

A numerologist could probably tell us if there is any special significance to the number 9. The people at Saab must be convinced that 9 is a very important number indeed. They've been tacking 9s on their cars as long as I can remember. We've seen 96s, 99s, and 900s, just to name a few Saab "9" models.

Saab stayed with the 9 tradition when they introduced the 9000 for 1986. But if you're thinking that the 9000 is just a 900 with an extra zero, you're wrong. The most obvious difference is that the 9000 discarded the 900's "over, under, sideways, down" front wheel drive transaxle in favor of a more traditional design. The 9000 powertrain is a transverse mounted, front wheel drive unit.

Other 9000 changes are less obvious. The 9000 bodywork doesn't scream "WEIRD SWEDISH CAR" like a few of Saab's earlier offerings. You might even have trouble finding a 9000 in a crowded parking lot. Some Saab enthusiasts were upset by this fact, and even accused the 9000 of being less of a Saab than its predecessors.

But exterior looks and drivetrain aside, the 9000 is every inch a Saab. The 9000 engines and many of their

related components have also seen duty in the Saab 900. Any 900 or earlier Saab experience will help to shorten the learning curve if you're planning to service 9000s.

We've included an assortment of characteristic 9000 tips and probable problem areas. This information can be helpful for spotting problems during regular maintenance.

Two items that didn't fit into our photo captions are the serpentine belt tensioner and the timing chain tensioner. A worn belt tensioner bearing can quickly destroy the serpentine belt. So be sure to check the tensioner condition, especially before a trip. A ratcheting style timing chain tensioner was introduced on later models. The later tensioner is a worthwhile retrofit for earlier models to prolong chain life.

And finally, our instructions on retrieving fault codes from the automatic climate control are meant to serve as an introduction to this system. Refer to a service manual for a complete explanation of the various trouble codes available through the automatic climate control self diagnostic system.

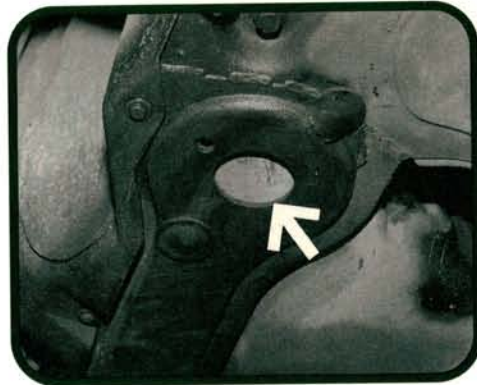
— By Karl Seyfert

# Saab 9000



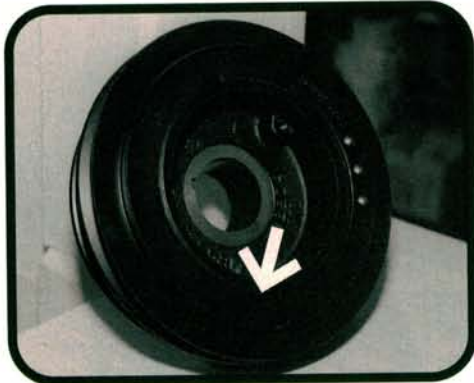
1

Turbo models use a vacuum controlled air bypass valve to redirect unneeded turbo boost to the turbo suction inlet during deceleration. A broken vacuum diaphragm inside the plastic valve can cause stalling problems during decel or an irregular idle speed. The plastic hose clamps may also break.



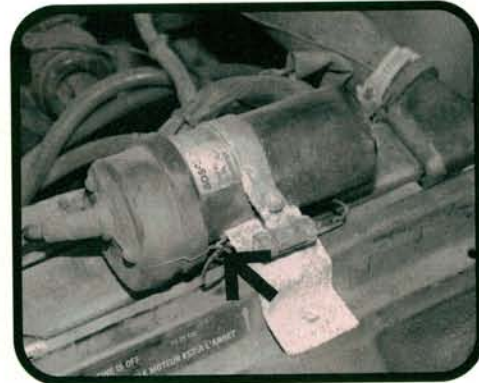
2

Both lower motor mounts at the right side of the engine bay are oil filled. The rubber mount seals may crack over time. The oil leaks out, causing extra engine vibration. A leaking front mount will lubricate the underside of the frame rail. The rear mount is fully exposed and easier to check.



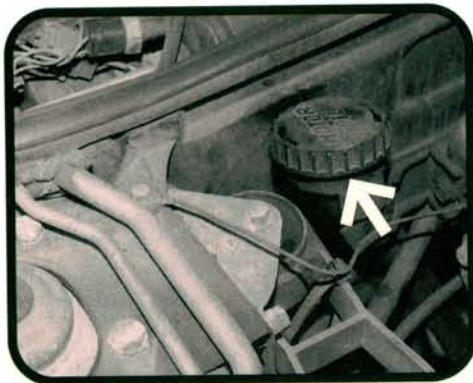
3

A squealing noise during cold starting probably means the rubber center has torn out of the crankshaft pulley. On early models, an outer pulley bolted to the main pulley. This kept the damaged main pulley from walking off the crank. Later pulleys and all replacement parts are a one piece design.



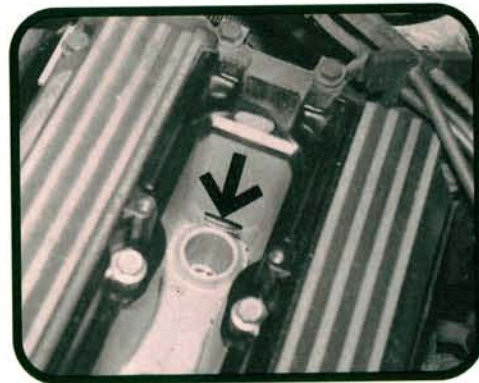
4

The ignition coil on pre-Direct Ignition models is mounted on top of the radiator core support. A broken radio noise suppressor wire on the positive side of the ignition coil may ground against the body, blowing the ignition fuse. Cut the broken wire at the coil terminal or replace the suppressor.



5

The combination remote oil filler neck/dipstick is located near the firewall. Be careful when filling the crankcase. The alternator is located directly below the filler. Spilled oil ends up inside the alternator. Starting the engine will cook the alternator faster than you can say "What's that smell?"



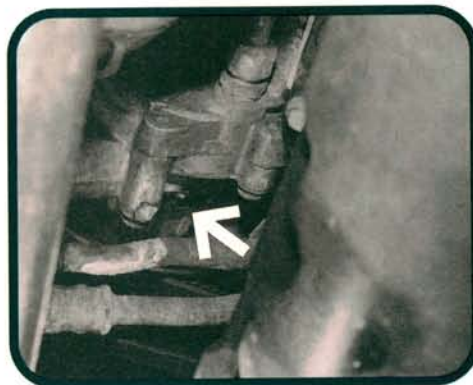
6

The valve cover is sealed by an inner and an outer o-ring. Oil from inner cover o-ring leaks will accumulate in the well between the DOHC valve cover. Saab made allowances for this problem by thoughtfully providing a drain (arrow) at the transmission end of the head.



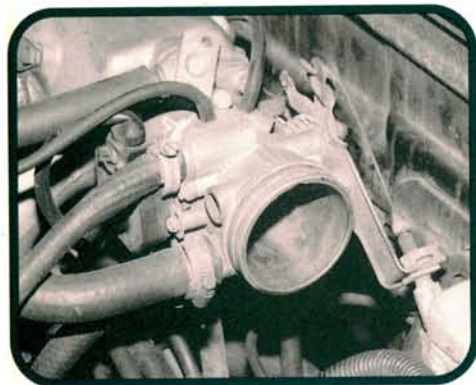
## 7

Look real hard and you might see the radiator drain plug in this photo. The plastic plug discourages overtightening but can also get brittle with age and may break if it's disturbed. To prevent an embarrassing leak a few days after a coolant flush, install a new drain plug or metal bolt.



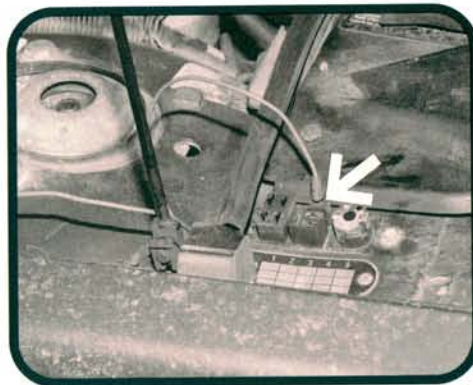
## 8

A chalky dried antifreeze deposit on the underside of the water pump may be misdiagnosed as a coolant leak. Even brand new water pumps may seep slightly to lubricate the pump seal. Watch the fluid reservoir level. The seepage should equal about a quart of coolant per 60,000 miles.



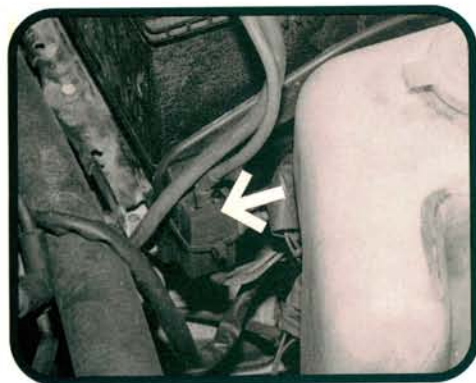
## 9

Throttle housing carbon deposits can affect the throttle switch operation. Remove the air inlet hose to clean the deposits with a rag and carburetor cleaner. Check the throttle switch and throttle stop screw for proper adjustment. Someone may have adjusted these to compensate for the deposits.



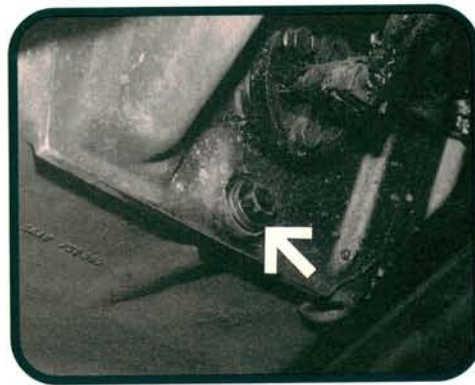
## 10

On early 9000s, ground the diagnostic terminal shown, then adjust the base idle speed. Always switch the automatic climate control to ECON before adjusting the idle speed. The climate control reverts to AUTO each time the engine is started and the compressor load will affect your idle speed adjustment.



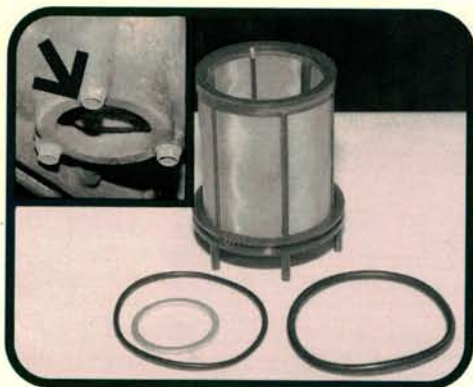
## 11

Check the ground connections next to the battery during a battery service. Many unshielded wiring harness grounds attach to the body behind the battery. Spilled battery acid and general corrosion can cause electrical problems. The positive junction below the battery (arrow) is shielded.



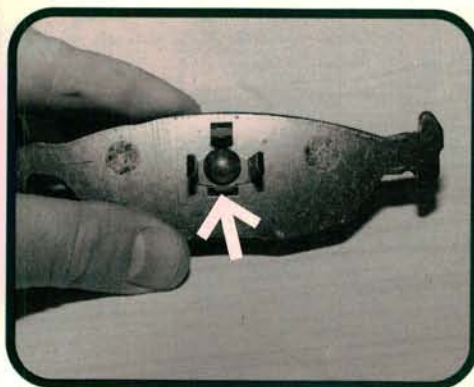
## 12

Don't overtighten the oil drain plug. The aluminum oil pan has a steel thread insert for the drain plug, so the oil pan may crack long before the threads strip from overtightening. The correct torque for the engine drain plug is 29-39 Nm (21-29 ft-lb).



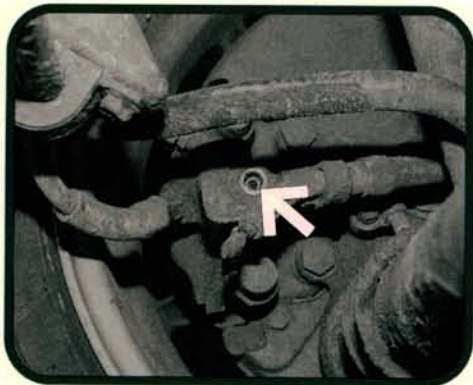
**13**

To prolong the automatic transmission life, change the fluid at least once every 30,000 miles or whenever it smells burnt. Remove these three bolts, then lower the cover to replace the round filter. The filter slides up into the transmission. Always use the new seals supplied with the new filter.



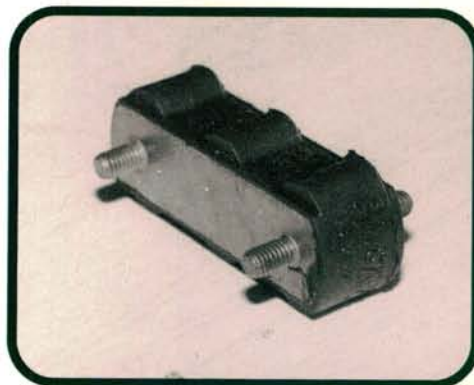
**14**

A rusted or broken anti-rattle spring clip on the inside of the inner rear brake pad will cause the pad to rattle over bumps. The clip is riveted to the pad and isn't available separately, so the pad set must be replaced if the clip breaks.



**15**

Don't retract the rear caliper piston with a C-clamp. Remove the access cover on the inside of the caliper. Then retract the piston by turning the internal hex while pushing the piston inward. With the new pads in place, tighten the screw until the brakes lock, then back off the screw about a quarter turn.



**16**

This rubber coupler provides a flexible connection between the manual shift linkage and the manual transmission gear selector shaft. One side bolts to the linkage, the other to the selector shaft. A coupler that's worn or broken on either side will make it difficult to shift into some or all of the gears.



**17**

The mounting bolts for the factory fog light brackets can cause electrical problems either sooner or later. The bolts extend through the bumper and can damage the wiring harness that runs through this area. Repair the wiring, then secure the harness away from the bolts to prevent damage.



**18**

A clunking front suspension noise may be caused by a broken stabilizer bracket bolt. The broken bolt can be difficult to see when the car is in the air with the weight off the suspension. Pry on the bracket to see if one side is loose. Remove the broken parts, then secure the bracket with a new nut and bolt.



## 19

Removing the front door trim panel can give you fits if you don't know where all the hidden screws are located. Most of the screws are easy to find under plastic plugs. The last screw on the driver's side is behind the mirror switch. Pry the panel forward from the rear to remove it.



## 20

We removed the door trim to repair the window regulator. The cable operated regulator is easily damaged if the regulator mounting bolts loosen. If you catch it in time, tightening and thread locking the bolts will save the regulator. Once the cable slips off the pulleys and tangles, the 300 dollar assembly is toast.



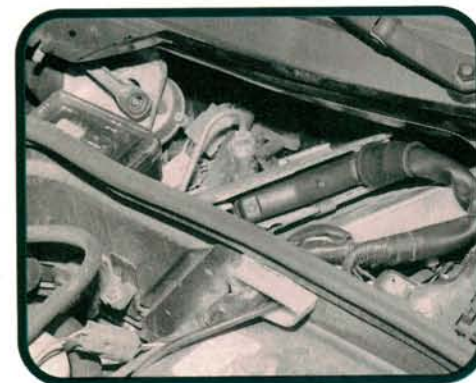
## 21

Failed servo motors may affect automatic climate control operation. To review diagnostic codes, press the AUTO and VENT buttons. The LED flashes 88 during self diagnosis, then the total number of codes is displayed. Press VENT once to see the first code number, then repeat for additional codes.



## 22

An incorrectly positioned or blocked evaporator drain pipe can cause water to blow out of the center dash vent or flood the driver's floor. Water may also cause the fan motor to drag during right turns and eventually seize. Clogged cowl drains will cause the cowl area to fill with rain water.



## 23

The blower motor runs even when the A/C system is shut off. The constant use has caused some motors to fail. The upper section of the bulkhead and most of the parts that surround the motor must be removed to access the worn out motor. We'll come back at another time for a detailed look at this procedure.



## 24

A poor tail lamp ground may light the bulb failure pictograph on the dash. All of the bulbs for both tail lamp assemblies ground through the same wire. Drill a small hole in the printed tail lamp ground circuit, then bolt an extra ground wire between the body and the tail lamp assembly.