

—4-VALVE HEAD

F

FILTER (AIR, OIL AND FUEL)

Any device used to remove foreign particles or impurities from air, oil, fuel or other fluid. Air, oil and fuel filters are used in all vehicle engines to prevent foreign particles from damaging the engine. In addition, some vehicles use filters to clean the air coming into the passenger cabin.

FINAL DRIVE, FINAL DRIVE RATIO

The gear ratio in a vehicle's differential, expressing the number of turns required by the differential's input shaft (i.e., the pinion) to drive the axle one revolution. For example, a ratio of 2.73:1 means the pinion turns 2.73 times to turn the axle once. A higher number means a lower (or shorter) gear, which provides better acceleration at the expense of top speed and fuel economy. Conversely, a lower number means a higher (or taller) gear, which provides higher top speed and fuel economy at the expense of acceleration.



FOG/DRIVING LIGHTS

These auxiliary lights are used to improve visibility in poor lighting conditions. They are typically mounted below the main headlights. Fog lights are standard on many Hyundai models.



FOLDING REAR SEATS

Rear seats whose seatbacks can be folded to increase a vehicle's cargo capacity. There are several folding rear seat designs. A full folding rear seat means the entire seatback folds as one piece. Split folding rear seat means that the seatback is split into two sections, which can be folded independently. This allows one seatback to remain up so an occupant can use the seat. A split folding rear seat typically has one seatback larger than the other to allow maximum flexibility as in a 60/40 split. Split folding rear seats are standard on all Hyundai vehicles.

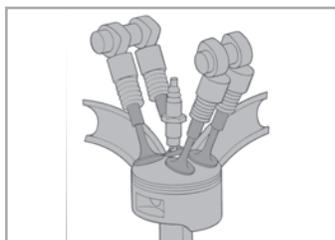
FOOT-POUND (POUND-FOOT)

A measure of the torque produced by the vehicle's engine. Torque is a measure of how much force acting on an object causes that object (the engine's crankshaft in this case) to rotate.

(See "TORQUE")

FORCE LIMITERS

(See "SEATBELT LIMITERS")



4-VALVE HEAD

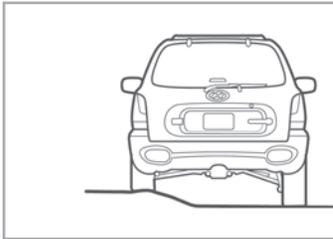
A cylinder head design which features four valves per cylinder (instead of two) for increased efficiency and performance. 4-valve heads offer improved airflow into and out of the engine's cylinders by using two exhaust and two intake valves.

◆ 4-WHEEL DRIVE —

4-WHEEL DRIVE (4WD)

A drivetrain that has the capability of distributing power to all four of a vehicle's wheels. 4-wheel-drive systems offer greater traction for poor road conditions, and can allow a vehicle to go off-road as well. There are several types of 4-wheel-drive systems.

(See "FULL-TIME 4-WHEEL-DRIVE")



4-WHEEL INDEPENDENT SUSPENSION

A suspension system that permits each wheel of a vehicle to react to road conditions independently of the other wheels. This results in better ride and handling characteristics. 4-wheel independent suspensions are standard on all Hyundai vehicles.

(See "SUSPENSION SYSTEM")

FRAME

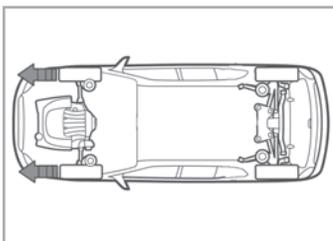
The structural, load bearing component of a vehicle that supports and positions the body and major mechanical components. The frame acts as a vehicle's "backbone."

(See also "SUB-FRAME," "MONOCOQUE" and "UNIBODY")



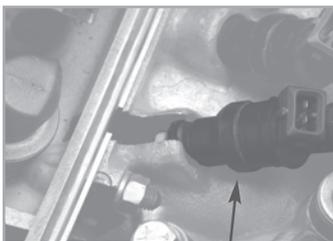
FRONT AIR DAM

A spoiler located below the front bumper. Air dams are designed to reduce the flow of air under a vehicle in order to increase stability. They can also be designed to increase airflow to radiators, reduce aerodynamic drag and/or reduce lift. Tiburon has a deep front air dam.



FRONT-WHEEL-DRIVE (FWD)

A drivetrain system that powers a vehicle's front wheels. Under certain driving conditions, front-wheel drive provides better traction than rear-wheel-drive (RWD) systems because more weight is on the front wheels. Front-wheel-drive systems also allow vehicles to be designed with more interior space because the engine and drivetrain are all concentrated at the front of the vehicle. All Hyundai vehicles feature front-wheel drive, with the exception of 4-wheel-drive models.



FUEL INJECTOR

FUEL INJECTION

A type of fuel system that injects a precise amount of fuel into an engine's cylinder at precisely the right time. The simplest fuel injection systems are known as Throttle Body Fuel Injection (TBI), which use single or dual injectors in a central chamber, which supplies all of the cylinders. The more sophisticated systems are known as port or multi-port fuel injection (MPFI) systems, which position an injector ahead of the intake valve(s) of each cylinder. Fuel injection systems are more efficient than carburetors and provide more power, reduced emissions and improved fuel economy. All Hyundai engines use electronically controlled multi-port fuel injection.

— GALVANIZED STEEL



FULL CLOTH SEAT UPHOLSTERY

A deluxe type of upholstery which uses cloth on all sides of a seat. Less expensive upholstery has cloth only on the seating surfaces, with vinyl on the sides and rear of a seat.

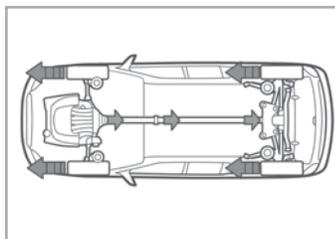


FULL-LOGIC TAPE DECK

A cassette tape player with full-logic controls instead of mechanical, spring-loaded controls found in older or less expensive tape players. Hyundai models that come with a cassette tape player have a full-logic tape deck.

FULL-SIZE SPARE TIRE

A full-size spare tire can be used as a direct replacement for the vehicle's tires. Temporary spare tires are for short-term emergency use only and should not be driven at speeds over 50 mph. All 2004 and newer Santa Fe and Azera models have a full-size spare tire.



FULL-TIME 4-WHEEL DRIVE

A drivetrain that distributes engine power to all four wheels all of the time, automatically transferring power from the wheels that slip to the wheels with better traction. This provides the driver with enhanced control and traction under most driving conditions. Full-time 4-wheel drive is designed primarily to improve traction and performance on paved roads and highways in wet and/or slippery conditions. Full-time 4-wheel drive is available on Santa Fe 2.7L GLS, 4WD models.

FULLY AUTOMATIC AIR CONDITIONING

(See "AUTOMATIC CLIMATE CONTROL SYSTEM")

G

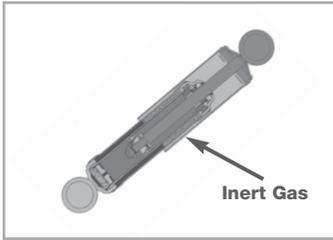
G

The symbol for gravity, used to measure a vehicle's cornering or handling ability. One g equals 32.2 feet/second/second (32 ft./S²), which is the rate at which any object accelerates when dropped at sea level—it is also what determines our weight. If a vehicle were cornering at 1.0 g, the occupants' bodies would be pushed sideways with the same force as their body weight. Few production vehicles are capable of approaching 1.0 g when cornering. Factors which determine a vehicle's cornering ability are tire design, its center of gravity and suspension design.

GALVANIZED STEEL

Steel which has been electrochemically coated with zinc to prevent corrosion.

◆ **GAS SHOCK ABSORBER—**



GAS SHOCK ABSORBER

A shock absorber with a pressurized nitrogen gas chamber in addition to or in place of the traditional air/oil combination. Gas-filled shock absorbers respond more quickly than normal shocks and do not fatigue under hard use. Hyundai equips Tiburon, Sonata and Azera with standard gas shock absorbers.



GAUGES (INSTRUMENTATION)

The instruments in a vehicle which measure vehicle variables, such as speed and engine temperature, and communicate them to the driver. Most vehicles have a speedometer, engine temperature gauge and fuel gauge. A tachometer is frequently found on many vehicles. Other gauges that are less frequently installed are engine oil pressure gauge, engine oil temperature gauge, an amp meter or volt meter, and a fuel economy (engine vacuum) gauge.

GPS (GLOBAL POSITIONING SATELLITE)

GPS is a satellite system devised for use by the U.S. military that has been released for public use. Through triangulation, the satellites can determine the location of a sensor within a few feet. Its automotive application is in the use of vehicle navigation systems and vehicle tracking/communication and concierge systems such as General Motors OnStar®.

GROUND CLEARANCE

The distance measured from the lowest point underneath a vehicle to the level ground below.

(See "EXTERIOR DIMENSIONS")



GROUND EFFECTS

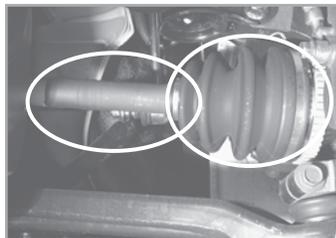
The use of various aerodynamic devices, such as spoilers and side skirts, to harness the air that travels under a vehicle in order to create downforce at high speeds, which improves stability and control. Ground effects technology was pioneered in Formula One race cars in the 1970s and 1980s.

GROSS VEHICLE WEIGHT RATING (GVWR)

The maximum allowable loaded vehicle weight, including the vehicle and its equipment, fluids, occupants and cargo.

—HOMELINK® 

 **H**



HALF SHAFT

The individual axle shafts that connect the drive wheels to either side of the differential. On Hyundai passenger cars, the half shafts connect the transaxle to the front wheels.

(See “*DRIVETRAIN*”)

HALOGEN HEADLIGHTS

Headlights with special light bulbs inside that provide brighter illumination than conventional light bulbs. They are named for the halogen gas used inside the light bulbs. Halogen headlights last longer and use less energy than conventional light bulbs.

HANDLING

A subjective measure of a vehicle’s steering and cornering capabilities.

(See “*G*”)

HEAD ROOM

A measurement, usually in inches, of the available space between the base of the seat and the interior’s roof.

(See “*INTERIOR MEASUREMENTS*”)

HID (HIGH-INTENSITY DISCHARGE) HEADLIGHTS

(see “*XENON HEADLIGHTS*”)

HIP ROOM

A measurement, usually in inches, of the available space between the door panels, at the hip level.

(See “*INTERIOR MEASUREMENTS*”)

HIVEC (HYUNDAI INTELLIGENT VEHICLE ELECTRONIC CONTROL)

An electronic automatic transmission control system that uses “fuzzy-logic” to minimize upshifts and downshifts on grades.

HOMELINK®

HomeLink® is an integrated transceiver (a transmitter and receiver) that can be programmed to activate radio frequency (RF) devices such as garage doors, estate/community gates, entry door locks, home/office lighting, security systems or other RF devices. Through a simple training process, HomeLink® duplicates the codes of the original transmitter. HomeLink® is also capable of learning rolling (encrypted) codes. HomeLink® is available on many Hyundai models.

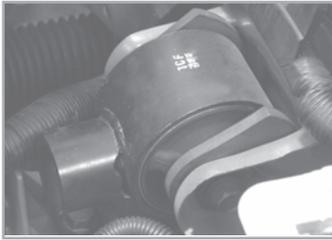
◆ **HORSEPOWER (HP)—HYDROCARBON (HC)**

HORSEPOWER (HP)

A calculated value indicating an engine's power capability usually cited at a specific engine rpm. One unit of horsepower is the power required to lift 550 pounds one foot off the ground in one second.

HVAC

The abbreviation for a vehicle's Heating, Ventilation, Air Conditioning systems.



HYDRAULIC ENGINE MOUNTS

Engine mounts that are filled with hydraulic fluid to reduce engine vibration transmitted into the vehicle's interior. Most vehicles use rubber motor mounts. Hydraulic motor mounts are standard on Azera and Tiburon.



HYDRAULIC VALVE LIFTER (LASH ADJUSTER)

A valve lifter—or lash adjuster—that continually keeps an engine's valvetrain in adjustment, reducing maintenance costs. Hydraulic valve lifters use pressurized engine oil to automatically adjust the length of the lifter to maintain zero clearance between the cam, the lifter and the rocker arm. Hydraulic valve lifters are standard on all Hyundai models.

HYDROCARBON (HC)

Any of many compounds containing hydrogen and carbon, such as gasoline, diesel fuel and kerosene. Unburned hydrocarbons combine with nitrogen oxides in the presence of sunlight to form smog.