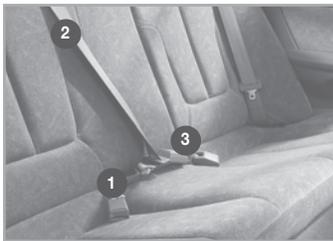


## 2-POINT SEATBELTS—A-ARM



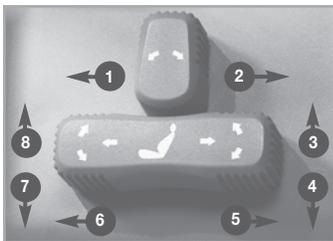
### 2-POINT SEATBELTS (LAP BELTS)

Seatbelts that are anchored to the vehicle at two points. They are typically known as a lap belts and are sometimes used in the center seating position.



### 3-POINT SEATBELTS

Seatbelts that are anchored to the vehicle at three points. This seatbelt type is commonly used in outboard seating positions, although some manufacturers are adding them to the rear center seating position. It includes both a lap and a shoulder belt. Accent, Sonata, Elantra, Azera, Santa Fe and Tucson have 3-point seatbelts located in the rear center seating position as well as the outboard seating positions.



### 4-, 6-, 8-WAY ADJUSTABLE SEATS

Also known as multi-adjustable seats, these seats can be adjusted in various ways for optimum comfort. Each way that a seat can be adjusted counts as one way. For example, a 4-way adjustable seat may be adjusted by sliding forward and back (two ways), and recline up and down (another two ways). Multi-adjustable seats can either be power- or manually operated.

### 5-MPH BUMPERS

Bumpers that are designed to withstand impacts up to 5 miles per hour without sustaining any significant damage in tests specified by the Federal Government. Most passenger vehicles have a 2-mile-per-hour bumper rating. Trucks and SUV government bumper ratings are not mandatory.

### 12-VOLT ACCESSORY OUTLET

A power outlet for accessories, such as cell phones, that provides power from the vehicle's battery.

### 14-,15-,16-,17-INCH WHEELS

Refers to the outside diameter of a wheel. A larger wheel allows the use of a larger tire, which can improve a vehicle's traction and handling.



### A-ARM (WISHBONE)

A lateral suspension locating link that is shaped like the letter A. The two legs of the A attach to the chassis via pivots, while the top of the A is attached to the wheel spindle assembly. This type of suspension system provides excellent wheel-locating geometry and is used in the suspension systems of high-performance and racing cars. Also known as a wishbone. Some vehicles use an upper A-arm and a lower A-arm, which is called double-wishbone suspension. Sonata and Azera both have a double-wishbone front suspension.

◆ **ADAPTIVE AUTOMATIC TRANSMISSION—**

**ADAPTIVE AUTOMATIC TRANSMISSION**

An automatic transmission that adjusts gear changes to match the driver's typical driving style. Hyundai transmissions use sophisticated computer technology with "fuzzy logic," which learns a driver's driving style and "adapts" to it for improved shifting performance after a few minutes of driving.

**AERODYNAMIC DRAG**

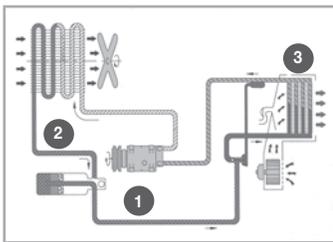
A measurement of a vehicle's ability to cut through the wind as it moves. The measurement is known as coefficient of drag. A lower number means that the vehicle cuts through the wind more efficiently, resulting in better fuel economy and less wind noise.



**AIRBAG SUPPLEMENTAL RESTRAINT SYSTEM (SRS)**

A cushion-like device that rapidly inflates in certain front and side-impact conditions where significant injury is likely. The airbag absorbs energy by allowing an occupant to slow down in a controlled manner and also prevents the driver and front-seat passenger from contacting the hard surfaces and components inside the vehicle. The most common are front airbags that deploy in certain front-end collisions. There are also side-impact airbags for the driver and front passenger and, on Azera models, for the rear passengers as well, which deploy in certain side impacts. In addition to front and front seat-mounted side airbags are the front and rear side-curtain airbags that are standard equipment on all 2005 Tucsons, and 2006 Sonatas, Azeras and Accents. All 2004 and newer Hyundai vehicles have dual front airbags and front seat-mounted side-impact airbags. Please note that the airbag Supplemental Restraint System (SRS) is designed to work in conjunction with the 3-point seatbelt system. The SRS is not a substitute for seatbelts, which should be worn at all times. Children under the age of 13 should be securely restrained in the rear seat. NEVER place a rear-facing child seat in the front seat of a vehicle.

**AIR CONDITIONING SYSTEM**



A system that cools the cabin air when activated. Air conditioning systems are driven by a belt connected to the engine, which drives a compressor. The compressor (1) compresses a refrigerant gas, which becomes very hot and under high pressure. The hot high-pressure refrigerant then enters the condenser (2), which removes the heat from it, causing it to condense into a liquid. The hot, high-pressure refrigerant liquid runs through an expansion valve. The refrigerant gas then runs through the evaporator (3), where it absorbs heat and cools down the air inside the vehicle.

**AIR FILTRATION SYSTEM**

A system which filters out dust and other pollutants from the air coming into the vehicle's interior through the vents. Air filtration systems feature a replaceable filter element, which must be replaced at preset intervals outlined in the owner's manual. Not all vehicles are equipped with an air filtration system.

**AIR INTAKE RESONATOR**

A device which reduces engine noise, especially upon acceleration. Air intake resonators are installed within an engine's air intake system.

## —AMP METER

### ALIGNMENT

The proper adjustment of a vehicle's steering and suspension system which enables it to track straight and steer properly. A vehicle that is out of alignment can result in premature tire wear and may cause the vehicle to wander or pull to one side while driving.

### ALLOY

A combination of metals, such as aluminum or magnesium, used to combine the weight, strength and corrosion resistance advantages of each metal. The most visible use of aluminum alloy is in alloy wheels. Some components of all Hyundai engines are of alloy construction, including cylinder heads, pistons and intake manifolds. The 2.7-liter V6 used in the Sonata, Santa Fe, Tucson and Tiburon has both an aluminum block and aluminum cylinder heads and therefore may be referred to as an "all-aluminum" engine. Aluminum components, while being more expensive to produce, weigh less and dissipate heat more quickly and more evenly than cast iron.

### ALL-SEASON RADIAL TIRES

Tires designed to perform well in either rain or light snow and deliver a comfortable, quiet ride.

### ALUMINUM ALLOY (WHEELS AND ENGINES)

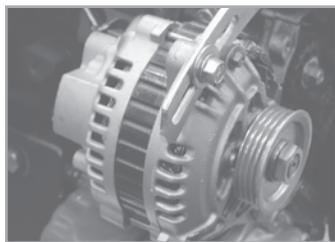
(See "ALLOY")

### ALL-WHEEL DRIVE (AWD)

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

### ALR (AUTOMATIC LOCKING RETRACTOR) SEATBELTS

A type of seatbelt device which automatically locks a seatbelt at a desired length, making it possible to secure a child seat without using a seatbelt locking clip. To activate this feature, pull the shoulder belt all the way out, then allow it to slowly retract to the desired length.



### ALTERNATOR

A device which provides energy for a vehicle's electrical system as well as recharging its battery. The alternator is typically mounted on a vehicle's engine and is driven by a belt.

### AMP METER

An instrument which measures the amount of current flow in a vehicle's electrical system. A reading on the positive (+) side of an amp meter indicates that the vehicle's charging system is charging the battery. A reading on the negative (-) side indicates that the charging system is in a discharging condition (battery supplying the current).

◆ **ANTIFREEZE** —

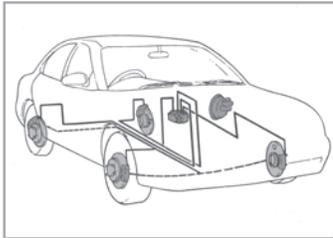
**ANTIFREEZE**

A liquid mixture of several chemicals, including ethylene glycol, which is added to the water in an engine's cooling system to prevent freezing of the coolant. Antifreeze also has a higher boiling point than water, allowing the cooling system to run at a higher, more efficient temperature without boiling over. Antifreeze is also formulated to prevent corrosion in the cooling system.

(See "COOLANT")

**ANTI-KNOCK**

Any substance or device which prevents fuel from igniting prematurely. Premature ignition, also known as "pinging" or "knocking," can cause damage to a vehicle's engine. Anti-knock substances such as ethanol are commonly added to gasoline as an octane enhancer. An anti-knock sensor enables an engine's computer to make adjustments to prevent premature ignition.



**ANTI-LOCK BRAKING SYSTEM (ABS)**

The primary benefit of ABS is to help the driver maintain directional stability (steering control) during emergency braking situations. ABS is a computer-controlled braking system that modulates brake pressure during hard braking and panic stop situations, keeping the wheels from locking up and skidding. When wheel speed sensors detect that a wheel is going to lock up, the ABS computer modulates brake fluid pressure to keep the wheels rolling to maintain traction. ABS may lengthen the stopping distance in some conditions because the wheels are allowed to rotate while braking. Unlike some competitive Anti-lock Braking Systems, the current Hyundai ABS is a true 4-channel system, which means there is a sensor for each wheel.

**ANTI-PERFORATION WARRANTY**

A warranty which covers corrosion-related rust-through of the vehicle's body sheet metal from inside to out. All Hyundai vehicles feature a 7-year, unlimited-mileage anti-perforation warranty.



**AUTOMATIC CLIMATE CONTROL SYSTEM**

A system which enables a vehicle's occupants to select a desired interior temperature, then controls the heating and air conditioning systems to maintain that temperature. This is accomplished by using various sensors to read the "sun-load" on the interior and a temperature sensor mounted in the dash; together, they direct the system to make the necessary adjustments. An automatic climate control system is standard on Sonata LX, Santa Fe LX and Azera.



**AUTO-DOWN POWER WINDOWS**

Power window controls that enable the user to completely lower a window with a single push. All Elantra, Sonata, Azera, Santa Fe and Tiburon models have a standard auto-down driver's window.

## —BODYSIDE CLADDING



### **AUTOMATIC TRANSMISSION**

A transmission that automatically changes gears without the driver depressing a clutch pedal or moving a gear shift lever. Most automatic transmissions are hydraulically operated. Many new vehicles have automatic transmissions, which allow the driver to manually shift the transmission via the shift lever.

(See “*SHIFTRONIC*” *AUTOMATIC TRANSMISSION*”)



### **AUTO-ON/OFF HEADLIGHT CONTROL**

A system that detects outside lighting conditions and automatically turns the head lights on or off as needed. It also turns the headlights off when the key is removed from the ignition. This feature is standard on Azera.

## **B**

### **BACKLIGHT**

A technical term for the rear window of an automobile.

### **BALANCE SHAFT**

A shaft used in certain engines to reduce vibration. A balance shaft is designed so that, as it rotates, it vibrates in a way to cancel out the natural vibration produced by the engine. The Tucson and Santa Fe 4-cylinder engines utilize this feature.

### **BATTERY SAVER FEATURE**

All 2004 and newer Hyundai models have a battery saver feature which allows you to leave headlights on at all times—day or night. When you turn off the ignition, remove the key and open the driver’s door, the electrical system will automatically shut off your lights. Place the key back in the ignition and turn to the “on” position and the lights will automatically turn on.

(See “*ETACS*”)



### **BODYSIDE CLADDING**

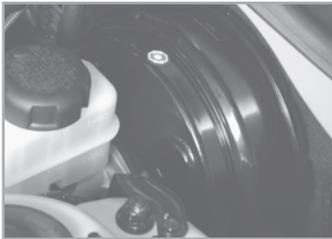
A protective molding that protects the lower portions of a vehicle’s side.

◆ **BODYSIDE MOLDING—**



**BODYSIDE MOLDING**

A protective molding that protects a vehicle's doors and fenders from parking lot dings and scratches. Sometimes referred to as waistline molding.



**BRAKE BOOSTER (POWER-ASSISTED BRAKING)**

A device that increases brake pressure applied by the driver to the brake pedal. Engine vacuum is used to increase the force on the brake system so that less driver effort is required to slow or stop the vehicle. All current Hyundai vehicles have power-assisted, or boosted, brake systems.

(See "BRAKE SYSTEM")

**BRAKE DISC/ROTOR**

(See "DISC BRAKE")

**BRAKE DRUM**

(See "DRUM BRAKE")

**BRAKE FADE**

A loss of braking effectiveness due to the overheating of a vehicle's brakes. This typically occurs after repeated heavy braking system use such as in downhill or high-speed braking conditions.



**BRAKE LINING**

The replaceable friction material that is bonded to brake pads or shoes. The lining material is pressed against the face of the drum or rotor to slow or stop the vehicle.

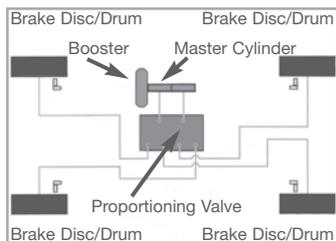
**BRAKE PAD**

(See "DISC BRAKE")

**BRAKE SHOE**

(See "DRUM BRAKE")

## —BUMPER-TO-BUMPER WARRANTY



### BRAKE SYSTEM

A hydraulic system which operates a vehicle's brakes. A typical brake system includes the following components:

- Master cylinder: Pressurizes the brake fluid to activate the disc or drum brakes at each wheel.
- Brake booster: Provides additional fluid pressure (so that brake pedal effort is less).
- Proportioning valve: Balances the amount of pressure between the front and rear wheels.
- Brake disc or drum: Applies braking force at each wheel.

### BUMPER-TO-BUMPER WARRANTY

A manufacturer's warranty that covers all parts and systems, with the exception of certain maintenance and "wear" items, such as tires and wiper blades. All Hyundai vehicles have a 5-year/60,000-mile bumper-to-bumper warranty. See owner's handbook for complete limited warranty details.