

COP0 SPECS & STATS P/N 20229562: 2023 Features			
2023 FEATURES	632 Naturally Aspirated	427 Naturally Aspirated	350 Supercharged
NHRA HORSEPOWER RATINGS	TBD	470	580
RECOMMENDED MAX ENGINE RPM	7000	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:			
1st	2.10	2.48	2.48
2nd	1.40	1.48	1.48
3rd	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-speed automatic Reverse pattern Built-in neutral safety switch	Hurst "Quarterstick" – 3-speed automatic Reverse pattern Built-in neutral safety switch	Hurst "Quarterstick" – 3-speed automatic Reverse pattern Built-in neutral safety switch
ENGINE			
Block	Tall Deck Bowtie Sportsman Big-Block with steel caps	Chevrolet Performance LSX cast-iron with steel main caps	Chevrolet Performance LSX cast-iron with steel main caps
Bore, Stroke	4.600" x 4.750"	4.125" x 4.00"	4.125" x 3.370"
Static Compression Ratio	12.0:1 nominal	13.0:1 nominal	10.9:1 nominal
Crankshaft	Callies 4340	Callies 4340 "Dragonslayer"	Callies 4340 "Dragonslayer" – double-keyed snout
Rods	Callies H-beam	Callies 4340 H-beam "Compstar" Forged Steel	Callies 4340 H-beam "Ultra" Forged Steel
Length Pin Bore Diameter	6.660" 0.990"	6.100" 0.927"	6.350" 0.927"
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 Piston Type	Mahle forged 2618 alloy Dome	Mahle forged 2618 alloy Dome Graphal coating Friction-coated skirts	Mahle forged 2618 alloy Dome Graphal coating Friction-coated skirts
Piston Rings	Mahle 1 mm x 1 mm x 3 mm Ductile iron top with radius molybdenum face Plain cast-iron tapered 2nd Chrome-plated oil rails with std-tension expander	Mahle 1 mm x 1 mm x 2 mm 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 3 mm Ductile iron top with radius molybdenum face Plain cast-iron tapered 2nd Chrome-plated oil rails with low-tension expander
Camshaft	Steel-billet mechanical roller	Cam Motion steel-billet hydraulic roller	Comp Cams steel-billet hydraulic roller
Duration Theoretical valve lift	270° IN / 285° EX @ .050"lift 0.780"IN / 0.782"EX	252° IN / 285° EX @ 0.050" lift 0.641" IN / 0.641" EX	242° IN / 257° EX @ 0.050" lift 0.641" IN / 0.641" EX
VALVETRAIN			
Tappets Pushrods	GM Roller Tie-bar 7/16" diameter	Johnson Hydraulic Roller 3/8" diameter LS7	Johnson Hydraulic Roller 3/8" diameter Trend Performance chrome moly
Rocker Arms Valve Springs	1.8:1 ratio roller tip PAC beehive springs	1.8:1 ratio LS7 with roller trunions Performance Springs Incorporated (PSI) "Max Life" beehive	1.8:1 ratio LS7 with roller trunions Performance Springs Incorporated (PSI) "Max Life" beehive
Spring Seats	Xceldyne hardened steel	Chevrolet Performance Hardened steel	Chevrolet Performance Hardened steel
Retainers	PAC hardened steel	Chevrolet Performance Lightweight steel	Chevrolet Performance Lightweight steel
Cylinder Heads	Fully CNC'd aluminum BBC	Fully CNC'ed aluminum LSX-LS7	Fully CNC'ed aluminum based on LSX-LS7
Nominal Intake Port Volume Nominal Exhaust Port Volume Nominal Combustion Chamber Volume	449 cc 161 cc 70 cc	289 cc 105 cc 70 cc	289 cc 105 cc 70 cc
Intake Valves Head Diameter, Stem Diameter	Xceldyne Titanium 2.450"x 5/16"	Del West titanium 2.205" x 8 mm	Del West titanium 2.205" x 8 mm
Exhaust Valves Head Diameter, Stem Diameter	Xceldyne Titanium 1.800"x 5/16"	Lightweight sodium-filled 1.615" x 8 mm	Lightweight sodium-filled 1.615" x 8 mm
Head Gaskets	Cosmetic multilayer steel with raised sealing bead	Cometic multilayer steel with raised cylinder sealing bead	Cometic multilayer steel with raised cylinder sealing bead
Oil Pump	Internal wet sump	Internal wet sump	Internal wet sump
Oil Pan Capacity	Champ deep Sump Steel 8 quarts	Fabricated Aluminum 7 quarts	Fabricated Aluminum 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	Modified LS3 mechanical pump
Intake Manifold/Induction	High rise manifold	Chevrolet Performance/ Holley "Hi Ram"	Magnuson 2.65L roots supercharger
Throttle Body	4bbl Throttle body	Whipple Industries– Billet Aluminum 90 mm	Magnuson– Billet Aluminum 109 mm
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	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: 72 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 and fittings High-impedance fuel injectors Fuel Pressure: 58 psi base (boost compensation used for supercharged engines) 80 lb/hr @ 43.5 psi with EV1 connector
Injectors (Flow Rate)	85lb/hr@ 58 psi with EV6 / USCAR connector	58 lb/hr @ 58 psi with EV6 / USCAR 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	3.60:1	4.57:1	4.10:1
Drive Shaft	4" OD x 0.125" wall 6061-T6 aluminum tube Chromoly end caps Billet steel slip yoke Heavy-duty 1350 universal joints	4" OD x 0.125" wall 6061-T6 aluminum tube Chromoly end caps Billet steel slip yoke Heavy-duty 1350 universal joints	4" OD x 0.125" 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
Trunk-Mounted Weight Box	Optional	Optional	Optional
Dual Batteries	Optional	Optional	Optional