

*1989*

*Honda*

*Prelude*





*Honda's research and development program defines the perfect sports coupe by the needs of the driver.*

*The result: the 1989 Prelude, a car both personal and responsive.*

*Its sleek profile is the result of a low hoodline, a smooth front end and near-flush-mounted glass.*

*Under the hood sits the heart of the Prelude: a powerful, 2.0 liter engine.*

*Double wishbone suspension provides responsive handling. And with 4-wheel steering, even higher levels of handling performance have been achieved.*

*The Prelude. The definition of the sports coupe has never been clearer.*

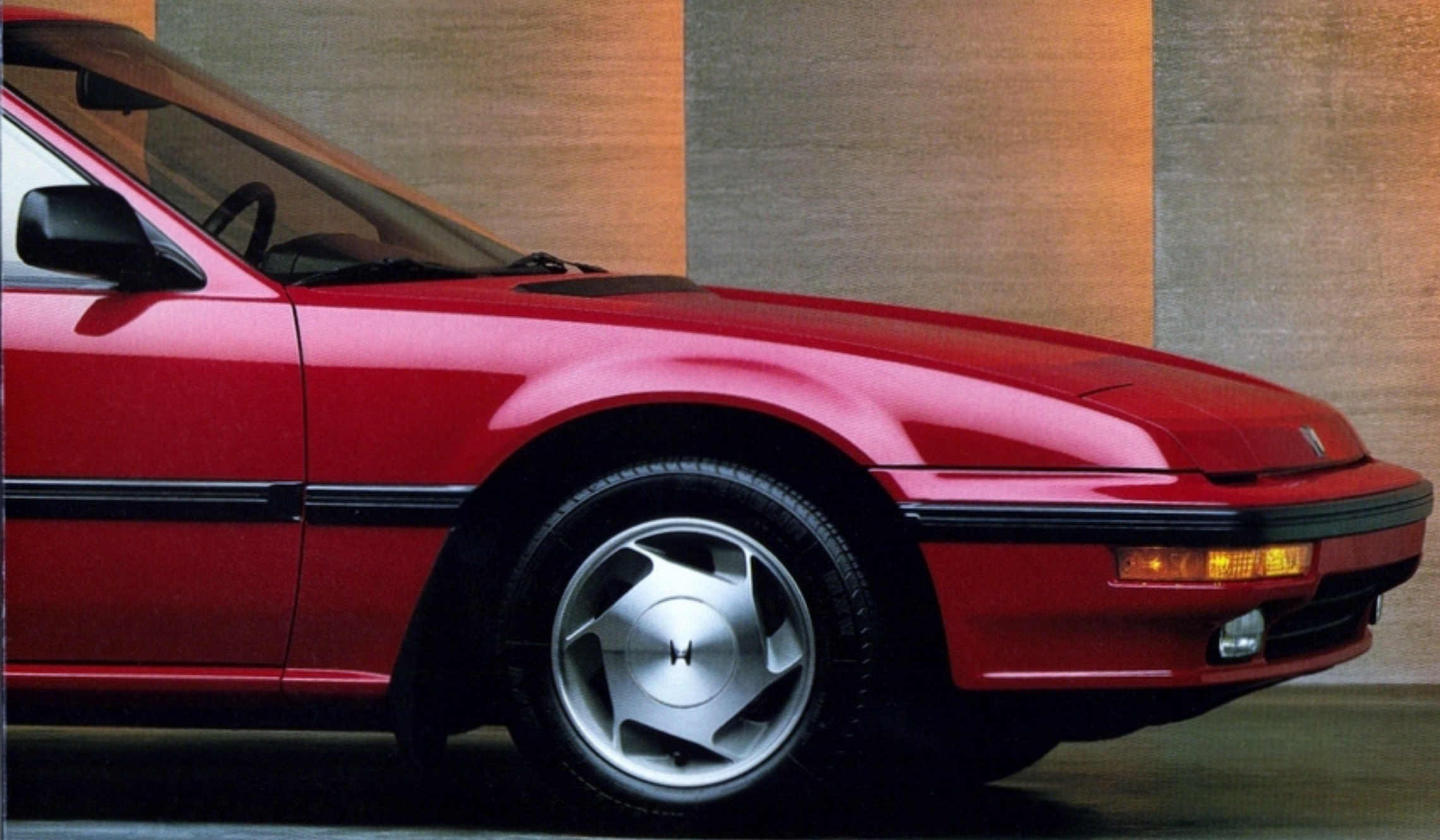






*Prelude Si with the 4WS package*









*Prelude S*





*When you take your driving personally.*

A personal sports coupe should inspire its driver. Not only with its looks. But with its handling and performance.

The Prelude S is visually inspiring. Gaze at its aerodynamic shape. Its low hoodline and near-flush-mounted glass.

The pillars are slim to provide greater visibility for the road.

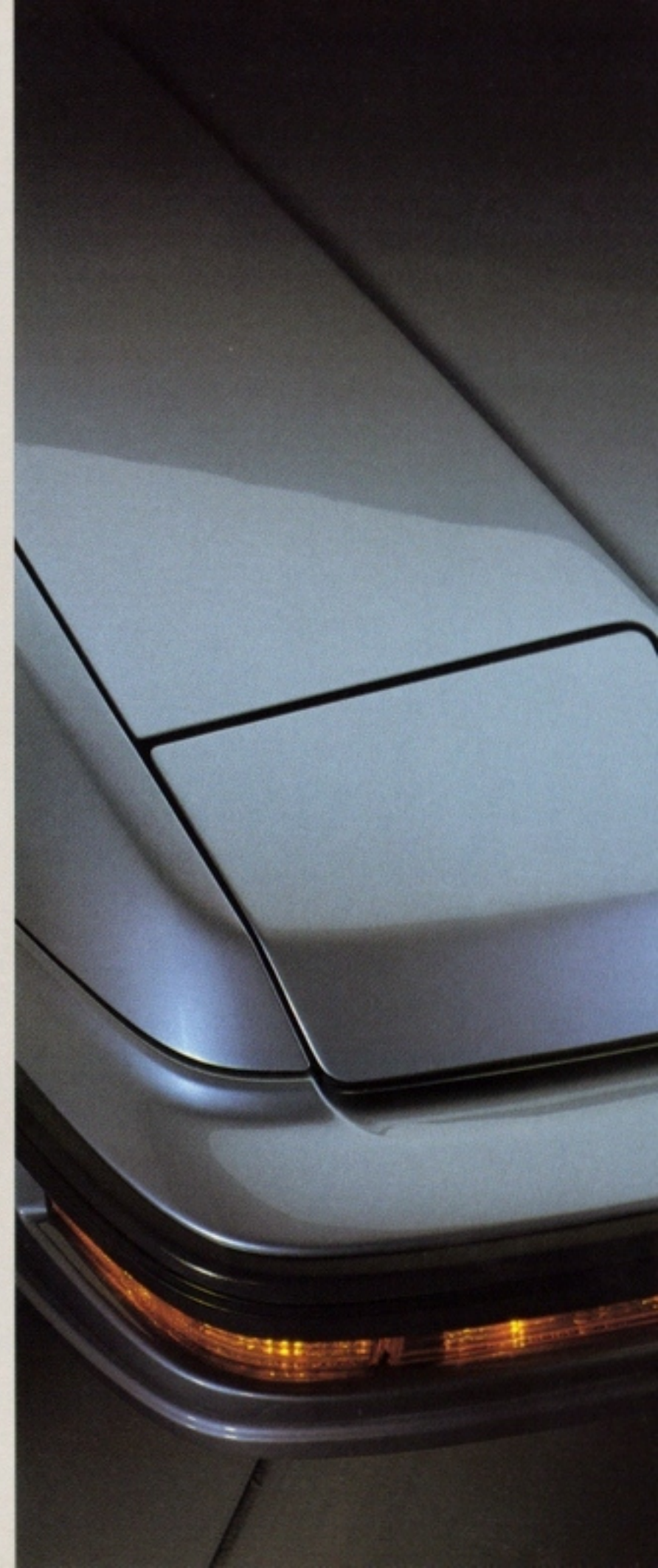
Take control with the Prelude S. The instruments are easy to read. The standard, power-operated moonroof, the AM/FM stereo cassette system and the cruise control improve your time in the driver's seat.

The Prelude S is powered by a 2.0 liter single overhead cam engine. Enough power for quick starts off the line, and for passing slower traffic.

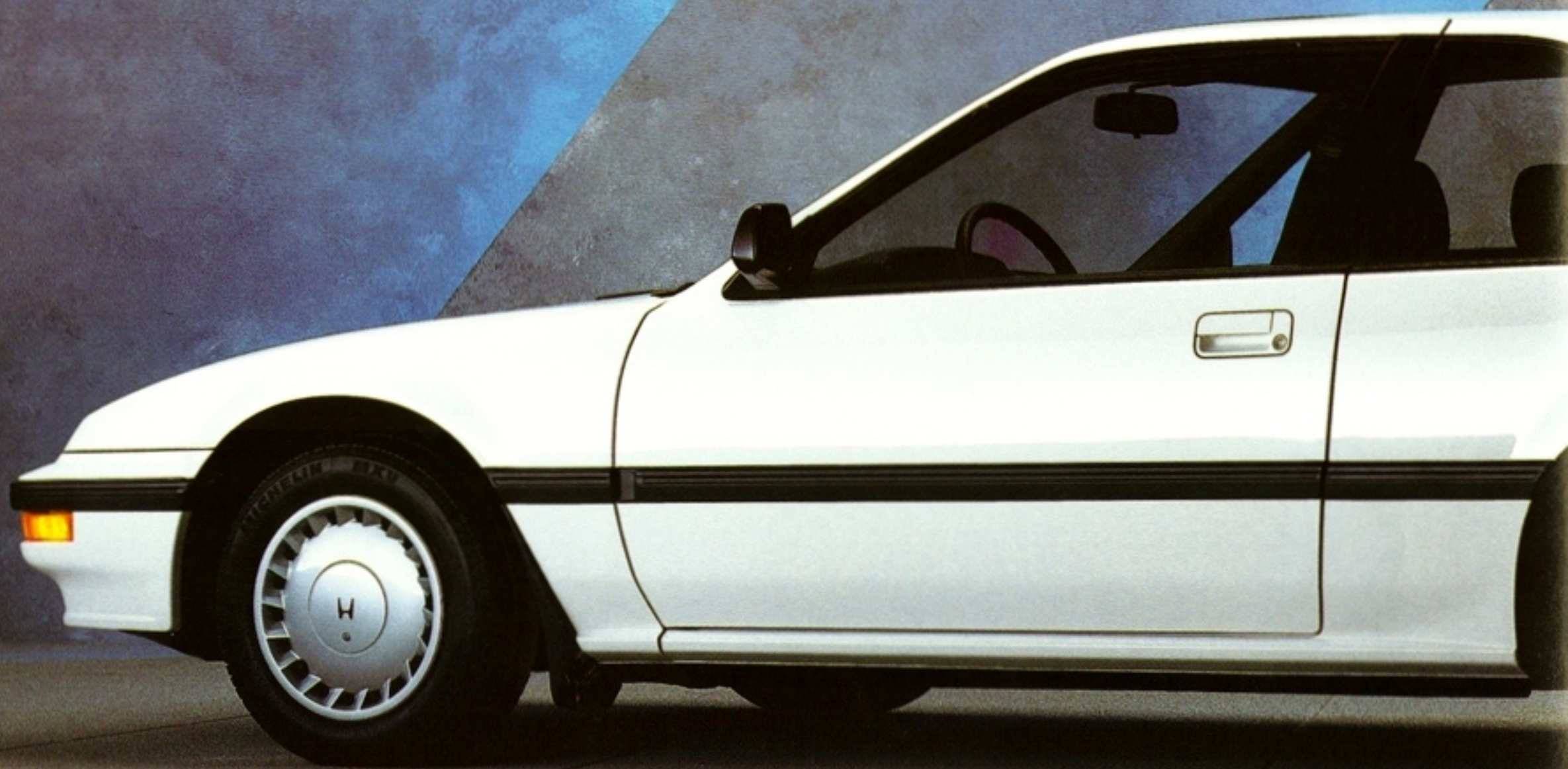
The 4-wheel double wishbone suspension with front and rear stabilizer bars provides positive handling and a comfortable ride. And variable-assist power steering gives you greater confidence to handle almost any road situation.

The Prelude S. Designed to make a driving statement.

*Aerodynamics are improved with the stylish retractable halogen headlights.*







*Prelude Si*





*It'll accelerate your senses.*

From its fuel-injected, 2.0 liter engine to its low profile, the Prelude Si is designed to move you.

The 16-valve twin cam engine with Programmed Fuel Injection is the essence of the Si. With 135 hp, it's the most powerful Prelude ever.

For smooth shifting, a 5-speed manual transmission is standard. And an available electronically controlled 4-speed automatic with sport shift is programmed to shift gears at higher rpm for sportier driving performance.

At all four wheels, you'll find a race-proven double wishbone suspension. This makes for a very agile car.

The variable-assist power steering and 4-wheel disc brakes with ventilated front rotors put you in firm control of the road. And the performance-rated 195/60 R14 Michelin MXV radials are standard.

To let in the sky, the Prelude Si comes equipped with a power-operated moonroof.

Driving is a pleasure with the standard AM/FM ETR High Power stereo cassette system, cruise control, air conditioning, power windows and mirrors.

Integrated fog lights provide improved road visibility. Courtesy lights for the ignition and door locks are standard.

The Prelude Si. You'll find it a moving experience.





*Prelude Si with the 4WS package*



### *The outlook from mission control.*

Behind the wheel of a Prelude, you'll see a whole new view of the road.

The hoodline and the cowl are low. Slim pillars help provide even more glass area for improved visibility.

The wraparound dash logically arranges the instrumentation.



*On the Prelude Si, power controls for the windows are placed within easy reach.*

The white-on-black analog gauges—speedometer, tachometer, fuel and temperature—can be read effortlessly for day or night driving.

Switches for the moonroof, power windows (Prelude Si), lights and wipers are placed

well within reach of the driver.

The steering column is adjustable. And the gear shift moves with precision.

The temperature controls and entertainment system are conveniently located in the center console.

When it comes to your driving, the Prelude has things well under control.

*The center console puts your stereo and temperature controls at your fingertips.*







*Prelude Si*





### *The driver's natural habitat.*

Inside the Prelude you'll find the perfect driving environment.

The driver's seat of the Si is designed to cradle you, thanks to the adjustable lumbar and side bolster supports. It has a memory feature that retains your favorite position. And for added comfort, a driver's left footrest is standard.

Unlock and fold the rear seatback down to stretch out the trunk space to carry your skis or bike.

Open up the power-operated, tinted glass moonroof for those midnight rides. Or leave it closed, and slide back the sunshade to let in the light.

There's a sophisticated AM/FM High



*The adjustable lumbar and side bolsters hug the Prelude Si's driver.*

Power stereo cassette with four speakers and a rear fender-mounted power antenna.

The Si also features a dual diversity antenna system which adds a rear window antenna.

Standard on every Prelude is a three-point passive restraint front seat belt system.\*

The inner Prelude. Become a product of its environment.

*An electronically controlled 4-speed automatic transmission with sport shift is available. Cruise control is standard on all Preludes.*

*\*In all interior photographs, the passive restraint front seat belt system has been shown unfastened for display purposes. This system should be fastened at all times in normal use.*







*Prelude Si with the 4WS package*



*A technological turning point.*

Four-wheel steering (4WS), described as an automotive milestone, is available on the Prelude Si. *Car and Driver* states that "the arrival of 4WS in a production car is a historic development."

Honda engineers saw the potential of advancing the limits of handling performance by developing a steering system that encompasses all four wheels.

Because the rear wheels turn in relation to the front wheels, there's more control and stability. During high-speed lane changes. In a crowded parking lot. Or on a snowy mountain road.

The Prelude Si with the 4-wheel steering package will also turn your head. The body is sleek. In fact, the hoodline is as low as that of the Ferrari 308 GTS.

Under the hood is a powerful 2.0 liter, 16-valve, twin cam engine with Programmed Fuel Injection.

Other features available exclusively as part of this package include: alloy wheels, bronze-tinted glass, power door locks and a rear tail spoiler, to create the ultimate Prelude.

The Prelude Si with the 4WS package. Things have turned out very well.

*The addition of four-wheel steering provides a new level of handling and control.*

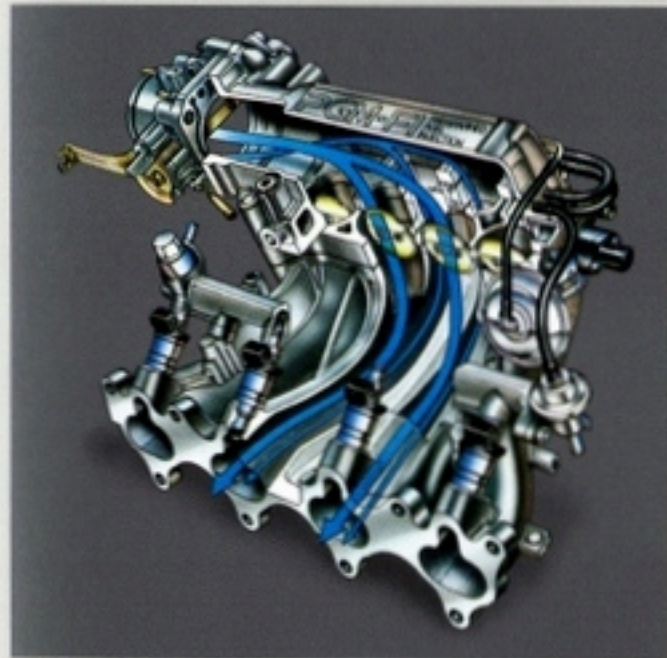




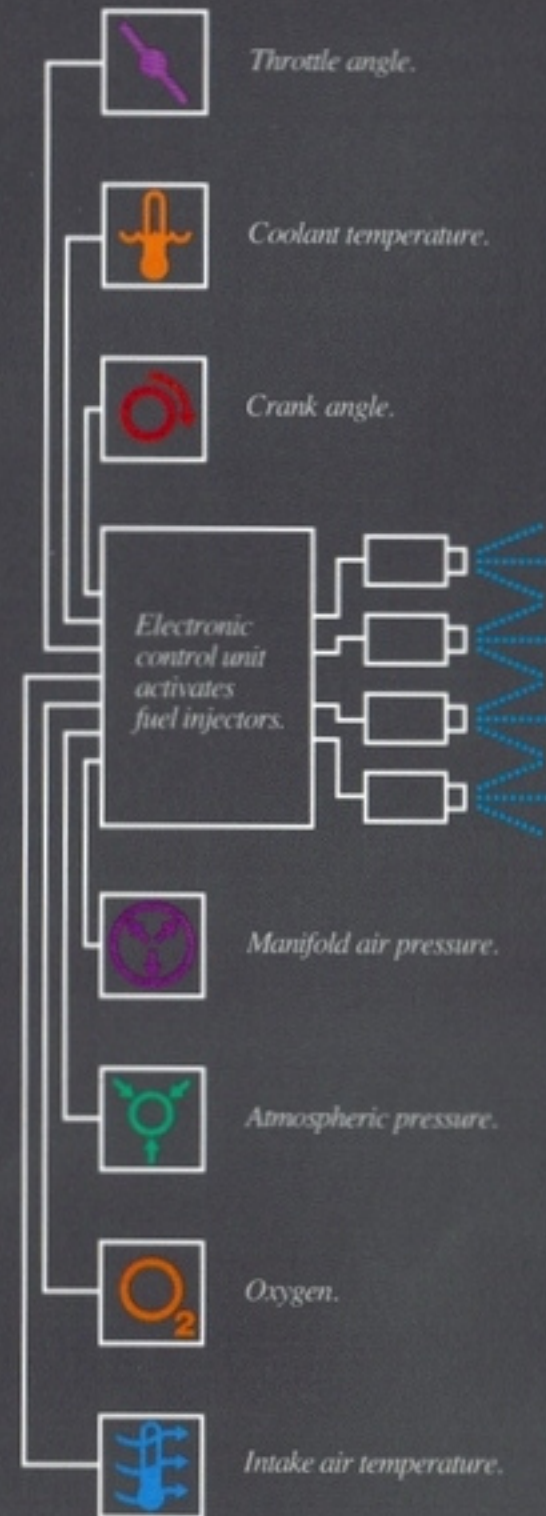
### Dual-Stage Intake Manifold

PGM-FI uses a vacuum-operated, dual-stage intake manifold to improve low- and mid-range torque. At low rpm, air is drawn through a 35mm diameter primary intake tract designed to keep intake air velocity high. This improves combustion chamber charge efficiency which yields better torque at low rpm.

As rpm increases, the engine's need for intake air also increases. At 5000 rpm, a supplemental 38mm intake tract opens. It supplies additional air to the engine to ensure free breathing and maximum power output at high rpm.



Dual-Stage Intake Manifold improves low- and mid-range torque without loss of high-rpm power.



PGM-FI microcomputer reads information from engine sensors and actuates individual injectors in a timed sequence.

### Transmissions

Prelude's dual-mode 4-speed, electronically controlled automatic transmission features both a Normal mode and a driver-selectable Sport mode.

When the driver requires more performance, for example during sportier driving or on a long, steep grade, the transmission can be shifted from D to S mode. In the S mode, the transmission automatically shifts from 1st to 2nd and from 2nd to 3rd gear at higher rpm at part-throttle openings. Pressing the S4 button allows the transmission to shift into 4th gear while still in the Sport mode.

An Electronic Control Unit (ECU) determines when the gears will shift in the Normal and Sport modes. It also regulates torque converter lockup in Normal mode.

Torque converter lockup eliminates power-robbing automatic transmission slippage in 2nd, 3rd and 4th gears, and during vehicle deceleration.

A smooth, precise-shifting, close-ratio 5-speed manual transmission is standard on the Prelude. It features a low maintenance, self-adjusting, hydraulically actuated clutch with an ignition interlock system.

Prelude's differential uses equal length halfshafts to drive the front wheels. This design minimizes torque steer—the tendency for front-wheel-drive cars to pull to one side under hard acceleration.



*Shock absorber and spring are specially calibrated for ride control and to isolate passengers.*

*Rear stabilizer bar.*

*Progressive-rate rear coil springs and gas pressurized rear shock absorbers help maintain control when car is empty or loaded.*

## **Suspension**

By utilizing race-proven 4-wheel double wishbone suspension on the Prelude, Honda engineers were able to build a suspension system that provides outstanding control, handling and ride.

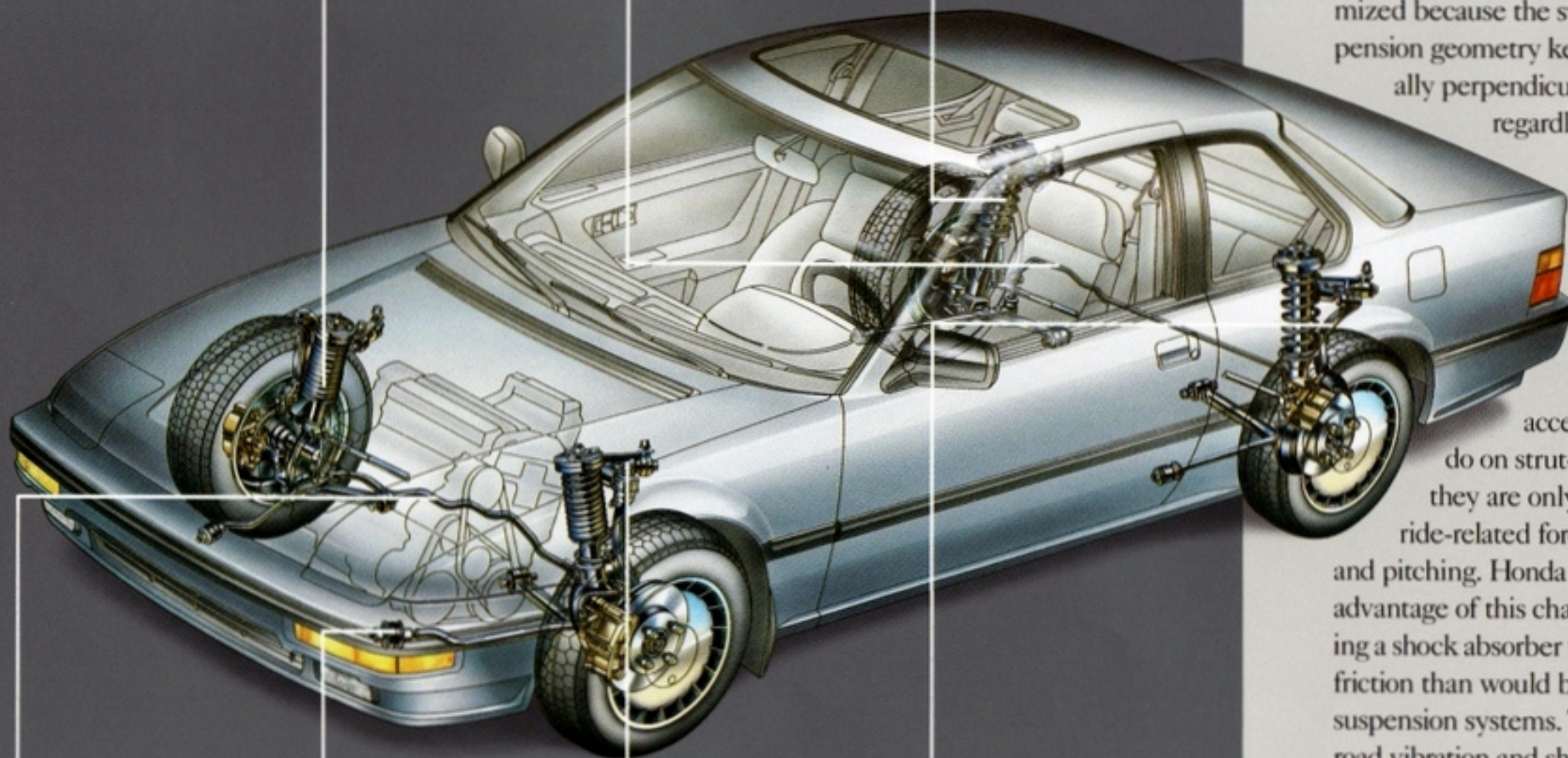
Tire adhesion while cornering is maximized because the system's near-ideal suspension geometry keeps the wheels virtually perpendicular to the road surface regardless of the amount of

body-roll developed.

With 4-wheel double wishbone suspension, the shock absorbers do not have to absorb braking, cornering and acceleration forces as they do on strut-type systems. Instead they are only required to control ride-related forces such as body-roll and pitching. Honda engineers have taken advantage of this characteristic by designing a shock absorber that operates with less friction than would be possible on other suspension systems. The result is that less road vibration and shock are transmitted to the vehicle.

Anti-dive and anti-lift geometry incorporated into the suspension design also minimizes nose-dive and rear-end lift during braking.

Front and rear stabilizer bars and low center of gravity contribute to Prelude's flat cornering stance.



*Front stabilizer bar.*

*Compliance bushing absorbs road shock.*

*Upper arm increases stability when cornering and over bumps and dips.*

*Compact rear double wishbone suspension increases passenger and cargo space.*

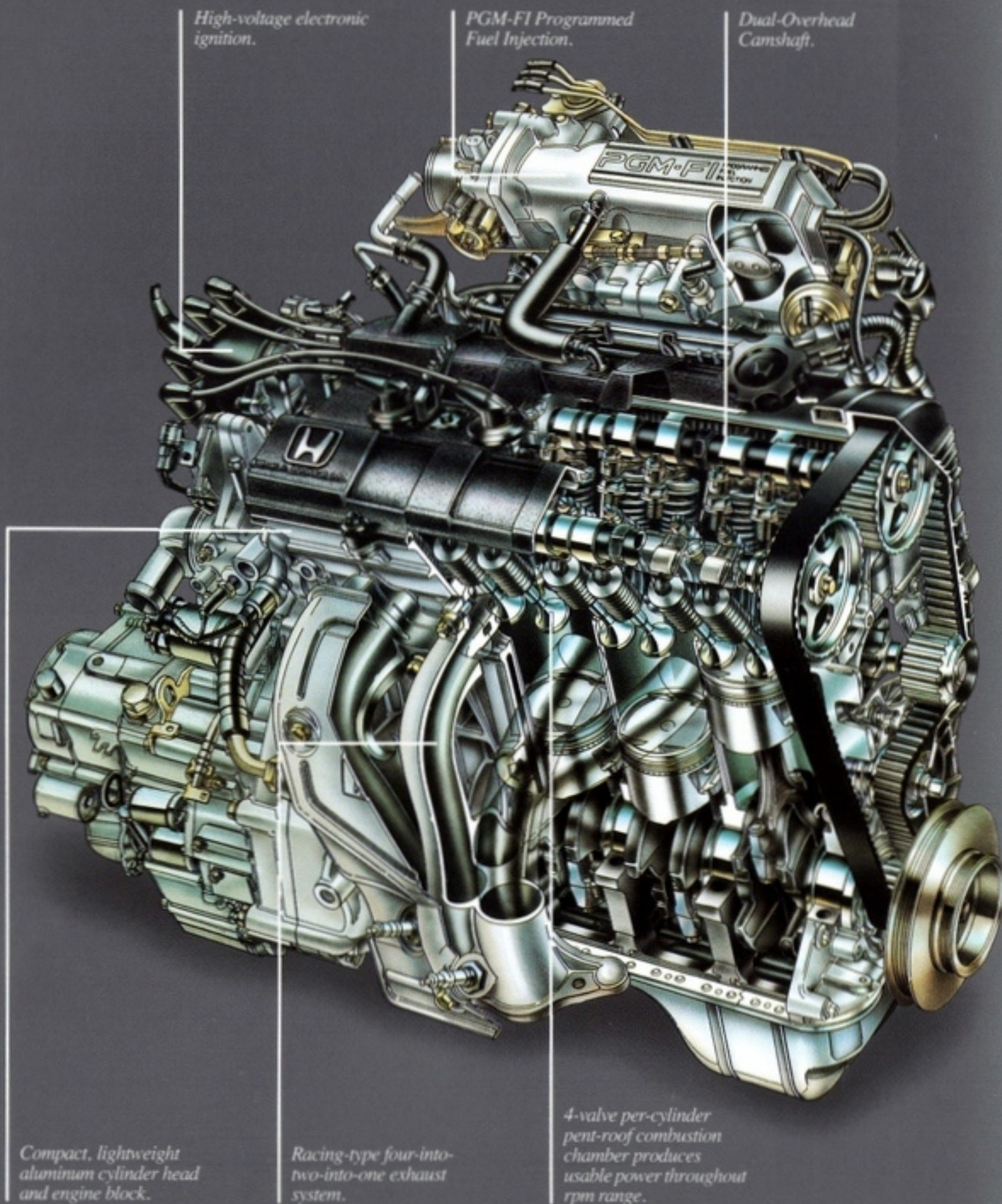


### *Power You Can Use*

The compact, aluminum alloy, twin-cam, 2.0 liter power plant of the Prelude Si is a direct descendant of Honda's Formula 1 racing heritage. The dual overhead camshaft cylinder head has four valves per cylinder and pent-roof combustion chambers. The combustion chamber's 52-degree included angle allows the use of larger intake and exhaust valves for better breathing. It also utilizes centrally located spark plugs for efficient combustion.

This engine's high power output isn't merely a result of combustion chamber design alone. Efficient, usable power output requires attention to the intake and exhaust system design as well.

The fuel delivery is by Honda's Programmed Fuel Injection system (PGM-FI). PGM-FI is a timed, sequential, multi-point Programmed Fuel Injection system which uses seven sensors to monitor engine status. These sensors feed information to a state-of-the-art computer which controls the exact moment and duration each injector operates. PGM-FI gives the Prelude Si engine outstanding driveability, power and fuel economy† over a wide range of operating conditions.



*High-voltage electronic ignition.*

*PGM-FI Programmed Fuel Injection.*

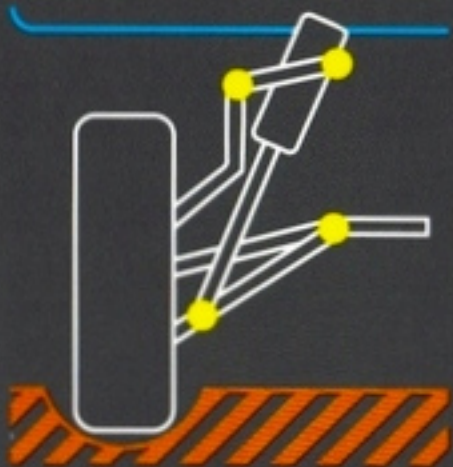
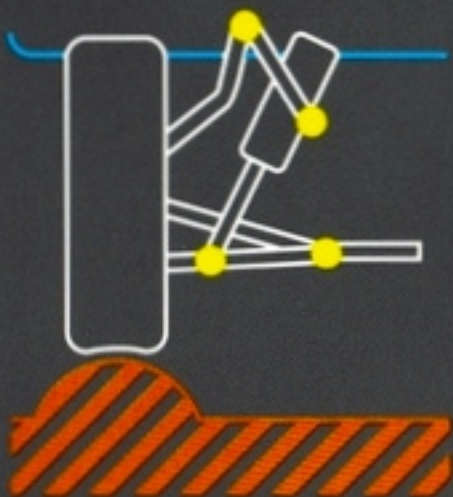
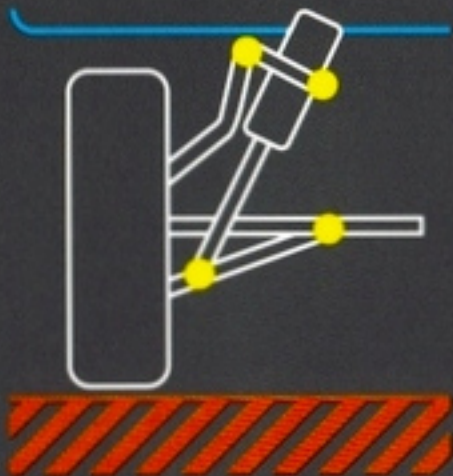
*Dual-Overhead Camshaft.*

*Compact, lightweight aluminum cylinder head and engine block.*

*Racing-type four-into-two-into-one exhaust system.*

*4-valve per-cylinder pent-roof combustion chamber produces usable power throughout rpm range.*





*Double wishbone suspension isolates the passenger from road-shock such as bumps and dips.*

### *Aerodynamics: The Total Car*

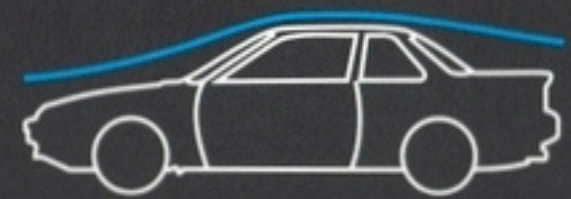
Improving a car's aerodynamics has several benefits. The car will use less fuel, handle better, and give the driver and passengers a greater feeling of security and comfort. Turbulence is reduced, resulting in less wind noise. So the car's occupants experience a quieter, less fatiguing environment.

The Prelude's excellent coefficient of drag rating of 0.34 is the result of attention to every aspect of the car's design. For example, the Prelude has the lowest hoodline of any front-wheel-drive car. This not only contributes to the car's aerodynamic efficiency, it also improves forward visibility, which helps driver control and comfort.

However, this low hoodline would not be possible were it not for the compactness of the front double wishbone suspension system. The Prelude's engine was also designed to fit this profile. Reclining the engine 18 degrees rearward lowered the car's center of gravity and improved its weight distribution, which improved braking, acceleration and cornering.

Attention to details like nearly flush-mounted glass and flush-mounted door handles also contribute to the Prelude's aerodynamic efficiency.

Ultra-slim roof pillars improve outward visibility by providing a full 326 degrees of viewing angle. Structural reinforcing within the pillars contributes to Prelude's excellent body strength and rigidity.



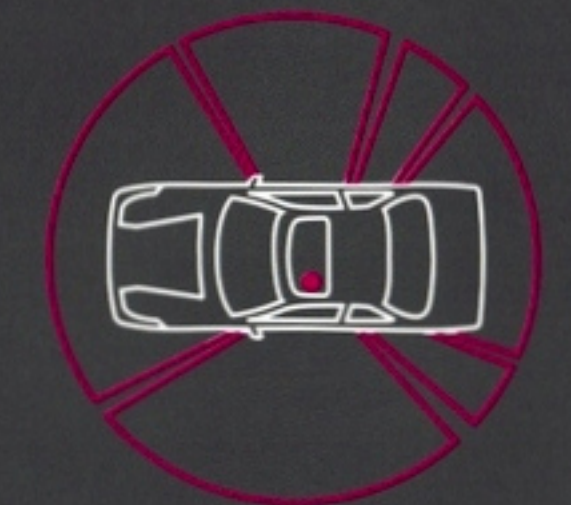
*0.34 drag coefficient.*



*11 cu. ft. cargo capacity is augmented by lockable trunk-through access.*



*Ergonomic, cockpit-like interior with 43.1 in. legroom and 36.9 in. headroom.*



*Ultra-slim roof pillars help provide 326 degrees of outward visibility.*



### *The tradition continues.*

Prelude has traditionally been a showcase of Honda innovation and engineering. The 1989 model proudly carries on this tradition with features like 4-wheel double wish-bone suspension, 12- and 16-valve engines, advanced ergonomics and the world's first mass-produced, all mechanical 4-wheel steering system available on the Prelude Si. The result is a "driver's car" that uniquely combines high performance and refinement.

#### **4-Wheel Steering (4WS)**

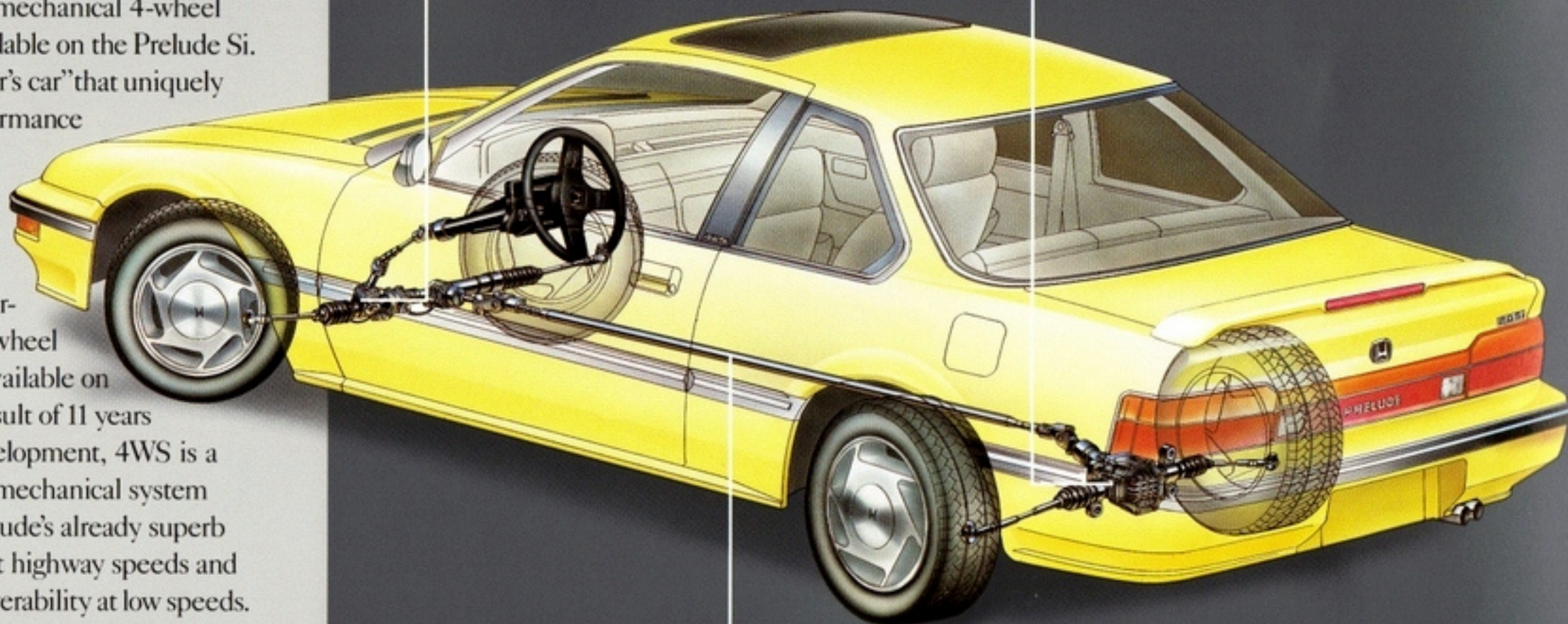
Honda's unique steer-angle dependent 4-wheel steering system is available on the Prelude Si. A result of 11 years of research and development, 4WS is a completely reliable mechanical system which improves Prelude's already superb handling response at highway speeds and increases its maneuverability at low speeds.

At highway speeds the car responds more quickly to steering input than a conventional car with two-wheel steering.

In order for a conventional two-wheel steering vehicle to change direction, the steered front wheels first must rotate the

*Variable-assist, power rack-and-pinion steering.*

*Mechanical rear steering box steers rear wheels.*



*Center shaft transmits rotation of steering wheel to rear steering box.*



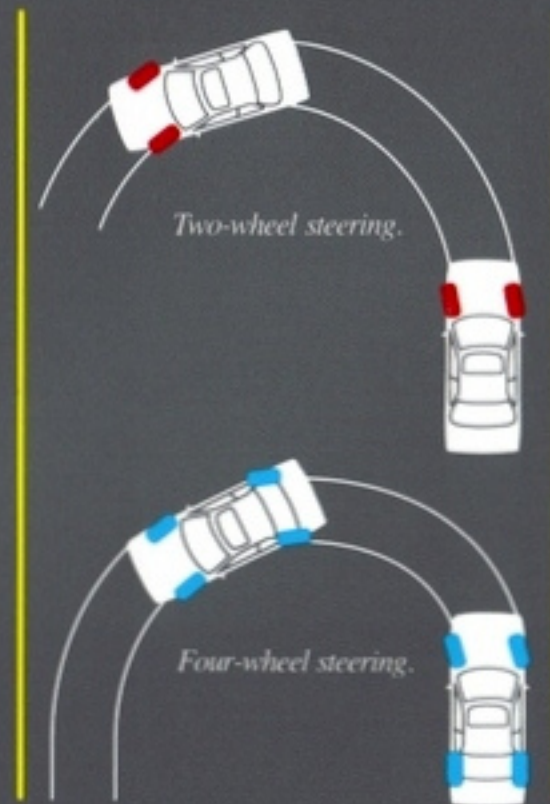
vehicle around its center of gravity. As the vehicle rotates, its fixed rear wheels generate the additional side force necessary to change the vehicle's direction of travel.

With 4WS at highway speeds, the front and the rear wheels are steered in the same direction at the same time. So the rear wheels begin generating a cornering force immediately rather than having to wait for the vehicle to first rotate as they would on a two-wheel-steered car.

The result is a car that responds quicker with less body-roll during transient maneuvers such as lane changes. 4WS also makes the Prelude easier to control in side-force disturbances such as cross-winds and off-camber roads.

In tight turns at low speed, the front wheels steer at a greater angle than at highway speeds. This causes the rear wheels to turn slightly in the opposite direction of the front wheels. This effectively shortens the Prelude's turning radius; allowing it to make a U-turn in less space than a conventional two-wheel-steered vehicle.

The superior low-speed handling with four-wheel steering also allows it to fit more easily into difficult spaces, making maneuvers like parallel parking easier.



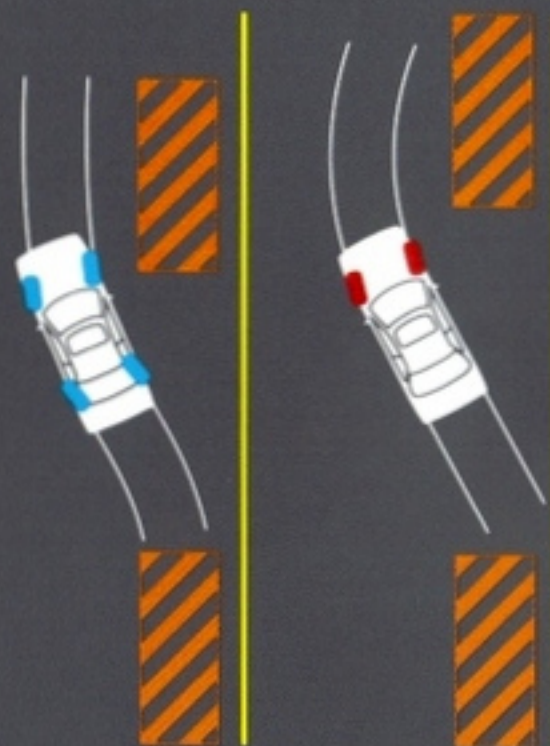
*Two-wheel steering.*

*Four-wheel steering.*

*When making a tight turn, the front and rear wheels are steered in opposite directions, reducing the turning radius.*

*Four-wheel steering.*

*Two-wheel steering.*



*In low speed maneuvers such as parallel parking, 4WS helps the Prelude Si fit into tight parking spaces.*



*Unique, all-mechanical rear wheel steering box.*

### ***High Performance Exhaust System***

The Prelude utilizes a low back-pressure, racing-type "four-into-two-into-one" exhaust system. The system promotes combustion chamber "scavenging" and also improves cylinder head breathing. The result is increased engine torque and a flatter torque curve for better engine performance.

### ***Engine Mounting***

Engine vibration transferred to the passenger compartment is minimized by Prelude's Inertia Axis Engine Mount system. This unique system places engine mounts along the engine's inertial axis—the axis along which it actually vibrates when operating.



Air conditioning can cool things off in your Prelude S. Honda air conditioners also act as a dehumidifier. By combining the air conditioning with the heater adjustment, year-round temperature and humidity control is available.

When you want to add a sporty look to your Prelude or load it up for road trips, how about a rear deck rack?

See your Honda dealer for a full-line accessory brochure. And drive a Prelude with your personal touch.



*Color-coordinated carpeted floor mats in five colors are an attractive way to protect the interior. Colors not shown include sand and camel.*

*Design your Prelude with a choice of directional or mesh-type wheels. Top row, left to right: 13" silver mesh, 13" black mesh, 13" silver/gold mesh; middle row, left to right: 13" turbine-12, 13" gold mesh; bottom row, left to right: 14" directional machine-finish, 13" directional painted-finish, 13" directional machine-finish.*

*The rear tail spoiler with an integrated high-mount LED brakelight is available for the Prelude S or Si.*





## Personalize your Prelude.

Why not have your Prelude reflect your individuality?

Design your own sound system with either a Compact Disc player or a 7-Band Graphic Equalizer.

Give your Prelude your personal look from the ground up with a variety of stylish, aluminum alloy wheels.

A leather steering wheel cover will give you an even sportier feel for the road.

Maintain your Prelude's finish with door edge guards, fenderwell trim and rear mud guards.

And a nose mask will help protect the front end against stones and insects.

For long drives, a center armrest provides extra comfort.

Improve your visibility at night and during bad weather with integrated halogen fog lights for your Prelude S.



*The Honda Vehicle Security System helps protect your Prelude from intruders. This system can be activated either manually (with the remote shown) or in a passive mode.*

*For superior clarity, listen to your favorite tunes with the Compact Disc player.*






	PRELUDE Si	PRELUDE S
<b>EXTERIOR FEATURES</b>		
Integrated Fog Lights	●	
Door Lock Light	●	
Dual-Outlet Exhaust System	●	
Dual Remote-Operated Door Mirrors	Power	●
Power Antenna	●	●
Power Moonroof	●	●
5mph, Impact-Absorbing Bumpers	●	●
Tinted Glass	●	●
<b>INTERIOR FEATURES</b>		
Power Windows	●	
Air Conditioning	●	
Ignition Switch Light	●	
Driver's Left Footrest	●	
Cruise Control	●	●
Adjustable Steering Column	●	●
AM/FM ETR Stereo Cassette with 4 Speakers	High Power	●
Amplifier	4x12.5-Watt RMS	2x20-Watt RMS
Fold-Down Rear Seatback with Lock	●	●
Front Reclining Seatback	with Memory on Driver's Seat	●
Remote Trunk-Lid and Fuel Filler Door Release	●	●
Rear Window Defroster with Timer	●	●
3-Point Passive Restraint Seat Belt System (front)	●	●
3-Point Seat Belt System (rear)	●	●
<b>EXTERIOR/INTERIOR COLORS</b>		
Polar White/Black	●	
Barbados Yellow/Black	●	
Granada Black Pearl/Camel	●	
Phoenix Red/Black	●	●
Laurel Blue Metallic/Blue	●	●
Laguna Gold Metallic/Sand	●	●
Noble Silver Metallic/Gray		●
<b>4WS OPTION PACKAGE</b>		
Steer-Angle Dependent 4WS	●	
Rear Tail Spoiler with LED Brake Light	●	
14-inch Alloy Wheels	●	
Power Door Locks	●	
Bronze-Tinted Glass	●	
<b>EPA MILEAGE ESTIMATES<sup>1</sup></b>		
49-State City/Hwy. (5-speed manual)	23/27	22/27
49-State City/Hwy. (4-speed automatic)	21/27	20/26
California City/Hwy. (5-speed manual)	23/27	23/28
California City/Hwy. (4-speed automatic)	21/27	21/26



**SPECIFICATIONS AND DIMENSIONS/FEATURES, OPTIONS AND STANDARD EQUIPMENT**

	<b>PRELUDE SI</b>	<b>PRELUDE S</b>
<b>ENGINE</b>		
Type	Aluminum-alloy in-line 4	Aluminum-alloy in-line 4
Displacement (cc)	1958	1958
Horsepower @ rpm (SAE net, MT/AT)	135 @ 6200	104 @ 5800/105 @ 5800
Torque (lb.-ft. @ rpm)	127 @ 4500	111 @ 4000
Compression Ratio	9.0:1	9.1:1
Valve Train	DOHC, 16-Valve	SOHC, 12-Valve
Fuel Induction System	Multi-Point Programmed Fuel Injection: PGM-FI	Dual Side-Draft, Constant Velocity
Ignition System	Electronic	Electronic
<b>DRIVE TRAIN</b>		
Type	Front-Wheel Drive	Front-Wheel Drive
Manual Transmission	5-speed	5-speed
Electronically Controlled Automatic Transmission (Available)	4-speed w/Sport Shift	4-speed w/Sport Shift
Final Drive Ratio (MT/AT)	4.266/4.133	4.187/4.066
<b>BODY/SUSPENSION/CHASSIS</b>		
Body Type	Unit Body	Unit Body
Suspension	4-Wheel Double Wishbone w/Coil Springs	4-Wheel Double Wishbone w/Coil Springs
Stabilizer Bar (mm, front/rear)	25.4/17	25.4/17
Steering Type: Variable-Assist Power Rack-and-Pinion	●	●
Steering Wheel Turns, Lock-to-Lock	2.81 (2.66**)	2.81
Turning Diameter, Curb-to-Curb (ft.)	34.8 (31.5**)	34.8
Dual-Diagonal Brake System	●	●
Wheels	14-inch Steel Wheels with Full Covers	13-inch Steel Wheels with Full Covers
Tires	195/60 R14 85H Michelin MXV	185/70 HR13
<b>EXTERIOR DIMENSIONS</b>		
Wheelbase (in.)	101.1	101.1
Length (in.)	175.6	175.6
Width (in.)	67.3	67.3
Height (in.)	51.0	51.0
Track (in., front/rear)	58.3/57.9	58.3/57.9
Curb Weight (lbs., MT/AT)	2712/2747	2571/2610
Coefficient of Drag (Cd)	0.34	0.34
<b>INTERIOR DIMENSIONS</b>		
Headroom (in., front/rear)	36.9/34.1	36.9/34.1
Legroom (in., front/rear)	43.1/27.1	43.1/27.1
Shoulder Room (in., front/rear)	53.1/51.1	53.1/51.1
Hiproom (in., front/rear)	51.5/45.1	51.5/45.1
Cargo Volume (cu. ft.)	11.0	11.0
Interior Volume (cu. ft.)	87	87
<b>CAPACITIES</b>		
Engine Oil with Filter (qt.)	5.1	5.1
Fuel (gal.)	15.9	15.9
Cooling System (qts., MT/AT)	6.7	6.3/5.6

 This worldwide symbol represents Honda Motor Co., the source of various line makes of quality automobiles. †Mileage figures shown for comparison. \*\*With 4WS option package.

**3-Year/36,000-Mile Limited Warranty:** Ordinary maintenance items or adjustments, parts subject to normal wear and replacement and certain items are excluded. See your Honda dealer for the terms and conditions of this limited warranty.