Cadillac gives the new 2021 Escalade SUV a huge technology upgrade

Enlarge / Augmented reality is a standard feature on the new Cadillac Escalade SUV.
Jonathan Gitlin

reader comments

170 with 99 posters participating, including story author

Share this story

I will admit it; when Cadillac asked if we wanted to spend a day with the new 2021 Escalade, I was in two minds about saying yes. A 6,000lb body-on-frame SUV is about as far from my automotive comfort zone as it's possible to get with a regular driver's license. And while there is a choice of gasoline V8 or turbodiesel inline-six, there's not a sniff of a hybrid option—not even the 48V mild kind, which feels inexcusable in the year 2020.

On the other hand, Cadillac has turned up the technology dial in an effort to regain its crown as the King of Bling. From the driver's seat you can see 38 inches of OLED screen wrapping around you. The highlight is an augmented reality mode that's cool enough to tempt you away from navigating by CarPlay or Android Auto and worthy of Ars' attention on its own.

- This might be the Escalade's best angle.
  Jonathan Gitlin

- There is no escaping the sheer size of this SUV.
  Jonathan Gitlin
- If you wondered what happens when you take the face of the Cadillac Escada concept and change the dimension to a massive SUV, wonder no more.
  Jonathan Gitlin
- This is the full fat, long wheelbase Escalade ESV.
  Jonathan Gitlin
- Cadillac has given the Escalade a serious tech upgrade for 2021.
  Jonathan Gitlin
- No column-mounted shifter here.
- This glass crystal Cadillac logo is embedded in the back of the OLED screen and lights up at night.
- LED lighting lets car designers run wild.

The body-on-frame light truck is an American speciality. It's where the domestic automakers make their money, and the new Escalade is built on General Motor's latest and greatest body-on-frame platform. And I do mean greatest. Our test vehicle was a $105,995 Escalade ESV 4WD Platinum, which stretches out across 226.9 inches (5,766mm), with a 134.1-inch (3.407mm) wheelbase. More than one neighbor remarked on how large it was as it jutted out of my parking space, which luckily is slightly wider than the Escalade's 81.1 inches (2,059mm). At 76.4 inches (1,942mm) tall, I was grateful for the retractable running boards that emerge when you open a door; if you're shorter than average, it is a $1,750 option you might want.

Body-on-frame isn't a synonym for primitive, as evinced by the Escalade's underpinnings. It uses independent suspension front and rear, and the Platinum Luxury, Sport, and Platinum Sport trims all feature standard magnetorheological dampers, an electronic limited slip differential, and optional air suspension.

The 6.2L V8 engine is common to many a GM machine and does feature the latest in cylinder-on-demand technology. It

provides the Escalade with 420hp (313kW) and 460lb-ft (623Nm), and regardless of whether you pick two- or four-wheel drive, it uses the same 10-speed automatic transmission. Later this year the 277hp (207kW), 460lb-ft (623Nm) diesel option becomes available, but that's it on the powertrain front. Simply put, GM doesn't have a hybrid system on its shelves it could stick into the Escalade and evidently doesn't think its customer base cares enough for it to need one.

Once you climb up and ensconce yourself in the driver's seat—a 16-way adjustable power seat with a pretty decent massage function to go with heating and cooling functions—the sense of modernity continues. There are little touches, like the transmission lever that sprouts from the center console as opposed to poking out from the steering column, or wireless charging slot for your smartphone. But mainly it's the big touches—all that acreage of OLED.

Although Cadillac's press materials make many references to the car's 38-inch OLED display "at twice the pixel density of a 4k TV," it's actually three separate panels. To your left is a 7.2-inch touchscreen: this one is where you can see your trip information, as well as select what to display on the main instrument panel. That is a 14.2-inch screen, mounted just in front of the other two. And to your right is a 16.9-inch touchscreen where you interact with the infotainment system and the car's settings.

The first couple of modes of the main instrument panel are pretty conventional—you can display a big virtual speedometer gauge, and there's also a moving map. Night vision is a $2,000 optional extra and works a lot like it did in the Cadillac CT6, although the Escalade uses a higher-resolution infrared camera to go with the better screens.

- The Escalade's best party trick is this new augmented reality camera view.

Jonathan Gitlin

- The augmented reality display comes into its own once you program a navigation route.

Jonathan Gitlin

- Big blue arrows show you where to turn.

Jonathan Gitlin

- You can see in this image how the 14.2-inch main instrument display is set just ahead of the other two OLED screens.
- The most conventional view. If I had an Escalade this one would almost never get used.

Jonathan Gitlin

- The left-side touchscreen is for selecting what you see on the main instrument display.

Jonathan Gitlin

- This small screen also shows you your trip information. 20mpg has never felt like more of an achievement.

Jonathan Gitlin

- We’ve seen these 3D parking cameras in recent Audis and Porsches. It would be more useful if you could make the large view a top-down view instead of that being relegated to the right side, but I never worked out how to make that happen.
- The onboard navigation will show you a street view of your destination.

Jonathan Gitlin

- With the AKG Studio Reference system you can tweak the way the 36 speakers project sound.

Jonathan Gitlin

- My ears are made of cloth and I have tinnitus from time to time, but the sound quality in the Escalade was quite acceptable.

Jonathan Gitlin

- Apple CarPlay runs within a window.

Jonathan Gitlin

- The rear gets its own independent climate control.

Jonathan Gitlin

- Each of the two middle seat passengers gets their own touchscreen display.
- The middle of three rows of seats.
  Jonathan Gitlin
- If you don’t want to open the full hatch, you can just open the rear screen for access to the cargo area.
  Jonathan Gitlin
- Speakers are everywhere, including in your headrest.

But the best view is the AR camera. As you’ll see in the photos, it shows you the view of a forward-looking camera and overlays your navigation directions on top. It’s most dramatic when you approach a turn, with large blue arrows pointing the way you need to go, but the system will also tell you which lane you need to be in and so on. The overlays are visible enough from your peripheral vision, and if you do glance down to look at them, you still see everything on the road in front of you. It’s a pretty good implementation of the idea, and having it in the main instrument panel instead of the heads-up display is a boon for those of us who wear polarized sunglasses when it’s sunny. Even better is the fact that AR is standard on all Escalades.

I’d love to tell you more about the hardware that runs all of the above, but Cadillac wasn’t prepared to delve into technical details, unfortunately.

One tech upgrade we weren’t able to try out is enhanced Super Cruise. When it arrives it will offer an automated lane change ability, but like the diesel engine option, Cadillac says it won’t be ready until late in Q4 2020. Early adopters will still get a complement of other advanced driver assistance systems, including front and rear pedestrian detection (probably a must, given the height of the hood) and automatic emergency braking. You’ll have to spring for the Premium Luxury, Platinum Luxury, Sport, or Platinum Sport trims to get the 360-degree parking cameras, blind zone monitors, and cross traffic assist however. Do that and you also get the active

video rear view mirror and a heads-up display.

Like other GM vehicles, Cadillac has haptic alerts in the seat, so your left or right thigh will buzz as well as providing a visual alert if there's something in one of those blind spots.

The infotainment system UI will be familiar if you've been in other recent Cadillacs, albeit sharper thanks to the higher-resolution screens. It all looks good, but I did experience perceptible lag when swiping from one screen to another. Apple CarPlay and Android Auto both work wirelessly, although I think the AR system will mean most Escalade drivers stick to the SUV's onboard navigation rather than farming directions out to their smartphones.

The Escalade's passengers were not forgotten when the engineers were adding upgrades. The Escalade Platinums come with a 36-speaker AKG sound system, up from the 19-speaker setup in the lesser trims, and your front seat passenger has their own independent volume control. There's a conversation enhancement system, a lot like the QNX system I saw at CES a few years ago. The pair of 12.-6-inch touchscreens for the middle seat passengers can each function independently and can stream content over HDMI and USB, as well as mirroring Android devices. Better yet, wireless headphones mean the driver doesn't have to listen along, too.

The driving experience is dominated by Escalade's size and mass. Even if you stand on the throttle pedal it's going to take a little time to get moving, and once up to speed there is a lot of inertia; needless to say it's not a vehicle you yearn to take on a twisty mountain road. It rides well on the optional air suspension and responds well to a relaxed driving style on the highway. The sheer size and fearsome thirst make it much less suited to urban errands. The EPA rates the 2WD V8 Escalade at 17mpg (13.8l/100km) combined, or 16mpg (14.7l/100km) for 4WD. I managed 20mpg (11.76l/100km) during

my time with it, but that’s also because I didn’t spend much time driving around city streets.

Personally, if I wanted a three-row Cadillac SUV, I’d find it hard to pick the Escalade over the slightly smaller, slightly more efficient, significantly cheaper, certainly more nimble XT6. But I suspect I am out of the mainstream and would not be surprised to see the Escalade—which starts at $75,195 for a 2WD Luxury trim—outsell that SUV comprehensively. I do think the AR system is cool, though, and I hope that starts to trickle down to other vehicles soon.

https://arstechnica.com/?p=1715567