Resetting Emission Reminder Lights

If you've trained your customers properly, they bring their cars to you at the first sign of trouble. They've learned it's almost always cheaper to have a problem repaired sooner, rather than later.

Imagine for a moment that one of your well-trained customers stopped at your shop this morning because a bright red warning light, labeled OXS, just started glowing on his dash. Like most owners, it never occurred to him to consult his owner's manual. He brought his problem to you instead.

This situation can be a headache or an opportunity for some extra dash cash, depending on how you handle it. Here are three possible approaches:

• Try to guess the reset switch, wire, or connector location by process of elimination. You could end up killing the rest of the morning before you finally find it.
• Admit that you aren't sure how to reset the reminder light and advise your customer to return to the dealer. This is bound to erode his confidence in your ability to handle harder problems in the future.
• Find the reminder light reset location quickly, reset the light, and replace the oxygen sensor.

Which would you choose? Resetting the light quickly is obviously the most attractive alternative. Many shops consider resetting the reminder light an opportunity to sell other service work. On most cars, the oxygen sensor light comes on at 30,000 mile intervals. This usually corresponds with the maintenance interval for a major service. The car is already in the shop. There couldn't be a better time to recommend that service to your customer.

Even if the customer declines the additional service work, at least you've put the idea in his head. He might decide to bring the car back later.

Hide and Seek

The car manufacturers seem to have a conspiracy going to make resetting emission lights as difficult as possible. Each company has its own ideas. Most have tried different systems and change them from year to year. Just when you think you know where things are, the new models roll around and everything is in a different place. Standardization just isn't the rule.

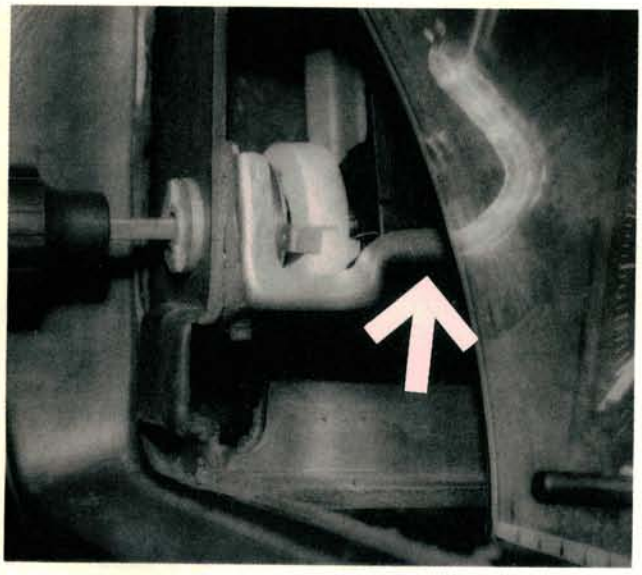
We cleared up some of the confusion in our September 1988 issue by giving you the reminder light reset locations for the Japanese imports. This time around we're going to do the same for several popular German manufacturers. We'll be back next month with the remainder of the Germans and the rest of the Europeans.

In a few cases, some vehicle disassembly is necessary to reach the reset location. We've included extra photographs and text to make the job a little easier. Getting clear photographs of assorted reset levers, buttons, and switches was at times harder than actually resetting the reminder light. I think I have a permanent flat spot on the top of my head after standing on it underneath dashboards.

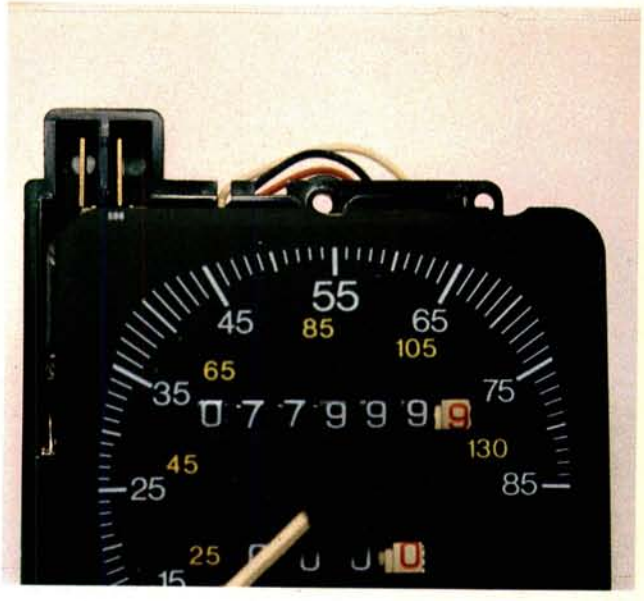
Before we go any further, it's worth mentioning that reminder lights were put on cars for a good reason (besides creating an annoyance). That EGR light is a reminder to check for proper operation of the EGR system. If it's an OXS, EXH, or SENSOR light, check or replace the oxygen sensor according to the manufacturer's recommendations.

Resetting the mileage counter or removing the bulb, then sending the customer on his way isn't doing the whole job.

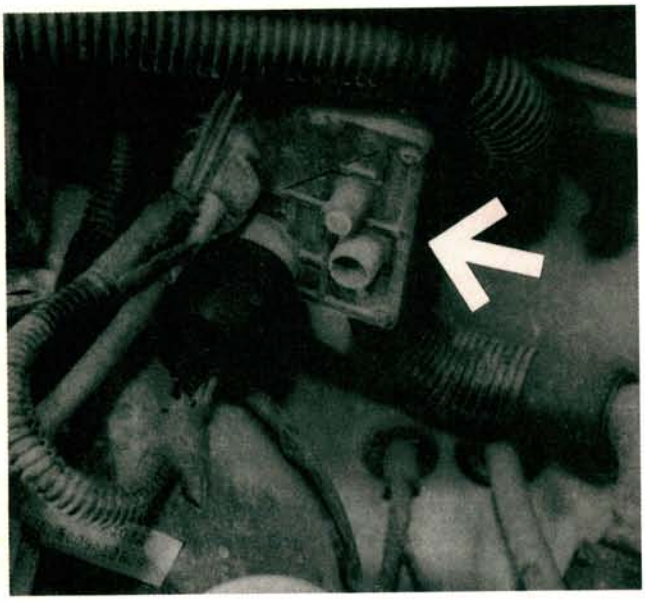
—By Karl Seyfert



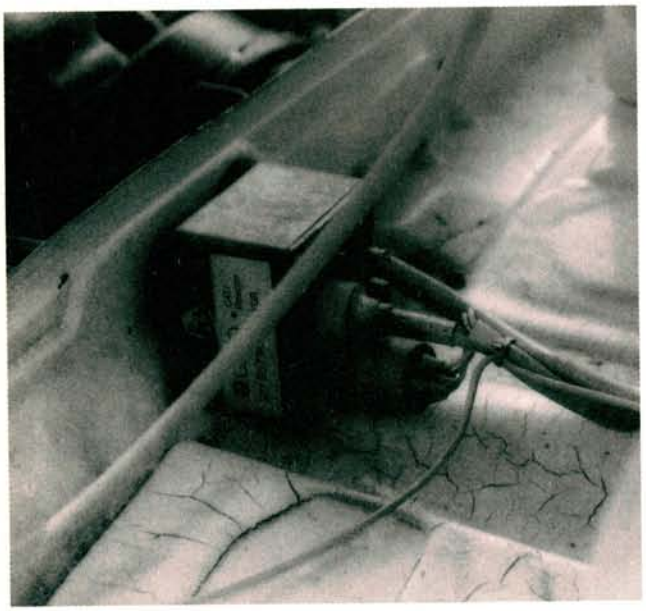
Volkswagen hid the reminder light resets on U.S. made Rabbits and Pickups inside the dash cluster. Remove the instrument cluster cover screws. The cluster cover can't be completely removed until the headlight switch control shaft is removed. Reach behind the cluster cover to find the release button (arrow) on the headlight switch. Depress the button, then pull the headlight switch control shaft straight out to remove it. Remove the cluster cover and set it aside.



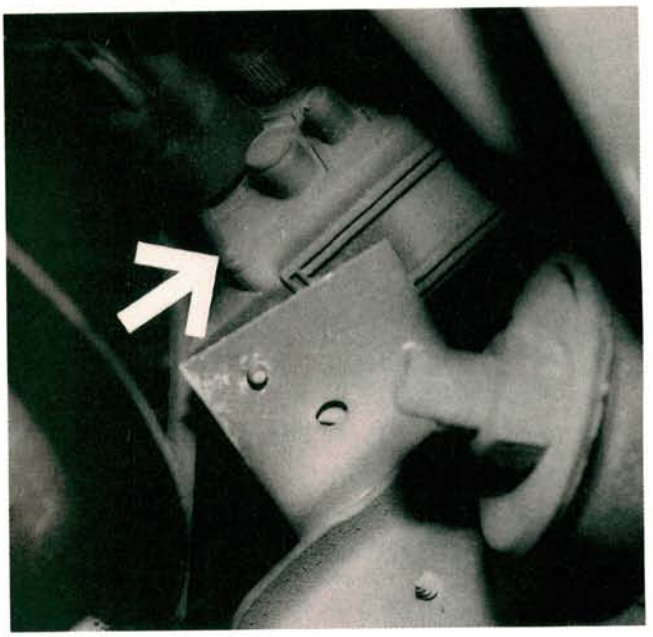
Both reset levers are located at the upper left-hand corner of the instrument cluster. The left lever resets the EGR reminder light, which comes on at 15,000 mile intervals. The right arm resets the oxygen sensor (OXS) light, which comes on at 30,000 mile intervals. Use a small hook to pull the levers and reset the mileage counters. Service the EGR system or replace the oxygen sensor as necessary.



The EGR or OXS lights on non-U.S. made Rabbits, Dashers, Golfs, Jettas, and Sciroccos are easier to deal with. The mileage counter (arrow) is located in-line with the speedometer cable under the hood. Follow the cable from the transmission to locate the counter (arrow) near the firewall. Push the OXS or EGR buttons to reset the counter. Replace the oxygen sensor, then make sure the dash reminder light is off. Later models with 60,000 mile oxygen sensors don't have a mileage counter or reminder light.

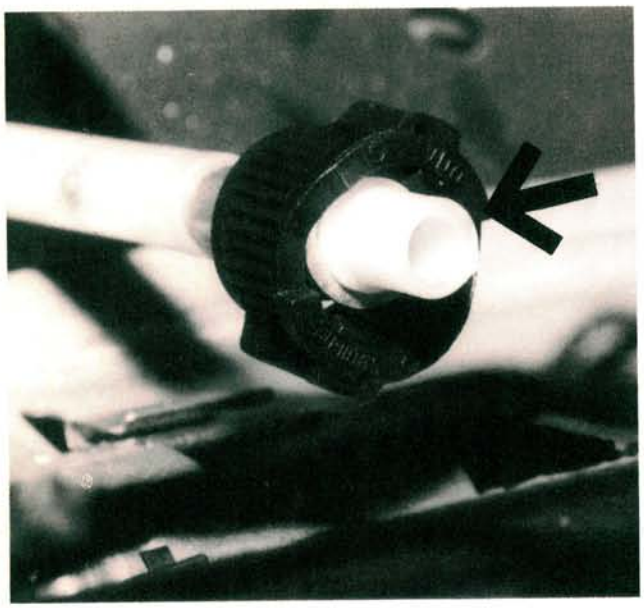


Audi 4000s built before 1984 use an in-line mileage counter mounted in the cowl area. This is about as easy as you're going to get in terms of location. The EGR light comes on at 15,000 mile intervals. Check the system for defects, then reset the counter. The oxygen sensor light illuminates at 30,000 mile intervals. Replace the sensor, then reset the counter.

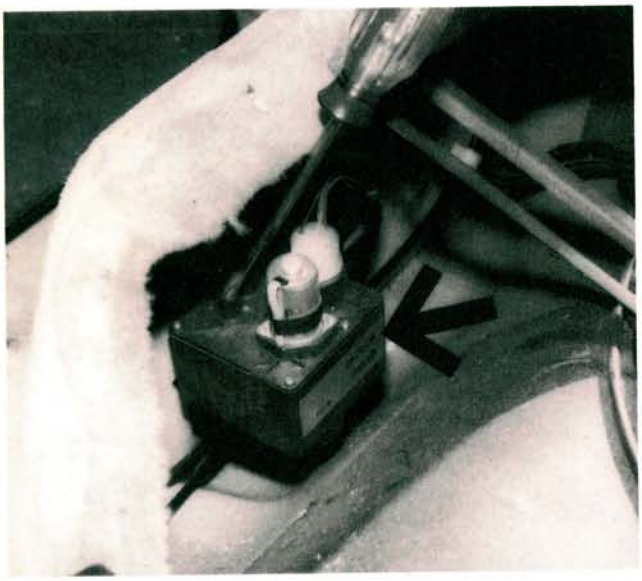


The Volkswagen Vanagon also uses an in-line mileage counter for its OXS and/or EGR reminder lights. It's just mounted in a more out of the way place. Follow the cable from the speedometer head to the counter (arrow) located below the driver's floorboard, next to the spare tire carrier. One of the reset buttons may be covered by a small plug. Temporarily remove the plug, then insert a small rod in the hole to push the reset button.

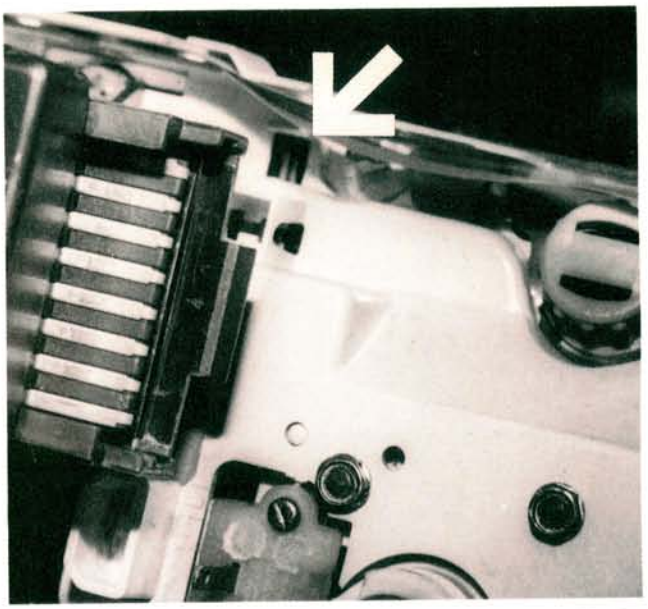
The in-line mileage counter (arrow) on first body style (pre 1984) Audi 5000s is mounted under the dash, to the left of the steering column near the pedal assembly. We removed the driver's side lower dash cover to show you the counter location. Audi technicians tell us that it's possible to reach the reset button using a bent rod, without removing the lower cover. Once you know the counter location, your sense of feel comes in handy. Depress the white button to reset the reminder light.



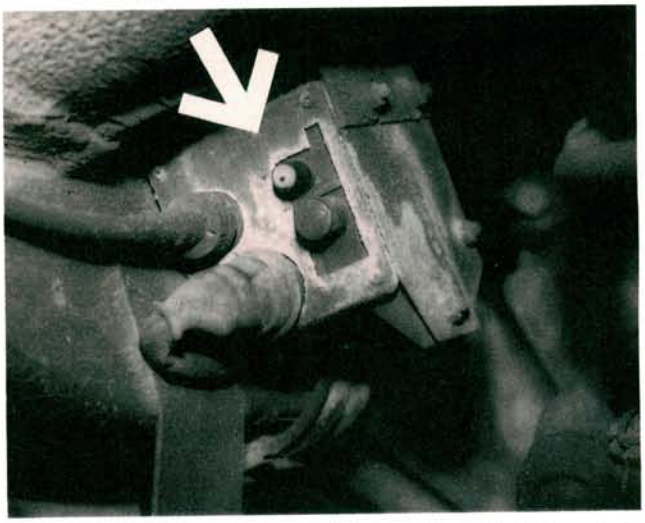
Resetting the counter on 1984 and later Audi 4000s and non-turbo 5000s involves some extra steps. The reset lever is hidden in the dash cluster, much like the Rabbit. The dash cluster must be removed to reach the lever. We found the plastic retainer (arrow) at the instrument cluster end of the speedometer cable to be very fragile. Disconnect the speedometer cable at the transaxle end and remove the steering wheel to give yourself extra room before proceeding to the next step.



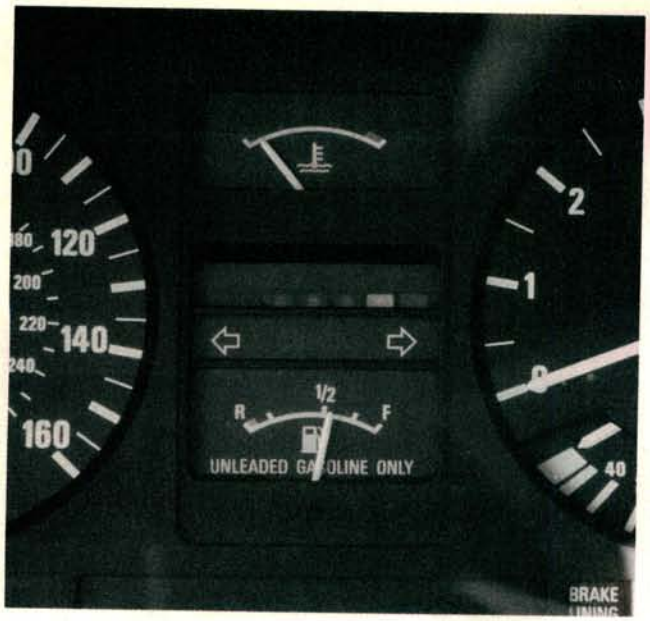
The mileage counter on 1984-88 Audi 5000 Turbos is located under the rear seat. Push the seat cushion toward the rear of the car, then lift the front of the cushion to release the cushion retainers. Move the cushion out of the way. The counter (arrow) is located on the left side of the car. Push the button marked "OXS." Cycle the ignition to the on position and ensure that the reminder light is off. Replace the oxygen sensor.



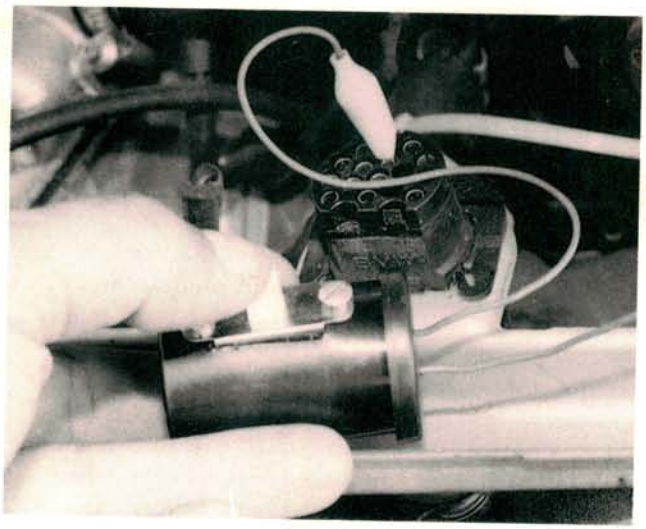
Remove the instrument cluster cover screws. Pull the instrument cluster out of the dash as far as the attached wiring and speedometer cable allow. Locate the small opening (arrow) marked "OXS" on the rear of the cluster. Break off the plastic cover, then press the lever to reset the counter. Once you've familiarized yourself with the lever's location, it can be reached by partially removing the cluster. Reassemble the instrument cluster, then replace the oxygen sensor.



The in-line mileage counter (arrow) on BMW models up to 1983 is located above the left frame rail, near the transmission. This location exposes the counter to a lot of abuse. Make sure the reset button gives a solid "click" when you press it. If it doesn't, you can bet the reminder light will still be lit. Replace the mileage counter to correct this problem. BMW 528e and 1983 633CSi models have no reset switch. Remove the instrument panel, then remove and discard the bulb for the "OXYGEN" light.



An onboard computer on 1983 and later BMWs evaluates mileage, average engine speed and temperature, and other factors to determine maintenance intervals. Five green, a yellow, and a red LED remind the owner of oil changes and other maintenance services. The green LEDs light with the ignition on, engine off. Fewer green LEDs light as maintenance time approaches. A yellow LED with the engine running indicates maintenance is due now. A red LED indicates you're pushing your luck.



Never underestimate the power of the pocket book. This homemade reset tool can also be used to reset BMW oil change reminder lights. Solder a small momentary contact switch to two ten foot lengths of 20 gauge stranded wire. Install the switch in a small project box or a film canister as shown here. Solder two small connectors to the opposite ends of the wires. The ten foot wire leads allow you to watch the dash indicator lights while operating the reset tool.

BMW specialists use this reset tool manufactured by Assenmacher Tool to reset maintenance reminder lights on BMW six cylinder models from 1983 and four cylinders from 1984. An additional adapter allows the tool to be used on 1988 and later models. Locate the diagnostic connector near the thermostat housing. Plug the tool into the connector, switch the ignition on, then depress the reset button until all five green LEDs are illuminated.

BMW warns that the vehicle's control unit can be damaged (fried) if you hook up the reset tool to the wrong terminal. Check for five volts at terminal 7 (blue/white wire) with the ignition on. Turn the ignition off. Now connect one lead of the reset tool to terminal 7, the other to a chassis ground. Double check to make certain that you're connected to the correct terminal. Turn the ignition switch to the on position. Depress the reset switch for 12 seconds, or until all five green LEDs are lit.