= Chevrolet Cobalt SS =

The Chevrolet Cobalt SS is a line of three sport compact versions of the Chevrolet Cobalt built on the General Motors Delta platform at Lordstown Assembly in Ohio , United States . It featured two forced induction inline @-@ four Ecotec engines , as well as a third naturally aspirated engine in 1SS trim , later called the Cobalt Sport .

The Cobalt SS was GM 's first foray into the tuner market , launching with a 205 hp (153 kW ; 208 PS) supercharged 2 @.@ 0 L engine in late 2004 as a 2005 model , paired with the F35 manual of Opel . The following year , a naturally aspirated 1SS model equipped with GM 's new 2 @.@ 4 L , 171 hp (128 kW ; 173 PS) engine was added ; it had both automatic and manual transmission options . The supercharged version continued until it was discontinued after 2007 for a more economical turbocharged 2 @.@ 0 L engine producing 260 hp (194 kW ; 264 PS) making it the manual only , highest trim Cobalt in the second quarter of 2008 (See timeline) .

The powertrain of the Cobalt SS received generally positive reviews , especially the turbocharged version , the car drew criticism for its interior quality , and its exterior styling , which was described as too reminiscent of its predecessor , the Cavalier . Reports surfaced in May 2009 that General Motors planned to eliminate the Cobalt SS as soon as December 2009 , but they proved to be untrue . Production continued , but ordering options for late 2010 models were limited , and production of all Cobalts ended in June 2010 . The car has been replaced by the Cruze , but a high performance version to directly replace the Cobalt SS has not yet been announced , nor any possible powertrains .

= = Model details = =

= = = Overview = = =

Of the five engines General Motors has placed in the Cobalt since its launch , three have been designated SS . The first was launched in 2004 as a 2005 model with a new powertrain that had debuted one year earlier on the Saturn ION Red Line . It was available as a Supercharged coupe only . The naturally aspirated 2 @.@ 4 L LE5 engine was the next SS to launch in late 2005 as a 2006 model , available as both a coupe and sedan for the duration of its run . However , in late 2007 , at the same time the announcement cancelling the SS Supercharged was made , GM also announced that the 2 @.@ 4 L would be renamed " Cobalt Sport " , rendering Chevrolet without a Cobalt SS for the first half of the 2008 model year . The 2 @.@ 0 L LNF turbocharged Cobalt was the last to launch in the second quarter of 2008 ; initially available only as a coupe until a sedan option was offered for the 2009 model year but again deleted for 2010 after less than 500 were produced .

All three models of the Cobalt SS feature four wheel , anti @-@ lock disc brakes . Compared to the base Cobalt , the SS has lower front and rear fascias for a more aggressive look with integrated foglamps , side rocker moldings , interior accents , and a chrome exhaust tip . Exclusive to the 2 @.@ 0 L Cobalt are a titanium @-@ faced sport analogue cluster with a 160 mph (260 km / h) speedometer , an A @-@ pillar mounted boost gauge , reclining front bucket seats with two @-@ tone leather @-@ appointed seating surfaces , vertical adjusting head restraints and driver @-@ side lumbar and height adjusters , and a sport @-@ tuned FE5 suspension with a 24 mm front stabilizer bar and 22 mm rear stabilizer bar .

= = = SS Supercharged = = =

Available as a coupe only , the SS Supercharged featured the 2 @.@ 0 L LSJ Ecotec engine with an Eaton M62 Roots type supercharger and air @-@ to @-@ liquid intercooler . The engine makes 205 hp (153 kW) at 5600 rpm and 200 lb \cdot ft (271 N \cdot m) at 4400 rpm . 18 @-@ inch broad @-@ spoke wheels with P215 / 45R18 summer Pirelli tires are standard . Optional for the LSJ was a

performance package coded G85 that added Recaro bucket seats and a limited slip differential (LSD). LSD was optional for 2005 models (performance package came with LSD) and was standard in 2007 + models. The G85 option continues in the LNF Cobalt, but adds only the LSD. The car has become notable for a high profile spoiler that was standard in 2005, but optional from 2008 when a lower profile spoiler used on all other Cobalt coupes became an option.

GM offers dealer @-@ installed performance upgrade packages called " stage kits " that are covered by factory warranty . The Stage 1 kit consists of new fuel injectors and a reprogram of the ECU , and yields up to a 30 hp (22 kW) improvement . The Stage 2 kit consists of new fuel injectors and the same reprogram with a smaller serpentine belt and pulley for the supercharger , producing a 36 hp improvement and 18 lbft of torque . Both stage 1 and 2 kits increase the engine redline to 7 @,@ 000 rpm . The Stage 3 kit consists of a smaller , 76 mm (3 @.@ 0 in) supercharger pulley , a 2 @-@ pass intercooler end plate and a customizable replacement ECU . The Stage 3 ECU allows for the use of a 50 @-@ shot of nitrous , 100 octane fuel and an adjustable redline from 6 @,@ 750 to 8 @,@ 000 rpm . Stage 3 produces 248 hp (185 kW) using 93 octane fuel , up to 260 hp (194 kW) using 100 octane fuel , and much higher power with nitrous . Stage 3 is for track use only , and to emphasize this , air conditioning is disabled with the Stage 3 ECU .

A problem frequently encountered with the car , due to a combination of its high torque , front drive , and short first gear is wheel hop , wheelspin and a general lack of traction . Items like upgraded front and rear trans and motor mounts would eliminate this . The GM Performance Division later tried to rectify these problems in the turbocharged car by providing wider , stickier tires and stronger axles .

= = = SS Turbocharged = = =

The LSJ engine did not meet emissions requirements for the 2008 model year , and General Motors 'contract with Eaton had expired . The non @-@ supercharged 2 @.@ 4 L Cobalt SS also lost its Super Sport designation for the 2008 model year and was renamed "Sport". However , in fall 2007 , a more powerful Cobalt SS was announced for the second quarter of 2008 . The car would be equipped with the 2 @.@ 0 L , turbocharged , direct injected , VVT , LNF Ecotec engine , making 260 hp (194 kW) at 5300 rpm and 260 lb \cdot ft (353 N \cdot m) at 2000 rpm , and remain mated to the F35 5 @-@ speed manual transmission . The engine had been introduced in a rear wheel drive application for the 2007 GM Kappa platform , which includes the Saturn Sky , Pontiac Solstice , and Opel GT .

Also new for the 2008 SS were SS @-@ embroidered sport seats with suede @-@ like UltraLux inserts , several new exterior colors , and wider 18 @-@ inch (460 mm) forged , split @-@ spoke wheels with P225 / 40R18 Continental AG tires , reminiscent of those offered for the Chevrolet Corvette C6 . The car 's electronics are also new , and along with greater assist in poor traction conditions , add a " no @-@ lift @-@ shift " feature which allows the driver to maintain turbocharger boost during upshifts . During a no @-@ lift @-@ shift , the driver shifts normally by depressing the clutch , but the accelerator pedal is held wide open . Also new is " launch control " , which feathers the throttle at roughly 4800 rpm until engagement of the clutch , allowing more consistent launches in competitive situations . To use the feature the driver presses twice on the traction control button which first turns off traction control , and then notifies the driver through the Driver 's Information Center that the launch control of Competitive Mode has been enabled . However , turbocharged Cobalt owners have found that better times can be achieved while racing when the car is manually launched . These features help propel the car from 0 to 60 mph (97 km / h) in a class @-@ leading 9 seconds and a quarter mile time of 9 seconds at 9 seconds at 9 seconds and 9 seconds and 9 seconds at 9 seconds at 9 seconds at 9 seconds and 9 seconds at 9 seconds and 9 seconds at $9 \text{$

New for 2009 is the aforementioned four @-@ door sedan option , as well as an optional " reconfigurable performance display " (RPD) for the coupe only . The \$ 295 option replaces the boost gauge in the A @-@ pillar , and allows the driver manipulation of traction control , stability control , " shift points " , and the engagement of Competition Mode , as well as information regarding the car 's engine torque and horsepower , g @-@ force , boost , wideband air fuel ratio , barometric

pressure, temperature, and battery voltage. For 2010, RPD is standard, as is a power sunroof. The red / ebony and grey / ebony interior color options are also dropped, as is the turbocharged sedan.

A stage 1 kit which raises power to 290 hp (216 kW) and 340 lb \cdot ft (461 N \cdot m) was made available in October 2009 after several delays . The kit can be installed by the owner of the car , but final alteration of the vehicle 's engine control unit must take place at a GM dealer .

= = = SS Naturally aspirated = = =

Chevrolet introduced a naturally aspirated Cobalt SS in the fall of 2005 , as a 2006 model available as both a coupe and sedan . It featured the 2 @ .@ 4 L LE5 Ecotec engine with variable valve timing , making 171 hp at 5 @ ,@ 600 rpm and 163 lb @ -@ ft at 5000 rpm , later upped to 167 lb \cdot ft (226 N \cdot m) at 4500 rpm . The LE5 engine was new for 2006 and was introduced on both the FWD Delta platform and RWD Kappa platform . For the 2006 and 2007 model years the car was called SS , or " 1SS " , but was replaced with the moniker " Cobalt Sport " for 2008 with the anticipated introduction of the turbocharged super sport car later on in the model year . For the first time , a 4 @ -@ speed automatic transmission was offered , the 4T45 . The 5 @ -@ speed manual is also different from the Cobalt SS Supercharged , it is the Getrag F23 transmission with different ratios that is offered for the 2 @ .@ 2 L L61 engine in the Cobalt LS and LT .

Other changes over the supercharged car are notable but not drastic ; 17 @-@ inch broad @-@ spoke wheels with narrower P205 / 50R17 all @-@ season Pirelli tires are standard , as is the low profile spoiler . 2 @.@ 4 L and 2 @.@ 2 L Sport Package Cobalts have a 140 mph (220 km / h) speedometer with optional white face gauges . The car rides on the FE3 suspension , superior and more sport @-@ tuned to that of base Cobalts but less refined than the FE5 on the supercharged and turbocharged cars . Brakes on the 2.4L naturally aspirated and supercharged model are identical , but the turbocharged model receives an upgraded Brembo braking system The front and rear bumpers are the same , but the front lacks a lip accessory and the bottom of the rear fascia is slightly different . With the negligible exception of exterior styling and some interior trims , the vehicle is identical to the Pontiac G5 GT .

= = Reception = =

Reviews of the supercharged Cobalt SS were generally positive. While the Cavalier received very negative reviews, the supercharged Cobalt was seen as an improvement, and a worthy first entry for GM into the tuner market. However, the general fit and finish was poor, and power levels were not up to par with other competitors. Journalist Thom Blackett said, "When compared with more contemporary cars including the Dodge Neon SRT @-@ 4 and the Subaru WRX, that SS badge seems to lose some of its luster . " The F35 transmission has also been deemed inferior to that in the newest of generation of Honda 's Civic Si . Critics also disliked the heavy wheels which negatively affected handling, as well as the spoiler which obstructed rearward visibility. Speaking of the high profile aero wing, automotive journalist Alexandra Straub said, "the deck @-@ lid spoiler was directly in my line @-@ of @-@ sight when looking out of the rearview mirror. It 's almost like it cut everything in half . " Some Cobalt SS owners have traded spoilers with lower trim owners to obtain a less aggressive look, or traded the entire trunklid with Cobalt LS owners, for whom a rear spoiler is merely optional. The naturally aspirated Cobalt SS has been seen as an improvement over the base models with its slightly more potent 2 @.@ 4 L engine, but notably inferior to the supercharged car. The powertrain of the 2008 turbocharged Cobalt SS received rave reviews. John Neff of Autoblog said, "The GM Performance Division completely reworked the Cobalt SS for 2008, swapping in a more powerful turbocharged engine, upgrading the rest of the mechanicals, and tweaking the entire package on the world 's most demanding race tracks, including the famed Nürburgring in Germany. The result is ? and we 're not kidding here ? the most impressive performance car to wear a bow @-@ tie badge on sale today . " Journalists were impressed with the performance of the car in relation to the price; Neff added that the " 2009 Cobalt SS Turbo is

freakishly good at going fast and the best bang @-@ for @-@ the @-@ buck value below \$ 30 @,@ 000 . " Ron Kiino of Motor Trend said , " at only \$ 22 @,@ 995 , the SS could stand for Super Steal . " The MSRP was raised to \$ 24 @,@ 095 for the 2009 model year .

The Nürburgring @-@ tuned suspension gives the SS some of the best handling characteristics of any General Motors front wheel drive vehicle , and the suspension is stiffer and more refined than the supercharged car . Since the interior is hardly changed other than the seats , those criticisms remain . Of the interior in the turbocharged sedan , Car and Driver said it " is constructed primarily of plastics cheap enough to be rejected from a Chinese toy factory ; the Tata Nano probably has a fancier parking @-@ brake lever . " The new Cobalt was the winner in its price class (under \$ 30 @,@ 000) of Car and Driver 's 2008 Lightning Lap competition at Virginia International Raceway , beating lap times of several cars in the \$ 30,000- \$ 60 @,@ 000 class , including the Mitsubishi Lancer Evolution X.

= = Racing = =

Four Chevrolet Cobalt SS 's were used in the Continental Challenge Street Tuner class in 2009.