

205cc LSX Mongoose Street Head

The Small Port, High Velocity Torque Monster



Specifications, Features, and Optional Supporting Components

Head Torque	----- 11MM ARP 70ft. lbs. w/ Moly 8mm 23ft. lbs. w/ Moly
Exhaust Port Gasket	----- GM#12558573/Fel-Pro #1440 AFR #6857
Intake Port Volume	----- 205cc
Exhaust Port Volume	----- 84cc
Head Gasket	----- Fel-Pro #1041, AFR #6847
Cometic Head Gasket	----- AFR #6846
Head Bolts & Studs	----- Standard ARP, AFR #6330, #6331 & #6332
Head Bolt Washers	----- Standard ARP, AFR #6328 & #6329
	----- Jesel or TD Shaft Mount
Suggested Manifold	----- LS6 or FAST, TPIS
Spark Plug Starting Range	----- AC 41-974 Platinum
Combustion Chambers	----- 64cc or 66cc
Spring Pocket 1.250	-----
Valve Spacing	----- Stock
Rocker Arms	----- Stock
Valve Angle	----- Stock
Flat Mill (milling options available)	----- .006" per cc

Note: Milling will affect flow numbers.

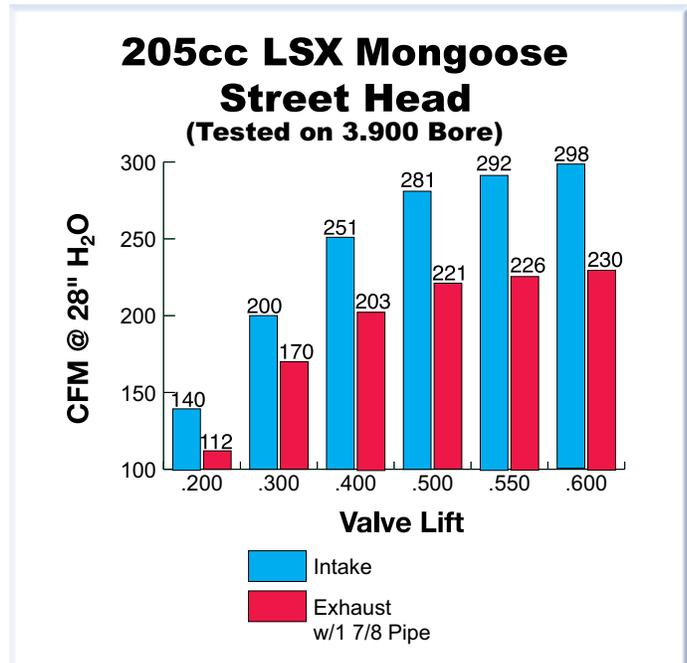
For the ultimate street LS1/LS2/LS6 aluminum cylinder head AFR's all new 205cc emission legal cylinder heads E/O # D250-4 are your only choice. Specifically designed for 1997 to present Gen-3 Chevy Corvettes, Camaros, and trucks. AFR's LS1 head offers unmatched flow performance (298 CFM at .600lift) and features 2.020 intake and 1.600 exhaust valves with AFR's iron ductile interlocking valve seats. With only 205cc port volume (same as stock LS1 head) this is an incredibly 70 CFM increase over stock casting creating unbelievable port velocity and performance. The 205cc is ideal for normally aspirated 346C.I. to 396C.I. It is available with 66cc combustion chambers. AFR's LS1 is a direct bolt on, no special parts required (see footnotes page 47). Structural features like Air Flow Research's trademark 3/4" thick head deck, a must for blown and nitrous applications, reinforced rocker stud bosses, and thick wall runners provide unparalleled durability. An exclusive new modern combustion chamber design with double quench pad area helps the LS1 generate huge low and mid lift airflow numbers. If you need a snake charmer for that pesky neighborhood "Cobra Mustang" look no further.

Note: Hydraulic roller cams in "LS" Gen III engines typically experience valve float at 6600-6800 RPM's. If you are using after market rocker arms valve float will become prominent and AFR highly recommends upgrading to our #8019 springs. If you plan on running over .600 gross valve lift and/or 6600 RPM, AFR suggests you upgrade your springs to AFR part #8019. Our upgrade spring has higher seat and open pressures (155/410+) to better reduce the risk of valve float in more aggressive applications.

Pairs of Cylinder Heads Complete With Parts & Ready To Install		
Runner Volume	Combustion Chamber	Part #
CNC Street Porting		
205cc	CNC Ported w/parts 66cc	1510
205cc	CNC Ported w/o parts 66cc	1520
200cc	As Cast w/o parts 64cc	1541

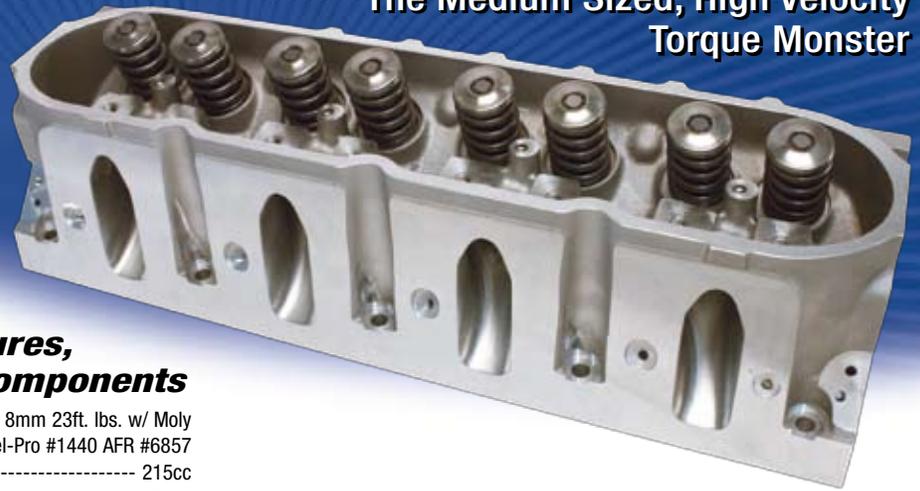
Basic Package Components	Part #
100% CNC Ported Combustion Chambers 100% CNC Ported Exhaust Ports 100% CNC Ported Intake Ports 3-angle Radiused Valve Job	
Bead Lock Intake Valve, 2.020" standard length	AFR #7207
Bead Lock Exhaust Valve, 1.600" standard length	AFR #7228
1.290" OD Hydraulic Valve Spring with dampener, 135 lbs. on seat, .600" maximum lift	AFR #8017
7° 1.250 Titanium Retainers	AFR #8512
7° Bead Locks Valve Keepers	AFR #9007
Viton Valve Seals	AFR #6612
Hardened Spring Cup	AFR #8042
Intake Valve Seats	AFR #9059
Exhaust Valve Seats	AFR #9069
Bronze Valve Guides	AFR #9051

FYI: LS1 bead locks and aftermarket bead locks are not interchangeable. GM made their bead lock radius and depth different, AFR locks are the same as GM LS1.



215cc LSX Mongoose Strip Head

The Medium Sized, High Velocity Torque Monster



Specifications, Features, and Optional Supporting Components

Head Torque	----- 11MM ARP 70ft. lbs. w/ Moly 8mm 23ft. lbs. w/ Moly
Exhaust Port Gasket	-----GM#12558573/Fel-Pro #1440 AFR #6857
Intake Port Volume	----- 215cc
Exhaust Port Volume	-----84cc
Head Gasket	-----Fel-Pro #1041, AFR #6847
Cometic Head Gasket	-----AFR #6848
Head Bolts & Studs	----- Standard ARP, AFR #6330, #6331 & #6332
Head Bolt Washers	----- Standard ARP, AFR #6328 & #6329
Jesol or TD Shaft Mount	
Suggested Manifold	-----LS6 or FAST, TPIS
Spark Plug Starting Range	----- AC 41-974 Platinum
Combustion Chambers	-----68cc
Spring Pocket 1.250	-----
Valve Spacing	----- Stock
Rocker Arms	----- Stock
Valve Angle	----- Stock
Flat Mill (milling options available)	----- .006" per cc

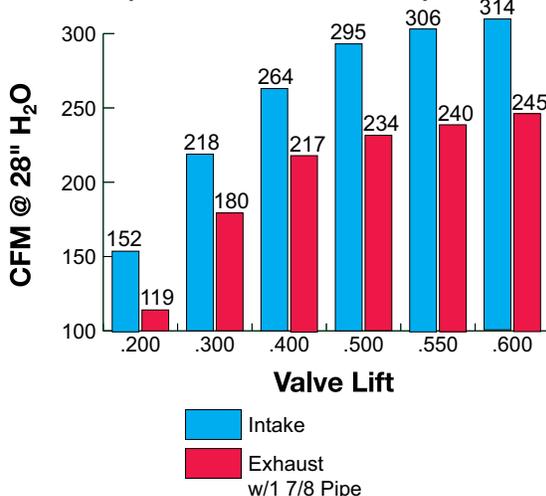
Note: Milling will affect flow numbers.

Pairs of Cylinder Heads Complete With Parts & Ready To Install		
Runner Volume	Combustion Chamber	Part #
CNC Street Porting		
215cc	Large bore CNC Ported w/parts 64cc	1530
215cc	Large bore CNC Ported w/o parts 64cc	1531
215cc	Large bore CNC Ported w/parts 74cc	1550
215cc	Large bore CNC Ported w/o parts 74cc	1551

In keeping up with the GM's trend of larger bore sizes and increased displacement, AFR is proud to release our 215cc LS1/LS2/LS6 version of our popular Gen III product line which is aimed specifically to maximize 4" bore combinations (364 – 408 CID). However this head is very versatile and could also be considered for aggressive 346 applications and should also be a prime consideration in larger stroker motors as well (415-430 CID) if the focus of the build is more aimed at enhancing street performance than all out strip performance (where our 225 or 240 cc offerings potentially make more sense). This is a very effective design offering serious velocity while still being able to provide a significant volume of airflow enough to generate well over 600 HP at the crank. This head will also work well on any forced induction or nitrous applications from 346 – 408 CID; larger engines should look to our 225 offering. Note the AFR 215 requires a minimum head gasket bore of 4.135 regardless of bore size and is a direct bolt on requiring no special parts (see footnotes page 47). It of course comes equipped with AFR's trademark 3/4" thick deck and thicker port and combustion chamber surfaces as well. If you're looking to see that a blue oval in your rear view mirror instead of your windshield, look no further than the AFR 215.

Note: Hydraulic roller cams in "LS" Gen III engines typically experience valve float at 6600-6800 RPM's. If you are using after market rocker arms valve float will become prominent and AFR highly recommends upgrading to our #8019 springs. If you plan on running over .600 gross valve lift and/or 6600 RPM, AFR suggests you upgrade your springs to AFR part #8019. Our upgrade spring has higher seat and open pressures (155/410+) to better reduce the risk of valve float in more aggressive applications.

215cc LSX Mongoose Street Head (Tested on 4.060 Bore)



Basic Package Components	Part #
100% CNC Ported Combustion Chambers 100% CNC Ported Exhaust Ports 100% CNC Ported Intake Ports 3-angle Radiused Valve Job	
Bead Lock Intake Valve, 2.020" standard length	AFR #7207
Bead Lock Exhaust Valve, 1.600" standard length	AFR #7228
1.290" OD Hydraulic Valve Spring with dampener, 135 lbs. on seat, .600" maximum lift	AFR #8017
7° 1.250 Titanium Retainers	AFR #8512
7° Bead Locks Valve Keepers	AFR #9007
Viton Valve Seals	AFR #6612
Hardened Spring Cup	AFR #8042
Intake Valve Seats	AFR #9059
Exhaust Valve Seats	AFR #9069
Bronze Valve Guides	AFR #9051

FYI: LS1 bead locks and aftermarket bead locks are not interchangeable. GM made their bead lock radius and depth different, AFR locks are the same as GM LS1.

225cc LSX Mongoose Strip Head

The Ultimate Bolt-On Emission
Legal Street/Strip Weapon



For the maximum street/strip LS1/LS2/LS6 aluminum cylinder heads AFR's all new 225cc emission legal head E/O #D250-4 are hands down the best choice. Specifically designed for 1997 to present Gen-3 Chevy Corvettes, Camaros, and trucks. AFR's LS1 head offers unmatched flow performance and features 2.080 intake and 1.600 exhaust valves with AFR's iron ductile interlocking valve seats. The 225cc is ideal for normally aspirated 396C.I. to 427C.I. For a wild 346 ci the 225 is a good choice, however some low RPM loss of torque might occur. It is available with 62cc, 65cc, and 72cc combustion chambers. AFR's LS1 is a direct bolt on, no special parts required (see footnotes page 47). Structural features like Air Flow Research's trademark 3/4" thick head deck, a must for blown and nitrous applications, reinforced rocker stud bosses and thick wall runners provide unparalleled durability. An exclusive new modern combination chamber design with double quench pad area helps the LS1 generate huge low and mid lift airflow numbers. If you need a snake charmer for that pesky neighborhood "Cobra Mustang" look no further!

Basic Package Components	Part #
100% CNC Ported Combustion Chambers 100% CNC Ported Exhaust Ports 100% CNC Ported Intake Ports 3-angle Radiused Valve Job	
Bead Lock Intake Valve, 2.080" standard length	AFR #7208
Bead Lock Exhaust Valve, 1.600" standard length	AFR #7228
1.270" OD Hydraulic Valve Spring with dampener, 155 lbs. on seat, .650" maximum lift	AFR #8019
7° 1.250 Titanium Retainers	AFR #8512
7° Bead Locks Valve Keepers	AFR #9007
Viton Valve Seals	AFR #6612
Hardened Spring Cup	AFR #8042
Intake Valve Seats	AFR #9059
Exhaust Valve Seats	AFR #9069
Bronze Valve Guides	AFR #9051

FYI: LS1 bead locks and aftermarket bead locks are not interchangeable. GM made their bead lock radius and depth different, AFR locks are the same as GM LS1.

Specifications, Features, and Optional Supporting Components

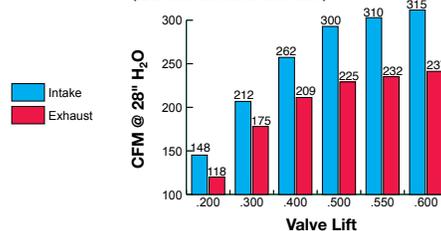
Head Torque	----- 11MM ARP 70ft. lbs. w/ Moly 8mm 23ft. lbs. w/ Moly
Exhaust Port Gasket	----- GM#12558573/Fel-Pro #1440 AFR #6857
Intake Port Volume	----- 225cc
Exhaust Port Volume	----- 85cc
Head Gasket	----- Fel-Pro #1041, AFR #6847
Cometic Head Gasket	----- AFR #6848
Head Bolts & Studs	----- Standard ARP, AFR #6330, #6331 & #6332
Head Bolt Washers	----- Standard ARP, AFR #6328 & #6329
Jesol or TD Shaft Mount	
Suggested Manifold	----- LS6 or FAST, TPIS
Spark Plug Starting Range	----- AC 41-974 Platinum
Combustion Chambers	----- 62cc, 65cc or 72cc
Spring Pocket 1.250	-----
Valve Spacing	----- Stock
Rocker Arms	----- Stock
Valve Angle	----- Stock
Flat Mill (milling options available)	----- .006" per cc

Note: Milling Head Deck Will Affect Flow Numbers.

Pairs of Cylinder Heads Complete With Parts & Ready To Install		
Runner Volume	Combustion Chamber	Part #
CNC Street Porting		
225cc	Large bore CNC Ported w/ parts 62cc	1610
225cc	Large bore CNC Ported w/o parts 62cc	1620
225cc	Large bore CNC Ported w/ parts 72cc	1630
225cc	Large bore CNC Ported w/o parts 72cc	1640
225cc	Small bore CNC Ported w/ parts 65cc	1660
225cc	Small bore CNC Ported w/o parts 65cc	1670

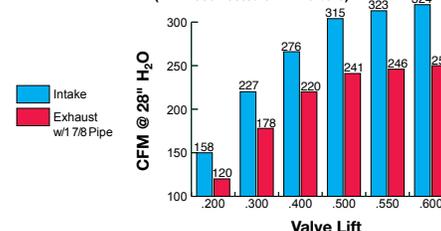
Small Bore 225cc LSX Mongoose Strip Head

(AFR 1660 Tested on 3.900 bore)



Large Bore 225cc LSX Mongoose Strip Head

(AFR 1630 Tested on 4.125 bore)



245cc LSX Mongoose Strip Head

Our Max Effort Cathedral Port Offering



Specifications, Features, and Optional Supporting Components

Head Torque	----- 11MM ARP 70ft. lbs. w/ Moly 8mm 23ft. lbs. w/ Moly
Exhaust Port Gasket	-----GM#12558573/Fel-Pro #1440 AFR #6857
Intake Port Volume	----- 240cc
Exhaust Port Volume	-----87cc
Cometic Head Gasket	----- AFR #6848
Head Bolts & Studs	----- Standard ARP, AFR #6330, #6331 & #6332
Head Bolt Washers	----- Standard ARP, AFR #6328 & #6329
Jesol or TD Shaft Mount	
Suggested Manifold	-----LS6 or FAST, TPIS
Spark Plug Starting Range	----- AC 41-974 Platinum
Combustion Chambers	----- 64cc or 74cc
Spring Pocket 1.570	-----
Valve Spacing	----- Stock
Rocker Arms	----- Stock
Valve Angle	----- Stock
Flat Mill (milling options available)	----- .006" per cc

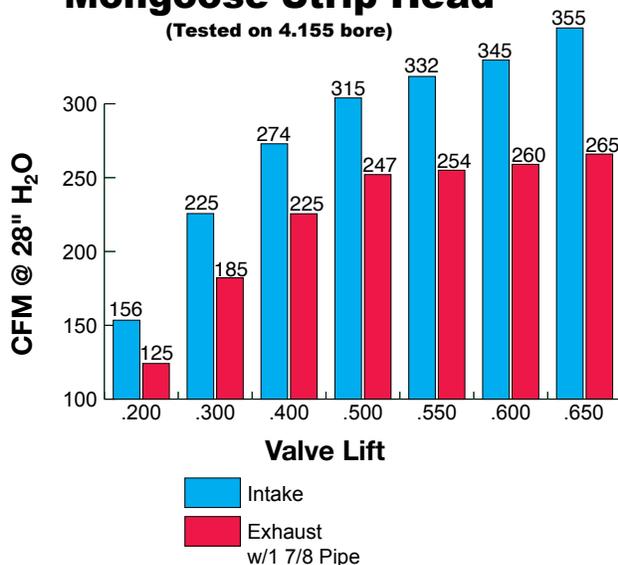
Note: Milling Head Deck Will Affect Flow Numbers.

Pairs of Cylinder Heads Complete With Parts & Ready To Install		
Runner Volume	Combustion Chamber	Part #
CNC Street Porting		
245cc	Large bore CNC Ported w/ parts 64cc	1680
245cc	Large bore CNC Ported w/o parts 64cc	1681
245cc	Large bore CNC Ported w/ parts 72cc	1690
245cc	Large bore CNC Ported w/o parts 72cc	1691

A tremendous amount of time and energy was invested to bring you our 245cc LS1/LS2/LS6 Gen III head what represents the pinnacle in cathedral design bolt on performance. With over 350 CFM's available it has intake flow numbers approaching GM's famed (and much larger) LS7 head with much stronger exhaust flow in comparison. This head is our take no prisoners LSX cathedral shaped offering and its focus is large displacement combinations (415 – 454 CID) with a minimum bore size of 4.060. It requires a head gasket bore of 4.160 or larger and comes standard equipped with lightweight 2.160 intake valves / 1.600 exhaust. Another unique feature of this head is that it is "solid roller friendly" having been designed and machined to accept larger .375 pushrods without additional clearancing (in most applications) and comes direct from the factory with 1.570 spring pockets (Note: Under no condition can these pockets be machined deeper). With an aggressive set-up this head is capable of producing power in the 700 HP range while still providing gobs of low and midrange torque. It is still a factory direct bolt on (see footnotes page 47) with standard length valves, stock valve train geometry, and everything in their respective OEM locations. It of course comes standard equipment with AFR's trademark 3/4" head deck and the same rugged castings found in the rest of the AFR LSX line up. Make sure you're packing lots of displacement to fully realize the benefits this head can offer you and hang on when its time to go WOT!

Large Bore 240cc LSX Mongoose Strip Head

(Tested on 4.155 bore)



Basic Package Components	Part #
100% CNC Ported Combustion Chambers 100% CNC Ported Exhaust Ports 100% CNC Ported Intake Ports 3-angle Radiused Valve Job	
Bead Lock Intake Valve, 2.160" standard length	AFR #7211
Bead Lock Exhaust Valve, 1.600" standard length	AFR #7228
1.270" OD Hydraulic Valve Spring with dampener, 155 lbs. on seat, .650" maximum lift	AFR #8019
7° 1.250 Titanium Retainers	AFR #8512
7° Bead Locks Valve Keepers	AFR #9007
Viton Valve Seals	AFR #6612
Hardened Spring Cup	AFR #8042
Intake Valve Seats	AFR #9060
Exhaust Valve Seats	AFR #9069
Bronze Valve Guides	AFR #9051

FYI: LS1 bead locks and aftermarket bead locks are not interchangeable. GM made their bead lock radius and depth different, AFR locks are the same as GM LS1.