

Whether good or bad, we've all had lots of experiences involving automobiles. All that it usually takes to bring memories of those experiences flooding back is to remember the name of the car you were driving. So it's not hard to understand just how important it can be for an automaker to choose the right name to identify a new model.

Some automakers, including Honda, seem determined to convey a positive message with the names of their cars. Why wait for customers to develop their own set of positive car memories. Why not start them off right by selling them a car that has a positive-sounding name like Accord?

Honda took the Name Game approach a step further when the upscale Acura subsidiary was introduced for 1986. The entire Acura division was given a name that suggested accuracy and precision. Acura called the flagship of the new line Legend, a tough name to live up to if there ever was one. How could a car be a legend if it was brand new?

The earliest Legends are now seven years old and have been around long enough for a few legends to be told. We'll concentrate on the first generation Legends in this ar-

ticle. Second generation Legends are still pretty young and may be returning to Acura dealers for service.

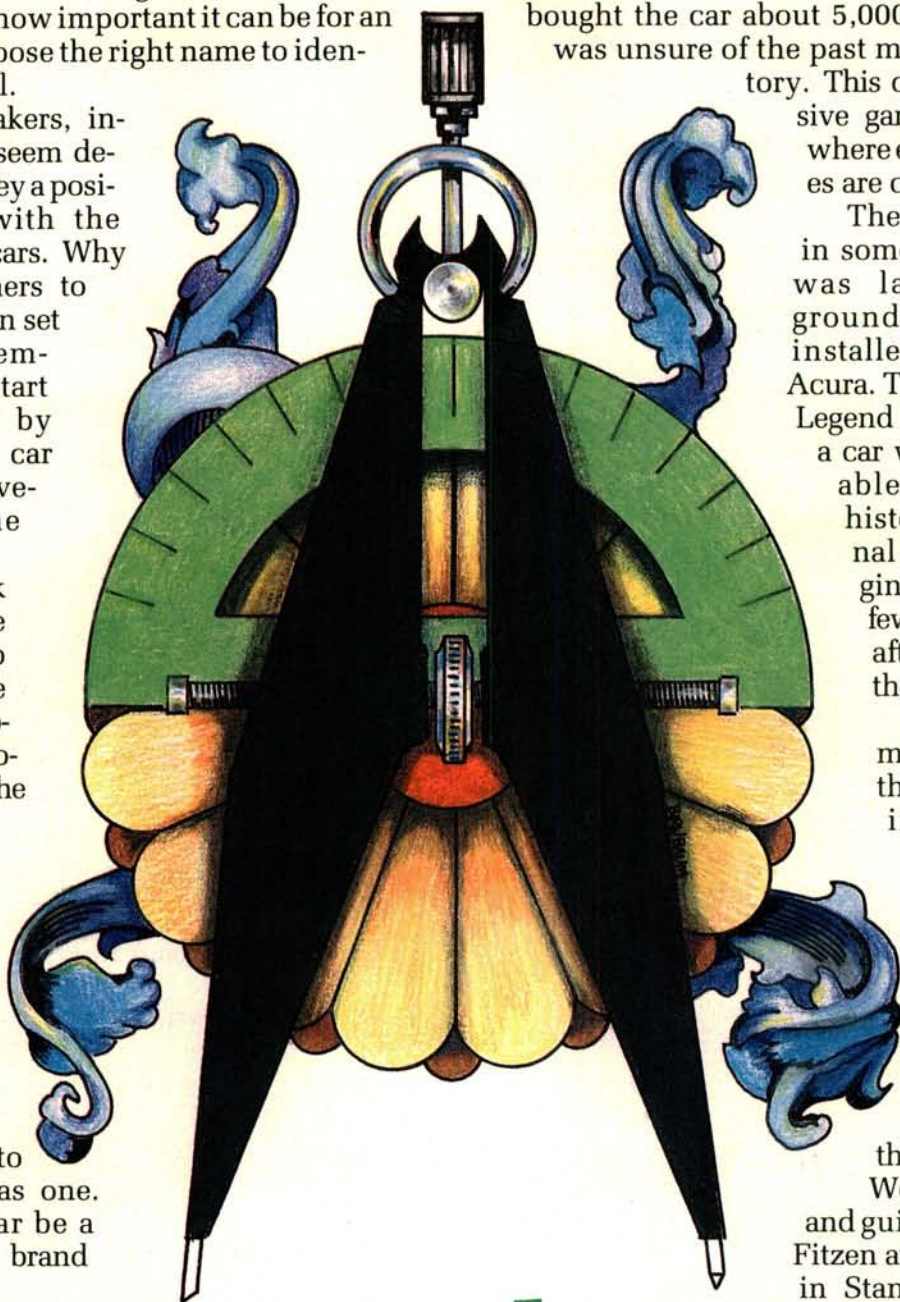
Our subject vehicle is a 1987 Legend with 63,000 miles on the clock. The present owner bought the car about 5,000 miles ago and was unsure of the past maintenance history. This can be an expensive gamble, especially where engine oil changes are concerned.

The engine shown in some of our photos was laying on the ground waiting to be installed in a second Acura. The owner of this Legend had also bought a car with a questionable maintenance history. The original sludged up engine went south a few thousand miles after he purchased the car.

We will check many of the items that should be included in a 60,000 mile maintenance. While we're at it, we'll also highlight the few Legend problem areas that may crop up at this mileage.

We received help and guidance from Jim Fitzen at Jackson Racing in Stanton, California, Harold Lamprecht at Rising Sun Automotive in Munson, Ohio, and Ron Money at Smith's Import Specialists in Auburn, Ohio.

— By Karl Seyfert



Legendary Acuracy

Legendary Accuracy



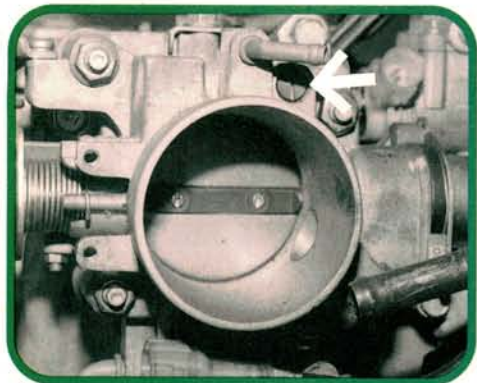
1

A timing belt replacement isn't necessary during a Legend's 60,000 mile maintenance. However, the belt wasn't meant to last forever. Our Acura sources "strongly urge" timing belt replacement at or before the 90,000 mile mark. The belt may outlast the idler pulley bearing and water pump.



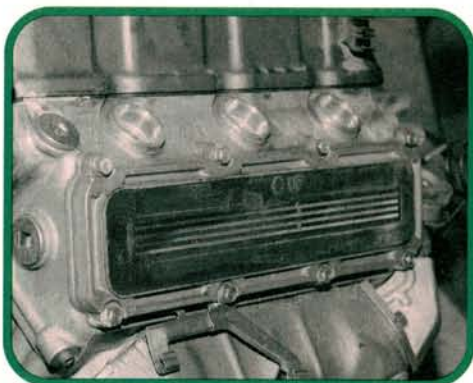
2

The first indication of a dying water pump may be coolant escaping through this weep hole in the front cover. The weep hole feeds directly from an opening in the water pump to keep water pump coolant leaks away from the timing belt. Always install a new timing belt when replacing the water pump.



3

Remove the throttle housing air intake hose and check for throttle body deposits during a maintenance. A dirty throttle bore and throttle plate may keep the throttle from closing, causing an irregular idle speed. The base idle adjustment screw is located at the back of the throttle housing (arrow).



4

Legend engines have hydraulic lash adjusters, so periodic valve adjustments are not normally required. However, a complicated system of rocker arms and pushrods is used to relay the camshaft's intentions to the exhaust valves. Exhaust valve clearance can be adjusted at the exhaust rocker arms.



5

Dirty oil can cause a slow or sudden death for a Legend engine. A ticking lash adjuster when the engine is cold may indicate a sludged up engine. Clogged passages and oil starvation to the camshafts can also cause timing belt breakage. The cost of engine repair or replacement buys lots of oil changes.



6

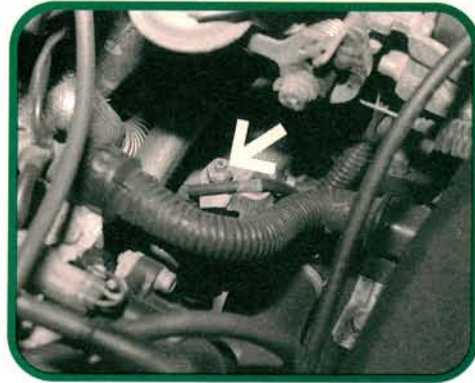
If you've ever replaced a fuel filter on a late model Honda, this oval shaped bolt should look familiar. Relieve the fuel pressure by first loosening the smaller hex bolt in the center of the oval main bolt. Cover the filter with a rag to catch any sprayed fuel. Use a backup wrench on the other line fitting.

Legendary Accuracy



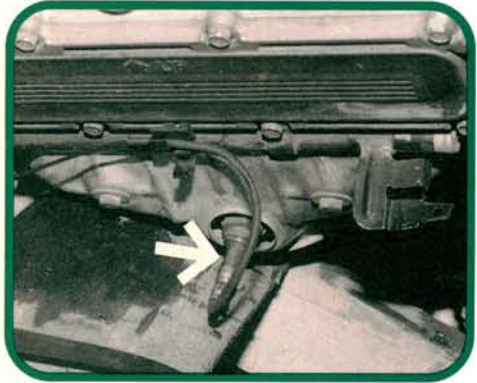
7

Remove the four air filter housing bolts, then remove the cover to access the filter. This is no one-size-fits-all filter. An opening at the bottom of the filter mates with the port leading to the throttle housing hose. A heavy spring wire holds the filter in position to seal the filter to the housing.



8

This bleeder screw below throttle housing (arrow) will help you get the air out of the cooling system during a coolant flush and fill. Open the bleeder screw, then add coolant to the radiator until coolant flows out of the bleeder. Close the bleeder, then finish filling the cooling system.



9

The single wire unheated oxygen sensors used on early Legend engine management systems have been known to die an early death. Two oxygen sensors are used, one for each bank of cylinders. The ECU monitors the sensors separately and will set either a code 1 or 2 if one of the sensors fails.



10

We also had reports of TDC position sensor failures on early Legends. A failed sensor will set a diagnostic code 8, but the engine should continue to run. The sensor is located behind the left camshaft pulley. Remove the timing belt cover, timing belt, and sprocket, then remove the sensor from the cam housing.



11

The fuel system ECU is located under the passenger seat and the transmission control unit is under the driver's seat. This makes them vulnerable to water damage, especially if you're in Southern California during the rainy season. Both control units have windows for diagnostic code reading.



12

Disconnecting the battery clears all engine management system diagnostic codes, but will also erase all other electronic system memories. To clear only the main ECU's memory, locate the fuse panel next to the battery. Remove the ECU and Alternator Sensor fuses for at least a minute.



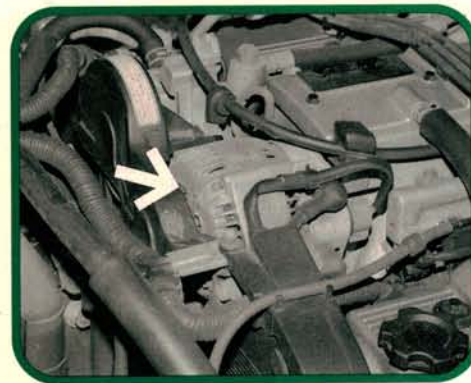
13

The transmission gear position indicator light in the center of the instrument panel will flash if the transmission control unit detects a problem with the transmission. Diagnostic codes can be read either at the transmission control unit, or by counting the flashes at the gear position indicator.



14

Intermittent operation of the turn signals, headlights, or parking lights may be caused by a bad steering column combination switch. In some cases, disassembling and cleaning the switch contacts will restore normal operation. If the contacts are damaged, switch replacement is a better alternative.



15

An updated alternator pulley and belt are available for 1986-88 Legends. Batteries discharged during slow speed, short trip operation because the original setup couldn't keep up with demand. The smaller diameter pulley spins the alternator faster for a higher charging rate at lower engine speeds.

Legendary Acuracy



16

Batteries seem to have a shorter than normal life span, even if the small diameter alternator pulley has been installed. The Legend's many power accessories place a large load on the battery. Any replacement battery you install should be at least as strong, if not stronger than the OE battery.



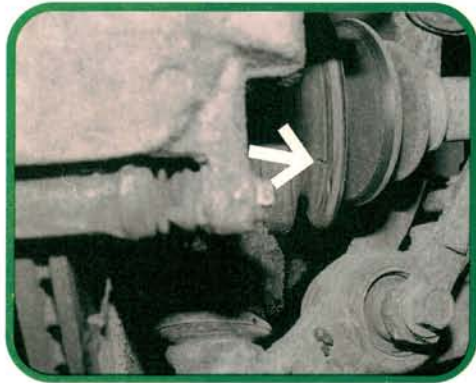
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Engine compartment steam cleaning should be avoided. While the electrical connector insulators do a good job of protecting the terminals from normal underhood moisture, a high pressure blast of water is more than they were meant to handle. Intermittent electrical problems may soon follow.



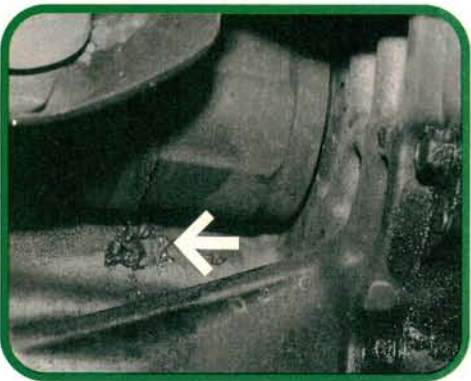
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Some Acura specialists automatically replace the distributor cap and rotor as a part of their 60,000 mile maintenance. Rotor failures can cause the no-start and poor performance problems we've seen on other Honda products. Always install quality replacement parts to prevent later problems.



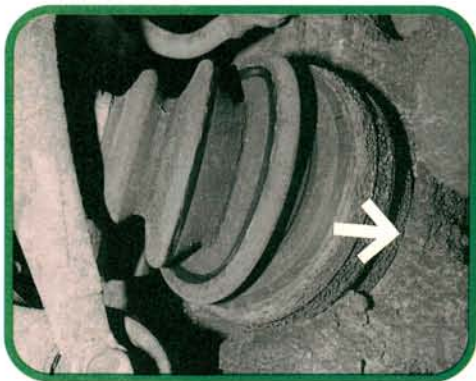
19

Check for torn outer CV boots whenever the car is on the lift for service. Torn outer boots are found more often than on other cars of the same age and approximate mileage. It may have something to do with the tightness of the turning radius putting a lot of stress on the boots.



20

Inner CV boot bands may loosen over time, allowing CV grease to build up on the rear of the transmission case. If the customer complains of a burning smell, a leaking right inner boot may be throwing grease on the exhaust system. If either inner joint has been leaking, clean, repack, and re-band both joints.



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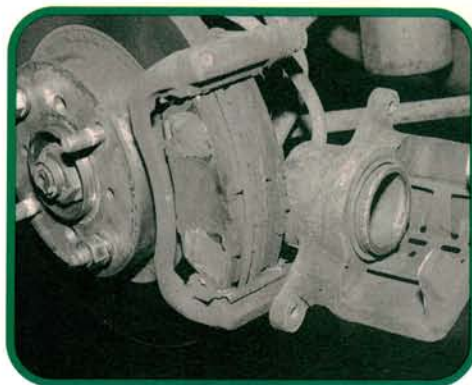
A loose front wheel bearing may cause a clunking noise while cornering. Press out the bearing and clean the knuckle bore. Apply a 12mm band of anaerobic thread locker to the leading edge of the wheel bearing. Press the bearing into the knuckle, then let the thread locker cure for several hours before driving.

Legendary Acuracy



22

Tire size, design, manufacturer, and wear can all have an effect on Legends equipped with ABS. For the fewest problems, a complete set of tires from the same manufacturer should be installed. Rotating the tires regularly to maintain even wear will also prevent problems with brake pull and steering drift.



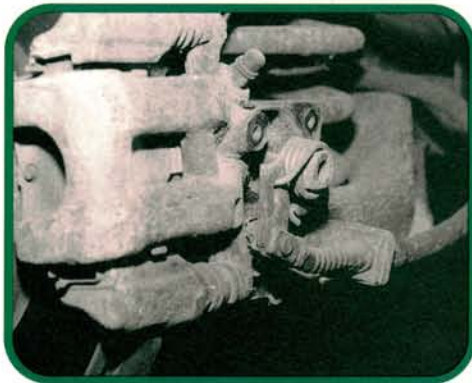
23

Every shop can't afford an on-the-car brake lathe, but Acura specifies it for all rotor resurfacing. Machining variations between the rotor and hub may cause a brake pulsation if the rotors are resurfaced using an off-the-car lathe. The difference between new and replacement front rotor thickness is only 2mm.



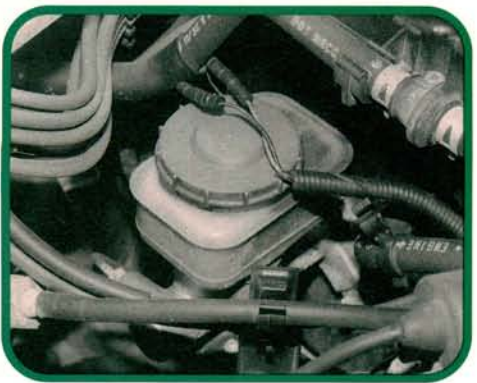
24

This Legend had a severe front brake pulsation. We knew the rotors had been removed because the retaining screws were missing and the rotors were improperly indexed to the hubs. If you must resurface rotors off the car, mark the rotors for position before removing them. This prevents stacked tolerances.



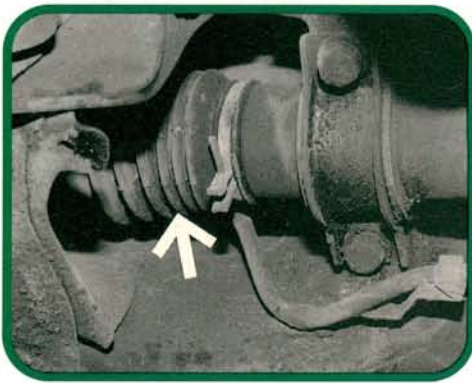
25

Rusted rear parking brake cables may bind and wear out the rear brake pads. The rear brakes are adjusted for wear each time the parking brake is applied. A low brake pedal may be caused by an owner who never uses the parking brake, especially on automatic models.



26

Flush and fill the brake fluid at 60,000 miles. This is especially important on ABS equipped Legends. Water and sediment in the brake fluid can bind up the ABS actuator and pump. Damaged ABS pumps make an expensive noise when the ABS tries to actuate. Replace the ABS high pressure hose at 60,000 miles too.



27

Leaking power steering rack seals can cause fluid to accumulate in the outer rack boots. Squeeze the boots to check for fluid inside. A fluid leak on the right side of the rack may be mistaken for an engine oil leak because the right rack boot is very close to the engine oil filter housing.