or cast-iron camshaft may be used. Camshaft journals must be stock for engine. Roller camshaft bearings are not prohibited. The maximum camshaft lift is 0.625 inches, measured at the valve. Roller tappets and rev kits **are** not permitted. Any, all steel lifter is permitted. Only steel push rods are allowed. Roller rocker arms are permitted. Maximum rocker arm ratio is 1.6 to 1. Shaft type rocker arms are permitted on Chrysler motors only. Stud girdles are permitted.

Cast Iron Head Engine - INTAKE MANIFOLD

Any readily available, production type, intake manifold is permitted. Retail cost must not exceed \$350.00. No material may be added to the manifold. Grinding or polishing of the ports is prohibited. Port matching of the intake manifold is permitted to a maximum of 1 inch. The maximum height of the manifold, as measured from the top of the cylinder block to the base of the carburetor (including adapter plate and gaskets), is 7 inches. Any 1" tall spacer or adapter is allowed. NO chamfering, tapering, or beveling of the adapter plate is permitted. Only one flat gasket, with a maximum thickness of 0.120 inches, may be used between the intake manifold and cylinder head. No spacer or wedge type gaskets are permitted between the intake manifold and head.

Cast Iron Head Engine OIL PAN

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MUST HAVE 3/4" INSPECTION HOLE ABOVE OIL LEVEL FOR INSPECTION.

Inspection hole needs to be installed in a manner were Tech officials can see crankshaft & rods for proper inspection. If not pan may be removed for inspection.