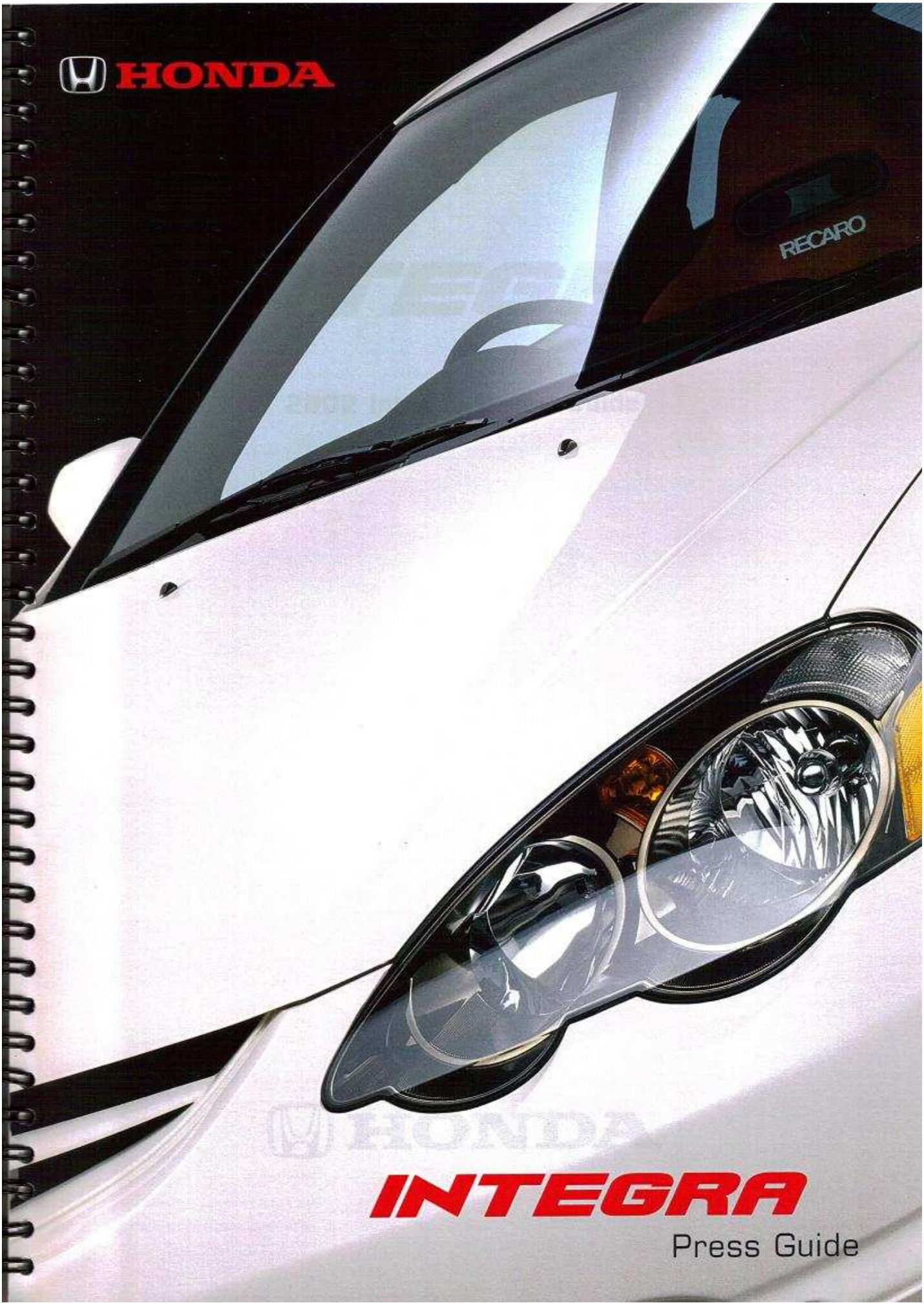
HONDA
RECARO
INTEGRA
Press Guide

INTEGRA

2002 Integra Press Guide

HONDA

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Overview

Honda's 2002 Integra range enters new realm of sports sophistication

Honda has redefined Integra with an all-new range for 2002. Two new models - featuring bigger engines with a new "intelligent" incarnation of VTEC - continue the Integra's sports heritage and spirit of driving pleasure.

Integra engineers spearheaded these key areas for development - styling, performance with improved chassis, body and engine, and safety and low emissions.

Honda also took the unusual step of developing a Type R variant in parallel with the new Integra. The result is a sportier base model and a more refined range topping model that retains the race-bred driving experience synonymous with Honda's Type R badge.

The new Integra Type R features a slick-shifting, close-ratio 6-speed manual gearbox, while the Integra gets a sequential shift 5-speed automatic transmission or close-ratio 5-speed manual.

Central to the 2002 Integra is an all-new 2.0-litre i-VTEC LEV engine - the first of Honda's new generation engines to be sold in Australia.

i-VTEC combines Honda's innovative valve timing technology with VTC - Variable Timing Control - that continually adjusts camshaft phasing to provide linear engine performance throughout the rev range, low fuel consumption and LEV performance.

Two versions are available - powering the Integra is a 118 kW 2.0-litre i-VTEC four-cylinder engine with peak power at 6500 rpm and 191 Nm @ 4000 rpm.

A higher output version of i-VTEC lifts Integra Type R engine performance to a massive 147 kW.

A light, compact, short-throw shift 6-speed manual with multiple-cone synchronisers helps extract maximum performance from the Type R powerplant.

A new body was designed to meet the demands of the high-performance powertrain.

Boasting 116 per cent greater torsional rigidity and 35 per cent increased bending rigidity, the new Integra body enhances handling and ride as well as overall strength.

The Integra chassis is revised to include new compact Control-Link strut-style front suspension, compact rear double wishbone suspension and quick ratio power steering for smooth and controlled handling and comfortable ride.

Honda's Integra Type R specially tuned suspension advances the Type R's acclaimed at-the-limit performance. A torque-sensing Limited Slip Differential delivers superior traction and reduced understeer.

Anti-lock brakes and 4-wheel discs housed within 16-inch alloy wheels improve the Integra's stopping power.

Compact chassis components and compact engine have allowed the Integra to adopt a cabin forward design. Its sharper styling contributes to a 4 per cent aerodynamic improvement.

For the first time, Integra achieves LEV status. Honda countered emission levels by positioning the exhaust at the rear of the engine. The shorter distance between the engine and catalyst adds up to a more complete conversion of exhaust gases. A unique "e-shaped" dual exhaust manifold improves exhaust flow.

The new Integra is as safe as it is quick. The body uses high tensile steel and numerous reinforcements to help it meet the highest international safety standards. The Type R gains aluminium door, mid-body and front and rear bumper beams.

Standard safety equipment across both cars includes dual SRS airbags, anti-lock brakes, three point seatbelts with pretensioners in the front seatbelts.

The Integra's pedestrian safety technologies target the prevention of lower body injuries with shock absorbing bumpers, bonnet and front guards. Inside, head protection measures boost occupant safety.

Naturally, the Integra features a driver-oriented cockpit. A dome-shaped pod houses large, metallic dials with red illumination and "zero angle" needles to give the Integra a high tech, sporty feel.

Occupants benefit from increased knee and headroom and extra storage compartments around the cabin. The rear cargo capacity is up to 321 litres and load opening is extended from 400 to 770 mm.

The Integra's equipment has been extensively upgraded - body hugging sports seats, a small three-spoke steering wheel, automatic climate control air-conditioning, 4-speaker stereo with CD tuner, remote central locking and security alarm are all standard.

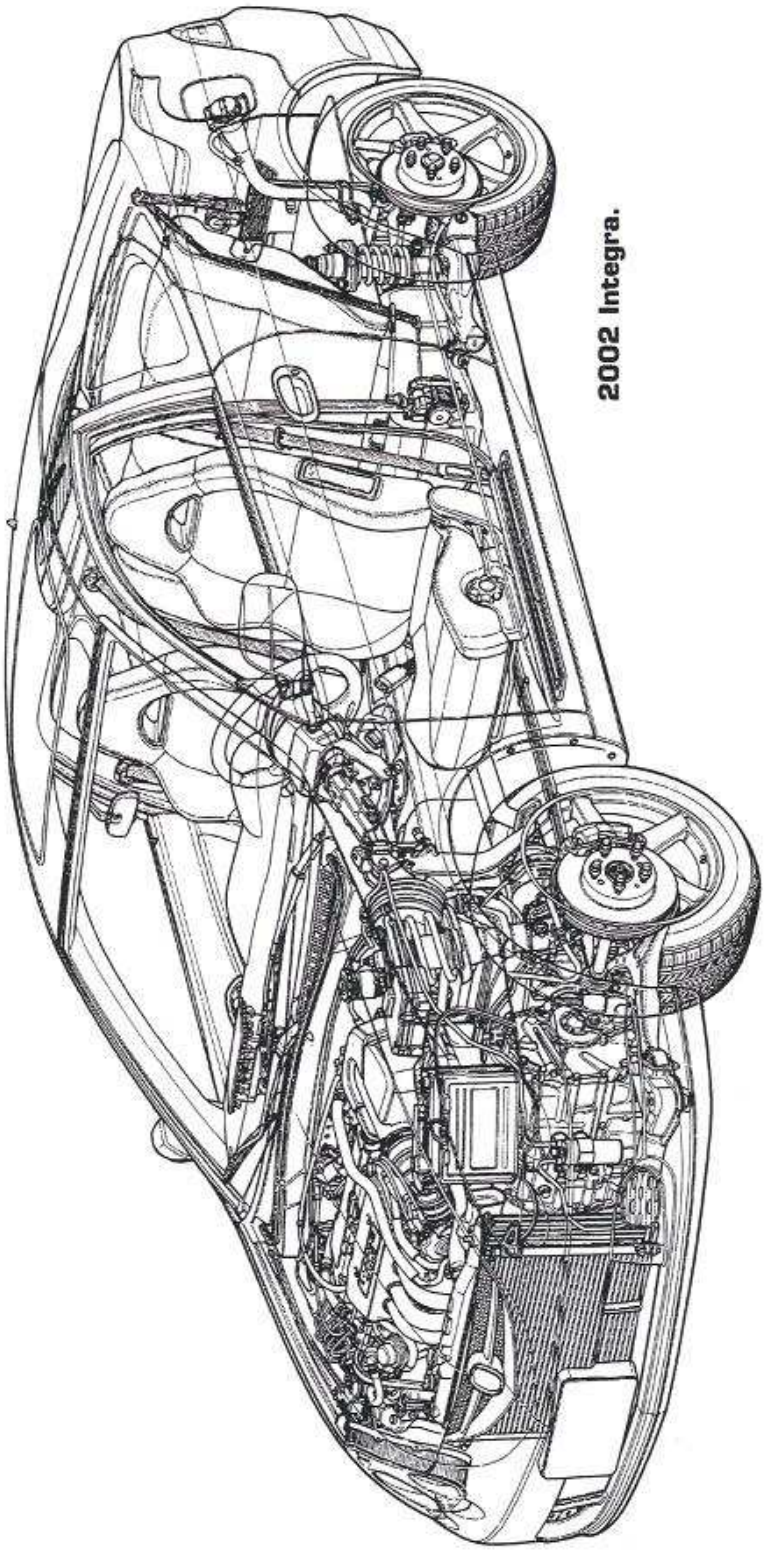
The Type R interior extends its racing theme with suede Recaro seats, Momo steering wheel, aluminium pedals, foot rest and shift knob. The Type R exterior also gets the racing treatment with a high wing spoiler, body coloured side sills, chin spoiler and Type R decals.

Honda Australia Director Lindsay Smalley said the latest Integra is bound to attract driving enthusiasts in search of cutting edge technology, luxury features, advanced styling and a pure driving experience.

"The 2002 Integra clearly enters a new realm of sophistication," he said.

"Every aspect of the Integra has advanced - from the engine, upgraded equipment levels, exterior and interior design to its crash performance and build quality - to make the Integra experience even more enjoyable."

"Honda's passion for cars and motorsport is never more clearly expressed than in its sports cars, and the new Integra is a thrilling example."



2002 Integra.

Sales & Marketing

Now more powerful and luxurious, the 2002 Honda Integra has broadened its appeal to a wider range of customers.

With each generation, the Integra has grown more sophisticated. Honda's third generation Integra introduced Type R - a raw, uncompromising variant that delivered performance on par with vehicles of greater engine capacity and price.

In a short space of time, the Integra Type R elevated the Integra to the serious sports car category. Integra sales were boosted significantly when it roared onto the Australian market in October 1999, with the Type R accounting for around 50 per cent. Honda anticipates a similar sales split with the new model.

Honda believes young, well informed driving enthusiasts will be attracted to the Integra's high equipment levels, advanced, efficient technology and superior performance characteristics.

The diversity of the two models allows Honda a two pronged attack. Base model Integra appeals to those looking for a smart, sporty yet sophisticated coupe designed for driving pleasure, while the Integra Type R is designed to cater to customers seeking a performance edge.

Honda believes around 75 per cent of Type R customers will be men, while Integra will draw a 45/55 male/female buyer ratio.

The Integra is expected to interest younger buyers as well as traditional Honda sports car customers. Honda is certain the combination of i-VTEC, LEV and crash safety technologies will increase the Integra's appeal to those who like their performance cars sophisticated, thoughtful and efficient.

Honda has set its sights on the number one spot in the sports car segment, aided by Integra sales of at least 120 units per month in its first year of sales.

Honda Australia Product Manager Justin Orr said the Integra has a winning formula and builds on the elements that made the previous generation Integra an enduring success.

"Honda has delivered an exciting driver's car in the new Integra," he said.

"Not only does the new model boast superior levels of luxury and refinement, every aspect of Integra has been redesigned in the pursuit of driving pleasure."

"Bigger, more powerful engines with i-VTEC, dual SRS airbags, climate control, remote central locking with security alarm, 16-inch wheels and CD tuner add up to a very solid package."

Main Features

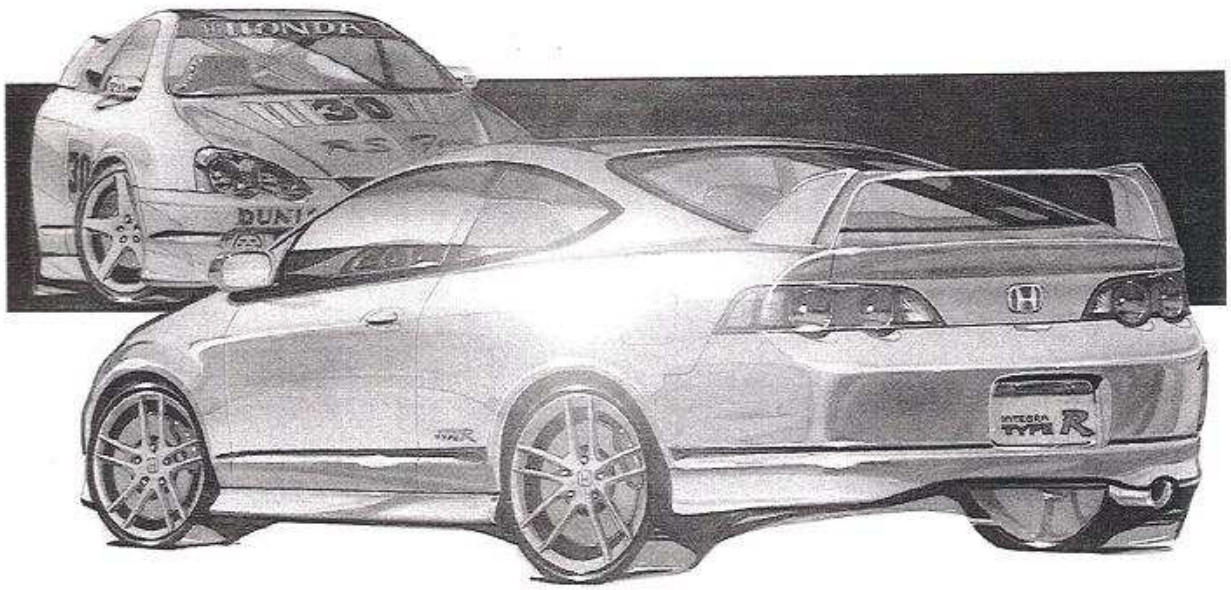
Integra

- All-aluminium, 2.0-litre DOHC i-VTEC with VTC (Variable Timing Control) 4-cylinder LEV engine, producing 118kW of power @ 6500rpm and 191Nm of torque @ 4000rpm.
- Choice of two 5-speed transmissions - manual with triple-cone synchronisers on gears 1 and 2 and a sequential shift automatic with Grade Logic Control.
- ABS brakes.
- Four-wheel disc brakes.
- All-new Control-Link strut-style front suspension.
- Compact rear double wishbone suspension.
- Driver and passenger airbags.
- Climate control air-conditioning (Integra only).
- Power windows.
- Power mirrors.
- Remote central locking.
- Security system.
- Alloy wheels.
- Halogen headlights.
- AM/FM 4-speaker stereo with CD tuner.
- Five cupholders.
- Low impact interior head protection design.
- Pedestrian safety designed front bumper, bonnet, guards and wiper brackets.

Integra Type R

As Integra, plus:

- All-aluminium, 2.0-litre DOHC i-VTEC with VTC (Variable Timing Control) 4-cylinder LEV engine, producing 147kW of power @ 7400rpm and 192Nm of torque @ 6000rpm.
- All-new synchronised 6-speed close-ratio manual gearbox - with triple cones on 1 and 2, double cones on 3-6.
- Sports-tuned suspension - strut-style at the front and rear double wishbone.
- 300mm front disc brakes.
- 205/55 R16 89V Bridgestone performance tyres.
- Aluminium bumper, door and centre beams.
- Front spoiler, high wing rear spoiler and body-coloured side skirts.
- Recaro seats.
- Momo leather steering wheel.
- Aluminium pedals.
- Aluminium Type R plate affixed to centre console.
- Type R graphics.
- Four cupholders.



What's New

Integra

- Bigger new generation 2.0 litre i-VTEC engines with VTC or Variable Timing Control.
- Low Emission Vehicle status.
- All-new 5-speed sequential shift automatic transmission with Grade Logic Control and linear solenoid direct-acting control.
- New second gear hold function and lock-up system.
- All-new Control-Link strut-style front suspension.
- Compact rear double wishbone suspension.
- Passenger side airbag.
- Remote central locking.
- Climate control air-conditioning. (Integra only)
- CD tuner.
- 16-inch alloy wheels.
- High-mounted steering box with long control arms for improved toe control.
- Driver's style cockpit with red illuminated dials and switches.
- Flat floor in rear.
- Cabin forward design.
- Stronger body with 116 per cent increased torsional rigidity and 35 per cent increased bending rigidity.
- Increased tread - 10mm at the front, 20mm at the rear.
- Compact, lightweight engine and gearbox package - 10kg lighter than one it replaces.
- New rear-mounted exhaust manifold for more efficient catalyser performance.
- E-shaped dual pipe exhaust with 11 per cent reduced exhaust resistance.
- U-turn silencer unit.
- Dual stage intake manifold.
- Resin fuel tank.
- One-piece sport style bucket seats.
- Halogen headlights.
- Lightweight removable mesh cargo cover.
- Lockable glove box.
- Dual front seatbelt pretensioners.

- Interior head protection structures.
- Pedestrian safety technologies, including shock-absorbing front bumper, bonnet, guards and wiper bracket.
- 371 litre cargo space.

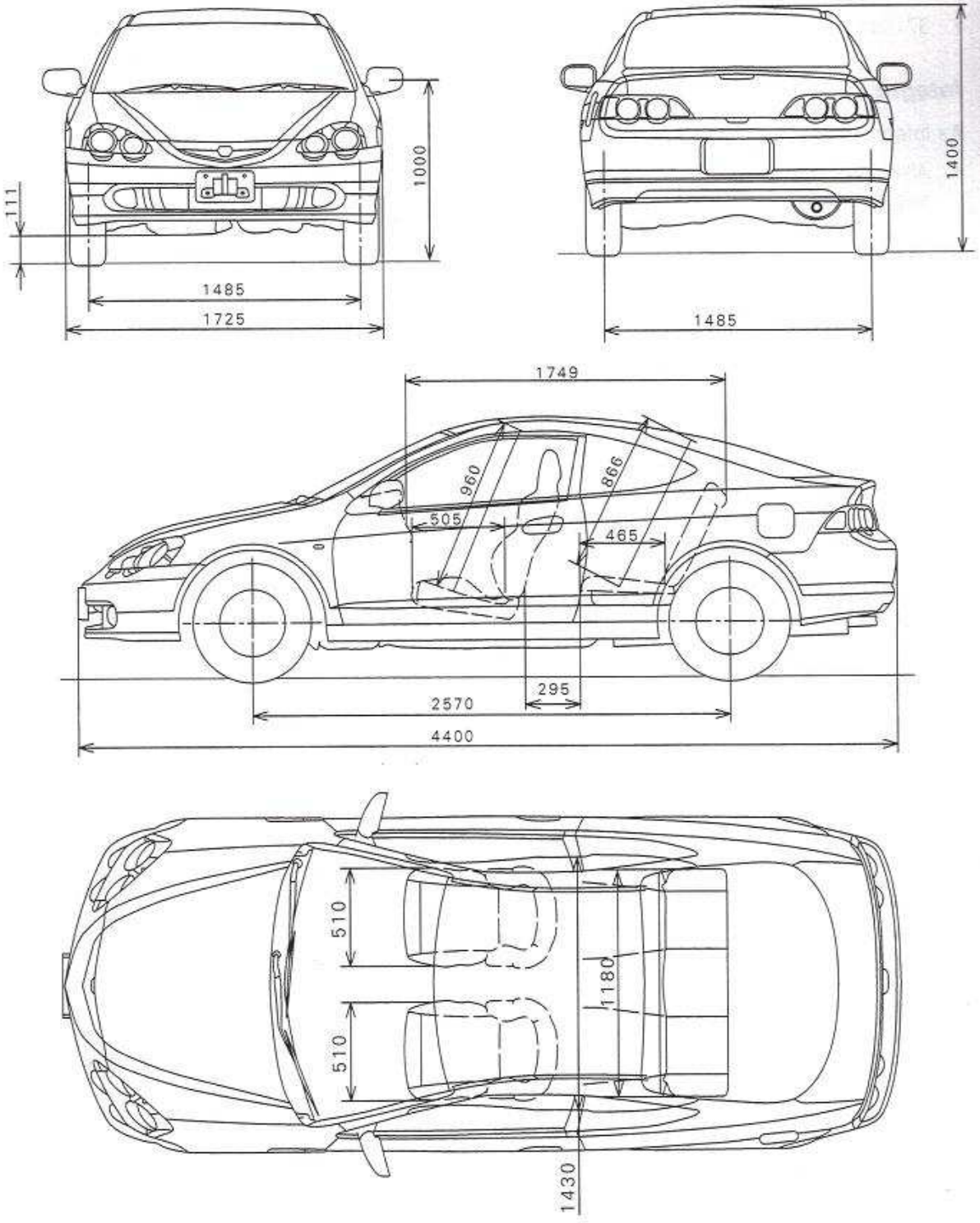
Integra Type R

As Integra, plus:

- All-aluminium, 2.0-litre DOHC i-VTEC with VTC - Variable Timing Control - 4-cylinder LEV engine.
- All-new compact 6-speed close-ratio gearbox with multiple-cone synchronisers for all gears for improved shift feel and reduced gear grinding.
- Sports performance clutch with torsion mechanism and integrated hydraulic damper.
- E-shaped dual pipe exhaust manifold with 25 per cent reduced exhaust resistance.
- Torque induction-type helical Limited Slip Differential.
- 300 mm front disc brakes.
- Brake cooling vents in front bumper.
- Aluminium beams in the front and rear bumpers, doors and mid body.

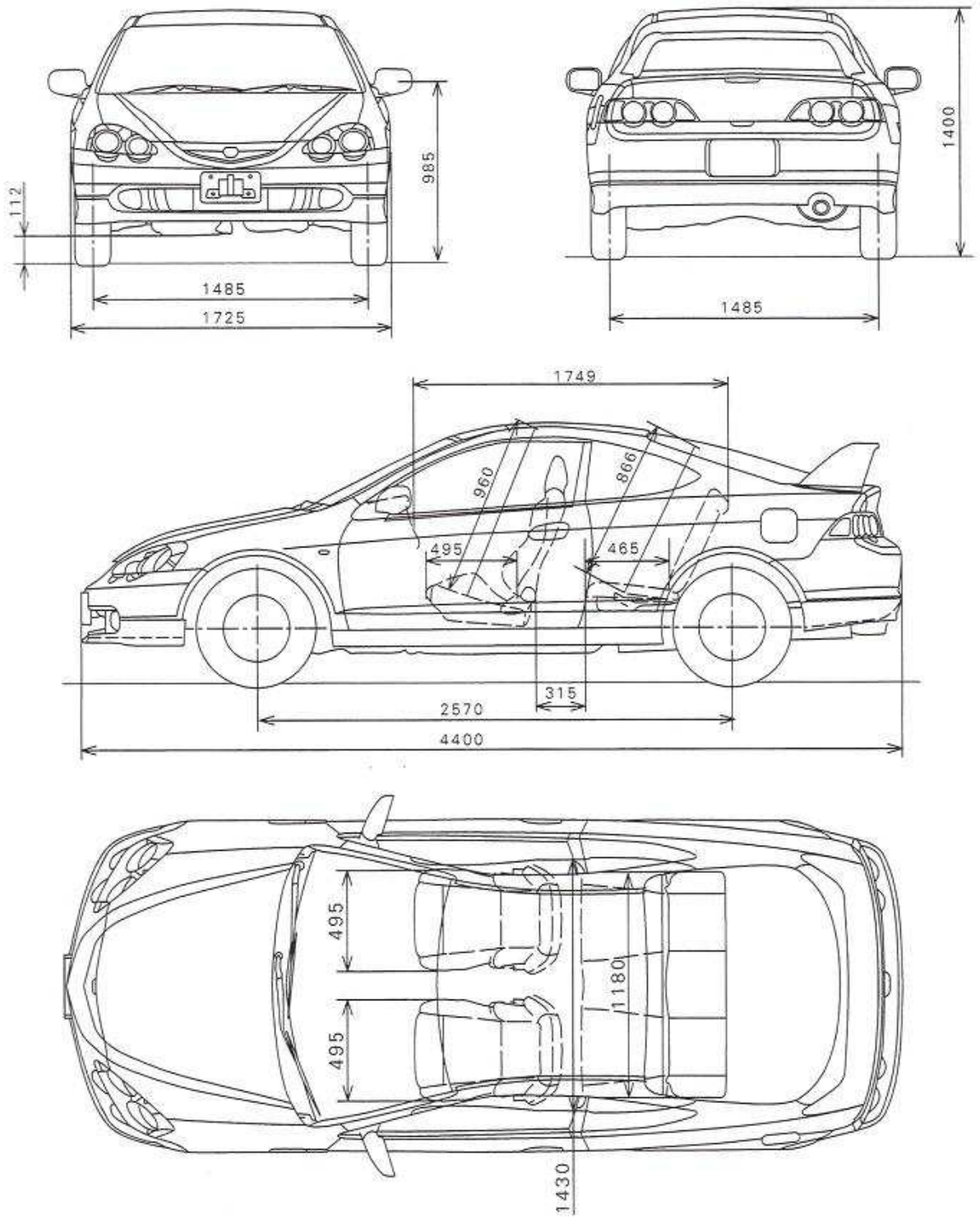
Dimensions

Integra



Dimensions

Integra Type R



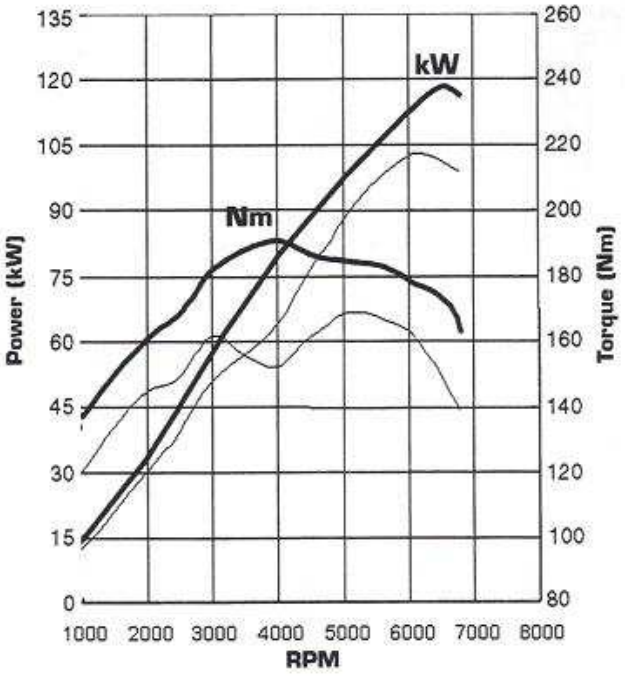
Technical
Powertrain

Integra

2.0 litre DOHC i-VTEC LEV

- **Power:** 118kW@6500rpm
- **Torque:** 191Nm@4000rpm

New 2.0 litre vs. 1.8 litre

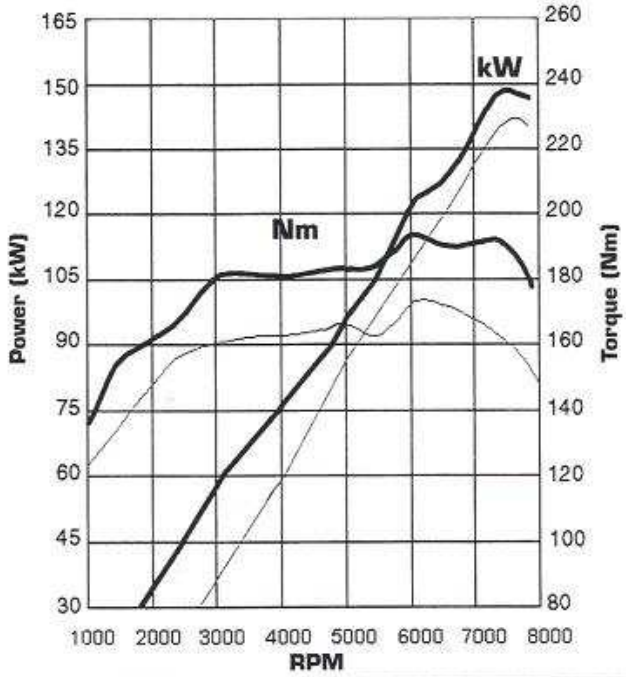


Integra Type R

2.0 litre DOHC i-VTEC LEV

- **Power:** 147kW@7400rpm
- **Torque:** 192Nm@6000rpm

New 2.0 litre vs. 1.8 litre



Overview

The Integra offers two 2.0-litre i-VTEC engines, each combining high performance, efficiency and low emissions.

An all-aluminium, 2.0-litre inline 4-cylinder 16-valve LEV engine delivering 118kW at 6500rpm and 191Nm of torque at 4000rpm powers the Integra.

Meanwhile, the 2.0-litre 4-cylinder Integra Type R powerplant takes its performance dynamics one step further with an advanced version of i-VTEC and a fixed, high-efficiency intake manifold. These features help boost output 147kW at 7400rpm and 192Nm of torque at 6000rpm.

Both share Honda's new-generation "intelligent" valve-control system - a technology that combines VTC, or Variable Timing Control, with VTEC to change valve lift, timing and duration.

The result is increased power and high torque with superior fuel economy and low exhaust emissions.

The new Integra engine also use a rotary valve in the dual stage intake manifold for the selection of a long or short pipe, assuring maximum intake inertia effect in all rpm ranges and improved intake efficiency.

A simple e-shaped separator within the exhaust manifold helps reduce exhaust interference, while a rigid, lightweight two piece cylinder block allows high output with low NVH.

The engines are also compact thanks to a silent camchain and serpentine accessory drive belt - the Type R's engine and transmission package is 50mm shorter and 10 kg lighter than the superseded powertrain.

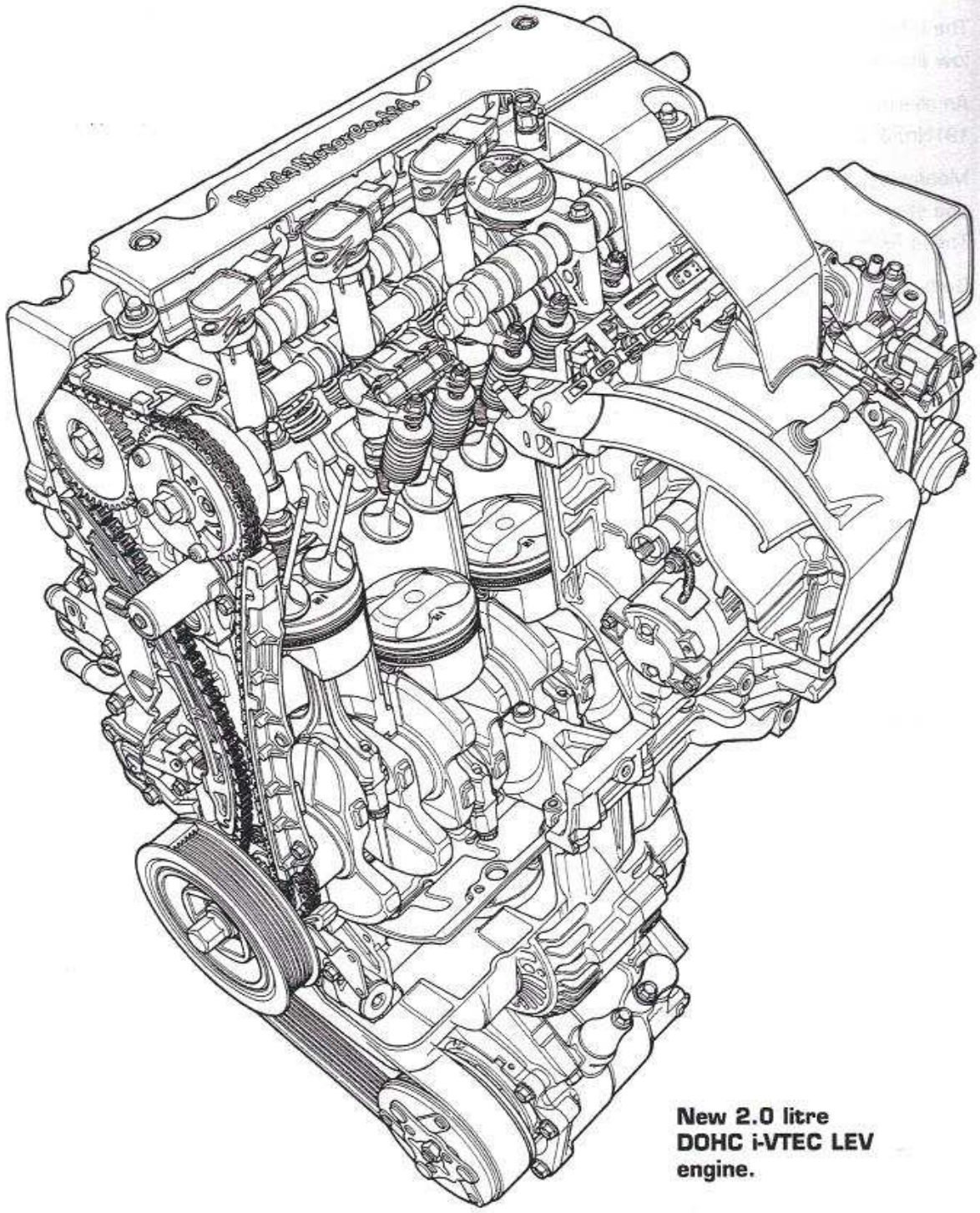
The Integra's transversely mounted engine block is rotated 180 degrees, bringing the exhaust manifold closer to the catalyst for improved light-off and reduced emissions at start-up.

As a result, both new Integra engines reduce NOx and HC by approximately 80 per cent - a performance that meets Low Emission Vehicle-II (LEV-II) standards.

The Integra is available with a choice of two transmissions. For the first time, Integra has an optional electronically controlled, sequential-style 5-speed automatic transmission. The sequential system gives the driver the choice of full automatic shifting or semi-automatic shifting for added performance driving pleasure. The new transmission will only shift up or down if directed by the driver.

The 5-speed manual transmission has a short throw action for precise gear changes.

Designed for the driving purist, the Integra Type R is equipped with a new short-throw 6-speed manual transmission. The compact and lightweight gearbox is engineered with the quick-shift action of a race car transmission. Multiple synchronisers - triple cone on gears 1 and 2, double cone on gears 3 to 6 - help reduce shifting load for a light, responsive feel. A short-throw clutch with a new torsion mechanism that considerably reduces gear rattle compliments the Type R transmission performance.

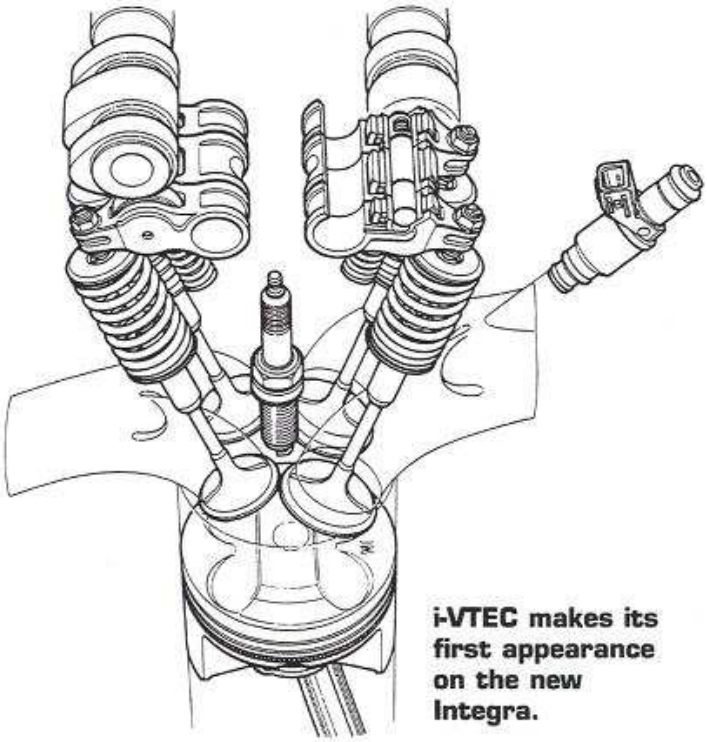


New 2.0 litre DOHC i-VTEC LEV engine.

i-VTEC

Honda's i-VTEC is an evolution of the innovative Variable Valve Timing and Lift Electronic Control (VTEC) system that made its debut on the NSX supercar.

The "intelligent," i-VTEC system takes the concept of variable valve timing to new heights. The combination of VTEC and VTC provides a substantial performance increase across a broad power band while boosting fuel economy and reducing engine emissions.



i-VTEC makes its first appearance on the new Integra.

Honda's VTEC system is able to adjust the lift and opening duration of the valves to maximise low-rpm torque and high-rpm power. At low rpm, VTEC adjusts valve timing and lift for optimum cylinder filling. The timing of the intake valves is staggered and their lift asymmetric - creating a swirl effect within the combustion chambers. The result is increased burn speed with improved combustion stability. As engine rpm builds, VTEC transitions to a high-lift, long-duration cam profile for improved high-rpm engine output.

Honda has developed two variations of i-VTEC for the 2002 Integra - a streamlined version for Integra and i-VTEC with high-performance operation for the Type R.

The Integra uses a new version of VTEC that applies variable timing and lift to the intake valves only.

Unlike previous systems, the new Integra uses only two roller arms per pair of intake valves, instead of three. During low rpm operation, intake air is drawn almost exclusively through the primary intake valve, thereby creating a strong swirl effect to speed combustion. At higher rpm, the secondary rocker arm engages, causing both intake valves to open for the same lift and duration, substantially increasing airflow into the cylinder and boosting performance.

The Type R shares its high-performance VTEC design with the NSX, a three rocker arm system that varies the lift and duration of both the intake and exhaust valves for maximum power output.

At low rpm, the valves follow low lift, short duration camshaft profiles to help boost low-end torque. At higher rpm, the intake and exhaust valves are operated by high-lift, long-duration cam profiles, for maximum high rpm horsepower.

When combined with VTC, both versions help the Integra engine produce a broad and smooth power band with high torque and power.

VTC

Honda's combined VTEC and VTC provides continuously variable camshaft phasing across the engine's entire power band. As engine rpm builds, a VTC actuator - controlled by an engine - control unit that monitors cam position, ignition timing, exhaust O2 and throttle position - advances or retards the intake cam to a maximum of 50 degrees, optimising engine output and reducing emissions.

The VTC actuator is built into the intake side of the camshaft drive sprocket. The phasing of both the sprocket and camshaft is hydraulically controlled.

During operation, high-pressure oil flows from a spool valve through two separate passages into the first camshaft journal. From there, the oil travels through two passages in the centre of the camshaft, corresponding with the advance and retard chambers within the sprocket.

During typical operation, the intake camshaft timing is almost fully retarded at idle for more stable idling while reducing exhaust emissions (NOx). In engine's normal operating range, the engine is controlled to achieve the best balance between high fuel efficiency and low emissions.

As rpm increases, the intake camshaft is advanced, opening the intake valve sooner and providing additional valve overlap. This results in increased fuel economy by reducing pumping losses, and a further reduction in exhaust emissions by creating a large, internal exhaust gas re-circulation effect.

To generate additional power throughout the rev range, the intake camshaft is also continuously varies the amount of advance or retard, instantly adjusting to provide additional power as required by the driver.

Cylinder Head

The Integra engine uses an aluminium cylinder head and a double overhead cam, four-valve-per-cylinder valvetrain incorporating the new i-VTEC system. A generous "squish" area around the combustion chambers yields increased gas turbulence for faster flame propagation and increased efficiency. The camshafts are operated by a maintenance-free silent-chain drive for smoother performance.

Engine Block

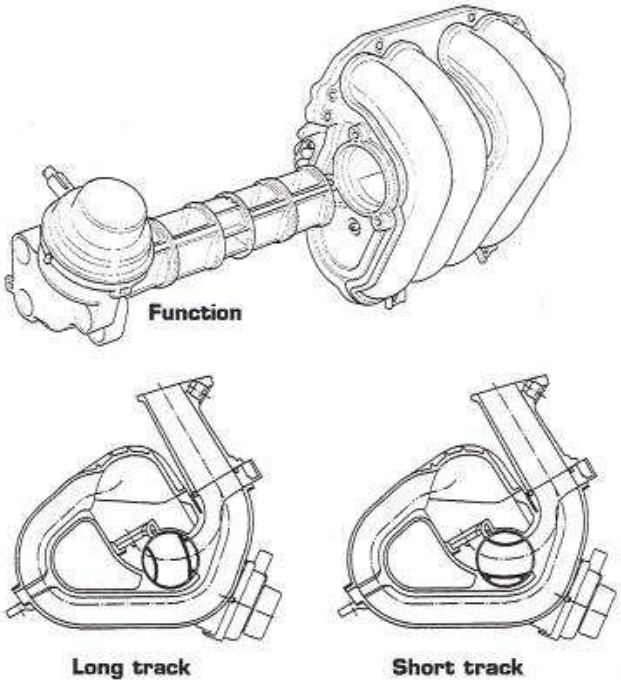
The new next generation Integra engine features a compact aluminium block with cast-in iron liners - a design known for its light weight, high rigidity, and excellent durability. The block has a one-piece aluminium crankshaft carrier that has ferrous-carbon inserts in the bearing caps for additional strength. The Type R incorporates a stiff, cast-aluminium oil pan. The crankshaft is a highly rigid, forged-steel design that uses a special micro-polished surface finish for reduced friction and increased durability.

The Type R engine uses high-strength connecting rods and crankshaft as well as high-compression cast-aluminium pistons.

Dual Stage Intake Manifold

The Integra engine has a dual-stage intake manifold that uses two intake runners for each cylinder, one longer than the other. Below 4600 rpm, only the longer of the two runners delivers air to the cylinder to take advantage of the inertia effect of the long intake path. Above 4600 rpm, a rotary valve in the bore of the short runner opens to allow the passage of additional air to the cylinder. This has the effect of boosting midrange and high-rpm power by utilising the inertia effect at both low and high rpm.

The Type R has a short, high-performance single-stage manifold to help boost high-rpm power.



Dual stage intake manifold.

Programmed Fuel Injection

Each of the Integra engines is equipped with a Programmed Fuel Injection (PGM-FI) system. The system monitors throttle position, engine temperature, intake-manifold pressure, atmospheric pressure, exhaust-gas oxygen content and intake-air temperature. It also controls fuel delivery by four newly developed, multi-holed injectors mounted in the cast-aluminium intake manifold. The ECU also tracks engine operation with position sensors on the crankshaft and both camshafts.

Exhaust System

Standard on the Integra is a newly designed, stainless-steel, low heat-mass exhaust system that weighs around 27 per cent less than the previous generation Integra exhaust.

The system employs a new high-density catalytic converter for improved light-off performance and reduced hydrocarbons and NOx. The new design also improves emissions performance by positioning the exhaust manifold at the rear of the engine. This shortens the distance the exhaust gases must travel to the catalytic converter, resulting in faster light-off and more complete conversion of all exhaust gases.

The exhaust system also incorporates an "e-shaped" dual-path pipe that improves exhaust flow for improved torque and lower emissions.

Honda has reduced exhaust resistance by 11 per cent, while the Type R exhaust system has been tuned with a 25 per cent reduction in backpressure.

NVH

The Integra engines have been engineered for class-leading smoothness and refinement. Both have NVH-reducing features including highly rigid, ferrous-carbon inserts in the main bearing caps for added rigidity, a one-piece crankshaft carrier, a silent chain cam drive and a stiff, cast-aluminium oil pan on the Type R.

Four engine mounts - two liquid-filled - and reinforcements in the engine compartment help further reduce engine noise and vibration.

Transmission

5-Speed Manual Transmission

The new Integra 5-speed close ratio manual is equipped with a short-stroke shift linkage for faster shifting and smoother operation. A refined hydraulic clutch unit reduces pedal effort, while new clutch friction material adds to the longevity and performance.

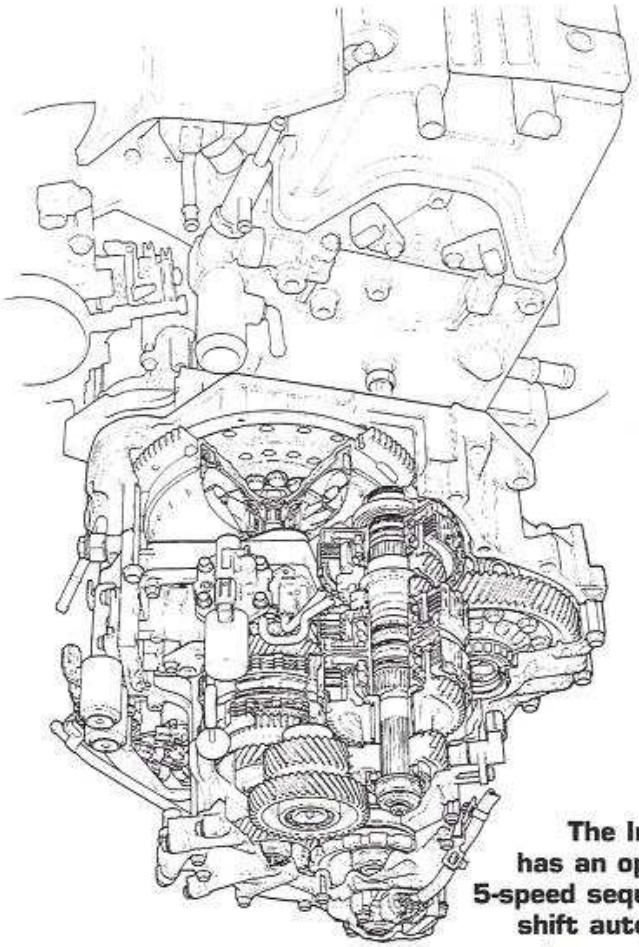
5-Speed Automatic Transmission

The Integra's all-new sequential shift automatic transmission is a new compact and lightweight design - with smoother shift operation and less shift shock than its predecessor.

Honda has combined a direct-acting control that uses an exclusive linear solenoid with new logic control for more responsive shifting.

The transmission's sequential operation gives the driver the option of sports-style manual shifting.

By moving the console-mounted transmission selector handle to the left of the "Drive" position into the manual-mode gate, upshifts and downshifts can be made with a quick flick of the lever. An LED display located between the tachometer and speedometer indicates the gear selected.



The Integra has an optional 5-speed sequential shift automatic transmission.

For race car-style shift feel, the sequential mode transmission logic commands firmer shifts that are quicker than in automatic mode. The system is also engineered for quicker shift response.

The semi-automatic transmission will only upshift and downshift at the driver's command, unless there is a danger of overrevving. The engine ECU will cut fuel flow if the driver fails to command an upshift in time. If over-revving continues after the fuel cut, the transmission will upshift automatically.

The transmission will also stay in the selected gear until the vehicle approaches a complete stop before shifting into first automatically.

The Integra's Grade Logic Control system uses sensors to monitor throttle position, vehicle speed and acceleration/deceleration. By comparing these inputs with a map stored in the transmission computer, the system is able to determine when the vehicle is on an incline and adjust the shift schedule for improved climbing power or downhill engine braking.

6-Speed Manual Transmission

The Integra Type R features a new, short-throw, close-ratio 6-speed manual transmission with around 40 per cent reduced shift effort.

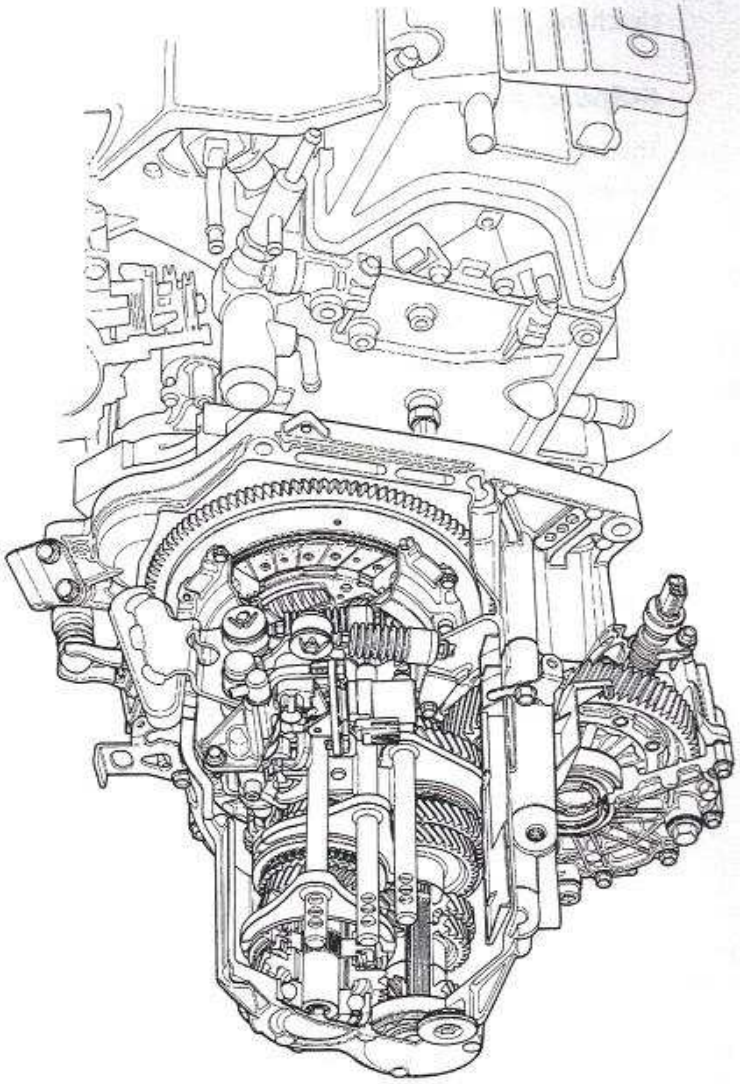
The new transmission uses multiple large-capacity synchronisers - triple cones on gears 1 and 2 and double cones on gears 3 to 6. Its short-stroke shift lever provides race car-style quick and precise shift responses.

Overall, shift stroke is shortened to just 45mm.

Honda has also made the Type R transmission more efficient - it is the same weight and 20mm shorter than the 5-speed manual transmission it replaces.

It has a new wide-angle, clutch-torsion mechanism with two-stage hysteresis to greatly reduce the gear rattling that is common of 6-speed transmission designs.

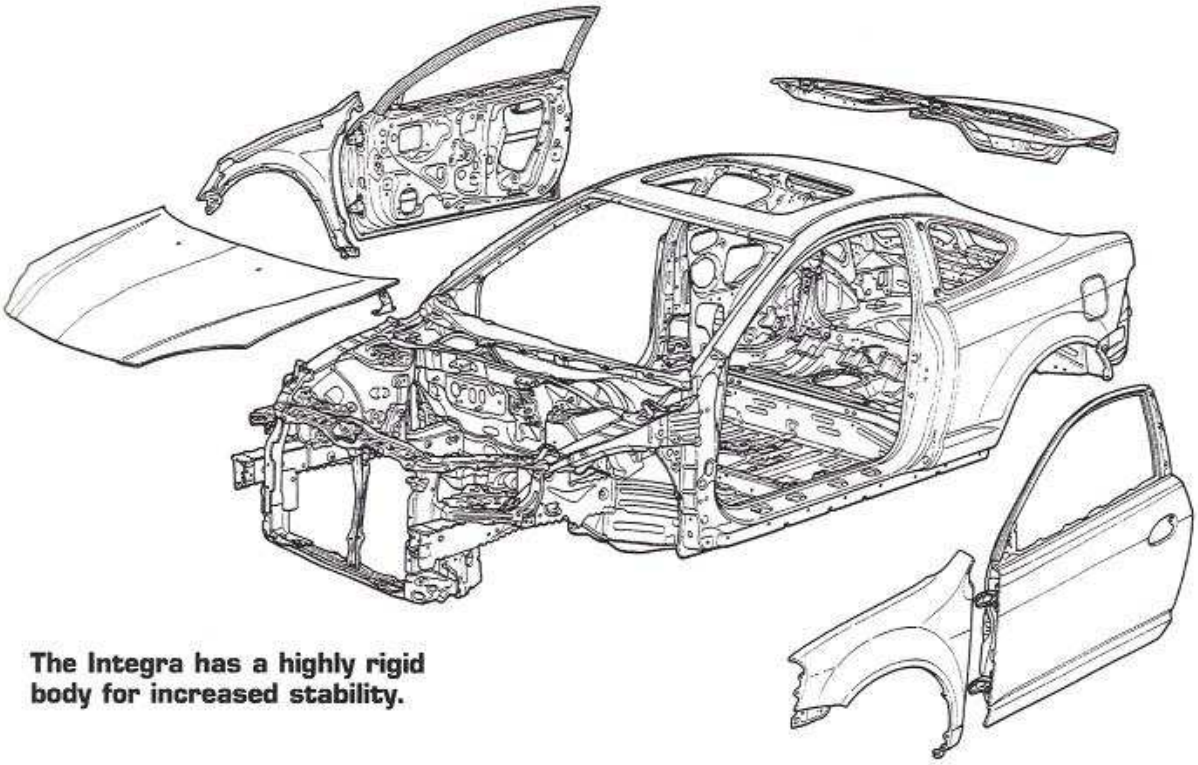
The Type R also has a short-stroke clutch pedal for quicker shifting, a hydraulic damper integrated with the master cylinder for reduced clutch vibration and new clutch-friction material for improved take-off feel.



The Integra Type R's close ratio 6-speed manual transmission has a shift stroke of just 45mm.

Body

The 2002 Integra body was developed to meet the highest standards in two key areas - handling ability and safety.



The Integra has a highly rigid body for increased stability.

The new Integra unit body was designed to meet world class safety standards, despite a short front and rear overhang design, and be highly rigid for traditional Integra handling and stability - without excess weight.

With the body design goals established, Honda carried out extensive computer research using the NASTRAN stress-analysis program.

Honda engineers created the final structure with a high percentage of lightweight yet strong high-tensile steel and numerous strategically placed reinforcements. Performance rods improved frontal rigidity, while other reinforcements improved the structural rigidity of the rear hatch opening.

The resulting body structure has 35 per cent improved bending rigidity and stiffness and 116 per cent improved torsional rigidity compared to the previous generation Integra.

On the Type R, aluminium is used in the front and rear bumpers, door beams and centre beam for added strength.

Dimensions

	1994 Integra	2002 Integra	Difference
Length (mm)	4395	4400	+5mm
Width (mm)	1710	1725	+15mm
Height (mm)	1335	1400	+65mm
Wheelbase (mm)	2570	2570	Same

Class-leading Aerodynamics

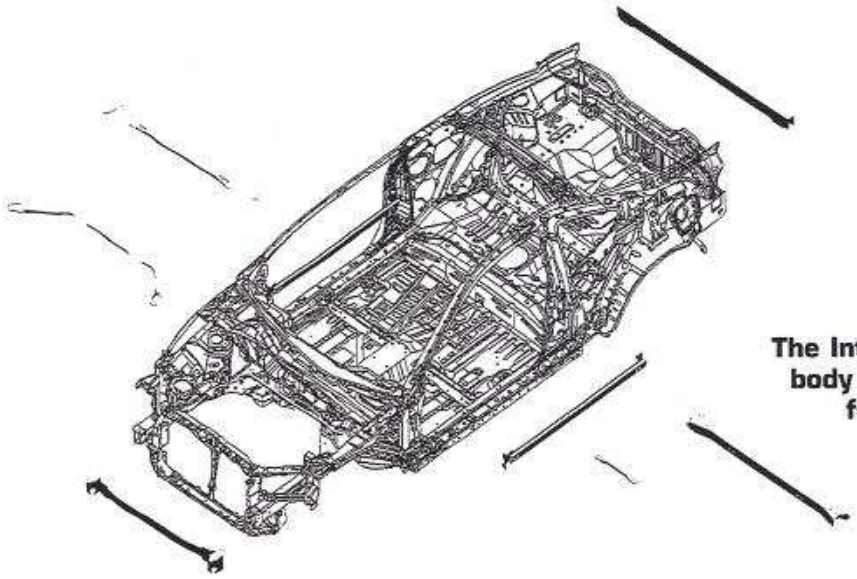
The Integra's sleek lines, angled hood, broad stance, deep chin spoiler and combination headlights contribute to a 4 percent improved drag coefficient compared to the old model - making the Integra the most aerodynamic coupe in its class. The Integra's coefficient of lift is also less, improving high-speed stability.

Contoured window glass in the doors and quarter panels aid the Integra's aerodynamic performance and provide maximum visibility for all occupants.

The Integra doors and quarter-panels use compound-curved glass for a smoothly integrated look and enhanced aerodynamic performance.

Safety

Safety continues to be of central importance in the design of any new Honda, and the Integra is no different.



The Integra has extra body reinforcements for extra impact protection.

Honda has equipped the Integra with an array of standard occupant-protection systems to help it achieve the highest possible rating for front impacts.

To achieve this, the Integra includes front and rear crumple zones, a highly rigid passenger compartment, dual seatbelt pretensioners on both front seats and driver and passenger dual-stage airbags.

In the event of a frontal impact, the energy is divided between the parallel side frame and the sub-frame. The impact is then absorbed, dissipating into the side sill, the floor frame and the front pillars.

Strong side-impact beams in each door provide side impact protection. Further strength is derived from a strong roof gusset. Crushable, energy absorbing pads below each quarter panel and in the door linings also help cushion side impact forces, while a middle-floor crossbeam is fitted between the B-pillars to help lessen body deformation.

The Integra is equipped with a standard driver's and front passenger's air bag Supplemental Restraint System (SRS).

The Integra's active safety features include a quick-ratio power steering system for precise handling, all-season high-performance tyres and four-wheel anti-lock brakes.

Chassis

Overview

Having already established the Integra as a refined and stylish driver's car, Honda engineers aimed to make the Integra's handling response, grip, ride and stability even better.

An all-new, Control-Link MacPherson Strut front suspension design was developed to provide the precise handling, stability and comfort of a double-wishbone layout with packaging efficiency to free up space within the engine bay.

At the rear, a new, highly compact double-wishbone suspension improves handling, ride comfort, stability, and space efficiency. Cornering grip is also enhanced by standard 205/55R16 high-performance tyres on 16-inch, five-spoke alloy wheels.

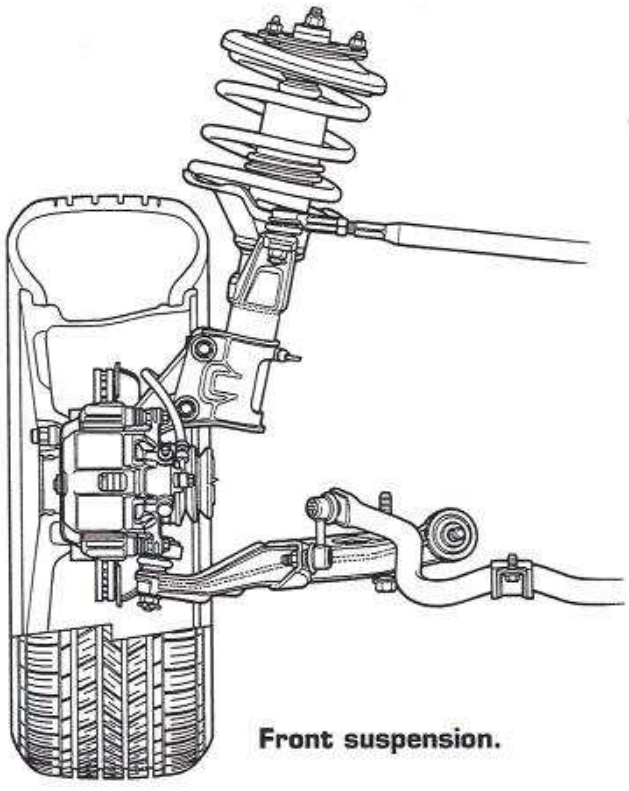
Front Suspension

The Integra's all-new, state-of-the-art Control-Link MacPherson Strut front suspension provides performance on par with a double-wishbone system.

Compared with conventional strut designs, the Integra front suspension provides superior suspension geometry and control by adding a long control link to precisely vary toe change throughout the suspension's travel.

Combined with refined suspension geometry, damping and carefully tuned spring rates, the suspension helps increase the front tyre's contact with the road - enhancing handling performance and stability, particularly during sporty driving.

For extra refinement, the layout incorporates larger wheel bearings and low-friction progressive-valve gas-pressurised shock absorbers that more effectively absorb bumps and other road shocks.



Front suspension.

The suspension's compact design also helped to maximise packaging efficiency and allowed engineers to allocate more room to the engine bay and cabin.

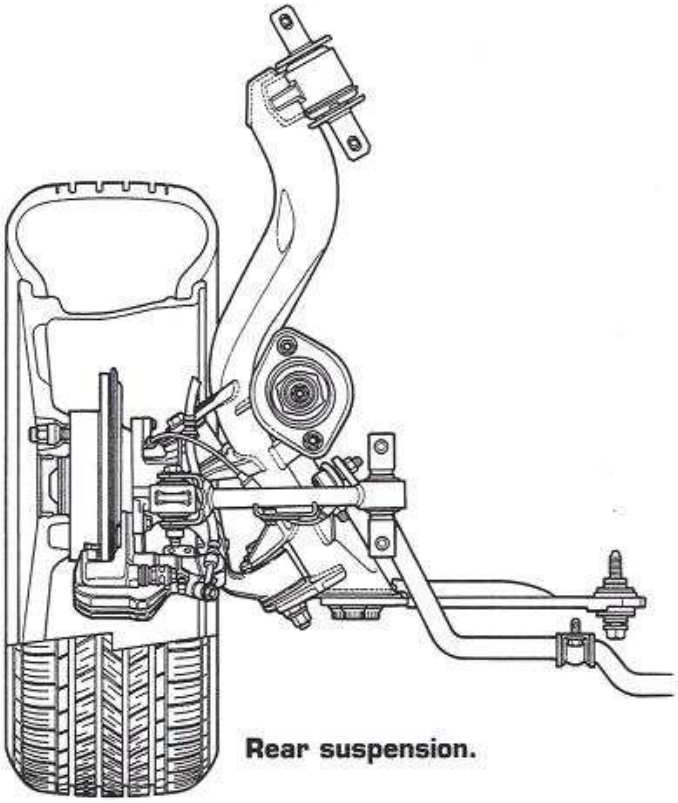
The increased space allowed Honda to incorporate a high-mounted steering gearbox. The steering gearbox uses 43 percent longer, high-mounted tie rods to steer the vehicle and provide improved toe control. The steering system also provides superior tracking stability during cornering.

The Integra Type R's front suspension is tuned with a 40 percent increase in the damping ratio for enhanced handling performance and responsiveness.

Rear Suspension

Like the front suspension, the new double-wishbone rear suspension is carefully designed to deliver high-performance handling, stability, excellent ride comfort and increased space efficiency.

Rear toe-in during braking improves the suspension's stopping stability. The geometry of this new suspension also arcs the tyres rearward when compressing over bumps to reduce road shock and provide a smoother, more comfortable ride. By enhancing the rigidity of the body, bearings, control arms, and stabiliser bar, the rear suspension provides secure tyre-to-ground contact for smooth, predictable handling.



Rear suspension.

The Integra's highly compact rear suspension design uses less space than conventional double-wishbone systems because there is no trailing arm alongside the fuel tank. This allowed engineers to move the exhaust pre-chamber from the cabin floor to the rear - enabling them to design a wider rear cargo area and a flat floor.

Suspension geometry with a well-balanced roll axis further enhances the Integra's stability.

The Integra uses a torque-sensitive, rack-and-pinion power steering system equipped with a new variable-capacity power-steering pump. By incorporating a relief valve, which adjusts necessary power assist through oil-quantity control, the new pump is able to achieve a linear injection volume. Unnecessary oil flow at 900 rpm and above is eliminated - increasing fuel economy by 0.5 percent.

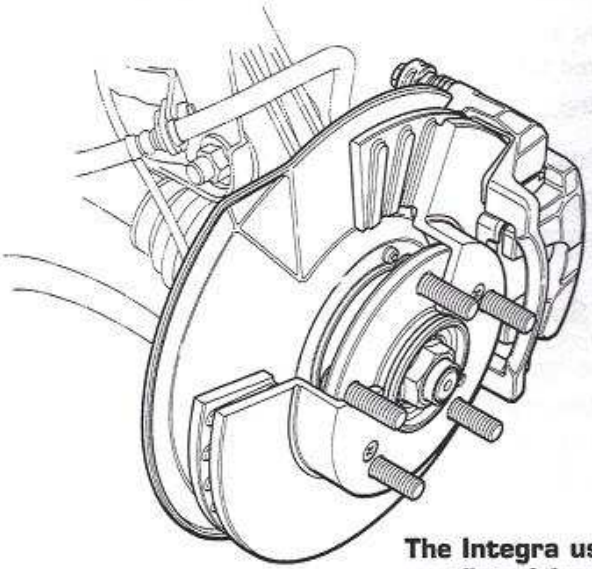
Brakes

The 2002 Integra features 4-wheel disc brakes and anti-lock brakes (ABS) as standard on both models.

The Integra uses 262mm rotors at the front and 260mm rotors at the rear.

A more rigid brake pedal gives the firmer feel necessary for performance driving.

The Type R gains 300mm discs at the front and 260mm at the rear. New air ducts are built into the front bumper for improved brake cooling.



The Integra uses ventilated front disc brakes for better stopping power.

Exterior

Styling

The Integra's aggressively styled front end, broad-shouldered look and cabin-forward posture are the work of Honda's American design centre.

The new shape updates the enduring design of the previous generation Integra with sharper lines and a more solid appearance.

The new Integra is practical as well as stylish. A neatly integrated rear hatch allows easy access to the cargo area, while extensive glass areas ensure high levels of visibility.

Short front and rear overhangs add to the Integra's lean and purposeful appearance, while clever packaging provides abundant cabin room for the driver and passengers. Ease of entry and exit has been improved by raising the Integra's hip point by 40mm.

The face of the new Integra is distinctively Honda, thanks in part to a new headlight design that advances the "round" image of the last-generation Integra.

The design incorporates four lamps - low beam, high beam, indicator, and position light - into a multi reflector and side reflex reflector behind a single clear lens. Headlight brightness, beam - width and range are improved, while neatly integrated taillights complement the Integra's sporty image.

Other design choices ensured the Integra's overall weight was kept to a minimum. The Integra's side and rear glass is thinner and lighter than in the model it replaces. At 3.1mm the rear-quarter and hatch glass is the thinnest in its class.

Type R Styling

Honda's Integra Type R is even more distinctively styled. Racing-style chin spoiler, body coloured side sills and high wing rear spoiler distinguish the Type R as a high-performance contender.

Exclusive 5-spoke 16-inch alloy wheels and brake-cooling vents located in the front bumper are also Type R features.

Interior

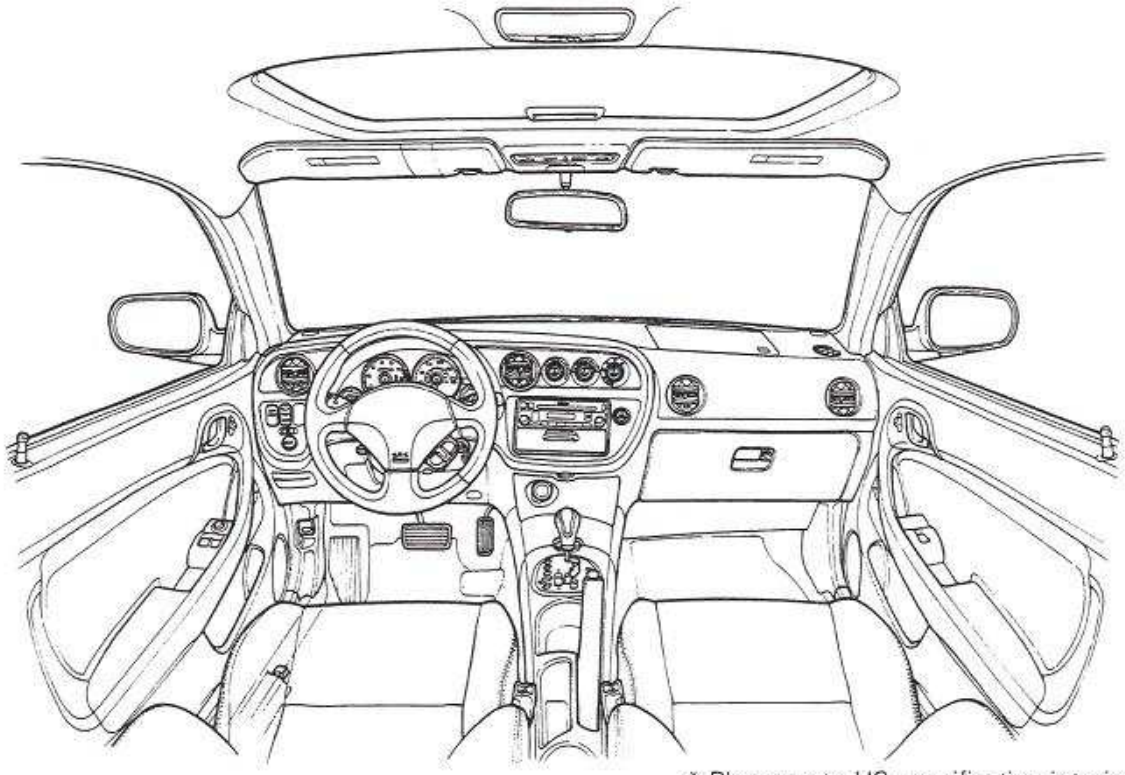
Overview

The Integra's interior has been carefully designed to appeal to driving enthusiasts while also providing comfort and added features for all passengers.

From the clear instrumentation, carefully placed switches and levers, sports seats and cockpit style design, the 2002 Integra encourages occupants to concentrate on the driving experience.

Passengers are well catered for with increased cabin dimensions, sculpted, more supportive seats and other cabin luxuries, such as climate control air-conditioning and power windows.

Cargo space is more usable thanks to the Integra's compact rear suspension package.



* Please note US specification interior.

Driver-oriented Cockpit

The Integra's interior concept is based on enhancing the driving experience.

A wide instrument pod with large, metallic-face analog gauges is angled towards the driver. During the day, the Integra's dash display appears as easy-to-read black numerals on a titanium-tone metallic background. When lit, the gauges are illuminated in red against a black background. The gauges also feature racecar style zero-angle pointers that point to the six o'clock position when at rest.

A smaller, three-spoke steering wheel is designed to convey the Integra's sporty intentions.

One-piece sculptured seats with integrated headrests provide comfort and support during cornering. Deep side bolsters provide lateral support, while firm back and bottom cushions stabilise occupant posture and deliver support during acceleration.

Honda chose materials to add a futuristic and luxurious feel to the Integra interior. The instrument panel is trimmed in a high tech and unique, rubberised geometric-grain material that feels soft to the touch. Other panels feature a metallic finish.

In back, the Integra has 50/50 split-folding seats and a convenient storage tray for sunglasses and other small items.

Standard on the Integra is a 4-speaker in-dash CD tuner. Each of the four speakers has been carefully located to optimise the Integra's cabin acoustics. An antenna integrated into the rear hatch glass provides reliable radio reception.

Other standard cabin luxuries include an automatic climate control air-conditioning (Integra only), power windows with anti-pinching "Auto-up" driver's window, power mirrors, remote central locking, large lockable glovebox, multi-function centre console and hidden, sliding storage tray, dual door pockets and integrated door grips with soft centre pads and elbow-rests.

Type R Interior

The Integra Type R interior adopts the look and feel of a racecar cockpit. Hip-hugging Recaro seats, leather MOMO steering wheel, aluminium pedals and gearshift knob are standard equipment.

A unique aluminium Type R panel adorns the centre console.

Climate Control Air-conditioning

For comfort in all weather conditions, the Integra is equipped with high-efficiency automatic climate control. Operated by three large, easy-to-use dials on the dash, the Integra's integrated system delivers best-in-class cool-down performance while also reducing power consumption by 9 per cent compared to the previous model. Atmospheric sensors provide accurate, fully automatic operation. However, the system can also be operated manually using the dashboard controls. Heat-rejecting window glass improve the efficiency of the climate control system. Air flowing from the dashboard is expelled through stylish round outlets.

Storage

The Integra's integrated hatch opens high to make loading and unloading of cargo easier. The rear cargo space is now up 3 litres to 321 litres - enough room for two large suitcases or two large golf bags without folding down the rear seats.

The Integra's cargo space is large enough to accommodate extra-large items such as bicycles with both seats folded down.

The Integra hatch uses a new damper mechanism that reduces closing effort by 35 percent compared with the old model. An inner handle on the hatch lowers the required reach height.

A lightweight mesh rear cargo cover is integrated into the liftgate for easy loading and unloading.

NVH

Noise, Vibration and Harshness (NVH) have been reduced thanks the Integra's highly rigid structure, extensive sound insulation and tight fit-and-finish tolerances.

To reduce high-frequency road noise, the Integra features carefully developed door-trim seals.

Other sound-blocking measures include a new styrofoam-moulded cover over the spare tyre, noise-insulating carpet, asphalt-based melt sheets in the floor and rear cargo areas, gap-sealing urethane foam in the front pillars, and a dashboard insulator to isolate the cabin from engine noise.

Security

The new Integra features keyless remote central locking with a standard security system. The system allows the driver and passenger doors and rear hatch to be unlocked by pressing a button on the transmitter.

The Integra's keyless entry system benefits from increased operating range - up to 9 metres from the vehicle - and improved security.

An engine immobiliser system is standard on the Integra. A special electronically coded key prevents the car from being started - even if a mechanical duplicate of the key is used. A built-in transponder signals the immobiliser control unit that the key is genuine.

Specifications

Engineering

Engine	All aluminium, 2.0-litre, DOHC, 16 valve, in-line 4 cylinder with i-VTEC	All aluminium, 2.0-litre, DOHC, 16 valve, in-line 4 cylinder with i-VTEC
Displacement (cc)	1998	1998
Bore & stroke (mm)		86.0 x 86.0
Compression ratio	9.8:1	11.0:1
Maximum power kW @ rpm	118 @ 6500	147 @ 7400
Maximum torque Nm @ rpm	191 @ 4000	192 @ 6000
Induction system Programmed Fuel Injection (PGM-FI)	•	•
Emission control Low Emission Vehicle	•	•
Ignition system	Programmed Ignition System (PGM-IG)	Programmed Ignition System (PGM-IG)
Battery	12V maintenance free	12V maintenance free
Emission control	3-way catalytic converter	3-way catalytic converter
Transmission type - Manual	Synchromesh close ratio 5-speed	Close ratio synchromesh 6-speed
Transmission type - Automatic	Electronically controlled 5-speed with Sequential Shift & Grade Logic Control	-
Gear Ratios	Manual/Auto	Manual
1st	3.266/2.684	3.266
2nd	1.880/1.500	2.130
3rd	1.212/0.983	1.517
4th	0.921/0.773	1.212
5th	0.738/0.571	0.972
6th	-	0.780
Reverse	3.583/2.000	3.583
Final	4.388/4.562	4.764

Suspension system

Front -Independent control-link strut-style	•	•
Rear - Compact double wishbone	•	•
Stabiliser bars	Front & rear	Front & rear
Damper type - front & rear	Gas pressurised with Honda Progressive Valve (HPV)	Gas pressurised with Honda Progressive Valve (HPV)
Steering system	Power assisted rack & pinion	Power assisted rack & pinion
Steering wheels turn to lock	2.64	2.53
Turning circle - kerb to kerb	11.6	11.6
Brakes - Front	Ventilated - 262 mm diameter, 21 mm rotor thickness	Ventilated - 300 mm diameter, 25 mm rotor thickness
Brakes - Rear	260mm diameter, 9mm rotor thickness	260mm diameter, 9mm rotor thickness
Anti-lock Braking System (ABS)	•	•
Wheel size	6.5JJ x 16	6.5JJ x 16
Tyre size	205/55 R16 91V	205/55 R16 89V
Alloy wheels	•	•

Exterior dimensions

Overall length (mm)	4400	4400
Overall width (mm)	1725	1725
Overall height (mm)	1400	1400
Wheel base (mm)†	2570	2570
Track [front/rear] (mm)	1485/1485	1485/1485
Ground clearance - laden (mm)	111	112
Vehicle weight - Tare (kg) [man/auto]	1160/1190	1160

Fuel

Fuel tank capacity (litres)	50	50
Recommended fuel (ron)	91 or higher	95
Fuel consumption	Manual/Automatic	Manual
City cycle (litres/100km)	8.0/8.0	9.5
Highway cycle (litres/100km)	5.2/5.0	5.0

Exterior features

Alloy wheels	•	•
Power body coloured door mirrors	•	•
Body coloured door handles	•	•
Projector beam halogen headlights	•	•
Polycarbonate headlight lenses	•	•
Front brake cooling ducts	-	•
2-speed/variable intermittent windscreen wipers	•	•
Rear window wiper washer	•	•
Rear window defroster	•	•
Chrome exhaust finisher	•	•
Front chin spoiler	Black	Body coloured
Rear spoiler	-	High wing
Side sills	Black	Body coloured
Rear skirt	-	•
Antenna in glass	•	•

Interior features

Air Conditioning	Climate control	optional
Remote central locking	•	•
Power windows	•	•
CD tuner	4 speaker	4 speaker
Gear shift	Leather	Aluminium
Sports steering wheel	•	MOMO
Front seats	One-piece bucket	Recaro
Aluminium pedals	-	•
Tilt adjustable steering wheel	•	•
Driver's footrest	•	Aluminium
Remote fuel lid/boot release	•	•
50/50 split folding rear seat	•	•
Passenger rear seat access lever	•	•
Removable rear parcel shelf	•	•
Speedometer, tachometer, odometer, tripmeter (x2)	•	•
Lights on warning chime	•	•
Digital clock in radio	•	•
Cup holders	5	4
Map pocket	•	•
Coin pocket	•	•
Sunvisors with vanity mirror	Driver & passenger	-
Glovebox, lockable and illuminated	•	•

Safety features

SRS airbag	Driver & passenger	Driver & passenger
Anti-lock Braking System (ABS)	•	•
4-wheel disc brakes	•	•
Highly rigid monocoque body	•	•
Security alarm	•	•
Front & rear crumple zones	•	•
Impact absorbing bumpers (8km/h)	•	•
Energy absorbing steering column	•	•
Door intrusion beams	•	•
Padded instrument panel	•	•
Automatic transmission shiftlock	Auto only	-
Vehicle Immobiliser System	•	•
3 point ELR seat belts	•	•
Child safety seat anchorages	x2	x2
High mount rear stop light	•	•
Hazard warning lights	•	•
Laminated front windscreen	•	•
Convex door mirror (passenger side)	•	•

Warranty

3 year/100,000 kms	•	•
3 year paint protection	•	•
6 year corrosion protection	•	•

Colours Exterior/Interior

	Milano Red/Black	Championship White/Red
	Satin Silver/Black	Milano Red/Black
	Nighthawk Black/Black	Satin Silver/Black
	Eternal Blue/Black	Nighthawk Black/Red
	Premium White/Black	Arctic Blue/Blue

• Standard feature

HONDA

honda.com.au/integra