

In pursuit of the unattainable. 1990 was the year Lexus issued its first-born, a luxury sedan impeccably designed, engineered and crafted. Meticulous in every detail, the car that would become the Lexus flagship spawned new ways of thinking, new technologies and new techniques – along with design and manufacturing standards that were more than exceptionally rigorous; *they were unprecedented*.

The Lexus signature line was born of such attitudes and practices. No mere slogan, "*The Relentless Pursuit of Perfection*" encapsulated a determination to lead the way. Pundits and public alike hailed the LS 400 as the quietest and smoothest of luxury sedans. It topped ratings as the best-built, most reliable luxury car, garnering further plaudits for exceptional warranty and service.



The triumph of the first Lexus heralded the emergence of an outstanding breed of LS 400 siblings. Blanketing the

Above all, this book is about new performance benchmarks set by Lexus: technologies embodied, most notably, in the super-luxurious, impressivelyperforming Lexus flagship, the LS 430.

Canadian automobile industry's luxury landscape, embracing an array of advanced technologies and new developments, Lexus engineers created an eight-model range of superb luxury vehicles. In little more than a decade.

Each new offering presented a unique and forthright character; each was born to reign over its chosen realm; each was unified by all that the Lexus signature line implies.



"Good 'nuff - NOT!" Cookie-cutter solutions play no part in the design of a Lexus. No "family look" is sought. No awkward compromises are struck with the marketing and financial people. Compromise is a dirty word.

At Lexus, each new model is created by a *tightly-knit team*. Each team is headed by *an engineer*. Each leader is accorded virtual carte blanche –with authority to match the responsibility.

As with a Stradivarius violin, each time "a new work is played", the Lexus spirit is born anew – uniquely interpreted, magnificently expressed via its creator – an uncompromising engineer.

This unequivocal support means that from top to bottom, inside, outside, every Lexus is unified to the team leader's vision. What does this mean to the person pondering which make and model to buy? A great deal.

If a manufacturer's philosophy is narrowly focused on one aspect of the driving experience, other attributes may well be diminished. This is not so with

Lexus. The LS 430, for example: As superbly luxurious and comfortable as it is, the Lexus flagship is also surprisingly fast and manoeuvrable.

The reason: its engineers targeted – and achieved – an outstanding *balance* of attributes.



Below left: The SC 430 in top-down mode (companion optional). Below right: The new-generation ES 300 mid-size luxury sedan. Above: The mid-sized (and first "civilized") SUV, the RX 300.







According to the Scribes... Pithy snippets from North America's automotive writers. According to the NATIONAL POST, the IS 300's engine was *"a model of sophistication"*. To MOTOR TREND its steering and suspension were *"fantastic"*. USA TODAY found its interior *"fresh, inviting, inventive"* and that, overall, the saucy newcomer in the compact sports sedan sector was a *"daunting package for rivals to trump"*.

The **GS 430's** ride quality was *"first-rate"*, its response *"razor-sharp"*, torque *"prodigious"* and speed *"smooth and fluid"* – THE GLOBE AND MAIL/CARGUIDE magazine.

CAR AND DRIVER praised the **GS 300**'s "silky powertrain... brilliant rear-wheel-drive chassis dynamics... Gibraltar-solid chassis... serene sophistication". MOTOR TREND praised the new **ES 300** as having a "creamy driving behaviour that truly rivals that of top prestige sedans". Its interior styling was considered "perfectly gorgeous and its execution nearly flawless". According to CAR AND DRIVER, the **SC 430** was "the biggest head turner we've driven all year... This one could almost be a concept car from an Italian carrozzeria at a Turin show". AUTOWORLD.COM rated the **LX 470**: "... the best of the best... the quality and luxury that only Lexus can deliver... the ultimate in luxury SUVs." FINANCIAL POST MAGAZINE added: "As for its image, think of it as a 350-lb. NFL linebacker dressed up in a tux." Finally, the **RX 300**: "A ride so good you'll swear you're in a car." – CAR AND DRIVER. "Absolutely bursting with quality, power, innovation and practicality." – AUTO SPEED.

Above left: The IS 300 compact sports sedan: audacious in looks and spirit – and, most certainly "...not your father's Lexus". Above right: The "awesome" GS 430 luxury sports sedan. Below: The all-conquering LX 470, king of SUVs.



Clay cars, bullet trains and a world-beating 0.25

cd. By the late Nineties, Lexus was again deep into the task of redefining standards for luxury cars.

The tersely put engineering brief didn't beat around the bush: "*To uncover applications of technology that would overwhelm the competition*".

More specifically, to quote Yashushi Tanaka, the chief engineer chosen to lead the LS 430 team: *"We set out to exceed the competition from Europe in terms of handling and stability"* (a stiff task, given that standards had risen spectacularly during the decade since the Lexus debut).

The first two (intense) years involved: • design competitions on three continents; • the building of *sixteen* full-size clay models.

One key design criteria: outstanding aerodynamic performance.

To attain an absolutely smooth skin, Lexus engineers devised methods to improve body panel stamping accuracy (and resulting fit) *ten fold*. Astounding.

To assist the cause of improved airflow, even the wind tunnel developed for the Japanese bullet train was called into action. Result: With a new air suspension option working in tandem with Lexus Vehicle Height Control (VHC) technology, *the LS 430 achieves the world's lowest coefficient of drag for sedans: 0.25.*

When asked what was most significant about the new LS 430, chief engineer Tanaka responded without hesitation, *"Coefficient of drag and electronic technology"*. No wonder.



0.25 cd factors: The flow of air travels smoothly over hood and roofline, thrusts down on the trunk to stabilize the rear end, merges turbulence-free with airflow that passes unimpeded under the LS 430's smooth from stem to stern underpinnings. For its world-beating cd numbers, credit technology that tells the LS 430 when to hunker down close to the tarmac – and credit lessons learned in the famed Japanese bullet train's wind tunnel.





"Hey, Hans, bad news. Here come those guys from Japan again." – CAR AND DRIVER. How did the new LS 430 fare with that most demanding of audiences – North America's automotive press? Very well indeed.

MOTOR TREND: "The pilot enjoys more feedback, better handling, and worthy performance. They didn't just crank it up a notch: The fun factor goes up at least twice as much. Yet, it all comes at no expense to that creamy ride and tomblike quiet we've come to expect from Lexus. They've gained in the 'driver's car' department, while giving up nothing."

CAR AND DRIVER, from the "Hey, Hans, bad news..." article: "To say that the LS 430 can do it all is [an] understatement; it seamlessly balances first-class



cabin comfort and the latest in gee-whiz technology with effortless performance in a way that matches the best in an extraordinary class for thousands less... The LS 430's styling is simple and unadorned but imposing and clearly identifiable. The car's lines and proportions neither hide nor emphasize its size but combine to give it a gravitas

appropriate for a car of its class."

The GLOBE AND MAIL: "It's about as good as it gets in fact, and in a direct comparison with its peers in the premium sedan class, this new Lexus doesn't take a back seat to any of them."

"Does it <u>look</u> staid? Are you nuts or something?" – Incredulous reaction by long-time Lexus fancier to a comment that used to be made about the Lexus flagship – and is obviously speeding into history.



"More goodies and gizmos than James Bond." Actually,

we rather liked the full quote: "Luxury cars are about feature content and the new LS packs more goodies and gizmos than James Bond's briefcase." – MOTOR TREND.

In addition to the array of technical, electrical, seat-related, solar and sonar devices to keep a hedonist an emotional hostage for the duration, the LS 430 has enough hidden gems to do "Q" proud.

When the car doors are locked or unlocked, courtesy mirror lights come on. As do lamps to illuminate gearshift, door handles, front foot wells, seat buckles and coin box.

To make graceful entries and exits



with ease, rear seats automatically return to their upright positions, the steering wheel tilts up and away, even the side mirrors tuck themselves tight against the car. When you're ready to go again, it all goes back to where you like it best. As for those outside mirrors, they are heated to shed frost, coated with titanium silica to shed water, and darken automatically to foil pursuing high-beams.

Among interesting amenities are: Over-sized, expanding door pockets voluminous enough to hold a library of map mementos

of your travels; a two-level glove box (the top level locks); a two-level centre console box (with neat sliding tray) and ample room for phone, CDs... whatever; and a lighted built-in coin box with space for bills and business cards.

You might like to pause here to check out the photographs, absorb the inimitable Lexus ambience – and ponder whether this could be a large part of your near future.





Fourteen ways to serious bodily comfort. Plus two more just for your back.

If (literally or figuratively) you find longdistance driving a pain in the back, designing a seat that keeps its occupant comfortable during long spells at the wheel is serious business indeed. The design team for the new LS 430 was devoted to the cause of how *your* seat would get on with *their* seats. Instances:

The LS 430's 14-way electronic seating controls (yes, *fourteen!*) enable drivers to "tailor" the seat to fit like a made-to-measure suit. With ease and extreme precision, seat cushion, seat back and headrest can be moved to *exactly* where you want it to be, then set in the memory – which can store the data for three drivers. Front seat passengers enjoy a *ten-way* seat with similar comfort – and data storage for two.



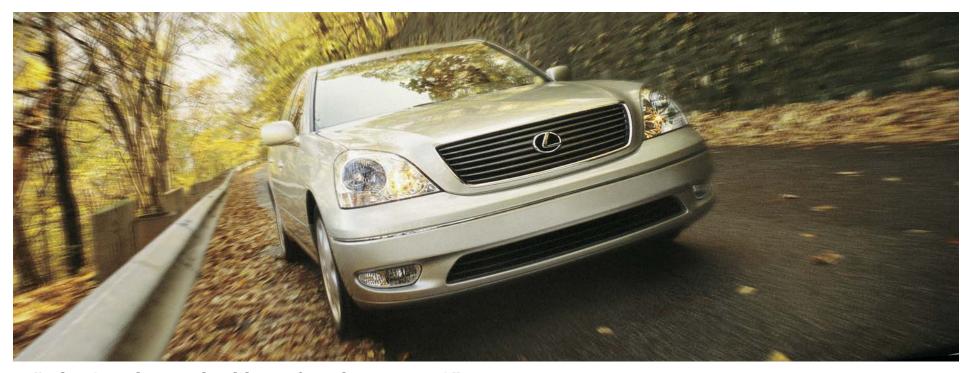
If, for you, the "pain in the back" reference was literal rather than figurative, the LS 430 front seat backs adjust to provide *separate degrees of support* for the lumbar region and the small of the back.

If you have long legs, simply move a lever and the seat cushion *automatically slides forward* to support your thighs – all the way to the back of your knees if you so wish. Smaller drivers simply move the seat cushion *backwards* until it feels "just right".

One last ingenious touch. The LS 430's front seats are *perforated* to deliver warm or cool air covering a nine degrees centigrade warm-to-cool range – precisely controlled by the occupant.







"What? No hot and cold running champagne?" Although the LS 430 driver has "got it made", as they say, never in the modern history of theatre or motoring has "the back of the house" had it so good!

Since the comfort of *all* of its occupants requires *space*, the LS 430 cabin is larger and its headroom higher. Said one executive: *"I'm tall, 6'2", and this is the first time I've not felt my hair brush the ceiling. The headroom is great!"* Exactly – as is legroom.

In addition to being able to move the seat *cushion* back and forth, inhabitants of the rear quarters can actually *recline* their seatback, choose soft music via CD and radio controls housed in the centre armrest console, shut the window shades, liberate a cool one from a mini cooler tucked into the back of the aforementioned console, turn up the warmth a notch, or two, or three, and sink back thinking luxury spa *as massagers built into the seat back set soothingly to work*.

Now for the trunk. And here we're talking space. Large? At 20.2 cubic feet, that's largesse.

The trunk lid hinges were designed to prevent them from striking items in the trunk – and for making its entire volume usable. The *lid* is positioned to prevent rain or snow from falling into the cavern. An undertray corrals smaller items. Without intruding into luggage space, the tool kit is right at hand. Ditto the first aid kit. As though that's not enough, there are storage compartments of significant size under the front seats.

MOTOR TREND summed it up: "What? No hot and cold running champagne? Lexus seems to have forgotten little else."

A setting for spirited enjoyment...

... or serene relaxation.





Climate control with a mind of its own...

and every thought for your comfort.

If an LS 430 has been parked in the sun and is HOT, a computer-directed system springs into action on the owner's return. Data received from neuro sensors placed around the cabin is analyzed and air registers directed to concentrate the initial flow of cool air towards the driver.

If there's a passenger in the front seat, the computer adds a second zone to the action scene. If the passenger likes it somewhat warmer or cooler than the driver, a second set of controls joins the fray.

If, to help keep you alert, you like a waft of cool air on your face – but not *all* the time – Lexus engineers have created computercontrolled, dash-mounted "intelligent swing registers" (louvres to most of us) for the LS 430. Sweeping back and forth, they deliver cool air faceward every few seconds. As the cabin cools, the airflow sweep widens until desired cabin temperatures are reached throughout.



If the system detects an out-of-step area (e.g. the sun beaming down from one side) solar sensors direct the registers to concentrate on the hot spot until it's in harmony with the cabin at large. In winter, the same processes work to keep passengers cozy-comfy. *There's nothing like the LS 430 system – in any car, anywhere in the world*.



Left: Imagine stretching out your arm... just a little... to the centre armrest in the rear quarters, pressing a button or two to supply air in appropriate volume and desired temperature. More buttons create music to suit, at a volume to soothe or excite as you wish. **Right:** If the sun is bothersome, simply pull up the shades. **Above:** Lexus' sweeping louvres distribute air scrubbed of impurities.



Banished: skunks, smog, sun, rain, dust, pollen...

If a skunk has made its presence felt... or a farmer has spread liquid fertilizer... or air pollution is bumping the top of the scale... the LS 430's state-of-the-art air purifying, smog and smell-sensing, dust and pollen-catching, climate control and air quality guru will strike back with an odour-removal system *eight times more effective than its predecessor*.

Warned by an NOx sensor that constantly monitors air quality, the system shuts off outside air until the powerful filtration and deodorization system can "scrub" the air clean – *quickly*.

When the nasal crisis has passed, the system will reintroduce fresh air. Again, without being asked. Dual-zoned for driver and front seat passenger, separately-controlled front and back, the system is unique to Lexus.

If you travel on dusty rural side roads or breathe less-than-pure urban air, a powerful new active charcoal filter with an electrostatic dust collector will freshen the air, gather up floating dust and help keep the cabin speckless. (Sorry, but restless little relatives are outside our sphere of expertise!)

If raindrops start to spot your windshield sporadically, sensors will note them – and command the wipers. With *twenty-nine* computers on board, there's always at least one dedicated to minister to most any reasonable need that might arise. Such as...



If the sun is behind, setting, and getting to be a problem, press a button and a sunshade will rise from the rear deck to cover the window. Shift into reverse; it will automatically retract.





Star Peace! With laser beams to protect you from what's up front and satellites to guide you to where you're going, it's no wonder the sound is out of this world.

First, laser protection: The LS 430's sophisticated cruise control system acts and reacts in the normal manner – though more smoothly. With this significant exception:

An infra-red laser system beams from the front bumper. Using a set of three lit bars on the dash, you select the distance you want to maintain from the traffic in front. A beeper warns when you're closing in on traffic, or there's unexpected braking ahead.

If traffic is light and you opt for



greater relaxation, the LS 430's lasers sense how far a vehicle is ahead of you *and maintain it at a constant distance appropriate for the speed*. If the car ahead slows down, then resumes its former cruising speed, the LS 430 will echo the other's actions – up to but no faster than your pre-set cruising speed.

This system oversees all activity - serene cruising, smooth acceleration or deceleration - without your even having to reset



*the cruise control if the system calls the brakes into action.** **Second, satellite guidance:** Now if you get lost you won't have to debate the merits of the map, or whether you should stop to ask for directions. The LS 430's built-in marriage counselor is a voice-activated global positioning system. Simplicity itself, it reacts to your instructions by telling you exactly where you are and guiding you to your destination. Verbally, every step of the way.

Third, out-of-this-world sound: That's overpage.

*Adaptive laser cruise control is intended only for use on highways or roads where traffic is light or moderate. It is *not* a collision-avoidance system and will *not* prevent accidents. Please, always drive carefully, paying full attention to traffic conditions.





Silence Absolute or Sound Sublime. Your Choice. In a Lexus, quiet is not just designed in. Or built in. Or added on. It's all three. With the emphasis on analyzing the source of noise and fixing it at its source – by measures almost too myriad to mention. A sampling of what Lexus does to insulate passengers from the noise of wind, road and fellow travellers:

A Pressure Wave Mechanism quietens the radiator fan; sound absorbing and vibration dampening materials are applied throughout. Even the rear wheel housings are lined to muffle the sound of splashing water. Motoring correspondents who have driven the LS 430 use words like "cosseted" and "cocooned" to describe the cabin ambience. This silent sanctuary (even more hushed than its famed predecessor) is the perfect environment for music. And what sound!

Commenting on "... a CD changer that eats six CDs straight into the dash and sounds terrific..." MOTOR TREND enthused: "...and this isn't even the ultra-lux version. A hedonist's delight."

"Audiophiles will salivate at the thought of the optional system designed by Mark Levinson – a soundsmith known for developing home systems that cost more than \$100,000 (that's US\$). The sonic envelope is explored with a 9-speaker 240-watt set-up featuring Digital Signal Processing specially designed and tuned for the LS 430."

For the last words on the subjects of sound (absence of) and sounds (of music), we offer a headline from the NATIONAL POST: "*Luxury car revels in the sounds of silence*."





"There wasn't a car quiet enough for it." Mark Levinson is hardly a household name. But among professional musicians and true audiophiles it's magic. Until now, one had never been installed in an automobile; apparently, *there wasn't a car quiet enough* to warrant the advanced technology and acoustic quality.

As remarked Mark Levinson executive, Michael Ross: "our engineers had evaluated every high-end automobile in the world for acoustic environment." Then Levinson met Lexus!

Based on mutual discovery – their commitment to similar levels of excellence – the result was a two-year joint developmental process to bring the home

audio experience to the Lexus flagship and other top-end Lexus models.

According to the Mark Levinson engineers, the fact that Lexus interiors are "as quiet as a mouse" made their task that much easier.

A unique Mark Levinson development, Digital Signal Processing software (DSP) allows the systems *to be tailored to the specific environment of each model*: volume of cabin space, interior angles for sound imaging, location of passengers – even the types of leather and carpeting. Since sound is only as good as the means of delivery, speakers are also "made to measure".

To compensate for the fact that the driver sits closer to the left door speaker than the right one, an almost infinitesimal adjustment enables the Mark Levinson 24-bit floating point DSP processor to transmit signals so that both in-door speakers deliver sound to the driver's ear at *exactly* the same time. *Nobody* can match this level of precision.





Does zero to 60 mph in a super-smooth 6.3 secs. warrant a name change? The LS 430

will quietly and smoothly accelerate from 0-60 mph in 6.3 seconds – without driver or passengers feeling it's "hurtling" at all. Which is more than quick enough to place this *luxury sedan* solidly in the league of the high-performance *sports sedan*.

This and the next page outline performance technologies developed by Lexus engineers. Concentrating



on what they mean to you - and treading lightly on how they do it - we invite you to read and then decide: Is the LS 430 a luxury sedan or a luxury sedan?

VVT-i: The Lexus marque's industry-leading Variable Valve Timing with intelligence adjusts valve timing instantly and precisely, *throughout the entire engine speed range*. Providing a smooth surge of power all the way – while improving both fuel economy and emissions.*

ACIS: Like cashmere on top of cashmere, Lexus Acoustic Control Induction System provides a further boost to performance.

Super ECT: The LS 430's Super Electronically Controlled Transmission is a five-speed, super-smart, lightning-fast transmission that prompts gear changes so smooth they are barely detectable. *No other car can touch it for speed or smoothness.*



It will *not* irritatingly shift gears if you brake or take your foot off the gas for a slower car. To reduce both brake *fade* and brake *wear* on a long, steep hill, the Super ECT's brain will tell it to kick-in engine braking to help the ventilated, extra-large, four-wheel disc brakes.

Says CAR AND DRIVER: "The five-speed automatic transmission is... so smooth that shifting gears is more of an aural than a physical experience."

*Because up to ninety percent of its emissions are respirable, the LS 430 qualifies for ultra low emission vehicle (ULEV) classification.



You are the camera! Imagine that the unseen other car is an LS 430. You're driving. Is the impetuous driver poking his nose out *inevitably* on his way? Or can he tuck back in? Situations like this illustrate why performance capability rests on so much more than straight-line speed.

Your first line of defence? Avoidance. Speed-sensing, progressive-rate power rackand-pinion steering and fully-independent, double-wishbone suspension with anti-dive and anti-squat geometry, help keep the LS 430 on course and level through sudden swerves, turns and braking.

When a wheel is about to lose its grip, Lexus Traction Control (TRAC) feeds power on, off and on again with lightning speed. The LS 430's unusually sophisticated Antilock Braking System (ABS) with Electronic Brake Force Distribution (EBD) and Brake Assist, coupled with TRAC, ensures the right balance



is achieved between right, left, front and back braking. Consequently, you stop in a shorter distance and arrow-straight.

Computer-linked sensors detect an emergency by how hard and long the driver hits the brakes. If the reaction is lacking, Brake Assist adds extra braking power. It also senses when you're carrying a heavy load and could do with its help. Ditto when you're going downhill.

In such circumstances, the LS 430 driver often is blissfully unaware of the special help. Situations like the one visualized alongside are different – and brutally basic. *With first-rate electronic aid, you stand a better chance of avoiding a head-on collision.* Whether your car is labelled a *luxury* sedan or a *sports* sedan.



The better the handling, the better your chances.



Knowing when to be tough and when to yield. When tangling with another vehicle, *unyielding* strength is not always the best

defence. Instances:

Lexus crash tests show that seats should act as *mini crumple zones*, cradling the body only to the point at which force would cause injury. The LS 430's seats then yield, deform – and absorb shock.

Front and rear ends of the LS 430 crumble *progressively* on impact – while leaving the cabin intact. The engine is designed to slide *under* the cabin rather than *into* it. Doors automatically unlock so occupants can get out or be got out.

When the collision is less severe, the LS 430's airbags inflate in two stages, so they pack less of a punch, offering better protection for smaller passengers. In a more severe impact, greater force is released for instant, more powerful counteraction. If there is no passenger, the bag does not go off!

Lexus seatbelts are also "smart"; the instant G-forces become too strong for the body to absorb, they release tension to cushion impact.

To protect against side collisions, *steel beams* are built into the LS 430's doors. Rather than being tucked in the doors, side airbags activate from the side of the seatback – *alongside the occupant*.

To protect the upper body and head of both the front and rear seat passengers, *curtain-shield airbags* deploy from the front pillar and above the door; *"soft-form" interiors*, backed with a cushioning layer, are fitted to impact-vulnerable areas.

Door windows are fitted with strong, two-layer laminated glass to prevent shards of glass from showering passengers.





Perils of the night defeated. A scenario: Your car is somewhere out there in the inky blackness of a parking lot. You press the ignition key; with light and sound, your LS 430 makes itself known. Shuffling tentatively towards it, you avoid stepping into a foot-soaking puddle; activated by the multi-purpose ignition key, "puddle lamps" are lighting the ground around the car's front doors.

Since the parking spot is perilously tight, behind and on both sides of the Lexus, the LS 430's Park Assist system is called on to reveal the unseen. Ultrasonic sensors recessed into the car's front and rear bumpers are linked to a dash-mounted display and warning buzzer. When the four lines of the diagram become three and then two, with the beeps ever more frequent, crunch time has arrived (literally). It's time to find another route out.

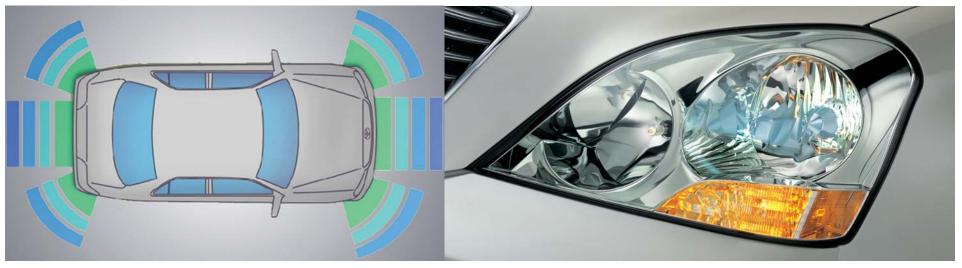
The next problem, a car tailgating with high beams dazzling, meets its match; the LS 430's electrochromic controls automatically darken both side and rear-view mirrors.

When the night is as dark, wet and nasty as this one, the LS 430's High Intensity Discharge (HID) headlights come into their own. *Twice as powerful* as halogen lamps, they unleash *20,000 volts* to create a sharp-edged, brilliantly white light that probes further and wider, with a clarity that sets new standards. *Self- levelling*, they invariably point where they should.



Ah, we're there! The key that found the car and lit it up now silences the near-silent engine, switches lights off, tucks in the power tilt-and-slide moonroof, closes the windows and locks the doors. Sleep tight.

Above: Puddle avoided. Below, left to right: Dings prevented; 20,000 volts in a beautiful package.







"I enjoyed the Lexus... a car I could live with." - MOTOR TREND editor.

According to Canadians who buy them, four marques dominate the luxury sedan sector. One is primarily noted for prestige, one for performance, one for elegance and one for being smooth and quiet. (You can guess their names for yourself!)

Each marque possesses further attributes, of course. However, the above are the words that first sprung to mind as highlighting their dominant characteristic.

This book set out to provide facts, photographs and a smattering of opinion that we trust, a) you enjoyed reading and, b) will lead you to conclude that the new LS 430 leads the way among this small but illustrious group.

We close with the verdict of a man who, during a long career, has put hundreds of cars through their paces – and is not easily impressed, which is what drew us to the so-simply-put first and final sentences:

"I enjoyed the Lexus. It's not only quicker than before, but the handling prowess has been taken up at least three notches without deteriorating its tomb-silent demeanor one whit. This is a car I could live with." – MOTOR TREND editor, C. Van Tune.





Seven A's in ten "subjects". According to Canadians who buy them, of the world's leading luxury sedans, one is primarily noted for prestige, one for performance, one for elegance and another for being smooth and quiet. (You can guess their names for yourself.)

The highly-respected MOTOR TREND magazine decided to put these and other stars of the automotive firmament through the most stringent of tests.

The pride of Germany, Japan, the U.S. and the U.K. were rounded up, driven, ridden in, meticulously scrutinized, tested and assessed in every which way.

They were then accorded ratings from A+ to C. In ten different categories - namely powertrain; handling; ride; interior



design; interior room/comfort; luxury features; use of technology; styling; brand cachet; value.

Some task! Some cars!*

Result: the new Lexus flagship led the pack by a country kilometre. *Ranking first in six of the ten categories and second in a seventh, the Lexus LS 430 garnered seven A's.*

Now wouldn't any parent be proud of a report card like that?

However, one (vital) factor is missing: your *personal*, feature-by-feature evaluation of the LS 430, culminating in a thorough test drive. How about it?

*With its new Seven Series a few months away from introduction, BMW unfortunately missed this full-ranging evaluation.



Secrets of staying young and beautiful.

Anti-aging: A law of nature: colours fade over time. Defying the inevitable, Lexus formed an anti-aging team. Its problems were many and complex. Not only do the leathers, woods, fabrics and finishes of an automobile fade over time, they differ greatly in the *rate* at which they fade – some colours, some finishes change more than others.

The Lexus Anti-Aging Team set out to devise ways to ensure that, in a Lexus, all materials would fade not only slightly *but at almost identical rates.* Anyone who knows what leathers and wood trim *can* look like in a few scant years and has observed the mint condition of a veteran Lexus, will know this: the Anti-Aging Team spends its time well.

Glowing skin: Lexus is noted for its lustrous, perfect paintwork. It certainly doesn't just happen: the Lexus painting

process involves as many as forty-two separate steps.

First, the entire body is immersed in a bath. Stains are washed off with hot water; oil is removed by a degreasing agent. Which is then washed off. A zinc phosphate film is applied to improve corrosion resistance and increase paint adhesion. The body is washed – *as many as three times* – to remove the treatment agent, washed yet again and dried at high temperature.

At the undercoating stage, the body is dipped, drip-dried and washed, the paint dried and hardened at temperatures of up to 170° C. Anti-chipping, acid-rainresistant paint is then applied and dried at a precise 140° for 30 minutes.

Then there's the wet sanding, washing, air blowing – and, yes, drying. You can imagine the fussiness that culminates in the final finish: as smooth as glass, glowing or shining.

Grieve not for the rejected. Only the highest of high-quality maple and walnut survive the rigors of selection for the pride of Lexus. Those that don't *quite* make it win a very nice next-best: a life of grace and taste as gleaming cladding for concert-hall-quality grand pianos. What fate awaits slightly lesser leathers turned away by keen-eyed, steely-minded selectors for LS 430 honours? Fret not... they're sure to adorn the very best of residences, executive offices and other luxurious environments. Other than an LS 430, of course.

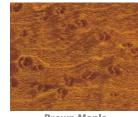




Ecru Maple with ecru premium leather



Bordeaux Walnut with black premium leather



Brown Maple with ecru or black leather



California Walnut with charcoal or ivory leather



The Lexus difference. All-round excellence requires more than top-rate design and brilliant engineering. It is found in immaculate fit and finish; in a deep-down, multi-layered glow; in unseen touches such as anti-chipping paintwork; in a plethora of anti-aging measures that, collectively, keep a Lexus looking new so much longer. Here, in extreme close-up, is where the Lexus difference really shines.

LS 430 EXTERIOR COLOURS



* New colour for 2002. † Premium leather only available with C, E & N suffix. Colours and interiors are subject to change during model year. Please see your Lexus dealer for details. Due to the limits of computer monitors and printers, the colours on this page are only representational of the actual paint and interior finishes. See your Lexus dealer for accurate samples.



Lexus LS 430 Specifications & Features*

Dimensions

Body Type – 4-door 5-passenger luxury sedan.

Construction – Unitized body with anti-vibration subframes. Extensive use of galvannealed steel and other anti-corrosive measures.
Overall Length – 4995mm (196.7 in.)
Width – 1830mm (72.0 in.)
Height (unloaded) – 1490mm (58.7 in.)
Height (unloaded with air suspension) – 1470mm (57.9 in.)

Wheelbase – 2925mm (115.2 in.) Curb Weight – 1795 kg (3957 lb) Tread (front/rear) – 1570/1570 mm (61.8/61.8 in.) Tread (front/rear with air suspension) – 1575/1575 mm (62.0/62.0 in.) Headroom (front/rear) – 967/964 mm (38.1/38.0 in.) Legroom (front/rear) – 967/964 mm (44.0/37.6 in.) Shoulder Room (front/rear) – 1481/1479 mm (58.3/58.2 in.) Trunk Space – 0.571 cu. m (20.2 cu. ft.) Fuel Tank Capacity – 84.0 l (18.5 imp. gal.)

Engine

Engine Type – (3UZ-FE) V8 Displacement – 4.3 litres (4293 cc) Valvetrain – DOHC 32 valves, Variable Valve Timing with intelligence (VVT-i) Acoustic Control Induction System (ACIS) and Electronic Throttle Control System with intelligence (ETCS-i) Bore x Stroke – 91.0 x 82.5 mm (3.58 x 3.25 in.) Horsepower – 290 hp (216 kW) @ 5600 rpm Torque – 320 lb. ft. (434 N.m) @ 3400 rpm Compression Ratio – 10.5:1 Engine Management – Computer control of sequential multi-port fuel injection. Direct Ignition System (DIS) with dual knock sensors. Fuel Requirement – Premium Unleaded recommended.

Drivetrain

Transmission – 5-speed Super Electronically Controlled Transmission (Super ECT). Overdrive top gear.

Drive Wheels – Rear-wheel drive with Traction Control System (TRAC). Final Drive Ratio – 3.266:1

Suspension – 4-wheel independent, double wishbone suspension, coil springs, low pressure gas shock absorbers, front and rear stabilizer bars. Anti-dive and anti-squat geometry. Steering – Vehicle-speed sensing electronically controlled Progressive Power Steering (PPS),

Steering – Vehicle-speed sensing electronically controlled Proposer rack-and-pinion steering, 3.53 turns, lock-to-lock.
 Brakes – 4-wheel, power assisted, ventilated disc brakes.
 Antilock Braking System (ABS) – 4-sensor, 4-channel.
 Brake Assist, Electronic Brake force Distribution (EBD)

Performance Capabilities Acceleration, 0-60 mph^{**} – 6.3 seconds Fuel Consumption, L/100 km^{***} –12.8 City, 8.8 Highway, 11.0 Combined Turning Circle – 10.7 m (35.1 ft.) Coefficient of Drag (cd.) – 0.25 with air suspension, 0.26 without air suspension

Exterior Features

Low reflection windshield with heating system and 3-jet washer nozzles Integrated headlight washer Helical-coil type short-pole antenna (mounted on the rear centre of the roof) Wheels/Tires – Newly-designed 16 x 7JJ 7-spoke alloy wheels. P225/60R16 Dunlop performance all-season radials. Clearance and Back-up Sonar

Interior Features

Leather package: Seats and headrests, armrest. Leather and wood steering wheel, shift knob and door trim.

Maple or Walnut wood trim accents

Audio: Lexus Premium AM/FM with cassette, 178 watt⁺ system with 7 speakers and Radio Data System (RDS)

In-dash 6-disc CD auto-changer

Electronic analog gauges with multi-information Display (Outside temperature and Vehicle performance information)

Automatic climate control with manual override, independent driver and front passenger temperature soft-touch controls with dust, pollen and deodorizing air filter.

Air quality control system: Exhaust gas and NOx sensors

Front centre console automatic swing register

Cruise control

Power-assisted driver and front passenger heated seats (Adjustments: 14-way driver, 10-way passenger)

Power trunk lid with auto close system

Power rear sunshade

Power fuel filler door release

Power windows with driver and passenger "auto up/down" feature with jam protection

Power tilt-and-telescopic steering wheel

Power tilt-and-slide moonroof with sunshade

Lexus Driver Memory system includes three driver memory settings for power adjustments on driver's seat, side mirrors, power tilt-and-telescopic steering wheel and shoulder belt anchor

Dual heated power remote-controlled and colour-keyed side mirrors with electrochromic automatic dimming

Automatic dimming electrochromic day/night inside rearview mirror

Upper and lower glove boxes

High solar energy absorbing tinted glass

Heavy duty rear window defogger with timer

Convenience Features

Adjustable rear seat headrests

Power Driver and front passenger adjustable pillar shoulderbelt anchors

Front seatback pockets

Rear seat fold-down armrest/storage console with trunk pass-through access panel

Electronic Compass

Accessory power outlet

Driver and passenger illuminated vanity mirrors with ticket holder

Front and rear cupholders

Interior power remote trunklid and fuel filler door releases



Lexus LS 430 Specifications & Features*

Convenience Features (contíd)

Low fuel, washer fluid, oil level and pressure warning Power door locks with driver's door 2-turn unlock feature Map lamps Trunk mat Two-level console box with sliding upper tray Storage drawers under front seats, expandable front door pockets Integrated garage door opener Illuminated entry system Carpeted floor mats Cargo net Automatic light control system Wheel-lock package

Safety Features Antilock Braking System (ABS) Brake Assist Electronic Brake force Distribution (EBD) Traction Control (TRAC) Vehicle Skid Control (VSC) High Intensity Discharge (HID) headlamps with auto leveling system Fully-integrated theft deterrent system with encoded vehicle immobilizer Driver and front passenger airbag Supplemental Restraint System (SRS) with 2-stage deployment and occupant sensor on the driver and passenger side. Side-impact airbag Supplemental Restraint System (SRS) for front seats Window curtain airbags Supplemental Restraint System (SRS) front and rear Front and rear outboard seatbelt pretensioner and force limiter system Keyless remote entry with adjustable audible warning, trunk release and panic alarm Variable intermittent wipers Integrated fog lamps First aid kit 3-point rear seat centre lap and shoulderbelt Full-size spare tire Rain Sensor Wipers

Optional Equipment

LS 430 Touring Edition includes: "Standard Features" plus 17 inch chrome wheels, 225/55R17 Dunlop performance summer radials, Euro Coil Suspension, Laser Cruise. Note: does not include wood steering wheel.

LS 430 Premium Package includes: "Standard Features" plus 17 inch wheels 225/55R17 Dunlop performance summer radials, Mark Levinson Audio, 240 watt⁺ system with 9 speakers and Radio Data System (RDS). Laminated side glass, front seat heater and A/C, Laser Cruise, Auto Door Closer (LS 430 Premium Package also available with DVD based GPS Navigation System)

LS 430 Ultra Premium Package includes: "Standard Features" plus 17 inch chrome wheels 225/55R17 Dunlop performance summer radials, Mark Levinson Audio, 240 watt⁺ system with 9 speakers and Radio Data System (RDS). Air Suspension, laminated side glass, front seat heater and A/C, Laser Cruise, Auto Door Closer, sunshade on rear doors, rear A/C with climate control, rear power seats with massage setting, rear audio controls. (LS 430 Premium Package also available with DVD based GPS Navigation System)

Available Accessories Block heater

Warranty

Comprehensive coverage: 48 months/80,000 km Powertrain: 72 months/110,000 km Corrosion Perforation: 72 months/unlimited mileage Roadside Assistance: 48 months, 24 hour roadside assistance with free travel planning

See your Lexus dealer for details.

*TOYOTA CANADA INC. Every effort has been made to ensure the specifications and equipment shown are accurate based on information available at time of printing. In some cases, certain changes in standard equipment, options or product delays may occur which would not be reflected in this brochure. Toyota Canada Inc. reserves the right to make these changes without notice or obligation. Your Lexus dealer is your best source for up-to-date information.

**Performance figure is shown for comparison only, and was obtained with prototype vehicles under test track conditions by professional drivers using special safety equipment and procedures. This should not be attempted on public streets or highways.

***FUEL CONSUMPTION RATING. These estimates are based on the Government of Canada's approved criteria and testing methods. The actual fuel consumption of this vehicle may vary. Refer to the Government of Canada publication – EnerGuide Fuel Consumption Guide.

[†]Continuous average power, all channels driven, at 0.01% THD; 20-20,000 Hz.

Please note: some of the features mentioned and/or shown in this brochure are optional.

Lexus reminds you to place small children in CSA-approved car seats – *in the rear seats.* To always wear your seat belts. And to drive safely.

