

**Dart****308cc BBC Aluminum Cylinder Head**

Part#	16200000 thru 16235146
Material:	RMR Cast Aluminum Alloy
Comb Chambers:	119cc or 139cc (121cc or 141cc w/CNC)
Intake Valve Dia:	2.250" or 2.300"
Intake Port volume:	320 SM-327cc, 320 FP-346cc
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"
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:	Super Mod (320) - 355 cfm (320) - 389 cfm @ .750 lift/28"
Flow, Exhaust:	(S/M) 255 cfm @.750 lift/28" (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 adjustable PN# 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: 1.550S = 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° - 45° - 60° - 70° - 80° Exh = 37° - 45° - 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