Dart (RACE SERIES)

340 Oval CNC BBC Aluminum Cylinder Head

Part# 16776010 / 16777010

Material: RMR Cast Aluminum Alloy

Comb Chambers: 121cc Intake Valve Dia: 2.250" Intake Port volume: 340 cc

Intake Port Dim: 1.810"w x 2.500"h

Int Port Location: Stock

Intake Gasket: Dart # 65123500 - .060" thick / #65123600 - .120" thick

*Must slot gasket bolt holes for port alignment

Exh Valve Dia.: 1.880" Exh Port volume: 142cc

Exhaust Port Dim: 1.950 x 1.725

Exh Port Location: Raised .400" STD bolt pattern

Exhaust Gasket: Mr. Gasket 5914

Exhaust Bolts: 1" longer than stock (4) ea.

Flow, Intake: 413 cfm @ .800" lift Flow, Exhaust: 319 cfm @ .800" lift

Head Bolts/studs: Bolts - Dart PN# 66220014 Studs - Dart PN# 66120014

Manifold: Rect. Port Dart (Port for Oval Port) 6.25" tall Milling: Min. 105cc / .080" (.005" = 1cc) Flat mill only.

Pistons: Most aftermarket pistons.

Push Rod length: Avg. +.200" / +.250" Should always measure

Stock length Int. = 8.275" / Exh = 9.250"

Push Rod Guide Plate Must only use Dart 27001230-4

Retainers: Titanium 10°

Spark Plug: .750" reach, gasketed. Autolite AR3933 Street AR3924

Spring Cups: 1.625" - .035" cup / 1.550" - .150" cup

Spring Pockets 1.740" OD for 1.625" cup (.030" deeper max)

Springs: Our Assembly: 1.550D = 195# @ 1.900'' / .650'' max

1.625D = 275# @ 2.000" / .850" max

Valve Angles: Int - 24°, Exh - 15° (Rolled 2°) 4° cant Valve Length: Int - 5.505" (+.250) Exh - 5.435" (stock)

Valve Stem Dia: .3415" - 11/32"

Valve Train: STD BBC 7/16" stud mount

Valve Guides: 1/2" OD Mag - bronze Cut for .530" PC seals (.002" press)

Valve Guide length: Int - 2.100" Exh - 2.250"

Valve Guide clearance: .0014" - .0021" (with our .3415 dia. valve stem)

Valve Guide Spacing: Exh moved .045" away from Int Valve Seats: Ductile Iron, .006" press (TIR .004)

Valve Seat dim. Int. - 2.450" x 2.000" x .375" Exh - 2.000" x 1.600" x .375"

Valve Seat angles: Int = $32^{\circ} - 45^{\circ} - 60^{\circ} - 70^{\circ} - 80^{\circ}$ Exh = $37^{\circ} - 45^{\circ}$ - radius

Stud Girdle: Must use DART design. Part# 64110001

Torque: Head Bolts = 70 ft/lb Rocker Studs = 55 ft/lb

Manifold = 35 ft/lb Dart's inner head study 3/8-7/16 = 50 ft/lb

Block Use: Mark IV, Gen V, and Gen VI with proper head gasket

Weight: 37 lbs

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