Dart RACE SERIES

360cc BBC Aluminum Cylinder Head

Part# 16500000 thru 16634136

Material: RMR Cast Aluminum Alloy Comb Chambers: 121cc or 141cc w / CNC)

Intake Valve Dia: 2.250" or 2.300"

Intake Port volume: 360 sm-366cc 360 FP-389cc

Intake Port Dim: 1.600" x 2.450" (as cast) - 1.750" x 2.500" (S/M & F/P)

Int Port Location: Stock

Intake Gasket: Mr. Gasket# 121 Exh Valve Dia.: 1.880" or 1.900"

Exh Port volume: 125cc (as cast), 128cc (S/M), 143cc (F/P)

Exhaust Port Dim: (As cast & S/M) 1.500" x 1.800"

(F/P) 1.600" x 1.900" 1.700" x 1.900"

Exh Port Location: Raised .300" STD bolt pattern

Exhaust Gasket: Fel-Pro 1412 - Mr. Gasket 5914 (F/P)

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

Flow, Intake: (360) - 377 cfm @ .750 lift/28" SM Port

(360) - 399 cfm @ .750 lift/28" Full Port

Flow, Exhaust: (S/M) 255 cfm (F/P) 280 cfm @.750 lift/28"

 Head Bolts/studs:
 Bolts - ARP# 135-3603
 Studs - ARP# 235-4103

 Manifold:
 Rect. Port Dart (opening - 1.575"x 2.250") 6.25" tall

Milling: Min. 105cc / .070'' (.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 PN# 27001230-4

Retainers: Titanium 10°

Spark Plug: .750" reach, gasketed.

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: 1.550S = 145# @1.900" / .660" max

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 inner head studs 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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