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Model	intake port Vol cc	Chamber Vol cc	Valve Size Int / exh	Application
14° RACE HEADS				
Aluminum and Iron				
	230cc	47	2.080" 1.625"	short oval track, as cast, unported rules. 300 - 350cu" 600hp+
	254cc	47	2.150" 1.625"	short oval track, CNC ported. 300 - 350 cu" up to 7500rpm
	265cc	47	2.180" 1.625"	med oval track / drag, CNC ported. 350 - 400 cu" 7500rpm+
	285cc	47	2.200" 1.625"	Long oval track / drag, CNC ported. 400cu"+ 8000rpm+
	300cc	47	2.300" 1.620"	Drag race / big cube, 440cu"+ 8000rpm+
23° RAISED RUNNER-RACE				
Aluminum and Iron				
	222cc	64	2.080" 1.625"	Short oval track, as cast, 23° unported rules. 350 - 400 cu" 580hp+
	256cc	64	2.125" 1.625"	Short oval track / drag, CNC ported, 23° rules. 350 - 400 cu" 700hp+
PRO LIGHTNING				
Aluminum and Iron				
	180cc	64 & 72	2.020"	Street performance, max throttle response & torque, up to 350 cu"
	200cc	64 & 72	2.020" 1.600"	Street perf & short track, restricted oval. 327 - 350 cu" up to 6500rpm
	220cc	64 & 72	2.020" 1.600"	Max Street Performance, oval track & drag bracket, 383 - 400cu" up to 7500rpm
	235cc	64 & 72	2.125" 1.600"	Serious Race head, unlimited oval / drag. 400cu" + 8000rpm+
SBC OEM Stock Replacement				
Torker	167cc	67 - 76	1.94" / 2.02" 1.50" / 1.60"	30hp gain over std, dual rocker cover pattern. Carburettor version (can be drilled for FI)
217 / 083	167cc	64	1.940" 1.500"	Standard replacement, Fuel injection, Marine, Police, light truck, centre rocker pattern only.
906	167cc	64	1.940" 1.500"	Standard replacement, Fuel injection, '96 truck onwards.
193 / 191	167cc	64	1.940" 1.500"	Standard replacement, Fuel injection, '87 - '95, car and truck onwards.
FORD OEM Stock Replacement V6 - 4.0				
F2-4090-AO-T (90TM / 93TM)		60	1.710" 1.358"	1990 - 1995 - 4.0 Explorer, open chamber, large exhaust port.
F2-4095-BC-U (95TM / 97TM)		60	1.710" 1.358"	1995 - 1997 - Ranger, Explorer and Aerostar, closed chamber, large exhaust port.
F2-4098-CC-A (98TM)		48	1.710" 1.358"	1998 - 2000 - Ranger, Explorer and Aerostar, closed chamber, small exhaust port.
FORD OEM Stock Replacement 460				
F2-460-E7-A (E7TE)		95	1.980" 1.646"	1988 - 1992 - Open chamber, Fuel injection.
F2-460-F3-B (F3TE)		95	2.083" 1.646"	1993 - 1997 - closed chamber, Fuel injection.
CHRYSLER 360				
C2-360-A		62	1.920" 1.624"	93' up Dodge Pickup '92 (page 64?)

PART #
112 53 265 H-SDN

PRO 12° 'H'- SERIES - HIGH PORT

12° HI-PORT

WORLDS MOST POWERFUL S/B ALCOHOL HEAD

This is Pro Topline's 'H' Series head, redefining the term hi-port. Measuring 3.85" from the deck, it provides "line-of-sight" from port to piston. Combined with offset valves moved .040" to unshroud the inlet, this raises the performance level of the SBC wedge head to new heights.

With a spread port exhaust and down nozzles it is the ideal combination up to 360cu" sprint cars.

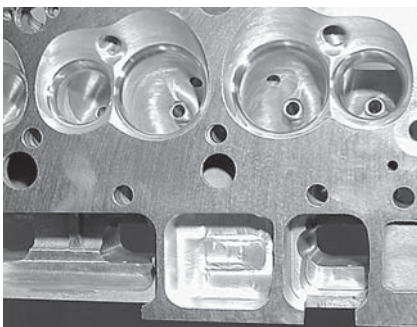
5° inlet face, -12 rocker layout.

Suggested Assembly Components

Intake Valve 2.180 x 6.260	Custom
Exhaust Valve 1.6206.280	Custom
Valve Spring Roller	221043
Retainer Titanium Pro	1043
Spring Seat Manley	42373
Valve Spring Roller ISKY	9985
Retainer Titanium Pro	9985
Spring Seat Manley	42326
Locks Manley	13083
Valve Spring Flat Tappet	22429
Retainer Titanium Pro	9985
Spring Seat	42326
Locks	13083 std
Head Gasket	1003/1034
Head Studs	See spec' section
Manifold	Hilborn
Spark Plug Suggested Starting Range only	
Below 13.5:1 Champion	C57CX
Above 13.5:1 - 15:1 Champion	C55CX
Above 15:1 Champion	C53CX
For high lift high RPM - Drag Race	
Spring Manley	22458
Retainer Manley	23669

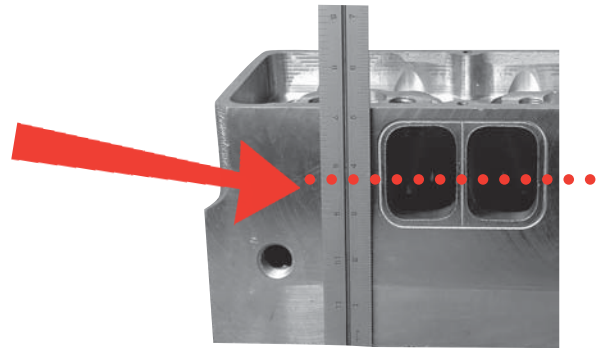
TITANIUM VALVES

As Per PRO Prints (see back of catalogue)
 Optimum Length Intake 6.260" x 5/16"
 Exhaust 6.280" x 11/32"



Aluminum
265cc
 Intake Runner

42-47cc
 Chamber



Specifications

100% CNC Ported Combustion Chambers	
100% CNC Ported Intake Ports	
100% CNC Ported Exhaust Ports	
3 Angle Valve Job	
Head Torque Settings	65-70ft lbs Short (7/16) 70-75ft lbs Long (7/16) 60ft lbs (3/8)
Rocker Stud Torque	50ft lbs
Combustion Chamber	42-47cc
(Can be angled milled to)	38cc
Spring Pocket	1.625"
Rockers .650 offset	Custom T & D
Rockers .650 offset	Custom JESEL
Valve Centers	1.935" moved .040 toward exhaust
Valve Angle	12°
Angle Mill	.0075 per cc
Flat Mill	.006 per cc
Intake Face Angle	5°
Manganese Bronze Valve Guides	
Inlet	5/16"
Exhaust	11/32"

Installed Height

Springs 221043	1.950"
Spring 22429	1.880"
Spring 9985	1.198" -2.00"

Options

Copper Beryllium seats.

Intake Valve Test Data @28" of water

.100	.200	.300	.400	.500	.600	.700
79.4	155.3	229.4	282.0	327.1	354.1	375.2

Exhaust Valve Test Data @28" of water

.100	.200	.300	.400	.500	.600	.700
55.90	112.84	165.47	312.41	241.33	258.40	270.26



PRO 12° 'H'- SERIES - HIGH PORT

PART #
112 53 285 H-SDN

WORLDS MOST POWERFUL S/B ALCOHOL HEAD

This is Pro Topline's 'H' Series head, redefining the term hi-port. Measuring 3.85" from the deck, it provides "line-of-sight" from port to piston. Combined with offset valves moved .040" to unshroud the inlet, this raises the performance level of the SBC wedge head to new heights.

With a spread port exhaust and down nozzles it is the ideal combination for 360" to 410" sprint cars.

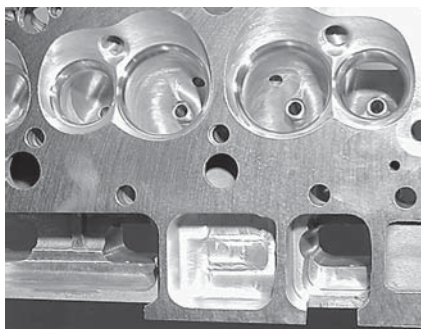
5° inlet face, -12 rocker layout.

Suggested Assembly Components

Intake Valve 2.200 x 6.260	Custom
Exhaust Valve 1.620 x 6.280	Custom
Valve Spring Roller	221043
Retainer Titanium Pro	1043
Spring Seat Manley	42373
Valve Spring Roller ISKY	9985
Retainer Titanium Pro	9985
Spring Seat Manley	42326
Locks Manley	13083
Valve Spring Flat Tappet	22429
Retainer Titanium Pro	9985
Spring Seat	42326
Locks	13083 std
Head Gasket	1003/1034
Head Studs	See spec' section
Manifold	Hilborn
Spark Plug Suggested Starting Range only	
Below 13.5:1 Champion	C57CX
Above 13.5:1 - 15:1 Champion	C55CX
Above 15:1 Champion	C53CX
For high lift high RPM - Drag Race	
Spring Manley	22458
Retainer Manley	23669

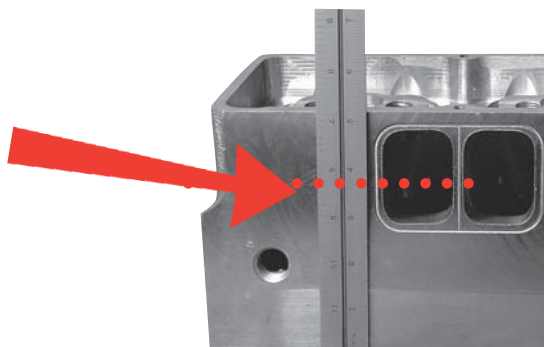
TITANIUM VALVES

As Per PRO Prints (see back of catalogue)
Optimum Length Intake 6.260" x 5/16"
Exhaust 6.280" x 11/32"



Aluminum
285cc
Intake Runner

42-47cc
Chamber



Specifications

100% CNC Ported Combustion Chambers	
100% CNC Ported Intake Ports	
100% CNC Ported Exhaust Ports	
3 Angle Valve Job	
Head Torque Settings	65-70ft lbs Short (7/16) 70-75ft lbs Long (7/16) 60ft lbs (3/8)
Rocker Stud Torque	50ft lbs
Combustion Chamber	42-47cc
(Can be angled milled to)	38cc
Spring Pocket	1.625"
Rockers .650 offset	Custom T & D
Rockers .650 offset	Custom JESEL
Valve Centers	1.935" moved .040 toward exhaust
Valve Angle	12°
Angle Mill	.0075 per cc
Flat Mill	.006 per cc
Intake Face Angle	5°
Manganese Bronze Valve Guides	
Inlet	5/16"
Exhaust	11/32"

Installed Height

Springs 221043	1.950"
Spring 22429	1.880"
Spring 9985	1.198" -2.00"

Options

Copper Beryllium seats.

Intake Valve Test Data @28" of water

.100	.200	.300	.400	.500	.600	.700	.800
73.36	160.55	237.52	301.26	349.96	380.63	393.26	399.4

Exhaust Valve Test Data @28" of water

.100	.200	.300	.400	.500	.600	.700	800
61.16	114.27	168.32	213.36	243.71	262.67	272.63	276.4

PART #
112 53 300 H-SDN

PRO 12° 'H'- SERIES - HIGH PORT

WORLDS MOST POWERFUL S/B ALCOHOL HEAD

This is Pro Topline's 'H' Series head, redefining the term hi-port. Measuring 3.85" from the deck, it provides "line-of-sight" from port to piston. Combined with offset valves moved .040" to unshroud the inlet, this raises the performance level of the SBC wedge head to new heights.

With a spread port exhaust and down nozzles it is the ideal combination for 410" sprint cars.

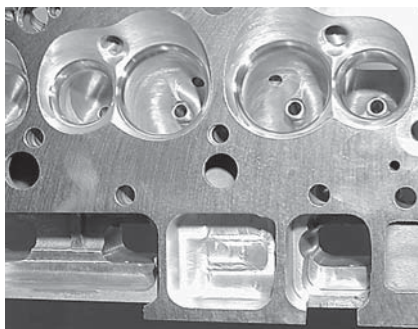
5° inlet face, -12 rocker layout.

Suggested Assembly Components

Intake Valve 2.250 x 6.260	Custom
Exhaust Valve 1.610 x 6.280	Custom
Valve Spring Roller	221043
Retainer Titanium Pro	1043
Spring Seat Manley	42373
Valve Spring Roller ISKY	9985
Retainer Titanium Pro	9985
Spring Seat Manley	42326
Locks Manley	13083
Valve Spring Flat Tappet	22429
Retainer Titanium Pro	9985
Spring Seat	42326
Locks	13083 std
Head Gasket	1003/1034
Head Studs	See spec' section
Manifold	Hilborn
Spark Plug Suggested Starting Range only	
Below 13.5:1 Champion	C57CX
Above 13.5:1 - 15:1 Champion	C55CX
Above 15:1 Champion	C53CX
For high lift high RPM - Drag Race	
Spring Manley	22458
Retainer Manley	23669

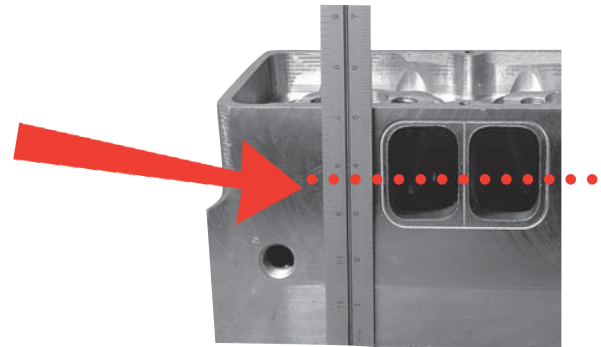
TITANIUM VALVES

As Per PRO Prints (see back of catalogue)
Optimum Length Intake 6.260" x 5/16"
Exhaust 6.280" x 11/32"



Aluminum
300cc
Intake Runner

42-47cc
Chamber



Specifications

100% CNC Ported Combustion Chambers	
100% CNC Ported Intake Ports	
100% CNC Ported Exhaust Ports	
3 Angle Valve Job	
Head Torque Settings	65-70ft lbs Short (7/16) 70-75ft lbs Long (7/16) 60ft lbs (3/8)
Rocker Stud Torque	50ft lbs
Combustion Chamber	42-47cc
(Can be angled milled to)	38cc
Spring Pocket	1.625"
Rockers .650 offset	Custom T & D
Rockers .650 offset	Custom JESEL
Valve Centers	1.935" moved .040 toward exhaust
Valve Angle	12°
Angle Mill	.0075 per cc
Flat Mill	.006 per cc
Intake Face Angle	5°
Manganese Bronze Valve Guides	
Inlet	5/16"
Exhaust	11/32"

Installed Height

Springs 221043	1.950"
Spring 22429	1.880"
Spring 9985	1.198" -2.00"

Options

Copper Beryllium seats.

Intake Valve Test Data @28" of water

.100	.200	.300	.400	.500	.600	.700	.800
79.2	161.61	234.2	298.4	352.1	383.4	398.9	412.2

Exhaust Valve Test Data @28" of water

.100	.200	.300	.400	.500	.600	.700	800
62.3	117.4	169.9	228.1	252.2	264.4	273.51	280.42



PRO 12° 'H'- SERIES - HIGH PORT

PART #
112 53 330 H-SDN

WORLDS MOST POWERFUL S/B ALCOHOL HEAD

This is Pro Topline's 'H' Series head, redefining the term hi-port. Measuring 3.85" from the deck, it provides "line-of-sight" from port to piston. Combined with offset valves moved .040" to unshroud the inlet, this raises the performance level of the SBC wedge head to new heights.

With a spread port exhaust and down nozzles it is the ideal combination for 440" to 500" sprint cars.

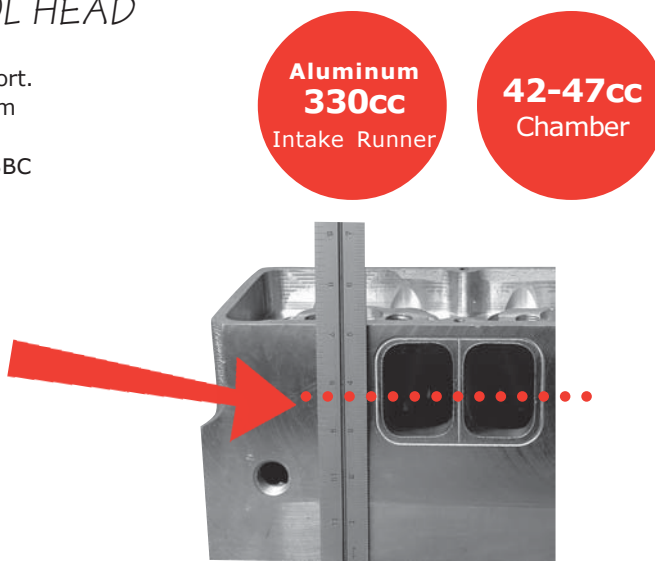
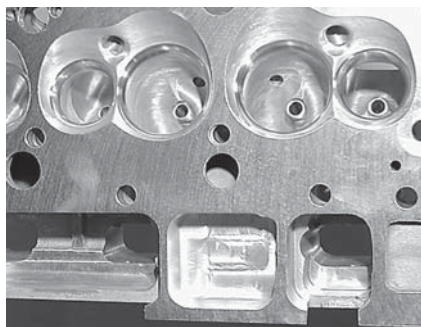
5° inlet face, -12 rocker layout.

Suggested Assembly Components

Intake Valve 2.250 x 6.260	Custom
Exhaust Valve 1.6106.280	Custom
Valve Spring Roller	221043
Retainer Titanium Pro	1043
Spring Seat Manley	42373
Valve Spring Roller ISKY	9985
Retainer Titanium Pro	9985
Spring Seat Manley	42326
Locks Manley	13083
Valve Spring Flat Tappet	22429
Retainer Titanium Pro	9985
Spring Seat	42326
Locks	13083 std
Head Gasket	1003/1034
Head Studs	See spec' section
Manifold	Hilborn
Manifold	Pro Release Dec 2002
Spark Plug Suggested Starting Range only	
Below 13.5:1 Champion	C57CX
Above 13.5:1 - 15:1 Champion	C55CX
Above 15:1 Champion	C53CX
For high lift high RPM - Drag Race	
Spring Manley	22458
Retainer Manley	23669

TITANIUM VALVES

As Per PRO Prints (see back of catalogue)
Optimum Length Intake 6.260" x 5/16"
Exhaust 6.280" x 11/32"



Specifications

100% CNC Ported Combustion Chambers	
100% CNC Ported Intake Ports	
100% CNC Ported Exhaust Ports	
3 Angle Valve Job	
Head Torque Settings	65-70ft lbs Short (7/16) 70-75ft lbs Long (7/16)
	60ft lbs (3/8)
Rocker Stud Torque	50ft lbs
Combustion Chamber	42-47cc
(Can be angled milled to)	38cc
Spring Pocket	1.625"
Rockers .650 offset	Custom T & D
Rockers .650 offset	Custom JESEL
Valve Centers	1.935" moved .040 toward exhaust
Valve Angle	12°
Angle Mill	.0075 per cc
Flat Mill	.006 per cc
Intake Face Angle	5°
Manganese Bronze Valve Guides	
Inlet	5/16"
Exhaust	11/32"

Installed Height

Springs 221043	1.950"
Spring 22429	1.880"
Spring 9985	1.198" -2.00"

Options

Copper Beryllium seats.

Intake Valve Test Data @28" of water

.100	.200	.300	.400	.500	.600	.700	.800
72.1	1662.4	239.1	312.1	362.4	391.1	415.9	426.4

Exhaust Valve Test Data @28" of water

.100	.200	.300	.400	.500	.600	.700	800
61.59	115.53	167.1	226.3	251.9	264.1	275.4	282.1

PART #
114 53 265 V-SDN

PRO 14° 'V'- SERIES - OFFSET VALVE

14° OFFSET VALVE

WORLDS MOST POWERFUL S/B ALCOHOL HEAD

This exciting new 14° evolution head uses existing manifolds but introduces a new level of performance. both the inlet and exhaust valves are offset .040" toward the exhaust. This unshrouds the inlet to unleash even greater HP potential.

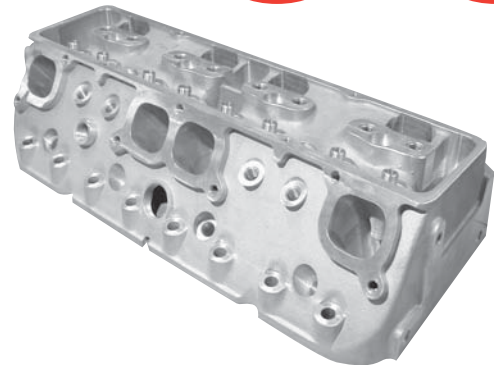
Suits 358-400 cubic inch engines 1/4 - 5/8 mile ovals, provides fantastic acceleration and throttle response.

Uses -12 rocker layout, 10° inlet face.

265cc runner 2.180" inlet 1.620" exhaust.

Aluminum
265cc
 Intake Runner

42-47cc
 Chamber



Suggested Assembly Components

Intake Valve 2.180 + .700 long	22507
2.200 option + .700 long Pro	22007
Exhaust Valve 1.620 + .700 long	16257
Valve Spring Roller Manley	221043
Retainer Titanium Pro	1043
Spring Seat Manley	42373
Valve Spring Roller ISKY	9985
Retainer Titanium Pro	9985
Spring Seat Manley	42326
Locks Manley	13083
Valve Spring Flat Tappet	22429
Retainer Titanium Pro	9985
Spring Seat	42326
Locks	13083 std
Intake Gasket Pro	M14001G-060
Head Gasket	1003/1034
Head Studs ARP	234 4334
Manifold	Hilborne/Kinsler
Spark Plug Suggested Starting Range only	
Below 13.5:1 Champion	C57CX
Above 13.5:1 - 15:1 Champion	C55CX
Above 15:1 Champion	C53CX
For high lift high RPM - Drag Race	
Spring Manley	22458
Retainer Manley	23669

Specifications

100% CNC Ported Combustion Chambers	
100% CNC Ported Intake Ports	
100% CNC Ported Exhaust Ports	
3 Angle Valve Job	
Head Torque Settings	65-70ft lbs Short (7/16)
	70-75ft lbs Long (7/16)
	60ft lbs (3/8)
Rocker Stud Torque	50ft lbs
Combustion Chamber	42-47cc
(Can be angled milled to)	38cc
Spring Pocket Can be cut to 1.625, no deeper	
Rockers .650 offset	Custom T & D
Rockers .650 offset	Custom JESEL
Note: Both valves offset .040" toward the exhaust	
Valve Centers	1.935"
Valve Angle	14°
Angle Mill	.0075 per cc
Flat Mill	.006 per cc
Intake Face Angle	5°
Manganese Bronze Valve Guides	

TITANIUM VALVES

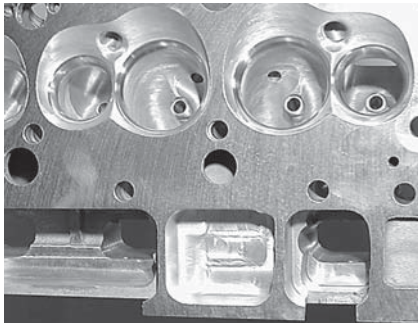
As Per PRO Prints (see back of catalogue)
 Optimum Length Intake 5.640"
 Exhaust 5.660"

Installed Height

Springs 221043	1.950"
Spring 22429	1.880"
Spring 9985	1.198" -2.00"

Options

Available with 5/16" inlet guides on request.
 Copper Beryllium seats



Intake Valve Test Data @28" of water

.100	.200	.300	.400	.500	.600	.700
79.70	154.92	225.21	281.63	325.06	352.82	374.76

Exhaust Valve Test Data @28" of water

.100	.200	.300	.400	.500	.600	.700
67.26	119.04	188.82	229.24	251.97	266.18	274.08



PRO 14° 'V'- SERIES - OFFSET VALVE

PART #
114 62 265 V-SDN

WORLDS MOST POWERFUL S/B ALCOHOL HEAD

This exciting new 14° evolution head uses existing manifolds but introduces a new level of performance. both the inlet and exhaust valves are offset .040" toward the exhaust. This unshrouds the inlet to unleash even greater HP potential.

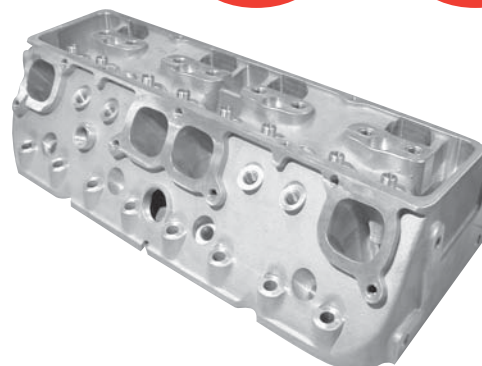
Suits 358-400 cubic inch engines 1/4 - 5/8 mile ovals, provides fantastic acceleration and throttle response.

Uses 18° style rockers, 5° inlet face.

265cc runner 2.180" inlet 1.620" exhaust.

Aluminum
265cc
Intake Runner

42-47cc
Chamber



Suggested Assembly Components

Intake Valve 2.180 + .700 long	21807
2.200 option + .700 long Pro	22007
Exhaust Valve 1.620 + .700 long	16257
Valve Spring Roller Manley	221043
Retainer Titanium Pro	1043
Spring Seat Manley	42373
Valve Spring Roller ISKY	9985
Retainer Titanium Pro	9985
Spring Seat Manley	42326
Locks Manley	13083
Valve Spring Flat Tappet	22429
Retainer Titanium Pro	9985
Spring Seat	42326
Locks	13083 std
Intake Gasket Pro	M14001G-060
Head Gasket	1003/1034
Head Studs ARP	234 4334
Manifold	Hilborne/Kinsler
Manifold	Pro Release Dec 2002
Spark Plug Suggested Starting Range only	
Below 13.5:1 Champion	C57CX
Above 13.5:1 - 15:1 Champion	C55CX
Above 15:1 Champion	C53CX
For high lift high RPM - Drag Race	
Spring Manley	22458
Retainer Manley	23669

Specifications

100% CNC Ported Combustion Chambers	
100% CNC Ported Intake Ports	
100% CNC Ported Exhaust Ports	
3 Angle Valve Job	
Head Torque Settings	65-70ft lbs Short (7/16)
	70-75ft lbs Long (7/16)
	60ft lbs (3/8)
Rocker Stud Torque	50ft lbs
Combustion Chamber	42-47cc
(Can be angled milled to)	38cc
Spring Pocket Can be cut to 1.625, no deeper	
Rockers .650 offset	Custom T & D
Rockers .650 offset	Custom JESEL
Note: Both valves offset .040" toward the exhaust	
Valve Centers	1.935"
Valve Angle	14°
Angle Mill	.0075 per cc
Flat Mill	.006 per cc
Intake Face Angle	5°
Manganese Bronze Valve Guides	

Installed Height

Springs 221043	1.950"
Spring 22429	1.880"
Spring 9985	1.198" -2.00"

Options

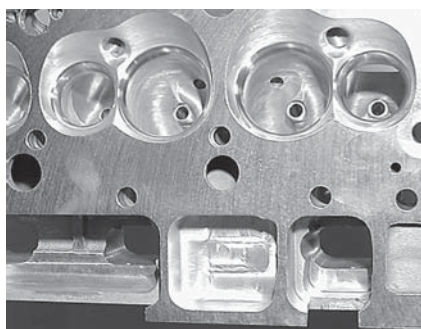
Available with 5/16" inlet guides on request.
Copper Beryllium seats

TITANIUM VALVES

As Per PRO Prints (see back of catalogue)

Optimum Length Intake 5.640"

Exhaust 5.660"



Intake Valve Test Data @28" of water

.100	.200	.300	.400	.500	.600	.700
79.70	154.92	225.21	281.63	325.06	352.82	374.76

Exhaust Valve Test Data @28" of water

.100	.200	.300	.400	.500	.600	.700
67.26	119.04	188.82	229.24	251.97	266.18	274.08

PART #
114 63 265 V-SDN

PRO 14° 'V'- SERIES - OFFSET VALVE

WORLDS MOST POWERFUL S/B ALCOHOL HEAD

This exciting new 14° evolution head uses existing manifolds but introduces a new level of performance. both the inlet and exhaust valves are offset .040" toward the exhaust. This unshrouds the inlet to unleash even greater HP potential.

Suits 358-400 cubic inch engines 1/4 - 5/8 mile ovals, provides fantastic acceleration and throttle response.

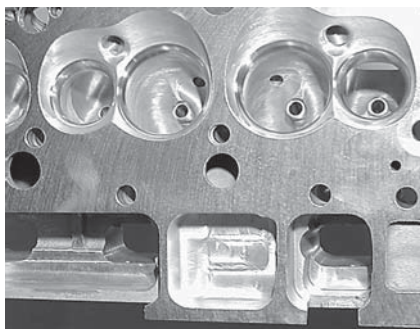
Uses -12 rocker layout, 5° inlet face.
 265cc runner 2.180" inlet 1.620" exhaust.

Suggested Assembly Components

Intake Valve 2.180 + .700 long	21807
2.200 option + .700 long Pro	22007
Exhaust Valve 1.620 + .700 long	16207
Valve Spring Roller Manley	221043
Retainer Titanium Pro	1043
Spring Seat Manley	42373
Valve Spring Roller ISKY	9985
Retainer Titanium Pro	9985
Spring Seat Manley	42326
Locks Manley	13083
Valve Spring Flat Tappet	22429
Retainer Titanium Pro	9985
Spring Seat	42326
Locks	13083 std
Intake Gasket Pro	M14001G-060
Head Gasket	1003/1034
Head Studs ARP	234 4334
Manifold	Hilborne/Kinsler
Spark Plug Suggested Starting Range only	
Below 13.5:1 Champion	C57CX
Above 13.5:1 - 15:1 Champion	C55CX
Above 15:1 Champion	C53CX
For high lift high RPM - Drag Race	
Spring Manley	22458
Retainer Manley	23669

TITANIUM VALVES

As Per PRO Prints (see back of catalogue)
 Optimum Length Intake 5.640"
 Exhaust 5.660"



Aluminum
265cc
 Intake Runner

42-47cc
 Chamber



Specifications

100% CNC Ported Combustion Chambers	
100% CNC Ported Intake Ports	
100% CNC Ported Exhaust Ports	
3 Angle Valve Job	
Head Torque Settings	65-70ft lbs Short (7/16) 70-75ft lbs Long (7/16) 60ft lbs (3/8)
Rocker Stud Torque	50ft lbs
Combustion Chamber	42-47cc
(Can be angled milled to)	38cc
Spring Pocket Can be cut to 1.625, no deeper	
Rockers .650 offset	Custom T & D
Rockers .650 offset	Custom JESEL
Note: Both valves offset .040" toward the exhaust	
Valve Centers	1.935"
Valve Angle	14°
Angle Mill	.0075 per cc
Flat Mill	.006 per cc
Intake Face Angle	5°
Manganese Bronze Valve Guides	

Installed Height

Springs 221043	1.950"
Spring 22429	1.880"
Spring 9985	1.198" -2.00"

Options

Available with 5/16" inlet guides on request.
 Copper Beryllium seats

Intake Valve Test Data @28" of water

.100	.200	.300	.400	.500	.600	.700
79.70	154.92	225.21	281.63	325.06	352.82	374.76

Exhaust Valve Test Data @28" of water

.100	.200	.300	.400	.500	.600	.700
67.26	119.04	188.82	229.24	251.97	266.18	274.08



PRO 14° 'V'- SERIES - OFFSET VALVE

PART #
114 53 285 V-SDN

WORLDS MOST POWERFUL S/B ALCOHOL HEAD

This exciting new 14° evolution head uses existing manifolds but introduces a new level of performance. both the inlet and exhaust valves are offset .040" toward the exhaust. This unshrouds the inlet to unleash even greater HP potential.

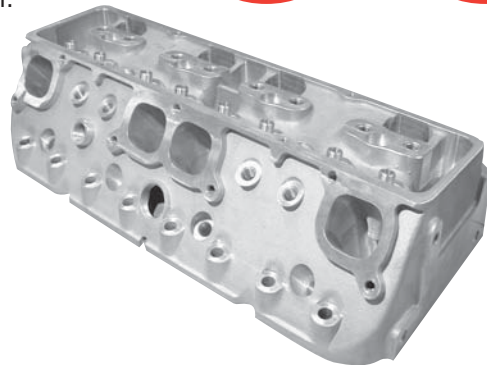
Ideal on 410 cubic inch engines 1/2 - 5/8 mile oval track at high RPM.

Uses -12 style rockers, 10° inlet face.

285cc runner **2.200" inlet** 1.620" exhaust.

Aluminum
285cc
Intake Runner

42-47cc
Chamber



Suggested Assembly Components

Intake Valve 2.200 + .700 long	22007
Exhaust Valve 1.620 + .700 long	16207
Valve Spring Roller Manley	221043
Retainer Titanium Pro	1043
Spring Seat Manley	42373
Valve Spring Roller ISKY	9985
Retainer Titanium Pro	9985
Spring Seat Manley	42326
Locks Manley	13083
Valve Spring Flat Tappet	22429
Retainer Titanium Pro	9985
Spring Seat	42326
Locks	13083 std
Intake Gasket Pro	M14001G-060
Head Gasket	1003/1034
Head Studs ARP	234 4334
Manifold	Hilborne/Kinsler
Spark Plug Suggested Starting Range only	
Below 13.5:1 Champion	C57CX
Above 13.5:1 - 15:1 Champion	C55CX
Above 15:1 Champion	C53CX
For high lift high RPM - Drag Race	
Spring Manley	22458
Retainer Manley	23669

Specifications

100% CNC Ported Combustion Chambers	
100% CNC Ported Intake Ports	
100% CNC Ported Exhaust Ports	
3 Angle Valve Job	
Head Torque Settings	65-70ft lbs Short (7/16)
	70-75ft lbs Long (7/16)
	60ft lbs (3/8)
Rocker Stud Torque	50ft lbs
Combustion Chamber	42-47cc
(Can be angled milled to)	38cc
Spring Pocket Can be cut to 1.625, no deeper	
Rockers .650 offset	Custom T & D
Rockers .650 offset	Custom JESEL
Note: Both valves offset .040" toward the exhaust	
Valve Centers	1.935"
Valve Angle	14°
Angle Mill	.0075 per cc
Flat Mill	.006 per cc
Intake Face Angle	10°
Manganese Bronze Valve Guides	

TITANIUM VALVES

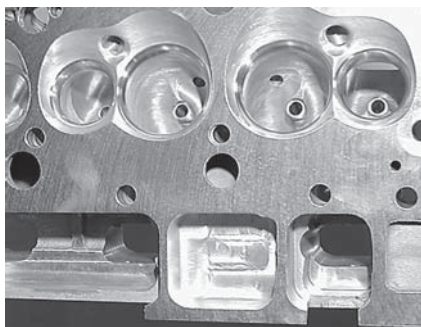
As Per PRO Prints (see back of catalogue)
Optimum Length Intake 5.640"
Exhaust 5.660"

Installed Height

Springs 221043	1.950"
Spring 22429	1.880"
Spring 9985	1.198" -2.00"

Options

Available with 5/16" inlet guides on request.
Copper Beryllium seats



Intake Valve Test Data @28" of water

.100	.200	.300	.400	.500	.600	.700	.800
76.56	158.60	230.59	298.64	343.87	373.42	393.57	396.2

Exhaust Valve Test Data @28" of water

.100	.200	.300	.400	.500	.600	.700	.800
61.16	117.11	172.59	220.00	251.29	265.52	275.95	276.8

PART #
114 62 285 V-SDN

PRO 14° 'V'- SERIES - OFFSET VALVE

WORLDS MOST POWERFUL S/B ALCOHOL HEAD

This exciting new 14° evolution head uses existing manifolds but introduces a new level of performance. both the inlet and exhaust valves are offset .040" toward the exhaust. This unshrouds the inlet to unleash even greater HP potential.

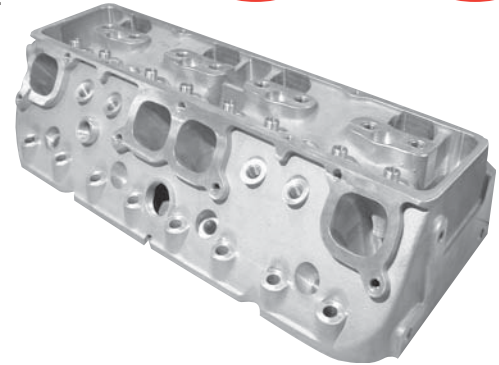
Ideal on 410 cubic inch engines 1/2 - 5/8 mile oval track at high RPM.

Uses 18° style rockers, 5° inlet face.

285cc runner **2.200" inlet** 1.620" exhaust.

Aluminum
285cc
Intake Runner

42-47cc
Chamber



Suggested Assembly Components

Intake Valve 2.200 + .700 long	22007
Exhaust Valve 1.620 + .700 long	16207
Valve Spring Roller Manley	221043
Retainer Titanium Pro	1043
Spring Seat Manley	42373
Valve Spring Roller ISKY	9985
Retainer Titanium Pro	9985
Spring Seat Manley	42326
Locks Manley	13083
Valve Spring Flat Tappet	22429
Retainer Titanium Pro	9985
Spring Seat	42326
Locks	13083 std
Intake Gasket Pro	M14001G-060
Head Gasket	1003/1034
Head Studs ARP	234 4334
Manifold	Hilborne/Kinsler
Spark Plug Suggested Starting Range only	
Below 13.5:1 Champion	C57CX
Above 13.5:1 - 15:1 Champion	C55CX
Above 15:1 Champion	C53CX
For high lift high RPM - Drag Race	
Spring Manley	22458
Retainer Manley	23669

Specifications

100% CNC Ported Combustion Chambers	
100% CNC Ported Intake Ports	
100% CNC Ported Exhaust Ports	
3 Angle Valve Job	
Head Torque Settings	65-70ft lbs Short (7/16)
	70-75ft lbs Long (7/16)
	60ft lbs (3/8)
Rocker Stud Torque	50ft lbs
Combustion Chamber	42-47cc
(Can be angled milled to)	38cc
Spring Pocket Can be cut to 1.625, no deeper	
Rockers .650 offset	Custom T & D
Rockers .650 offset	Custom JESEL
Note: Both valves offset .040" toward the exhaust	
Valve Centers	1.935"
Valve Angle	14°
Angle Mill	.0075 per cc
Flat Mill	.006 per cc
Intake Face Angle	5°
Manganese Bronze Valve Guides	

TITANIUM VALVES

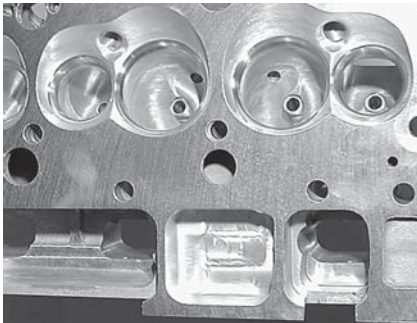
As Per PRO Prints (see back of catalogue)
Optimum Length Intake 5.640"
Exhaust 5.660"

Installed Height

Springs 221043	1.950"
Spring 22429	1.880"
Spring 9985	1.198" -2.00"

Options

Available with 5/16" inlet guides on request.
Copper Beryllium seats



Intake Valve Test Data @28" of water

.100	.200	.300	.400	.500	.600	.700	.800
76.56	158.60	230.59	298.64	343.87	373.42	393.57	396.2

Exhaust Valve Test Data @28" of water

.100	.200	.300	.400	.500	.600	.700	.800
61.16	117.11	172.59	220.00	251.29	265.52	275.95	276.8



PRO 14° 'V'- SERIES - OFFSET VALVE

PART #
114 63 285 V-SDN

WORLDS MOST POWERFUL S/B ALCOHOL HEAD

This exciting new 14° evolution head uses existing manifolds but introduces a new level of performance. Both the inlet and exhaust valves are offset .040" toward the exhaust. This unshrouds the inlet to unleash even greater HP potential.

Ideal on 410 cubic inch engines 1/2 - 5/8 mile oval track at high RPM.

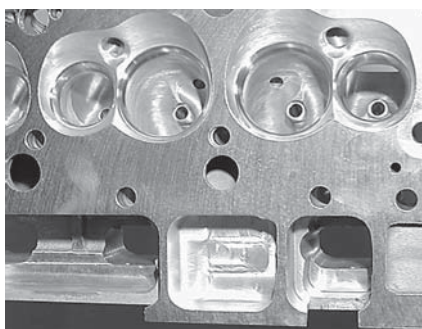
Uses -12 style rockers, 5° inlet face.
285cc runner **2.200" inlet** 1.620" exhaust.

Suggested Assembly Components

Intake Valve 2.200 + .700 long	22007
Exhaust Valve 1.620 + .700 long	16207
Valve Spring Roller Manley	221043
Retainer Titanium Pro	1043
Spring Seat Manley	42373
Valve Spring Roller ISKY	9985
Retainer Titanium Pro	9985
Spring Seat Manley	42326
Locks Manley	13083
Valve Spring Flat Tappet	22429
Retainer Titanium Pro	9985
Spring Seat	42326
Locks	13083 std
Intake Gasket Pro	M14001G-060
Head Gasket	1003/1034
Head Studs ARP	234 4334
Manifold	Hilborne/Kinsler
Spark Plug Suggested Starting Range only	
Below 13.5:1 Champion	C57CX
Above 13.5:1 - 15:1 Champion	C55CX
Above 15:1 Champion	C53CX
For high lift high RPM - Drag Race	
Spring Manley	22458
Retainer Manley	23669

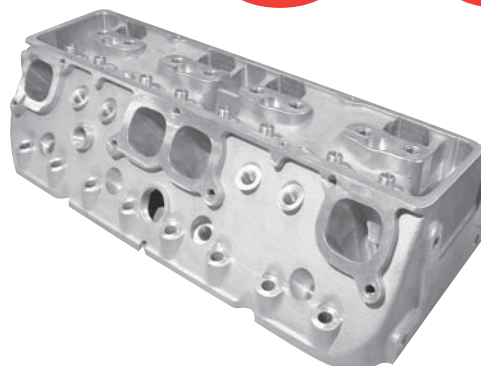
TITANIUM VALVES

As Per PRO Prints (see back of catalogue)
Optimum Length Intake 5.640"
Exhaust 5.660"



Aluminum
285cc
Intake Runner

42-47cc
Chamber



Specifications

100% CNC Ported Combustion Chambers	
100% CNC Ported Intake Ports	
100% CNC Ported Exhaust Ports	
3 Angle Valve Job	
Head Torque Settings	65-70ft lbs Short (7/16)
	70-75ft lbs Long (7/16)
	60ft lbs (3/8)
Rocker Stud Torque	50ft lbs
Combustion Chamber	42-47cc
(Can be angled milled to)	38cc
Spring Pocket Can be cut to 1.625, no deeper	
Rockers .650 offset	Custom T & D
Rockers .650 offset	Custom JESEL
Note: Both valves offset .040" toward the exhaust	
Valve Centers	1.935"
Valve Angle	14°
Angle Mill	.0075 per cc
Flat Mill	.006 per cc
Intake Face Angle	5°
Manganese Bronze Valve Guides	

Installed Height

Springs 221043	1.950"
Spring 22429	1.880"
Spring 9985	1.198" -2.00"

Options

Available with 5/16" inlet guides on request.
Copper Beryllium seats

Intake Valve Test Data @28" of water

.100	.200	.300	.400	.500	.600	.700	.800
76.56	158.60	230.59	298.64	343.87	373.42	393.57	396.2

Exhaust Valve Test Data @28" of water

.100	.200	.300	.400	.500	.600	.700	.800
61.16	117.11	172.59	220.00	251.29	265.52	275.95	276.8

PART #
114 53 265 SDN

PRO 14° OUTLAW SPRINT CAR HEAD

14° SPRINT CAR

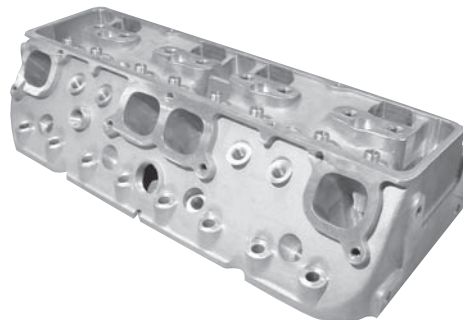
WORLDS MOST POWERFUL S/B SPRINT CAR HEAD

Bolt on -12 Brodix Replacement

This head has all the superior features of the PRO 14° cylinder head but has been made with the Spread Port exhaust pattern, **10° inlet face angle, -12 rocker** position.

This fantastic sprint car head suits 358-400 cubic inch engines and provides tremendous acceleration, excellent for 1/4 - 3/8 mile oval track.

Aluminum
265cc
Intake Runner



Suggested Assembly Components

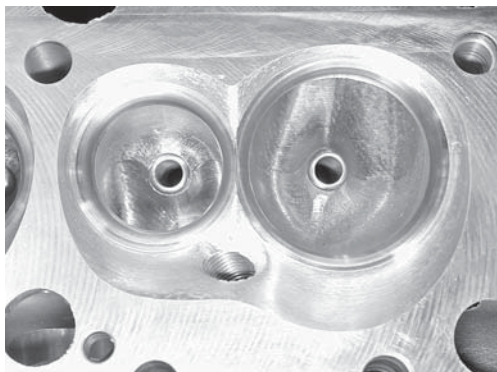
Intake Valve 2.180 +.700 long Pro	21807
2.200 option +.700 long Pro	22007
Exhaust Valve 1.625 +.700 long Pro	16257
Valve Spring Roller Manley	221043
Retainer Titanium Pro	1043
Spring Seat Manley	42373
Valve Spring Roller ISKY	9985
Retainer Titanium Pro	9985
Spring Seat Manley	42326
Locks Manley	13083
Valve Spring Flat Tappet	22429
Retainer Titanium Pro	9985
Spring Seat	42326
Locks	13083 std
Intake Gasket Pro	M14001-12G060
Head Gasket	1003/1034
Head Studs ARP	234 4334
Manifold	Hilborne/Kinsler
Spark Plug Suggested Starting Range only	
Below 13.5:1 Champion	C57CX
Above 13.5:1 - 15:1 Champion	C55CX
Above 15:1 Champion	C53CX
For high lift high RPM - Drag Race	
Spring Manley	22458
Retainer Manley	23669
Seat Manley	42374

Specifications

100% CNC Ported Combustion Chambers	
100% CNC Ported Intake Ports	
100% CNC Ported Exhaust Ports	
3 Angle Valve Job	
Head Torque Settings	65-70ft lbs Short (7/16)
	70-75ft lbs Long (7/16)
	60ft lbs (3/8)
Rocker Stud Torque	50ft lbs
Combustion Chamber	42-47cc
(Can be angled milled to)	36cc
Spring Pocket Can be cut to 1.625, no deeper	
Rockers .550 offset	T & D 2055
Rockers .550 offset	JESEL -12
Valve Centers	1.935"
Valve Angle	14°
Angle Mill	.0075 per cc
Flat Mill	.006 per cc
Intake Face Angle	10°
Manganese Bronze Valve Guides	

TITANIUM VALVES

As Per PRO Prints (see back of catalogue)
Optimum Length Intake 5.640"
Exhaust 5.660"



Installed Height

Spring 221043	1.950"
Spring 22429	1.880"
Spring 9985	1.198" -2.00"

Options

2.200" Intake Valve
Copper Beryllium seats

Intake Valve Test Data @28" of water

.100	.200	.300	.400	.500	.600	.700
79.70	154.92	225.21	281.63	325.06	352.82	374.76

Exhaust Valve Test Data @28" of water

.100	.200	.300	.400	.500	.600	.700
55.00	112.84	164.47	212.41	241.33	258.40	270.26



PRO 14° OUTLAW SPRINT CAR HEAD

PART #
114 62 265 SDN

WORLDS MOST POWERFUL S/B SPRINTCAR HEAD

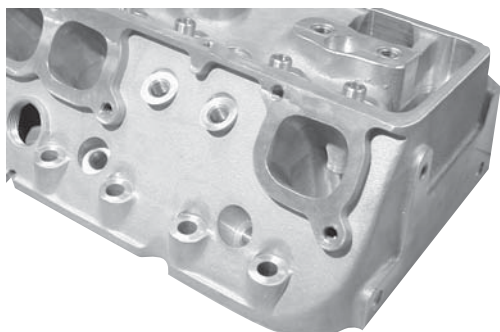
This head has all the superior features of the PRO 14° cylinder head but has been made with the Spread Port exhaust pattern, **5° inlet face angle 18° rocker** position with down nozzle. This allows the use of 18° style injection manifolds. This fantastic sprint car head suits 358-400 cubic inch engines and provides tremendous acceleration excellent for 1/4-3/8 mile oval track.

Suggested Assembly Components

Intake Valve 2.180 +.700 long Pro	21807
2.200 option +.700 long Pro	22007
Exhaust Valve 1.625 +.700 long Pro	16257
Valve Spring Roller Manley	221043
Retainer Titanium Pro	1043
Spring Seat Manley	42373
Valve Spring Roller ISKY	9985
Retainer Titanium Pro	9985
Spring Seat Manley	42326
Locks Manley	13083
Valve Spring Flat Tappet	22429
Retainer Titanium Pro	9985
Spring Seat	42326
Locks	13083 std
Intake Gasket Pro	M14001-G060
Head Gasket	1003/1034
Head Studs ARP	234 4334
Manifold	Hilborne/Kinsler
Spark Plug Suggested Starting Range only	
Below 13.5:1 Champion	C57CX
Above 13.5:1 - 15:1 Champion	C55CX
Above 15:1 Champion	C53CX
For high lift high RPM - Drag Race	
Spring Manley	22458
Retainer Manley	23669
Seat Manley	42374

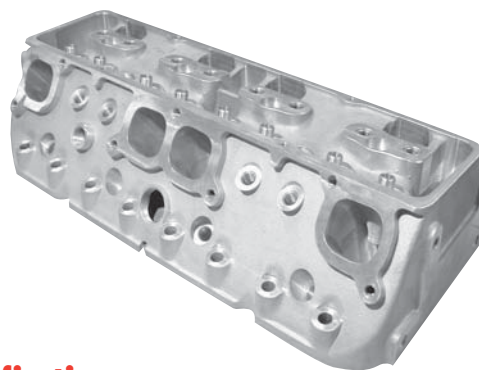
TITANIUM VALVES

As Per PRO Prints (see back of catalogue)
Optimum Length Intake 5.640"
Exhaust 5.660"



Aluminum
265cc
Intake Runner

42-47cc
Chamber



Specifications

100% CNC Ported Combustion Chambers	
100% CNC Ported Intake Ports	
100% CNC Ported Exhaust Ports	
3 Angle Valve Job	
Head Torque Settings	65-70ft lbs Short (7/16) 70-75ft lbs Long (7/16) 60ft lbs (3/8)
Rocker Stud Torque	50ft lbs
Combustion Chamber	42-47cc
(Can be angled milled to)	36cc
Spring Pocket Can be cut to 1.625, no deeper	
Rockers .550 offset	T & D 18° 2055
Rockers .550 offset	JESEL 18° kra-10742
Valve Centers	1.935"
Valve Angle	14°
Angle Mill	.0075 per cc
Flat Mill	.006 per cc
Intake Face Angle	5°
Manganese Bronze Valve Guides	

Installed Height

Spring 221043	1.950"
Spring 22429	1.880"
Spring 9985	1.198" -2.00"

Options

2.200" Intake Valve
Copper Beryllium seats

Intake Valve Test Data @28" of water

.100	.200	.300	.400	.500	.600	.700
79.70	154.92	225.21	281.63	325.06	352.82	374.76

Exhaust Valve Test Data @28" of water

.100	.200	.300	.400	.500	.600	.700
55.00	112.84	165.47	212.41	241.33	258.40	270.26

PART #
114 53 285 SDN

PRO 14° OUTLAW SPRINT CAR HEAD

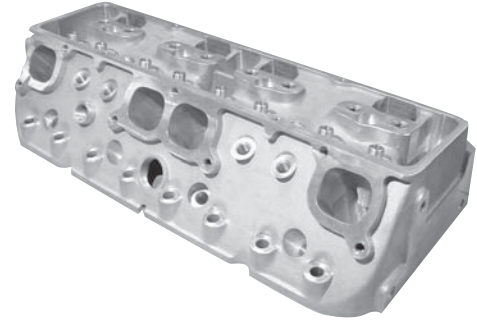
WORLDS MOST POWERFUL S/B SPRINT CAR HEAD

-12 Brodix replacement

This head has all the superior features of the PRO 14° cylinder head but has been made with the Spread Port Exhaust pattern, **10° inlet face angle -12 Rocker** position & down nozzle to make an easy interchange to the most powerful sprint car head on the market today. Ideal on 410 cu in engine 1/2 - 5/8 mile high RPM. Works better on 4.200" bore. 285cc runner **2.200" valve.**

Aluminum
285cc
Intake Runner

42-47cc
Chamber

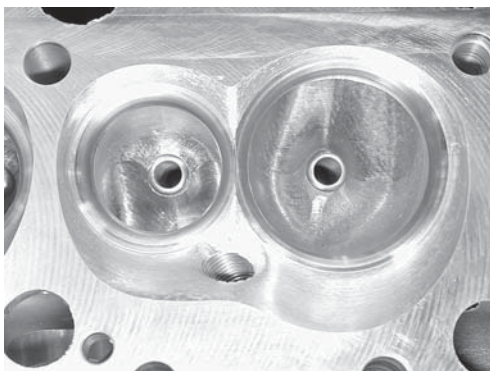


Suggested Assembly Components

Intake Valve 2.200 +.700 long Pro	22007
Exhaust Valve 1.625 +.700 long Pro	16257
Valve Spring Roller Manley	221043
Retainer Titanium Pro	1043
Spring Seat Manley	42373
Valve Spring Roller ISKY	9985
Retainer Titanium Pro	9985
Spring Seat Manley	42326
Locks Manley	13083
Valve Spring Flat Tappet	22429
Retainer Titanium Pro	9985
Spring Seat	42326
Locks	13083 std
Intake Gasket Pro	M14001G-12G060
Head Gasket	1003/1034
Head Studs ARP	234 4334
Manifold	Hilborne/Kinsler
Spark Plug Suggested Starting Range only	
Below 13.5:1 Champion	C57CX
Above 13.5:1 - 15:1 Champion	C55CX
Above 15:1 Champion	C53CX
For high lift high RPM - Drag Race	
Spring Manley	22458
Retainer Manley	23669
Seat Manley	42374

TITANIUM VALVES

As Per PRO Prints (see back of catalogue)
Optimum Length Intake 5.640"
Exhaust 5.660"



Specifications

100% CNC Ported Combustion Chambers	
100% CNC Ported Intake Ports	
100% CNC Ported Exhaust Ports	
3 Angle Valve Job	
Head Torque Settings	65-70ft lbs Short (7/16)
	70-75ft lbs Long (7/16)
	60ft lbs (3/8)
Rocker Stud Torque	50ft lbs
Combustion Chamber	42-47cc
(Can be angled milled to)	38cc
Spring Pocket Can be cut to 1.625, no deeper	
Rockers .550 offset	T & D -12
Rockers .550 offset	JESEL -12
Note: Exhaust rocker offset .030"	
Valve Centers	1.965"
Valve Angle	14°
Angle Mill	.0075 per cc
Flat Mill	.006 per cc
Intake Face Angle	10°
Manganese Bronze Valve Guides	

Installed Height

Spring 221043	1.950"
Spring 22429	1.880"
Spring 9985	1.198" -2.00"

Options

Copper Beryllium seats

Intake Valve Test Data @28" of water

.100	.200	.300	.400	.500	.600	.700
72.53	150.89	228.35	293.27	338.94	370.28	398.94

Exhaust Valve Test Data @28" of water

.100	.200	.300	.400	.500	.600	.700
59.27	126.12	172.11	217.63	250.82	264.57	274.08



PRO 14° OUTLAW SPRINT CAR HEAD

PART #
114 53 585 SDN

WORLDS MOST POWERFUL S/B SPRINT CAR HEAD

-12 Brodix replacement

This head has all the superior features of the PRO 14° cylinder head but has been made with the Spread Port Exhaust pattern, **10° inlet face angle -12 Rocker** position & down nozzle to make an easy interchange to the most powerful sprint car head on the market today. Ideal on 410 cu in engine 1/2 - 5/8 mile high RPM. Works better on 4.200" bore. 285cc runner **2.250" valve**.

Aluminum
285cc
Intake Runner

42-47cc
Chamber



Suggested Assembly Components

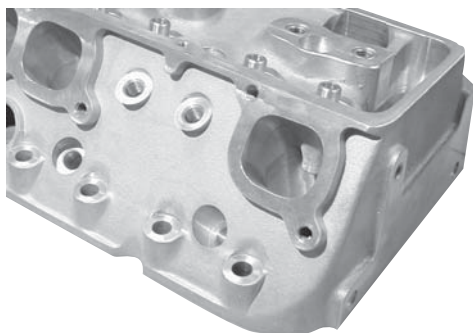
Intake Valve 2.250 +.700 long Pro	22507
Exhaust Valve 1.625 +.700 long Pro	16257
Valve Spring Roller Manley	221043
Retainer Titanium Pro	1043
Spring Seat Manley	42373
Valve Spring Roller ISKY	9985
Retainer Titanium Pro	9985
Spring Seat Manley	42326
Locks Manley	13083
Valve Spring Flat Tappet	22429
Retainer Titanium Pro	9985
Spring Seat	42326
Locks	13083 std
Intake Gasket Pro	M14001G-12G060
Head Gasket	1003/1034
Head Studs ARP	234 4334
Manifold	Hilborne/Kinsler
Spark Plug Suggested Starting Range only	
Below 13.5:1 Champion	C57CX
Above 13.5:1 - 15:1 Champion	C55CX
Above 15:1 Champion	C53CX
For high lift high RPM - Drag Race	
Spring Manley	22458
Retainer Manley	23669
Seat Manley	42374

TITANIUM VALVES

As Per PRO Prints (see back of catalogue)

Optimum Length Intake 5.640"

Exhaust 5.660"



Specifications

100% CNC Ported Combustion Chambers	
100% CNC Ported Intake Ports	
100% CNC Ported Exhaust Ports	
3 Angle Valve Job	
Head Torque Settings	65-70ft lbs Short (7/16)
	70-75ft lbs Long (7/16)
	60ft lbs (3/8)
Rocker Stud Torque	50ft lbs
Combustion Chamber	42-47cc
(Can be angled milled to)	38cc
Spring Pocket Can be cut to 1.625, no deeper	
Rockers .550 offset	T & D -12
Rockers .550 offset	JESEL -12
Note: Exhaust rocker offset .030"	
Valve Centers	1.965"
Valve Angle	14°
Angle Mill	.0075 per cc
Flat Mill	.006 per cc
Intake Face Angle	10°
Manganese Bronze Valve Guides	

Installed Height

Spring 221043	1.950"
Spring 22429	1.880"
Spring 9985	1.198" -2.00"

Options

Copper Beryllium seats

Intake Valve Test Data @28" of water

.100	.200	.300	.400	.500	.600	.700
76.56	161.64	234.17	299.99	353.27	383.72	401.21

Exhaust Valve Test Data @28" of water

.100	.200	.300	.400	.500	.600	.700
59.27	126.12	172.11	217.63	250.82	264.57	274.08

PART #
114 62 585 SDN

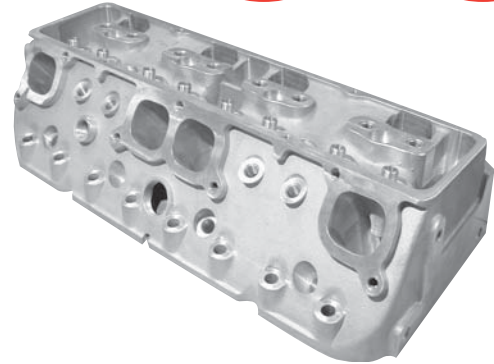
PRO 14° OUTLAW SPRINT CAR HEAD

WORLDS MOST POWERFUL S/B ALCOHOL HEAD

This head has all the superior features of the Pro 14° cylinder head but has been made with the Spread Port exhaust pattern. **5° inlet face angle & 18° rocker** with down nozzle injection. this allow the use of 18° style injection manifolds. This provides an easy interchange to the most powerful sprint car head on the market. Ideal on 410 cubic inch engines 1/2 - 5/8 mile oval track at high RPM works best with 4.200 bore.
285cc runner **2.250" valve.**

Aluminum
285cc
Intake Runner

42-47cc
Chamber

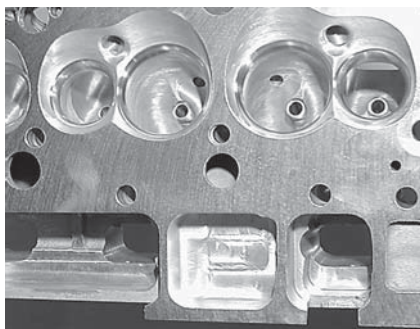


Suggested Assembly Components

Intake Valve 2.250 +.700 long Pro	22507
2.200 option +.700 long Pro	22007
Exhaust Valve 1.625 +.700 long Pro	16257
Valve Spring Roller Manley	221043
Retainer Titanium Pro	1043
Spring Seat Manley	42373
Valve Spring Roller ISKY	9985
Retainer Titanium Pro	9985
Spring Seat Manley	42326
Locks Manley	13083
Valve Spring Flat Tappet	22429
Retainer Titanium Pro	9985
Spring Seat	42326
Locks	13083 std
Intake Gasket Pro	M14001G-060
Head Gasket	1003/1034
Head Studs ARP	234 4334
Manifold	Hilborne/Kinsler
Spark Plug Suggested Starting Range only	
Below 13.5:1 Champion	C57CX
Above 13.5:1 - 15:1 Champion	C55CX
Above 15:1 Champion	C53CX
For high lift high RPM - Drag Race	
Spring Manley	22458
Retainer Manley	23669

TITANIUM VALVES

As Per PRO Prints (see back of catalogue)
Optimum Length Intake 5.640"
Exhaust 5.660"



Specifications

100% CNC Ported Combustion Chambers	
100% CNC Ported Intake Ports	
100% CNC Ported Exhaust Ports	
3 Angle Valve Job	
Head Torque Settings	65-70ft lbs Short (7/16)
	70-75ft lbs Long (7/16)
	60ft lbs (3/8)
Rocker Stud Torque	50ft lbs
Combustion Chamber	42-47cc
(Can be angled milled to)	38cc
Spring Pocket Can be cut to 1.625, no deeper	
Rockers .550 offset	T & D 18° 2055
Rockers .550 offset	JESEL 18° kra-10742
Note: Exhaust rocker offset .030"	
Valve Centers	1.965"
Valve Angle	14°
Angle Mill	.0075 per cc
Flat Mill	.006 per cc
Intake Face Angle	5°
Manganese Bronze Valve Guides	

Installed Height

Springs 221043	1.950"
Spring 22429	1.880"
Spring 9985	1.198" -2.00"

Options

2.200" Intake Valve For Bore Size under 4.155
Copper Beryllium Seats

Intake Valve Test Data @28" of water

.100	.200	.300	.400	.500	.600	.700
76.56	161.64	234.17	299.99	353.27	383.72	401.21

Exhaust Valve Test Data @28" of water

.100	.200	.300	.400	.500	.600	.700
67.26	119.04	188.82	229.24	251.97	266.18	274.08



PRO 14° OUTLAW SPRINT CAR HEAD

PART #
114 53 265 S

WORLDS MOST POWERFUL S/B SPRINTCAR HEAD

-12 Brodix Replacement

This head has all the superior features of the PRO 14° cylinder head but has been made with the Spread Port Exhaust pattern, **10° inlet face angle -12 Rocker** position to make an easy interchange. Excellent -12 replacement where rules do not allow down nozzle but allow injection.

Suits 358-400 cubic inch engine.

Suggested Assembly Components

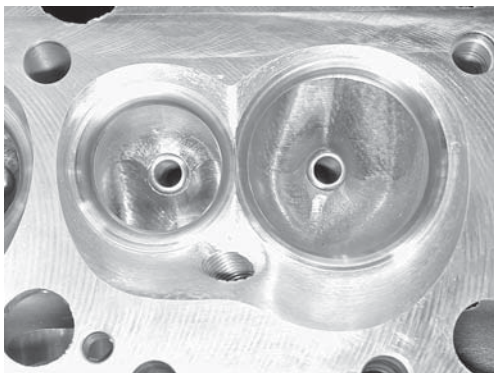
Intake Valve 2.180 +.700 long Pro	21807
2.200 option +.700 long Pro	22007
Exhaust Valve 1.625 +.700 long Pro	16257
Valve Spring Roller Manley	221043
Retainer Titanium Pro	1043
Spring Seat Manley	42373
Valve Spring Roller ISKY	9985
Retainer Titanium Pro	9985
Spring Seat Manley	42326
Locks Manley	13083
Valve Spring Flat Tappet	22429
Retainer Titanium Pro	9985
Spring Seat	42326
Locks	13083 std
Intake Gasket Pro	M14001-12G060
Head Gasket	1003/1034
Head Studs ARP	234 4334
Manifold	Hilborne/Kinsler
Spark Plug Suggested Starting Range only	
Below 13.5:1 Champion	C57CX
Above 13.5:1 - 15:1 Champion	C55CX
Above 15:1 Champion	C53CX
For high lift high RPM - Drag Race	
Spring Manley	22458
Retainer Manley	23669
Seat Manley	42374

TITANIUM VALVES

As Per PRO Prints (see back of catalogue)

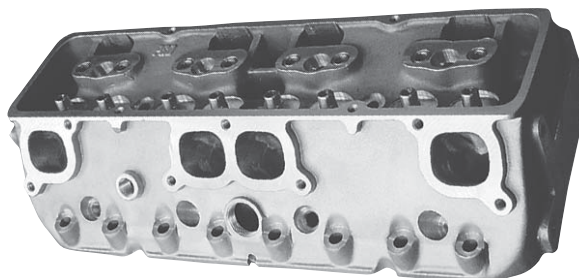
Optimum Length Intake 5.640"

Exhaust 5.660"



Aluminium
265cc
Intake Runner

42-47cc
Chamber



Specifications

100% CNC Ported Combustion Chambers	
100% CNC Ported Intake Ports	
100% CNC Ported Exhaust Ports	
3 Angle Valve Job	
Head Torque Settings	65-70ft lbs Short (7/16)
	70-75ft lbs Long (7/16)
	60ft lbs (3/8)
Rocker Stud Torque	50ft lbs
Combustion Chamber	42-47cc
(Can be angled milled to)	36cc
Spring Pocket Can be cut to 1.625, no deeper	
Rockers .550 offset	T & D -12
Rockers .550 offset	JESEL -12
Valve Centers	1.935"
Valve Angle	14°
Angle Mill	.0075 per cc
Flat Mill	.006 per cc
Intake Face Angle	10°
Manganese Bronze Valve Guides	

Installed Height

Spring 221043	1.950"
Spring 22429	1.880"
Spring 9985	1.198" -2.00"

Options

2.200" Intake Valve
Copper Beryllium Seats

Intake Valve Test Data @28" of water

.100	.200	.300	.400	.500	.600	.700
79.70	154.92	225.21	281.63	325.06	352.82	374.76

Exhaust Valve Test Data @28" of water

.100	.200	.300	.400	.500	.600	.700
55.00	112.84	165.47	212.41	241.33	228.40	270.26

PART #
114 62 265 S

PRO 14° OUTLAW SPRINT CAR HEAD

WORLDS MOST POWERFUL S/B SPRINTCAR HEAD

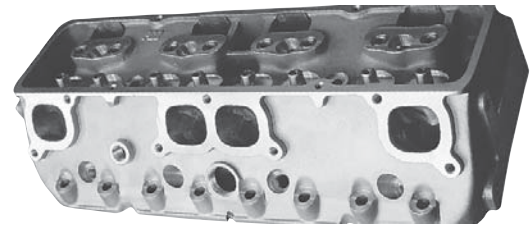
This head has all the superior features of the PRO 14° cylinder head but has been made with the Spread Port exhaust pattern features **5° inlet face angle & 18° rockers**, this allows the use of the PRO two piece manifold with Phenolic spacers for carburetors or 18° style injection manifold. Suits 358-400 cubic inch engine.

Aluminium
265cc
Intake Runner

42-47cc
Chamber

Suggested Assembly Components

Intake Valve 2.180 +.700 long Pro	21807
2.200 option +.700 long Pro	22007
Exhaust Valve 1.625 +.700 long Pro	16257
Valve Spring Roller Manley	221043
Retainer Titanium Pro	1043
Spring Seat Manley	42373
Valve Spring Roller ISKY	9985
Retainer Titanium Pro	9985
Spring Seat Manley	42326
Locks Manley	13083
Valve Spring Flat Tappet	22429
Retainer Titanium Pro	9985
Spring Seat	42326
Locks	13083 std
Intake Gasket Pro	M14001-G060
Head Gasket	1003/1034
Head Studs ARP	234 4334
Manifold	Hilborne/Kinsler
Spark Plug Suggested Starting Range only	
Below 13.5:1 Champion	C57CX
Above 13.5:1 - 15:1 Champion	C55CX
Above 15:1 Champion	C53CX
For high lift high RPM - Drag Race	
Spring Manley	22458
Retainer Manley	23669
Seat Manley	42374

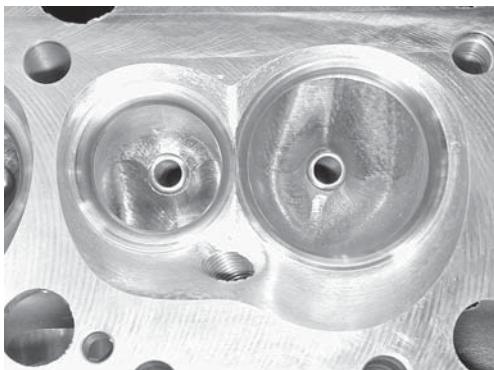


Specifications

100% CNC Ported Combustion Chambers	
100% CNC Ported Intake Ports	
100% CNC Ported Exhaust Ports	
3 Angle Valve Job	
Head Torque Settings	65-70ft lbs Short (7/16) 70-75ft lbs Long (7/16) 60ft lbs (3/8)
Rocker Stud Torque	50ft lbs
Combustion Chamber	42-47cc
(Can be angled milled to)	36cc
Spring Pocket Can be cut to 1.625, no deeper	
Rockers .550 offset	T & D 18° 2055
Rockers .550 offset	JESEL 18° kra-10742
PRO 1.6 x 1.5	PRO6377
PRO 1.65 x 1.55	PRO6378
Valve Centers	1.935"
Valve Angle	14°
Angle Mill	.0075 per cc
Flat Mill	.006 per cc
Intake Face Angle	5°
Manganese Bronze Valve Guides	

TITANIUM VALVES

As Per PRO Prints (see back of catalogue)
Optimum Length Intake 5.640"
Exhaust 5.660"



Installed Height

Spring 2214043	1.950"
Spring 22429	1.880"
Spring 9985	1.198" -2.00"

Options

2.200" Intake Valve
Copper Beryllium Seats

Intake Valve Test Data @28" of water

.100	.200	.300	.400	.500	.600	.700
79.70	154.92	225.21	281.63	325.06	352.82	374.76

Exhaust Valve Test Data @28" of water

.100	.200	.300	.400	.500	.600	.700
55.00	112.84	165.47	212.41	241.33	258.40	270.26



PRO 14° OUTLAW SPRINT CAR HEAD

PART#
114 53 585 S

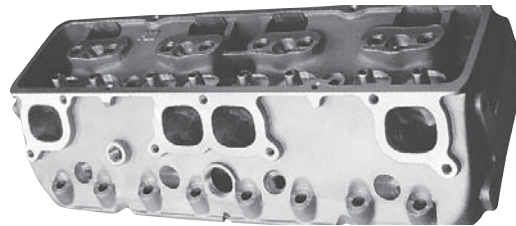
WORLDS MOST POWERFUL S/B SPRINT CAR HEAD

Bolt on -12 Brodix Replacement

This head has all the superior features of the PRO 14° cylinder head but has been made with the Spread Port Exhaust pattern, **10° inlet face angle -12 Rocker** position to make an easy interchange. Ideal big cubic inch engine where rules do not allow down nozzles suits 400 cubic inch + engines using carburetor or injected on alcohol. Best suited to 4.200 bore.
285cc runner **2.250" valve.**

Aluminum
285cc
Intake Runner

42-47cc
Chamber

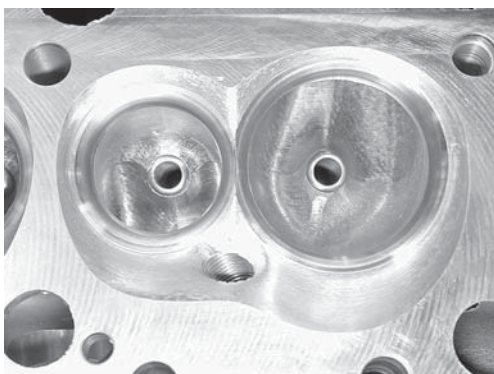


Suggested Assembly Components

Intake Valve 2.250 +.700 long Pro	22507
2.200 option long +.700 Pro	22007
Exhaust Valve 1.625 +.700 long Pro	16257
Valve Spring Roller Manley	221043
Retainer Titanium Pro	1043
Spring Seat Manley	42373
Valve Spring Roller ISKY	9985
Retainer Titanium Pro	9985
Spring Seat Manley	42326
Locks Manley	13083
Valve Spring Flat Tappet	22429
Retainer Titanium Pro	9985
Spring Seat	42326
Locks	13083 std
Intake Gasket Pro	M14001-12G060
Head Gasket	1003/1034
Head Studs ARP	234 4334
Manifold	Hilborne/Kinsler
Spark Plug Suggested Starting Range only	
Below 13.5:1 Champion	C57CX
Above 13.5:1 - 15:1 Champion	C55CX
Above 15:1 Champion	C53CX
For high lift high RPM - Drag Race	
Spring Manley	22458
Retainer Manley	23669
Seat Manley	42374

TITANIUM VALVES

As Per PRO Prints (see back of catalogue)
Optimum Length Intake 5.640"
Exhaust 5.660"



Specifications

100% CNC Ported Combustion Chambers	
100% CNC Ported Intake Ports	
100% CNC Ported Exhaust Ports	
3 Angle Valve Job	
Head Torque Settings	65-70ft lbs Short (7/16)
	70-75ft lbs Long (7/16)
	60ft lbs (3/8)
Rocker Stud Torque	50ft lbs
Combustion Chamber	42-47cc
(Can be angled milled to)	38cc
Spring Pocket Can be cut to 1.625, no deeper	
Rockers .550 offset	T & D -12
Rockers .550 offset	JESEL -12
Note: Exhaust rocker offset .030"	
Valve Centers	1.965"
Valve Angle	14°
Angle Mill	.0075 per cc
Flat Mill	.006 per cc
Intake Face Angle	10°
Manganese Bronze Valve Guides	

Installed Height

Spring 221043	1.950"
Spring 22429	1.880"
Spring 9985	1.198" -2.00"

Options

2.200" Intake Valve
Copper Beryllium Seats

Intake Valve Test Data @28" of water

.100	.200	.300	.400	.500	.600	.700
76.56	161.64	234.17	299.99	353.27	383.72	401.21

Exhaust Valve Test Data @28" of water

.100	.200	.300	.400	.500	.600	.700
67.26	119.04	188.82	229.24	251.97	266.18	274.08

PART#
114 62 585 S

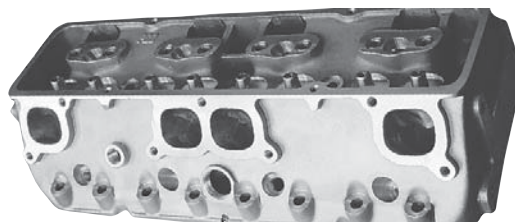
PRO 14° OUTLAW SPRINT CAR HEAD

WORLDS MOST POWERFUL S/B HEAD

This head has all the superior features of the PRO 14° cylinder head but has been made with the Spread Port Exhaust pattern, **5° inlet face angle & 18° rocker** Building a new engine - the 5° face angle enables the use of Pro 14° two piece manifold. Ideal for 400 cu in or larger Hava Tampa engine on 4.200 bore. 285 runner **2.250" valve.**

Aluminum
285cc
Intake Runner

42-47cc
Chamber

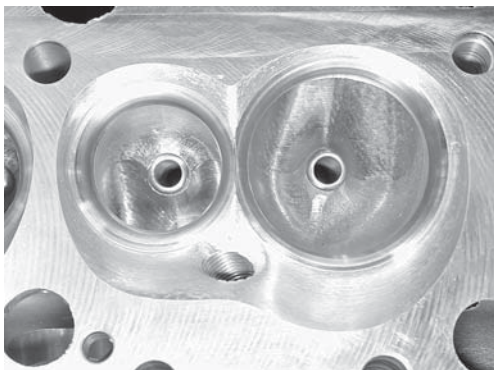


Suggested Assembly Components

Intake Valve 2.250 +.700 long Pro	22507
2.200 option long +.700 Pro	22007
Exhaust Valve 1.625 +.700 long Pro	16257
Valve Spring Roller Manley	221043
Retainer Titanium Pro	1043
Spring Seat Manley	42373
Valve Spring Roller ISKY	9985
Retainer Titanium Pro	9985
Spring Seat Manley	42326
Locks Manley	13083
Valve Spring Flat Tappet	22429
Retainer Titanium Pro	9985
Spring Seat	42326
Locks	13083 std
Intake Gasket Pro	M14001-12G060
Head Gasket	1003/1034
Head Studs ARP	234 4334
Manifold	Hilborne/Kinsler
Spark Plug Suggested Starting Range only	
Below 13.5:1 Champion	C57CX
Above 13.5:1 - 15:1 Champion	C55CX
Above 15:1 Champion	C53CX
For high lift high RPM - Drag Race	
Spring Manley	22458
Retainer Manley	23669
Seat Manley	42374

TITANIUM VALVES

As Per PRO Prints (see back of catalogue)
Optimum Length Intake 5.640"
Exhaust 5.660"



Specifications

100% CNC Ported Combustion Chambers	
100% CNC Ported Intake Ports	
100% CNC Ported Exhaust Ports	
3 Angle Valve Job	
Head Torque Settings	65-70ft lbs Short (7/16) 70-75ft lbs Long (7/16) 60ft lbs (3/8)
Rocker Stud Torque	50ft lbs
Combustion Chamber	42-47cc
(Can be angled milled to)	38cc
Spring Pocket Can be cut to 1.625, no deeper	
Rockers .550 offset	T & D 18° 2055
Rockers .550 offset	JESEL 18° kra-10742
Note: Exhaust rocker offset .030"	
Valve Centers	1.965"
Valve Angle	14°
Angle Mill	.0075 per cc
Flat Mill	.006 per cc
Intake Face Angle	5°
Manganese Bronze Valve Guides	

Installed Height

Spring 221043	1.950"
Spring 22429	1.880"
Spring 9985	1.198" -2.00"

Options

2.200" Intake Valve
Copper Beryllium Seats

Intake Valve Test Data @28" of water

.100	.200	.300	.400	.500	.600	.700
76.56	161.64	234.17	299.99	353.27	383.72	401.21

Exhaust Valve Test Data @28" of water

.100	.200	.300	.400	.500	.600	.700
67.26	119.04	188.82	229.24	251.97	226.18	274.08



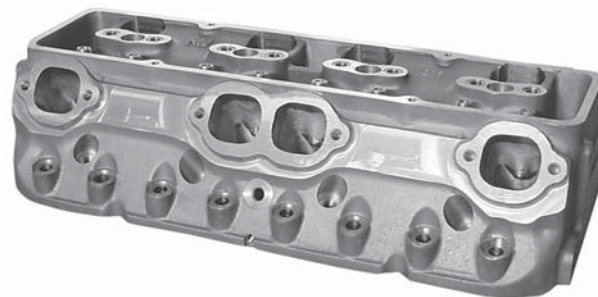
PRO 14° ALUMINUM AS-CAST RACING HEAD

PART #
114 60 030

This head features CNC chambers with as cast bowl and ports, guides and inserts fitted with no valve job. Ideal for engine builders who wants to develop their own port shapes and valve configuration, using a casting with material in the right places.

Aluminium
230cc
Intake Runner

47cc
Chamber



Suggested Assembly Components

Inlet no valve job - suggest +.700 length	
Exhaust no valve job - suggest +.700 length	
Valve Spring Roller Manley	221043
Retainer Titanium Pro	1043
Spring Seat Manley	42373
Valve Spring Roller ISKY	9985
Retainer Titanium Pro	9985
Spring Seat Manley	42326
Locks Manley	13083 std
Valve Spring Flat Tappet	22429
Retainer Titanium Pro	9985
Spring Seat	42326
Locks	13083 std
Intake Gasket Pro	M14001G-060
Head Gasket	1003/1034
Head Studs ARP	234 4334
Manifold Pro	14001 - 14002
Spark Plug Suggested Starting Range only	
Below 13.5:1 Champion	C57CX
Above 13.5:1 - 15:1 Champion	C55CX
Above 15:1 Champion	C53CX
For high lift high RPM - Drag Race	
Spring Manley	22458
Retainer Manley	23669
Seat Manley	42374

TITANIUM VALVES

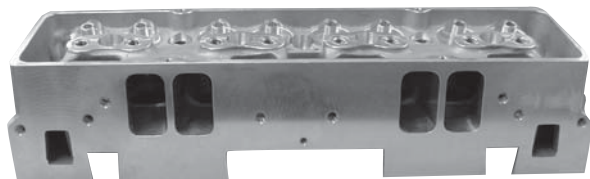
As Per PRO Prints (see back of catalogue)
Optimum Length Intake 5.640"
Exhaust 5.660"

Specifications

100% CNC Ported Combustion Chambers	
Head Torque Settings	65-70ft lbs Short (7/16) 70-75ft lbs Long (7/16) 60ft lbs (3/8)
Rocker Stud Torque	50ft lbs
Combustion Chamber	42-47cc
(Can be angled milled to)	36cc
Spring Pocket Can be cut to 1.625, no deeper	
Rockers .550 offset	T & D 18° 2055
Rockers .550 offset	JESEL kra-10742
PRO 1.6 X 1.5	PRO6377
PRO 1.65 X 1.55	PRO6378
Valve Centers	1.935"
Valve Angle	14°
Angle Mill	.0075 per cc
Flat Mill	.006 per cc
Intake Face Angle	5°
Manganese Valve Guides	

Options

Copper Beryllium Seats



PART#
114 62 254 TA

2.135"
Inlet Valve

1.600"
Exhaust Valve

PART#
114 62 254

2.150"
Inlet Valve

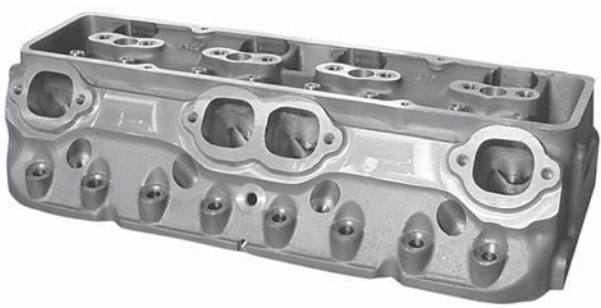
1.625"
Exhaust Valve

PRO 14° TRANSAM HEAD

Aluminum
254CC
Intake Runner

42-47cc
Chamber

This head has all the superior features of the PRO 14° cylinder head. Transam - fantastic Road Race head. This is the cylinder head that powered Paul Genillozzi to the 1998 Transam Championship with 9 wins from 13 starts between Genillozzi and team mate Bill Saunders. Wide port large valve option suits 350 cu inch. 254cc runner 2.135" valve.



Suggested Assembly Components

Intake Valve 2.135 +.700 long Pro	21357
2.150 option +.700 long Pro	21507
Exhaust Valve 1.600 +.700 long Pro	16007
1.625 option Pro	16257
Valve Spring Roller Manley	221043
Retainer Titanium Pro	1043
Spring Seat Manley	42373
Valve Spring Roller ISKY	9985
Retainer Titanium Pro	9985
Spring Seat Manley	42326
Locks Manley	13083 std
Valve Spring Flat Tappet	22429
Retainer Titanium Pro	9985
Spring Seat	42326
Locks	13083 std
Intake Gasket Pro	M14001G-060
Head Gasket	1003/1034
Head Studs ARP	234 4334
Manifold Pro	14001 - 14002
Spark Plug Suggested Starting Range only	
Below 13.5:1 Champion	C57CX
Above 13.5:1 - 15:1 Champion	C55CX
Above 15:1 Champion	C53CX
For high lift high RPM - Drag Race	
Spring Manley	22458
Retainer Manley	23669
Seat Manley	42374

Specifications

100% CNC Ported Combustion Chambers	
100% CNC Ported Intake Ports	
100% CNC Ported Exhaust Ports	
3 Angle Valve Job	
Head Torque Settings	65-70ft lbs Short (7/16)
	70-75ft lbs Long (7/16)
	60ft lbs (3/8)
Rocker Stud Torque	50ft lbs
Combustion Chamber	42-47cc
(Can be angled milled to)	36cc
Rockers .550 offset	T & D 18° 2055
Rockers .550 offset	JESEL 18° kra-10742
Valve Centers	1.935"
Valve Angle	14°
Angle Mill	.0075 per cc
Flat Mill	.006 per cc
Intake Face Angle	5°
Manganese Bronze Valve Guides	

TITANIUM VALVES

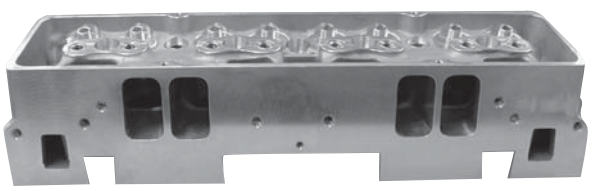
As Per PRO Prints (see back of catalogue)
Optimum Length Intake 5.640"
Exhaust 5.660"

Installed Height

Spring 221043	1.950"
Spring 22429	1.880"
Spring 9985	1.198" -2.00"

Options

- 2.150" Intake Valve
- 1.625" Exhaust Valve
- Wide port - Port Width 1.375"
- Copper Beryllium Seats



Intake Valve Test Data @28" of water

.100	.200	.300	.400	.500	.600	.700
74.33	149.99	222.98	287.00	328.20	352.37	364.46

Exhaust Valve Test Data @28" of water

.100	.200	.300	.400	.500	.600	.700
57.78	113.67	181.88	219.45	239.03	249.76	260.50



PRO 14° ALUMINUM RACING HEAD

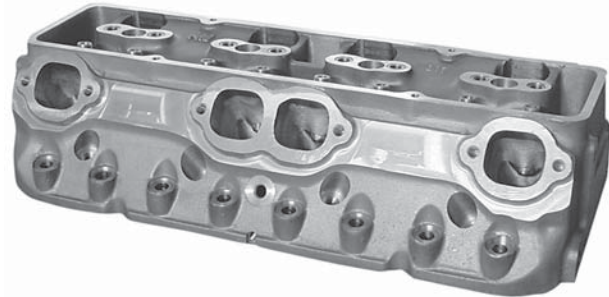
PART #
114 62 265

WORLDS MOST POWERFUL S/B HEAD

This head has all the superior features of the PRO 14°cylinder head. Fantastic Drag Race or Road Race head superior spark plug position & water cooling allows big compression without detonation. Suits 350-400 cubic inch Drag Race engine to 9000 RPM and 1050cfm or 7000 RPM and 830cfm.

Aluminum
265cc
Intake Runner

42-47cc
Chamber

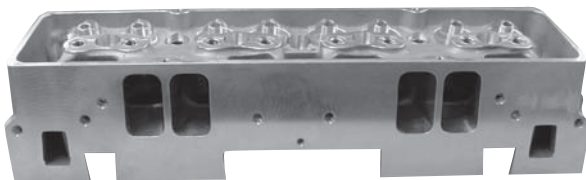


Suggested Assembly Components

Intake Valve 2.180 +.700 long Pro	21807
Exhaust Valve 1.625 +.700 long Pro	16257
Valve Spring Roller Manley	221043
Retainer Titanium Pro	1043
Spring Seat Manley	42373
Valve Spring Roller ISKY	9985
Retainer Titanium Pro	9985
Spring Seat Manley	42326
Locks Manley	13083 std
Valve Spring Flat Tappet	22429
Retainer Titanium Pro	9985
Spring Seat	42326
Locks	13083 std
Intake Gasket Pro	M14001G-060
Head Gasket	1003/1034
Head Studs ARP	234 4334
Manifold Pro	14001 - 14002
Spark Plug Suggested Starting Range only	
Below 13.5:1 Champion	C57CX
Above 13.5:1 - 15:1 Champion	C55CX
Above 15:1 Champion	C53CX
For high lift high RPM - Drag Race	
Spring Manley	22458
Retainer Manley	23669
Seat Manley	42374

TITANIUM VALVES

As Per PRO Prints (see back of catalogue)
Optimum Length Intake 5.640"
Exhaust 5.660"



Specifications

100% CNC Ported Combustion Chambers	
100% CNC Ported Intake Ports	
100% CNC Ported Exhaust Ports	
3 Angle Valve Job	
Head Torque Settings	65-70ft lbs Short (7/16) 70-75ft lbs Long (7/16) 60ft lbs (3/8)
Rocker Stud Torque	50ft lbs
Combustion Chamber	42-47cc
(Can be angled milled to)	36cc
Spring Pocket Can be cut to 1.625, no deeper	
Rockers .550 offset	T & D 18° 2055
Rockers .550 offset	JESEL 18° kra-10742
PRO 1.6 x 1.5	PRO6377
PRO 1.65 x 1.55	PRO6378
Valve Centers	1.935"
Valve Angle	14°
Angle Mill	.0075 per cc
Flat Mill	.006 per cc
Intake Face Angle	5°
Manganese Bronze Valve Guides	

Installed Height

Spring 221043	1.950"
Spring 22429	1.880"
Spring 9985	1.198" -2.00"

Options

Copper Beryllium Seats
2.200 valve

Intake Valve Test Data @28" of water

.100	.200	.300	.400	.500	.600	.700
79.70	154.92	225.21	281.63	325.06	352.82	374.76

Exhaust Valve Test Data @28" of water

.100	.200	.300	.400	.500	.600	.700
55.00	112.84	165.47	212.41	241.33	258.4	270.26

PART #
114 62 585

PRO 14° BIG CU. IN - RACE HEAD

WORLDS MOST POWERFUL S/B HEAD

This head has all the superior features of the PRO 14° cylinder head using 18° Exhaust pattern, 5° face angle, 18° Rocker Position.

Ideal 400 cubic inch Drag Race, Boat or Oval Track, twin dominators on sheet metal intake for Drag Racing.

Produces 800HP + with 440 cu in on single carburetor.

285cc runner 2.250" valve.

Use with 4.155" + bore size.

Suggested Assembly Components

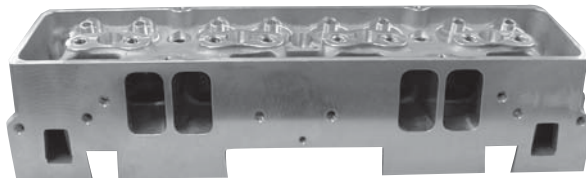
Intake Valve 2.250 +.700 long Pro	22507
Exhaust Valve 1.625 +.700 long Pro	16257
Valve Spring Roller ISKY (+ .720" lift)	9801-A
Retainer Titanium	980-TI/10°
Spring Seat ISKY	990-SC
Valve Spring Roller ISKY (up to .720" lift)	9985
Retainer Titanium Pro	9985
Spring Seat Manley	42326
Locks Manley	13083 std
Valve Spring Flat Tappet	22429
Retainer Titanium Pro	9985
Spring Seat	42326
Locks	13083 std
Intake Gasket Pro	M14001G-060
Head Gasket	1003/1034
Head Studs ARP	234 4334
Manifold Pro	14001 - 14002
Spark Plug Suggested Starting Range only	
Below 13.5:1 Champion	C57CX
Above 13.5:1 - 15:1 Champion	C55CX
Above 15:1 Champion	C53CX
For high lift high RPM - Drag Race	
Spring Manley	22458
Retainer Manley	23669
Seat Manley	42374

TITANIUM VALVES

As Per PRO Prints (see back of catalogue)

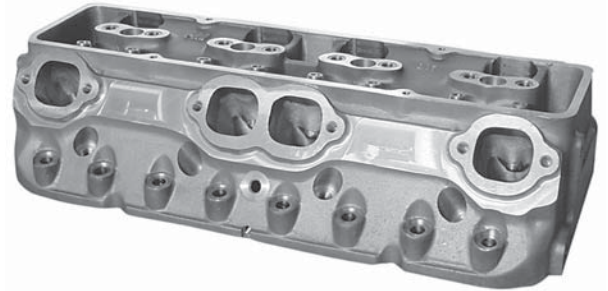
Optimum Length Intake 5.640"

Exhaust 5.660"



Aluminium
285cc
Intake Runner

42-47cc
Chamber



Specifications

100% CNC Ported Combustion Chambers	
100% CNC Ported Intake Ports	
100% CNC Ported Exhaust Ports	
3 Angle Valve Job	
Head Torque Settings	65-70ft lbs Short (7/16)
	70-75ft lbs Long (7/16)
	60ft lbs (3/8)
Rocker Stud Torque	50ft lbs
Combustion Chamber	42-47cc
(Can be angled milled to)	38cc
Spring Pocket Can be cut to 1.625, no deeper	
Rockers .550 offset	T & D 18° 2055
Rockers .550 offset	JESEL 18° kra-10742
Note: Exhaust rocker offset .030"	
Valve Centers	1.965"
Valve Angle	14°
Angle Mill	.0075 per cc
Flat Mill	.006 per cc
Intake Face Angle	5°
Manganese Bronze Valve Guides	

Installed Height

Spring 221043	1.950"
Spring 22429	1.880"
Spring 9985	1.198" -2.00"

Options

Copper Beryllium Seats

Intake Valve Test Data @28" of water

.100	.200	.300	.400	.500	.600	.700
76.56	161.64	234.17	299.99	353.27	383.72	401.21

Exhaust Valve Test Data @28" of water

.100	.200	.300	.400	.500	.600	.700
67.26	119.04	188.82	229.24	251.97	266.18	274.08



PRO 14° BIG CU.IN - RACE HEAD

PART #
114 62 285

WORLDS MOST POWERFUL S/B HEAD

This head has all the superior features of the PRO 14° cylinder head. 18° Exhaust pattern, 5° face angle 18° Rocker. Ideal for large cubic inch applications.

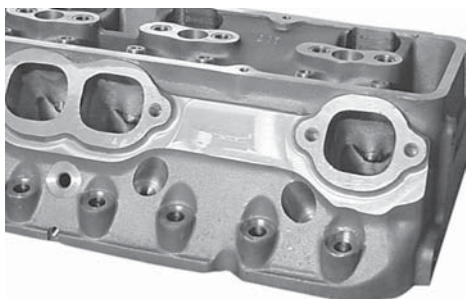
285cc runner 2.200" valve. Use with bore size 4.155" and under. 2.200" valve provides less shrouding than 2.250" valve option.

Suggested Assembly Components

Intake Valve 2.200 + .700 long Pro	22007
Exhaust Valve 1.625 + .700 long Pro	16257
Valve Spring Roller ISKY (+ .720" lift)	9801-A
Retainer Titanium	980-TI/10°
Spring Seat ISKY	990-SC
Valve Spring Roller ISKY (up to .720" lift)	9985
Retainer Titanium Pro	9985
Spring Seat Manley	42326
Locks Manley	13083 std
Valve Spring Flat Tappet	22429
Retainer Titanium Pro	9985
Spring Seat	42326
Locks	13083 std
Intake Gasket Pro	M14001G-060
Head Gasket	1034
Head Studs ARP	234 4334
Manifold Pro	14001-14002
Spark Plug Suggested Starting Range only	
Below 13.5:1 Champion	C57CX
Above 13.5:1 - 15:1 Champion	C55CX
Above 15:1 Champion	C53CX
For high lift high RPM - Drag Race	
Spring Manley	22458
Retainer Manley	23669
Seat Manley	42374

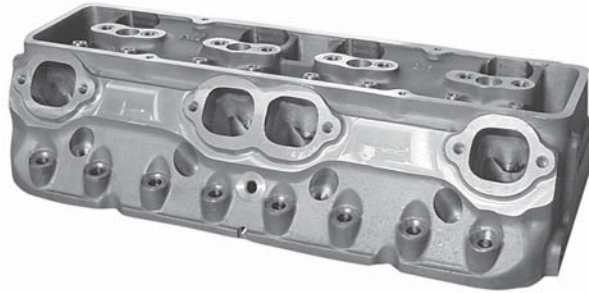
TITANIUM VALVES

As Per PRO Prints (see back of catalogue)
Optimum Length Intake 5.640"
Exhaust 5.660"



Aluminium
285cc
Intake Runner

42-47cc
Chamber



Specifications

100% CNC Ported Combustion Chambers	
100% CNC Ported Intake Ports	
100% CNC Ported Exhaust Ports	
3 Angle Valve Job	
Head Torque Settings	65-70ft lbs Short (7/16)
	70-75ft lbs Long (7/16)
	60ft lbs (3/8)
Rocker Stud Torque	50ft lbs
Combustion Chamber	42-47cc
(Can be angled milled to)	38cc
Spring Pocket Can be cut to 1.625, no deeper	
Rockers .550 offset	T & D 18° 2055
Rockers .550 offset	JESEL 18° kra-10742
Note: Exhaust rocker offset .030"	
Valve Centers	1.965"
Valve Angle	14°
Angle Mill	.0075 per cc
Flat Mill	.006 per cc
Intake Face Angle	5°
Manganese Bronze Valve Guides	

Installed Height

Spring 221043	1.950"
Spring 22429	1.880"
Spring 9985	1.198" -2.00"

Options

Copper Beryllium Seats

Intake Valve Test Data @28" of water

.100	.200	.300	.400	.500	.600	.700
72.53	150.89	228.35	293.27	338.94	370.28	398.94

Exhaust Valve Test Data @28" of water

.100	.200	.300	.400	.500	.600	.700
60.22	110.47	166.90	223.32	251.97	266.18	274.08

PART #
114 62 530

PRO 14° PRO STOCK SMALL VALVE DRAG RACE HEAD

WORLDS MOST POWERFUL S/B HEAD

This head has all the superior features of the PRO 14° cylinder head features **2.250" Intake valve with a 305cc runner**. Flows over 410 CFM can be made to go over 420 CFM with custom porting. The most powerful S/B head currently on the market. Ideal high RPM Drag Race such as Pro Stock Requires 4.155" + bore to work

Aluminium
305cc
Intake Runner

42-47cc
Chamber

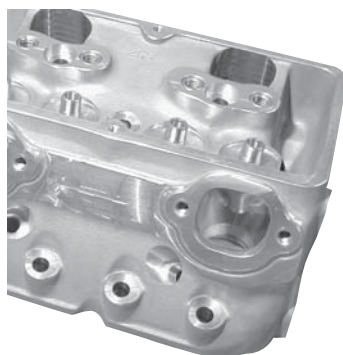


Suggested Assembly Components

Intake Valve 2.250 +.700 long Pro	22507
Exhaust Valve 1.625 +.700 long Pro	16257
Valve Spring Roller ISKY (+ .720" lift)	9801-A
Retainer Titanium	980-TI/10°
Spring Seat ISKY	990-SC
Valve Spring Roller ISKY (up to .720" lift)	9985
Retainer Titanium Pro	9985
Spring Seat Manley	42326
Locks Manley	13083 std
Valve Spring Flat Tappet	22429
Retainer Titanium Pro	9985
Spring Seat	42326
Locks	13083 std
Intake Gasket Pro	M14001G-060
Head Gasket	1034
Head Studs ARP	234 4334
Thick Deck Stud Kit ARP	234 4335
Manifold Pro	14001-14002-14002D
Spark Plug Suggested Starting Range only	
Below 13.5:1 Champion	C57CX
Above 13.5:1 - 15:1 Champion	C55CX
Above 15:1 Champion	C53CX
For high lift high RPM - Drag Race	
Spring Manley	22458
Retainer Manley	23669
Seat Manley	42374

TITANIUM VALVES

As Per PRO Prints (see back of catalogue)



Specifications

100% CNC Ported Combustion Chambers	
100% CNC Ported Intake Ports	
100% CNC Ported Exhaust Ports	
3 Angle Valve Job	
Head Torque Settings	65-70ft lbs Short (7/16) 70-75ft lbs Long (7/16) 60ft lbs (3/8)
Rocker Stud Torque	50ft lbs
Combustion Chamber	42-47cc
(Can be angled milled to)	38cc
Spring Pocket Can be cut to 1.625, no deeper	
Rockers .550 offset	T & D 18° 2055
Rockers .550 offset	JESEL 18° kra-10742
Note: Exhaust Rocker offset .030	
Valve Centers	1.965"
Valve Angle	14°
Angle Mill	.0075 per cc
Flat Mill	.006 per cc
Intake Face Angle	5°
Manganese Bronze Valve Guides	

Installed Height

Spring 221043	1.950"
Spring 22429	1.880"
Spring 9985	1.198" -2.00"

Options

Copper Beryllium Seats
Extra thick deck and high flow exhaust for blown or nitrous
Exh flows 315 CFM @ .800 lift. Add suffix TD-N

Intake Valve Test Data @28" of water

.100	.200	.300	.400	.500	.600	.700	.800
76.56	161.64	234.17	299.99	353.72	383.72	398.71	410.70

Exhaust Valve Test Data @28" of water

.100	.200	.300	.400	.500	.600	.700	.800
67.26	119.04	118.82	229.24	251.97	266.18	274.08	281.01



PRO 14° PRO STOCK DRAG RACE HEAD

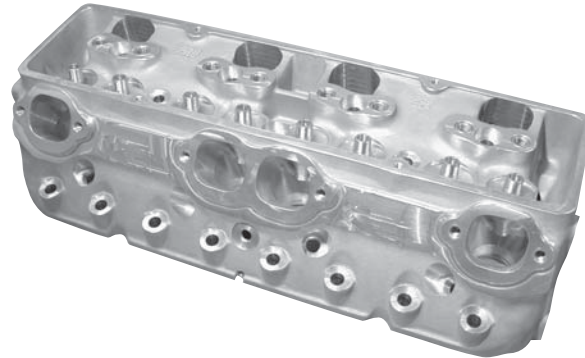
PART#
114 62 300

WORLDS MOST POWERFUL S/B HEAD

This head has all the superior features of the Pro 14° cylinder head but has been made with a **305cc runner** and a **huge 2.300" intake valve**. Capable of flowing over 420CFM with custom porting and is currently the most powerful S/B cylinder head on the market. Produces amazing power at high RPM on 440cu in or larger engine needs 4.200" bore for best results.

Aluminum
305CC
Intake Runner

42-47cc
Chamber



Suggested Assembly Components

Intake Valve 2.300 +.700 long Pro	23007
Exhaust Valve 1.610 +.700 long Pro	16007
Valve Spring Roller ISKY (+ .720" lift)	9801-A
Retainer Titanium	980-TI/10°
Spring Seat ISKY	990-SC
Valve Spring Roller ISKY (up to .720" lift)	9985
Retainer Titanium Pro	9985
Spring Seat Manley	42326
Locks Manley	13083 std
Valve Spring Flat Tappet	22429
Retainer Titanium Pro	9985
Spring Seat	42326
Locks	13083 std
Intake Gasket Pro	M14001G-060
Head Gasket	1034
Head Studs ARP	234 4334
Thick Deck Stud Kit ARP	234 4335
Manifold Pro	14001-14002-14002D
Spark Plug Suggested Starting Range only	
Below 13.5:1 Champion	C57CX
Above 13.5:1 - 15:1 Champion	C55CX
Above 15:1 Champion	C53CX
For high lift high RPM - Drag Race	
Spring Manley	22458
Retainer Manley	23669
Seat Manley	42374

TITANIUM VALVES

As Per PRO Prints (see back of catalogue)
Optimum Length Intake 5.640"
Exhaust 5.660"

Specifications

100% CNC Ported Combustion Chambers	
100% CNC Ported Intake Ports	
100% CNC Ported Exhaust Ports	
3 Angle Valve Job	
Head Torque Settings	65-70ft lbs Short (7/16)
	70-75ft lbs Long (7/16)
	60ft lbs (3/8)
Rocker Stud Torque	50ft lbs
Combustion Chamber	42-47cc
(Can be angled milled to)	38cc
Spring Pocket Can be cut to 1.625, no deeper	
Rockers .550 offset	T & D 18° 2055
Rockers .550 offset	JESEL 18° kra-10742
Note: Offset exhaust rocker .060	
Valve Centers	1.995"
Valve Angle	14°
Angle Mill	.0075 per cc
Flat Mill	.006 per cc
Intake Face Angle	5°
Manganese Bronze Valve Guides	

Installed Height

Spring 221043	1.950"
Spring 22429	1.880"
Spring 9985	1.198" -2.00"

Options

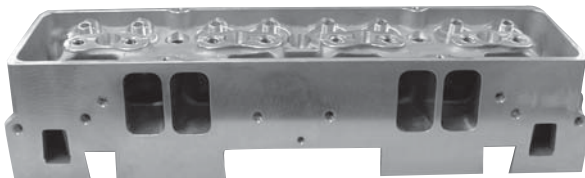
2.290" Intake Valve
Extra thick deck and high flow exhaust for blown or nitrous
Exh flows 315 CFM @ .800 lift. Add suffix TD-N
Copper beryllium seats

Intake Valve Test Data @28" of water

.100	.200	.300	.400	.500	.600	.700	.800
76.56	161.64	234.17	299.99	353.72	383.72	398.71	415.9

Exhaust Valve Test Data @ 28" of water

.100	.200	.300	.400	.500	.600	.700	.800
67.26	119.04	165.42	229.24	251.97	266.18	274.08	281.01



PART #
214 60 030

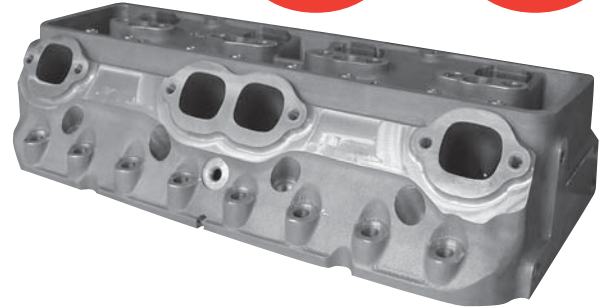
PRO 14° IRON AS-CAST RACING HEAD

14° CAST IRON

This cylinder head suits 300-350 cubic inch engine. Ideal for 1/4 3/8 mile oval track or Drag race with smaller cubic inch engine. Features As Cast High Flow ports. With intake flow figures of 314 cfm these heads are capable of over 600Hp out of the box with high compression and a large carburetor. Ideal for unported rules classes.

Cast Iron
230cc
Intake Runner

42-47cc
Chamber

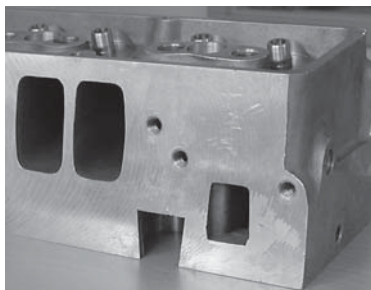


Suggested Assembly Components

Intake Valve 2.125 +.600 long Pro	21256
Exhaust Valve 1.625 +.600 long Pro	16256
Valve Spring Roller Manley	221043
Retainer Titanium Pro	1043
Spring Seat Manley	42373
Valve Spring Roller ISKY	9985
Retainer Titanium Pro	9985
Spring Seat Manley	42326
Locks Manley	13083 std
Valve Spring Flat Tappet	22429
Retainer Titanium Pro	9985
Spring Seat	42326
Locks	13083 std
Intake Gasket Pro	M14001G-060
Head Gasket	1034
Head Studs ARP	234 4334
Manifold Pro	14001 - 14002
(With 14002 use 1/2" phenolic)	
PHNS 1-2	
Spark Plug Suggested Starting Range only	
Below 13.5:1 Champion	C57CX
Above 13.5:1 - 15:1 Champion	C55CX
Above 15:1 Champion	C53CX
For high lift high RPM - Drag Race	
Spring Manley	22458
Retainer Manley	23669
Seat Manley	42374

TITANIUM VALVES

As Per PRO Prints (see back of catalogue)
Optimum Length Intake 5.540"
Exhaust 5.560"



Specifications

100% CNC Ported Combustion Chambers	
3 Angle Valve Job	
Head Torque Settings	65-70ft lbs Short (7/16) 70-75ft lbs Long (7/16) 60ft lbs (3/8)
Rocker Stud Torque	50ft lbs
Combustion Chamber	42-47cc
(Can be angled milled to)	36cc
Rockers .550 offset	T & D 2055 18°
Rockers .550 offset	JESEL 18° kra-10742
PRO 1.6 x 1.5	PRO6377
PRO 1.65 x 1.55	PRO6378
Valve Centers	1.935"
Valve Angle	14°
Angle Mill	.0075 per cc
Flat Mill	.006 per cc
Intake Face Angle	5°
Manganese Bronze Intake Guides	
Phosphor Bronze Exhaust Guides	

Installed Height

Spring 221043	1.950"
Spring 22429	1.880"
Spring 9985	1.198" -2.00"

Intake Valve Test Data @28" of water

.100	.200	.300	.400	.500	.600	.700
72.09	146.86	212.23	261.93	288.35	310.29	314.72

Exhaust Valve Test Data @28" of water

.100	.200	.300	.400	.500	.600	.700
63.53	104.78	156.46	199.61	225.69	238.49	240.03



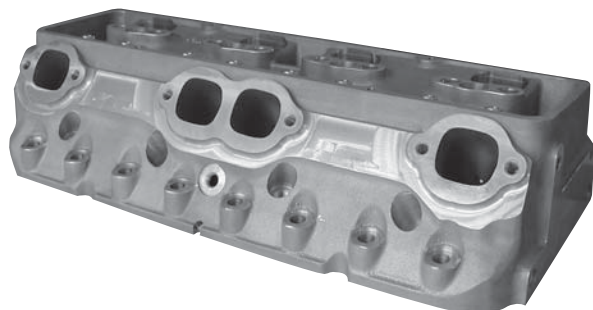
PRO 14° IRON SEMI-PORTED RACE HEAD

PART#
214 62 030

This cylinder head suits 300-350 cubic inch engine. Ideal for 1/4 3/8 mile oval track or Drag race with smaller cubic inch engine CNC bowl & chamber and is ideal for those who like to finish the ports themselves. With intake flow figures of 325 cfm these heads are capable of over 600Hp out of the box with high compression and a large carburetor.

Cast Iron
235cc
Intake Runner

42-47cc
Chamber

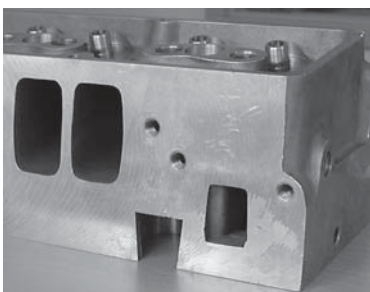


Suggested Assembly Components

Intake Valve 2.125 +.600 long Pro	21256
Exhaust Valve 1.625 +.600 long Pro	16256
Valve Spring Roller Manley	221043
Retainer Titanium Pro	1043
Spring Seat Manley	42373
Valve Spring Roller ISKY	9985
Retainer Titanium Pro	9985
Spring Seat Manley	42326
Locks Manley	13083 std
Valve Spring Flat Tappet	22429
Retainer Titanium Pro	9985
Spring Seat	42326
Locks	13083 std
Intake Gasket Pro	M14001G-060
Head Gasket	1034
Head Studs ARP	234 4334
Manifold Pro	14001 - 14002
(With 14002 use 1/2" phenolic)	PHNS 1-2
Spark Plug Suggested Starting Range only	
Below 13.5:1 Champion	C57CX
Above 13.5:1 - 15:1 Champion	C55CX
Above 15:1 Champion	C53CX
For high lift high RPM - Drag Race	
Spring Manley	22458
Retainer Manley	23669
Seat Manley	42374

TITANIUM VALVES

As Per PRO Prints (see back of catalogue)
Optimum Length Intake 5.540"
Exhaust 5.560"



Specifications

100% CNC Chamber & Bowl	
3 Angle Valve Job	
Head Torque Settings	65-70ft lbs Short (7/16) 70-75ft lbs Long (7/16) 60ft lbs (3/8)
Rocker Stud Torque	50ft lbs
Combustion Chamber	42-47cc
(Can be angled milled to)	36cc
Spring Pocket Can be cut to	1.625, no deeper
Rockers .550 offset	T & D 2055 18°
Rockers .550 offset	JESEL 18° kra-10742
PRO 1.6 x 1.5	PRO6377
PRO 1.65 x 1.55	PRO6378
Valve Centers	1.935"
Valve Angle	14°
Angle Mill	.0075 per cc
Flat Mill	.006 per cc
Intake Face Angle	5°
Manganese Bronze Intake Guides	
Phosphor Bronze Exhaust Guides	

Installed Height

Spring 221043	1.950"
Spring 22429	1.880"
Spring 9985	1.198" -2.00"

Intake Valve Test Data @28" of water

.100	.200	.300	.400	.500	.600	.700
72.09	146.86	212.23	268.9	292.54	312.32	325.01

Exhaust Valve Test Data @28" of water

.100	.200	.300	.400	.500	.600	.700
63.63	104.78	156.46	199.61	225.69	238.49	245.13

PART #
214 62 254

PRO I4° IRON SMALL CU.IN RACE HEAD

This small intake runner head is best suited for the smaller cubic inch engine 300-350. Ideal for 1/4 - 3/8 Oval track or Drag race. Carburetor of 750 CFM for engines that will use up to 7000 RPM and a 830+CFM carburetor for 7000+ RPM. 100% CNC ported.

Cast Iron
254cc
Intake Runner

42-47cc
Chamber

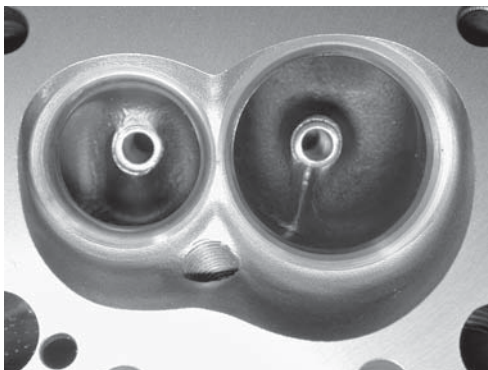


Suggested Assembly Components

Intake Valve 2.150 +.600 long Pro	21506
Exhaust Valve 1.625 +.600 long Pro	16256
Valve Spring Roller Manley	221043
Retainer Titanium Pro	1043
Spring Seat Manley	42373
Valve Spring Roller ISKY	9985
Retainer Titanium Pro	9985
Spring Seat Manley	42326
Locks Manley	13083 std
Valve Spring Flat Tappet	22429
Retainer Titanium Pro	9985
Spring Seat	42326
Locks	13083 std
Intake Gasket Pro	M14001G-060
Head Gasket	1034
Head Studs ARP	234 4334
Manifold Pro	14001 - 14002
(With 14002 use 1/2" phenolic)	PHNS 1-2
Spark Plug Suggested Starting Range only	
Below 13.5:1 Champion	C57CX
Above 13.5:1 - 15:1 Champion	C55CX
Above 15:1 Champion	C53CX
For high lift high RPM - Drag Race	
Spring Manley	22458
Retainer Manley	23669
Seat Manley	42374

TITANIUM VALVES

As Per PRO Prints (see back of catalogue)
Optimum Length Intake 5.540"
Exhaust 5.560"



Specifications

100% CNC Ported Combustion Chambers	
100% CNC Ported Intake Ports	
100% CNC Ported Exhaust Ports	
3 Angle Valve Job	
Head Torque Settings	65-70ft lbs Short (7/16)
	70-75ft lbs Long (7/16)
	60ft lbs (3/8)
Rocker Stud Torque	50ft lbs
Combustion Chamber	42-47cc
(Can be angled milled to)	36cc
Spring Pocket Can be cut to 1.625, no deeper	
Rockers .550 offset	T & D 2055 18°
Rockers .550 offset	JESEL 18° kra-10742
Valve Centers	1.935"
Valve Angle	14°
Angle Mill	.0075 per cc
Flat Mill	.006 per cc
Intake Face Angle	5°
Manganese Bronze Intake Guides	
Phosphor Bronze Exhaust Guides	

Installed Height

Spring 221043	1.950"
Spring 22429	1.880"
Spring 9985	1.198" -2.00"

Intake Valve Test Data @28" of water

.100	.200	.300	.400	.500	.600	.700
69.85	154.47	222.98	282.53	327.30	351.48	364.01

Exhaust Valve Test Data @28" of water

.100	.200	.300	.400	.500	.600	.700
57.37	117.11	165.47	216.68	240.39	250.82	260.30



PRO 14° IRON MEDIUM CU.IN RACE HEAD

PART#
214 62 265

This head has a 265cc intake runner and is best suited for 350-400 cubic inch engines, Drag Racing or Oval Track. This all out racing cylinder head has a broad power band which requires a 750cfm carburetor up to 7000 RPM and a 830cfm carburetor for 7000-9000 RPM.

Cast Iron
265cc
Intake Runner

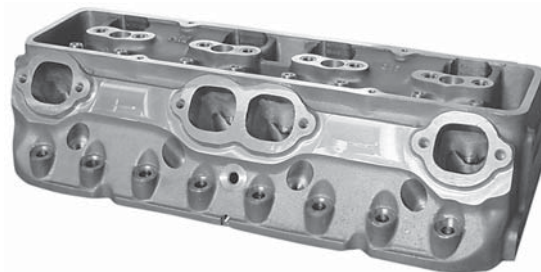
42-47cc
Chamber

Suggested Assembly Components

Intake Valve 2.180 +.600 long Pro	21806
Exhaust Valve 1.625 +.600 long Pro	16256
Valve Spring Roller Manley	221043
Retainer Titanium Pro	1043
Spring Seat Manley	42373
Valve Spring Roller ISKY	9985
Retainer Titanium Pro	9985
Spring Seat Manley	42326
Locks Manley	13083 std
Valve Spring Flat Tappet	22429
Retainer Titanium Pro	9985
Spring Seat	42326
Locks	13083 std
Intake Gasket Pro	M14001G-060
Head Gasket	1034
Head Studs ARP	234 4334
Manifold Pro	14001 - 14002
(With 14002 use 1/2" phenolic)	PHNS 1-2
Spark Plug Suggested Starting Range only	
Below 13.5:1 Champion	C57CX
Above 13.5:1 - 15:1 Champion	C55CX
Above 15:1 Champion	C53CX
For high lift high RPM - Drag Race	
Spring Manley	22458
Retainer Manley	23669
Seat Manley	42374

TITANIUM VALVES

As Per PRO Prints (see back of catalogue)
Optimum Length Intake 5.540"
Exhaust 5.560"

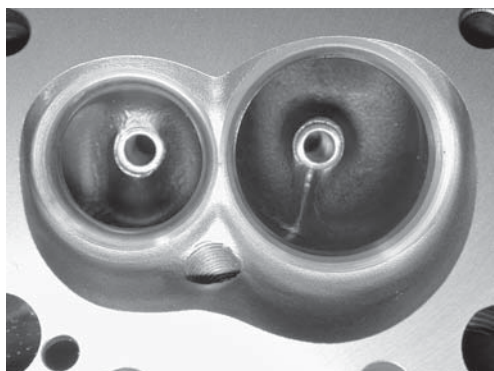


Specifications

100% CNC Ported Combustion Chambers	
100% CNC Ported Intake Ports	
100% CNC Ported Exhaust Ports	
3 Angle Valve Job	
Head Torque Settings	65-70ft lbs Short (7/16)
	70-75ft lbs Long (7/16)
	60ft lbs (3/8)
Rocker Stud Torque	50ft lbs
Combustion Chamber	42-47cc
(Can be angled milled to)	36cc
Spring Pocket Can be cut to 1.625, no deeper	
Rockers .550 offset	T & D 2055 18°
Rockers .550 offset	JESEL 18° kra-10742
PRO 1.6 x 1.5	PRO6377
PRO 1.65 x 1.55	PRO6376
Valve Centers	1.935"
Valve Angle	14°
Angle Mill	.0075 per cc
Flat Mill	.006 per cc
Intake Face Angle	5°
Manganese Bronze Intake Guides	
Phosphor Bronze Exhaust Guides	

Installed Height

Spring 221043	1.950"
Spring 22429	1.880"
Spring 9985	1.198" -2.00"



Intake Valve Test Data @28" of water

.100	.200	.300	.400	.500	.600	.700
79.70	154.92	225.21	281.63	325.06	352.82	374.76

Exhaust Valve Test Data @28" of water

.100	.200	.300	.400	.500	.600	.700
55.00	112.84	164.47	212.41	241.33	258.40	270.26

PART #
214 62 285

PRO 14° IRON BIG CU.IN. - RACE HEAD

WORLDS MOST POWERFUL S/B HEAD

This head has all the superior features of the PRO 14° cylinder head. 18° Exhaust pattern, 5° face angle 18° Rocker. Ideal for large cubic inch applications. Bore size under 4.155. 2.200" valve provides less shrouding than 2.250 valve option.

285cc runner, 2.200" inlet valve.

285cc
Intake Runner

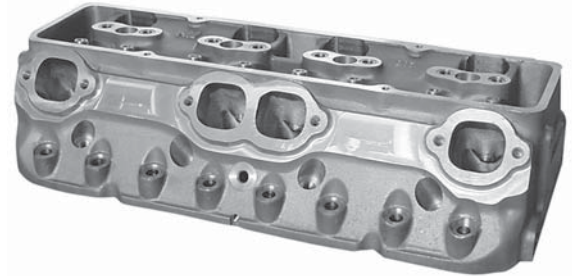
42-47cc
Chamber

Suggested Assembly Components

Intake Valve 2.200 +.600 long Pro	22006
Exhaust Valve 1.625 +.600 long Pro	16256
Valve Spring Roller ISKY (+ .720" lift)	9801-A
Retainer Titanium	980-TI/10°
Spring Seat ISKY	990-SC
Valve Spring Roller ISKY (up to .720" lift)	9985
Retainer Titanium Pro	9985
Spring Seat Manley	42326
Locks Manley	13083 std
Valve Spring Flat Tappet	22429
Retainer Titanium Pro	9985
Spring Seat	42326
Locks	13083 std
Intake Gasket Pro	M14001G-060
Head Gasket	1034
Head Studs ARP	234 4334
Manifold	14001-14002
(With 14002 use 1/2" phenolic)	PHNS 1-2
Spark Plug Suggested Starting Range only	
Below 13.5:1 Champion	C57CX
Above 13.5:1 - 15:1 Champion	C55CX
Above 15:1 Champion	C53CX
For high lift high RPM - Drag Race	
Spring Manley	22458
Retainer Manley	23669
Seat Manley	42374

TITANIUM VALVES

As Per PRO Prints (see back of catalogue)
Optimum Length Intake 5.540"
Exhaust 5.560"

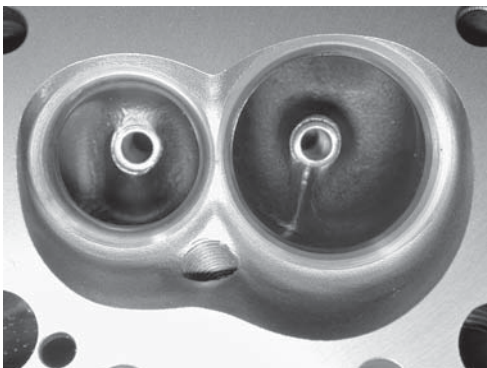


Specifications

100% CNC Ported Combustion Chambers	
100% CNC Ported Intake Ports	
100% CNC Ported Exhaust Ports	
3 Angle Valve Job	
Head Torque Settings	65-70ft lbs Short (7/16) 70-75ft lbs Long (7/16) 60ft lbs (3/8)
Rocker Stud Torque	50ft lbs
Combustion Chamber	42-47cc (Can be angled milled to) 38cc
Spring Pocket Can be cut to 1.625, no deeper	
Rockers .550 offset	T & D 18° 2055
Rockers .550 offset	JESEL 18° kra-10742
Note: Exhaust rocker offset .030"	
Valve Centers	1.965"
Valve Angle	14°
Angle Mill	.0075 per cc
Flat Mill	.006 per cc
Intake Face Angle	5°
Manganese Bronze Intake Guides	
Phosphor Bronze Exhaust Guides	

Installed Height

Spring 221043	1.950"
Spring 22429	1.880"
Spring 9985	1.198" -2.00"



Intake Valve Test Data @28" of water

.100	.200	.300	.400	.500	.600	.700
72.98	155.81	239.99	305.36	350.58	379.24	398.49

Exhaust Valve Test Data @28" of water

.100	.200	.300	.400	.500	.600	.700
60.22	110.47	166.90	223.32	251.97	266.18	274.08



PRO 14° IRON BIG CU.IN RACE HEAD

PART #
214 62 585

This head features a larger intake runner best suited for 400 cu in + engines running 4500-9000 RPM with 830 + cfm carburetor or 2 5/8" injectors. These high flowing ports produce 800+ HP. Requires 4.155" bore or larger. This is a serious cast iron head for maximum HP. **285cc runner 2.250" valve.**

Cast Iron
285cc
Intake Runner

42-47cc
Chamber

Suggested Assembly Components

Intake Valve 2.250 +.600 long Pro	22506
Exhaust Valve 1.625 +.600 long Pro	16256
Valve Spring Roller ISKY (+ .720" lift)	9801-A
Retainer Titanium	980-TI/10°
Spring Seat ISKY	990-SC
Valve Spring Roller ISKY (up to .720" lift)	9985
Retainer Titanium Pro	9985
Spring Seat Manley	42326
Locks Manley	13083 std
Valve Spring Flat Tappet	22429
Retainer Titanium Pro	9985
Spring Seat	42326
Locks	13083 std
Intake Gasket Pro	M14001G-060
Head Gasket	1034
Head Bolts ARP	234 4334
Manifold Pro	14001 - 14002
(With 14002 use 1/2" phenolic)	PHNS 1-2
Spark Plug Suggested Starting Range only	
Below 13.5:1 Champion	C57CX
Above 13.5:1 - 15:1 Champion	C55CX
Above 15:1 Champion	C53CX
For high lift high RPM - Drag Race	
Spring Manley	22458
Retainer Manley	23669
Seat Manley	42374

TITANIUM VALVES

As Per PRO Prints (see back of catalogue)
Optimum Length Intake 5.540"
Exhaust 5.560"



Specifications

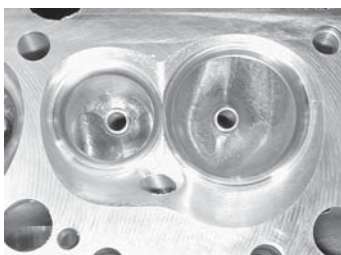
100% CNC Ported Combustion Chambers	
100% CNC Ported Intake Ports	
100% CNC Ported Exhaust Ports	
3 Angle Valve Job	
Head Torque Settings	65-70ft lbs Short (7/16)
	70-75ft lbs Long (7/16)
	60ft lbs (3/8)
Rocker Stud Torque	50ft lbs
Combustion Chamber	42-47cc
(Can be angled milled to)	38cc
Spring Pocket Can be cut to 1.625, no deeper	
Rockers .550 offset	T & D 2055 18°
Rockers .550 offset	JESEL 18° kra-10742
Note Exhaust Rocker offset .030"	
Valve Centers	1.965"
Valve Angle	14°
Angle Mill	.0075 per cc
Flat Mill	.006 per cc
Intake Face Angle	5°
Manganese Bronze Intake Guides	
Phosphor Bronze Exhaust Guides	

Installed Height

Spring 221043	1.950"
Spring 22429	1.880"
Spring 9985	1.198" -2.00"

Options

2.200" Intake Valve



Intake Valve Test Data @28" of water

.100	.200	.300	.400	.500	.600	.700
76.56	161.64	234.17	299.99	353.27	383.72	401.21

Exhaust Valve Test Data @28" of water

.100	.200	.300	.400	.500	.600	.700
67.26	119.04	188.82	229.24	251.97	266.18	274.08

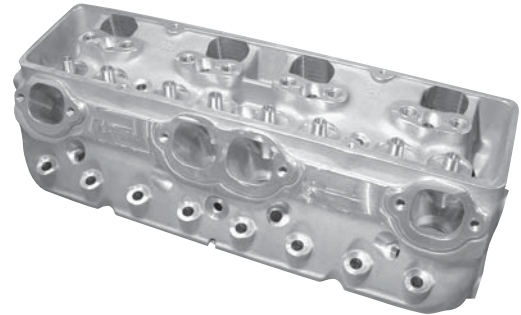
PART #
214 62 300

PRO 14° IRON BIG CU" DRAG RACE HEAD

This head has all the superior features of the Pro 14° cylinder head but has been made with a **305cc runner and a huge 2.300" intake valve.** Capable of flowing over 420CFM with custom porting and is currently the most powerful S/B cylinder head on the market. Produces amazing power at high RPM on 440cu in or larger engine needs 4.200" bore for best results.

Cast Iron
305cc
Intake Runner

42-47cc
Chamber

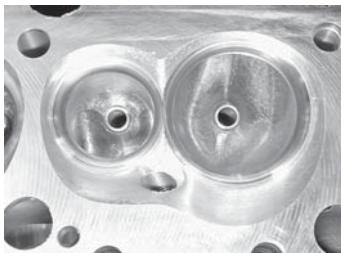


Suggested Assembly Components

Intake Valve 2.300 +.600 long Pro	23006
Exhaust Valve 1.625 +.600 long Pro	16256
Valve Spring Roller ISKY (+ .720" lift)	9801-A
Retainer Titanium	980-TI/10°
Spring Seat ISKY	990-SC
Valve Spring Roller ISKY (up to .720" lift)	9985
Retainer Titanium Pro	9985
Spring Seat Manley	42326
Locks Manley	13083 std
Valve Spring Flat Tappet	22429
Retainer Titanium Pro	9985
Spring Seat	42326
Locks	13083 std
Intake Gasket Pro	M14001G-060
Head Gasket	1034
Head Studs ARP	234 4334
Manifold Pro	14002 D
(With 14002 use 1/2" phenolic)	PHNS 1-2
Spark Plug Suggested Starting Range only	
Below 13.5:1 Champion	C57CX
Above 13.5:1 - 15:1 Champion	C55CX
Above 15:1 Champion	C53CX
For high lift high RPM - Drag Race	
Spring Manley	22458
Retainer Manley	23669
Seat Manley	42374

TITANIUM VALVES

As Per PRO Prints (see back of catalogue)
Optimum Length Intake 5.540"
Exhaust 5.560"



Specifications

100% CNC Ported Combustion Chambers	
100% CNC Ported Intake Ports	
100% CNC Ported Exhaust Ports	
3 Angle Valve Job	
Head Torque Settings	65-70ft lbs Short (7/16)
	70-75ft lbs Long (7/16)
	60ft lbs (3/8)
Rocker Stud Torque	50ft lbs
Combustion Chamber	42-47cc
(Can be angled milled to)	38cc
Spring Pocket Can be cut to 1.625, no deeper	
Rockers .600 offset	T & D 2055 18°
Rockers .600 offset	JESEL 18° kra-10742
Note: Exhaust rockers offset .060	
Valve Centers	1.995"
Valve Angle	14°
Angle Mill	.0075 per cc
Flat Mill	.006 per cc
Intake Face Angle	5°
Manganese Bronze Intake Guides	
Phosphor Bronze Exhaust Guides	

Installed Height

Spring 221043	1.950"
Spring 22429	1.880"
Spring 9985	1.198" -2.00"

Options

2.290" Intake Valve

Intake Valve Test Data @28" of water

.100	.200	.300	.400	.500	.600	.700	.800
76.56	161.64	234.17	299.99	353.72	383.72	398.71	415.9

Exhaust Valve Test Data @28" of water

.100	.200	.300	.400	.500	.600	.700	.800
67.26	119.04	118.82	229.24	251.97	266.18	274.08	281.01



PRO 23° IRON RAISED RUNNER - ENTRY LEVEL

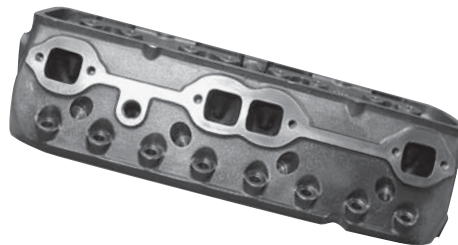
PART #
223 00 000

Cast Iron
215cc
Intake Runner

This is an entry level small chamber head to allow freedom of choice of valve sizes & seat shapes. Can be finish ported to customers own requirements. Valve guides supplied not fitted. No valve job.

Suggested Assembly Components

Valve Spring Roller Manley	221043
Retainer Titanium Pro	1043
Spring Seat Manley	42373
Valve Spring Roller ISKY	9985
Retainer Titanium Pro	9985
Spring Seat Manley	42326
Locks Manley	13083 std
Valve Spring Flat Tappet	22429
Retainer Titanium Pro	9985
Spring Seat	42326
Locks	13083 std
Intake Gasket Pro	M2300RG-060
Head Gasket	1034
Head Studs ARP	234 4333
Manifold	Requires minor mods to fit
Circle Track	Edelbrock 2949
(Thick flange version of 2926)	
Drag Race	Brodix HV1007
Spark Plug Suggested Starting Range only	
Below 13.5:1 Champion	C57CX
Above 13.5:1 - 15:1 Champion	C55CX
Above 15:1 Champion	C53CX
For high lift high RPM - Drag Race	
Spring Manley	22458
Retainer Manley	23669
Seat Manley	42374

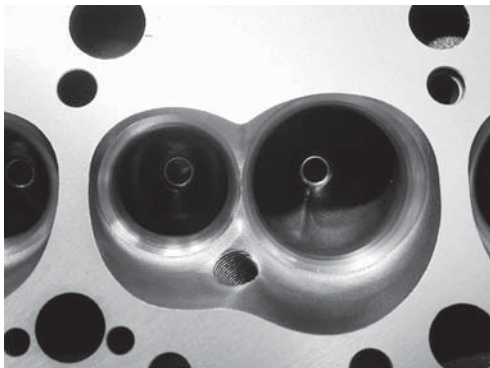


Specifications

Head Torque Settings	65-70ft lbs Short (7/16)
	70-75ft lbs Long (7/16)
Rocker Stud Torque	50ft lbs
Combustion Chamber	64cc
(Can be angled milled to)	54cc
Spring Pocket Can be cut to	1.625, no deeper
Rockers .450 offset	T&D 2110
Rockers .450 offset	Jesel kra-10509
PRO 1.5 x 1.5	PRO6348
PRO 1.6 X 1.6	PRO6349
PRO 1.65 X 1.6	PRO6354
Valve Angle	23°
Angle Mill	.0075 per cc
Flat Mill	.006 per cc
Intake Face Angle	10°
Manganese Intake Valve Guides	
Phosphor Bronze Exhaust Valve Guides	

Installed Height

Spring 221043	1.950"
Spring 22429	1.880"
Spring 9985	1.198" -2.00"



PART#
223 60 022

PRO 23° IRON RAISED RUNNER - AS CAST

23° R / R IRON

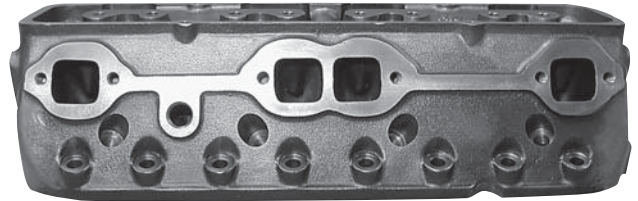
This head is suitable for 350-400 cu in engines for Drag race Oval track or boat. 100% CNC chambers high flow As Cast ports. This head can be angle milled to 54cc for higher compression engines. Over 580HP out of the box with high compression & large carburetor. Ideal for unported 23° classes.

Cast Iron
222cc
Intake Runner

60-64cc
Chamber

Suggested Assembly Components

Intake Valve 2.080 +.500 long Pro	20805
Exhaust Valve 1.600 +.500 long Pro	16005
Assembled height in excess of 2" +.600 long	
Intake Valve 2.080 +.600 long Pro	20806
Exhaust Valve 1.600 +.600 long Pro	16006
Valve Spring Roller Manley	221043
Retainer Titanium Pro	1043
Spring Seat Manley	42373
Valve Spring Roller ISKY	9985
Retainer Titanium Pro	9985
Spring Seat Manley	42326
Locks Manley	13083 std
Valve Spring Flat Tappet	22429
Retainer Titanium Pro	9985
Spring Seat Manley	42326
Locks Manley	13083 std
Intake Gasket Pro	M2300RG 060
Head Gasket Felpro	1034
Head Studs ARP	234 4333
Manifold Requires minor mods to fit	
Circle Track Edelbrock	2949
(Thick flange version of 2926)	
Drag Race Brodix	HV1007
Spark Plug Suggested Starting Range only	
Below 13.5:1 Champion	C57CX
Above 13.5:1 - 15:1 Champion	C55CX
Above 15:1 Champion	C53CX
For high lift high RPM - Drag Race	
Spring Manley	22458
Retainer Manley	23669
Seat Manley	42374

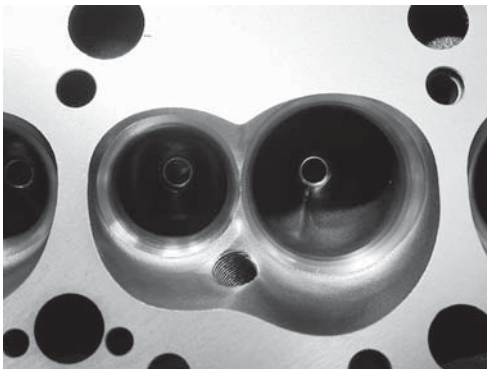


Specifications

100% CNC Ported Combustion Chambers	
3 Angle Valve Job	
Head Torque Settings	65-70ft lbs Short (7/16) 70-75ft lbs Long (7/16)
Rocker Stud Torque	50ft lbs
Combustion Chamber	60-64cc
(Can be angled milled to)	54cc
Spring Pocket Can be cut to 1.625, no deeper	
Rockers .450 offset	T & D 2110
Rockers .450 offset	Jesel kra-10509
PRO 1.5 X 1.5	PRO6348
PRO 1.6 X 1.6	PRO6349
PRO 1.65 X 1.6	PRO6354
Valve Angle	23°
Angle Mill	.0075 per cc
Flat Mill	.006 per cc
Intake Face Angle	10°
Manganese Bronze Intake guides	
Phosphor Bronze Exhaust valves	

Installed Height

Spring 221043	1.950"
Spring 22429	1.880"
Spring 9985	1.198" -2.00"



Intake Valve Test Data @28" of water

.100	.200	.300	.400	.500	.600	.700
68.50	132.98	194.77	249.84	280.73	290.59	296.41

Exhaust Valve Test Data @28" of water

.100	.200	.300	.400	.500	.600	.700
57.84	110.95	153.62	182.54	205.77	220.47	230.90



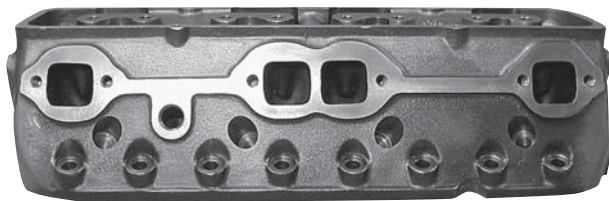
PRO 23° IRON RAISED RUNNER SEMI-PORTED

PART #
223 62 022

This head is suitable for engines 350-400 cuin. Chamber & bowl CNC ported ports as cast. Ideal for those who like to port their own heads. Oval Track Drag Race or Boat using 4000-7500 RPM carburetor 600-750cfm will attain the best results.

Cast Iron
222cc
Intake Runner

60-64cc
Chamber



Suggested Assembly Components

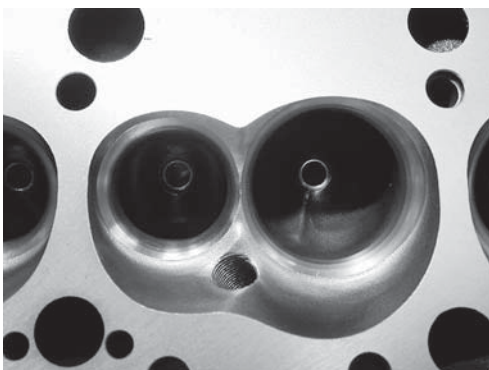
Intake Valve 2.080 +.500 long Pro	20805
Exhaust Valve 1.600 +.500 long Pro	16005
Assembled height in excess of 2" +.600 long	
Intake Valve 2.080 +.600 long Pro	20806
Exhaust Valve 1.600 +.600 long Pro	16006
Valve Spring Roller Manley	221043
Retainer Titanium Pro	1043
Spring Seat Manley	42373
Valve Spring Roller ISKY	9985
Retainer Titanium Pro	9985
Spring Seat Manley	42326
Locks Manley	13083 std
Valve Spring Flat Tappet	22429
Retainer Titanium Pro	9985
Spring Seat Manley	42326
Locks Manley	13083 std
Intake Gasket Pro	M2300RG 060
Head Gasket Felpro	1034
Head Studs ARP	234 4333
Manifold	Requires minor mods to fit
	Circle Track Edelbrock
	(Thick flange version of 2926)
	Drag Race Brodix
	HV1007
Spark Plug Suggested Starting Range only	
Below 13.5:1 Champion	C57CX
Above 13.5:1 - 15:1 Champion	C55CX
Above 15:1 Champion	C53CX
For high lift high RPM - Drag Race	
Spring Manley	22458
Retainer Manley	23669
Seat Manley	42374

Specifications

100% CNC Ported Combustion Chambers & Bowls	
3 Angle Valve Job Intake Radius Exhaust	
Head Torque Settings	65-70ft lbs Short (7/16)
	70-75ft lbs Long (7/16)
	60ft lbs 3/8
Rocker Stud Torque	50ft lbs
Combustion Chamber	60-64cc
(Can be angled milled to)	54cc
Rockers .450 offset	T & D
	2110
Rockers .450 offset	Jesel
	kra-10509
PRO 1.5 X 1.5	PRO6348
PRO 1.6 X 1.6	PRO6348
PRO 1.65 X 1.6	PRO6354
Valve Angle	23°
Angle Mill	.0075 per cc
Flat Mill	.006 per cc
Intake Face Angle	10°
Manganese Bronze Intake Valve Guides	
Phosphor Bronze Exhaust Valve Guides	

Installed Height

Spring 221043	1.950"
Spring 22429	1.880"
Spring 9985	1.198" -2.00"



Intake Valve Test Data @28" of water

.100	.200	.300	.400	.500	.600	.700
71.19	145.07	203.72	249.84	291.03	296.41	302.23

Exhaust Valve Test Data @28" of water

.100	.200	.300	.400	.500	.600	.700
54.31	112.41	150.30	176.82	197.03	212.82	224.50

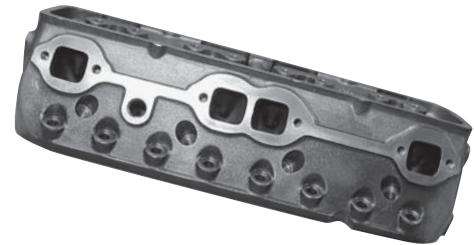
PART#
223 62 256

PRO 23° IRON RAISED RUNNER FULLY PORTED

This is a fully CNC ported cylinder head suitable for Oval track jet boat drag race and is capable of over 700 HP with high compression & large carburetor. Ideal head for all racing with a 23° rule.

256cc
Intake Runner

64cc
Chamber



Suggested Assembly Components

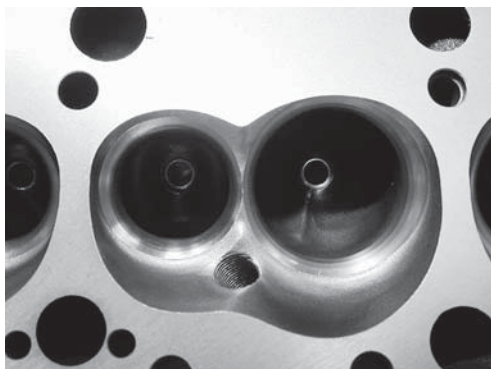
Intake Valve 2.125 +.500 long Pro	21255
Exhaust Valve 1.625 +.500 long Pro	16255
Assembled height in excess of 2" +.600 long	
Intake Valve 2.125 +.600 long Pro	21256
Exhaust Valve 1.625 +.600 long Pro	16006
Valve Spring Roller Manley	221043
Retainer Titanium Pro	1043
Spring Seat Manley	42373
Valve Spring Roller ISKY	9985
Retainer Titanium Pro	9985
Spring Seat Manley	42326
Locks Manley	13083 std
Valve Spring Flat Tappet	22429
Retainer Titanium Pro	9985
Spring Seat Manley	42326
Locks Manley	13083 std
Intake Gasket Pro	M2300RG 060
Head Gasket Felpro	1034
Head Studs ARP	234 4333
Manifold Requires minor mods to fit	
Circle Track Edelbrock	2949
(Thick flange version of 2926)	
Drag Race Brodix	HV1007
Spark Plug Suggested Starting Range only	
Below 13.5:1 Champion	C57CX
Above 13.5:1 - 15:1 Champion	C55CX
Above 15:1 Champion	C53CX
For high lift high RPM - Drag Race	
Spring Manley	22458
Retainer Manley	23669
Seat Manley	42374

Specifications

100% CNC Ported Combustion Chambers	
100% CNC Ported Intake Ports	
100% CNC Ported Exhaust Ports	
3 Angle Valve Job Intake Radius Exhaust	
Head Torque Settings	65-70ft lbs Short (7/16)
	70-75ft lbs Long (7/16)
Rocker Stud Torque	50ft lbs
Combustion Chamber	64cc
(Can be angled milled to)	54cc
Spring Pocket Can be cut to 1.625, no deeper	
Rockers .450 offset	T & D 2110
Rockers .450 offset	Jesel kra-10509
PRO 1.6 X 1.5	PRO6375
PRO 1.65 X 1.55	PRO6376
Valve Angle	23°
Angle Mill	.0075 per cc
Flat Mill	.006 per cc
Intake Face Angle	10°
Manganese Bronze Intake Guides	
Phosphor Bronze Exhaust Guides	

Installed Height

Spring 221043	1.950"
Spring 22429	1.880"
Spring 9985	1.198" -2.00"



Intake Valve Test Data @28" of water

.100	.200	.300	.400	.500	.600	.700
77.01	154.92	218.95	270.44	307.60	338.05	341.90

Exhaust Valve Test Data @28" of water

.100	.200	.300	.400	.500	.600	.700
55.95	119.96	161.21	194.40	224.74	241.33	251.77



PRO 23° ALUMINUM RAISED RUNNER RACING HEAD

PART#
123 60 022

As cast port with fully CNC chamber no valve job or porting. This is an ideal cylinder head for those who like to cut their own seats and port to your own specifications. Suggested valve size 2.125 Intake 1.625 Exhaust.

Aluminum
222cc
Intake Runner

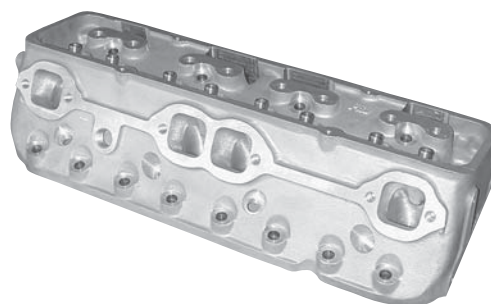
64cc
Chamber

Suggested Assembly Components

Intake Valve 2.125 +.500 long Pro	21255
Exhaust Valve 1.625 +.500 long Pro	16255
Assembled height in excess of 2" +.600 long	
Intake Valve 2.125 +.600 long Pro	21256
Exhaust Valve 1.625 +.600 long Pro	16256
Valve Spring Roller Manley	221043
Retainer Titanium Pro	1043
Spring Seat Manley	42373
Valve Spring Roller ISKY	9985
Retainer Titanium Pro	9985
Spring Seat Manley	42326
Locks Manley	13083 std
Valve Spring Flat Tappet	22429
Retainer Titanium Pro	9985
Spring Seat Manley	42326
Locks Manley	13083 std
Intake Gasket Pro	M2300RG
Head Gasket Felpro	1034
Head Studs ARP	234 4333
Manifold Requires minor mods to fit	
Circle Track Edelbrock	2949
(Thick flange version of 2926)	
Drag Race Brodix	HV1007
Spark Plug Suggested Starting Range only	
Below 13.5:1 Champion	C57CX
Above 13.5:1 - 15:1 Champion	C55CX
Above 15:1 Champion	C53CX

TITANIUM VALVES

As Per PRO Prints (see back of catalogue)
Optimum Length Intake 5.440"
Exhaust 5.460"



Specifications

100% CNC Ported Combustion Chambers	
3 Angle Valve Job	
Head Torque Settings	65-70ft lbs Short (7/16)
	70-75ft lbs Long (7/16)
	50-55 lbs Long 3/8
Rocker Stud Torque	50ft lbs
Combustion Chamber	64cc
(Can be angled milled to)	50cc
Spring Pocket Can be cut to 1.625, no deeper	
Rockers .450 offset	T & D 2110
Rockers .450 offset	JESEL kra-10509
PRO 1.6 x 1.5	PRO6375
PRO 1.65 x 1.55	PRO6376
Valve Centers	1.935"
Valve Angle	23°
Angle Mill	.0075 per cc
Flat Mill	.006 per cc
Intake Face Angle	10°
Manganese Bronze Valve Guides	

Installed Height

Spring 221043	1.950"
Spring 22429	1.880"
Spring 9985	1.198" -2.00"

Options

Copper Beryllium Seats

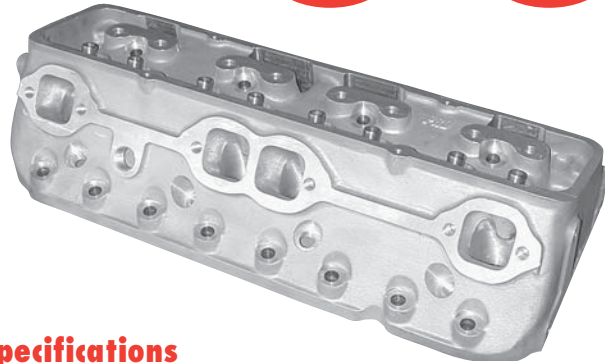
PART #
123 62 256

PRO 23° ALUMINUM RAISED RUNNER RACING HEAD

The ultimate 23° CNC aluminum head available, 100% CNC ported, suited to 350-400 cubic inch engines. Drag Race & Oval track using 4000-8800 RPM. Requires 850 + cfm carburetor for best results and a Dominator for Drag Race. Ideal for classes where 23° rule applies. Capable of over 700 HP out of the box.

Aluminum
256cc
Intake Runner

60-64cc
Chamber



Suggested Assembly Components

Intake Valve 2.125 +.500 long Pro	21255
Exhaust Valve 1.625 +.500 long Pro	16255
Assembled height in excess of 2" .600 long	
Intake Valve 2.125 +.600 long Pro	21256
Exhaust Valve 1.625 +.600 long Pro	16256
Valve Spring Roller Manley	221043
Retainer Titanium Pro	1043
Spring Seat Manley	42373
Valve Spring Roller ISKY	9985
Retainer Titanium Pro	9985
Spring Seat Manley	42326
Locks Manley	13083 std
Valve Spring Flat Tappet	22429
Retainer Titanium Pro	9985
Spring Seat Manley	42326
Locks Manley	13083 std
Intake Gasket Pro	M2300RG
Head Gasket Felpro	1034
Head Studs ARP	234 4333
Manifold Requires minor mods to fit	
Circle Track Edelbrock	2949
(Thick flange version of 2926)	
Drag Race Brodix	HV1007
Spark Plug Suggested Starting Range only	
Below 13.5:1 Champion	C57CX
Above 13.5:1 - 15:1 Champion	C55CX
Above 15:1 Champion	C53CX

TITANIUM VALVES

As Per PRO Prints (see back of catalogue)
Optimum Length Intake 5.440"
Exhaust 5.460"

Specifications

100% CNC Ported Combustion Chambers	
100% CNC Ported Intake Ports	
100% CNC Ported Exhaust Ports	
3 Angle Valve Job	
Head Torque Settings	65-70ft lbs Short (7/16)
	70-75ft lbs Long (7/16)
	60ft lbs (3/8)
Rocker Stud Torque	50ft lbs
Combustion Chamber	60-64cc
(Can be angled milled to)	50cc
Rockers .450 offset	T & D 2110
Rockers .450 offset	JESEL 18° kra-10509
PRO 1.6 X 1.5	PRO6375
PRO 1.65 X 1.55	PRO6376
Valve Centers	1.935"
Valve Angle	23°
Angle Mill	.0075 per cc
Flat Mill	.006 per cc
Intake Face Angle	10°
Manganese Bronze Intake Guides	

Installed Height

Spring 221043	1.950"
Spring 22429	1.880"
Spring 9985	1.198" -2.00"

Options

Copper Beryllium Seats

Intake Valve Test Data @28" of water

.100	.200	.300	.400	.500	.600	.700
77.01	154.92	218.95	270.44	307.60	338.05	341.90

Exhaust Valve Test Data @28" of water

.100	.200	.300	.400	.500	.600	.700
55.95	119.96	161.21	194.40	224.74	241.33	251.77



PRO 23° ALUMINUM RAISED RUNNER SPREAD PORT - RACING HEAD

PART#
123 62 256 S

A new addition to the 23° range, using the same components and features as the 12362256 but using the Spread Port Exhaust layout. Head rolled over 2° for 21° valve angle. Ideal for 360cu in sprint car.

Aluminum
256cc
Intake Runner

60-64cc
Chamber



Suggested Assembly Components

Intake Valve 2.125 +600 long Pro	21256
Exhaust Valve 1.625 +600 long Pro	16256
Assembled height in excess of 2" +.700 long	
Intake Valve 2.125 +.700 long Pro	21257
Exhaust Valve 1.625 +.700 long Pro	16257
Valve Spring Roller Manley	221043
Retainer Titanium Pro	1043
Spring Seat Manley	42373
Valve Spring Roller ISKY	9985
Retainer Titanium Pro	9985
Spring Seat Manley	42326
Locks Manley	13083 std
Valve Spring Flat Tappet	22429
Retainer Titanium Pro	9985
Spring Seat Manley	42326
Locks Manley	13083 std
Intake Gasket Pro	M2300RG
Head Gasket Felpro	1034
Head Studs ARP	234 4333
Manifold Requires minor mods to fit	
Circle Track Edelbrock	2949
(Thick flange version of 2926)	
Drag Race Brodix	HV1007
Spark Plug Suggested Starting Range only	
Below 13.5:1 Champion	C57CX
Above 13.5:1 - 15:1 Champion	C55CX
Above 15:1 Champion	C53CX

TITANIUM VALVES

As Per PRO Prints (see back of catalogue)
Optimum Length Intake 5.640"
Exhaust 5.660"

Specifications

100% CNC Ported Combustion Chambers	
100% CNC Ported Intake Ports	
100% CNC Ported Exhaust Ports	
3 Angle Valve Job	
Head Torque Settings	65-70ft lbs Short (7/16)
	70-75ft lbs Long (7/16)
	60ft lbs (3/8)
Rocker Stud Torque	50ft lbs
Combustion Chamber	60-64cc
(Can be angled milled to)	50cc
Rockers .450 offset	T & D 2110
Rockers .450 offset	Jesel kra 10509
PRO 1.6 X 1.5	PRO6375
PRO1.65 X 1.55	PRO6376
Valve Centers	1.935"
Valve Angle	21°
Angle Mill	.0075 per cc
Flat Mill	.006 per cc
Intake Face Angle	10°
Manganese Bronze Intake Guides	

Installed height

Spring 221043	1.950"
Spring 22429	1.880"
Spring 9985	1.198" -2.00"

Options

Down nozzle version available as special request
Copper Beryllium Seats

Intake Valve Test Data @28" of water

.100	.200	.300	.400	.500	.600	.700
77.01	154.92	218.95	270.44	307.60	338.05	341.90

Exhaust Valve Test Data @28" of water

.100	.200	.300	.400	.500	.600	.700
55.95	119.96	161.21	194.40	224.74	241.33	251.77

PART #
223 4000 80A

180cc
Intake
Runner

64cc
Chamber

PART #
223 2000 80A

180cc
Intake
Runner

72cc
Chamber

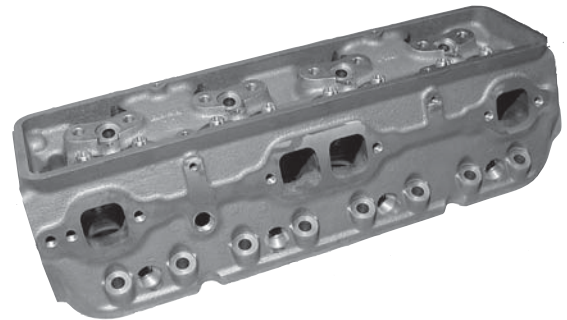
23° PRO LIGHTNING

WORLD'S MOST POWERFUL STANDARD STYLE
23° IRON HEAD

A top quality high performance 23° cylinder head that features phosphor bronze exhaust valve guides for superior heat dissipation and manganese bronze intake guides for longer life.

This head will take Std rocker covers or late model centre bolt covers and Std type screw in studs & rockers. Unique multi angled inlet & radius exhaust valve seats will out flow the competition by 5%. Also features thick deck faces for angle milling.

As Cast chamber & ports.



Suggested Assembly Components

Intake Valve 2.020 +.100 long Pro	20201
Exhaust Valve 1.600 +.100 long Pro	16001
Assembled height in excess of 1.950" +.200 long	
Intake Valve 2.020 +.200 long Pro	20202
Exhaust Valve 1.600 +.200 long Pro	16002
Valve Spring Roller Manley	221043
Retainer Titanium Pro	1043
Spring Seat Manley	42373
Valve Spring Roller ISKY	9985
Retainer Titanium Pro	9985
Spring Seat Manley	42326
Locks Manley	13083 std
Valve Spring Flat Tappet	22429
Retainer Titanium Pro	9985
Spring Seat Manley	42326
Locks Manley	13083 std
Intake Gasket Pro	M23001L 060
Head Gasket Felpro	1034
Head Studs Manley	42171
Manifold Std Chev	Edelbrock 2925
Spark Plug Suggested Starting Range only	V59C
For high lift high RPM - Drag Race	
Spring Manley	22458
Retainer Manley	23669
Seat Manley	42374

Note

- If a straight plug head is required delete letter "A" from part #.
- When using pop-up pistons, chamber to dome clearance **MUST** be checked.
- When using high lift cams, valve to piston clearance should be measured. recommended min: inlet .80" exh .100"
- Specified chamber sizes are a minimum. Due to variations in valve margins and dishes, chamber volume **MUST** be checked before installation.



APPLICATION

Street performance, max throttle response & torque, up to 350 cu"

Specifications

3 Angle Valve Job	
Head Torque Settings	65-70ft lbs Short (7/16) 70-75ft lbs Long (7/16)
Rocker Stud Torque	50ft lbs
Combustion Chamber	64cc
(Can be angled milled to)	47cc
Angle Mill	.0075 per cc
Flat Mill	.006 per cc
Spring Pocket Can be cut to	1.625, no deeper
Rocker	No offset required
Valve Centers	1.890"
Valve Angle	23°
Intake Face Angle	10°
Intake Port Dimensions	1.190" x 1.990"
Manganese Bronze Intake Guides	
Phosphor Bronze Exhaust Guides	

Installed Height

Spring 221043	1.950"
Spring 22429	1.880"
Spring 9985	1.198" -2.00"

Intake Valve Test Data @28" of water

	.100	.200	.300	.400	.500	.600	.700
	73.88	150.89	206.86	242.68	257.90	263.27	270.12

Exhaust Valve Test Data @28" of water

	.100	.200	.300	.400	.500	.600	.700
	56.90	100.99	156.94	176.85	186.34	190.13	194.87



23° PRO LIGHTNING

WORLDS MOST POWERFUL

STANDARD STYLE 23° IRON HEAD

A top quality high performance 23° cylinder head that features phosphor bronze exhaust valve guides for superior heat dissipation and manganese bronze intake guides for longer life.

This head will take Std rocker covers or late model centre bolt covers and Std type screw in studs & rockers. Unique multi angled inlet & radius exhaust valve seats will out flow the competition by 5%. Also features thick deck faces for angle milling.

As Cast chamber & ports.

Suggested Assembly Components

Intake Valve 2.020 +.100 long Pro	20201
Exhaust Valve 1.600 +.100 long Pro	16001
Assembled height in excess of 1.950" +.200 long	
Intake Valve 2.020 +.200 long Pro	20202
Exhaust Valve 1.600 +.200 long Pro	16002
Valve Spring Roller Manley	221043
Retainer Titanium Pro	1043
Spring Seat Manley	42373
Valve Spring Roller ISKY	9985
Retainer Titanium Pro	9985
Spring Seat Manley	42326
Locks Manley	13083 std
Valve Spring Flat Tappet	22429
Retainer Titanium Pro	9985
Spring Seat Manley	42326
Locks Manley	13083 std
Intake Gasket Pro	M2300IL 060
Head Gasket Felpro	1034
Head Studs Manley	42171
Manifold Std Chev	Edelbrock 2925
Spark Plug Suggested Starting Range only	V59C
For high lift high RPM - Drag Race	
Spring Manley	22458
Retainer Manley	23669
Seat Manley	42374

Note

- If a straight plug head is required delete letter "A" from part #.
- When using pop-up pistons, chamber to dome clearance **MUST** be checked.
- When using high lift cams, valve to piston clearance should be measured. recommended min: inlet .80" exh .100"
- Specified chamber sizes are a minimum. Due to variations in valve margins and dishes, chamber volume **MUST** be checked before installation.



PART #
223 5000 00A

200cc
Intake
Runner

50cc
Chamber

PART #
223 4000 00A

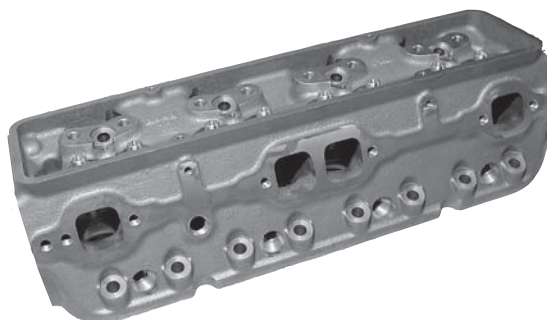
200cc
Intake
Runner

64cc
Chamber

PART #
223 2000 00A

200cc
Intake
Runner

72cc
Chamber



APPLICATION

Street perf & short track, restricted oval, 327 - 350 cu" up to 6500rpm

Specifications

3 Angle Valve Job	
Head Torque Settings	65-70ft lbs Short (7/16) 70-75ft lbs Long (7/16)
Rocker Stud Torque	50ft lbs
Combustion Chamber	64cc (Can be angled milled to) 47cc
Angle Mill	.0075 per cc
Flat Mill	.006 per cc
Spring Pocket	Can be cut to 1.625, no deeper
Rocker	No offset required
Valve Centers	1.890"
Valve Angle	23°
Intake Face Angle	10°
Intake Port Dimensions	1.230" x 2.100"
Manganese Bronze Intake Guides	
Phosphor Bronze Exhaust Guides	

Installed Height

Spring 221043	1.950"
Spring 22429	1.880"
Spring 9985	1.198" -2.00"

Intake Valve Test Data @28" of water

.100	.200	.300	.400	.500	.600	.700
68.5	134.32	191.63	235.96	260.98	268.51	278.41

Exhaust Valve Test Data @28" of water

.100	.200	.300	.400	.500	.600	.700
56.90	100.99	156.94	176.85	186.34	190.13	194.87

PART #
223 5000 20A

220cc
Intake
Runner

50cc
Chamber

PART #
223 4000 20A

220cc
Intake
Runner

64cc
Chamber

PART #
223 2000 20A

220cc
Intake
Runner

72cc
Chamber

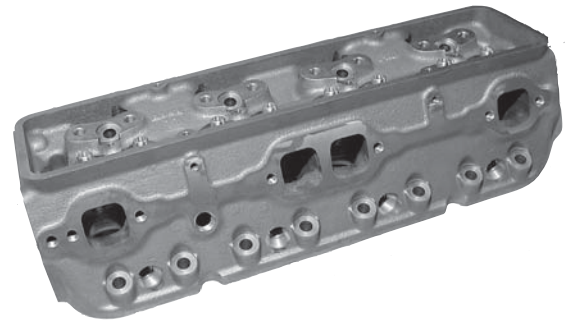
23° PRO LIGHTNING

WORLD'S MOST POWERFUL
STANDARD STYLE 23° IRON HEAD

A top quality high performance 23° cylinder head that features phosphor bronze exhaust valve guides for superior heat dissipation and manganese bronze intake guides for longer life.

This head will take Std rocker covers or late model centre bolt covers and Std type screw in studs & rockers. Unique multi angled inlet & radius exhaust valve seats will out flow the competition by 5%. Also features thick deck faces for angle milling.

As Cast chamber & ports.



Suggested Assembly Components

Intake Valve 2.020 +.100 long Pro	20201
Exhaust Valve 1.600 +.100 long Pro	16001
Assembled height in excess of 1.950" +.200 long	
Intake Valve 2.020 +.200 long Pro	20202
Exhaust Valve 1.600 +.200 long Pro	16002
Valve Spring Roller Manley	221043
Retainer Titanium Pro	1043
Spring Seat Manley	42373
Valve Spring Roller ISKY	9985
Retainer Titanium Pro	9985
Spring Seat Manley	42326
Locks Manley	13083 std
Valve Spring Flat Tappet	22429
Retainer Titanium Pro	9985
Spring Seat Manley	42326
Locks Manley	13083 std
Intake Gasket Pro	M2300IL 060
Head Gasket Felpro	1034
Head Bolts & Studs Manley	42171
Manifold Std Chev	Edelbrock 2925
Spark Plug Suggested Starting Range only	V59C
For high lift high RPM - Drag Race	
Spring Manley	22458
Retainer Manley	23669
Seat Manley	42374

Note

- If a straight plug head is required delete letter "A" from part #.
- When using pop-up pistons, chamber to dome clearance **MUST** be checked.
- When using high lift cams, valve to piston clearance should be measured. recommended min: inlet .80" exh .100"
- Specified chamber sizes are a minimum. Due to variations in valve margins and dishes, chamber volume **MUST** be checked before installation.



APPLICATION

Max Street Performance, oval track & drag bracket, 383 - 400cu" up to 7500rpm

Specifications

3 Angle Valve Job	
Head Torque Settings	65-70ft lbs Short (7/16) 70-75ft lbs Long (7/16)
Rocker Stud Torque	50ft lbs
Combustion Chamber	64cc
(Can be angled milled to)	47cc
Angle Mill	.0075 per cc
Flat Mill	.006 per cc
Spring Pocket Can be cut to	1.625, no deeper
Rocker	No offset required
Valve Centers	1.890"
Valve Angle	23°
Intake Face Angle	10°
Intake Port Dimensions	1.230 x 2.225
Manganese Bronze Intake Guides	
Phosphor Bronze Exhaust Guides	

Installed Height

Spring 221043	1.950"
Spring 22429	1.880"
Spring 9985	1.198" -2.00"

Intake Valve Test Data @28" of water

.100	.200	.300	.400	.500	.600	.700
70.74	146.41	204.62	249.84	264.62	272.23	282.08

Exhaust Valve Test Data @28" of water

.100	.200	.300	.400	.500	.600	.700
56.90	100.99	156.94	176.85	186.34	190.13	194.87



23° PRO LIGHTNING

WORLDS MOST POWERFUL STANDARD STYLE

23° IRON HEAD

A top quality high performance 23° cylinder head that features phosphor bronze exhaust valve guides for superior heat dissipation and manganese bronze intake guides for longer life.

This head will take Std rocker covers or late model centre bolt covers and Std type screw in studs & rockers. Unique multi angled inlet & radius exhaust valve seats will out flow the competition by 5%. Also features thick deck faces for angle milling.

CNC chamber. As Cast ports.

Suggested Assembly Components

Intake Valve 2.020 +.100 long Pro	20201
Exhaust Valve 1.600 +.100 long Pro	16001
Assembled height in excess of 1.950" +.200 long	
Intake Valve 2.020 +.200 long Pro	20202
Exhaust Valve 1.600 +.200 long Pro	16002
Valve Spring Roller Manley	221043
Retainer Titanium Pro	1043
Spring Seat Manley	42373
Valve Spring Roller ISKY	9985
Retainer Titanium Pro	9985
Spring Seat Manley	42326
Locks Manley	13083 std
Valve Spring Flat Tappet	22429
Retainer Titanium Pro	9985
Spring Seat Manley	42326
Locks Manley	13083 std
Intake Gasket Pro	M2300IL 060
Head Gasket Felpro	1034
Head Studs Manley	42171
Manifold Std Chev	Edelbrock 2925
Spark Plug Suggested Starting Range only	V59C
For high lift high RPM - Drag Race	
Spring Manley	22458
Retainer Manley	23669
Seat Manley	42374

Note

- If a straight plug head is required delete letter "A" from part #.
- When using pop-up pistons, chamber to dome clearance **MUST** be checked.
- When using high lift cams, valve to piston clearance should be measured. recommended min: inlet .80" exh .100"
- Specified chamber sizes are a minimum. Due to variations in valve margins and dishes, chamber volume **MUST** be checked before installation.



PART #
223 4600 20A

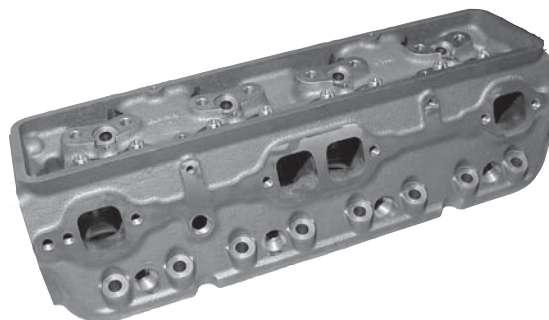
220cc
Intake
Runner

64cc
Chamber

PART #
223 2600 20A

220cc
Intake
Runner

72cc
Chamber



APPLICATION

Max Street Performance, oval track & drag bracket, 383 - 400cu" up to 7500rpm

Specifications

CNC machined Chamber	
3 Angle Valve Job	
Head Torque Settings	65-70ft lbs Short (7/16) 70-75ft lbs Long (7/16)
Rocker Stud Torque	50ft lbs
Combustion Chamber	64cc
(Can be angled milled to)	47cc
Angle Mill	.0075 per cc
Flat Mill	.006 per cc
Spring Pocket Can be cut to 1.625, no deeper	
Rocker	No offset required
Valve Centers	1.890"
Valve Angle	23°
Intake Face Angle	10°
Intake Port Dimensions	1.230" x 2.225"
Manganese Bronze Intake Guides	
Phosphor Bronze Exhaust Guides	

Installed Height

Spring 221043	1.950"
Spring 22429	1.880"
Spring 9985	1.198" -2.00"

Intake Valve Test Data @28" of water

.100	.200	.300	.400	.500	.600	.700
70.74	146.41	204.62	249.84	264.62	274.23	288.08

Exhaust Valve Test Data @28" of water

.100	.200	.300	.400	.500	.600	.700
60.22	114.27	151.72	177.80	183.02	190.71	195.24

PART #
223 4622 20A

228cc
Intake
Runner

64cc
Chamber

PART #
223 2622 20A

228cc
Intake
Runner

72cc
Chamber

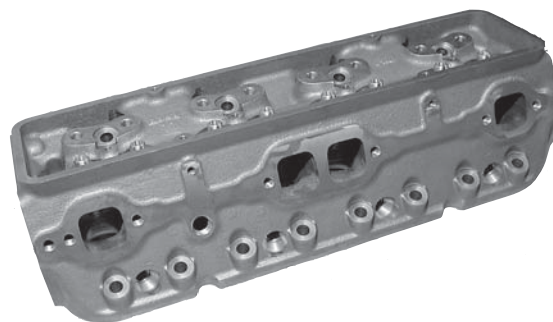
23° PRO LIGHTNING

WORLD'S MOST POWERFUL STANDARD STYLE
23° IRON HEAD

A top quality high performance 23° cylinder head that features phosphor bronze exhaust valve guides for superior heat dissipation and manganese bronze intake guides for longer life.

This head will take Std rocker covers or late model centre bolt covers and Std type screw in studs & rockers. Unique multi angled inlet & radius exhaust valve seats will out flow the competition by 5%. Also features thick deck faces for angle milling.

100% CNC chamber bowl & ports.



Suggested Assembly Components

Intake Valve 2.080 +.100 long Pro	20801
Exhaust Valve 1.600 +.100 long Pro	16001
Assembled height in excess of 1.950" +.200 long	
Intake Valve 2.080 +.200 long Pro	20802
Exhaust Valve 1.600 +.200 long Pro	16002
Valve Spring Roller Manley	221043
Retainer Titanium Pro	1043
Spring Seat Manley	42373
Valve Spring Roller ISKY	9985
Retainer Titanium Pro	9985
Spring Seat Manley	42326
Locks Manley	13083 std
Valve Spring Flat Tappet	22429
Retainer Titanium Pro	9985
Spring Seat Manley	42326
Locks Manley	13083 std
Intake Gasket Pro	M23001L 060
Head Gasket Felpro	1034
Head Studs Manley	42171
Manifold Std Chev	Edelbrock 2925
Spark Plug Suggested Starting Range only	V59C
For high lift high RPM - Drag Race	
Spring Manley	22458
Retainer Manley	23669
Seat Manley	42374

Note

- If a straight plug head is required delete letter "A" from part #.
- When using pop-up pistons, chamber to dome clearance **MUST** be checked.
- When using high lift cams, valve to piston clearance should be measured. recommended min: inlet .80" exh .100"
- Specified chamber sizes are a minimum. Due to variations in valve margins and dishes, chamber volume **MUST** be checked before installation.



APPLICATION

Max Street Performance, oval track & drag bracket, 383 - 400cu" up to 7500rpm

Specifications

100% CNC machined	
3 Angle Valve Job	
Head Torque Settings	65-70ft lbs Short (7/16) 70-75ft lbs Long (7/16)
Rocker Stud Torque	50ft lbs
Combustion Chamber	64cc
(Can be angled milled to)	47cc
Angle Mill	.0075 per cc
Flat Mill	.006 per cc
Spring Pocket Can be cut to 1.625, no deeper	
Rocker	No offset required
Valve Centers	1.890"
Valve Angle	23°
Intake Face Angle	10°
Intake Port Dimensions	1.230 x 2.225
Manganese Bronze Intake Guides	
Phosphor Bronze Exhaust Guides	

Installed Height

Spring 221043	1.950"
Spring 22429	1.880"
Spring 9985	1.198" -2.00"

Intake Valve Test Data @28" of water

.100	.200	.300	.400	.500	.600	.700
71.43	138.35	198.66	249.12	285.02	296.11	307.38

Exhaust Valve Test Data @28" of water

.100	.200	.300	.400	.500	.600	.700
60.22	114.27	151.72	177.8	192.02	201.71	210.24



23° PRO LIGHTNING

WORLDS MOST POWERFUL STANDARD STYLE

23° IRON HEAD

A top quality high performance 23° cylinder head that features phosphor bronze exhaust valve guides for superior heat dissipation and manganese bronze intake guides for longer life.

This head will take Std rocker covers or late model centre bolt covers and Std type screw in studs & rockers. Unique multi angled inlet & radius exhaust valve seats will out flow the competition by 5%. Also features thick deck faces for angle milling.

As Cast chamber & ports.

Suggested Assembly Components

Intake Valve 2.080 +.100 long Pro	20801
Exhaust Valve 1.600 +.100 long Pro	16001
Assembled height in excess of 1.950" +.200 long	
Intake Valve 2.080 +.200 long Pro	20802
Exhaust Valve 1.600 +.200 long Pro	16002
Valve Spring Roller Manley	221043
Retainer Titanium Pro	1043
Spring Seat Manley	42373
Valve Spring Roller ISKY	9985
Retainer Titanium Pro	9985
Spring Seat Manley	42326
Locks Manley	13083 std
Valve Spring Flat Tappet	22429
Retainer Titanium Pro	9985
Spring Seat Manley	42326
Locks Manley	13083 std
Intake Gasket Pro	M2300IL 060
Head Gasket Felpro	1034
Head Bolts & Studs Manley	42171
Manifold Std Chev	Edelbrock 2925
Spark Plug Suggested Starting Range only	V59C
For high lift high RPM - Drag Race	
Spring Manley	22458
Retainer Manley	23669
Seat Manley	42374

Note

- If a straight plug head is required delete letter "A" from part #.
- When using pop-up pistons, chamber to dome clearance **MUST** be checked.
- When using high lift cams, valve to piston clearance should be measured. recommended min: inlet .80" exh .100"
- Specified chamber sizes are a minimum. Due to variations in valve margins and dishes, chamber volume **MUST** be checked before installation.



PART #
223 4000 35A

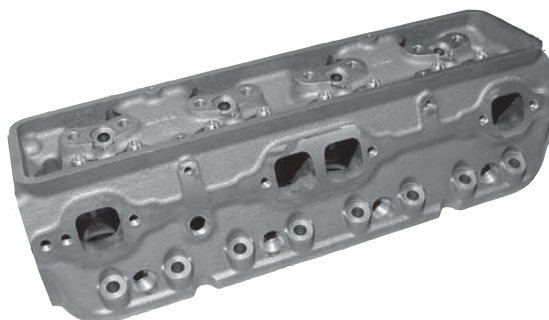
235cc
Intake
Runner

64cc
Chamber

PART #
223 2000 35A

235cc
Intake
Runner

72cc
Chamber



APPLICATION

Serious Race head, unlimited oval / drag, 400cu" + 8000rpm+

Specifications

3 Angle Valve Job	
Head Torque Settings	65-70ft lbs Short (7/16) 70-75ft lbs Long (7/16)
Rocker Stud Torque	50ft lbs
Combustion Chamber	64cc
(Can be angled milled to)	47cc
Angle Mill	.0075 per cc
Flat Mill	.006 per cc
Spring Pocket	Can be cut to 1.625, no deeper
Rocker	No offset required
Valve Centers	1.890"
Valve Angle	23°
Intake Port Dimensions	1.250 x 2.240
Intake Face Angle	10°
Manganese Bronze Intake Guides	
Phosphor Bronze Exhaust Guides	

Installed Height

Spring 221043	1.950"
Spring 22429	1.880"

Intake Valve Test Data @28" of water

.100	.200	.300	.400	.500	.600	.700
73.43	138.35	195.66	243.12	274.02	292.11	312.38

Exhaust Valve Test Data @28" of water

.100	.200	.300	.400	.500	.600	.700
60.22	114.27	151.72	177.80	192.02	194.13	197.24

PART #
223 4600 35A

235cc
Intake
Runner

64cc
Chamber

PART #
223 2600 35A

235cc
Intake
Runner

72cc
Chamber

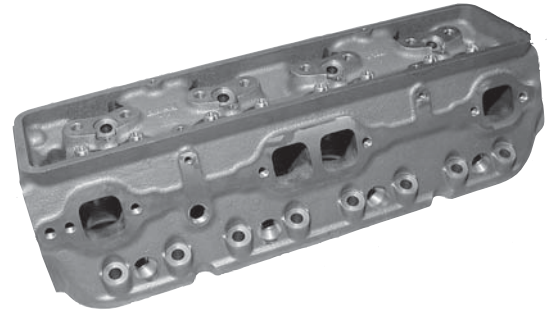
23° PRO LIGHTNING

WORLD'S MOST POWERFUL STANDARD STYLE
23° IRON HEAD

A top quality high performance 23° cylinder head that features phosphor bronze exhaust valve guides for superior heat dissipation and manganese bronze intake guides for longer life.

This head will take Std rocker covers or late model centre bolt covers and Std type screw in studs & rockers. Unique multi angled inlet & radius exhaust valve seats will out flow the competition by 5%. Also features thick deck faces for angle milling.

CNC chamber. As Cast parts.



Suggested Assembly Components

Intake Valve 2.080 +.100 long Pro	20801
Exhaust Valve 1.600 +.100 long Pro	16001
Assembled height in excess of 1.950" +.200 long	
Intake Valve 2.080 +.200 long Pro	20802
Exhaust Valve 1.600 +.200 long Pro	16002
Valve Spring Roller Manley	221043
Retainer Titanium Pro	1043
Spring Seat Manley	42373
Valve Spring Roller ISKY	9985
Retainer Titanium Pro	9985
Spring Seat Manley	42326
Locks Manley	13083 std
Valve Spring Flat Tappet	22429
Retainer Titanium Pro	9985
Spring Seat Manley	42326
Locks Manley	13083 std
Intake Gasket Pro	M23001L 060
Head Gasket Felpro	1034
Head Studs Manley	42171
Manifold Std Chev	Edelbrock 2925
Spark Plug Suggested Starting Range only	V59C
For high lift high RPM - Drag Race	
Spring Manley	22458
Retainer Manley	23669
Seat Manley	42374

Note

- If a straight plug head is required delete letter "A" from part #.
- When using pop-up pistons, chamber to dome clearance **MUST** be checked.
- When using high lift cams, valve to piston clearance should be measured. recommended min: inlet .80" exh .100"
- Specified chamber sizes are a minimum. Due to variations in valve margins and dishes, chamber volume **MUST** be checked before installation.



APPLICATION

Serious Race head, unlimited oval / drag, 400cu" + 8000rpm+

Specifications

CNC machined Chamber	
3 Angle Valve Job	
Head Torque Settings	65-70ft lbs Short (7/16) 70-75ft lbs Long (7/16)
Rocker Stud Torque	50ft lbs
Combustion Chamber	64cc
(Can be angled milled to)	47cc
Angle Mill	.0075 per cc
Flat Mill	.006 per cc
Spring Pocket Can be cut to 1.625, no deeper	
Rocker	No offset required
Valve Centers	1.890"
Valve Angle	23°
Intake Face Angle	10°
Intake Port Dimensions	1.250 x 2.240
Magnesium Bronze Intake Guides	
Phosphor Bronze Exhaust Guides	

Installed Height

Spring 221043	1.950"
Spring 22429	1.880"
Spring 9985	1.198" -2.00"

Intake Valve Test Data @28" of water

.100	.200	.300	.400	.500	.600	.700
68.19	135.59	192.17	256.42	292.35	310.49	318.00

Exhaust Valve Test Data @28" of water

.100	.200	.300	.400	.500	.600	.700
58.79	118.53	162.94	182.42	194.01	198.92	205.97



23° PRO LIGHTNING

WORLDS MOST POWERFUL STANDARD STYLE

23° IRON HEAD

A top quality high performance 23° cylinder head that features phosphor bronze exhaust valve guides for superior heat dissipation and manganese bronze intake guides for longer life.

This head will take Std rocker covers or late model centre bolt covers and Std type screw in studs & rockers. Unique multi angled inlet & radius exhaust valve seats will out flow the competition by 5%. Also features thick deck faces for angle milling.

100% CNC chamber, bowl & ports.

PART #
223 4622 35A

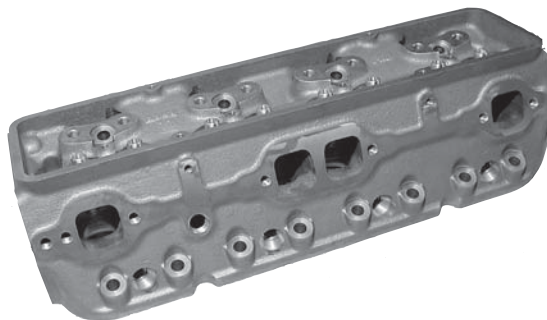
242cc
Intake
Runner

64cc
Chamber

PART #
223 2622 35A

242cc
Intake
Runner

72cc
Chamber



Suggested Assembly Components

Intake Valve 2.125 +.100 long Pro	21251
Exhaust Valve 1.600 +.100 long Pro	16001
Assembled height in excess of 1.950" +.200 long	
Intake Valve 2.125 +.200 long Pro	21252
Exhaust Valve 1.600 +.200 long Pro	16002
Valve Spring Roller Manley	221043
Retainer Titanium Pro	1043
Spring Seat Manley	42373
Valve Spring Roller ISKY	9985
Retainer Titanium Pro	9985
Spring Seat Manley	42326
Locks Manley	13083 std
Valve Spring Flat Tappet	22429
Retainer Titanium Pro	9985
Spring Seat Manley	42326
Locks Manley	13083 std
Intake Gasket Pro	M2300IL 060
Head Gasket Felpro	1034
Head Studs Manley	42171
Manifold Std Chev	Edelbrock 2925
Spark Plug Suggested Starting Range only	V59C
For high lift high RPM - Drag Race	
Spring Manley	22458
Retainer Manley	23669
Seat Manley	42374

Note

- If a straight plug head is required delete letter "A" from part #.
- When using pop-up pistons, chamber to dome clearance **MUST** be checked.
- When using high lift cams, valve to piston clearance should be measured. recommended min: inlet .80" exh .100"
- Specified chamber sizes are a minimum. Due to variations in valve margins and dishes, chamber volume **MUST** be checked before installation.



APPLICATION

Serious Race head, unlimited oval / drag, 400cu" + 8000rpm+

Specifications

100% CNC Machined Chamber, Bowl & Ports	
3 Angle Valve Job	
Head Torque Settings	65-70ft lbs Short (7/16) 70-75ft lbs Long (7/16)
Rocker Stud Torque	50ft lbs
Combustion Chamber	64cc
(Can be angled milled to)	47cc
Angle Mill	.0075 per cc
Flat Mill	.006 per cc
Spring Pocket Can be cut to 1.625, no deeper	
Rocker	No offset required
Valve Centers	1.890"
Valve Angle	23°
Intake Face Angle	10°
Intake Port Dimensions	1.250 x 2.240
Manganese Bronze Intake Guides	
Phosphor Bronze Exhaust Guides	

Installed Height

Spring 221043	1.950"
Spring 22429	1.880"
Spring 9985	1.198" -2.00"

Intake Valve Test Data @28" of water

.100	.200	.300	.400	.500	.600	.700
68.19	147.59	206.17	263.42	296.35	315.49	325.00

Exhaust Valve Test Data @28" of water

.100	.200	.300	.400	.500	.600	.700
58.79	118.53	156.94	180.17	197.71	217.93	225.67

PART #
123 4000 80A

PART #
123 2000 80A

180cc
Intake
Runner

64cc
Chamber

180cc
Intake
Runner

72cc
Chamber

23° PRO ALUMINUM LIGHTNING

WORLD'S MOST POWERFUL STANDARD STYLE
23° ALUMINUM HEAD

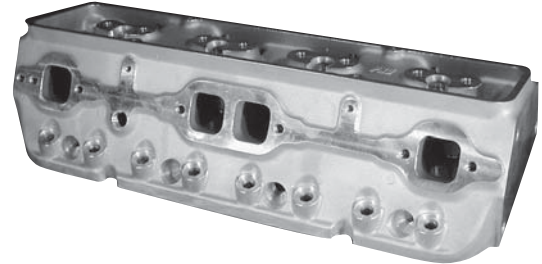
A top quality high performance 23° cylinder head that features manganese bronze intake guides for longer life. This head will take Std rocker covers or late model centre bolt covers and Std type screw in studs & rockers. Unique multi angled inlet & radius exhaust valve seats will out flow the competition by 5%. Also features thick deck faces for angle milling.
As Cast chamber & ports.

Suggested Assembly Components

Flat Tappet Assembled height to 1.800"	
Intake Valve 2.020 +.100 long Pro	20201
Exhaust Valve 1.600 +.100 long Pro	16001
Roller Assembled height up to 1.900" +.200 long	
Intake Valve 2.020 +.200 long Pro	20202
Exhaust Valve 1.600 +.200 long Pro	16002
Assembled height 1.950" use +.050" locks	
Valve Spring Roller Manley	221043
Retainer Titanium Pro	1043
Spring Seat Manley	42373
Valve Spring Roller ISKY	9985
Retainer Titanium Pro	9985
Spring Seat Manley	42326
Locks Manley	13083 std
Valve Spring Flat Tappet	22429
Retainer Titanium Pro	9985
Spring Seat Manley	42326
Locks Manley	13083 std
Intake Gasket Pro	M2300IL 060
Head Gasket Felpro	1034
Head Studs Manley	42171
Manifold Std Chev	Edelbrock 2925
Spark Plug Suggested Starting Range only	C57C
For high lift high RPM - Drag Race	
Spring Manley	22458
Retainer Manley	23669
Seat Manley	42374

Note

- If a straight plug head is required delete letter "A" from part #.
- When using pop-up pistons, chamber to dome clearance **MUST** be checked.
- When using high lift cams, valve to piston clearance should be measured. recommended min: inlet .80" exh .100"
- Specified chamber sizes are a minimum. Due to variations in valve margins and dishes, chamber volume **MUST** be checked before installation.



APPLICATION

Street performance, max throttle response & torque, up to 350 cu"

Specifications

3 Angle Valve Job	
Head Torque Settings	65-70ft lbs Short (7/16) 70-75ft lbs Long (7/16)
Rocker Stud Torque	50ft lbs
Combustion Chamber	64cc
(Can be angled milled to)	47cc
Angle Mill	.0075 per cc
Flat Mill	.006 per cc
Spring Pocket Can be cut to	1.625, no deeper
Rocker	No offset required
Valve Centers	1.890"
Valve Angle	23°
Intake Face Angle	10°
Intake Port Dimensions	1.190 x 1.990
Manganese Bronze Guides	

Installed Height

Spring 221043	1.950"
Spring 22429	1.880"
Spring 9985	1.198" -2.00"

Intake Valve Test Data @28" of water

.100	.200	.300	.400	.500	.600	.700
73.88	150.89	206.86	242.68	257.90	263.27	270.12

Exhaust Valve Test Data @28" of water

.100	.200	.300	.400	.500	.600	.700
56.90	100.99	156.94	176.85	186.34	190.13	194.87

23° PRO ALUMINUM LIGHTNING

WORLDS MOST POWERFUL STANDARD STYLE

23° ALUMINUM HEAD

A top quality high performance 23° cylinder head that features manganese bronze intake guides for longer life. This head will take Std rocker covers or late model centre bolt covers and Std type screw in studs & rockers. Unique multi angled inlet & radius exhaust valve seats will out flow the competition by 5%.

Also features thick deck faces for angle milling.

As Cast chamber & ports.

Suggested Assembly Components

Flat Tappet Assembled height to 1.800"

Intake Valve 2.020 +.100 long Pro	20201
Exhaust Valve 1.600 +.100 long Pro	16001
Roller Assembled height up to 1.900" +.200 long	
Intake Valve 2.020 +.200 long Pro	20202
Exhaust Valve 1.600 +.200 long Pro	16002
Assembled height 1.950" use +.050" locks	
Valve Spring Roller Manley	221043
Retainer Titanium Pro	1043
Spring Seat Manley	42373
Valve Spring Roller ISKY	9985
Retainer Titanium Pro	9985
Spring Seat Manley	42326
Locks Manley	13083 std
Valve Spring Flat Tappet	22429
Retainer Titanium Pro	9985
Spring Seat Manley	42326
Locks Manley	13083 std
Intake Gasket Pro	M2300IL 060
Head Gasket Felpro	1034
Head Studs Manley	42171
Manifold Std Chev	Edelbrock 2925
Spark Plug Suggested Starting Range only	C57C
For high lift high RPM - Drag Race	
Spring Manley	22458
Retainer Manley	23669
Seat Manley	42374

Note

- If a straight plug head is required delete letter "A" from part #.
- When using pop-up pistons, chamber to dome clearance **MUST** be checked.
- When using high lift cams, valve to piston clearance should be measured. recommended min: inlet .80" exh .100"
- Specified chamber sizes are a minimum. Due to variations in valve margins and dishes, chamber volume **MUST** be checked before installation.



PART #
123 4000 00A

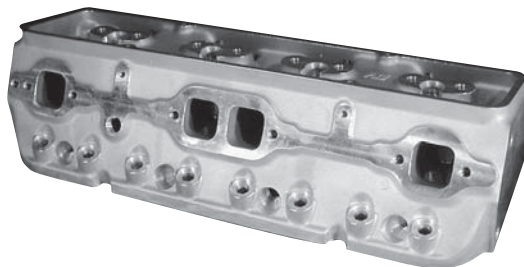
PART #
123 2000 00A

200cc
Intake
Runner

64cc
Chamber

200cc
Intake
Runner

72cc
Chamber



APPLICATION

Street perf & short track, restricted oval, 327 - 350 cu" up to 6500rpm

Specifications

3 Angle Valve Job	
Head Torque Settings	65-70ft lbs Short (7/16) 70-75ft lbs Long (7/16)
Rocker Stud Torque	50ft lbs
Combustion Chamber	64cc
(Can be angled milled to)	47cc
Angle Mill	.0075 per cc
Flat Mill	.006 per cc
Spring Pocket Can be cut to	1.625, no deeper
Rocker	No offset required
Valve Centers	1.890"
Valve Angle	23°
Intake Face Angle	10°
Intake Port Dimensions	1.190 x 1.990
Manganese Bronze Guides	

Installed Height

Spring 221043	1.950"
Spring 22429	1.880"
Spring 9985	1.198" -2.00"

Intake Valve Test Data @28" of water

.100	.200	.300	.400	.500	.600	.700
70.74	146.41	203.72	249.84	260.98	268.51	276.41

Exhaust Valve Test Data @28" of water

.100	.200	.300	.400	.500	.600	.700
56.90	100.99	156.94	176.85	186.34	190.13	194.87

PART #
123 4000 20A

PART #
123 2000 20A

220cc
Intake
Runner

64cc
Chamber

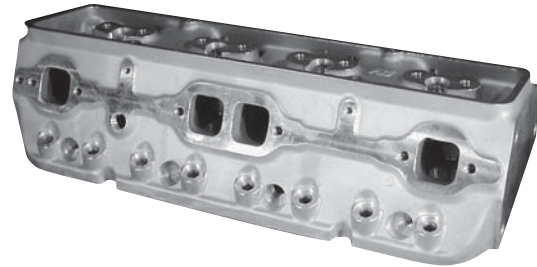
220cc
Intake
Runner

72cc
Chamber

23° PRO ALUMINUM LIGHTNING

WORLD'S MOST POWERFUL STANDARD STYLE
23° ALUMINUM HEAD

A top quality high performance 23° cylinder head that features manganese bronze intake guides for longer life. This head will take Std rocker covers or late model centre bolt covers and Std type screw in studs & rockers. Unique multi angled inlet & radius exhaust valve seats will out flow the competition by 5%. Also features thick deck faces for angle milling.
As Cast chamber & ports.



Suggested Assembly Components

Flat Tappet Assembled height to 1.800"	
Intake Valve 2.020 +.100 long Pro	20201
Exhaust Valve 1.600 +.100 long Pro	16001
Roller Assembled height up to 1.900" +.200 long	
Intake Valve 2.020 +.200 long Pro	20202
Exhaust Valve 1.600 +.200 long Pro	16002
Assembled height 1.950" use +.050" locks	
Valve Spring Roller Manley	221043
Retainer Titanium Pro	1043
Spring Seat Manley	42373
Valve Spring Roller ISKY	9985
Retainer Titanium Pro	9985
Spring Seat Manley	42326
Locks Manley	13083 std
Valve Spring Flat Tappet	22429
Retainer Titanium Pro	9985
Spring Seat Manley	42326
Locks Manley	13083 std
Intake Gasket Pro	M2300IL 060
Head Gasket Felpro	1034
Head Studs Manley	42171
Manifold Std Chev	Edelbrock 2925
Spark Plug Suggested Starting Range only	C57C
For high lift high RPM - Drag Race	
Spring Manley	22458
Retainer Manley	23669
Seat Manley	42374

Note

- If a straight plug head is required delete letter "A" from part #.
- When using pop-up pistons, chamber to dome clearance **MUST** be checked.
- When using high lift cams, valve to piston clearance should be measured. recommended min: inlet .80" exh .100"
- Specified chamber sizes are a minimum. Due to variations in valve margins and dishes, chamber volume **MUST** be checked before installation.



APPLICATION

Max Street Performance, oval track & drag bracket, 383 - 400cu" up to 7500rpm

Specifications

3 Angle Valve Job	
Head Torque Settings	65-70ft lbs Short (7/16) 70-75ft lbs Long (7/16)
Rocker Stud Torque	50ft lbs
Combustion Chamber	64cc
(Can be angled milled to)	47cc
Angle Mill	.0075 per cc
Flat Mill	.006 per cc
Spring Pocket Can be cut to 1.625, no deeper	
Rocker	No offset required
Valve Centers	1.890"
Valve Angle	23°
Intake Face Angle	10°
Intake Port Dimensions	1.190 x 1.990
Manganese Bronze Guides	

Installed Height

Spring 221043	1.950"
Spring 22429	1.880"
Spring 9985	1.198" -2.00"

Intake Valve Test Data @28" of water

.100	.200	.300	.400	.500	.600	.700
70.74	146.41	204.62	249.84	264.62	272.23	282.08

Exhaust Valve Test Data @28" of water

.100	.200	.300	.400	.500	.600	.700
56.90	100.99	156.94	176.85	186.34	190.13	194.87



23° PRO ALUMINUM LIGHTNING

WORLDS MOST POWERFUL STANDARD STYLE

23° ALUMINUM HEAD

A top quality high performance 23° cylinder head that features manganese bronze intake guides for longer life. This head will take Std rocker covers or late model centre bolt covers and Std type screw in studs & rockers. Unique multi angled inlet & radius exhaust valve seats will out flow the competition by 5%. Also features thick deck faces for angle milling. **CNC chambers.** As Cast ports.

Suggested Assembly Components

Flat Tappet Assembled height to 1.800"	
Intake Valve 2.020 +.100 long Pro	20201
Exhaust Valve 1.600 +.100 long Pro	16001
Roller Assembled height up to 1.900" +.200 long	
Intake Valve 2.020 +.200 long Pro	20202
Exhaust Valve 1.600 +.200 long Pro	16002
Assembled height 1.950" use +.050" locks	
Valve Spring Roller Manley	221043
Retainer Titanium Pro	1043
Spring Seat Manley	42373
Valve Spring Roller ISKY	9985
Retainer Titanium Pro	9985
Spring Seat Manley	42326
Locks Manley	13083 std
Valve Spring Flat Tappet	22429
Retainer Titanium Pro	9985
Spring Seat Manley	42326
Locks Manley	13083 std
Intake Gasket Pro	M23001L 060
Head Gasket Felpro	1034
Head Studs Manley	42171
Manifold Std Chev	Edelbrock 2925
Spark Plug Suggested Starting Range only	C57C
For high lift high RPM - Drag Race	
Spring Manley	22458
Retainer Manley	23669
Seat Manley	42374

Note

- If a straight plug head is required delete letter "A" from part #.
- When using pop-up pistons, chamber to dome clearance **MUST** be checked.
- When using high lift cams, valve to piston clearance should be measured. recommended min: inlet .80" exh .100"
- Specified chamber sizes are a minimum. Due to variations in valve margins and dishes, chamber volume **MUST** be checked before installation.



PART #
123 4600 20A

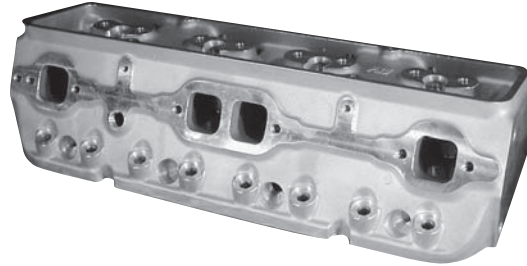
PART #
123 2600 20A

220cc
Intake
Runner

64cc
Chamber

220cc
Intake
Runner

72cc
Chamber



APPLICATION

Max Street Performance, oval track & drag bracket, 383 - 400cu" up to 7500rpm

Specifications

CNC machined Chamber	
3 Angle Valve Job	
Head Torque Settings	65-70ft lbs Short (7/16) 70-75ft lbs Long (7/16)
Rocker Stud Torque	50ft lbs
Combustion Chamber	64cc
(Can be angled milled to)	47cc
Angle Mill	.0075 per cc
Flat Mill	.006 per cc
Spring Pocket Can be cut to	1.625, no deeper
Rocker	No offset required
Valve Centers	1.890"
Valve Angle	23°
Intake Face Angle	10°
Intake Port Dimensions	1.190 x 1.990
Manganese Bronze Guides	

Installed Height

Spring 221043	1.950"
Spring 22429	1.880"
Spring 9985	1.198" -2.00"

Intake Valve Test Data @28" of water

.100	.200	.300	.400	.500	.600	.700
70.74	146.41	204.62	249.84	264.62	274.23	288.08

Exhaust Valve Test Data @28" of water

.100	.200	.300	.400	.500	.600	.700
60.22	114.27	151.72	177.80	183.02	190.71	195.24

PART #
123 4622 20A

PART #
123 2622 20A

23° PRO ALUMINUM LIGHTNING

228cc
Intake
Runner

64cc
Chamber

228cc
Intake
Runner

72cc
Chamber

WORLD'S MOST POWERFUL STANDARD STYLE
23° ALUMINUM HEAD

A top quality high performance 23° cylinder head that features manganese bronze intake guides for longer life. This head will take Std rocker covers or late model centre bolt covers and Std type screw in studs & rockers. Unique multi angled inlet & radius exhaust valve seats will out flow the competition by 5%.

Also features thick deck faces for angle milling.

100% CNC chambers bowls & ports.

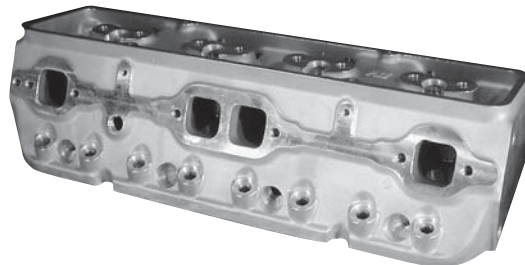
Suggested Assembly Components

Flat Tappet Assembled height to 1.800"

Intake Valve 2.080 +.100 long Pro	20801
Exhaust Valve 1.600 +.100 long Pro	16001
Roller Assembled height up to 1.900" +.200 long	
Intake Valve 2.080 +.200 long Pro	20802
Exhaust Valve 1.600 +.200 long Pro	16002
Assembled height 1.950" use +.050" locks	
Valve Spring Roller Manley	221043
Retainer Titanium Pro	1043
Spring Seat Manley	42373
Valve Spring Roller ISKY	9985
Retainer Titanium Pro	9985
Spring Seat Manley	42326
Locks Manley	13083 std
Valve Spring Flat Tappet	22429
Retainer Titanium Pro	9985
Spring Seat Manley	42326
Locks Manley	13083 std
Intake Gasket Pro	M23001L 060
Head Gasket Felpro	1034
Head Studs Manley	42171
Manifold Std Chev	Edelbrock 2925
Spark Plug Suggested Starting Range only	C57C
For high lift high RPM - Drag Race	
Spring Manley	22458
Retainer Manley	23669
Seat Manley	42374

Note

- If a straight plug head is required delete letter "A" from part #.
- When using pop-up pistons, chamber to dome clearance **MUST** be checked.
- When using high lift cams, valve to piston clearance should be measured. recommended min: inlet .80" exh .100"
- Specified chamber sizes are a minimum. Due to variations in valve margins and dishes, chamber volume **MUST** be checked before installation.



APPLICATION

Max Street Performance, oval track & drag bracket, 383 - 400cu" up to 7500rpm

Specifications

100% CNC machined	
3 Angle Valve Job	
Head Torque Settings	65-70ft lbs Short (7/16) 70-75ft lbs Long (7/16)
Rocker Stud Torque	50ft lbs
Combustion Chamber	64cc
(Can be angled milled to)	47cc
Angle Mill	.0075 per cc
Flat Mill	.006 per cc
Spring Pocket Can be cut to	1.625, no deeper
Rocker	No offset required
Valve Centers	1.890"
Valve Angle	23°
Intake Face Angle	10°
Intake Port Dimensions	1.190 x 1.990
Manganese Bronze Guides	

Installed Height

Spring 221043	1.950"
Spring 22429	1.880"
Spring 9985	1.198" -2.00"

Intake Valve Test Data @28" of water

.100	.200	.300	.400	.500	.600	.700
71.43	138.35	198.66	249.12	285.02	296.11	307.38

Exhaust Valve Test Data @28" of water

.100	.200	.300	.400	.500	.600	.700
60.22	114.27	151.72	177.8	192.02	201.71	210.24



23° PRO ALUMINUM LIGHTNING

WORLDS MOST POWERFUL STANDARD STYLE

23° ALUMINUM HEAD

A top quality high performance 23° cylinder head that features manganese bronze intake guides for longer life. This head will take Std rocker covers or late model centre bolt covers and Std type screw in studs & rockers. Unique multi angled inlet & radius exhaust valve seats will out flow the competition by 5%.

Also features thick deck faces for angle milling.

As Cast chamber & ports.

Suggested Assembly Components

Flat Tappet Assembled height to 1.800"	
Intake Valve 2.080 +.100 long Pro	20801
Exhaust Valve 1.600 +.100 long Pro	16001
Roller Assembled height up to 1.900" +.200 long	
Intake Valve 2.080 +.200 long Pro	20802
Exhaust Valve 1.600 +.200 long Pro	16002
Assembled height 1.950" use +.050" locks	
Valve Spring Roller Manley	221043
Retainer Titanium Pro	1043
Spring Seat Manley	42373
Valve Spring Roller ISKY	9985
Retainer Titanium Pro	9985
Spring Seat Manley	42326
Locks Manley	13083 std
Valve Spring Flat Tappet	22429
Retainer Titanium Pro	9985
Spring Seat Manley	42326
Locks Manley	13083 std
Intake Gasket Pro	M2300IL 060
Head Gasket Felpro	1034
Head Studs Manley	42171
Manifold Std Chev	Edelbrock 2925
Spark Plug Suggested Starting Range only	C57C
For high lift high RPM - Drag Race	
Spring Manley	22458
Retainer Manley	23669
Seat Manley	42374

Note

- If a straight plug head is required delete letter "A" from part #.
- When using pop-up pistons, chamber to dome clearance **MUST** be checked.
- When using high lift cams, valve to piston clearance should be measured. recommended min: inlet .80" exh .100"
- Specified chamber sizes are a minimum. Due to variations in valve margins and dishes, chamber volume **MUST** be checked before installation.



PART #
123 4000 35A

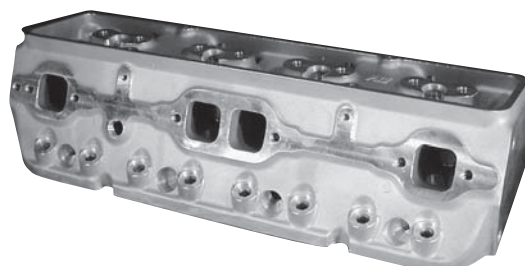
235cc
Intake
Runner

64cc
Chamber

PART #
123 2000 35A

235cc
Intake
Runner

72cc
Chamber



APPLICATION

Serious Race head, unlimited oval / drag, 400cu" + 8000rpm+

Specifications

3 Angle Valve Job	
Head Torque Settings	65-70ft lbs Short (7/16) 70-75ft lbs Long (7/16)
Rocker Stud Torque	50ft lbs
Combustion Chamber	64cc (Can be angled milled to) 47cc
Angle Mill	.0075 per cc
Flat Mill	.006 per cc
Spring Pocket	Can be cut to 1.625, no deeper
Rocker	No offset required
Valve Centers	1.890"
Valve Angle	23°
Intake Face Angle	10°
Intake Port Dimensions	1.190 x 1.990
Manganese Bronze Guides	

Installed Height

Spring 221043	1.950"
Spring 22429	1.880"
Spring 9985	1.198" -2.00"

Intake Valve Test Data @28" of water

.100	.200	.300	.400	.500	.600	.700
73.43	138.35	195.66	243.12	274.02	292.11	312.38

Exhaust Valve Test Data @28" of water

.100	.200	.300	.400	.500	.600	.700
60.22	114.27	151.72	177.80	192.02	194.13	197.24

PART #
123 4600 35A

235cc
Intake
Runner

64cc
Chamber

PART #
123 2600 35A

235cc
Intake
Runner

72cc
Chamber

23° PRO ALUMINUM LIGHTNING

WORLD'S MOST POWERFUL STANDARD STYLE
23° ALUMINUM HEAD

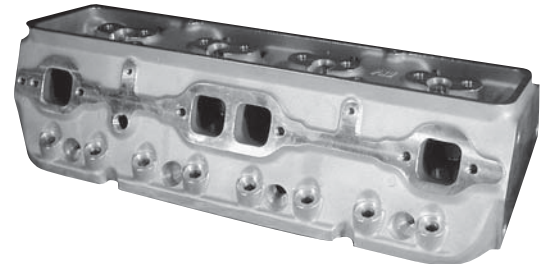
A top quality high performance 23° cylinder head that features manganese bronze intake guides for longer life. This head will take Std rocker covers or late model centre bolt covers and Std type screw in studs & rockers. Unique multi angled inlet & radius exhaust valve seats will out flow the competition by 5%. Also features thick deck faces for angle milling.
CNC chambers. As Cast ports.

Suggested Assembly Components

Flat Tappet Assembled height to 1.800"	
Intake Valve 2.080 +.100 long Pro	20801
Exhaust Valve 1.600 +.100 long Pro	16001
Roller Assembled height up to 1.900" +.200 long	
Intake Valve 2.080 +.200 long Pro	20802
Exhaust Valve 1.600 +.200 long Pro	16002
Assembled height 1.950" use +.050" locks	
Valve Spring Roller Manley	221043
Retainer Titanium Pro	1043
Spring Seat Manley	42373
Valve Spring Roller ISKY	9985
Retainer Titanium Pro	9985
Spring Seat Manley	42326
Locks Manley	13083 std
Valve Spring Flat Tappet	22429
Retainer Titanium Pro	9985
Spring Seat Manley	42326
Locks Manley	13083 std
Intake Gasket Pro	M23001L 060
Head Gasket Felpro	1034
Head Studs Manley	42171
Manifold Std Chev	Edelbrock 2925
Spark Plug Suggested Starting Range only	C57C
For high lift high RPM - Drag Race	
Spring Manley	22458
Retainer Manley	23669
Seat Manley	42374

Note

- If a straight plug head is required delete letter "A" from part #.
- When using pop-up pistons, chamber to dome clearance **MUST** be checked.
- When using high lift cams, valve to piston clearance should be measured. recommended min: inlet .80" exh .100"
- Specified chamber sizes are a minimum. Due to variations in valve margins and dishes, chamber volume **MUST** be checked before installation.



APPLICATION

Serious Race head, unlimited oval / drag, 400cu" + 8000rpm+

Specifications

CNC Machined Chamber	
3 Angle Valve Job	
Head Torque Settings	65-70ft lbs Short (7/16) 70-75ft lbs Long (7/16)
Rocker Stud Torque	50ft lbs
Combustion Chamber	64cc
(Can be angled milled to)	47cc
Angle Mill	.0075 per cc
Flat Mill	.006 per cc
Spring Pocket Can be cut to	1.625, no deeper
Rocker	No offset required
Valve Centers	1.890"
Valve Angle	23°
Intake Face Angle	10°
Intake Port Dimensions	1.190 x 1.990
Manganese Bronze Guides	

Installed Height

Spring 221043	1.950"
Spring 22429	1.880"
Spring 9985	1.198" -2.00"

Intake Valve Test Data @28" of water

.100	.200	.300	.400	.500	.600	.700
68.19	135.59	192.17	256.42	292.35	310.49	318.00

Exhaust Valve Test Data @28" of water

.100	.200	.300	.400	.500	.600	.700
58.79	118.53	162.94	182.42	194.01	198.92	205.97



23° PRO ALUMINUM LIGHTNING

WORLDS MOST POWERFUL STANDARD STYLE

23° ALUMINUM HEAD

A top quality high performance 23° cylinder head that features manganese bronze intake guides for longer life. This head will take Std rocker covers or late model centre bolt covers and Std type screw in studs & rockers. Unique multi angled inlet & radius exhaust valve seats will out flow the competition by 5%.

Also features thick deck faces for angle milling.

100% CNC chamber bowl & ports.

Suggested Assembly Components

Flat Tappet Assembled height to 1.800"

Intake Valve 2.125 +.100 long Pro	21251
Exhaust Valve 1.600 +.100 long Pro	16001
Roller Assembled height up to 1.900" +.200 long	21252
Intake Valve 2.125 +.200 long Pro	16002
Exhaust Valve 1.600 +.200 long Pro	16002
Assembled height 1.950" use +.050" locks	
Valve Spring Roller Manley	221043
Retainer Titanium Pro	1043
Spring Seat Manley	42373
Valve Spring Roller ISKY	9985
Retainer Titanium Pro	9985
Spring Seat Manley	42326
Locks Manley	13083 std
Valve Spring Flat Tappet	22429
Retainer Titanium Pro	9985
Spring Seat Manley	42326
Locks Manley	13083 std
Intake Gasket Pro	M2300IL 060
Head Gasket Felpro	1034
Head Studs Manley	42171
Manifold Std Chev	Edelbrock 2925
Spark Plug Suggested Starting Range only	C57C
For high lift high RPM - Drag Race	
Spring Manley	22458
Retainer Manley	23669
Seat Manley	42374

Note

- If a straight plug head is required delete letter "A" from part #.
- When using pop-up pistons, chamber to dome clearance **MUST** be checked.
- When using high lift cams, valve to piston clearance should be measured. recommended min: inlet .80" exh .100"
- Specified chamber sizes are a minimum. Due to variations in valve margins and dishes, chamber volume **MUST** be checked before installation.



PART #
123 4622 35A

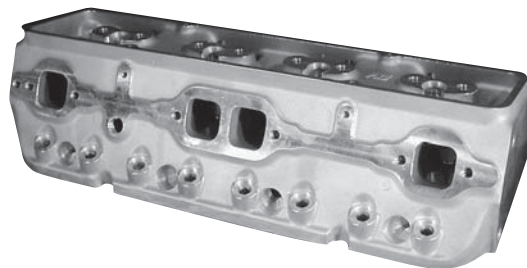
PART #
123 2622 35A

242cc
Intake
Runner

64cc
Chamber

242cc
Intake
Runner

72cc
Chamber



APPLICATION

Max Street Performance, oval track & drag bracket, 383 - 400cu" up to 7500rpm

Specifications

100% CNC Machined Chamber Bowl & Ports	
3 Angle Valve Job	
Head Torque Settings	65-70ft lbs Short (7/16)
	70-75ft lbs Long (7/16)
Rocker Stud Torque	50ft lbs
Combustion Chamber	64cc
(Can be angled milled to)	47cc
Angle Mill	.0075 per cc
Flat Mill	.006 per cc
Spring Pocket Can be cut to 1.625, no deeper	
Rocker	No offset required
Valve Centers	1.890"
Valve Angle	23°
Intake Face Angle	10°
Intake Port Dimensions	1.190 x 1.990
Manganese Bronze Guides	

Installed Heights

Spring 221043	1.950"
Spring 22429	1.880"
Spring 9985	1.198" -2.00"

Intake Valve Test Data @28" of water

.100	.200	.300	.400	.500	.600	.700
68.19	135.59	192.17	256.42	292.35	310.49	318.00

Exhaust Valve Test Data @28" of water

.100	.200	.300	.400	.500	.600	.700
58.79	118.53	162.94	182.42	194.01	198.92	205.97

PART #
124 19000 320

320cc
Intake
Runner

119cc
Chamber

PART #
124 19000 360

360cc
Intake
Runner

119cc
Chamber

This is a true multi purpose head for street, drag race and power boat applications. As with the existing Pro Topline range, accuracy and detail have not been overlooked ensuring the very best quality meaning the best performance available for your big block Chev.

Rolled over valve angles and better flowing ports give you all the advantages of a custom one off cylinder head at a more affordable price. These heads are available with three intake runner options; 320cc or 360cc so you can choose what is best suited to your application.

As cast ports (320c - 360c)

Suggested Assembly Components

For a roller cam with a base circle of 1.130" and lift of between .650" & .750"

For 320cc ports:

Intake Valve 2.250" +.250"
Exhaust Valve 1.880" +.100"

For 360cc ports:

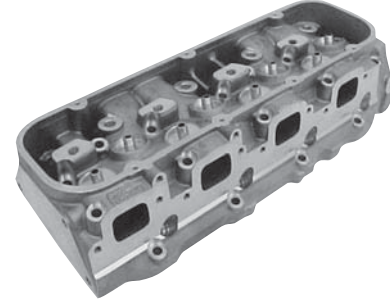
Intake Valve 2.300" +.250"
Exhaust Valve 1.880" +.100"

For 320cc and 360cc ports:

Intake Pushrod Manley 8.500"	25850
Exhaust Pushrod Manley 9.500"	25960
Rockers 1.7 ratio SCORPION	SCP1014
Roller Followers ISKY	203-96TB
Valve Spring Roller ISKY	9985
Retainer Titanium PRO	9985
Spring Seat Manley	42326
Locks Manley	13083
Intake Gasket Felpro	1275
Head Gasket Felpro	1047
Head Studs Manly	42322
Manifold Edelbrock	2902

PRO THUNDER ALUMINUM

REACHING NEW HEIGHTS IN BB
CHEV PERFORMANCE



APPLICATION

For street, drag race and power boats

Specifications

3 Angle Valve Job	
Head Torque Settings	65-70ft lbs Short (7/16) 70-75ft lbs Long (7/16)
Rocker stud torque settings	50ft lbs
Combustion chamber	119cc
Spring pocket is 1.6250", no deeper	
Rocker 1.7 ratio	SCORPION SCP1014
Valve Angle	15°/24°
Intake Face Angle	90°
Intake Port Dimensions	320cc & 360cc 1.640" x 2.4"
Manganese Bronze Guides	

Installed Height

2.000"+

Options

Complete assemblies with either titanium or stainless steel valves

320cc Intake Valve Test Data @28" of water

.100	.200	.300	.400	.500	.600	.700
74.33	166.11	245.36	308.05	339.84	360.43	374.31

320cc Exhaust Valve Test Data @28" of water

.100	.200	.300	.400	.500	.600	.700
62	118	160	195	229	248	265

360cc Intake Valve Test Data @28" of water

.100	.200	.300	.400	.500	.600	.700
75	158	230	286	342	380	403

360cc Exhaust Valve Test Data @28" of water

.100	.200	.300	.400	.500	.600	.700
62	118	160	195	229	248	265



PRO THUNDER IRON

REACHING NEW HEIGHTS IN BB CHEV PERFORMANCE

This is the cast iron version of our aluminium head. As with the existing Pro Topline range, accuracy and detail have not been overlooked ensuring the very best quality meaning the best performance available for your big block Chev.

Rolled over valve angles and better flowing ports give you all the advantages of a custom one off cylinder head at a more affordable price. These heads are available with three intake runner options; 320cc or 360cc so you can choose what is best suited to your application.

We have utilised phosphor bronze exhaust valve guides for superior heat dissipation and manganese bronze intake valve guides for longer life. This head will take standard type screw in studs & rockers and standard rocker covers.

As cast ports or full CNC ported.

Suggested Assembly Components

For a roller cam with a base circle of 1.130" and lift of between .650" & .750"

For 320cc ports:

Intake Valve 2.250" +.250"
Exhaust Valve 1.880" +.100"

For 360cc ports:

Intake Valve 2.300" +.250"
Exhaust Valve 1.880" +.100"

For 320cc and 360cc ports:

Intake Pushrod Manley 8.500" 25850
Exhaust Pushrod Manley 9.500" 25960
Rockers 1.7 ratio SCORPION SCP1014
Roller Followers ISKY 203-96TB
Valve Spring Roller ISKY 9985
Retainer Titanium PRO 9985
Spring Seat Manley 42326
Locks Manley 13083
Intake Gasket Felpro 1275
Head Gasket Felpro 1047
Head Studs Manly 42322
Manifold Edelbrock 2902

PART #
224 19000 320

PART #
224 19000 360

320cc
Intake
Runner

119cc
Chamber

360cc
Intake
Runner

119cc
Chamber



APPLICATION

For street, drag race and power boats

Specifications

3 Angle Valve Job
Head Torque Settings 65-70ft lbs Short (7/16)
70-75ft lbs Long (7/16)
Rocker stud torque settings 50ft lbs
Combustion chamber 119cc
Spring pocket is 1.6250", no deeper
Rocker 1.7 ratio SCORPION SCP1014
Valve Angle 15°/24°
Intake Face Angle 90°
Intake Port Dimensions 320cc & 360cc 1.640" x 2.4"
Manganese Bronze Guides

Installed Heights

Spring 221043 1.950"
Spring 22429 1.880"
Spring 9985 1.198" -2.00"

Options

Complete assemblies with either titanium or stainless steel valves
Please turn to page ??????? for the OEM Stock Replacement BBC cylinder head

320cc Intake Valve Test Data @28" of water

.100	.200	.300	.400	.500	.600	.700
74.33	166.11	245.36	308.05	339.84	360.43	374.31

320cc Exhaust Valve Test Data @28" of water

.100	.200	.300	.400	.500	.600	.700
62	118	160	195	229	248	265

360cc Intake Valve Test Data @28" of water

.100	.200	.300	.400	.500	.600	.700
75	158	230	286	342	380	403

360cc Exhaust Valve Test Data @28" of water

.100	.200	.300	.400	.500	.600	.700
62	118	160	195	229	248	265

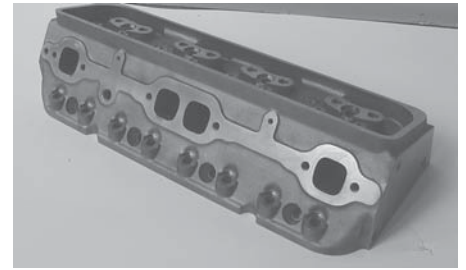
PRO TOPLINE SBC STOCK REPLACEMENT SERIES

PRO TORKER # 223 7694 167T

Generic SBC replacement

Application : 30hp gain over std, dual rocker cover pattern.
Carburettor version (can be drilled for FI)

Chamber style : "D" Chamber.
Chamber size : 76 cc & 67 cc
Port Volume : 167 cc
Port Style : Conventional with enhanced flow.
Rocker cover bolt pattern : Dual pattern
Rocker stud : screw in 7/16" UNC
Spark plug position : straight plug
Manifold bolt pattern : 12 bolt 1955 -1986
Heat riser : YES
Valve Centers : Std SBC 1.865"
Inlet valve size : 1.940"
Exhaust valve size : 1.50"



217 / 083

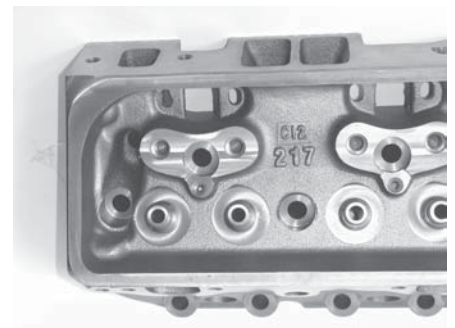
part # 223 7694 217 / 223 6494 083

(replaces GM # 14096217)

Application : Standard replacement, Fuel injection, Marine, Police,
light truck.

truck 87-91 series 10 20 & 30 car 87-92 VIN 8
Chamber style : "D" Chamber.

Chamber size : **217** = 76 cc **083** = 64cc
Port Volume : 167 cc
Port Style : conventional
Centre rocker pattern only
Rocker cover bolt pattern : center bolt only
Rocker stud : screw in 7/16" UNC
Spark plug position : straight plug
217 - Manifold bolt pattern : 12 bolt-Fuel injection-87 to 96
083 - Manifold bolt pattern : 12 bolt-carburettor
Heat Riser : YES
Valve Centers : 1.890"
Inlet valve size : 1.940"
Exhaust valve size : 1.50"



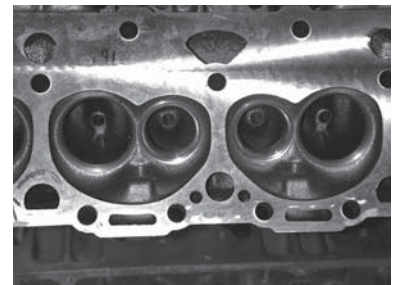
906

part # 223 6494 906

(replaces GM # 10239906) Vortec

Application : Standard replacement, Fuel injection, 96' truck onwards.
96 Pick up RPO L31, series 10 20 & 30, VIN R, VIN M.

Chamber style : Vortec "Heart Chamber".
Chamber size : 64 cc
Port Volume : 170 cc
Port Style : Vortec high velocity
Rocker cover bolt pattern : center bolt only
Rocker stud : screw in 7/16" UNC
Spark plug position : straight plug
Manifold bolt pattern : vortec manifold 12366573, 12496820, 1249621, 12496822
Heat Riser : NO
Inlet valve size : 1.940"
Exhaust valve size : 1.50"



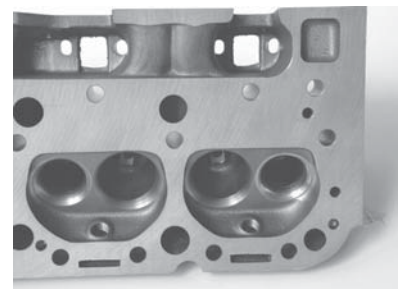
193 / 191

part # 223 6494 193

(replaces GM # 14102193)

Application : Standard replacement, Fuel injection, 87' - 95' car and truck onwards.
Truck VIN K, VIN M, VIN L, car VIN 7, VIN 8.

Chamber style : "D" Chamber.
Chamber size : STD = 64cc. Available as 76cc #223 7694 193
Port Volume : TBA cc
Port Style : Swirl Port (with divider)
Rocker cover bolt pattern : center bolt only
Rocker stud : screw in 7/16" UNC
Spark plug position : straight plug
Manifold bolt pattern : 12 bolt-Fuel injection-1986 to 1996
Heat Riser : Yes
Valve Centers : Std SBC
Inlet valve size : 1.940"
Exhaust valve size : 1.50"



PRO TOPLINE V6 FORD 4.0 STOCK REPLACEMENTS

Part# F2-4090-AO-T

Year 1990 - 1995

App. 4.0 Explorer

Open Chamber * large exhaust port

Ford casting #90TN/93TN

Open chamber model run through to 95 year. Casting ID by letter 'T' located on the top of the right rear/left front exhaust port.

Part# F2-4095-BC-U

Year 1995 - 1997

App. 4.0 Explorer, Ranger & Aerostar 97

Closed Chamber * large exhaust port

Ford casting #95TN/97TN

Closed chamber fast burn model run through to 97 year. Casting ID by letter 'U' located on the top of the right rear/left front exhaust port.

Part# F2-4098-CC-A

Year 1998 - 2000

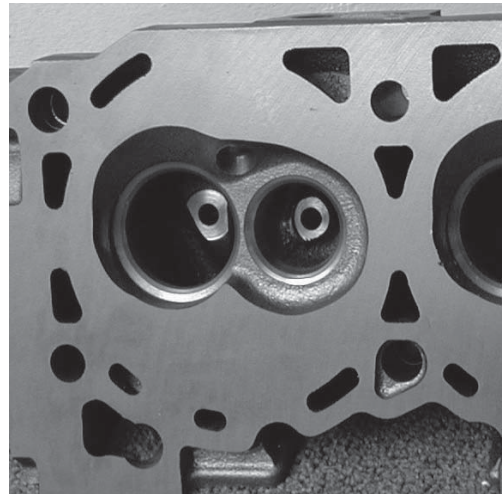
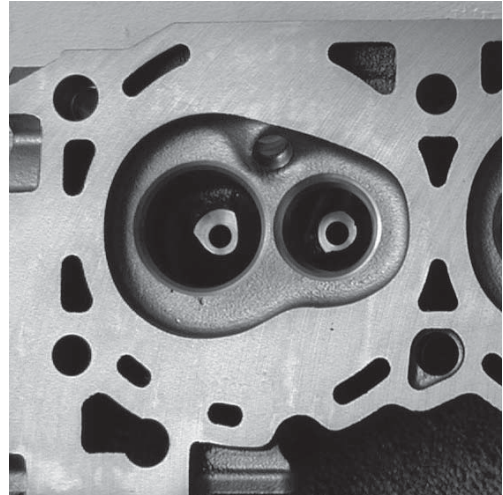
App. 4.0 Explorer, Ranger & Aerostar 98 onwards

Closed chamber * small exhaust port

Ford casting #98TN

Closed chamber fast burn. Small port introduced 98 year, essential for correct catalytic converter operation and EPA emission test.

- * Hardened exhaust inserts.
- * Close tolerance casting and machining for precise component fit, providing the best in performance and durability.
- * Premium grade cast iron for consistent casting quality and increased resistance to cracking.
- * Redesigned water jacket for enhanced thermal conductivity.



PRO TOPLINE ISUZU 2.3-2.6 STOCK REPLACEMENTS

Part # CHIS7-4ZE1

(Replaces Isuzu # 4ZE1157 / 4ZE1L)

Year 1986 onwards

Application: 2.6L Isuzu four cylinder

Hardened exhaust inserts.

Close tolerance casting and machining for precise component fit, providing the best in performance and durability.

Premium grade aluminium for consistent casting quality and increased resistance to cracking.

Redesigned water jacket for enhanced thermal conductivity.

Part # CHIS6-4ZD1

(Replaces Isuzu # 4ZD1)

Year 1986 onwards

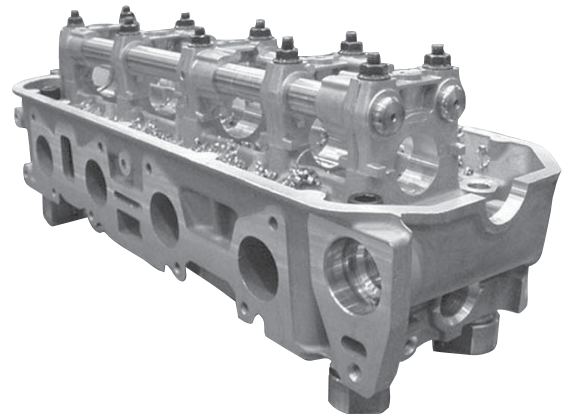
Application: 2.3L Isuzu four cylinder

Hardened exhaust inserts.

Close tolerance casting and machining for precise component fit, providing the best in performance and durability.

Premium grade aluminium for consistent casting quality and increased resistance to cracking.

Redesigned water jacket for enhanced thermal conductivity.



Coming soon!

Toyota 3LT 2.8L OEM Stock Replacement

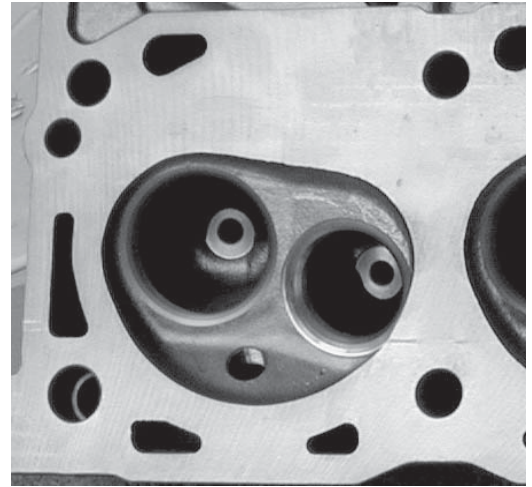
FORD 460 AND CHRYSLER 360 OEM STOCK REPLACEMENTS

Part# F2-460-E7-A

Year 1988 - 1992
Ford casting #E7TE
App. TBA
Open Chamber
Intake Valve 1.980"
Exhaust Valve 1.646"

Open chamber model run through to 92 year.
Casting ID by letter 'E7' located on the top of the right rear/left front exhaust port.

- * Hardened exhaust inserts.
- * Close tolerance casting and machining for precise component fit, providing the best in performance and durability.
- * Premium grade cast iron for consistent casting quality and increased resistance to cracking.
- * Optimised water jacket for enhanced thermal conductivity.

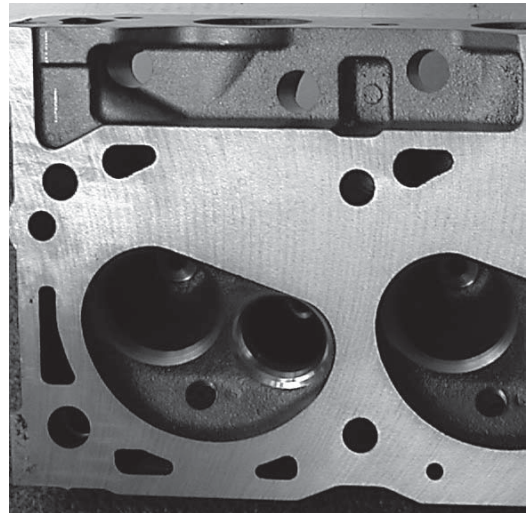


Part# F2-460-F3-B

Year 1993 - 1997
Ford casting #F3TE
App. TBA
Closed Chamber
Intake Valve 2.083"
Exhaust Valve 1.646"

Closed chamber fast burn model run through to 97 year.
Casting ID by letter 'F3' located on the top of the right rear/left front exhaust port.

- * Hardened exhaust inserts.
- * Close tolerance casting and machining for precise component fit, providing the best in performance and durability.
- * Premium grade cast iron for consistent casting quality and increased resistance to cracking.
- * Redesigned water jacket for enhanced thermal conductivity.

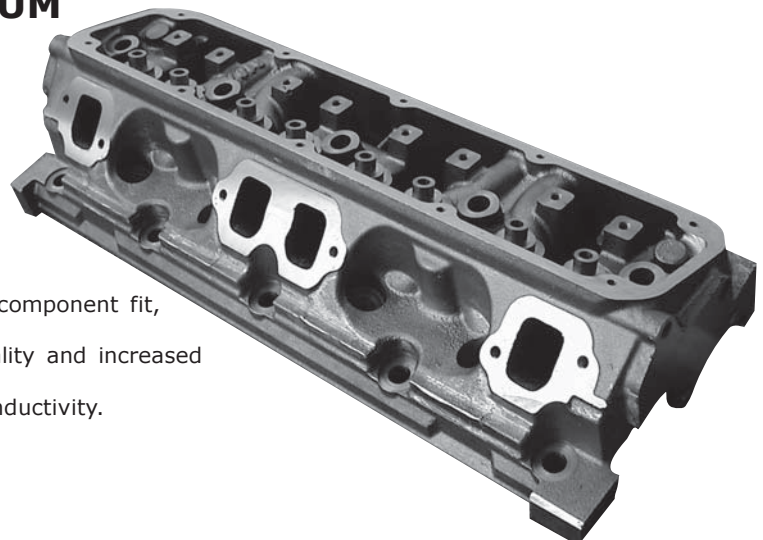


CHRYSLER 360 / 318 MAGNUM

Part# C2-360-A

Year 1992 onwards
App. '92 - '98 Magnum 360 Truck VIN Z5
Dodge Pickup R1500
Closed chamber
Intake Valve 1.920"
Exhaust Valve 1.624"

- * Hardened exhaust inserts.
- * Close tolerance casting and machining for precise component fit, providing the best in performance and durability.
- * Premium grade cast iron for consistent casting quality and increased resistance to cracking.
- * Redesigned water jacket for enhanced thermal conductivity.



PRO LIGHTNING SERIES

ASSEMBLY KIT DETAILS

Part # Suffix K1

3100-Hydraulic Kit

- 8 2.020, 2.055, 2.080 + .100"
- 8 1.600 + .100
- 16 3100 Valve Springs 1.460 O.D. **110lbs" @ 1.800 .550 lift**
- 16 502 Retainers Chrome Moly 7 Degree
- 1 set 205 HD Valve Keepers
- 1 set 5180n **3/8** Screw in Rocker Arm Studs
- 1 set 601 Guide Plates Flat

Part # Suffix K2

3400-Flat Tappet Kit

- 8 2.020, 2.055, 2.080 + .100" or +.200" Inlet valves
- 8 1.600 + .100 or +.200" Exhaust valves
- 16 3400 Valve Springs 1.460 O.D. dual Damper
135lbs" @ 1.800 320lbs" 1.200" .600 lift
- 1 set 506 Chrome Moly 10 degree Retainers
- 1 set 203 Machined Valve Keepers
- 16 5182 **7/16** 190,000 psi Rocker Arm Studs
- 1 set 601 Guide Plates Flat

Part # Suffix K3

3600-Roller to .660" Lift Kit

- 8 2.020, 2.055, 2.080 + .100" or +.200" Inlet valves
- 8 1.600 + .100 or +.200" Exhaust valves
- 16 3600 Valve Springs 1.540 O.D. dual w/damper
190lbs" @ 1.900 450lbs" @1.300" .660 lift
- 1 set 506 Chrome Moly 10 degree Retainers
- 1 set 203 10 degree Valve Keepers
- 16 5182 **7/16** 190,000 psi Rocker Arm Studs
- 1 set 601 Guide Plates Flat

Part # Suffix K4

3850-Roller to .720" Lift Kit

- 8 2.020, 2.055, 2.080 + .100" or +.200" Inlet valves
- 8 1.600 + .100 or +.200" Exhaust valves
- 16 3850 Valve Springs 1.550 O.D. dual w/damper
220lbs" @ 1.950 580lbs" @ 1.230" .720 lift
- 1 set 506 Chrome Moly 10 degree Retainers
- 1 set 203 10 degree Valve Keepers
- 16 5182 **7/16** 190,000 psi Rocker Arm Studs
- 1 set 601 Guide Plates Flat

14° KITS

- 8 2.125", 2.150", 2.180", 2.200", 2.250", +.700" Inlet valves
- 8 1.625" +.700" Exhaust valves
- 16 3850 Valve Springs 1.550 O.D. dual w/damper
220lbs @ 1.950 580lbs" @ 1.230" .720 lift
- 1 set 506 Chrome Moly 10 degree Retainers
- 1 set 203 10 degree Valve Keepers

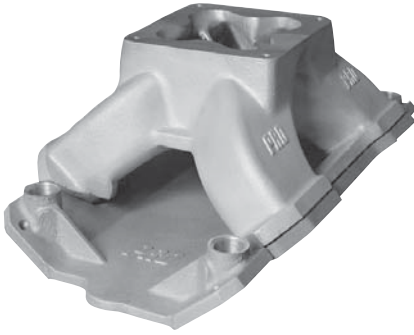
OPTIONS

Titanium Retainers upgrade
Valve Spring upgrade to Isky 9985 or 9945

NOTE

When ordering 14 deg kits valve sizes must be specified.





INTAKE MANIFOLDS

M14001 Pro 14 Deg One Piece Manifold lightweight flanges 4150 carb mount. One piece casting with thermostat housing. Suits all 14° Pro Topline heads with 5° inlet face. Requires porting for best results, suits circle track / drag bracket up to 350cu" to 7500RPM. e.g. (114 60 030 - 114 62 254)

M14002 Pro 14 Deg Two Piece Manifold Phenolic spacers 4150 carb mount. 2 piece casting with separate Valley Plate, Spider insulated by "O" ringed Phenolic Spacer for fantastic intake charge cooling. Suits all 14° Pro Topline heads with 5° inlet face. Requires porting for best results, suits circle track / drag bracket up to 400cu" to 7500RPM. e.g. (114 62 265 - 114 62 285)

M14002S Pro 14 Deg Two Piece Manifold Spider only.

M14002D Pro 14 Deg Two Piece Manifold Phenolic spacer, Dominator carb mount. Shares similar features to 14002 but cast with larger runners and plenum to optimise Dominator carburettor. Unlocks potential of Pro Topline 14° heads for large cube applications. Ported for best results, suits Drag / Boat 400cu"+ to 8000RPM+.

M14002H Pro 14 Deg Two Piece Manifold Highrise (Nascar) 4150 mount. Std 2 piece features with extended runner and plenum height. Suits race applications without carb height restriction. Provides increased mid-range and top end, excellent for medium cube or alcohol. Circle track / Drag 350 to 410cu" to 8000RPM+.

VALLEY PLATES

M14002VPS Std Valley Plate for 14002 manifold. deck height 9.025"

M14002VP150 Thick deck option (Deck height 9.150"). Use 3/4" Phenolic PHMS 3-4.

M14002VP350 Suits deck height 9.350". Use 7/8" Phenolic PHMS 7-8.

M14002VP500 Suits deck height 9.500". Use 1" Phenolic PHMS 1-0.

PHENOLIC SPACERS

PHMS 1-2 1/2" to suit 14° iron heads.

PHMS 5-8 5/8" to suit 14° aluminum heads

PHMS 3-4 3/4" to suit 9.150 tall deck option.

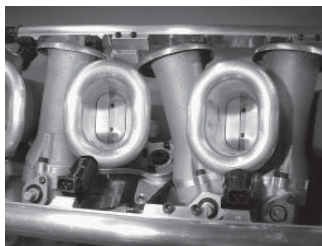
PHMS 7-8 7/8" to suit 14° 9.350 tall deck option.

PHMS 1-0 1" to suit 9.500 tall deck option.

PRO INJECTION SYSTEMS

The fuel injection manifold illustrated incorporates state of the art fuel injection and air flow technology developed initially for the Australian Touring Car series. Features a rectangular butterfly & ram tubes. Ram Tubes are available in aluminum, magnesium & carbon fibre.

This rectangular port gives increased power & torque over conventional systems. This occurs because the air fuel column only marginally changes shape as it goes into the cylinder head port before reaching the short turn radius. Improved injector position gives better atomization and helps direct the charge to the right place enhancing throttle response and acceleration.



Individual Runner

ROCKERS

To suit NON CNC 23° Raised Runner part #s 22300000 22360022

PRO6348 23 DEG .450" Offset 1.5 X 1.5 Ratio Inlet & Exhaust

PRO6349 23 DEG .450" Offset 1 6 X 1.6 Ratio Inlet & Exhaust

PRO6354 23 DEG .450" Offset 1.65 X 1.6 Ratio Inlet & Exhaust

Suits Raised Runner part #'s 22362022

22362256

12360022

12362256DN

PRO6375 23 DEG .550" Offset 1.6 X 1.5 Ratio Inlet & Exhaust

PRO6376 23 DEG .550" Offset 1.65 X 1.55 Ratio Inlet & Exhaust

To suit the following part #'s

21462030

21462254

21462265

11460030

11462254

11462265

11462585

11462265DN

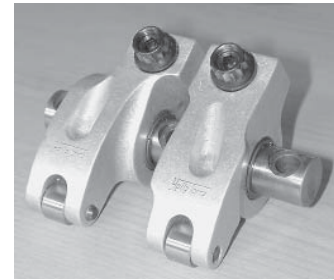
11462285DN

11462585DN

(All CNC 14 & 23 Deg PRO cylinder heads)

PRO6377 14 DEG .550" Offset 1.6 X 1.5 Ratio Inlet & Exhaust

PRO6378 14 DEG .550" Offset 1.65 X 1.55 Ratio Inlet & Exhaust



GASKETS

M14001G040 14 Deg one piece intake gasket .040 thickness

M14001G060 14 Deg one piece intake gasket .060 thickness

M14002VG 14 Deg two piece valley gasket .060 thickness

M14001-12G040 14 Deg Sprint Car 10° face gasket .040 thickness

M14001-12G060 14 Deg Sprint Car 10° face gasket .060 thickness

M2300G040 23 Deg Lightning port intake gasket .040 thickness

M2300G060 23 Deg Lightning port intake gasket .060 thickness

M2300RG040 23 Deg Raised runner Intake gasket .040 thickness

M2300RG060 23 Deg Raised runner Intake gasket .060 thickness

M4BBLCG 4 Barrell standard carburetor gasket

M4BBLDG Dominator carburetor gasket

VALVE GUIDES

VG502-E2135- Small Block Valve Guide 11/32ID Phosphorus

VG502-E2135- Small Block Valve Guide 11/1321D Manganese

VG503-E2135- Small Block Valve Guide 11/1321D Phosphorus

VG503-E2135- Small Block Valve Guide 11/1321D Manganese

VG510-E2135- Small Block Valve Guide 11/1321D Phosphorus

VG510-E2135- Small Block Valve Guide 11/1321D Manganese

VG545-E2135- Small Block Valve Guide 11/1321D Phosphorus

VG545-E2135- Small Block Valve Guide 11/32ID Manganese

VG565-E2135- Small Block Valve Guide 11/1321D Phosphorus

VG565-E2135- Small Block Valve Guide 11/1321D Manganese

VALVE SEATS

2250-375 2.250 x 1.810 x .375 Intake Seat

2290-375 2.290 x 1.810 x .375 Intake Seat

1680-375 1.680 x 1.370 x .375 Exhaust Seat

1690-375 1.690 x 1.370 x .375 Exhaust Seat

DW2250-375 2.250 x 1.810 x .375 Intake Seat

DW2290-375 2.290 x 1.810 x .375 Intake Seat

DW2350-375 2.350 x 1.810 x .375 Intake Seat

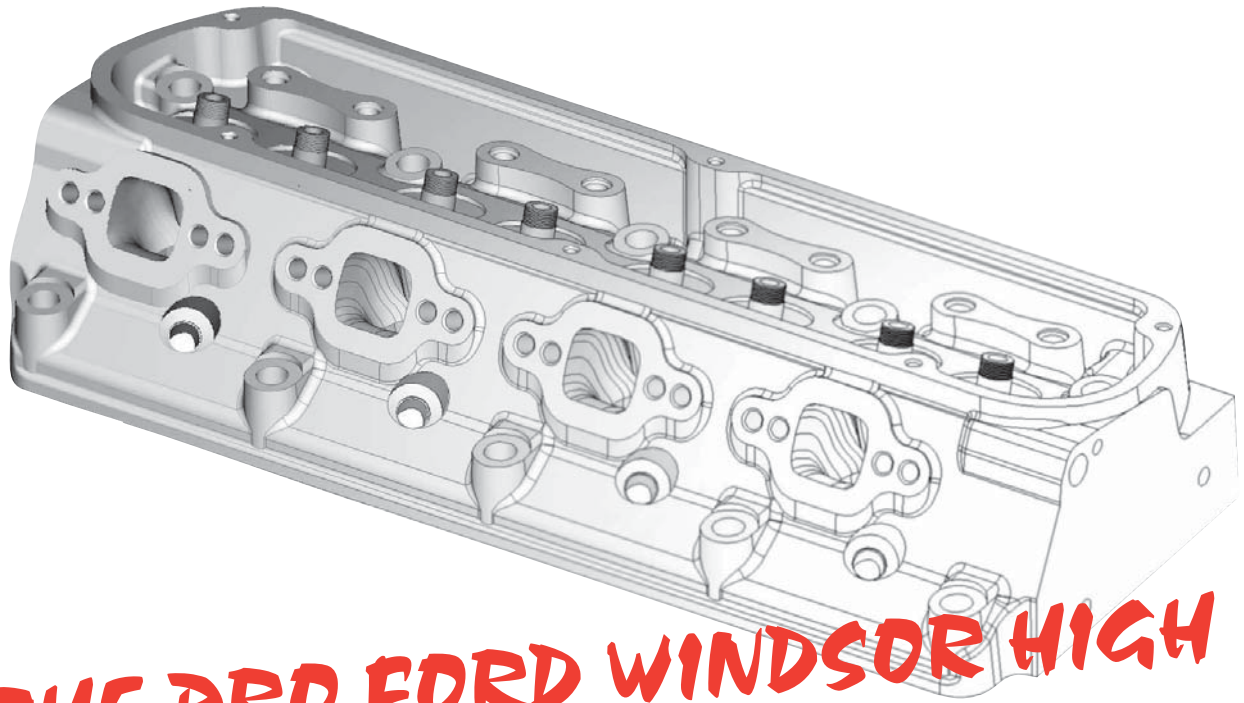
DW1680-375 1.680 x 1.370 x .375 Exhaust Seat

DW1690-375 1.690 x 1.370 x .375 Exhaust Seat

Ductile Iron

Copper Beryllium

AVAILABLE NOVEMBER...



THE PRO FORD WINDSOR HIGH PERFORMANCE CYLINDER HEAD

Another Winning combination from

Chamber volumes: 60-70cc
Valve sizes Intake: 2.02-2.0
Exhaust: 1.600



Incorporates rolled over valve angles, optional standard or raised exhaust ports, optional open chamber heart-shaped combustion chambers.

Available with as cast ports, competition multi angle valve job and full CNC ported. Also as complete assemblies with either stainless or titanium valves.

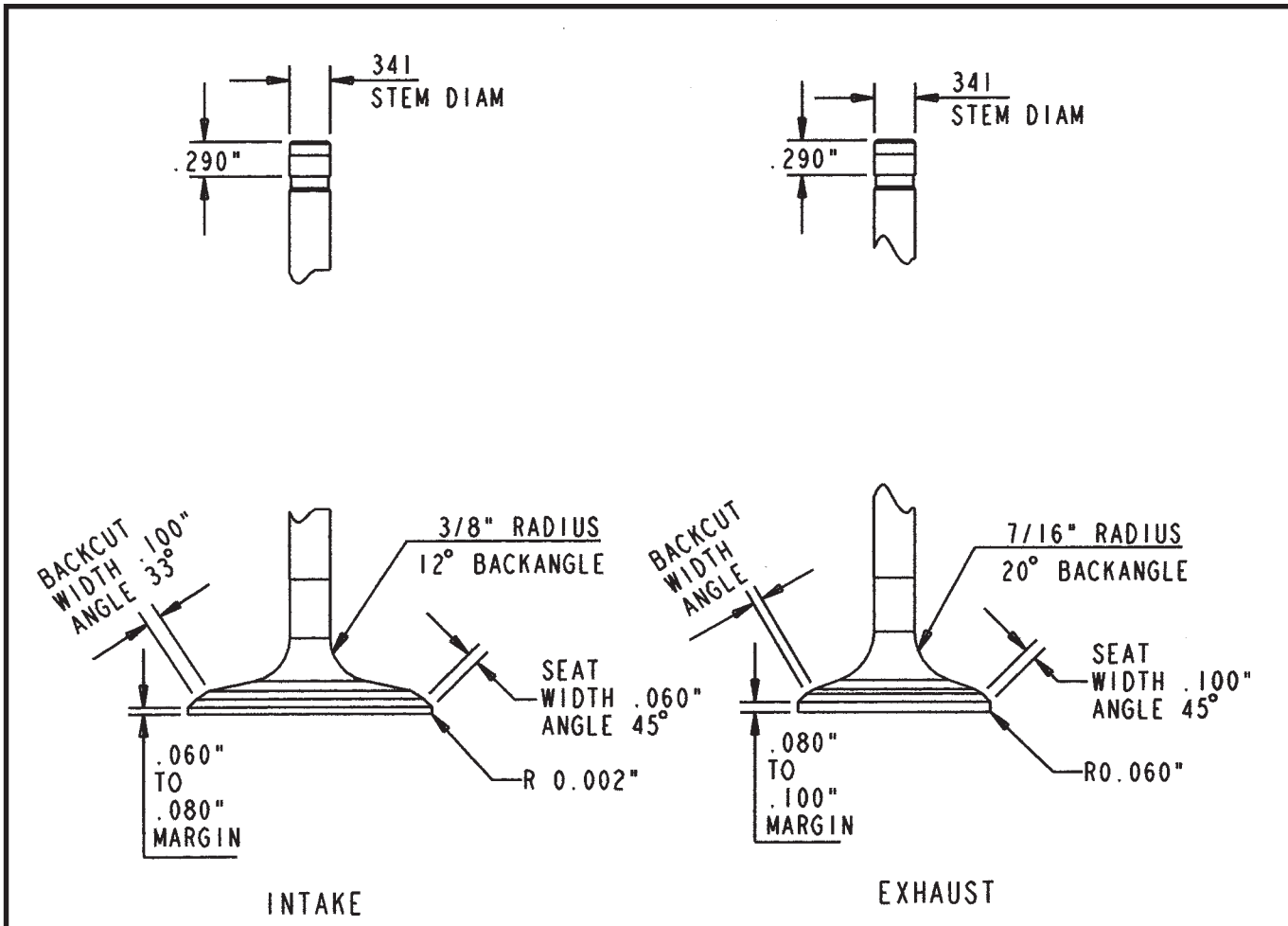


FLOW SHEETS

- All Pro Top line CNC Heads are flow checked on a Superflow SF600, fitted with Flow Com & Windows Winflow. This is the latest technology available & is regularly calibrated to Superflow specs.
- Superflow benches do not have atmospheric correction and have a tolerance of $\pm 3\%$. Due to these factors plus variances in Flowbench plate sizes, bore sizes, mounting fixtures and radius intake port entry, there will be differences in flow numbers when comparing data.
- Because each bench will vary, it must be used as a comparative against heads of known performance, rather than only comparing numbers.
- Pro Cylinder Heads are developed using flow tests, dyno tests and actual racing conditions.
- Remember, races are won on the track not on flowbenches and dynos.
- Now you have the opportunity to bolt on and experience the Pro winning edge!

PLUG CROSS REFERENCE

3/4"	CHAMPION	NGK	AC DELCO	AUTO LITE
FLAT	C 55 CX	R-5118-M-11		3911
	C 57 CX	R-5118-M-10.5		3912
	C 59 CX	R-418-M-9		3933
	C 61 CX	R-418-M-10	436 XLS	3932
5/8"	V 57 C	5763-8	AC 40 TS	132
TAPER	V 59 C	5763-9	AC 44 TS	132
	V 61 C	5763-10		



HEAD STUD SPECIFICATIONS

14° Head

ARP 234-4334

Outers

16x 7/16 x 2.5" 1" UNF 7/16
.85 SHANK
.65 UNC 7/16

Middle End

4 7/16 x 4" 1" UNF 7/16
2.30 SHANK
.65 UNC 7/16

Centre

2 7/16 x 4.5" 1" UNF 7/16
2.85 SHANK
.65 UNC 7/16

3/8"

4 3/8 x 4 3/4" 1" UNF 3/8
3.10 SHANK
.65 UNC 7/16

Top

8 7/16 x 5" 1" UNF 7/16
3.35 SHANK
.65 UNC 7/16

12 ° Hi-Port Head

Outers

16 7/16 x 2.5" 1" UNF 7/16
.85 SHANK
.65 UNC 7/16

Middle End

4 7/16 x 4 1/4" 1" UNF 7/16
2.60 SHANK
.65 UNC 7/16

Centre

2 7/16 x 5 1/4" 1" 3/8 UNF 7/16
3.60 SHANK
.65 UNC 7/16

3/8"

4 3/8 x 4 3/4" 1" 3/8 UNF 3/8
3.85 SHANK
.65 UNC 7/16

Top

8 7/16 x 5 3/4" 1" UNF 7/16
4.10 SHANK
.65 UNC 7/16

Aluminum Block - Donovan

Outers

16 - 7/16 x 3.240" #1696-B (+.090")

Middle End

4 - 7/16 x 4.560" #1696-2C (-.040")

Centre

2 - 7/16 x 5.060" #1696-1C (-.090")

3/8"

4 - 3/8 x 5.600" #1615-TL (+.200")*

Top

8 - 7/16 x 6.060" #1696-4C (+.410")®

* Requires shorten by .200"

® Shorten by .400"

23° Head

ARP 234-3334

Outers

16x 7/16 x 2.5" 1" UNF 7/16
.85 SHANK
.65 UNC 7/16

Middle End

4 7/16 x 4 1/4" 1" UNF 7/16
2.60 SHANK
.65 UNC 7/16

Centre

2 7/16 x 5" 1" UNF 7/16
3.40 SHANK
.65 UNC 7/16

3/8"

4 3/8 x 5" 1" UNF 3/8
3.40 SHANK
.65 UNC 7/16

Top

8 7/16 x 5" 1" UNF 7/16
3.40 SHANK
.65 UNC 7/16



PART # LEGEND

14 DEG & 23 DEG RAISED RUNNER

FIRST DIGIT = MATERIAL	1 = ALUMINUM	2 = CAST IRON	
SECOND & THIRD = VALVE ANGLE	14 = 14 DEG	12 = 12 DEG	23 = 23 DEG
FORTH = INLET FACE ANGLE	5 = 10 DEG FACE	6 = 5 DEG FACE	
FIFTH = ROCKER STLYE	2 = 18° STYLE	3 = -12 STYLE	
6,7,& 8 = PORT VOL IN cc	254 = 254 cc	285 = 285 cc	
285 ONLY 6 th DIGIT = VALVE SIZE	2 = 2.200" INLET VALVE	5 = 2.250" INLET VALVE	
300 ONLY 6 th DIGIT = VALVE SIZE	5 = 2.250" INLET VALVE	3 = 2.300 " INLET VALVE	

Suffix - HEADS

C Copper Beryllium	TD Thick deck
S Spread port exhaust	N Nitrous
DN Down Nozzle	V Offset valve (.040")
H High Port head	A Angle Plug

MANIFOLDS

M Magnesium Option
D Dominator Carb Mount
P Ported Manifold

EXAMPLES

1 Aluminum	1 14° Valve Angle	4 5° Face Angle	6 18° Rocker	2 2.250 Valve	8 Runner Size	5
1 Aluminum	1 14° Valve Angle	4 10° Face Angle	5 -12 Rocker	3 2.250 Valve	8 Runner Size	5
2 Cast Iron	2 23° Valve Angle	3 10° Face Angle	6 18° Rocker	2	2	5 Runner Size

114 53 585 V-S-DN-C offset valve - spread port-down nozzle - copper seats

PRO LIGHTNING SERIES

Suffix

A = ANGLE PLUG K = ASSEMBLED KIT

Kit Details

K1 = HYDRAULIC KIT
 K2 = FLAT TAPPET KIT
 K3 = ROLLER KIT TO .660" LIFT
 K4 = ROLLER KIT TO .720 " LIFT

PRO LIGHTNING SERIES

PART # LEGEND

FIRST DIGIT = MATERIAL	1 = ALUMINUM	2 = CAST IRON
SECOND & THIRD = VALVE ANGLE	23 = 23 DEG VALVE ANGLE	
FORTH = CHAMBER SIZE	4 = 64 cc CHAMBER	2 = 72cc CHAMBER
FIFTH = CHAMBER FINISH	0 = AS CAST	6 = CNC MACHINED
SIXTH = BOWL FINISH	0 = AS CAST	6 = CNC MACHINED
SEVENTH = PORT FINISH	0 = AS CAST	6 = CNC MACHINED
8 th & 9 th = PORT VOLUME IN cc	80 = 180 cc	00 = 200 cc
		20 = 220 cc
		35 = 235 cc

EXAMPLES

2	2	3	4	0	0	0	0	0	A
Cast Iron	23° Valve Angle	64cc	As Cast	A/C Bowl	A/C Port	200cc Runner	Angle Plug		
2	2	3	2	6	0	0	3	5	
Cast Iron	23° Valve Angle	72cc	CNC Chamber	A/C Bowl	A/C Port	235cc Runner	Straight Plug		
2	2	3	4	6	2	2	2	0	A
Cast Iron	23° Valve Angle	64cc	CNC Chmbr	CNC Bowl	CNC Port	220cc Runner	Angle Plug		
1	2	3	4	0	0	0	8	0	A
Aluminim	23° Valve Angle	64cc	As Cast	As Cast	As Cast	180cc Runner	Angle Plug		
1	2	3	2	0	0	0	0	0	K1
Aluminim	23° Valve Angle	72cc	As Cast	As Cast	As Cast	200cc Strait Plug	Hyd Asem		

OEM STOCK REPLACEMENT SERIES- SBC

FIRST DIGIT = MATERIAL	2 = CAST IRON	
SECOND & THIRD = VALVE ANGLE	23 = 23 DEG VALVE ANGLE	
FORTH & FIFTH = CHAMBER SIZE SIZE	76 = 76 cc CHAMBER	67 = 67cc CHAMBER
SIXTH & SEVENTH = INLET VALVE SIZE	94 = 1.940" INT VALVE	20 = 2.020" INT VALVE
8 th , 9 th & 10 th = LAST 3 GM CASTING DIGITS		

2	2	3	76	94	906
Cast Iron	23° Valve Angle	76cc Chbr	1.94 Valve	GM Casting ID	

SBC PRO TORKER

FIRST DIGIT = MATERIAL	2 = CAST IRON	
SECOND & THIRD = VALVE ANGLE	3 = 23 DEG VALVE ANGLE	
FORTH & FIFTH = CHAMBER SIZE SIZE	76 = 76 cc CHAMBER	67 = 67cc CHAMBER
SIXTH & SEVENTH = INLET VALVE SIZE	94 = 1.940" INT VALVE	20 = 2.020" INT VALVE
8 th , 9 th & 10 th = PORT VOL IN cc	167 = 167 cc Port	
11 TH = PRODUCT ID CODE		

2	2	3	76	94	167	T
Cast Iron	23° Valve Angle	76cc Chbr	1.94 Valve	167cc	ID Code	



PART # LEGEND

FORD V6

FIRST DIGIT	= MANUFACTURER	F	= FORD
SECOND DIGIT	= MATERIAL	2	= CAST IRON
3 rd & 4 th DIGIT	= MOTOR SIZE	40	= 4 LITRE
5 th & 6 th DIGIT	= MODEL YEAR	90	= 1990 ONWARDS
7 th DIGIT	= PRODUCT ID CODE		
8 th DIGIT	= CHAMBER STYLE	C	= CLOSED
9 th DIGIT	= FORD CASTING ID	O	= OPEN

F Ford **2** Cast iron **40** 4 Litre **90** 1990 **A** ID Code **O** Open Chmbr **T** Ford Casting

FORD 460

FIRST DIGIT	= MANUFACTURER	F	= FORD
SECOND DIGIT	= MATERIAL	2	= CAST IRON
3 rd , 4 th & 5 th DIGIT	= MOTOR SIZE	460	= 460 CU IN “
6 th & 7 th DIGIT	= FORD CASTING ID		
8 th DIGIT	= PRODUCT ID CODE		

F Ford **2** Cast iron **460** 460 CU IN “ **E7** Ford Casting **A** Product ID Code

FORD STRAIGHT 6

FIRST DIGIT	= MANUFACTURER	F	= FORD
SECOND DIGIT	= MATERIAL	2	= CAST IRON
3 rd , 4 th & 5 th DIGIT	= MOTOR SIZE	300	= 300 CU IN
6 th DIGIT	= MOTOR CONFIG	6	= 6 CYLINDER
7 th = FUEL DELIVERY		I	= FUEL INJECTION

F Ford **2** Cast iron **300** 300 cu in” **A** ID Code **I** injected

CHRYSLER

FIRST DIGIT	= MANUFACTURER	C	= CHRYSLER
SECOND DIGIT	= MATERIAL	2	= CAST IRON
3 rd 4 th & 5 th DIGIT	= MOTOR SIZE	360	= 360 cu in “
6 th DIGIT	= PRODUCT ID CODE		

C Chrysler **2** Cast iron **360** 360 cu in” **A** ID Code