



## **Dart 410 Big M BBC Aluminum Cylinder Head**

<b>Part#</b>	<b>16900000 - 16935176</b>
<b>Material:</b>	<b>355-T61 alum alloy</b>
<b>Comb Chambers:</b>	<b>121cc</b>
<b>Intake Valve Dia:</b>	<b>2.350"</b>
<b>Intake port volume:</b>	<b>(SM) - Left 411cc / RT 406cc</b>
<b>Intake Port Dim:</b>	<b>2.670" x 1.730"w</b>
<b>Int Port Location:</b>	<b>Stock</b>
<b>Intake Gasket:</b>	<b>Mr. Gasket# 122 (.120" thick)</b>
<b>Exh Valve Dia.:</b>	<b>1.880"</b>
<b>Exh Port volume:</b>	<b>(SM) - 147 cc</b>
<b>Exhaust Port Dim:</b>	<b>(As cast &amp; S/M) 1.750" x 1.970"w ("D" Shape)</b>
<b>Exh Port Location:</b>	<b>Raised .300" STD bolt pattern</b>
<b>Exhaust Gasket:</b>	<b>Fel-Pro 1412 - Mr. Gasket 5914 (F/P)</b>
<b>Exhaust Bolts:</b>	<b>1" longer than stock (4) ea.</b>
<b>Head Bolts/studs:</b>	<b>Bolts – ARP# 135-3603 Studs – ARP# 235-4103</b>
<b>Flow, Intake:</b>	<b>(S/M) 414 cfm (Full polish) 432 cfm @ .850 lift/28"</b>
<b>Flow, Exhaust:</b>	<b>(S/M) - 298 cfm @ .850 lift/28"</b>
<b>Manifold:</b>	<b>Dart PN# 41125000M (10.200" x 4500")</b>
<b>Milling:</b>	<b>Min. 105cc / .070" (.005" = 1cc) Flat mill only.</b>
<b>Pistons:</b>	<b>Most aftermarket pistons.</b>
<b>Push Rod length:</b>	<b>Avg. +.200" / +.250" Should always measure Stock length Int. = 8.275" / Exh = 9.250"</b>
<b>Push Rod Guide Plate</b>	<b>Must only use Dart adjustable PN# 27001230-4</b>
<b>Retainers:</b>	<b>Titanium 10°</b>
<b>Spark Plug:</b>	<b>.750" reach, gasketed.</b>
<b>Spring Cups:</b>	<b>1.625" - .035 cup / 1.550" - ID locator</b>
<b>Spring Pockets</b>	<b>1.740" OD for 1.625" cup (.030" deeper max)</b>
<b>Springs:</b>	<b>Our Assembly: 1.625D = 275# @ 2.000" .850 P.S.I</b>
<b>Valve Angles:</b>	<b>Int - 24°, Exh - 15° (Rolled 2°) 4° cant</b>
<b>Valve Length:</b>	<b>Int - 5.575" (+.350) Exh - 5.435" (stock)</b>
<b>Valve Stem Dia:</b>	<b>.3415" - 11/32"</b>
<b>Valve Train:</b>	<b>STD BBC 7/16" stud mount</b>
<b>Valve Guides:</b>	<b>1/2" OD Mag - bronze Cut for .530" PC seals (.002" press)</b>
<b>Valve Guide length:</b>	<b>Int - 2.100" Exh - 2.250"</b>
<b>Valve Guide clearance:</b>	<b>.0014" - .0021" (with our .3415 dia. valve stem)</b>
<b>Valve Guide Spacing:</b>	<b>Exh moved .065" away from Int</b>
<b>Valve Seats:</b>	<b>Ductile Iron, .006" press (TIR .004)</b>
<b>Valve Seat dim.</b>	<b>Int. - 2.450" x 2.000" x .375" Exh - 2.000" x 1.600" x .375"</b>
<b>Valve Seat angles:</b>	<b>Int = 32° - 45° - 60° - 70° - 80° Exh = 37° - 45° - radius</b>
<b>Stud Girdle:</b>	<b>Must use DART design. Part# 64110001</b>
<b>Torque:</b>	<b>Head Bolts = 70 ft/lb Dart inner head studs 3/8-7/16 = 50 ft/lb Rocker Studs = 55 ft/lb Manifold = 35 ft/lb</b>
<b>Block Use:</b>	<b>Mark IV, Gen V, and Gen VI with proper head gasket</b>
<b>Weight:</b>	<b>37 lbs</b>