

COPO SPECS & STATS P/N 20129562: 2012 Features

2012 FEATURES	327/4.0L Supercharged	327/2.9L Supercharged	427 Naturally Aspirated
NHRA HORSEPOWER RATINGS	550	500	425
RECOMMENDED MAX ENGINE RPM	7500	7500	7500
NHRA Shipping Weight	3,175 lbs.	3,250 lbs.	3,195 lbs.
TRANSMISSION	ATI Racing Products "Pro Glide" SFI-approved ATI "Super Case" 1.80 ratio 9310 straight cut gear set Precision balanced carrier with 4340 tool steel output shaft Turbo spline input shaft - Vasco material Seven clutch high gear pack Billet clutch hub High flow front pump with heat-treated pinned stator tube Deep aluminum pan Hard Chrome Rings Fluid overflow catch can	ATI Racing Products "Pro Glide" SFI-approved ATI "Super Case" 1.80 ratio 9310 straight cut gear set Precision balanced carrier with 4340 tool steel output shaft Turbo spline input shaft - 300M material Seven clutch high gear pack Billet clutch hub High flow front pump with heat-treated pinned stator tube Deep aluminum pan Hard Chrome Rings Fluid overflow catch can	ATI Racing Products "Pro Glide" SFI-approved ATI "Super Case" 1.80 ratio 9310 straight cut gear set Precision balanced carrier with 4340 tool steel output shaft Turbo spline input shaft - 300M material Seven clutch high gear pack Billet clutch hub High flow front pump with heat-treated pinned stator tube Deep aluminum pan Hard Chrome Rings Fluid overflow catch can
TORQUE CONVERTER	ATI Racing Products "Treemaster MRT" Series	ATI Racing Products "Treemaster MRT" Series	ATI Racing Products "Treemaster MRT" Series
Housing diameter	9"	8"	8"
	Furnace brazed impeller and turbine fins Precision pump drive tube Heavy duty needle bearings Investment cast cover	Furnace brazed impeller and turbine fins Precision pump drive tube Heavy duty needle bearings Investment cast cover	Furnace brazed impeller and turbine fins Precision pump drive tube Heavy duty needle bearings Investment cast cover
SHIFTER	Hurst "Quarterstick" — 2-speed automatic Forward pattern Built-in neutral safety switch	Hurst "Quarterstick" — 2-speed automatic Forward pattern Built-in neutral safety switch	Hurst "Quarterstick" — 2-speed automatic Forward pattern Built-in neutral safety switch
ENGINE			
Block	Chevrolet Performance LSX cast-iron with steel main caps	Chevrolet Performance LSX cast-iron with steel main caps	Chevrolet Performance LS7 aluminum block
Bore, Stroke	4.065" x 3.150"	4.065" x 3.150"	4.125" x 4.00"
Static Compression Ratio	10:1 nominal	10:1 nominal	13.1 nominal
Crankshaft	Callies 4340 "Dragonslayer" — double-keyed stout	Callies 4340 "Dragonslayer" — double-keyed stout	Callies 5140 "Compstar"
Rods	Callies 4340 H-beam "Ultra Rods"	Callies 4340 H-beam "Ultra Rods"	Callies 4340 H-beam "Compstar"
Length	6.350"	6.350"	6.100"
Pin Bore Diameter	.928"	.928"	.928"
Bearings	Clevite "H-Series" heat-treated tri-metal rod and main bearings	Clevite "H-Series" heat-treated tri-metal rod and main bearings	Clevite "H-Series" heat-treated tri-metal rod and main bearings
Pistons	Mahle forged 2618 alloy	Mahle forged 2618 alloy	Mahle forged 2618 alloy
Piston Type	Dome Graphal coating Friction-coated skirts	Dome Graphal coating Friction-coated skirts	Dome Graphal coating Friction-coated skirts
Piston Rings	Mahle .043" x .043" x 3mm Ductile iron top with radius molybdenum face Plain cast-iron tapered 2nd Chrome-plated oil rails with low-tension expander	Mahle .043" x .043" x 3mm Ductile iron top with radius molybdenum face Plain cast-iron tapered 2nd Chrome-plated oil rails with low-tension expander	Mahle .043" x .043" x 3mm Ductile iron top with radius molybdenum face Plain cast-iron tapered 2nd Chrome-plated oil rails with low-tension expander
Camshaft	COMP Cams steel billet hydraulic roller	COMP Cams steel billet hydraulic roller	Chevrolet Performance steel billet hydraulic roller
Duration	246° IN / 254° EX @ .050" lift	246° IN / 254° EX @ .050" lift	233° IN / 276° EX @ .050" lift
Theoretical valve lift	.630" / .630"	.630" / .630"	.630" / .630"
VALVETRAIN			
Tappets	Chevrolet Performance "Ceramic Ball" high-rpm hydraulic roller	Chevrolet Performance "Ceramic Ball" high-rpm hydraulic roller	Chevrolet Performance "Ceramic Ball" high-rpm hydraulic roller
Pushrods	3/8" diameter LS7	3/8" diameter LS7	3/8" diameter LS7
Rocker Arms	1.8:1 ratio LS7 with roller trunions	1.8:1 ratio LS7 with roller trunions	1.8:1 ratio LS7 with roller trunions
Valve Springs	Performance Springs Incorporated (PSI) "Max Life" beehive	Performance Springs Incorporated (PSI) "Max Life" beehive	Performance Springs Incorporated (PSI) "Max Life" beehive
Spring Seats	Chevrolet Performance Hardened steel	Chevrolet Performance Hardened steel	Chevrolet Performance Hardened steel
Retainers	Chevrolet Performance Lightweight steel	Chevrolet Performance Lightweight steel	Chevrolet Performance Lightweight steel
Cylinder Heads	Fully CNC'ed aluminum based on LSX LS7	Fully CNC'ed aluminum based on LSX LS7	Fully CNC'ed aluminum based on LS7
Nominal Intake Port Volume	275 cc	275 cc	275 cc
Nominal Exhaust Port Volume	89 cc	89 cc	89 cc
Nominal Combustion Chamber Volume	70 cc	70 cc	70 cc
Intake Valves	Del West titanium	Del West titanium	Del West titanium
Head Diameter, Stem Diameter	2.205" x 8 mm	2.205" x 7 mm	2.205" x 8 mm
Exhaust Valves	Lightweight sodium-filled	Lightweight sodium-filled	Lightweight sodium-filled
Head Diameter, Stem Diameter	1.615" x 8mm	1.615" x 8mm	1.615" x 8mm
Head Gaskets	Fel-Pro Performance multi-layer steel with raised cylinder sealing bead	Fel-Pro Performance multi-layer steel with raised cylinder sealing bead	Fel-Pro Performance multi-layer steel with raised cylinder sealing bead
Oil Pump	Internal wet sump	Internal wet sump	Internal wet sump
Oil Pan	Deep-sump cast aluminum	Deep-sump cast aluminum	Deep-sump cast aluminum
Capacity	6 quarts	6 quarts	6 quarts
Damper	ATI Performance Products "Super Damper" w/10-rib shell SFI-approved	ATI Performance Products "Super Damper" w/10-rib shell SFI-approved	ATI Performance Products "Super Damper" - SFI approved
Water Pump	Chevrolet Performance LS3	Chevrolet Performance LS3	Meziere Enterprises billet electric
Intake Manifold/Induction	Whipple Industries 4.0L twin-screw supercharger	Whipple Industries 2.9L twin-screw supercharger	Chevrolet Performance/Holley "Hi Ram" intake manifold
Throttle Body	Whipple Industries - Billet Aluminum	Whipple Industries - Billet Aluminum	Whipple Industries - Billet Aluminum
Blade Size	172mm	109mm	102mm
HEADERS	American Racing Headers 2" x 30" primary with merge collectors 304 Stainless Steel	American Racing Headers 2" x 30" primary with merge collectors 304 Stainless Steel	American Racing Headers 2" x 30" primary with merge collectors 304 Stainless Steel
FUEL SYSTEM	Aeromotive "Eliminator" fuel pump — free flow rating = 800 lb/hr Aeromotive "A1000" pressure regulator with manifold pressure compensation capability Aeromotive 10-micron high-flow filter Lightweight black nylon braided-8 AN hoses Black anodized aluminum-8 AN hose ends and fittings High-impedance fuel injectors Fuel Pressure: 70 psi base (1 to 1 boost compensation used for supercharged engines)	Aeromotive "Eliminator" fuel pump — free flow rating = 800 lb/hr Aeromotive "A1000" pressure regulator with manifold pressure compensation capability Aeromotive 10-micron high-flow filter Lightweight black nylon braided-8 AN hoses Black anodized aluminum-8 AN hose ends and fittings High-impedance fuel injectors Fuel Pressure: 70 psi base (1 to 1 boost compensation used for supercharged engines)	Aeromotive "Eliminator" fuel pump — free flow rating = 800 lb/hr Aeromotive "A1000" pressure regulator with manifold pressure compensation capability Aeromotive 10-micron high-flow filter Lightweight black nylon braided-8 AN hoses Black anodized aluminum-8 AN hose ends and fittings High-impedance fuel injectors Fuel Pressure: 90 psi base
Flow Rate	105 lb/hr @ 43.5 psi with EV1 connector	80 lb/hr @ 43.5 psi with EV1 connector	42 lb/hr @ 58 psi with EV6/USCAR connector

2012 Features standard for 327, 327 Supercharged, and 427

ENGINE CONTROLS & IGNITION	Delco MEFI 5A electronic fuel injection processor • Speed density operation • Interfacing software & hardware available in the aftermarket Cable-actuated throttle Production LS7 ignition coils Production LS7 secondary wires GM sensors
ELECTRICAL	Dash-installed control switches: • Starter • Ignition • Fuel pump • Cooling fan Intercooler pump/water pump (varies by engine package)
GAUGES	Autometer with gold "Bowtie" logo on dials • 5" 10K RPM tach with shift light • Electronic water temp with 2.0625" face and 100°-260°F range • Electronic trans temp with 2.0625" face and 100°-260°F range • Electronic oil pressure with 2.0625" face and 0-100 psi range • Electronic fuel pressure with 2.0625" face and 0-100 psi range • Voltmeter with 2.0625" face and 8-18v range
SAFETY	RJS Safety Equipment 3" driver restraints RJS Safety Equipment window net
CHASSIS	Chrome-moly cage – NHRA certified to 8.50 ET Subframes tied together Front engine cradle modified to accept additional oil pan clearance Rear subframe modified to accept unique COPO NHRA Stock Eliminator Suspension
REAR SUSPENSION	4-bar with adjustable top links Adjustable Panhard link Double-adjustable Strange Engineering coil over shocks Anti-roll bar
FRONT SUSPENSION	Adjustable Strange Engineering coil over struts Sway bar removed
STEERING	Production steering gear modified for manual (non-assist) operation
BRAKES	Lightweight vented rotors Billet 4-piston lightweight calipers Lightweight tandem master cylinder OEM pedal modified to mount master cylinder All components provided by Strange Engineering
WHEELS	Bogart Racing lightweight with unique COPO logo • Forged outer ring • Billet center • 15" x 10" rear – 5/8" studs • 3.875" Back Spacing • 15" x 3.5" front – 1/2" studs • 4 3/4" bolt circle pattern
TIRES	Rear: 9.0 / 30.0R - 15 94.0" Radial Front: 4.5 / 28.0 - 15 Drag only
GEARS & AXLES	Strange Engineering 9" aluminum center section Lightweight steel spring 9310 alloy 4.29 ring and pinion set Strange Engineering 35-spline axles Strange Engineering Chromoly yoke
DRIVE SHAFT	4" OD x .125" wall 6061-T6 aluminum tube Chromoly end caps Forged chrome-moly slip yoke Heavy-duty 1350 universal joints
SHIFTER	Hurst "Quarterstick" — 2-speed automatic Forward pattern Built-in neutral safety switch