

# inside Audi

information for those who specialize in the brand



## allroad quattro concept showcases future technology

### Vehicle celebrates 25 years of quattro®

**T**his year's North American International Auto Show was a fitting venue for Audi's introduction of the allroad quattro concept. After all, the original allroad quattro concept was also revealed in Detroit in January 1998. And what better site to showcase the virtues of quattro all-wheel drive than a wintry Detroit market in January? Just as the first allroad concept showcased the potential for a later production Audi crossover vehicle, the latest iteration hints at the direction a second-generation vehicle may take. The Audi allroad quattro concept is also a showcase of technology, much of which is conceivable for future Audi models.

The creative spark for many of the leading-edge features found on the latest concept came from the Audi AG electronics research laboratory in Palo Alto, CA. Located in one of the world's development capitals for electronics innovation, this group plays an increasingly important role in Audi's advanced electrical and electronic engineering. Inside and out – not to mention under the hood – the Audi allroad quattro concept is a technological marvel. What follows is a brief description of just some of the more noteworthy technology found in this concept vehicle.

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Never quit.  
Never do the expected.  
Never rest on your laurels.  
Never think great is good enough.

Never Follow

## Ask Audi

**Q.** Consumer Reports *magazine* recently added the Audi A4 models to their list of 'Recommended' choices. This is welcome and valuable recognition. But given their unwillingness to allow advertising use of their recommendations, how can we make use of this good news?

**A.** The recommendation of *Consumer Reports* magazine does indeed carry clout. Many people don't realize that its monthly circulation is roughly equivalent to that of the major U.S. automotive enthusiast magazines—combined! That gives great weight to their recommendations and it's little wonder that there is temptation to spread the word when one is favored with a positive recommendation.

The magazine's recommendation of the A4 is currently on its web site, [ConsumerReports.org](http://ConsumerReports.org). The rating is a result of the good performance of the car tested, as well as improved reliability of cars in service, as measured by the survey conducted by *Consumer Reports* and its parent organization, Consumers Union. Much of the web site information is only available by subscription. However, the annual *Consumer Reports* magazine Auto Issue is available every April. This issue covers a wide range of automotive topics and is one that sales professionals are well advised to keep for frequent reference. Not, however, as a source of advertising or promotional material.

Our advice is to buy your own copy of the upcoming April *Consumer Reports* Auto Issue. If you are familiar with its contents you will be able to assist customers by directing them to the same resources, including the web site.

Got a question ? **Ask Audi**

**By E-mail:** Send your questions to [Duncan.Crook@Audi.com](mailto:Duncan.Crook@Audi.com) – include "Ask Audi" on the subject line.

**By Fax:** Attention Duncan Crook at Audi of America, (248)-754-5539 and write "Ask Audi" on the cover sheet.

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### Drivetrain

The allroad quattro concept is powered by the world's most powerful, lightest and most advanced eight-cylinder, self-ignition diesel, the 4.0-liter TDI. It's also the first to outperform the strict EU 4 European emission standards taking effect in 2006.

The robust power of the V8 TDI is delivered in the form of 290 horsepower and 470 pounds-feet of torque, that latter delivered from as low as 1600 rpm all the way to 3000. Mated to a six-speed automatic transmission, this is enough to deliver 0–60 mph acceleration in less than 6.4 seconds and a top speed that is electronically limited to 155 mph.

Just as impressive is the powertrain's elasticity, or mid-range pulling power. Acceleration from 50-75 mph (80-120 km/h) takes just 4.9 seconds, making the allroad quattro concept just as fast as the S4 in this measure of mid-range strength.

### Driving dynamics and ride comfort

Like the current A8 models, the allroad quattro concept features the latest generation of adaptive air suspension, delivering an ideal combination of sporty handling and supreme comfort. With the air suspension's height adjustability, the car can be set for one of four ground clearance levels, ranging from a minimum of 6.3 inches (160 mm) to a maximum of 8.3 inches

(210 mm). Left in automatic mode, the suspension delivers the right combination of low-speed ground clearance or the road-hugging stability of a lower center of gravity at higher speeds.

Beyond the issue of ride height, the suspension also responds automatically with a balance between the comfort desired for long-distance cruising and the more

spirited sports settings that make dynamic driving so enjoyable. The automatic adjustment continuously fine-tunes the suspension to coordinate with the driving

style as interpreted through accelerator inputs, gear selection and other driving characteristics. At the driver's discretion, manually-selectable settings are accessible via the central Multi Media Interface (MMI). These settings include:

- Automatic mode**, perfect for all-around driving
- Comfort mode** for superior long-distance comfort, or
- Dynamic mode** which delivers a sportier suspension setting and more controlled ride

The driver may also request a lift mode to consistently maintain a maximum ride height of 8.3 inches (210 mm), ideal for rough terrain. At speeds above 62 mph (100 km/h), the vehicle is automatically lowered to its normal level.

### Driver-assistance systems

Audi vehicles have long enjoyed a reputation as among the safest vehicles in the industry, whether through crash tests or the cumulative evidence of real-world experience. The allroad quattro concept raises the bar quite a few notches with a number of driver-assistance systems.

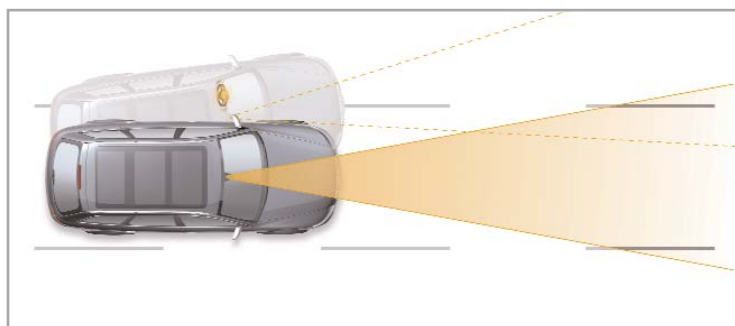
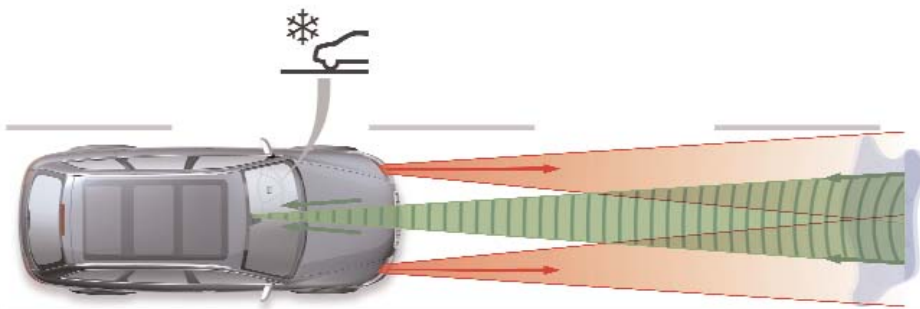


The first is the **Audi road vision**. Using laser and infrared spectroscopy, Audi Road Vision can distinguish between wet, dry and ice-bound roads. It also recognizes road

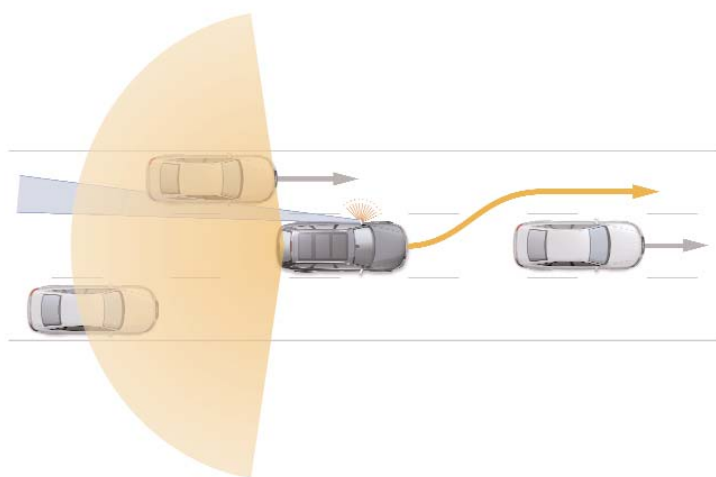
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surfaces with specific grip such as concrete, various types of asphalt, or gravel and is even able to distinguish if the road conditions differ on the left and right side of the vehicle. This is all accomplished via multiple sensors that "see" through the windshield from a location just above the rearview mirror.

Using this system of optical sensors, Audi Road Vision recognizes road conditions and can alert the driver – via the instrument cluster – of ice, gravel or snow conditions, including black ice formation. Its interpretation of the road ahead also helps add an intelligent regulation capability to systems such as the Electronic Stabilization Program, cruise control and ABS brakes. Using these inputs, the Electronic Stabilization Program is able – on road surfaces with poor grip, for example – to intervene within fractions of a second and vary drive or brake forces as required before the vehicle becomes unstable.



**Audi lane assist**, meanwhile, informs the driver as soon as the vehicle unintentionally leaves its lane by making the steering wheel vibrate. If your children have racing-type video games with force-feedback controls, they're already familiar with this concept. Briefly operating the turn signal before changing lanes automatically deactivates the system for a short period of time since the electronics recognize that, when signalled, the lane departure is intentional.



A third driver-assistance system is the **Audi side assist**. It uses radar sensors to monitor areas next to and behind the vehicle to warn the driver of vehicles approaching the from behind, in adjacent lanes or driving in the car's blind spots. A light mounted in the exterior mirror on the appropriate side of the car warns the driver.

Audi side assist provides two levels of warning:

- ▶ Whenever a vehicle is in an adjacent lane (at a blind angle or approaching), a warning light in the respective mirror comes on and stays on as long as the other vehicle is there, giving the driver a clear signal as soon as he looks in the mirror.
- ▶ Should the driver activate the direction indicator in his Audi to show that she is about to change lanes, the second-level warning signal will come on automatically if the lane chosen is occupied, with the warning light quickly flashing on and off.

The system can be activated or deactivated at the touch of a button.

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### Infotainment

Just as avant-garde is the allroad quattro concept's infotainment system. In addition to the more conventional navigation system already included in some production Audi models, the concept features the ability to interactively record non-digitized routes while driving. One examples might be to map and record an off-road excursion. The display even adopts a 3D look to help define the terrain. Once activated, the system will register the route taken, including all turns, and even differences in elevation. A digital camera next to the interior mirror provides the further option of integrating real-life photos into the navigation screen.

The navigation system and a host of other vehicle control functions are displayed on a Multi Media Interface that measures 8.9

inches diagonally and delivers crisp 1024 x 600-pixel resolution. By comparison, most in-vehicle monitors, even many of today's largest, are currently of the 7-inch variety and offer just 480 x 270 pixels of resolution.

### An additional nice touch

Attention to detail and unique customer experiences have been synonymous with Audi. Just consider the technologies that have been designed to make driving safer, more comfortable or simply more convenient. To that long list, the allroad quattro concept adds a sky roof covering nearly the entire roof area between the A and D pillars. It delivers both a breath of fresh air and an exceptional level of light to the interior, including a luminous band on the perimeter for a true halo effect by night. The same electro-luminescent film is used

to highlight the seat switch clusters and on the door sills to light the vehicle entry.

Another customer-delight feature starts at the molecular level: the use of hydrophobic molecules on the vehicle's windows. Coated with these molecules, the windows repel both water and dirt, resulting in cleaner windows and better visibility in the rain.

While there are no concrete plans to launch any of these advanced features in a specific production model, the allroad quattro concept gives a very promising look into a future that is based on reality, rather than the fanciful fiction of many other concepts. And, depending on the public's reaction, there is a very real possibility that a next-generation allroad quattro could incorporate much of what this concept foretells.





## 25 Years of quattro all-wheel drive

The allroad quattro concept car is the latest model to feature the performance, safety and benefits of quattro all-wheel drive. With so much new on the latest concepts, it's worth reflecting on quattro itself now has a quarter century of production proof that validates its standing. Considering that it has so many imitators today, it's easy to forget that the launch of quattro all-wheel drive was a seismic event in automotive development.

### The year: 1980. The scene: Geneva. The center of attention: the Audi Quattro.

Even today, reports of that year's Geneva Auto Salon talk of the furor caused by the launch of the original Audi Quattro. Up to that moment, conventional wisdom had dictated that sports and sporting cars needed rear-wheel drive to cope with their power. Yet the very difficulty that so many cars had — and still have — in doing so should have made all-wheel drive the obvious solution. Twenty-five years ago, however, it was only obvious to Audi. Starting with victory in its first race, the original Audi Quattro built its name, and enduring fame, by defying convention. So much so that race sanctioning bodies the world over have regularly rewritten their rules in an attempt to outlaw quattro all-wheel drive. Yet it's still a winner today, whether in the hands of talented race car drivers or with one of the millions of Audi owners behind the wheel.

### 2005: Approaching two million sold

The year 2005 marks twenty-five years of quattro all-wheel drive. It's also the year in which the two-millionth new Audi with quattro all-wheel drive will be sold. Success has many measures. One is sales. Another is satisfied owners. A third is the loyalty of these owners and the high value they place on their cars. But there are other measures. An innovation that changes the way that cars are built is a milestone. When it sends competitors back to the drawing board, it proves leadership. And when it changes the way that other cars are evaluated, it becomes the benchmark.

**quattro: milestone, proven leader, benchmark**  
Find out more at [www.25quattro.com](http://www.25quattro.com).



## allroad quattro concept gallery



## 2004 Technician Challenge

After the Audi R8 sports cars won the Le Mans 24-hour endurance race three times in succession, the rules stipulated that the winner's trophy be permanently awarded to Audi. Thus, it now occupies an honored place in the trophy case at Audi's headquarters in Ingolstadt, Germany.

There's no such rule in the Audi Technician Challenge and that's probably a good thing. Unless your name is Paul Baglow, that is. In an amazing feat of Audi Master Technician wizardry, Mr. Baglow upheld his personal tradition by winning the overall competition again in 2004. That makes three first place finishes in the past four years and six Top 10 awards to complete his unblemished record in the half-dozen years since the Technician Challenge was launched. We tip our hats again this year to Paul Baglow, the pride of Langan Motor Car Corp., Schenectady, NY. Each year the competition offers Certified Audi Technicians and, beginning with the

2004 Challenge, Audi Shop Foremen the opportunity to test their skills against the best-of-the-best in a three-round series of challenges. As in past years, the Grand Prize level recognizes the Top 10 winners. This year we honor seven repeat winners and three Technicians who cracked the winner's circle for the first time.

Among those tasting victory for the first time are Michael Carter of Gurley-Leep Imports, Inc. in Mishawaka, IN; James Pyle of Bill Cooke Imports in Ithaca, NY; and Mike Dye from Lewis Audi in South Burlington, VT. Congratulations and welcome to the club of Grand Prize winners.

With over 1000 eligible Audi Technicians and Shop Foremen, it's clear that reaching the Grand Prize level takes extraordinary skill. That goes double (or triple, or more...) for those who return as repeat winners. Among the repeaters we are pleased to

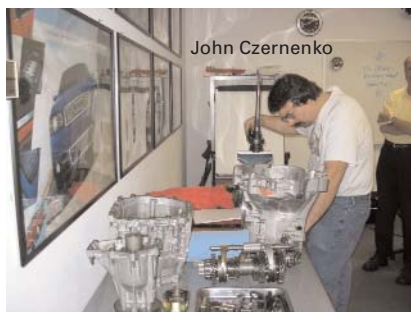
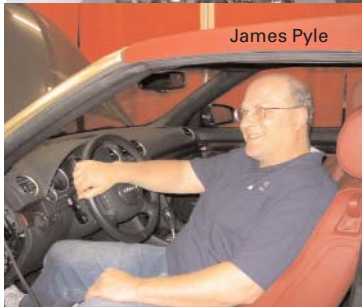


recognize Rob Strodbeck from Sunnyside Audi in Middleburg Heights, OH (five times); John Kamp from Audi Centre Oakville in Oakville, ONT (four times); Sydney Foskew of Zumbach Sports Cars, Ltd. in New York, NY (also four times). A trio of two-time winners rounds out the top 10: James Benoit from Carousel Automobiles in Minneapolis, MN; John Czernenko from Audi of Charlotte in Charlotte, NC and Joel Kowaleski of Hoffman Audi in East Hartford, CT. Each of this year's winners is pictured below, along with a list of all Audi Technicians who have achieved multiple Grand Prize status since 1999.

The quest to the Grand Prize level is difficult but rewarding. Among the prizes, each of the Top 10 Technicians won a travel award for two. This year's destination includes the German cities of Munich, Ingolstadt and Berlin. Each winner, and a guest, will enjoy expenses-paid travel, meals

*Continued Page 5 >>>*

Multiple Winners		Top 10 Finishes
Paul Baglow	6	
Rob Strodbeck	5	
John Kamp	4	
Sydney Foskew	4	
Darren McNeely	3	
Carl Sheardown	2	
David Randall	2	
Michael Hadley	2	
Dermot Walsh	2	
James Benoit	2	
Joel Kowaleski	2	
John Czernenko	2	
Brian Taylor	2	
Dana Spada	2	

 John Czernenko	 James Benoit	 Rod Strodbeck
 James Pyle	 Paul Baglow	 Joel Kowaleski
 Mike Dye	 Michael Carter	 John Kamp
		 Sydney Foskew

## 2004 Technician Challenge *continued*

and lodging on a tour that takes in some of the finest sights Germany has to offer. Of course, the trip also includes a tour of the production facility in Ingolstadt, Audi's headquarters city and home to the A3, A4 and S4 models as well as the Audi museum.

Other prizes include crystal trophies for the three top places and substantial monetary awards for every Technician who qualified for Stage III, the final round of the Challenge. While the awards at the top level are generous, it paid—literally—for any Certified Audi Technician or Shop Foreman to enter.

The 2004 Technician Challenge consisted of three stages. Stage I kicked off with a 100-question online exam. The areas covered included both technical skill and product knowledge, as well as knowledge of the Audi brand. Among all those scoring above the national average, the fifty highest-scoring Technicians advanced to Stage II.

Every Technician who entered was awarded a gift set and those who correctly answered 75 or more questions received a \$25 bonus to use toward a selection of gift certificate options.

Hands-on competition has always been at the heart of Stages II and III. Qualifying Technicians travelled to Audi's Atlanta, GA repair facility to compete against the clock, and their peers, to diagnose and repair "bugged" Audis. While the obvious objective was to find and fix each problem, an equally important part of the assessment was the proper use of Audi diagnostic and repair procedures. All fifty of the Stage II participants qualified for another round of monetary awards with twenty-one of the Technicians (due to a tie) advancing to Stage III.

The third stage was similar to the second, except the problems were tougher and the competition more intense. The final result

of the Stage III challenge was the Top 10 group that Audi will host on this year's award trip. Just making it to Stage III, however, proves that every participant was already a winner. In honor of that, the value of the monetary prizes jumps significantly at this level and everyone takes home a healthy share. The recognition also includes a set of uniform patches designating their status as among Audi's finest. All twenty-one Stage III participants are named below. Those with multiple wins to their credit are recognized accordingly.

With the 2004 contest now in the history books, it's time to start thinking about the 2005 Audi Technician Challenge. Whether you are a recently certified Audi Technician, a Shop Foreman or a veteran of long standing, you'll want to keep your eyes and ears open for the announcement of the 2005 Technician Challenge. For more information, log on to *AudiOps.com* and click on Technician Challenge.

### 2004 Audi Technician Challenge Final Standings

Rank	Technician Name	Dealership	Dealer Location	Previous Top 10 Finish?
1	Paul Baglow	Langan Motor Car Corp.	Schenectady, NY	Yes: 99, 00, 01, 02, 03
2	James Benoit	Carousel Automobiles	Minneapolis, MN	Yes: 02
3	John Kamp	Audi Centre Oakville	Oakville, ON	Yes: 00, 01, 03
4	Rob Strodbeck	Sunnyside Audi	Middleburg Heights, OH	Yes: 00, 01, 02, 03
5	Michael Carter	Gurley-Leep Imports, Inc.	Mishawaka, IN	No
6	John Czernenko	Audi of Charlotte	Charlotte, NC	Yes: 03
7	James Pyle	Bill Cooke Imports	Ithaca, NY	No
8	Sydney Foskew	Zumbach Sports Cars, Ltd.	New York, NY	Yes: 99, 02, 03
9	Mike Dye	Lewis Audi	South Burlington, VT	No
10	Joel Kowaleski	Hoffman Audi	East Hartford, CT	Yes: 02
11	Wayne Allard	Bluegrass Audi	Louisville, KY	No
12	Steven Lafond	Ira Audi	Danvers, MA	No
13	Mario Bienvenue	Les Automobiles Niquet	St. Bruno, QC	Yes: 00
14	Carl Sheardown	Autohaus Barrie Ltd.	Barrie, ON	Yes: 99, 02
15	Gary Despres	Autohaus Barrie Ltd.	Barrie, ON	No
16	Timus Galli	Carousel Motors	Iowa City, IA	No
17	Daniel Oulette	Valenti Motors, Inc.	Watertown, CT	Yes: 99
18	Brian Finn	Walter's Audi	Riverside, CA	No
19	Darren McNeely	Boardwalk Audi	Plano, TX	Yes: 99, 01, 02
20	Dermot Walsh	Royal Motor Sales	San Francisco, CA	Yes: 01, 03
21	Jeffrey Hofmann	Roger Burdick Audi	Cicero, NY	No

## Awards, Praise and Accolades

The A8 models continue to win friends and influence people. Most recently it was the editorial staff of *Automobile Magazine*. In the February 2005 issue, the magazine announced its annual automotive All-Stars. This year's winner in the Luxury Sedan category was the A8 L. The review is short and sweet, the summary shorter and sweeter: "The A8L is impossible to ignore, to resist, or, for the foreseeable future, to surpass."



Cars and trucks aren't the only All-Stars in the Automobile Magazine constellation. Technology can be an All-Star, too. The February 2005 issue picks a Technology of the Year. This year it was Audi's Direct Shift Gearbox (DSG) — standard equipment on the TT 3.2 and soon to be available on the A3. Those who remember that the same magazine chose Audi's multitronic for the same award in 2002 may sense a trend in transmission leadership.

More awards, for more parts of the car, came from *Wards AutoWorld* magazine. This influential monthly serves a more technical crowd. Thus it's annual choice of Ward's 10 Best Engines attracts substantial attention. And much of the attention this year was focused on Audi because two engines were

selected for recognition. Both the new 3.2 FSI V6 and the 4.2-litre V8 (for the second time) were selected from the scores of eligible engines. The 3.2 FSI V6 is used on the new A6 and, soon, the new A4 models while the 4.2-liter V8 powers models in the A6, S4, allroad quattro and A8 range. This isn't the first time that Audi engines have been recognised by *Ward's*. In fact, the 1.8 T engine was a perennial winner over a period of several years. It just makes one wonder what would have happened if the new 2.0T engine had been eligible for this year's voting. Stay tuned for the 2006 awards. In the meantime, check out the *Ward's* website for more information: [wardsauto.com](http://wardsauto.com).

### CanadianDriver

Ever wonder what it takes to engineer and develop a fine sound system in a modern automobile? Apparently so did the editors at *CanadianDriver.com*, an online magazine covering a wide range of tests and topics in the automotive world.

In an article that uses the new A6 and its Bose Surround Sound system as an example, the writer describes the depth of development required to create a premium listening experience. The fact that Bose and Audi have such a long-standing partnership is part of what's required to achieve superb results. In fact, did you know that Audi was the first import brand that Bose worked with in developing high-end automotive sound systems? You'll want to bookmark this page for a ready reference to present to customers who express an interest in learning more about the Bose system: [www.canadiandriver.com/articles/tw/a6sound.htm](http://www.canadiandriver.com/articles/tw/a6sound.htm)

One more bit of good news comes from the year-end sales reports. In 2004 Audi AG recorded its eleventh straight year of sales growth, again setting records for sales volume, production and sales revenue. With 779,441 new cars sold worldwide, Audi

continued to hold its place among the "Big Three" in the world's luxury car brands. Not surprisingly, the other two are Mercedes-Benz and BMW, both selling slightly more than a million cars. And who is next in line? Fourth place in 2004 went to Volvo at 460,000, quite some distance behind the leaders. If you wondered about Lexus, they finished the year *behind* Volvo on a worldwide basis. The Japanese premium brand's North American success belies the fact that Lexus is a relative unknown elsewhere. Scarcely 20,000 Lexus cars were sold in all of Europe in 2004 and the brand currently isn't sold in Japan under that name at all!

Among other brands, Cadillac is next in line with sales of slightly more than a quarter million units. As with Lexus, but for different reasons, most Cadillac volume is centered in North America. The final group of luxury competitors is clustered in the range from 100,000 to 150,000. This includes Lincoln and Infiniti at the upper end of that group. Saab and Jaguar anchor the other end at the very low side of the six-figure range.

When it comes to measuring a brand's impact and reach, sometimes it pays to stand back and take a global perspective. Yet even on the local level, Audi's sales in the U.S. market continued to make this the largest export market for Audi, bar none.

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