



Port Flow Analyzer v3.0 Performance World
 Test: PW BBC 90315A www.performance-world.com
 Folder: Chevrolet Page: 1

Head #: Bore Adapter Diameter: 4.00"
 Customer: Int Port Adapter: Radiused Inlet
 Operator: Exh Port Adapter: Short "stub stack"

Test Comments:
 PW 90315A BB Chevrolet aluminum head as cast. Note:

Report of:		Tested at	28"	Corr to	28.0"	# Vlvs	1	Vlv Dia	2.25"	Stem Dia	.341"	Port Area	0.00 sq in
Comparing	Int:												
1 Cylinders	Exh:		28"		28.0"		1		1.88"		.341"		0.00 sq in

Port	Lift	L/D	Avg CFM	Cyl 1 CFM	
Intake	0.100	0.044	76.9	76.9	
Intake	0.200	0.089	153.4	153.4	
Intake	0.300	0.133	266.6	266.6	
Intake	0.400	0.178	286.0	286.0	
Intake	0.500	0.222	327.7	327.7	
Intake	0.600	0.267	349.2	349.2	
Intake	0.700	0.311	356.4	356.4	
Intake	0.800	0.356	363.8	363.8	
Exhaust	0.100	0.053	70.4	70.4	
Exhaust	0.200	0.106	121.0	121.0	
Exhaust	0.300	0.159	154.2	154.2	
Exhaust	0.400	0.212	188.1	188.1	
Exhaust	0.500	0.265	217.9	217.9	
Exhaust	0.600	0.318	244.8	244.8	
Exhaust	0.700	0.371	259.7	259.7	
Exhaust	0.800	0.424	262.1	262.1	

NOTE: ALL FLOWBENCHES ARE NOT CREATED EQUAL!
Data from one bench to the next can be vastly different.
If you are modifying this head, it is important to "baseline" first to ensure accuracy.
The data on this sheet is for reference only.

Head File: 90315A
 Head Comments:
 PW 90315A BB Chevrolet aluminum head as cast.

Head Number	Customer
Intake	Exhaust
Layout: 1 valve & 1 port	Layout: 1 valve & 1 port
Valve Diameter, in 2.25"	Valve Diameter, in 1.88"
Stem Diameter, in .341"	Stem Diameter, in .341"
Throat Diameter, in	Throat Diameter, in
Avg Seat Angle, deg 45	Avg Seat Angle, deg 45
Port Shape: Rectangular	Port Shape: "D" .375" Raised
Port Volume, ccs 320cc	Port Volume, ccs 125cc
Avg Port Diameter, in	Avg Port Diameter, in
Avg Port Height, in	Avg Port Height, in
Port Length, in	Port Length, in

Specifications 90315A

Material	A356 Aluminum
Combustion Chamber CC	120cc
Intake Port Volume CC	320cc
Intake Port Dimension	2.45" x 1.75" Rectangle Port
Exhaust Port Volume CC	125cc
Exhaust Port Design	1.75" x 2.00" D Shape .375" Raised
Spark Plug Location	Straight
Intake Valve Size	2.25" (+.250" Length)
Exhaust Valve Size	1.88" (Std. Length)
Valve Stem Diameter	11/32" (.341")
Valve Spring Pocket I.D.	1.735"
Valve Spring Installed Height	1.95"-1.97"
Valve Guide Material	Manganese Bronze
Valve Guide O.D.	0.530" (.570" at base)
Rocker Stud Thread Size	7/16"x20 (.820"-1.30" u.h.l.)
Valve Cover Mounting	Perimeter
Valve Angle	24° Intake/15° Exhaust
Valve Seat Machining	Intake=4-Angle Exhaust=3-Angle
Oiling	Through Pushrod

Hydraulic Roller (up to .600" lift) (Check Cam Manufacturer Recommendation)

Installed Components	Size	Brand
Intake Valves	2.25" x 5.49" x 11/32"	PW 360025
Exhaust Valves	1.88" x 5.42" x 11/32"	PW 360019
Valve Spring		Howards 98632-16
Valve Retainers	10-Degree	Comp Cams 741-16
Valve Locks	10-Degree 11/32" (-.050")	Comp Cams 630-16
Valve Seals	11/32" x .530"	PW 360480
Valve Spring Locators		Comp Cams 4776-16
Rocker Arm Studs	7/16"-14 x 7/16"-20	PW 360372
Pushrod Guide Plates	3/8" Raised	Manley 42164-8
Spark Plugs	Autolite 3924 or equivalent	

Valves Lapped & Checked

Valve Spring Installed Height & Pressure Checked

Vacuum Tested

NOTE: Assembled cylinder heads are supplied without the pushrod guideplates and rocker studs installed as they require adjusting for proper rocker alignment and pushrod clearance. Use thread sealant where required.