

COPO SPECS & STATS P/N 20129562: 2016/2017 Features

2016/2017 FEATURES	6.2L Naturally Aspirated	427 Naturally Aspirated	350 Supercharged
NHRA HORSEPOWER RATINGS	410	470	580
RECOMMENDED MAX ENGINE RPM	8000	8000	8000
TRANSMISSION: Automatic	ATI Racing Products TH400 SFI-approved ATI "Super Case" Helical low gear — — — 4340 input shaft with aluminum forward drum Aluminum direct drum with 34 element sprag Extreme-duty clutches and steels Blueprinted high-flow pump Deep aluminum pan Reverse-manual valve body Fluid overflow catch can	ATI Racing Products TH400 SFI-approved ATI "Super Case" Helical low gear — — — 4340 input shaft with aluminum forward drum Aluminum direct drum with 34 element sprag Extreme-duty clutches and steels Blueprinted high-flow pump Deep aluminum pan Reverse-manual valve body Fluid overflow catch can	ATI Racing Products TH400 SFI-approved ATI "Super Case" Helical low gear Vasco intermediate shaft Heavy duty steel forward clutch drum Heavy duty center support Vasco input shaft with aluminum forward drum Severe-duty aluminum direct drum Extreme-duty clutches and steels - increased clutch capacity Blueprinted high-flow pump Deep aluminum pan Reverse-manual valve body Fluid overflow catch can
Gear ratios:			
1 st	2.48	2.48	2.48
2 nd	1.48	1.48	1.48
3 rd	1.00	1.00	1.00
TORQUE CONVERTER	ATI Racing Products "Treemaster MRT" Series 8" diameter housing Furnace brazed impeller and turbine fins Precision pump drive tube Heavy duty needle bearings Investment cast cover	ATI Racing Products "Treemaster MRT" Series 8" diameter housing Furnace brazed impeller and turbine fins Precision pump drive tube Heavy duty needle bearings Investment cast cover	ATI Racing Products "Treemaster MRT" Series 8" diameter housing Furnace brazed impeller and turbine fins Precision pump drive tube Heavy duty needle bearings Investment cast cover
Flex Plate	Steel ATI "Super Plate" - SFI-approved	Steel ATI "Super Plate" - SFI-approved	Steel ATI "Super Plate" - SFI-approved
SHIFTER	Hurst "Quarterstick" — 3-spd. automatic Reverse pattern Built-in neutral safety switch	Hurst "Quarterstick" — 3-spd. automatic Reverse pattern Built-in neutral safety switch	Hurst "Quarterstick" — 3-spd. automatic Reverse pattern Built-in neutral safety switch
ENGINE			
Block	LT1 Aluminum with 6-bolt nodular iron main caps	Chevrolet Performance LSX cast-Iron with steel main caps	Chevrolet Performance LSX cast-Iron with steel main caps
Bore, Stroke	4.070" x 3.622"	4.125" x 4.00"	4.125" x 3.370"
Static Compression Ratio	12.4:1 nominal	13.0:1 nominal	10.9:1 nominal
Crankshaft	LT4 Forged Steel	Callies 4340 "Dragonslayer"	Callies 4340 "Dragonslayer" — double-keyed stout
Rods	Callies 4340 H-beam "Compstar" Forged Steel	Callies 4340 H-beam "Compstar" Forged Steel	Callies 4340 H-beam "Ultra" Forged Steel
Length	6.125"	6.100"	6.350"
Pin Bore Diameter	.927"	.927"	.927"
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 1mm x 1mm x 2mm Ductile iron top with radius molybdenum face Plain cast-iron tapered 2nd Chrome-plated oil rails with low-tension expander	Mahle 1mm x 1mm x 2mm 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	Chevrolet Performance steel billet hydraulic roller	Chevrolet Performance steel billet hydraulic roller	Comp Cams steel billet hydraulic roller
Duration	242° IN / 285° EX @ .050" lift	240° IN / 285° EX @ .050" lift	242° IN / 257° EX @ .050" lift
Theoretical valve lift	.641" IN / .641" EX	.641" IN / .641" EX	.641" IN / .641" EX
VALVETRAIN			
Tappets	Johnson Hydraulic Roller	Chevrolet Performance "Ceramic Ball" high-rpm hydraulic roller	Chevrolet Performance "Ceramic Ball" high-rpm hydraulic roller
Pushrods	3/8" diameter Trend Performance chrome moly	3/8" diameter LS7	3/8" diameter LS7
Rocker Arms	1.8:1 ratio LT1 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	Aluminum LT	Fully CNC'ed aluminum LSX-LS7	Fully CNC'ed aluminum based on LSX-LS7
Nominal Intake Port Volume	316 cc	289 cc	289 cc
Nominal Exhaust Port Volume	118 cc	105 cc	105 cc
Nominal Combustion Chamber Volume	53 cc	70 cc	70 cc
Intake Valves	Del West Titanium	Del West titanium	Del West titanium
Head Diameter, Stem Diameter	2.135" x 8mm	2.205" x 8mm	2.205" x 8mm
Exhaust Valves	Lightweight sodium- filled exhaust valves	Lightweight sodium- filled	Lightweight sodium- filled
Head Diameter, Stem Diameter	1.595" x 8mm	1.615" x 8mm	1.615" x 8mm
Head Gaskets	Chevrolet Performance LT1 multi-layer steel head gaskets	Cometic multi-layer steel with raised cylinder sealing bead	Cometic 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	Fabricated Aluminum	Fabricated Aluminum
Capacity	6 quarts	7 quarts	7 quarts
Damper	ATI Performance Products "Super Damper" - SFI approved	ATI Performance Products "Super Damper" - SFI approved	ATI Performance Products SFI-approved "Super Damper" w/ 10-rib shell
Water Pump	Meziere Billet electric water pump	Meziere Billet electric water pump	Chevrolet Performance LS3
Intake Manifold/Induction	Chevrolet Performance/Holley "Hi Ram"	Chevrolet Performance/Holley "Hi Ram"	Whipple Industries 2.9L twin-screw supercharger
Throttle Body	Whipple Industries - Billet Aluminum	Whipple Industries - Billet Aluminum	Whipple Industries - Billet Aluminum
Blade Size	90mm	90mm	109mm
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 an fittings High-impedance fuel injectors Fuel Pressure: 70 psi base from Tank	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 an fittings High-impedance fuel injectors Fuel Pressure: 70 psi base	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 an fittings High-impedance fuel injectors Fuel Pressure: 60 psi base (boost compensation used for supercharged engines)
Injectors (Flow Rate)	LS4 DI @ 200 bar pressure	58 lb/hr @ 58 psi with EV6 / USCAR connector	80 lb/hr @ 43.5 psi with EV1 connector
Gears & Axles	Strange Engineering 9" thru-bolt aluminum center section Lightweight steel spool Strange Engineering 9310 alloy Strange Engineering 40-spline gun drilled axles	Strange Engineering 9" thru-bolt aluminum center section Lightweight steel spool Strange Engineering 9310 alloy Strange Engineering 40-spline gun drilled axles	Strange Engineering 9" thru-bolt aluminum center section Lightweight steel spool Strange Engineering 9310 alloy Strange Engineering 40-spline gun drilled axles
Differential Gearing	4.57:1	4.57:1	4.10:1
Drive Shaft	4" OD x .125" wall 6061-T6 aluminum tube Chromoly end caps Billet steel slip yoke Heavy-duty 1350 universal joints	4" OD x .125" wall 6061-T6 aluminum tube Chromoly end caps Billet steel slip yoke Heavy-duty 1350 universal joints	4" OD x .125" wall 6061-T6 aluminum tube Chromoly end caps Billet steel slip yoke Heavy-duty 1350 universal joints
Hood	Carbon Fiber	Carbon Fiber	Carbon Fiber
Parachute	Optional	Optional	Yes
Wheelie Bars	Yes	Yes	Yes