

SHORT BLOCK

Short Block:	Chevy 350				
No. Cylinders:	8	Bore:	4.030 in	Rod Length:	5.700 in
Total Volume:	355.5 ci	Stroke:	3.484 in	Rod Ratio:	1.636

CYLINDER HEADS

Cylinder Heads: AirFlowResearch 190

Valve Specifications:

In take Valves/Port:	1	Exhaust Valves/Port:	1
In take Valve Dia:	2.020 in	Exhaust Valve Dia:	1.600 in

COMPRESSION

Compression Ratio:	9.80		
Combustion Space:	82.75 cc	Cylinder Volume:	728.25 cc

INDUCTION

Induction Flow:	700.0 cfm	@ 1.50 inHg	Fuel Type:	Gasoline
Manifold Type:	Tuned-Port Injection	Nitrous Injection:	0.0 lbs/min	
Forced Induction Specifications:				

Blower Type: None

Island Flow: *** cfm Surge Flow: *** cfm Pressure Ratio: ***

Impeller Speed: *** rpm Belt Ratio: *** Internal Ratio: ***

Peak Efficiency: *** % Boost Limit: *** psi Intercooler: *** %

EXHAUST

Exhaust System: Small-Tube Headers With Mufflers

CAMSHAFT

Cam Name: XFI_268_113LSA

Intake Lift At Valve: 0.570 in Lifter Type: Roller Hydraulic

Exhaust Lift At Valve: 0.565 in Lifter Acceleration Rate: 3.12 (Auto)

Valve Opening/Closing Based On: Seat-To-Seat

Primary Timing (Seat-to-Seat): IVO: 25.0 IVC: 63.0 EVO: 75.0 EVC: 21.0

Secondary Timing (0.050-inch): IVO: 1.0 IVC: 37.0 EVO: 48.0 EVC: -4.0

Cam Installed Advanced(+)/Retarded(-): 0.0

True IVO: 25.0 True EVO: 75.0

True IVC: 63.0 True ICA: 109.0 True EVC: 21.0 True ECA: 117.0

Cam Timing Summary:

Intake Duration: 268.0 Exhaust Duration: 276.0

Intake Centerline Angle: 109.0 Exhaust Centerline Angle: 117.0

Lobe Centerline Angle: 113.0 Valve Overlap: 46.0

NOTES

1.6 Rocker Ratio

CYLINDER HEAD AIRFLOW DATA

Description: AirFlowResearch 190

Intake Valve

Test Diameter: 2.020 in
 Pressure Drop: 28.0 inH2O
 Valves Per Port: 1

<u>Lift: in</u>	<u>Flow: cfm</u>
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0.050	40.0
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0.100	71.0
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0.200	144.0
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0.300	208.0
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0.400	244.0
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0.500	262.0
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0.600	261.0
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Exhaust Valve

Test Diameter: 1.600 in
 Pressure Drop: 28.0 inH2O
 Valves Per Port: 1

<u>Lift: in</u>	<u>Flow: cfm</u>
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0.050	31.0
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0.100	67.0
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0.200	121.0
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0.300	157.0
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0.400	188.0
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0.500	202.0
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0.600	211.0
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CALCULATED POWER AND ENGINE PRESSURES

Engine RPM	Power (Fly)	Torque (Fly)	Int Man Pressure	Vol Eff %	BMEP Pressure
1000	67	352	14.69	73.4	149.2
1500	118	412	14.68	79.7	174.7
2000	172	451	14.66	86.9	191.4
2500	218	458	14.62	89.6	194.2
3000	261	457	14.58	91.1	194.0
3500	301	452	14.53	91.4	191.6
4000	332	437	14.48	91.1	185.2
4500	357	416	14.43	89.9	176.7
5000	368	386	14.37	87.4	163.8
5500	359	343	14.32	83.3	145.4
6000	336	295	14.29	78.2	124.9
6500	313	253	14.28	74.3	107.2
7000	278	208	14.26	69.9	88.3
7500	242	169	14.25	65.5	71.9
8000	194	127	14.25	61.3	54.0
8500	147	91	14.26	57.0	38.4
9000	91	53	14.27	52.9	22.6
9500	33	18	14.29	49.0	7.7
10000	0	0	14.31	45.3	0.0
10500	0	0	14.33	41.8	0.0
11000	0	0	14.35	38.4	0.0
11500	0	0	14.38	35.2	0.0
12000	0	0	14.41	32.2	0.0
12500	0	0	14.43	29.5	0.0
13000	0	0	14.46	26.9	0.0
13500	0	0	14.48	24.3	0.0
14000	0	0	14.51	22.1	0.0
14500	0	0	14.53	20.0	0.0

PROTOOLS CALCULATED POWER AND ENGINE PRESSURES

Engine RPM	Power (Fly)	Indicated Power	Frictional Power	Pumping Power	Mech. Eff %	Induction Airflow	Piston Force	Piston Speed	IMEP Pressure	FMEP Pressure	PMEP Pressure
1000	67	74	7	0	90.4	75.5	2105	581	165.0	15.2	0.7
1500	118	130	11	1	90.6	123.0	2461	871	192.9	17.0	1.2
2000	172	190	17	2	90.4	178.8	2701	1161	211.8	18.7	1.7
2500	218	243	23	2	89.7	230.3	2762	1452	216.5	20.1	2.2
3000	261	294	29	4	88.9	281.2	2783	1742	218.2	21.6	2.6
3500	301	342	36	5	88.0	329.1	2776	2032	217.6	23.0	3.0
4000	332	382	44	6	86.9	374.7	2717	2323	213.0	24.5	3.4
4500	357	417	52	8	85.6	416.2	2632	2613	206.4	26.0	3.7
5000	368	438	62	9	83.9	449.8	2491	2903	195.3	27.6	3.9
5500	359	441	72	10	81.4	471.5	2278	3194	178.6	29.2	3.9
6000	336	431	84	10	78.2	482.6	2039	3484	159.8	31.1	3.8
6500	313	420	97	11	74.4	496.6	1838	3774	144.1	33.1	3.7
7000	278	400	111	11	69.4	503.1	1623	4065	127.2	35.3	3.6
7500	242	380	127	11	63.6	505.7	1441	4355	113.0	37.7	3.4
8000	194	350	145	11	55.4	504.3	1243	4645	97.4	40.3	3.1
8500	147	322	164	11	45.6	498.6	1075	4936	84.3	43.0	2.9
9000	91	287	186	10	31.8	490.0	906	5226	71.1	45.9	2.6
9500	33	251	209	10	13.0	479.0	751	5516	58.9	49.0	2.2
10000	0	218	234	9	0.0	465.7	619	5807	48.5	52.2	1.9
10500	0	176	262	7	0.0	451.3	475	6097	37.2	55.6	1.6
11000	0	134	292	6	0.0	434.2	345	6387	27.1	59.2	1.2
11500	0	89	325	4	0.0	416.5	220	6678	17.2	62.9	0.8
12000	0	49	359	2	0.0	397.8	116	6968	9.1	66.7	0.4
12500	0	8	397	0	0.0	379.8	19	7258	1.5	70.7	0.1
13000	0	0	436	0	0.0	359.4	0	7549	0.0	74.7	0.0
13500	0	0	477	0	0.0	337.6	0	7839	0.0	78.8	0.0
14000	0	0	522	0	0.0	318.8	0	8129	0.0	83.0	0.0
14500	0	0	569	0	0.0	298.7	0	8420	0.0	87.4	0.0



