

Alarm Installation

Contributed by Administrator
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It is not terribly difficult to install an aftermarket alarm system in the car. Fortunately, Saab doesn't do anything strange with their electronics to make doing so prohibitive, so don't listen to the guy at Circuit City when he tells you that your Saab requires anything special. After installing a few of these things, my advice is that if you're reasonably good with a wrench and have a good working knowledge of basic car electronics, save yourself the money and do it yourself. For me, the only incentive I needed was not having to worry about some minimum wage teenager traipsing around my baby's wiring.

Back in the '80s, Saab started selling an optional "Saab Guard" alarm system. Competent at the time, most of them have either failed or been disabled due to their general lack of feature-set. If your car has (or had at one time) one of these alarms, half your work is already done. If not, don't give up hope. With any luck, the following tips will make your job easier:

Constant +12v: To function, an alarm will need a constant supply of power. If you've got a SaabGuard alarm, you'll find this connection under the rear seat, ready to go. If not, you can grab it from Pin #29 at the main fuseblock. Just splice in to the wire that's already there.

Switched +12v: Most alarms will want to know when the car is running and when it isn't. If you've got a SaabGuard alarm, you'll find this connection under the rear seat. If not, grab it from the ignition switch in the center console (labeled "X").

Ground: Ground locally, or use the ground point located just forward of the handbrake. If you've got a SaabGuard alarm, you'll find this connection under the rear seat.

Parking Lights: Many alarms will flash the parking lights when changing status. You want Pin #58 at the headlight switch - it will usually be red/green.

Starter Inhibitor: Many alarms will disable the starter when armed. Most will use a relay to do this - they stick a relay between the starter output at the ignition switch and the starter itself, and control the relay with a lead from the alarm brain. Consult the alarm for details, but the wire you want is Pin #50 at the ignition switch. Make sure you use heavy gauge (16 is good) wire if adding length to this connection - there is a lot of juice running through this connection!

Door State Detection: In order to know if someone is trying to get in, an alarm needs to know whether the doors are open or closed. Due to the way Saab wired the car, you will likely encounter some problems here. Saabs use a negative trigger system - when the door is opened, a switch goes to ground. That part is simple. The problem is that Saab sticks a pair of relays in the way of an otherwise simple circuit - one relay is the door open buzzer which only applies to the driver's door, and the other is the "courtesy light" relay which leaves the interior lighting on for about 15 seconds after the last door is closed. The buzzer relay can interfere with some alarms since you'll very likely get different ground potentials between it and the passenger side door - a diode placed in the alarm's input can usually overcome this, and some alarms won't even notice the slight difference. The courtesy light relay poses another problem - as long as the courtesy lights are on, the alarm won't set because it will think a door is still open. Your options here are to either live with it, and wait for the lights to go out prior to arming; to remove the courtesy light relay and live without courtesy lights; to purchase an alarm with "defective zone ignore" - it will detect that a zone (the door) is not secured and arm anyway. In the latter case, the logic is that assuming your car is locked, glass will have to be broken to get inside it, and that will trip the glass or shock sensor anyway, so your car is still secured. Do note that this detection is different than hood or trunk open detection - that's another ball of wax! All that said, you can grab this connection at any of the door jamb switches or at Pin T of the Courtesy Light Relay under the rear seat. If you've got a SaabGuard alarm, you'll find this connection ready-to-use under the rear seat

Keyless Entry: One of the biggest reasons to get a modern alarm is keyless entry. Nothing beats not having to fumble with keys to unlock your car. If your alarm has this feature, you'll need to know: First, Saab uses a negative trigger system for the power locks - a particular circuit goes to ground to trigger the door lock motors to lock or unlock. The easiest place to grab the necessary connections is at the door lock relay located above the front passenger's feet, attached to the ventilation plenum. You'll want Pins #1 and #2 - grounding #1 will lock the doors, and grounding #2 will unlock them. The problem here is that on all 900s and 9000s the driver's door does not have a motor, only a switch. You will need to replace this with a functional motor if you want the driver's door to lock and unlock. There are kits available from most alarm retailers to add aftermarket motors to assist in this situation - you'll have to read the instructions that come with such a kit if you go this route. My solution is to replace the driver's door lock switch with a

motor. You will lose the ability to lock/unlock all the doors from the driver's door but, in my opinion, with keyless entry you won't need to do that ever again anyway, so it's no major loss. You can grab one from a junkyard - the switches and motors have the same casing, so get one from a passenger door or a trunk/hatch. Just pull off the door panel, and swap the hardware! Once it's all mounted up, you will need to get power to the new motor - to do this, you'll want Pins #7 and #8 at the door lock relay. Giving +12v to pin #7 will lock the doors, reversing the polarity (+12v to pin #8) will unlock them. Simple! Note #1: If you are adventurous, you can actually dismantle the door lock motors and switches, and combine two units into one. I have personally seen this done, though never bothered to do it myself - cracking open those cases is tough work, and like I said above, central locking at the driver's door isn't that important to me. Note #2: One thing I always make a point of doing is using window switch and locating it with the other window switches - With a little work, you can wire the switch into the door lock relay and use it to un/lock all the doors from the center console. It's a lot less obvious that reaching for the door, and is convenient for those times when you use the key to unlock the driver's door, then need to unlock the trunk or a rear door. If you need help doing this, let me know and I'll email you simple instructions on what to do.

Other little bits of information:

Siren Location: The best place to mount a siren, in my experience, is on the passenger side fender, just behind the washer fluid reservoir.

Hood Pin Location: Most alarms will allow you to mount a switch to detect if someone is tampering with the hood. There is a hole on all 1985 and later Saabs on the radiator crossmember, passenger side, designed for just this. I can provide pictures of the location for those of you with earlier cars, or those having trouble finding it.

Trunk Open Detection: If your alarm has an input for trunk open detection, it will work exactly like the passenger door detection. Locate the switch in the trunk area (under the striker plate on hatchbacks, near the left rear speaker on trunked models) and tap in here.